Wisconsin Cooperative Trapper Education Program



STUDENT MANUAL







Additional Publications

The following publications are to be used as supplements to the Trapper Education Manual:



Body-grip Traps Brochure



Furbearer Management



NTA Trapping Handbook



Trapping and Furbearer Mgmt



Diseases of WI Furbearers



Mammal Tracks on Wisconsin



Trapping and Furbearer Mgmt



Cable Restraint Booklet

Avoidance Brochures/Booklets



Marten Avoidance



Lynx Avoidance



Cable Restraint Brochure



Trapping in the 21st Century



WI Trapping Regulations



Fur Handling DVD

Wisconsin Cooperative Trapper Education Program Student Manual

This education program is the result of countless hours of dedication and commitment from individuals in the wildlife profession, and is truly a cooperative effort between citizens of Wisconsin as well as federal and state agency personnel. The primary theme was an interest and desire that future generations enjoy the same furbearer trapping opportunities we have today. The Wisconsin Department of Natural Resources (WDNR) and the Wisconsin Trappers Association (WTA) through the Wisconsin Cooperative Trapper Education Program (WCTEP) are charged with execution of this effort.

Our gratitude extends to the Association of Fish and Wildlife Agencies (AFWA) and North Dakota Game and Fish Department for providing the blueprint to this manual; and the WTA, WDNR and Wisconsin citizens for acknowledging the importance of regulated, science-based furbearer trapping by providing the resources and financial support for the program. Individuals deserving such recognition include:

John Irwin, Former Wisconsin Trappers Association (WTA) President Scott McAuley, Former WTA President John Olson, Furbearer Specialist (retired), WDNR Shawn Rossler, Furbearer Specialist, WDNR Virgil Schroeder, Former WTA President Nicke Shumaker, Former WTA-WCTEP Statewide Coordinator Rick Tischaefer, North Dakota Fur Hunters & Trappers Association (NDFHTA) Erinn Kiesow-Webb, Assistant Furbearer Specialist, WDNR Mike Widner, WTA-WCTEP Correspondence Coordinator Jim Binder, WTA-WCTEP Trapper Education Coordinator Samuel Jonas, Ecology Section Chief, Wisconsin Department of Natural Resources (WDNR)

In addition, we express our sincere appreciation to Pat Beringer, Dennis Brady, Dan Carroll, Joe Dragon, Anna Jahns, John Gillen, Lesa Kardash, Jolene Kuehn, Junior Prudlick, Scott Loomans and Mike Wilhite for their dedication and countless volunteer hours committed to this program. It is that volunteer spirit and quality leadership that serves to ensure future generations have the same furbearer trapping opportunities we have today.

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Cover photo:WDNR

Fourth Edition

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Preface

In 1982, the Wisconsin Trappers Association (WTA) in cooperation with the Wisconsin DNR, began a statewide program of voluntary trapper education. That program recognized that many inexperienced trappers were sincerely interested in trapping responsibly, but they lacked any available source of direct information. Due in part to the successes of the volunteer program and the importance of keeping all new trappers informed of current regulations and techniques, trapper education became mandatory for all first time trappers in 1992. The program was revised and designated as The Wisconsin Cooperative Trapper Education Program (WCTEP).

The WCTEP has a proud history of providing quality trapping resources and education to new and experienced trappers alike. This manual is intended to provide the information needed to responsibly trap furbearers in Wisconsin. A discussion of basic techniques and how to avoid common mistakes is found in this manual. There is no excuse for the avoidable abuses resulting from lack of knowledge by inexperienced and irresponsible trappers which serve to inflame public opinion against all trappers.

Trapping is not for everyone and persons who trap, or who are considering trapping, must be willing to accept the responsibilities that come with it. This manual will not make an "expert" out of anyone -- and it is not intended to do so. Expertise in trapping comes only with years of experience and long hours of thoughtful observation and study. This manual will provide an introduction to the biology and management of Wisconsin furbearers, and to the basics of using that resource responsibly and safely. It is not intended to encourage or discourage anyone who might want to trap.

This manual is a blend of the original WCTEP trapper education manual and an Association of Fish and Wildlife trapper education manual template. The intent is to provide an updated manual that retains the roots of the Wisconsin program while providing content that shares general similarities with trapper education programs throughout the United States. This manual is intended for use in conjunction with the WTA/DNR Trapper Education programs. In addition to classroom sessions, these programs typically include equipment demonstrations and practical field experience under the supervision of qualified instructors. Although this manual can be used alone as a reference or self-instruction book, it will be of most value when used in combination with the education course.

Students who have successfully completed the WCTEP course will:

- 1. Have a greater knowledge and appreciation for wildlife and our natural resources.
- 2. Be aware of the history and heritage of the fur trade.
- 3. Have a basic understanding of the biology and management of Wisconsin furbearers.
- 4. Be familiar with trapping and wildlife regulations and their purpose.
- 5. Know how to behave ethically in the outdoors.
- 6. Understand how to properly prepare, maintain, and use trapping equipment.
- 7. Know the basics of trapping Wisconsin furbearers responsibly and effectively.
- 8. Understand how to properly prepare, care for, and use/market, fur pelts to realize the greatest benefit.
- 9. Understand the basics of outdoor safety and survival.

NOTE: The WCTEP would not be what it is today without the forethought of past WTA members or the dedication and unselfish nature of current WTA instructors and members, conservation wardens, and wildlife biologists. Take the time to thank your instructors.



UNITI

Chapter 1 Introduction to Trapper Education







First muskrat.

Trapping benefits society.

Trapping is highly regulated, and science-based.

Trapping is a highly engaging, year-round activity.

Objective - *Students demonstrate an understanding of the purpose of trapping and trapper education in today's society.*

Introduction

Trapping is part of our North American heritage. First-time trappers in many states and Canadian provinces must complete a trapper education program covering skills, regulations, and the role of regulated trapping in scientific wildlife management. Trapper education programs teach basic techniques with a strong focus on the responsible treatment of animals, legal methods, safety, selectivity, and ethical trapper behavior.

This revised Trapper Education Program was developed by the Wisconsin Department of Natural Resources, volunteer representatives from the Wisconsin Trappers Association and the Association of Fish and Wildlife Agencies. The Association is comprised of and represents professionals from fish and wildlife agencies of states, provinces and federal governments of the United States and Canada. The program was developed to:

- Protect the health, safety, and welfare of people, wildlife, and domestic animals.
- Support wildlife **conservation** programs that sustain species and **ecosystems** for the benefit of future generations.
- Increase the benefits society currently receives from regulated trapping activities.

Trapping: A Serious Commitment

Trapping is a highly regulated, science-based activity because the public is concerned about wildlife conservation and the welfare of wild animals. Regulations are designed to help manage furbearing animals using safe and selective equipment and techniques.

Trapping takes time and dedication. Trappers spend time studying wildlife, scouting, preparing traps, working with landowners, setting traps, running trap lines and preparing pelts. When trapping season starts, trappers must check their traps routinely until they are removed.

Society, trappers, and non-trappers alike will not accept illegal or unethical behavior. This course can teach you the basics. You must be willing to spend the time and effort to learn and trap responsibly.

Values of Furbearers and Why We Trap

Fur products and trapping are of **cultural** and economic importance. Furbearers are used and managed as valuable, abundant natural resources.

Values associated with furbearers:

- **Economic** Positive values include furs, meat and by-products such as perfume and fishing/trapping lures. Examples of negative values include crop depredation, property damage and flooded roads.
- **Ecological** Furbearers have a positive value as predators and prey in functioning **ecosystems**. Excessive numbers of furbearers can have negative values if they harm habitats or prey on endangered animals.
- **Cultural** Trapping is valued by many people as part of their cultural heritage. Trapping involves outdoor skills, knowledge and respect for wildlife, and family activities. Some people look to nature or the land to provide vegetables, firewood, venison and furbearers. Trapping provides these people with needed food and clothing.
- **Biological** Furbearers have positive values that help us understand human health and the effects of environmental pollutants. Negative biological values include human exposure to disease and parasites.
- Aesthetic Furbearers have many positive aesthetic values for fur and wildlife watching.

Benefits of Regulated Trapping

Responsible trappers provide these benefits to society:

- **Disease Control** Reducing local populations helps limit the spread of diseases among animals and people.
- Habitat Protection When furbearers overpopulate they can destroy habitat. For example, the harvest of nutria in Louisiana, an exotic animal, helps protect 3.6 million acres of coastal wetlands.
- Endangered Species Protection Foot-hold traps help protect many rare and endangered species from predators. Examples of animals that have benefited include the desert tortoise, sea turtles, whooping cranes, black-footed ferrets, and piping plovers.
- **Property Protection** Farmers and other landowners benefit when trappers remove excess furbearers that threaten property and crops.



Marty Beard

Fur handling is rewarding work for all ages.

Illegal or unethical behavior is not acceptable. Show respect for wildlife, people and property.

Farmers who have crop damage will often give you permission to trap.



John Olson Zack Wilson and Devin Olson. Iron County early 1980's

Trapping is a way of life for many people.



FWS Photo Whooping Crane. Wetland habitats are home to hundreds of species of wildlife.

When voters restricted trapping in Massachusetts in 1996, landowner beaver complaints doubled.

The ability to participate in activities like hunting and trapping is a privilege in most states, a right in others.

A US Fish and Wildlife Service survey revealed 487 wildlife management programs that involved trapping on 281 National Wildlife Refuges.



Andrea Lutz with mink and muskrat

- Wildlife Restoration Trappers use foot-hold traps to humanely capture species such as river otter in states where they are plentiful so they can be released in other states to re-establish populations. Over 4,000 river otter have been trapped and released in 21 different states, restoring a valuable native species.
- Wildlife Research Foot-hold traps and cable devices are critical for catching elusive species such as wolves, bobcat, coyote, and fox. Wildlife

biologists depend on traps and trappers to help study many species of wildlife.

• Helping Maintain Balance - Trappers assist in controlling mid-sized predators where large predators no longer occur or are rare. Thus helping maintain balance in a wide variety of ecosystems.

Trapping: Privilege vs Right

In most states, trapping is a privilege available to all citizens who choose to follow regulations and behave responsibly. In Wisconsin, regulated trapping is a constitutional right, but trappers who violate laws can lose their privilege to trap. If trappers as a group do not behave responsibly, citizens could decide to take away this right and stop all trapping.

State and National Trappers Associations

Trappers have formed state and national organizations to help address issues related to trapping and furbearer management. Two national groups include the National Trappers Association and the Fur Takers of America.

The National Trappers Association (NTA) has the following purpose statement:

- To promote sound **conservation**, legislation, and administrative procedures.
- To save and faithfully defend from waste the natural resources of the United States.
- To promote sound environmental education programs.
- To promote a continued annual fur harvest using the best tools presently available for that purpose.

The Fur Takers of America (FTA) has the following purpose:

• To promote interest in and accumulate and disseminate knowledge concerning the trapping of fur bearing animals among persons interested therein.

You can find out more about the NTA and FTA at their Web sites:

- http://www.nationaltrappers.com/
- http://www.furtakersofamerica.com/

The Web sites also link to state trapping associations, online bulletin boards, and other helpful organizations.

Wisconsin Trappers Association:

• http://www.wistrap.org/

Wisconsin Cooperative Trapper Education Program:

https://dnr.wisconsin.gov/Education/OutdoorSkills/TrapEd

There are many benefits to membership in trapping organizations. You will learn new techniques to become more successful, be invited to meetings and other activities, gain a greater understanding of wildlife management, and learn about issues affecting trapping.

Wisconsin DNR's Policy on Trapping

The Wisconsin Department of Natural Resources supports the regulated use of wildlife for human benefits, including hunting and trapping where legal harvests do not reduce subsequent population levels of these renewable wildlife resources or where population reduction of certain species is a deliberate objective.

The Department supports regulated trapping and efforts to address societal concerns through appropriate education, research, enforcement and regulatory programs. Such programs shall be designed to increase awareness and acceptance of regulated trapping by seeking to enhance animal welfare while maintaining wildlife management capabilities and other benefits associated with this activity.

For more information visit the Wisconsin DNR website:

• http://dnr.wi.gov/

Confidential information concerning violations can be reported by calling:

• 1-800-TIP-WDNR (1-800-847-9367)

Organized trappers, hunters, and anglers have supported fish and wildlife conservation programs for more than 100 years.

Membership in state and national trapping organizations will help you become a more successful and responsible trapper.

The Wisconsin Trapper Association,inc facebook page and YouTube channel are a good way to learn new techniques and solve problems. Post a question, and get answers from friendly, experienced trappers.

Trapping technology and techniques have shown continuous improvement for nearly 200 years

Chapter 1 Review – Introduction to Trapper Education

Objective - Students demonstrate an understanding of the purpose of trapping and trapper education in today's society.

Recognize that the decision to become a trapper represents a serious commitment of time and dedication to responsible behavior.

1. When trapping season starts, trappers must check th	eir traps	until all are removed
2. List three positive values of furbearers including eco economic values.	ological, biological, cu	lltural, aesthetic and
a.		
b		
c		
3. List three negative values or problems caused by fur	bearers.	
a		
b		
С.		
4. List two products that come from furbearers.		
 4. List two products that come from furbearers. a b 5. Trapping is valued by many people as part of their people with food and 		heritage. Trapping provides
 4. List two products that come from furbearers. a. b. 5. Trapping is valued by many people as part of their _ people with food and 6. Furbearers help us understand he 	ealth.	heritage. Trapping provides
 4. List two products that come from furbearers. a	alth.	heritage. Trapping provides
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 4. List two products that come from furbearers. a b 5. Trapping is valued by many people as part of their 5. Trapping is valued by many people as part of their 6. Furbearers help us understand 6. Furbearers help us understand 7. List a minimum of four benefits that regulated trapp a	alth.	heritage. Trapping provides y.
 4. List two products that come from furbearers. a	alth.	heritage. Trapping provides

Trapping is an individual privilege in most states, and a individual right in others.

- 8. Name two state or national trapper associations that provide materials and continuing education for trappers.
 - a._____
 - b._____



Chapter 2 Historical Considerations

Objective - Students use knowledge of history, public attitudes about wildlife, and the North American Model of Wildlife Conservation to understand regulated trapping as a legitimate activity.

History of the Fur Trade in North America and Wisconsin

North America's fur trade began during the 1500s when Europeans explored the eastern coast. In 1608 Samuel De Champlain, a French explorer, established the first North American fur trading post in Quebec. In exchange for pelts, Native Americans received metal tools, weapons, cloth, decorative objects, metal, and glass.

For many years, the beaver was the most desired animal. Its soft underhairs were compressed into a felt-like fabric for men's hats and the skins themselves were used for lining overcoats. These were desirable items in Europe, a nation that had overharvested its furbearing animals to near **extinction** by the early 1600s.

As a result, the fur trade became North America's primary business. Many wars and battles were fought over the fur trade. During the 1600s, the Iroquois Nation frequently battled other native tribes in Canada and the Ohio Valley to gain control over land where furbearers lived. This period of time is known today as the Beaver Wars.

At first, almost all trappers were Native American; Europeans could only travel to what is now present day Wisconsin with Native American permission. That is how in 1634 Jean Nicolet made the first visit on record by a European to what is now Wisconsin with the purpose of trading fur.

During this time period, the French government issued licenses to companies or individuals giving them exclusive rights to trade in specific regions. European traders continued moving into the Wisconsin region and soon had a strong hold on the fur trade. The establishment of additional French trade centers, such as Prairie du Chien and Madeline Island (WI), was necessary to accommodate the increased flow of pelts and trade goods.



Alaskan trapper cabin.

Fun to Know

Beaver felt hats were prized possessions among European men during the 1700's and early 1800s. They were expensive to make. The beaver were captured in North America and furs were shipped a long distance to reach Europe. The manufacturing process was complex.



Beaver.

Dennis Garrison



Silvertip Productions Two kinds of beaver were used to make felt hats. At first, "coat beaver" were preferred. These were furs that had been worn by Native Americans until the guard hairs wore off.

"Parchment beaver" were prime pelts, but for a long time they had to be shipped to Russia for processing to remove the guard hairs. Eventually French and English hat makers discovered the Russian secrets and began to use parchment beaver for all their felt hats. The final blow to the early fur trade came when silk hats gained popularity in Europe.

Beaver felt is commonly used to make high-quality cowboy hats.

As a result of the French and Indian War (1760), the British government took over the Wisconsin region from the French and continued the fur trade along the same lines. Large fur-trading operations like the North West Company began to take shape, although many small independent outfits were established to accommodate the needs of trappers and to compete in the business. Fortunes were made and lost in the business of buying and trading furs.

After the War of 1812, the American Fur Company, owned by John Jacob Astor, took over much of the Wisconsin trade. The fur trade declined over time, reaching a low about 1850. **Habitat** destruction and unregulated killing made furbearers scarce. Europeans were favoring silk over beaver felt, and Native American fur suppliers had declined due to disease, warfare, and displacement from their homelands. At that point, smaller firms continued the fur business in Wisconsin by funneling furs to larger markets in Canada, Europe, and Asia.

During several centuries of fur trading, there was no effort to conserve wildlife or protect **habitat**. Everyone competed for the same wildlife resource. Beaver and otter were eliminated from much of the country. The government did not regulate seasons or methods that could be used to take wildlife. Furbearers of all kinds were shot, speared, snared, or killed using **deadfalls**. Ponds were sometimes drained so all beaver could be captured.

Steel traps did not play a major role in the development of the fur trade or the widespread decline of beaver, otter, and other furbearers. Metal-jawed **Foot-hold traps** were not mass produced or widely available until after 1823.

Although the beaver was the most sought after and most valued animal, other species were also taken. Other Wisconsin furbearer species of value included wolves, fisher, coyote, red fox, badger, American marten, river otter, raccoon, mink, bobcat and muskrat.

Widespread habitat destruction played a key role in changes in animal populations. By the late 1800s, millions of acres of wetlands were drained, forests were cleared for farms, and prairies were plowed under. Streams and rivers ran heavy with silt, sewage, and industrial waste. In the East, nearly all species of fish and wildlife were in decline.

Changes in the abundance and harvests of fur species have occurred throughout the history of the fur trade and undoubtedly will continue in the future. Change occurs from fluctuations in animal populations, demand, value, continued habitat loss and other economic factors. Unfortunately, very little information is available regarding fur harvests and returns received during much of Wisconsin's early fur history. Two main factors influence the economic value of a furbearer species: 1) the abundance of the animal; and 2) the monetary return received for the animal. Both factors are variable and change from year to year. The harvest of some species such as skunk, fox, raccoon, and coyote tend to follow the return received for the animal. If returns are high, the harvests are above average. The harvests of other species such as mink, muskrat, weasel, and beaver are quite consistent even though the return may vary. As a general rule, the economic value of any year's harvest will be a product of the number of trappers, the demand for a certain species, and the abundance of the species.

Aside from any monetary return, regulated trapping is important in Wisconsin. Over 20,000 people purchase licenses to trap furbearers annually in Wisconsin. People trap for a variety of reasons. Some reasons include learning about the characteristics and habitats of the animals themselves, outdoor physical activity, the challenges associated with fair chase, a respect and love for nature and wildlife, protecting personal property, and maintaining a connection with the land. Regulated trapping remains an important activity and cultural lifestyle for many people in Wisconsin.

Fish and Wildlife are Public Resources

In North America, wildlife is a public resource owned by no individual or corporation. State and federal wildlife agencies manage wildlife for the benefit of all people. Public values and attitudes about wildlife determine how it can be used. Since the first European contact, people's attitudes about wildlife have changed.

People sometimes have conflicting attitudes about the way wildlife should be used or managed. The most serious conflicts are among people who have different views about killing wildlife. However, even people who hold similar views may disagree on how animals such as furbearers should be managed.

Attitudes and Values

The values people place on wildlife underlie their attitudes about when and how animals may be used. People who use wildlife for subsistence may revere animals even though they harvest wildlife for food and clothing. People who misuse or try to exterminate wildlife do not value animals at all until they are dead.

Conservationists place the highest values on preserving habitats, ecosystems, and sustainable wildlife populations. Conservationists accept regulated harvests of surplus animals as appropriate.

Grand Squirrel Hunt -Franklin Co., Ohio 1880 Newspaper Story

"The hunt was conducted agreeably to the instructions in our last paper. On counting the scalps it appeared that 19,660 scalps were produced. It is impossible to say what numbers in all were killed, as a great many of the hunters did not come in. We think we can safely challenge any other county in the State to kill squirrels with us."



FWS Photo

Market "Hunters"

Before wildlife was protected by seasons and **bag limits**, market "hunters" killed millions of animals a year to supply food to restaurants and grocery stores. Market "hunters" had a strict "utilitarian" attitude toward wildlife. They were not "hunters" according to today's meaning of the word.



FWS Photo

Sport Hunters

The term "sport hunter" arose in the United States during the mid-1800s to distinguish those who practiced "fair chase" hunting techniques from commercial "market hunters." Sport hunters placed limits on themselves and their hunting methods in order to test their skills and give animals a reasonable opportunity to escape. The code of the sportsman arose to define proper conduct for hunters.



USFWS Service

Great Hinkley Hunt.

On December 24,1818, 600 armed men encircled Hinkley Township in northeastern Ohio. They marched toward a central point and shot 300 deer, 21 bears, 17 wolves, plus hundreds of turkey, fox, and raccoons. This was an effort to exterminate all the wildlife. Strict protectionists value individual animals. They tend to oppose hunting and trapping out of concern for individual animals. Some protectionists have a mistaken belief that hunting and trapping will threaten the entire population.

Animal rights activists believe all animals have the same rights as humans. They oppose any human use of animals, domestic or wild, and may value an animal's life as much as a human life.

Subsistence Attitude

Prior to European influence wildlife was a source of food, clothing, and tools for Native Americans. They had few crops to grow, and no livestock. The lives of plants and wild animals were spiritually and culturally connected to the lives of native people. Today, only a few people totally depend on wildlife for subsistence.

Utilitarian Attitude

European settlers and Native Americans alike viewed wildlife as a common resource. No one owned wildlife until they killed it. Some people made their living by killing animals for fur, meat, or feathers. At the time there were no government agencies to manage and protect wildlife.

Extermination Attitude

When people started farming in the wilderness, wildlife became a nuisance. Bears, wolves, and mountain lions were a threat to people or livestock. Deer, raccoon, and squirrels damaged crops. Farmers shot wildlife, or paid others to do it. Government agencies paid bounties on many animals.

During the 1800's former military officers sometimes organized "armies" to conduct "wars of extermination" on wild animals. Communities held events to see who could kill the most wildlife on a given day or weekend. Widespread events could result in tens of thousands of animals being killed in a single day.

Conservation Attitude

By the mid-1800's many people no longer depended on wildlife for survival. Some began to enjoy hunting, fishing, and camping as leisure activities.

Habitat destruction, market hunting, and extermination efforts were reducing animal populations. As wildlife became scarce, **conservation** became a concern for hunters. Conservationists wanted to save critical habitats and remaining wildlife populations. There was no scientific knowledge about wildlife management. It took decades to create natural resource agencies and funding sources. Leaders such as President Theodore Roosevelt, a hunter, created public support for wildlife and a conservation ethic. Today, wildlife conservation programs are based upon sustainable use. Individual animals may be used in accordance with laws, while habitats and animal populations are preserved. Many people, including hunters and trappers, are conservationists who care about wildlife while recognizing that regulated use is beneficial to society and the resource.

Preservation Attitude

Many people value wildlife but they fail to see the positive connection between hunting and trapping, and sustainable populations. Preservationists may oppose hunting and trapping in the belief it endangers animals. However, many preservationists are open-minded, and willing to examine facts about wildlife management.

Animal Rights Attitude

A small but highly vocal group of Americans believe in **animal rights**. The primary concern of Animal Rights advocates is the moral obligation of people. They believe animals have the same rights as humans and therefore oppose any human use of animals including hunting, trapping, farming practices, research on animals, rodeos, circuses, horse races, and other animal-related activities. Some animal rights proponents even oppose owning animals as pets.

Apathetic Attitude

A high percentage of the American public is growing up with little connection to the land. Few of these people think about wildlife on a daily basis, and most have no personal experience that would help shape their attitude. If they encounter wildlife doing damage to their property, they may want it exterminated or removed. If someone shows them pictures of animals in traps and claims it is cruel, they may oppose trapping or vote to make it illegal. An **apathetic** person's attitude can be easily changed, but they may not spend much time considering the issues.

Animal Welfare vs. Animal Rights

Most Americans, including those who trap, care about animal welfare. A small number of people hold **animal rights** beliefs. A person concerned with animal welfare wants to minimize pain and suffering when animals are trapped, or used any other way. A person who believes in animal rights believes animals have a right not to be trapped at all.

Most trappers are concerned with animal welfare. Those who are not are unlikely to be accepted by other trappers.



Beaver lodge - habitat FWS Photo

Beaver populations, if managed carefully, can provide immense benefits to natural ecosystems, while minimizing nuisance and damage problems.



Red Fox

FWS Photo

Some people oppose any use of animals, including human consumption of meat, fish, eggs, and milk.

Tragedy of the Commons

The "Tragedy of the Commons" relates to common resources that are available to all. In this situation, the greediest will gain the most, for a time. Restrictions on use of common resources are necessary to prevent overuse by individuals that could result in the loss of these resources to society. Wildlife agencies are concerned about sustainable long-term populations and individual animal welfare. Many trapping regulations are enacted to improve animal welfare. Agencies regulate types of traps that may be used, where they may be set, seasons, and how often traps must be checked. Trapper education programs play a role in animal welfare, too.

One of the most important efforts to improve animal welfare is known as the **Best Management Practices** project. The Association of Fish and Wildlife Agencies has spent years working with wildlife agencies, trappers, veterinarians, universities, and other groups to develop Best Management Practices. This project is ongoing, and provides information used in this Trapper Education Manual.

The North American Model of Wildlife Conservation

The United States and Canada have the most successful system of wildlife management the world has ever known. Conservationists, especially hunters and trappers, supported the development of The North American Model of Wildlife Conservation. This model is defined by seven principles:

1. Wildlife as a Public Trust Resource

Legally, wildlife is a public resource, held in trust by the government, and managed by fish and wildlife agencies. State wildlife agencies are responsible for most wildlife management and regulation. The U.S. Fish and Wildlife Service has authority over migratory birds and federally **endangered species**. The Service works cooperatively with the states and other nations.

2. Elimination of Markets for Wildlife

The elimination of market hunting of most wildlife for meat, feathers, or other uses was critical in halting what would have been a "tragedy of the commons." Using regulated trapping, furbearer populations will sustain a commercial market and provide significant benefits to society.

3. Allocation of Wildlife by Law

Public privileges to use wildlife and have a say in its management are guaranteed by law. Hunting and trapping privileges are not restricted to wealthy landowners or granted as special considerations. Individuals can lose their privileges if they violate laws pertaining to the legal harvest of wildlife.

4. Wildlife May Be Killed Only for a Legitimate Purpose

Killing wildlife for frivolous reasons is prohibited by law. If society is going to sanction the killing of wildlife it must be for a legitimate purpose such as using the animal or its parts for food, clothing, medicine, self-defense, or property protection.

5. Wildlife Is Considered an International Resource

The Migratory Bird Treaty of 1916 between the United States and Canada was the world's first significant international treaty for the management of wildlife. Today, waterfowl, songbirds, and other migratory wildlife benefit from international management and regulation.

6. Science is the Proper Tool for Discharge of Wildlife Policy

Science has been the primary basis for wildlife restoration and management, and the formation of the wildlife profession. North Americans used wildlife science as a basis for managing wildlife decades ahead of everyone else in the world.

7. Democracy of Hunting and Trapping

In North America, everyone has the opportunity to participate in regulated hunting and trapping. President Theodore Roosevelt wrote about the societal gains to be made by keeping land available for hunting for all people. This is very different from a model that existed for centuries in Europe, where wealthy people owned wildlife and the land, and only the wealthy could fish and hunt. In North America, wildlife is owned by the public, and responsible citizens have equal opportunities to participate in regulated hunting or trapping.

Hunters and trappers provide the funding for wildlife management programs and the purchase of critical habitats. When they join together with a common purpose, hunters and trappers are a political force speaking out in favor of wildlife **conservation**.

Thanks to conservation-minded hunters and trappers, species such as elk, deer, geese, wild turkeys, wood ducks, beaver, bald eagles, and river otter are more numerous today than they were in 1900. Hunters, trappers, and other conservationists were the first people to place a value on living wildlife. As a result, wildlife is now managed as a public resource to be conserved for the benefit of all.



Muskrat

WI DNR



Jason Hawley

Biologist with a wolf. Research plays a key role in wildlife management

Chapter 2 Review - Historical Considerations

Objective - Students use knowledge of history, public attitudes about wildlife, and the North American Model of Wildlife Conservation to understand regulated trapping as a legitimate activity.

Students become aware of the fur trade's role in the exploration and settlement of North America.

1. Jean Nicolet came to Wisconsin with the purpose of ______.

2. The ______ was the most desirable animal during the beginning of the fur trade.

3. ______ traps were not mass produced or widely available until after 1823.

Students recognize that fish and wildlife resources are publicly owned, and managed according to society's laws, values and attitudes

- 4. State and federal wildlife agencies are entrusted with the ______ of wildlife for the benefit of all people.
- 5. ______ place the highest values on preserving habitats, ecosystems, and suitable populations of wildlife.

Students identify key components of the North American Model of Wildlife Conservation.

6. _____ has been the primary basis for wildlife restoration and management.

- 7._____ and _____ provide the funding for wildlife management programs
- 8. In North America, wildlife is a _____ resource owned by _____ individual or corporation.

Chapter 3 **Responsible Trapping**







Legal Obligations

Trappers, hunters, and anglers must know the regulations and follow them to help conserve resources, and to be accepted in the conservation community.

Trappers and fur hunters must always take the high road. Obeying the law is always the minimum standard of conduct. **Objective -** *Students demonstrate an awareness of their responsibilities to landowners, wildlife, other outdoor users, and the public.*

Introduction

Trappers and hunters have a *legal* responsibility to follow regulations. Trappers and hunters have a *moral* obligation to make good decisions when their actions might affect wildlife, landowners, other outdoor users or the public. Ethical trappers and hunters consistently make decisions that result in the greatest good for wildlife, the environment and people.

Legal and Social Obligations

Trapping and hunting is a constitutional right in Wisconsin, but on private lands is still a privilege based on your responsible, ethical actions. Trappers who violated laws can lose their privilege to trap. Society expects trappers and hunters to behave in certain ways if they want to participate. That is why we have regulations for seasons, traps, sets, permission to trap and public safety. Those who fail to follow regulations face possible fines, jail time and the loss of licenses. Illegal trappers also face disapproval from other trappers and outdoor users. If you want to be accepted by other trappers, you must know the regulations and follow them.

Responsible Trapping

Laws cannot define what is right or wrong for you in every situation. You must use judgment based on your knowledge, skills, attitudes and experience to decide what is right or wrong. You can learn from your family or a trusted mentor. In time, you will understand how to make good decisions on your own.

Your relationships with other people, and your social acceptance as a trapper, develop as people come to know how you behave. When you behave in ways that are good for animal welfare, landowners, other outdoor users and the public, you will be an ethical trapper.

Ethics

Ethics is a term you should know. Many trappers, hunters and anglers discuss ethics. Ethics is not a science. Ethics deals with right or wrong in human behavior.

Good behavior in one situation may not be good in another. As an example, if beavers have entered an area where they are causing damage you may choose to capture as many as you can. If beavers are scarce on another property, you should capture only a few of the animals.

Code of Trapping Ethics

The following points are keys to trapping in a responsible and ethical manner.

- 1. Respect private property. Always ask permission before trapping on private property. Do not tamper with the property of others on public or private land.
- 2. Know selective and humane trapping systems and use them appropriately.
- 3. Check traps according to current state regulations for the specific trap type, size, and set.
- 4. Be aware of others using the outdoors and do not interfere with their activities.
- 5. Assist property owners with wildlife damage problems.
- 6. Avoid areas or sets likely to result in the capture of domestic animals.
- 7. Be a conservationist. Make an effort to not overharvest.
- 8. Promptly report wildlife problems such as disease, pollution, or habitat destruction.
- 9. Identify and record all trap locations accurately. Pick up all traps promptly when you have finished trapping.
- 10. Utilize furbearer carcasses for human, domestic animal, or wildlife food whenever possible.
- 11. Dispose of unused carcasses properly.
- 12. Provide educational assistance to new trappers.
- 13. Support strict enforcement of laws relating to wildlife and wildlife habitat.
- 14. Respect the rights and feelings of others, even if you disagree with them.
- 15. Cooperate with wildlife management agencies.



Silvertip Productions

Behave as though there is a video camera crew with you afield, with the video being shown on national television that evening. Will you be proud of what they see?



FWS Photo



A history of cooperation.

Ethics

Ethics concerns right and wrong in human behavior. Although it involves the application of human reason, it is not a science.

Definition of Responsible

- Liable to be required to give account, as of one's actions or of the discharge of a duty or trust.
- Involving personal accountability or ability to act without guidance or superior authority.

Responsible Behavior and Wildlife

Trappers have an obligation to show respectful behavior toward all wildlife. Both those that they are attempting to harvest, and those that they are not. Even though as trappers, you are killing an animal, you must show respect for the animal both while it is alive and after you have dispatched it.

- Know and use selective and humane trapping systems
- Check traps according to regulations
- Do not to overharvest
- Utilize as much of a harvested animal as possible
- Dispatch humanely
- Use methods that allow the release of non-target species

Responsible Behavior and the Public

Trappers must demonstrate respect toward all people if they expect to be treated with respect in return. Many people do not understand that wildlife is abundant or that trapping benefits wildlife and people. Your attitude and behavior will affect people in a positive or a negative way. You should:

- Be able to explain trapping as a highly regulated activity that provides positive benefits to society.
- Be a public advocate for animal welfare and wildlife management.
- Use discretion when transporting animals.

Responsible Behavior and Other Trappers

Trappers must cooperate with each other to ensure the continued use of trapping as an accepted wildlife management technique.

- Join state and/or national trapping organizations so you can learn from others and share your knowledge.
- Report illegal trapping activity one individual's conduct affects everyone's conduct.
- Treat all user groups with respect you may be the only interaction they have with a trapper make it a positive experience. You do not want to mistakenly make a non-trapper into an anti-trapper
- Just because it is legal does not make it ethical- think about all consequences when placing a trap

Responsible Behavior and Other Outdoor Users

Millions of North American citizens participate in outdoor activities. Responsible trapping is compatible with other activities at most times and places. To avoid potential conflicts with other outdoor users you should:

- Ask landowners who else might be using their property during trapping season. Communicate with them to find out when and what they might be doing.
- Avoid land trapping on public or private property when hunters may be out in numbers, especially those using dogs.
- Wear hunter-orange clothing during hunting season so others can clearly identify you as a person.
- Support responsible hunting when hunters need your help.
- Be a responsible steward for all wildlife and habitats.

Respect for Natural Resources

Trappers and hunters should recognize positive and negative values of furbearers and habitat in the environment:

- Avoid excessive destruction of living vegetation to make sets.
- Don't drive vehicles off the road where you may destroy natural vegetation.
- Practice low impact camping.
- Support the reintroduction of species to areas they once inhabited.

Trapping Scenarios...What Would You Do?

Group discussions are an excellent way to develop your understanding of **ethics** and responsibilities. Think about each of the people in the following scenarios and the attitudes they may have about furbearers and trapping.

-What would you do in this situation?

- -If you could talk to the people, what would you say?
- -What might change their feelings?

-If everyone in your community had the same attitudes about wildlife, what might happen as a result?

Trappers, hunters, and anglers work with resource agencies in many ways.



Silvertip Productions

Trappers must demonstrate responsible behavior.

State and national trapping organizations benefit individual trappers, trappers as a group, and society by promoting conservation and responsible behavior.



Respect others who use the outdoors, such as birdwatchers.



Responsible trappers respect other people who enjoy using the outdoors

Scenario 1 – Your older cousin invites you to go trapping. Along the way, you come to a fence posted with "No Trespassing" signs. As he starts to cross the fence, you ask him "Do we have permission to go there?" He responds, "The owner doesn't care, and besides, he never comes back here; now come on, let's go."

Scenario 2 – It is Winter Vacation from school. You have put out a trap line with more than three dozen sets. One afternoon a friend calls and asks you to spend the night and go to an all-day party the next day. It sounds like fun and you really want to go.

Scenario 3 – A friend introduces you to a Mr. Smith who is complaining about problems with raccoons on his new 500-acre farm. He gives you permission to trap. On the third day of the season at a remote part of the farm you are confronted by a fox trapper who accuses you of trespassing on property where he claims sole permission to trap. You tell him you have permission from Mr. Smith, but he claims the property is owned by the Jones family, who moved to the city several years ago.

Scenario 4 – You are checking your land sets on public land where you haven't seen anyone else since trapping season opened. Suddenly, you hear several gunshots and turn to see a group of about a dozen hunters in a wide line walking across the field in your direction. As you watch, you can hear the sound of dog bells and beepers coming closer. They are going to pass through an area where you have several foot-hold traps and cable restraints set for coyotes.

Scenario 5 – You are trapping on private land where you know the landowner is generous about giving permission to hunters and trappers. You find a muskrat in one of your body-grip traps at a den site. A man and a young girl approach you and accuse you of stealing fur from their traps. You haven't stolen anything, and you haven't seen anyone else's traps on the property since the season opened. How would you respond?

Scenario 6 – It is the second day of trapping season. Before school, you checked your traps and found several muskrat, a mink, and two raccoon. After school you return home and begin the process of skinning and fleshing your fur when three friends show up. One of them is offended to find out that you are a trapper. You don't know what the other two think because they are unusually quiet. What would you say to your friend?

Scenario 7 – It is six weeks before the trapping season opens. You show up at a farm to do some scouting where you have permission to trap. The landowner complains about deer damaging his crops. He comes out of the house with two rifles and says he wants to go along while you scout and have you help him kill several deer. If you turn him down, he may not let you trap on his property anymore. You know that there are too many deer in the area, but deer season is not open and the state wildlife agency is the one in charge of deer depredation.

Scenario 8 – You are out checking your fox traps on a private farm. As you approach a set, you find a fox in someone else's trap set about 30 feet upwind of one of your dirt-hole sets. You can see well in all directions and no one else is around. You've worked hard to do everything right, and you feel like that fox would have been yours if the other trapper had stayed away.

Scenario 9: You stop at a roadside stand where a farmer sells fruits and vegetables. You overhear a customer say "Why is your sweet corn so expensive this year?" The farmer says "Raccoons have eaten nearly half my corn. I never saw so much damage."

Scenario 10: Your family has trapped on several properties in your neighborhood for many years. One property with two large ponds was sold. A month before trapping season opens you stop by to introduce yourself. A young child waves at you as you pull in the drive. As you get out of the car you notice a bumper sticker on the car in front of you. It says "Real Men Don't Eat Meat." The front door opens and a young man steps out to check on the child.

Scenario 11: You take your dog to the vet for annual shots. While you are waiting a woman rushes in crying and holding a badly injured cat. She tells the receptionist her cat is dying after being attacked by a coyote.

Being an Advocate for Trapping

If you asked 100 strangers whether trapping was OK, most would say no. It's not because they dislike you. It's not because they oppose the use of animal products – nearly all of them eat meat, drink milk or wear leather shoes.

So why are they so quick to respond? More often than not, it's because they know very little about regulated trapping – their response is based on the belief that killing animals is wrong unless it somehow benefits society and is done responsibly. You won't change this philosophy. In fact, you probably agree with it as strongly as anyone.



Dan Enloe Behave responsibly even when no one is watching



This trapper has earned the respect of landowners. As a result, he has access to thousands of acres of private land for trapping. What you can change is peoples' awareness of the benefits, oversight and responsibilities that come with trapping. People are less likely to oppose trapping if they recognize that it's highly regulated, doesn't endanger animals and benefits society.

Why should you care? The future of trapping depends on it. Help to maintain regulated trapping by taking every opportunity to let people know:

Trapping Does NOT Cause Wildlife to Become Endangered

- All animals that are trapped in Wisconsin are abundant.
- In North America, every **endangered species** is protected by laws that prohibit or restrict hunting and trapping.
- Trapping removes part of a surplus that's produced each year it doesn't harm the population's future.

Trapping is Highly Regulated

- Regulations are enforced by trained game wardens.
- Most harvest seasons are set in the fall and winter to coincide with the time of year that pelts are most valuable and to avoid the time period when young are raised.
- Regulated trapping is endorsed by trained wildlife professionals who care about the welfare of wildlife.

Trapping Provides Many Benefits to Society

- Trapping can help to keep wildlife from becoming overpopulated.
- Trapping can reduce or prevent damage to crops and other property.
- License fees are used to manage all of Wisconsin's wildlife.
- Trapping can help to reduce the potential for wildlife diseases.
- Trapping can be an important tool for saving endangered species.
- Trapping provides opportunities for outdoor activity and helps our society remain connected with our natural resources.



Trapping instructors passing it on.

Above all, be polite and truthful.



Adventure awaits!

What could you do? What should you do?

What would you do?

Tips for Being an Effective Advocate

Begin by memorizing the main messages (those in bold). Use them whenever the opportunity arises. Fill in the supporting messages as you gain experience.

KEY MESSAGES

- 1) Regulated trapping does not cause wildlife to become threatened or endangered.
- 2) Trapping is managed through scientifically-based regulations, strictly enforced by Wisconsin Conservation Wardens.
- 3) The Wisconsin DNR continually reviews and develops rules, regulations, education programs, and capture methods that consider animal welfare.
- 4) Regulated trapping provides many benefits to society.
- 5) Most of the animal can be used the fur to make clothes and the rest of the animal for food and other useful products.

Assume a fog, not a brick wall, when it comes to peoples' attitudes about trapping. Most will listen if you're sincere and stick to the facts. You're hoping they'll recognize that trapping is a necessary and appropriate activity that should be allowed to continue – even if they don't support it fully. Join local, state and national trapping organizations to stay informed on improvements and threats to trapping. Write legislators when the need arises.

The Wisconsin Department of Natural Resources and the Wisconsin Trappers Association recognizes that regulated fur hunting and trapping is the most versatile, safe, effective, and efficient tool for capturing individual animals without impairing the survival of furbearer populations or damaging the environment. Trapping and hunting provides an outdoor lifestyle for many Wisconsin citizens through use of an abundant natural resource and provides an effective means of harvesting, managing and studying furbearers; controlling damage caused by furbearers; and, at times, reduces the spread of harmful disease. The WDNR and WTA also recognize that trapping concerns segments of the public who oppose trapping, the use of trapping devices or consumptive use of animals.



Just because it is legal, does not mean you should make the set!



Always be responsible sportsperson

Chapter 3 Review – Responsible Trapping

Objective - Students demonstrate an awareness of their responsibilities to landowners, wildlife, other outdoor users and the public.

Know that there are legal and social obligations in addition to trapping regulations.

1. In Wisconsin, trapping is a ______, but those who violate laws may lose their ______ to trap.

2. Obeying the ______ is always the minimum standard of conduct.

Know that responsible trapping involves many decisions that cannot be defined by law.

3. When you behave in ways that are good for animal welfare, landowners, other outdoor users and the public, you will be an ______ trapper.

Know that ethics is a system of principles for good conduct.

- 4. Ethics involves ______ or _____ in human behavior.
- 5. List two specific ways trappers can demonstrate responsible behavior concerning wildlife.
- a. ______b. _____

6. List three specific ways trappers can demonstrate responsible behavior to the public.

a. ______ b. ______ c. _____

7. List two specific ways trappers can demonstrate responsible behavior to other trappers.

a. _____ b. ____

8. List three Key Messages of regulated trapping.

a.	
b.	
c.	
c.	

9. List three ways trappers can care for and respect natural resources while pursuing and taking furbearers.

a.	
b.	
C.	



Chapter 4 Wisconsin's Furbearer Resource



Wisconsin's Furbearer Resource

Wisconsin is blessed with a rich and diverse furbearer resource. Because of Wisconsin's geographic position, the state has furbearers that represent both northern and southern climates.

The Following Furbearers can be Found and Legally Trapped in Wisconsin.

Beaver

Castor canadensis; Order: Rodentia; Family: Castoridae

Description:

The beaver is the largest native rodent found in North America, with adults commonly weighing 40-50 lbs, but sometimes reaching 80+ lbs. They have sharp teeth capable of cutting down large trees, and are capable of altering their habitat by building dams and lodges.

The second claw on each hind foot is split lengthwise and is used like a comb for grooming and to coat the fur with oil from its large oil glands. The fur varies from pale brown to almost black, is very dense and, when groomed with oil, is impervious to water for several hours. Both sexes have large **castor** glands beneath the skin on the lower belly.

The beaver is highly adapted for aquatic life. The tail is very large, scaled, and horizontally flattened, resembling a paddle; the tail can be used as a rudder or slapped loudly on the water to sound an alarm. Beaver swim by propelling themselves with their hind feet and with their front feet folded back against their body, and with only their head exposed above the surface of the water. The nostrils and ears of the beaver are constructed with valves to keep water out when submerging underwater.

Biology:

Beaver usually live as a family group. The colony usually consists of the adult pair, their young of the year (kits), and the young of the previous year (yearlings). Breeding occurs in the den in late January or February, and averages of five kits are born in May or June after a **gestation period** of 110 days.





Common sets for beaver:

- Scent-mound
- Open-water
- Under-Ice Bait
- Runway
- Channel
- Cable snare

Recommended traps and trapping systems:

- #330 body-grip
- #3 foot-hold
- #4 foot-hold
- #5 foot-hold
- #14 foot-hold
- Cable snares

Normally, only one female per colony gives birth. In the spring, before the young are born, the two-year-old beaver are forced from the colony to disperse and establish their own colony. It is these dispersers that can be captured quite easily using scent mounds set in the early spring along larger streams. This movement continues into early summer.

Beaver are one of a few animals capable of manipulating their environment, and are an important part of the **ecosystem**. Their dams create fish and wildlife habitat, reduce erosion and improve water quality. Conversely, the animal sometimes damages valuable trees and crops or causes flooding that affect farmlands, wild rice beds, roads, and residential areas.

They build dams on streams and small flowages to create a pond with a stable water level. The dam is constructed of sticks and mud, mixed with a few rocks if available. The upstream, or pond side, is smoothly plastered with mud. Contrary to popular belief, the beaver does not use its tail as a trowel to apply mud to the dam. All members of the family, except kits, help keep the dam in repair.

A lodge varies in size from 6 -40 feet in diameter depending on the number of beaver in the colony, is built of sticks, tree limbs and mud, and contains a nest chamber which has its entrance underwater. Burrows are often dug into the banks of the pond and used as resting areas. Some older male beaver, referred to as "bachelors", live alone and do not have a dam. When suitable banks are present, such as on large rivers or drainage ditches, beaver will construct a bank den instead. The entrance to the den is underwater and the tunnel leading to it may be 12-15 feet long.

In the spring and summer, beaver feed mainly on small twigs and aquatic plants such as water lily, cattail roots, sedges, and on corn stalks or other terrestrial plants found near the waters edge. Beginning in late August, tree and brush cutting activity increases dramatically, and a food pile, or **cache**, is constructed near the lodge by anchoring branches, shrubs and small trees in the bottom of the pond. This activity peaks at the time of leaf fall. This cache, which usually consists of aspen, alder, willow and birch, provides the green bark which serves as the late fall and winter food supply.

Beaver are very territorial and force away any beaver which does not belong to the colony. The adults mark their territory by creating scent mounds, or "castor mounds" on the bank or dam and depositing their scent, or castor, on these mounds. There are two diseases that beaver can spread to humans. Tularemia is a bacterial disease, and can be transmitted from infected beaver by coming in contact with blood, tissue or water. Human symptoms include headache, chills, vomiting, fever, aches and pain. Giardiasis, a parasitic disease, enters the water when beaver that have the parasite defecate. It causes acute diarrhea and abdominal pain in humans. Drinking contaminated water is the most common means of transmission.

Habitat:

Beaver range throughout most of North America except for the arctic tundra, southwestern deserts and the Florida peninsula. Beaver are common in Wisconsin. Habitats include rivers, streams, marshes, lakes and ponds as long as the water is deep enough to meet their needs. Otter, bear, lynx, bobcat, wolves and coyote prey on beaver. In good habitat a beaver's **home range** will cover up to 0.6 miles of a stream or river. If food is scarce they may travel as far as 650 feet from the water.

Sign:

Beaver cuttings and construction activities are the most obvious signs of their presence. The large, webbed hind foot track is also quite distinctive and can be found along the dam or at the base of slides or runways where the animals enter or leave the water to fell trees and drag brush. In soft mud, only the claw marks of the track may be visible. Under the ice, the presence of bubbles can be used to identify active travel routes.

Trapping Techniques:

Open water techniques generally are blind sets in runways or channels, or utilize castor scent or bait. Foot-hold traps, body-grip traps and cable snares can all be used when open water trapping. Foot-hold traps used in open water trapping should be set as submersion sets. Use plenty of weight to anchor the submersion wire. Do not underestimate the strength of a beaver. A 40 lb. beaver is quite capable of dragging a 15-20 lb. weight out of 3 feet of water.

Body-grip traps and cable snares are used in open water situations where adequate water is not available for submersion but must be at least half submerged. Trap-shy beaver are less likely to be captured using the body-grip trap. It is also more difficult to "hide" these traps from other trappers.

Trapping under the ice usually utilizes bait or is blind sets made in den entrances or channels. A foot-hold, body-grip, or cable snare can all be used under the ice with techniques similar to those used in open water trapping. Most under-ice sets are made on a pole under the ice and are baited with fresh aspen. Please refer to chapter 11 for examples and illustrations of common sets.

Lures and baits:

- Commercial lures
- Castor mixed w/ mineral spirits
- Popple (fresh cut)
- Willow
- Birch

Muskrat

Ondatra zibethicus; Order: Rodentia; Family: Cricetidae

Description:

Muskrats are small rodents with dense glossy brown fur and a hairless tail, weighing 1-4 pounds. Total length varies from 19-25 inches. Muskrats are primarily nocturnal and can swim forward and backward with the aid of partially-webbed hind feet. The head, rump, and tail of the muskrat are exposed above the waters surface while swimming. The muskrat's small front feet are used for holding vegetation. Males have prominent musk glands beneath the skin on their lower abdomen that swell in the spring and produce a yellowish musky-smelling fluid.

Biology:

Muskrats are sexually mature at six months of age and very prolific. They may breed from April to September in the northern U.S., and year-round in the southern U.S., producing 1-5 litters a year with 1-11 young per litter. The **gestation period** is about 30 days and young muskrats are on their own in three to four weeks. Young muskrats typically establish territories 10-60 yards from their mother's den. Other times they travel several miles to find suitable habitat that is not occupied by another muskrat.

Muskrats construct a den either in the bank or in a lodge which they build in the water. When the den is on land, the muskrat may dig several chambers, with the burrow entrance below the water level. In periods of low water, it digs a tunnel or trench to provide access from the den to deep water. The greatest lodge building activity is in late summer and fall. Lodges are built from mud and aquatic plants such as cattail or bulrush. A lodge is usually two or three feet high and four to six feet across. There is normally one dry nest chamber dug out near the center of the house with two underwater entrances or "plunge holes".

Sometimes several nest chambers will be constructed in a single, large lodge. In forested areas, muskrats do not normally build their own lodge, but construct a den in the side of an active beaver lodge. This den is a separate chamber from the one used by the beaver.

Feeding platforms may resemble small lodges, but actually are loose rafts of vegetation where muskrats can crawl out of the water and feed. In winter, muskrats often construct "push-ups" which are hollow frozen shells of submergent vegetation constructed over a hole in the ice. These have no connection with the bottom substrate and are usually constructed near the lodges.



Muskrat tracks.

Rear

Front 1" width by 1" length

Rear 1" width by 2.5" length During the fall, there is some overland movement of muskrats, primarily due to the drying up of shallow ponds. Lack of water forces muskrat to look for larger wetlands which still contain water.

The large-scale movement in the spring, just after ice-out, is related to the onset of breeding activity. At this time, muskrats establish territories which they defend by fighting off other muskrats. Fighting may also occur if food is scarce or population levels are very high, but most of the year, there is little fighting and a number of muskrats share the same den.

Muskrats have small home ranges, seldom traveling more than 200 feet from their den. They are creatures of habit and use the same trails, feeding platforms, and toilet stations over and over. They are primarily vegetarians, eating the roots, shoots, stems, leaves, tubers and bulbs of aquatic plants and other plants near the water's edge. The muskrat's diet may also be supplemented with clams, snails, crawfish, fish, frogs, and even the carcasses of other muskrats. In forested areas, muskrat will eat the bark of pencil-sized twigs obtained from beaver food **caches** in winter. Mink, otter, fox, coyote, hawks and owls eat muskrats.

Habitat:

Muskrats are found throughout most of North America except for the arctic region, the arid southwest and most of Texas and Florida. Muskrats are common in Wisconsin, especially where there is permanent water available. Habitats include marshes, lakes, ponds, streams, and ditches where they feed on aquatic plants such as cattails, rushes and water lilies. The water must be deep enough not to freeze to the bottom (usually at least 2-3 feet). Muskrats have benefited from programs that involve planting and maintaining grass and trees along streams and rivers. Some other practices that benefit this species include conservation tillage, managed grazing, wetland restoration and regulations that protect water quality.

Sign:

Muskrat sign is most often found near water. In marshes, their presence is most commonly indicated by the occurrence of lodges and "push-ups". Evidence of feeding, such as pieces of plants floating in the water, and the presence of runs and channels through vegetation are indications of muskrat activity. The small "hand-like" prints of front feet, elongated hind feet, and a drag mark of its tail between the tracks is distinctive. Their small brown pellet-like droppings are about one-half inch long and often found in feeding areas and surrounding logs or rocks protruding from the water. Bubble trails under the ice can identify active runs.

Sets for muskrat:

- Feedbed
- Trail
- Bank Hole
- Channel
- Runway
- Floating

Recommended traps for musk-rat:

- #110 body-grip
- #120 body-grip
- #150 body-grip
- #1 1/2 foot-hold
- #1 guarded foot-hold
- #1 1/2 guarded foot-hold
- Colony

Lures and baits for muskrat:

- Commercial lures
- Apple slices
- Carrots
- Potato
- Corn

Mustelids - members of the weasel family including:

- weasels
- river otter
- fisher
- American marten
- badger
- mink





Rear

River Otter tracks.

Front and Rear 2.25" width by 2" length

Sets for River Otter:

- Slide or Trail Set
- Channel Set
- Toilet Set

Trapping Techniques:

Foot-hold traps for muskrat should be staked in deep water and the heavier and more durable #1 $\frac{1}{2}$ foot-holds should be used to make the set. The weight of the trap is sufficient enough to submerge a muskrat so no slide wire and lock is necessary in deep water. If there is too much vegetation that a trapped muskrat may become entangled, or if the water is too shallow, then a guarded foothold trap (stop-loss) or body-grip trap should be used. Colony traps or #110 body-grip or #150 can be used in muskrat runs (see current trapping regulations for specific rules).

River Otter

Lontra canadensis; Order: Carnivora; Family: Mustelidae

Description:

Otter are large semi-aquatic members of the weasel family; they are long, slender, short-haired furbearers known to be playful and intelligent. The fur is a rich, glossy, shade of brown and lighter on the cheeks, throat and belly. Males grow to 48 inches and 25 pounds with females averaging smaller. Both sexes have anal musk glands that release when the animal is frightened. The musk is less pungent than other **mustelids**. Otters have webbed toes, non-retractable claws and are excellent swimmers. They have valves in their nose and ears that close when they are underwater.

Biology:

FWS

Adult otter begin mating at two years of age. After mating in late spring or early summer, an average of 2-3 young are born the following spring in April or May, following a period of **delayed implantation**. The den may be an abandoned beaver lodge, bank hole, or hollow log. The young stay with the parents until the next spring.

Otter are very adept at catching small fish and minnows, with rough fish comprising most of the otter's diet. Crayfish, frogs, turtles, muskrats, and small reptiles are also eaten. Otter will repeatedly mark the same area with their scat as a way to establish a territory. These areas are commonly referred to as "latrines" or "toilets" and often occur at beaver dams.

Otter have large territories which may cover many miles (5-50 linear miles) of shoreline or stream course. They also travel overland from one water body or stream to another. Their territories are marked on twisted tufts of grass with scent secreted from their anal glands.

Habitat:

Otter range over Alaska, the Pacific Northwest, Great Lakes states, the Mis-
sissippi River Valley, to the Atlantic and Gulf Coastal states. River otter are common in Wisconsin, inhabiting nearly any wetland area, primarily rivers, small streams, lakes, and beaver ponds. They prefer areas away from human disturbances.

Sign:

Otter sign in snow is often distinctive, alternately running and sliding leaving a "dot-dash" pattern. The tracks are generally paired, but may be separated at slow gaits. Otter sign along streams and shorelines is often concentrated at "hauling out" places where matted and twisted grass and droppings will be found. Otter sign is also often concentrated on beaver lodges and dams.

Trapping Techniques:

Otter are strong, wary, and trap shy. Traps should be placed in water and concealed. Channel or beaver "run" sets result in many incidental otter catches.

NOTE: A special harvest authrizations is required to trap River Otter in Wisconsin. Once trapped it must be registered with the DNR. You will be sent a CITES tag to attach to the pelt.

Mink

Neovison vison; Order: Carnivora; Family: Mustelidae

Description:

Mink are small nocturnal **carnivores** with short dense fur shaded chocolate to nearly black with small patches of white on the chin, throat or belly. Some have light fur and they are known as **cotton mink**. Males measure 20-30 inches with weights over 3 pounds, while females are smaller at 16-21 inches and 1.5-2 pounds. Mink have glands in the anal area that can release a powerful, unpleasant smelling musk. They are quick on land, skilled swimmers and tree climbers.

Biology:

Mink breed in February, but because of **delayed implantation**, the fertilized egg does not attach to the uterine wall and begin developing until the weather is favorable to the litter's survival later in the spring. After a 31-day gestation, 5-6 young are born in dens made in debris piles, hollow logs, abandoned muskrat houses, or burrows. The female and young remain together until late summer when the young begin to disperse. The female remains close to her den and hunts a territory she can cover in two or three days. The male's home range is much larger (25 sq. miles), and a particular area maybe covered once every week or two. Males are very territorial and will not tolerate other male mink in their area, particularly during the breeding season. They may even kill young mink in a den.

Recommended traps:

- #220 body-grip
- #280 body-grip
- #330 body-grip
- #3 foot-hold traps
- #4 foot-hold
- #14 foot-hold

Lures and baits:

- Otter musk
- Beaver castor
- Fresh beaver meat
- Fresh whole fish

CITES - Convention on International Trade of Endangered Species (regulates trade of endangered species and look-alike species between countries)



Craig Bihrle





Rear • Mink tracks.

Front/Rear 1.5" width by 1.25" length

Sets for mink:

- Blind Set
- Spring Set
- Pocket Set
- Channel Set

Recommended traps:

- #120 body-grip trap
- #150 body-grip
- #155 body-grip
- #11 double long spring
- #1 coilspring
- #1 1/2 coilspring
- #1 1/2 jump
- # 1 1/2longsring

Lures and bait for mink

- Commercial lures
- Fish oil
- Fresh muskrat
- Fish bait

Mink eat muskrats, fish, frogs, salamanders, snakes, waterfowl and eggs, and also prey on small mammals such as mice and rabbits. They are efficient hunters and frequently **cache** surplus food in their dens. They are almost equally at home on land or in the water. While hunting, they inspect every hole, brush pile, hollow log, or other food producing cover along their route of travel. They are creatures of habit, and visit the same places on each trip through an area.

Habitat:

Mink are widely distributed across the United States except for the Southwest and Florida. Mink are shoreline dwellers and are common in Wisconsin. Maintaining and improving habitat are the most important conservation measures. The mink has benefited from programs that involve planting and maintaining grass and trees along streams and rivers. Other important practices that benefit this species include conservation tillage, managed grazing, wetland restoration and regulations that protect water quality.

Sign:

Mink generally leave paired tracks at 12-23 inch intervals, although they may also assume an open gait with all 4 feet separated. Mink may occasionally toboggan on snow or dive under it for short distances. In soft mud, they leave a distinctive round cat-like track with five toes and toenail marks. Mink scats are larger than those of weasels and are usually dark and long.

Trapping Techniques:

Almost all sets for mink are made near water. Common sets include pocket sets in the banks where foot-hold traps and submersion devices are used or trail and blind sets where body-grip traps are used.

Weasel

Mustela frenata (long-tailed weasel), Mustela erminea (short-tailed weasel, aka ermine); Mustela nivalis (least weasel) Order: Carnivora; Family: Mustelidae

Description:

Three species of weasel occur in Wisconsin; the long-tailed, the short-tailed and the least weasel, but only the long-tailed and short-tailed weasels are of value in the fur trade. Weasels are small furbearers with short fur, generally light brown above and cream-colored on the throat and belly, with black-tipped tails. In northern areas their coats change to white in the winter. Adult long-tailed weasels (*M. frenata*) measure 13-18 inches including a 4.5-6.5-inch tail.

Short-tailed weasels are about 13 inches long and have tails 4 inches long or less. In all three species, the male is larger than the female. Weasels are primarily nocturnal.

Biology:

Both sexes use a single den in hollow stumps, tree roots, rock piles, or under old buildings. Dens are lined with grasses and fur from prey animals. Weasels breed in July with **delayed implantation** (embryo does not develop until late winter or early spring, several months after breeding), producing one litter with an average of six young born in April or May. Females mate at 3-4 months, males during their second year of life.

Weasels eat mice, voles, chipmunks, rabbits, birds, eggs and poultry. Like the closely related mink and fisher, weasels are efficient killers. Their sharp canine teeth pierce the skulls of prey. Where prey is abundant, weasels may kill more than they can eat, caching excess prey items. Weasels are eaten by fox, mink, coyote, bobcat, hawks and owls.

Habitat:

Long-tailed weasels are widely distributed in the United States, except for the Southwest, while short-tailed weasels are in most of the far northern states. Although the species can be found throughout the state, long-tailed and least weasels are more common in southern Wisconsin, while the short-tailed weasel is most common in the northern two-thirds of the state. Habitats include mountains, farmland, forests, and prairies near water. Weasels generally stay within a half-mile of their den.

Sign:

Weasel tracks are usually paired and the tracks will be spaced about a foot apart. In deep snow the spacing will often be irregular alternating long and short, and sometimes weasels will travel under the snow for short distances. Scats are long, slender, and dark brown or black.

Trapping Techniques:

In Wisconsin weasels are unprotected and may be trapped year-round by persons possessing a trapping license. Weasels are most commonly caught in enclosed cubbies or "weasel boxes".

Fisher

Pekania pennanti; Order: Carnivora; Family: Mustelidae

FWS Front Rear Weasel tracks. Front/Rear-0.5" width by 0.75" length Recommended traps for weasels: • #110 body-grip #120 body-grip # 1 1/2 longspring trap Rat snap trap

Lures and baits for weasels:

- Fresh, bloody baits
- Chicken meat
- Rabbit meat
- Fresh muskrat
- Weasel musk

Ermine - any of several weasels whose coats become white in winter with black on the tip of the tail. Usually referring to the short-tailed weasel (*Mustela erminea*).

Description:



Fisher.

Front





Rear

Fisher tracks.

Front/Rear 2.5" width by 2" length

Carrion - dead and putrefying flesh.

Sets for fisher:

- Cubbies
- Leaning Pole Sets
- Dirt hole

Recommended traps or trapping systems:

- #220 body-grip trap
- #1 1/2 foot-hold
- #1 3/4 foot-hold
- #2 foot-hold

Fisher, members of the weasel family, have long slender bodies that range in color from gray brown to dark brown to nearly black with a long, tapering, bushy tail. Fisher may have white spots on their chest, at the base of each front leg and/or near the groin. Males weigh 7-18 pounds, and females 4-6 pounds. Adult males measure 35-47 inches in length, with females shorter at 29-37 inches. The animal has two anal scent glands that produce a foul-smelling liquid. Fisher primarily are nocturnal, traveling mostly on the ground. However, they are also agile tree climbers and sometimes swim.

Biology:

eyewire.com

Fisher breed in March or April, with adult females breeding shortly after giving birth. The fertilized eggs exhibit **delayed implantation** and do not start developing until January or February of the following year. One to five kits are born in April in a hollow tree, log or rock cavity. The young leave the female in early fall to find their own home territory.

Fisher are extremely agile and active predators. Excellent tree climbers, they can out climb red squirrels. They prey upon snowshoe hare, mice, squirrels, porcupine, and also feed upon **carrion**, particularly that of deer. Although they have a reputation for preying on porcupine, other small mammals are much more important in their diets in Wisconsin. Fisher will also eat insects and berries.

Fisher travel widely with a home range of 50-150 square miles, more if food is scarce. Males have a larger home range than females. Individual animals frequently use well defined hunting trails. When feeding on large food items such as a deer carcass, fisher may confine their activities to the immediate vicinity of the food source for a period of several days. Fisher are solitary, except during the breeding season and when young are with the females. The fisher gives off a foul musk odor when disturbed.

Habitat:

Fisher are found throughout Wisconsin, but are more common in the central and northern regions. Fisher prefer large areas of continuous forest, particularly older timber stands. They are adaptable and can live in a variety of forest types, but they avoid open areas. They prefer the edges of conifer stands when these are adjacent to stands of deciduous trees. Hollow trees, rock crevices, slash piles, abandoned beaver lodges in dry ponds, and old porcupine dens are preferred denning sites.

Sign:

The walking stride of a fisher is about 13 inches for males and about 9 inches for females. When jumping or bounding, fisher generally average over 24 inches per jump and they may lope with all four feet separated or bound with front

and hind feet nearly superimposed. The droppings may contain the remains of berries or fruits in the summer. Sometimes fisher scat will contain porcupine quills.

Trapping Techniques:

Fisher are most commonly caught in body-grip traps set up in cubbies. However, it is becoming more common to catch fisher in foot-hold traps at dirthole sets in open areas near forest edges as they are becoming more adaptive and abundant in numbers further south in the state.

NOTE: A special harvest authrization is required to trap a fisher. Upon harvesting the animal must then be registered with the DNR. Parts of the carcass may also have to be surrendered to the DNR for further research and studies.

Striped Skunk

Mephitis mephitis; Order: Carnivora; Family: Mephitidae

Description:

A member of the weasel family, striped skunks are small, heavy-bodied, black animals with two white stripes on the back that meet and form a white cap on the head. Skunks measure 20-30 inches and weigh 3.5-10 pounds. They are well known for their ability to spray a strong smelling, yellowish, oily fluid for protection. Primarily nocturnal, skunks have poor eyesight, keen hearing and a strong sense of smell. Skunks are capable of swimming, but they are poor climbers.

Biology:

Mating occurs in late February or March and, after a **gestation period** of about 63 days, an average of six young are born in May. Striped skunks can be observed wandering around at any time of the day, but tend to be most active at night. They are omnivorous and prefer mice, insects and their larvae, fruits and berries, carrion, eggs and frogs. They are effective predators on the eggs and young of ground nesting birds.

In early winter skunks den up and become inactive, but they do not actually hibernate. Mid-winter warm spells bring them out for hunting **forays**. Several skunks (sometimes 8-10) often occupy the same den in winter, especially the females. Males den up later in the winter than the females, and normally den by themselves.

Habitat:

Although striped skunks can be found statewide, they are most abundant in semi-open country with a mixture of small woodlots, brush patches, pastures,

Lures and baits for fisher:

- Commercial lures
- Skunk essence
- Beaver castor
- Fresh beaver meat

Recommended traps for skunk:

- #120 body-grip
- #160 body-grip
- live trap

Lures and baits for skunk:

- Commercial lures
- Skunk essence
- eggs

Skunk



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Raccoon.



Raccoon tracks.

Front 1.5" length by 2" width

Rear 1.5" width by 3" length

Foray - to search for food or spoils eventually returning to a core area.

Sets for raccoon:

- Pocket
- Spring Run
- Cubby
- Dirt Hole
- Slanted Pole
- Cage Trap

Recommended traps or trapping systems for raccoon:

- #160 body-grip
- #220 body-grip
- # 1 1/2 coilspring
- #11 longspring
- #2 longspring
- Enclosed trigger traps
- Cage traps at least 10" x 12" x 32"

cropland, fence rows, brush piles, old buildings, and farm yards. Owls, coyote, bobcat, fox, badger, lynx, fisher, and mountain lion will prey on skunks.

Trapping Techniques:

In Wisconsin skunks are unprotected and may be trapped year-round by persons possessing a trapping license. Striped skunks are usually not a target animal to be trapped. Most skunks are a nuisance in urban and suburban areas and are live-trapped using cage traps then humanely **dispatched**. On the trapline most skunks are caught just by wandering upon your set looking for something to eat. Skunks are known to carry rabies, a deadly disease to all mammals, including humans.

Raccoon

Procyon lotor; Order: Carnivora; Family: Procyonidae

Description:

Raccoon are medium-sized adaptable furbearers with a masked face and ringed tail. Average weights are 9-20 pounds, but they are larger in the north where weights up to 45 pounds have been reported. Fur color varies from dirty blonde with darker **guard hairs** to reddish and darker colors. The hind legs are longer than the front legs, creating a hunched appearance when running.

Biology:

Female raccoon breed their first year, males at two years of age. Breeding occurs from February to April with a **gestation period** of about nine weeks. An average of 2-6 young are born in a hollow tree, log or other protected den. The young remain with the female until fall and may den with her through the winter.

Home ranges vary by habitat from 15 acres in urban environments to 12,000 acres in prairies. Raccoon go into a partial hibernation in winter, either alone or in groups, but they are active during warm spells and thaws. Raccoon den in hollow trees, ground burrows, brush piles, muskrat houses, barns, buildings, clumps of cattails, haystacks and rock crevices. They are efficient omnivores, eating fish, crayfish, mussels, fruits, grains, small animals, birds and muskrats. Coyotes, bobcats, mountain lions, owls, eagles and fishers prey on raccoons.

Habitat:

Raccoon are highly adaptable animals and are common throughout Wisconsin and are widely distributed across the United States where they use varied habitats from streams, rivers, lakes and wetlands to forests, prairies, farmland and urban areas. Although they are good swimmers, raccoon usually stay in shallow water.

Sign:

The raccoon has a very distinctive and easily identifiable track. Often, only the front of the rear foot pad and the long, slender toes will show and the heel will not be visible except in soft mud, sand or snow. The scat is cylindrical and usually has little or no taper and may occasionally be found on limbs, logs or stumps.

Trapping Techniques:

Raccoon are caught in many types of traps depending on the habitat. If trapping near water, a foot-hold with a submersion or drowning device is usually used. On dryland, several foot-hold types can be used, including enclosed trigger traps which target raccoon specifically. Enclosed trigger traps help to avoid incidental catches. Body-grip traps used in cubby sets are also very common on dryland. Several sizes of body-grip traps can be used for raccoon, and the specific rules and regulations need to be followed when making cubbies and placing traps. Cage traps are also used for raccoon mainly when nuisance trapping (allowing for easier relocation).

Opossum

Didelphius virginiana; Order: Didelphimorphia; Family: Didelphidae

Description:

The opossum is the only marsupial (mammals in which the females have a pouch) in North America. They have a fur-lined pouch, pointed snout, and a prehensile, flesh-colored or whitish tail. The fur is grayish-white. Males average 6-7 pounds, up to 14 pounds, while females are smaller. Total lengths range up to 36 inches. Opossums are nocturnal and known for the habit of "playing dead" when threatened. They are strong climbers and swimmers.

Biology:

Most breeding occurs in February with litters of 5-13 young. The young are born after only 13 days, but move to the pouch where they stay for 60 days. Some young will ride on the mother's back by clinging to the fur, while others remain in the pouch. The young become independent at about 4 months of age and are sexually mature at 6-8 months.

Opossum are omnivorous, eating nearly any plant, animal, insect or carrion. They are often attracted to road sides where they feed on road-killed animals including other opossum. Coyote, fox, raccoon, bobcat, eagles, snakes, hawks and owls prey on opossum.

Lures and baits:

- Commercial lures
- Homemade lures
- Fish
- Chicken
- Anise oil
- Fish oil
- Honey
- Apples
- Pastries





Opossum tracks.

Front 1.5" width by 1.5" inches length

Rear 1.5" width by 3" length

Habitat:

Sets for opossum:

- Cubby
- Live trap

Traps or trapping systems for opossum:

- #120 body-grip
- #160 body-grip
- #220 body-grip
- Cage traps 9"x9"x30" or larger.

Lures and bait:

Almost any strong-smelling food lure or bait will attract opossum.



Bobcat. FWS Photo Front Rear Bobcat tracks.

Front/Rear 1.75" width by 2" length Opossum have a loosely defined territory. Some confine their movements to 10-40 acres while others travel constantly covering over 200 acres. They are primarily nocturnal and spend the day in a hollow tree or log, brush pile, squirrel nest, abandoned burrow or another dry, safe place. Opossum are common in southern and central Wisconsin, although they occasionally are found in other parts of the state. The susceptibility of their ears, nose, and tail to frostbite limits them from moving farther north. Having a relatively small brain, dominated by the olfactory (smell) regions, they are easily attracted by sweet or foul odors.

Sign:

Opossum tracks are distinctive, especially the widely angled "big toe" of the hind foot. Opossum droppings though, are not distinctive and vary according to the type of food eaten.

Trapping Techniques:

In Wisconsin, opossum are unprotected and may be trapped year-round by persons possessing a trapping license. The opossum is not targeted by many trappers, but commonly caught in many land sets. Most opossum are caught while they are searching for food.

Bobcat

Lynx rufus; Order: Carnivora; Family: Felidae

Description:

An adult bobcat stands about 20-30 inches at the shoulder and in Wisconsin weighs, 15-50 lbs. Short black tufts, up to an inch long, are found on the eartips. Extending from the ears to the chin is a white, black and gray ruff. The bobcat's fur is light fawn to rust brown in summer, and generally gray in winter. The bobcat is named for its short "bobtail," which varies in length, but usually measures around 6 inches. The tip of the bobcat's tail is black above and white below whereas that of a lynx is entirely black. The bobcat also has shorter, more slender legs and much smaller feet than a lynx.

Biology:

Bobcat breed primarily in February and March, although they can breed anytime. They have a **gestation period** of about 50 days and most young are born in May. Two to four kittens are born in an abandoned den of another animal, a windfall with tangled roots or branches, or even under the foundation of a vacant building. The young stay with the female until some time during the winter, when they disperse to find their own territories.

Bobcat are very secretive, and are active mainly at night. They have large home ranges, often exceeding 8-10 square miles, with the female home range

being smaller. A male bobcat's home range will overlap several female home ranges. Bobcat normally hunt alone while crossing and recrossing their territories.

Their main foods are snowshoe hare, deer, mice, small birds and porcupine. Bobcat occasionally kill white-tailed deer (fawns and adults). They are opportunistic, but are entirely carnivorous and do not like rotten or tainted food. When food is plentiful, bobcats may gorge themselves and then not feed again for days. Coyote, eagles, fisher, wolves and mountain lions kill, and in some cases feed upon bobcat.

Habitat:

Bobcat range throughout most of the United States and occupy dense forests, mountains, prairies, farmlands, deserts and wetlands. In Wisconsin, bobcats can be found statewide but are elusive and rarely seen. Bobcat prefer heavy brush areas in and around large lowland conifer stands, such as cedar, black spruce or tamarack. Maintaining and managing forested habitats are important conservation measures.

Sign:

The bobcat track is rounder than a coyote or fox with no claw marks. Also, if a clear track can be located, bobcats have three distinct lobes on the rear edge of the foot pad. Scat is similar to those of coyotes, but tend to be more segmented and less tapering. Often times the scat is partially or wholly covered with grass or leaves, and scratch marks are visible around them.

Trapping Techniques:

Bobcat are more dependent on their sense of sight and less dependent on smell than canines. Therefore, sets for bobcat can be made more effective if you give them a visual attractor in addition to the lure/bait. This is usually done by hanging a pie tin, a cd, or a piece of flagging from a tree branch.

Other items like a bird wing, a strip of fur, or a feather can also be used but are considered "sight exposed bait" and in Wisconsin, must be placed at least 25 feet from the trap.

Note: A special permit is required to trap a bobcat. Once harvested it must also be registered with the DNR and be sealed with a special CITES tag. Parts of the carcass may also be required to be surrendered to the DNR for further research and studies on the species.

Sets for bobcats:

- Cubby
- Dirt-Hole

Recommended traps:

- #1 3/4 foot-hold
- #2 foot-hold
- #3 foot-hold
- #220 body-grip (with restrictions see Chapter 8)

Lures and baits for bobcat:

- Commercial lures
- Beaver castor
- Skunk essence
- Catnip oil
- Fish oil

CITES - Convention on International Trade of Endangered Species (regulates trade of endangered species and look-alike species between countries)



Red Fox

Vulpes vulpes; Order: Carnivora; Family: Canidae

Description:

Red fox are small, shy, and adaptable with a capacity for learning from experience. They weigh 10-14 pounds. Lengths range from 35-41 inches with a 14-17 inch bushy tail tipped in white. Commonly red on top, gray to white lower, with black on the ears, lower legs and feet. Other color phases include black, silver and a cross between red and silver; these genetic variations may occur in the same litter. Red fox primarily are nocturnal and have the ability to hear low frequencies that let them detect small prey underground.

Biology:

Red fox reproduce in their first year. Breeding occurs in January to early March, resulting in one litter of 1-10 kits. The **gestation period** is 53 days. Red fox use maternity dens to raise their young. The dens often are old wood-chuck or badger diggings on slopes with good visibility.

The pups stay with the adults until early fall, when **dispersal** begins. This "fall shuffle" is used to the advantage by trappers who catch many of these dispersers. This **dispersal** period usually begins in October and it may continue through most of the winter. Some fox never disperse, and others disperse later in the winter or as adults.

The red fox, like most predators, is an opportunist which is quick to take advantage of any food available. Small mammals such as mice, rabbits and ground squirrels comprise the bulk of the red fox's diet. A fox will often **cache** uneaten food under litter or bury it in a hole to be eaten later.

Red fox tend to be solitary animals, and always hunt alone. They do not normally use a den except when raising their young. During winter, a red fox will curl up on the snow using its tail to cover its nose and feet.

Habitat:

The red fox is extremely adaptable and thrives under a variety of conditions. It is common throughout Wisconsin and is abundant in both the forest and farmland zones. Habitats include mixed cultivated fields, woodlots, and brushland. The home range is generally 2-3 square miles, but varies with habitat and prey. Coyote are known to kill red fox, and trappers often note lower red fox populations when coyote numbers are high. However, coyote and red fox can coincide if there is sufficient habitat for both species.

Sign:

Red fox tracks are usually more or less in a straight line and the hind foot is narrower and more pointed than the larger front foot. The heel pad is narrow and, particularly in winter, little of the heel pad will show through the thick hair which covers the foot. Red fox scat is variable and is similar to those of the other canids, although noticeably smaller than most coyote scat.

Trapping Techniques:

Almost all sets for fox are made using foot-hold traps or the cable restraint. Fox tend to take the easiest path of travel. Vacant pastures and breaks in fields are very good areas to place foot-hold sets. Cable restraints work well in grassy or wooded areas on deer trails where the cable restraint can be placed right over the trail.

Gray Fox

Urocycon cinereoargenteus; Order: Carnivora; Family: Canidae

Description:

Gray fox are small nocturnal canines that are more aggressive than the red fox. Gray fox are slightly smaller than red fox usually weighing 8-11 pounds, and measure 31-44 inches with a 12-15-inch black-tipped tail. The **pelage** has a coarser texture than red fox, and is colored by alternate bands of black and white on the **guard hairs**. Fur is gray above and red on the lower sides, chest, and back. Gray fox climb trees for food or shelter and **cache** their food. They are considered to be easier to trap than the red fox.

Biology:

Breeding occurs from January to early May, resulting in one litter averaging 3-4 pups. Gray fox use dens more than the red fox. Dens usually are natural cavities marked with snagged hair and scattered bones. The young disperse in late summer and fall.

Although the gray fox has a diet similar to that of a red fox, it eats more plant material. Unlike the red fox, it readily climbs trees when pursued. The gray fox is shy and seldom seen and usually is most active at night. During the day it rests in dense thickets. The home range of the gray fox is one square mile or less.

Habitat:

Gray fox are found in eastern states, the southern third of western states and along the West Coast in varied habitats with a preference for more wooded areas. Gray fox primarily inhabit deciduous forest areas of southern Wisconsin, although they may be found in almost any area of the state. They prefer

Recommended traps for red or gray fox:

- Foot-hold #1 1/2
- Foot-hold # 1 3/4
- Foot-hold #2
- Cable restraint



Lures and baits for red or gray fox:

- Commercial lures
- Fox urine
- Tainted meat bait Skunk musk



Coyote.





Front





Coyote tracks.

Front 3" width by 3.5" length

Rear 2.5" width by 2" length denser, brushy cover, and avoid open forest areas. Gray fox and red fox are rather intolerant of one another, but since their specific habitat preferences often separate them spatially, they often occupy the same general areas. There are no records of the two species crossbreeding. Bobcats, domestic dogs and coyotes prey on gray fox.

Sign:

The gray fox track is smaller and rounder than that of the red fox and, except for the claw marks, might be mistaken for that of a bobcat. Scat is similar to scat of the red fox.

Trapping Techniques:

The same tactics used for red fox will work for gray fox, the only difference being that the sets must be in or near woody cover which is the gray's preferred habitat.

Coyote

Canis latrans; Order Carnovora; Family: Canidae

Description:

Coyote are medium to large canines normally mottled with gray, but sometimes brown, reddish or black. Average weights of coyote in the west are 25-30 pounds, but the animals are larger in the eastern United States, with some weighing as much as 60 pounds. Coyote are intelligent and adaptable, living in a wide variety of habitats including urban and suburban areas. Coyote are abundant and they have become less wary of humans in recent years. Attacks on people and pets have been documented in North America.

Biology:

Coyote breed in late January and February, with a **gestation period** of 63 days. An average of 5-7 pups are born in April or early May in a den dug into loose soil or enlarged from one dug by another animal. The pups stay with the adults until autumn or mid-winter, when they disperse to find their own home territory.

Deer (most often in the form of carrion), cottontail rabbit, snowshoe hare and mice are the coyote's favorite food. But coyote are very opportunistic and will eat whatever food is available, such as insects, fruits or berries in summer, and occasionally domestic animals like sheep or poultry.

Coyote tend to be solitary animals or live in small packs during certain times of the year. They are most active during the evening and before dawn and can move long distances (2-5 miles) in a single night. Adult males have large territories (15-25 miles) in which they travel, whereas adult females occupy areas from 6-10 miles. Adult coyote have few predators, but include: dogs, wolves, mountain lion and eagles.

Habitat:

Coyote are widely distributed throughout the United States. In Wisconsin they are common throughout and usually live in transitional lands, which are a combination of farm land and forest but they can survive well in open prairie or dense forest as well. Coyote prefer to hunt in grassy fields or along the edges of fields for mice and spend the daytime in forested areas. They are also very curious and will not hesitate to go and check something out that has caught their attention in the middle of a field.

Sign:

Coyote tracks are oval in shape and the toenail marks, when present, tend to hook inward. They can usually be distinguished from dog tracks which are rounder and have deeper nail marks and point outward. Like all members of the dog family, the coyote's front foot is larger than the hind foot. Coyote scat is quite variable but is usually large, strongly tapering and contains hair, bone or seeds. Coyote use a variety of barks, yips and howls to communicate, which can be heard from a distance on a calm night. They also mark areas with urine or gland secretions much like domestic dogs.

Trapping Techniques:

Almost all sets for coyote are made using foot-hold traps or the cable restraint. Coyote tend to take the easiest path of travel. Vacant pastures and breaks in fields are very good areas to place foot-hold traps. Cable restraints work well in grassy or wooded areas on deer trails where the cable restraint can be placed right over the trail.

Furbearer Present in Wisconsin, but Currently No Trapping Season

Badger

Taxidea taxus; Order: Carnivora; Family: Mustelidae

Description:

Badger, members of the weasel family, are wide, flat carnivores with a grizzled gray appearance and a distinctive white stripe from their nose, over their head and ending between their shoulders. Average adults weigh 12-16 pounds, but may increase to 20 or more pounds in the fall. Badger are well known for their digging ability and fierce disposition. Badger use multiple elaborate dens with tunnels from 6-15 feet deep and as much as 30 feet to an elevated main chamber. Badger use bedding material and have a separate toilet chamber.

Recommended traps for coyote:

- # 1 3/4 foot-hold
- #2 foot-hold
- #3 foot-hold
- Cable restraints

Lures and baits for coyote:

- Commercial lures
- Coyote urine
- Tainted meat baits
- Gland lures
- Skunk essence





Badger tracks.

Front 2" width by 1.5" length

Rear 1.75" width by 2" length

Reporting Incidentals:

Endangered and state protected species may be trapped incidentally. Call the WDNR hotline for assistance with removing these species from your trap. (1-800-847-9367)



American Black Bear

USFWS Photo



Bear tracks.

Front 4" width by 4.5" length

Rear 3.5" width by 7" length

Biology:

Badger breed in August or September. After a delay of about five months, implantation of the embryos occurs. Following a five to six week development period, an average of three young are born sometime from March to June in a den 2-6 feet below ground. The young stay with the female until fall, when they disperse.

Badger catch prey such as ground squirrels, pocket gophers and mice by digging them out of their dens. These burrows, and the accompanying mound of dirt, are quite often a problem in hayfields and pastures, but if they are located along fence rows or field edges, they are valuable because many of them are used as dens by other animals such as rabbits and fox.

Badger do not actually hibernate, but they do spend most of the winter sleeping underground, occasionally coming out on especially warm days.

Habitat:

Badger primarily occur in the western and north central states with some eastward expansion. Badger are common in Wisconsin and are most abundant in the prairie regions. Establishing and maintaining grassland habitats are the most important conservation measures for this species.

Sign:

The most obvious indication that badgers are present is the occurrence of tunnels, dug in open areas and fields, with a large mound of dirt in front of them.

The badger is the state animal of Wisconsin, and is a protected species. Regulated trapping is not allowed at this time despite healthy populations.

American Black Bear

Ursus americanus; Order Carnivora; Family Ursidae

Description:

Black bear measure 3-6.5 feet in length. Males usually weigh an average of 130-300 pounds, with some exceeding 600 pounds. Females are smaller, weighing about 90-150 pounds. Black and brown are the two major color phases.

Biology:

Females usually breed every other year, beginning when they are 3-4 years old. Breeding takes place during the summer and 2-4 cubs are born in winter dens. Cubs remain with their mother until they are about a year and a half old.

Habitat:

American black bear are the most abundant and widespread of the three bear species found in North America, occurring in 42 of the continental United States and 11 Canadian provinces. They are common in the forested regions of central and northern Wisconsin. General habitat requirements include relatively remote landscapes with dense vegetation and abundant food sources. Black bear are omnivorous, meaning they feed on both plants and animals.

Black bear are considered a big game animal in Wisconsin. There is a hunting season, but no trapping season at the time this manual was last reprinted.

Protected or Endangered Furbearers Present in Wisconsin

American Marten

Martes americana; Order: Carnivora; Family: Mustelidae

Description:

American marten, tree climbing members of the weasel family, are small woodland mammals varying from light to dark brown with a bushy tail and orange throat. They weigh from 1-3.5 pounds, with males larger than females. When traveling on the ground, they seldom actually touch the ground, but hop from areas of cover (stumps, fallen logs, coarse woody debris).

Biology:

American marten breed in mid-summer (July-August). After a period of **delayed implantation** and about one month of pregnancy, 3-4 young are born from March to May. A tree den is preferred. Both sexes breed during their second year of life. Their home range is as small as one square mile but the range varies with sex, food availability and habitat. Food includes red-backed voles, other rodents, red squirrels and birds. Fisher and owls prey on marten.

Habitat:

American marten range from New England to the northern Great Lake states, the Rocky Mountains, and the northern West Coast living in coniferous forests with numerous dead trees and debris. In Wisconsin, American marten are found in the forests of the extreme northern parts of the state.

Sign:

American marten tracks may be confused with those of a large mink or small fisher. The walking stride of marten is usually 6-9 inches, but the paired tracks of bounding marten may be from 1-4 feet apart. Marten scat is about the same

Gestation Period: the time in which a fetus develops, beginning with fertilization and ending at birth.



American Marten

USFWS Photo.



Marten tracks.

Front/Rear 1.5" width by 1.25" length



Canada lynx.



Canada lynx tracks.

Front/Rear 3.25" width by 3.25" length size as mink and similar in shape to weasel and mink. In summer, berries and fruits may be present in marten scat, but generally not in those of mink.

Endangered Species:

American marten is a state endangered species. Marten are sometimes caught accidentally in fisher, fox, bobcat, or coyote sets. Special trapping regulations are imposed in areas with known marten populations and trappers are encouraged to use avoidance techniques as well. Contact the nearest DNR office for assistance in releasing them or to report incidental trap deaths.

Canada Lynx

Lynx canadensis; Order: Carnivora; Family: Felidae

Description:

The Canada lynx is on the **U.S. Endangered Species List** and classified as **threatened**. Canada lynx are light gray, with scattered brown to black hair, cinnamon colored underparts and short tails. Its most identifiable features are the long, feather-like ear tufts, the very large feet and the entirely black tipped tail. The lynx has longer legs and a lankier body than the bobcat, making it appear larger, though it stands only about 24 inches at the shoulder. Males are larger than females and the animals weigh from 11-40 pounds.

Biology:

Lynx live in coniferous forests, bogs and swamps. During the day, Canada lynx rest in cover. They climb trees and often leap down onto prey including snowshoe hares, birds and voles. They breed in March or April, producing one litter of 3-4 young. Lynx are closely tied to the snoeshoe hare and mirror their population levels (boom-bust).

Habitat:

The animal always has been rare in the lower 48 because its primary prey, the snowshoe hare, mostly is found in Canada and Alaska. While rare, Canada lynx may disperse to Wisconsin when prey populations, especially snowshoe hares, decline in Canada.

Sign:

Although lynx tracks are similar to those of bobcat, their feet are significantly larger and there is more hair around and between the toes. This gives a "snow-shoe effect" and prevents lynx from sinking so deeply into the snow and also results in the toe marks being indistinct.

Mountain Lion

Puma concolor; Order Carnivora; Family Felidae

Description:

Mountain lion are solitary, nocturnal carnivores found mainly in the western United States. They measure 6-8 feet long from the nose to the tip of the tail, and have a tawny-colored body with a lighter underbelly, a long, black-tipped tail and black-tipped ears. Male lions usually weigh 120-180 pounds, and females weigh 80-110 pounds. Mountain lion kittens have dark facial markings and are heavily spotted. Spots fade as the animals age.

Biology:

Mountain lion feed mainly on deer and elk, but smaller prey like porcupines and rabbits can be important. Lions are ambush hunters. Lions often drag their kill to a concealed place to feed, and bury their kills with dirt, leaves, or snow between feedings.

Individual lions have territories varying in size from 50 to more than 300 square miles. Males mark territory boundaries with piles of dirt and twigs, called scrapes, signaling to other lions that the area is occupied. Breeding takes place throughout the year. Females typically have litters of 2-4 kittens about every other year and raise the kittens without the help of the male. Young disperse when they are 13-18 months old. Females typically remain near where they were born, but males sometimes wander hundreds of miles before establishing their own territories.

Habitat:

Throughout the western United States, mountain lion habitat is characterized by vast areas of rugged country with dense vegetation. Lions need vegetative cover and topography (rock outcrops, boulder piles, steep slopes) to successfully stalk and ambush their prey, and provide security while feeding, resting and caring for young.

In 2008, Wisconsin DNR biologists confirmed the first cougar in Wisconsin since 1910, near the town of Milton, WI. Since that sighting, several cougars have been confirmed in the state. Genetic material collected (hair, blood, urine) suggests these animals are dispersing from established populations in the Black Hills of South Dakota. Cougar sightings will likely continue if western habitats remain saturated.



Mountain Lion





Mountain lion tracks. Front-3.5 inches width 3 inches length Rear-3 inches width 3 inches length



Gray Wolf.

USFWS





Wolf tracks.

Front 4.5" width by 5" length

Rear 4" width by 4.5" length

At the time this manual was last printed Gray Wolves were Federally listed and so protected in Wisconsin. If this changes and Wisconsin has a trapping season for wolves the following reccomendations can be used.

General guidelines: Use heavy chain (at least 3/16") and weld all connections closed.

Always double stake and reinforce double stake brackets.

Coyote sized drags are usually inadequate. If using drags consider a supplemental drag.

Inspect equipment after every capture.

Gray Wolf *Canis lupus; Order: Carnivora; Family: Canidae*

Description:

Gray wolves (also referred to as timber wolves) represent the largest living species of wild canine. Adults can reach weights of 100+ pounds but in Wisconsin females average around 60 pounds and males average around 80 pounds. Pelage can vary from white to black with most wolves in Wisconsin being a mixture of gray and brown with dark dorsal accents, especially on the face and tail. Wolves are powerfully built with a large head and heavily muscled neck and shoulders. Wolves have relatively long legs as compared to other canines with the front paws being slightly larger than the hind paws.

When compared to the much smaller coyote, wolves can be distinguished by their much larger and more powerful appearance. Wolves have large blocky heads with rounded ears that appear small in comparison as opposed to the slender head of a coyote that makes the more pointed ears appear quite large. Wolves generally carry their tails straight out when moving while a coyote's tail will droop at a downward angle (domestic dogs will often carry their tails curved upward).

Biology:

Wolves are social hunters living in family groups called packs. A wolf pack is made up of a breeding pair and their young from one or more years. Pack size can range from two wolves to as many as thirty but in Wisconsin most packs fall on the smaller side of this range. Individual packs defend territories of 50-120 square miles. Within the pack there are well developed male and female hierarchies where generally only the alpha female breeds and the alpha male is dominant over the entire pack. Wolves generally do not breed until they reach two years of age, at which time most will disperse from their natal pack in hopes of starting their own pack in an unoccupied territory.

Breeding season occurs in late January through February where after a nineweek gestation period, a litter of pups (4-7 on average) is born in the spring. Denning generally occurs in excavated chambers or hollow logs. The helpless pups are born blind and deaf requiring constant attention from their mother. Other members of the pack will assist in pup rearing. In the summer the pups will start leaving the den and interacting with the pack at "rendezvous sites" which are open areas where the pack congregates.

Gray wolves are carnivores with white-tailed deer being their primary prey base in Wisconsin. Wolves will hunt a variety of wild animals and sometimes livestock with beaver becoming an important prey source in the spring and summer. Wolves will also scavenge dead animals when the opportunity exists.

Habitat:

Wolves are highly adaptable but prefer the forested regions of northern and central Wisconsin. Densities are greater in areas where human populations are sparse and deer populations are plentiful. The historic range of the gray wolf covered approximately two-thirds of the contiguous United States as well as most of Canada and Alaska. Today there are two primary populations of gray wolves with the bulk of the North American population occurring in the west from the Northern Rocky Mountain states up through Canada and into Alaska with a smaller population occurring in the Great Lakes Midwestern states of Wisconsin, Minnesota and Michigan.

Sign:

Wolf tracks are more than twice the size of a coyote track, measuring 4-5 inches in length. Generally the claw marks will show with the overall shape of the track having an "egg" like appearance. Dog tracks can be very similar to wolf tracks but can usually be differentiated by a more oval, spread out appearance with a wondering pattern. Wolf tracks are generally less meandering and exhibiting direct registry where the tracks fall mostly in a straight line. Scat is composed primarily of hair and indigestible animal parts.

Endangered Species:

By 1960, wolves were considered extirpated from Wisconsin. Hunting and trapping of wolves was unregulated and boosted by a bounty system into the 1950's. After protection under the Endangered Species Act (ESA) in the 1970's wolf populations began to naturally recover as wolves dispersed from Minnesota into the vacant territories in Wisconsin. With protection and habitat recovery wolf populations continued to grow in Wisconsin until they no longer needed protection under the ESA. The Federal classification of Wisconsin wolves teetered between listed and de-listed until management authority was once again granted to the state in 2012. This allowed for a highly regulated and closely monitored harvest opportunity in Wisconsin to help manage the population through hunting and trapping but it wouldn't last. Despite a population that exceeded management goals, wolves were re-listed by the ESA in 2014.

Wolves are a polarizing species and as such their Federal classification can be impacted by politics and not just their population status. People have strong opinions on wolf managements and few species elicit stronger feelings than the gray wolf. If the state is granted authority to manage the wolf population the attitudes and opinions of many user groups will have to be taken into account in setting management goals. Hunters and trappers would be wise to also take these varying opinions into account if they have an opportunity to harvest a wolf. Be prepared to release a bear if wolf trapping before bears den.

Foothold traps:

A pan tension set at 8 pounds or greater will increase selectivity.

Trap components are often bent by captured wolves and require inspection after each capture.

Traps with offset jaws should be used.

Most coyote equipment is inadequate.

Use at least 3 heavy duty swivels with connections welded shut.

Consult the Wolf BMP for more information and trap reccomendations.

Always consult the current regulations booklet as regulations are subject to change.

Chapter 4 Review – Furbearers

Identify the furbearers in the following pictures. Under each, list whether it is found in "wetland", "upland" or "All" habitats, and whether it is a "carnivore", "herbivore" or an "omnivore".

2



Animal: Habitat:_____ Type of Food:

Type of Food:_____



Animal:	
Habitat:	
Type of Food:	

3



5

Animal:	
Habitat:	
Type of Food:	

Animal:	
Habitat:	
Type of Food:_	

6



Animal:	
Habitat:	
Type of Food:	





Animal:	
Habitat:	
Type of Food:	



8

Animal:	
Habitat:	
Type of Food:	



Animal:	
Habitat:	
Type of Food:	

10



Animal:	
Habitat:	
Type of Food:	

11



Animal:	
Habitat:	
Type of Food:	



Habitat:_____ Type of Food:_ Identify the following tracks.



Know Your Wisconsin Furbearers



Raccoon





20. Name the three furbearers that require a special permit and require registration by the Wisconsin DNR after harvest.

a			
b			
c.			

21. What does CITES stand for and what does it regulate?



Chapter 5 Furbearer Management

Objective - Students use knowledge of furbearer management principles, practices and issues to explain current management programs in their state.

Introduction

Wildlife management is a science. Wildlife biologists are professionals. Biologists apply the basic principles of ecology to maintain and manage wildlife. Many biologists are as highly trained as physicians, lawyers, or college professors.

Some wildlife biologists specialize in the management of furbearers and their habitats. Furbearer biologists monitor animal populations, habitat, and diseases that may affect furbearers or cause human health problems. They develop management goals and create plans to meet those goals.

Furbearer biologists set regulations to protect or restore **threatened** and **endangered species**, allow for the harvest of surplus animals, or reduce overabundant furbearer populations. They also work to educate landowners and the general public about furbearers and the need for regulated trapping. Without education, it is difficult to have public support for management programs.

Few people truly understand wildlife management. Along with biologists, experienced trappers are among the people most knowledgeable about wildlife. This is because trappers must study wildlife, wildlife behavior, and habitats to be successful.

As people learn more about wildlife, they usually care about it more. When caring leads to actions that conserve wildlife for future generations, the person has become a conservationist. This chapter will introduce you to the principles of furbearer management. Through further study and experience, you can develop the knowledge, skills, and attitudes to become a conservationist.

The Wisconsin Department of Natural Resources (WDNR)

State wildlife agencies have the authority and responsibility to manage furbearer resources and regulate trapping for their citizens. The Wisconsin



Shannon McNamara - wolf biologist Wolf biologist fitting a wolf with a GPS collar.

Responsible trappers learn about wildlife and take action to conserve it for future generations.



FWS Photo

Volunteers worked to build wood duck nest boxes at U.S. Fish and Wildlife Service Refuge.



Trees, like wildlife, are renewable.

State agencies have the legislative authority to manage wildlife on behalf of the public.

Department of Natural Resources manages Wisconsin's furbearer resources for the benefit of all citizens of the state. The Department recognizes that furbearers have a variety of ecological, **cultural**, economic and **aesthetic** values, and that these values can be positive or negative. Also, since values are determined by people, not nature, the same furbearer can have a wide range of values depending on the time, the place, and who is being affected by it.

In order to responsibly manage furbearers, the Department monitors populations and harvests, sets regulations, maintains habitats, and enforces laws related to furbearers.

Seasons

Trapping and hunting seasons are based on furbearer populations. Seasons are not permitted if they are deemed detrimental to the survival of the species. Once biological requirements are met, further decisions are based primarily on the concerns of people who use, value, or are affected by the resource. Opportunity, fur primeness, damage problems, landowner concerns, nonharvest values, disease and other factors all enter into these decisions and opportunities. No furbearer species has ever become endangered or threatened as a result of regulated trapping.

Surveys

Harvest and fur value surveys are conducted for all harvestable furbearer species in Wisconsin. For species that are more sensitive, harvest figures are determined through pelt registration. For those species, carcasses are collected from trappers and hunters, and information on location, sex ratios, age and productivity are used to assess the health of the population. A number of special surveys may also be used to evaluate particular areas of concern.

Habitat

Although furbearers often are not the highest priority in many habitat management programs, the fact remains that furbearing animals are primary beneficiaries of many of these practices. This is particularly true of wetland areas, which are prime habitat for muskrat, mink, beaver, raccoon, fox, and other furbearers. In fact, furbearers often do so well in these areas that conflicts develop with management for other species such as waterfowl. Forest management practices also influence furbearer populations, with some species favoring early successional stages of vegetation, and others favoring later stages.

Enforcement

Hundreds of trained conservation officers in Wisconsin enforce laws and regulations relating to furbearers. Of course, they have many other duties in addition to furbearer regulations, but they are always interested in, and concerned about situations where violations are occurring. It is important, however, for trappers and hunters to police their own ranks and to help enforcement officers by reporting violations. People who take furbearers illegally are stealing from all citizens of the state.

Conservation and Trap Line Management

Furbearer regulations are established for the entire state, or for large regions of Wisconsin depending on the species. Conditions vary within such large areas, therefore, it is up to trappers to practice **conservation** on their own trap line, and capture only a portion of the surplus. This sounds simple, but actually is quite complicated because in many areas a number of trappers and hunters are competing for the same resource. Fortunately, trapping and hunting tend to be self limiting for many species. The time and effort required to take these animals exceeds the benefit long before they are reduced to critically low levels. For other species which are not so resilient, regulations have to be more restrictive.

On private lands where trappers have exclusive or near exclusive trapping privileges, individual trap line management is much more feasible. In these areas the trapper can manage not only the harvest, but in many cases the habitat as well. By doing so, the trapper can be assured of having a relatively high sustained harvest year after year.

Regulated trapping provides many benefits for society. For example, they help keep wildlife populations in balance with the environment or at acceptable levels, reduce property damage, support broader conservation programs and obtain many products for human use. While all of these are good reasons for people to support regulated trapping, the future of these practices also depends on their perceptions of trappers and their actions afield. Always think about the **Code of Trapping Ethics** covered in Chapter 3.

Furbearer trapping is highly regulated and laws are enforced by trained conservation officers. Laws that pertain to furbearer trapping help to:

- 1. Protect species from becoming threatened or endangered.
- 2. Improve animal welfare.
- 3. Prevent nontarget catches.
- 4. Limit furbearer trapping to the time of the year when furs are marketable and young no longer depend on adult animals.
- 5. Monitor harvest levels by using mandatory registration for some species, and harvest questionnaires for others.
- 6. Support habitat conservation and wildlife studies through license sales and other fees.
- 7. Protect landowners' rights and interests by requiring written permission before setting capture devices.



Biologist tracking wildlife.



Nicole Rice



Nicke Shumaker Millions of Americans hunt and trap.

Habitat destruction leads to long term declines in wildlife populations.

Extirpated means that a species no longer exists in a portion of its historical range. It does not mean that a species is extinct.



Working together, biologists and trappers have restored river otter populations to much of their former range.



Oil is a non-renewable resource.

The Wisconsin Department of Natural Resources monitors wildlife populations and adjusts season dates and **bag limits** accordingly. Annual trapping pamphlets contain information and regulations applicable to the year's activities. Pamphlets may be obtained from license vendors or by contacting:

Wisconsin Department of Natural Resources P.O. Box 7921 Madison, WI 53707 Website: web: http://dnr.wi.gov/

Confidential information concerning violations can be reported by calling TIP WDNR (800)847-9367

Renewable vs. Non-renewable Resources

Natural resources fall into one of two categories: renewable and nonrenewable. Renewable resources are living things with the capacity to regenerate or repopulate. Plants and animals are renewable resources. For example, when trees are cut down, new trees can grow there again from seeds. Similarly, when some wild animals are harvested by people or die due to disease, predation, or starvation, the remaining animals have young and the population increases. Trees and animals are resources that can be renewed as long as the habitat is available.

Non-renewable resources are non-living items that are **finite** and do not regenerate themselves. Coal, oil and natural gas are examples of non-renewable resources.

Wildlife Habitat

Wildlife habitat is made up of food, water, cover, and space. Each species of wild animal needs certain kinds of food and cover. Each species also needs a certain amount of habitat to provide for its needs.

The quality and quantity of habitat in an area affects the number of species present, and the population level of each species.

Each species of wild animal is associated with a certain kind of habitat. Wetlands, forests, grasslands, and farmlands are common types of habitat used by furbearers.

Arrangement is an important characteristic of habitat. When habitat types are mixed, the area will generally support more species and higher wildlife populations.

Sustainable Management of Wildlife Resources

Native wildlife populations are natural resources - biological wealth that should be sustained and managed for the benefit of present and future generations of people.

Wildlife biologists focus on protecting, preserving and improving habitats and **ecosystems**. It is important to understand that biologists also focus on maintaining sustainable populations of wildlife, not individual animals.

Most species of wildlife, including furbearers, have short life spans. Over the long term, individual animals do not endure, but populations do.

Sustainable management of furbearer populations depends upon these two key concepts:

- An understanding and focus on habitat.
- An understanding and focus on the furbearer population.

Requirements to Allow Harvest of Furbearers

Biologists generally look for three requirements before allowing the harvest of wild animals:

- The species is not threatened or endangered.
- The harvest techniques are acceptable, and populations are sustainable.
- Killing the animals serves a practical purpose.

Factors Affecting Wildlife Populations

Furbearer populations change over time. Populations are highest after the young are born each year. Some animals die due to weather, food supplies, diseases and predation, so the number of animals declines until more are born the following year. Animal populations also change over longer periods of time, usually due to changes in the quantity and quality of habitat.

Many wild animals, including furbearers, can quickly repopulate an area of suitable habitat. River otter provide one example. In many states, river otter were extirpated long ago due to habitat destruction, water pollution and unregulated killing. In recent years, some river otter habitat has been restored. Biologists and trappers captured river otter in states where the populations were high, and released a few in the restored areas. Within a short time, the otter populations expanded to fill the available habitat. **Extinction** means a species is no longer found anywhere. Passenger pigeons, for example, are extinct.

Finite - having a definite limit. Once it's gone, it's gone!

Wildlife agencies and supporters have restored many species that were once extirpated from entire states. River otter, fisher, and beaver are furbearers that were extirpated from many states and later restored.



USDA Photo A tree nearly felled by a beaver.

Major Factors that Affect Wildlife Populations

- Changes in habitat
- Carrying capacity
- Limiting Factors such as food, weather, & predation



Wildlife populations are usually highest in the spring after young have been born.







The number of animals a given area can support throughout the year is known as its **biological carrying capacity**. Limiting factors determine what the biological carrying capacity will be. Food is a common limiting factor. Water, shelter, space, disease and predation are other types of limiting factors biologists must monitor.

Over the course of many years furbearer populations may decline a lot more than normal due to catastrophic events. Examples include habitat destruction such as forest fires, extreme weather such as blizzards, and diseases such as rabies. If a few animals survive, the population is capable of recovering when conditions return to normal. During these times, biologists may restrict harvest and take other actions to help the animals or the habitat.

Management Goals: Compensatory vs. Additive Mortality

Biologists consider several factors when setting management goals for each furbearer species. Two of these factors include the biological carrying capacity of the habitat, and the **cultural carrying capacity**. **Biological carrying capacity** refers to the number of animals the habitat can support. **Cultural carrying capacity** refers to the number of animals that society will accept, which may be a lower level than the biological carrying capacity.

Under normal conditions furbearers produce a surplus of young. Wildlife managers can set seasons, **bag limits** and trapping methods to allow part of the annual surplus to be harvested (harvestable surplus). Biologists manage for **compensatory mortality** by substituting regulated trapping for other mortality factors that would otherwise reduce the population. When managing for compensatory mortality, trapping does not affect the overall population that survives until spring. If trapping did not occur, a similar number of animals would be lost due to limiting factors, such as a lack of food or shelter or disease. The population level is determined by the biological carrying capacity of the habitat.

While some furbearer populations can change dramatically, most populations become stable when their population reaches the biological carrying capacity. In some areas high furbearer populations can cause major problems to people. Beaver dams, for example, may flood farm fields and roads, or interfere with city water supply systems. When furbearer populations cause too many problems, biologists may decide to reduce the numbers below the area's biological carrying capacity. In this case, biologists are managing for **additive mortality** to bring the population down to its cultural carrying capacity.

Regulated Trapping as a Management Tool

Regulated trapping is an important part of wildlife management programs. The regulated use of the furbearer resource is not only acceptable but in some cases has significant benefits. When furbearer populations cause conflicts with people, or with other wildlife species and habitats, biologists may adjust trapping regulations to increase the harvest and reduce the population. **Regulated trapping is the most efficient and practical means available to reduce furbearer populations, does so at no cost to the public, and has local economic benefits.**

Regulated trapping helps manage wildlife and habitats. Trapping is used to protect many rare and **endangered species** of plants and animals, wetland habitats, and personal property. Regulated trapping is also used for localized disease control, wildlife research, and wildlife restoration.

In 1997 the U.S. Fish and Wildlife Service (FWS) reported trapping was used on 487 management projects at 281 National Wildlife Refuges.

The case of the piping plover, a beach nesting bird along our Great Lake shorelines, is a good example. The piping plover is a threatened shorebird protected by the United States and Canada. Fox, raccoon, mink and striped skunk prey on piping plovers when they nest. The U.S. Fish and Wildlife Service and National Park Service use trapping in and around piping plover habitat to reduce local populations of these predators. Some of the other rare species protected by trapping programs include pink lady slippers, pitcher plants, the desert tortoise, sea turtles, Attwater's prairie chickens, brown pelicans, least terns and black-footed ferrets. Trapping has been a tool used in protecting and managing federally endangered whooping cranes here in Wisconsin.

Major Issues Related to Furbearer Management

Three major issues affect the conservation and management of furbearers:

- Human population growth, which degrades and destroys habitat.
- Public intolerance of furbearers.
- Opposition to any use of wildlife by animal rights groups.

Human population growth causes the loss of furbearer habitat. The range of some furbearer populations has already been reduced. Habitat destruction has eliminated the possibility of restoring some furbearing species to areas they once inhabited. Unlike habitat destruction, regulated trapping is a sustainable use of furbearers. Regulated trapping does not threaten the continued existence of furbearer populations.



USDA Photo Predator trapping has helped the endangered, common tern recover from near extinction in Wisconsin.



USFWS

Wildlife biologists face challenges:

- Expanding human populations.
- Public intolerance for furbearers in populated areas.
- Opposition to sound management by animal rights groups.

The U.S. Department of Agriculture has a Wildlife Services Program to manage damage, minimize wildlife threats to public health, resolve conflicts with wildlife in urban areas, protect property, protect endangered species, and preserve natural resources. Trapping is an essential tool used by Wildlife Services employees.



While fishing is popular nationwide, some activists oppose it, along with trapping and hunting.



Excise taxes are collected on firearms, ammunition, and archery equipment to support wildlife management programs.

Public intolerance of furbearers is another issue. As wildlife habitat continues to be split up by development, biologists are faced with new challenges. Examples include coyote killing pets, beaver cutting landscape trees or flooding roadways, raccoons invading homes, and human health threats from diseases such as rabies. These problems are highly publicized and they make some people want to lower or eliminate furbearer populations. As a result, nuisance animal trapping has become a growing industry. This concerns biologists because it shows increasing numbers of people view furbearers as problems that should be destroyed. This is a reactive response to problems, whereas regulated trapping activity is proactive and trappers value these resources.

Animal rights activists reflect a different view, which differs from values of using animals for food, clothing and other purposes. Activists want to eliminate all trapping and stop managing furbearers. If animal rights activists are successful, people will have fewer options for solving furbearer problems. Additionally, people could not use furbearers.

Funding Furbearer Management Programs

Hunters and trappers provide most of the money for wildlife management programs. The two major sources of funding include:

- Hunting and trapping license revenues.
- Excise taxes on firearms, ammunition, and archery equipment.

Hunting and trapping licenses are sold by states and provide direct revenue for furbearer management. **Excise taxes** on equipment are distributed by the U.S. Fish and Wildlife Service under the Division of Federal Assistance in Wildlife Restoration Act. Wildlife Restoration dollars, sometimes more than \$200 million a year, are distributed to all 50 states, territories, and Puerto Rico for approved programs that involve wildlife research, management, land purchases, and education. Part of the Wisconsin trapping license revenue is earmarked to trapper education.

Chapter 5 Review- Furbearer Management

Objective - Students use knowledge of furbearer management principles, practices, and issues to explain current management programs in their state.

Identify the government agency with the authority to manage furbearer resources and regulate trapping in your state.

1. Name the agency that regulates trapping in your state.

Explain the difference between a renewable and a nonrenewable resource.

- 2. Name two renewable resources.
 - a._____ b. _____
- 3. Name two nonrenewable resources.
 - a._____ b.

Identify the components of habitat and name three types of habitats used by furbearers.

- 4. Name four components (parts) of habitat.
 - a._____ b. _____
 - c. _____
 - d.
- 5. Name three types of habitat used by furbearers.
 - a. _____ b._____
 - с.

Name three principles that are applied in the harvest of wild animals in North America.

- 6. Complete these statements.

 - a. The species is not ______.

 b. The harvest techniques are ______.
 - c. The killing of these animals serves a .

Identify the major factors that affect wildlife populations.

7. Food supplies can be a limiting factor for wildlife. Name two more limiting factors.

a. b.____

Explain the difference between managing furbearers for compensatory mortality and additive mortality.

8. When furbearers over populate and cause problems, biologists may need to reduce the population. This means the biologists must manage for _____ mortality.

Identify regulated trapping as the most efficient and practical means available to accomplish regular furbearer population reductions.

9. Regulated trapping is the most practical means available to reduce furbearer populations and it does so at ______ to the public.

Identify situations where trapping is used to directly manage wildlife.

10. Regulated trapping is used to protect endangered species, wetland habitats, and personal property. Name three other uses for regulated trapping.

a._____ b.____ с.

Explain the three issues related to furbearer management.

11. Name the three major issues related to furbearer management.

- a. Human _____ growth.
- b. Public ______ of furbearers.
- c. Opposition from _____ groups.

Explain two funding sources for furbearer management programs

12. Name two major sources of funding for furbearer management:

 a. ______and _____revenues.

 b. Excise taxes on firearms, ______and _____equipment.

Chapter 6 Trapping Regulations





Legal traps vary from state to state. Trapping regulations are modified each year in Wisconsin. Season dates and new laws require trappers and hunters to be vigilant.

Wildlife officers have an important job. Officers strictly enforce trapping regulations. They may also help teach trapper education courses and assist on nuisance animal complaints.

Flexible trapping regulations allow biologist to use trapping as a tool of wildlife management.



Myranda Lin

Objective - *Students demonstrate the ability to understand, support, and comply with trapping regulations.*

Introduction

Biologists use trapping regulations to manage and conserve wildlife. When an animal population is low or endangered, regulations can be used to protect the species. When an animal population is high, biologists can allow more harvest, using the principle of **additive mortality**. If the population of a species is high enough to cause problems biologists may lengthen the season, raise **bag limits**, or allow additional methods of harvest so the population can be lowered to an acceptable level.

Trapping regulations are also used to enhance human health and safety; protect habitat, property, and domestic animals. Regulations require the use of selective trapping methods and meet public expectations for animal welfare.

Wisconsin has a process for setting regulations that allows for public participation at spring meetings in all counties. Trappers, landowners, organizations, and government agencies can participate in the regulation setting process.

As a responsible trapper, you must follow all regulations. If you disagree with a regulation you should participate in the regulation setting process. The Wisconsin Conservation Congress (WCC) has 5 representatives from each of our 72 counties. Learn who in your area is on the Congress and work through them and your local wildlife biologist. Plan on participating in the WCC/DNR Spring Hearing in early April.

Wisconsin has law enforcement officers dedicated to enforcement of hunting and trapping regulations. They are known as conservation officers or conservation wardens. Responsible trappers work with their local conservation warden and help develop mutual respect for the role each serves in wildlife conservation. When landowners have furbearer control problems, conservation wardens often refer them to responsible trappers they know and trust.

Sources for Current Trapping Regulations

The Wisconsin DNR publishes brochures that explain current hunting and trapping regulations. Since trapping regulations may change each year you need to obtain a new copy of the regulations when you renew your trapping license. The most common place to find the brochures is at the location where you purchase your license. You may also obtain the regulations by writing or calling the WDNR Call Center at: 1-888-936-7463. In addition, Wisconsin publishes hunting and trapping regulations on their web site: dnr.wi.gov, keyword "regulations"

Process for Setting or Changing Trapping Regulations

The Wisconsin DNR is responsible for publishing the trapping regulations. The Wisconsin State Statutes and Wisconsin Administrative Code is the authority for these regulations.

The governor appoints an advisory board to receive public comment on issues related to Wisconsin's natural resources. Advisory board members represent a geographic district within the boundaries of the state with monthly meetings held. The meetings provide the opportunity to discuss and request actions relative to furbearer management and trapping.

The Wisconsin Conservation Congress plays a very important role in the management of Wisconsin's furbearer resource. The WCC is the only "advisory body" in the state where citizens of Wisconsin elect delegates to represent their interests in natural resources, both local and statewide, who work with the Natural Resources Board and the DNR to effectively manage Wisconsin's natural resources. Many trapping regulations are developed by the WCC and brought to annual spring hearing meetings for approval.

Any Wisconsin citizen that has a reasonable idea for improving a regulation can contact their local Wisconsin Conservaiton Congress delegate and submit proposed change. If the local assembly approves, the resolution is voted on by the entire state delegation at the WCC annual meeting. It will then be sent to the appropriate committee to be discussed and analyzed before being passed on to the Executive Committee for review. After successfully passing each step in the WCC, the Natural Resources Board will consider the resolution and advise the WDNR. The WDNR will then present the proposed regulation to Wisconsin citizens for approval through public hearings and public meetings. It is a lengthy process, but Wisconsin is unique and fortunate that its concerned and informed citizens have a voice in our regulation making process. More information can be found at: dnr.wi.gov, keyword "conservation congress". It is your responsibility to know the trapping regulations. Ignorance of the law is no excuse if you are charged with a trapping violation.



WI Trapping Regulations.



WCC structure



Trappers work with wildlife agencies to improve regulations.



Ohio DOW Photo

A 330 body-grip trap set for beaver. To be set legally in Wisconsin, trapping regulations require this trap be at least half underwater.

If populations decline, biologists can shorten seasons or take other steps to allow the population to increase.

Wisconsin requires trappers to use trap tags with specific identification information.

Conditions Influencing Change in Trapping Regulations

- Furbearer populations rise or fall.
- Trapping technology improves.
- The number of trappers rises or falls.
- Habitat changes.
- Nuisance animal problems increase.
- Public attitudes change.
- Rare or endangered species need protection from furbearers.

Legal Restrictions for Trapping Nuisance Animals

Chapter 12.10 of the Wisconsin Administrative Code provides information regarding the rules and penalties related to nuisance wildlife control. These rules are summarized in a "Nuisance Wildlife Guidelines" handout, which needs to be reviewed before conducting any animal damage control work or removing nuisance wildlife. The handout can be found on the Wisconsin DNR website.

Know and Understand the Trapping Regulations

Violations of Wisconsin's hunting and trapping regulations can be criminal offenses. Conservation wardens and judges recognize the difference between an unintentional violation and willful intentions to poach animals out of season or by illegal means. Ignorance of trapping laws is not an excuse. Upon conviction of a trapping violation, a judge may impose fines or jail time. Trappers convicted of serious violations may also have traps, firearms and even vehicles confiscated by the court. Judges can also revoke licenses and suspend privileges to trap in the future.

Reporting Wildlife Violations

As a trapper, you may learn about trapping violations that need to be stopped. Never confront a violator or get directly involved without a Conservation Warden present. Instead, observe the situation and quickly report it to your local Conservation Warden. Provide descriptions of the violators, vehicles, license plate numbers, locations, dates and times.

Most states have established programs to stop poaching with toll-free telephone numbers to call when you need to report a violation. These programs go by names such as "TIP" which stands for "Turn In a Poacher." Many states provide rewards for information that leads to the arrest and conviction of violators. Callers can remain anonymous.

The Wisconsin TIP-WDNR line is: 1-800-TIP-WDNR (1-800-847-9367)
Chapter 6 Review - Trapping Regulations

Objective - Students demonstrate the ability to understand, support and comply with trapping regulations.

Identify two specific places to obtain current trapping regulations.

8. Provide descriptions of the violators, vehicles, locations, dates, times and ______.





Chapter 7 Best Management Practices

Objective - Students understand Best Management Practices for Trapping are needed to address animal welfare, trapping, efficiency, selectivity and safety in furbearer management programs.

Introduction

In 1996, the Association of Fish and Wildlife Agencies (formerly known as the International Association of Fish and Wildlife Agencies) began a program to develop **Best Management Practices** for trapping as a way to improve the welfare of captured animals, and to document improvements in trapping technology. This project is one of the most ambitious in the history of the conservation movement. The WDNR and the WTA have been active in this program since inception, with experienced trappers involved from all regions of the state.

BMP's are necessary to sustain regulated trapping as a wildlife management tool, and to maintain the integrity of wildlife **conservation** programs throughout the United States.

Who Coordinates BMP's for Trapping

The Association of Fish and Wildlife Agencies coordinates the development of BMPs for trapping. **AFWA**'s membership includes all 50 state fish & wildlife management agencies, federal agencies and conservation organizations.

State furbearer biologists, veterinarians and trappers in addition to scientists from the University of Georgia and the University of Wyoming cooperated on the development of BMPs. Most funding for BMP research and development was provided through a Congressional appropriation to the U.S. Department of Agriculture.

BMPs are Based on Scientific Research

BMPs are based on the most extensive research effort of animal traps ever conducted in the United States. Traps tested were selected based on knowledge of commonly used traps, previous research and input from expert trappers.



Trapping BMP's - Sustaining the Future of Trapping



All 50 state fish and wildlife agencies support the development of Best Management Practices.

Trappers, veterinarians and university researchers helped wildlife agencies evaluate more than 100 types of traps.

BMPs - Tools for Trappers and Wildlife Professionals

Wildlife veterinarians exam-
ined thousands of trappedth
to
to
to
injuries.

More than 2,000 teams of trappers and technicians participated in field testing.

Each state wildlife agency decides how to incorporate Best Management Practices into trapper education and furbearer management programs.

BMPs are valuable tools for biologists and trappers.

BMP-recommended traps resulted in no, little, or moderate injury to at least 70% of the animals trapped.

Traps that failed to capture and hold at least 60% of the species targeted did not qualify for recommendation.

To date, 41 state fish and wildlife agencies have been actively involved with the BMP program. Trapping BMPs were developed to give wildlife professionals information they need to improve animal welfare. State fish and wildlife agencies use BMPs to continue the improvement of trapping systems throughout the United States.

Trapping BMPs include suggestions on practices, equipment and techniques that will provide trappers and wildlife biologists with practical information to use in the field. These suggestions will improve animal welfare, help avoid the unintended capture of other animals and increase public support for trapping.

BMP Evaluation Criteria

BMP traps were evaluated using criteria to measure the effects on animal welfare as well as trapping **efficiency**, selectivity, practicality and safety.

Animal Welfare

Researchers tested live restraining traps for injuries to furbearers using two methods. One system evaluated specific injuries, and the other grouped the injuries into categories from mild to severe. BMP approved traps must have a low rate of injuries to the furbearing animals being studied. Recommended traps resulted in moderate, low, or no injury to at least 70 percent of the animals trapped.

Efficiency

Traps meeting BMP criteria must be able to capture and hold at least 60 percent of the furbearers that spring the trap.

Selectivity

Traps must be set and used in a fashion that limits the risk of capturing nonfurbearing species while increasing the chances of capturing the desired furbearer.

Practicality

Each recommended live-restraining trap was evaluated by experienced trappers and wildlife biologists for practicality. Criteria used to measure practicality include cost, ease of use, ease of transport, storage, weight and size, reliability, versatility and the expected life-span of the trap.

Safety

Each recommended live-restraining trap was evaluated for safety to the user and other people who might come into contact with the trap.

Sources for BMP Information

All state fish and wildlife agencies have access to Trapping BMP publications as they are developed. Trappers can find all current information on Trapping BMPs at the following Web site:

• http://www.fishwildlife.org (search furbearer management)

The Furbearer Management website is maintained by the Association of Fish and Wildlife Agencies on behalf of state fish and wildlife agencies, trappers, and trapping organizations.

BMPs provide guidance to wildlife agencies and help responsible trappers make decisions in the field. Below are a few examples of the BMPs available.



Badger is our only non-game furbearer in Wisconsin.

Traps and sets must be selective.

Experienced trappers evaluated cost, ease of use, trap weight, reliability and other factors.

As new BMP information is published it is distributed by wildlife agencies, AFWA and trapping associations in print and online









American marten is our only state endangered furbearer in Wisconsin.

Chapter 7 Review - Best Management Practices

Objective – Students understand Best Management Practices for Trapping are needed to address animal welfare, trapping efficiency, selectivity and safety in furbearer management programs.

State the name of the organization that coordinates development of Best Management Practices for Trapping.

1. State the full name of the organization known as AFWA.

Explain that BMPs are based upon scientific information and professional experience regarding currently available traps and trapping technology.

- 2. Experienced ______ were deeply involved with developing Best Management Practices for Trapping.
- 3. Using trapping BMPs can:
 - a. Improve ______ welfare.
 - b. Help avoid the unintended ______ of other animals.
 - c. Increase public ______ for trapping.

Identify where to find detailed BMP information for each furbearer species.

5. What is the URL address for the Best Management Practices website.



Objective - Students demonstrate the ability to identify types of traps, prepare traps for use, and safely operate traps.

Introduction

Traps come in many different sizes, shapes and styles. Traps can be divided into two main groups: Live-restraining or kill-type traps.

Live-restraining Traps

Live-restraining traps are designed to capture an animal alive and unharmed. The most common live-restraining traps include foot-hold traps, cable restraints and **cage traps**. These traps allow release of non-target animals.

Kill-type Traps

Kill-type traps are designed to kill furbearers. The most common kill-type traps are the **body-grip trap** and cable snare. Wisconsin has strict regulations on the use of these traps which includes trap size and location where sets can be made. The use of kill-type traps is highly regulated to avoid incidental catch of non-target animals.

Some of the traps described in this chapter may not be legal in Wisconsin. Regulations vary from state to state, and from year to year within states. Know the regulations for Wisconsin, and follow them.

Live-restraining Traps

Foot-hold traps

Foot-hold trap means a trap, constructed of metal, designed to catch an animal by the foot. The most common types of foot-hold traps include longspring and coilspring traps. Foot-hold traps come in various sizes and strengths, each of which is appropriate for one or more specific species of furbearers.

Advantages of foot-hold traps include versatility, small size, and the ability to release animals. Foot-hold traps, along with cable restraints, are the most reliable traps for coyote, red fox and gray fox.



Chapter 8

Traps

Kill-type body-grip trap.



Live-restraining single longspring with plain jaws.



Live-restraining double longspring double-jaw foot-hold trap.



Live-restraining coilspring trap.



Modified coilspring trap.



Joe Goodman Coilspring Padded Foot-hold Trap



Dog Proof trap



Ed Dub

Cable Restraint

- Longspring Trap Longspring traps are the oldest type of foot-hold traps. Single longspring traps are best suited for small animals like mink and muskrat. Longspring traps are heavier than coilsprings. Double longsprings are a better choice for water sets made for large animals such as beaver.
- **Guarded Foot-hold Trap** Guarded foot-hold—or stop-loss—traps, are used where kill-type traps are not suitable for capturing muskrats in shallow water. The spring-loaded guard restricts an animal's movement, making it less likely they will twist free or injure themselves.
- **Coilspring Trap** Coilsprings are the fastest kind of foot-hold trap. They work well in land sets for fox and coyote because of the coilspring's speed, strength and compact size.
- Underspring Trap The underspring, or "jump" trap, was used by many trappers years ago. The jump trap is a little harder to set but is a bit faster and lighter than longspring traps. This trap type has not been manufactured for many years, but you may still find them hanging in old sheds and barns or at rummage sales.
- Enclosed Trigger Trap Enclosed trigger traps are designed to catch raccoons and opossums. Traps like EGGTM, Duffer'sTM, Duke Dog-proofTM and Lil' GrizTM traps incorporate designs to eliminate non-target catches because raccoons or opossums must reach through a small opening to trigger the trap.

Modifications are made to the jaws of basic traps in concern for the welfare of the targeted furbearer. The purpose of foot-hold trap modifications is to reduce injury to the captured animal's foot. Several BMP traps are identified by jaw frame characteristics and modifications including those outlined below.

- **Padded foot-hold traps** have rubber pads on the jaws. The rubber acts as padding and cushions the animal's foot. Rubber also prevents the animals foot from moving back and forth between the jaws.
- Offset foot-hold traps have jaws that are offset. The offset creates a space between the gripping surfaces when the jaws are closed. The offset ranges from 1/8 to 1/4 inch.
- **Double jaw foot-hold traps** use two metal frames on the jaws instead of one. One set of jaws is smaller, and these are inside of the regular jaws. The additional frame covers the area surrounding the animal's foot, preventing any self-inflicted injury.
- Laminated foot-hold traps are another option that can increase efficiency and reduce injuries. Lamination, or additional metal, expands jaw thickness and increases the amount of surface area holding the animal's foot. Lamination normally is added by welding an additional strip of metal to the top or bottom of the jaw that sits perfectly flush with the original jaw. Some trappers also use double lamination, welding one strip above, and one below the jaw.



Laminated Jaws

Cable Restraint

Double Jaws

The cable restraint is a device consisting of a cable, a relaxing lock and a swivel used to live-capture fox, coyote, and bobcat. Cable restraints function by holding an animal by the neck or body. To be legal in Wisconsin, the device **must** consist of a reverse-bend washer lock that can move in both directions on the cable. The cable restraint **must** also include a breakaway device rated at 350 pounds or less to allow non-target animals to free themselves. To avoid entanglement, the cable restraint must be set in an area away from thick brush, saplings or fences. The cable restraint is lightweight and requires less tools to set, making them a tool of choice for many canine trappers. Chapter 13 covers cable restraints in greater detail.

Cage Traps

The **cage trap** functions by enclosing the animal completely inside a cage or box. A treadle (or pan) works as the trigger, and when stepped on, causes the open door to close behind the animal. Cage traps come in various sized models and work well in areas where the chance of domestic and non-target capture is likely. Non-targets can be easily released. The disadvantages to the cage trap are its cost and its difficulty to use and conceal because of its size.

In many cases, carefully covering the cage trap with natural camouflage (bark, branches, leaves) will make it more effective. In metropolitan areas, the cage





Live-restraining cage trap



Kill-type colony trap

Note: In Wisconsin, special regulations require medium and large body grip traps to be used with special care. Check the current trapping regulations to be aware of these requirements.



Universal Swivel

Cable Swivel

Universal and stake swivels.



Single Stake Swivel

Three pronged grapple.

trap might be the only legal means of capturing furbearers. Many nuisance trappers use cage traps to relocate smaller animals such as woodchucks, squirrels and rabbits. Raccoon, skunk, opossum, fisher and weasels can be caught in cage traps.

Kill-type Traps

The most common kill-type traps include the **body-grip trap** and cable snare. Other kill traps include the **colony trap** and submersion sets.

Body-grip Traps

A body-grip trap is designed to catch the animal around the neck or chest area. When the trap is properly set, the animal is killed quickly by a combination of striking and clamping forces. In most cases, the animal is struck at the base of the skull resulting in unconsciousness and quick death. Careful attention must be paid to trigger placement and how the animal will approach the set to make the trap most effective.

Body-grip traps are popular with water and land trappers. It is very important that you read the Wisconsin trapping regulations for specific rules on the use of body-grip traps.

Cable Snare

A cable snare is a device similar to the cable restraint, but is designed to kill the animal. In Wisconsin, cable snares are used to trap beaver and otter and must be at least 50% underwater to be legal. A cable snare is NOT a cable restraint. A cable snare consists of a non-spring activated, galvanized aircraft cable which includes a non-relaxing mechanical lock and swivel. The nonrelaxing mechanical lock on the cable can only move in one direction. When the animal pulls, the cable gets tighter leading to suffocation and death. Cable snares are not legal on dryland. Cable snares should be used in conjunction with a submersion system to insure quick death.

Colony Trap

A **colony trap** is a type of cage trap with one or more one-way entrances designed to be used as a submersion set for muskrat and mink. It is called a colony trap because you can catch multiple muskrats at one time. Check regulations for size specifications, rules and trapping seasons before using a colony trap in Wisconsin.

Submersion Sets

Foot-hold traps are generally classified as "live-restraining" traps. However, foot-hold traps can be used in a modified set to facilitate death through submersion. To make a submersion set, use a length of galvanized cable (3/32" or

1/8") with a one-way sliding lock. One end of the cable is staked near shore where the trap is set. The other end of the cable is staked or anchored in deep water (minimum 24" for muskrats and 42" for beaver). The one-way sliding lock allows the animal to swim toward deeper water, but not back to shore. This trapping system is covered further in Chapter 11.

Trap Anchoring Systems

Traps must be attached to something to hold an animal. Normally a chain is attached to a trap. Trappers can use several methods to secure the chain including single stakes, cross stakes, earth anchors, drags, or grapples.

- <u>Stakes</u> are normally made of metal (rerod) and are used to secure the chain to the ground. A stake needs to be long enough to hold the largest animal that might be caught. Under most conditions stakes should be 18-24 inches in length. Even longer stakes are needed in sandy soils.
- <u>Cross Staking or Double Staking</u> is a method used for stronger animals like bobcat, fox and coyote. Adding a second stake prevents larger animals from "pumping" a single stake out of the ground. If the stakes do not hold well, you must find a new place to make your set. You must not let an animal escape with a trap on its foot because it will cause injury.
- <u>Earth Anchors or Disposable Stakes</u> are attached to a cable which is driven into the ground with a tool. After being pounded into the ground, the cable is given a tug and the anchor turns sideways, securing it in place. Earth anchors are very strong, and need to be dug out of the ground when you remove the set.
- **Drags** are also a type of anchoring system for traps. Drags are commonly used for sets made in the open. Drags allow an animal to move a short distance and reach cover.
- **Grapples** are metal devices secured to the chain of traps. Grapples work like drags, but they are not as heavy. The shape of the metal grapple causes it to dig into the ground or vegetation, restricting the furbearer's movement. Once in cover it usually becomes entangled in heavier, dense brush. When approaching the trap set you can usually follow the tracks of the grapple in the ground.

The Importance of Using Swivels

A variety of good swivels are needed for quality sets that catch and hold certain furbearers. Swivels reduce the chance of injury by allowing a trap to move freely in the same direction as the animal's foot. It's recommended that all dryland foot-hold traps have at least 3 swivels including a base swivel on coilspring traps.



Earth Anchor.



Cross-staking.



In-line shock spring.

Lap-link swivels, stake swivels and universal swivels can be used to fasten a chain to a stake. When two stakes are needed trappers use a special crossstaking swivel.

Universal swivels can be used in the middle of chains. Four-way swivel, or box swivel, is another name for a universal swivel. A universal swivel is also used to attach the chain to a trap at the center of the base-plate.

J-hooks are used on some swivels. A special s-hook tool can be used to close and open the hook without damaging it. Some coyote trappers weld the connection to keep it from pulling open.

Swivels of various types, including universal swivels, are also used in combination with sliding locks in submersion sets.

Always use the highest quality swivels in your trap systems to prevent an animal from escaping or being injured. The proper use of swivels is an important part of responsible trapping.

Another way to reduce injury is to include shock springs. Shock springs should be used in combination with swivels, chains, stakes, drags, and grapples. One or two shock springs can be inserted in the chain and are used to help hold the animal and reduce leg and shoulder injury.

Trap Tuning

Inspection and Adjustments

Whether new or used, all traps require some minor adjustments to operate efficiently. When you make these adjustments it is called "trap tuning." It is very important that you inspect and tune all of your traps before the start of each season. Check for bent or broken parts, weak springs and damaged or broken chains. Parts are available for most traps or you can just save the broken traps as parts for future traps needing repairs. File down any sharp edges or burrs especially on the inside edges of the jaws and make sure trap tags are attached to all traps.

Foot-hold Trap Adjustments

When adjusting foot-hold traps, the trap pan needs to be level with the jaws. If the pan rests too high or too low, the frame will need to be bent in or out below the "dog." Bend it out to raise the pan. Bend it in to lower the pan.



Natalene Cummings Cable device and swivel at stake.

Trap Tuning

- Weak springs should be replaced.
- Level pan and adjust tension.
- Swivels and hooks must be strong and operate freely without binding.
- Use a metal file to smooth down any sharp or rough edges on the jaws.
- Check chains for worn links.
- Make certain your traps are tagged to comply with state regulations.



Pan notch Pan tension screw

Pan tension is another tuning adjustment. It is measured by the amount of weight it takes on the trap pan to fire the trap. Most new traps have pan tension adjustment screws. When trapping larger animals, increase the tension so that smaller species will not trigger the trap. For example, two pounds of pan tension is a good setting for fox. You can purchase a commercial testing device to measure pan tension. You can also use a tennis ball can, liquid soap container, or PVC pipe filled with the weight of sand that matches your desired tension.

Pan throw is another adjustment. Pan throw is the distance the pan must be depressed to fire the trap. Use a shorter pan throw when tuning a trap for high pan tension. To adjust the pan throw, you file some metal off the end of the notch where the dog fits. This notch determines how far the pan must drop before the trap will fire. Use a file to make certain the end of the dog and the notch in the trap pan are squared off. If the dog or the notch are rounded, your trap may release too easily.





Plastic tube-like containers can be filled with sand or lead weights to create a certain known weight. Use this to test for the appropriate pan tension.

Increase pan tension by tuning the pan tension screw to the right, or clockwise. Turn the pan tension screw to the left to decrease pan tension.

Measuring Jaw Spread on Foot-holds

There is no standardized way of determining a trap's measurements using manufacturer designations such as "No. 2" coilspring. To find traps that meet jaw spread measurements for BMPs or Wisconsin's regulations you may need to check jaw spread in two places: at the jaw, and at the hinge posts.



You can take these two measurements by setting the trap. Carefully measure the **outside** spread of the jaw frame at its widest point along the line from the dog to the opposite side. Then measure the width between the outside edge of the two jaws where they connect to the hinge posts. You may find slight differences in jaw spread measurements on the same make and model of traps.

Body-grip Trap Adjustments

Body-grip traps may require trigger adjustment. If there is too much play in the trigger your trap may misfire, or strike the animal in a poor location. If there is a gap in the top of the trigger assembly you can crimp it with a pair of pliers or a vise until the ends are flush.





Body-grip traps should be set to close from top to bottom to work properly



Body-grip trap setting tongs.



Body-grip trap safety gripper.

Chapter 8 - Traps

When adjusting traps it is also a good idea to attach the staking equipment you will be using to your trap chain. This equipment can be dyed with the trap and then there will be less handling of the trap once it has been dyed and waxed.

Measuring Maximum Jaw Spread on Body-grip Traps

When it comes to body-grip trap regulations, vertical and horizontal measurements are two important variables. Regulations in regard to body-grip trap size are in place to reduce the chance of catching non-target or domestic animals.





To determine the **vertical height** of a body-grip trap, measure from the widest points on the outside of the jaws

NOTE: Measurements must be taken when the trap is SET. To determine the **total square inches of a body-grip trap, measure from the widest points on the outside of the jaws

**NOTE: Measurements must be taken when the trap is UN-SET.

Trigger Adjustments on Body-grip Traps

Experienced trappers adjust the shape of triggers on body grip traps to make them selective for certain species of furbearers. Triggers can be shaped to allow "streamlined" otter to swim through large body-grip traps and still catch beaver, which have bigger bodies. These are just a few examples of the ways you can make your sets selective and avoid nontarget catches. To learn more study BMP documents for the species you trap.

Trigger Configurations

Note: Trappers often set body-grip traps with triggers on the bottom to reduce pelt damage to the upper part of the pelt.

- Small for mink
- Small for muskrat
- Medium for raccoon and fisher
- Large beaver and otter



Trapper Education student using setting tongs.

Тгар	Common	Dimensions
110 Body-grip (one spring)		4.5" by 4.5"
120 Body-grip (two springs)		4.5" by 4.5"
150 Body-grip (one spring)		5" by 5"
160 Body-grip (two springs)		6" by 6"
220 Body-grip Duke traps ma	y measure	7" by 7" smaller
280 Body-grip		8" by 8"
330 Body-grip		10" by 10"







Small - mink

Small - muskrat

Medium - raccoon and fisher



Large - beaver and otter



Large - beaver, not otter





Large - beaver, not otter



Large - beaver, not otter Trigger Configuration Illustrations by Joe Goodman

Trap Preparation

All equipment that is used in land trapping should be clean and free of foreign odors. New traps are shipped with a light coat of oil that needs to be removed before being used. Before preparing traps, put a nail or small piece of trapping wire between the jaws of each trap to hold them slightly open. This allows the traps to be cleaned, dyed and waxed evenly and in between the jaws as well. It will also keep the jaws from sticking shut once the trap is waxed.

There are many methods to cleaning traps. Some methods include:

- 1) Put the traps in a large wash tub and fill it with water and powdered automatic dishwasher detergent. Boil the traps in the soapy water for 30 minutes then remove and rinse them clean.
- 2) Wash traps with a mild, odorless detergent.
- 3) Soak traps overnight in a saltwater and vinegar solution.
- 4) Boil the traps in clean water and pour or skim the grease off the top of the water.

Hang the traps outside until a light coating of rust forms. This may take several weeks. The rust will help the dye bond to the metal without hurting your traps. New traps will take dye better if they have a light coat of rust formed on them. Excess rust on used traps is damaging to traps and should be removed with a steel brush or buffing wheel.

Dyeing

When your traps are lightly rusted they are ready to dye. Dyeing of traps slows rusting of traps, makes them easier to conceal and removes undesirable odors. Traps can be tied together with wire in groups of six or so to make handling easier. There are a few methods to dye your traps.

• Logwood powder or crystals can be used to dye traps. Put your traps in a large washtub or kettle over an open fire or a propane cooker. They should be submerged in the water with enough wire hanging over the side of the tub to retrieve the traps. When using a commercial logwood dye follow the directions on the package for the proper amount of water and logwood ingredients. Bring the water to a boil before adding the logwood. Let the traps soak in this solution for 30 to 60 minutes. The longer you leave the traps in the solution, the darker they will get. Stakes, drags, etc. can also be dyed and treated in this way.

• Natural materials including black walnut hulls, alder bark, sumac berries and maple bark contain tannic acid, just as logwood does. As an option to buying logwood, you can boil any of these natural ingredients for an hour before adding your traps.



Ohio DOW Photo Setting body-grip traps deep under water may allow an otter to go over the top of the trap, while most beaver will dive to the bottom and be caught.



High temperatures may weaken your trap springs so it is best to lower the water temperature to a simmer after you add the traps. A propane cooker allows you to adjust the heat better than an open fire. Some trappers place the rebar stakes in the bottom of the barrel to keep the traps off the hotter bottom.

• **Speed Dips** are preferred by some trappers to color and protect their traps. **Note:** If you are using padded jaw traps, do not dip the pads. No fire is needed with dips. These products are fast and simple. Speed dips are available in either petroleum-based or water-based formulas. For **petroleum-based dips**, add unleaded gas or lantern fuel to the dip according to the directions. For water-based dips, add water to the dip according to the directions. Then you simply dip your pre-rusted traps in this solution and then hang them outside to dry. You will get a harder and more even coating if you use petroleum-based dips when the air temperature is above 70 degrees F. and the humidity is relatively low. Always read and follow manufacturer's directions. Some canine trappers shy away from petroleum based speed dips for fear that the gasoline smell will stay on the trap and the canines will smell this and not be attracted to the set.

Cage traps can easily be protected for many years by dipping them in speed dips. Purchase a plastic tub that is large enough to accommodate your largest cage trap. Mix enough dip together to cover half of the cage trap then roll your cage trap in the solution until it's sufficiently covered. Hang out to dry for several hours before storing.

Excess speed dip can be stored in a clean, sealable container and saved from one season to the next.

Waxing

Waxing is another way to protect traps from further rusting and make them operate faster. There are two common methods to wax traps:

1) Submerge traps in boiling water in a pot. Place commercial trap wax in the water and let it melt. The wax will float.

OR

2) Melt pure commercial wax with no water in a pot.

Then for both methods use a stick or hook, and slowly and carefully lift the traps out of the water one at a time. The traps should come out with a thin, even coat of wax. Shake the traps to remove excess wax. If the wax is too thick or too heavy, put the traps back in the pot and allow them to heat a bit longer before removing them.

Exercise caution when waxing, especially when using pure wax, because trap wax is extremely flammable. Wax can catch fire, or cause severe burns if it splashes on you.

No matter how you wax traps, make certain you keep the wax and the container free of odors. Furbearers have a keen sense of smell. If your traps have odors on them the furbearers may shy away from your sets. If the odor is an attractive one, the furbearer may dig it up and ruin your set.

Never wax a body-grip trap. It makes them very sensitive and dangerous and they may spring unexpectedly while they are being set. Speed dips or dyeing is acceptable for body-grip traps.

Once you have waxed or dipped a foot-hold trap, you must clean the end of the dog and the pan notch. If you do not remove the dip/wax, the trap will not stay set. Use a file to clean the wax or dip off these parts. Another technique to remove wax is to use a propane torch to melt the wax, then briskly rub it off with a rag. With this method there is no chance of removing the dye and allowing rust to form on the dog or in the notch.

Storage

After your traps are degreased, dyed and waxed they should be hung in a clean, well-aired area away from foreign odors. An ideal location is an open woodshed away from the house. Every effort should be made to prevent contamination of your clean traps with lure, bait, human scent, gasoline, oil, smoke or blood. It is a good idea to wear gloves when handling clean traps. Traps can also be stored in plastic storage containers that seal tightly. **Never oil or grease a trap.**

Metal or wood cage traps should be stored in open air, and wooden boxes or cubbies should be allowed to weather before use.

Setting Traps

It is important that you develop skills when setting traps so that you can understand the way they work and use them safely. Working with an instructor, or an experienced trapper, select at least one type of live-restraining trap and practice setting it. Have your instructor or mentor show you how to release the trap safely. Practice with your instructor's help until you can do it correctly.

With practice, you will get comfortable setting traps. On the trapline, you will need to wear gloves for warmth, and to protect the trap from human odor, if you prefer. It is a good idea to practice while wearing the same type of gloves you will use when making sets.



Dirt hole set.



Trap placement is an important selectivity consideration.

Location. Location. Location.



Avoid trails used by people and domestic animals.

Use the selectivity matrix in Appendix A to identify techniques relative to capture device type and design. Practice setting and releasing a body-grip trap. Smaller body-grip traps have springs that can be compressed by hand. On doublespring models each spring can be compressed and then held with a safety hook that can be released once you have your trap in place.

Use setting tongs or chain setters to set body-grips size #120 and larger. This tool uses leverage to compress the springs and fasten the safety hook. You should then use a body-grip safety gripper to keep larger traps from firing shut while you are finishing your set. Setting tongs or chain setters should always be within reach when using large body-grip traps.

Selective Trap Techniques

The next several chapters will expand on selective trapping techniques including trap location, trap placement, trap adjustment and how a bait or lure you choose can influence selectivity.

Trap location is the first consideration for selective trapping. Each species of furbearer lives in a certain kind of habitat, eats certain kinds of food, and follows certain habits. Use this knowledge to find the best places to set your traps.

Once you have found a good location, your trap placement can influence what species the trap set will catch. In addition, sticks and rocks can help you make selective sets. Examples include:

- If you make a muskrat set at the edge of a stream you can avoid ducks and other water birds by sticking branches out of the stream bank above the trap. Muskrats can pass below the branches.
- You can make a rock cubby for raccoon that will keep most dogs from approaching the trap.
- A few small stones can be used as foot guides at land sets to help make the animal put its foot on the trap pan.

Pan tension is an important consideration as well. Try one pound of pan tension for gray fox, two pounds for red fox or bobcat, four pounds for coyote, and six pounds for beaver.

Trap placement in relation to lure, bait, or other attractors is another factor in selective trapping. At a dirt-hole set, for example, try placing the trap 7 inches from the hole for fox, and 12 inches for coyote. This will vary some as to where the bait or lure is placed.

Chapter 8 Review – Traps

Objective - Students demonstrate the ability to identify types of traps, prepare traps for use and safely operate traps.

Identify traps as kill-type or live-restraining devices.

- 1. Body-grip traps are ______.
- 2. Foot-hold traps and cage traps are ______

Identify live-restraining traps, including longspring and coilspring foot-hold traps, guarded traps, enclosed foot-hold traps, and cable restraints.

- 3. Name each of the capture devices shown below.
 - a. Enclosed Trigger
 - b. Longspring Foothold
 - c. Coilspring Foothold
 - d. Cable Restraint
 - e. Guarded Foothold (Stop loss)





- 4. Label the parts of the trap shown.
 - a. Dog
 - b. Coilspring
 - c. Pan
 - d. Jaw
 - e. Lever
 - f. Baseplate



Identify jaw frame characteristics and modifications including plain jaws, padded jaws, offset jaws, double jaws, and laminated or wide jaws.

- 5. Name each of the jaw frame types shown below.
 - a. Plain Jaw
 - b. Padded Jaw
 - c. Offset Jaw
 - d. Double Jaw
 - e. Laminated Jaw





Know that foot-hold traps can be used in submersion sets for muskrats, mink, river otter, raccoon and beavers.

- 7. Label the parts of the body-grip trap shown.
 - a. Dog
 - b. Jaw
 - c. Trigger
 - d. Safety Catch
 - e. Tag
 - f. Trigger Wires
 - g. Spring



8. List four anchoring systems.

a.		
b		
c		
d		

Identify live-restraining cage traps and kill-type colony traps for use in submersion sets.

- 9. Match the two traps below with their name.
 - a. Live-restraining cage trap
 - b. Kill-type colony trap



Explain how swivels are used and why they are important.

12. Swivels reduce the chance of ______ by allowing a trap to move freely in the same direction as the animal's foot.

13. _____ can be inserted in the chain and are used to help hold the animal and reduce leg and shoulder injury.

Chapter 9 **Trapping Equipment**



Objective - Students identify essential and nonessential clothing and equipment used to set traps and run a trap line.

Introduction

Before setting any kind of trap, you need to acquire the basic trapping tools. There are many factors (weather, terrain, target species) that determine what tools will be needed. The type of trapping will also influence the tools you will need. Some tools are specific to water or dryland trapping, while others can be used for both.

As a recommendation, first-time trappers should start out with the basic gear needed to trap. Trapping equipment can be expensive, so buying used is a good choice. BUT, use caution. Used waders or hip boots may leak, used traps may be missing parts, or trap springs may have weakened. With experience, you will develop a better sense of gear needed and where to get good prices.

Basic Trapping Equipment

- <u>Trap Tags</u> Trap tags are required to be attached to all traps in Wisconsin including: cable restraints, cable snares, cage traps and colony traps. The trap tag must be a metal tag. Copper, brass or aluminum is suggested because they do not rust. Tags can also be purchased commercially for a small cost and are usually better quality and less work than homemade tags. Tags must be stamped or engraved legibly with the name and address or the DNR Customer ID # of the operator.
- **Packbasket. Bucket or Heavy Bag** All trappers need something to carry their equipment in. Any of these items can be used. Lure and bait is usually carried in a separate pouch, container or in the trapper's coat pocket so odor is not spilled or spread on to the other trapping equipment.
- <u>Hatchet, Small Axe or Pocket Saw</u> Every trapper has the need for a type of hatchet or cutting tool on their trapline to cut limbs, drive stakes, chop ice or even to make certain sets. The hatchet or axe can be a very important multi-purpose tool at times.



Mike Kortenhof Trapper dressed in layers.

Water trappers will need hip boots or waders



Chris Tischaefer Metal trap tags are made from brass or copper. The information is stamped or engraved into the metal and is permanent.

- <u>Knives or Multi-Purpose Tools</u> Folding lockback knives or multi-purpose tools are recommended for trappers. You will find many uses for a knife on the trapline.
- <u>**Trowel or Digging Tool**</u> Almost all sets require some type of digging. Trowels are used to make dirthole sets on dryland and pocket sets on water. There are a few different styles of trowels.
- <u>Wire and Galvanized Cable</u> Wire and/or cable has many uses on the trapline. Wire can be used to hold traps, baits or cubbies in place. It can also be used to support cable restraints on land and cable snares in water, repair chains when you're in a pinch or even make a drowning set. Galvanized multi-strand aircraft cable (normally 3/32" or 1/8" diameter) can be used to make submersion sets and to fasten traps. CAUTION: Wire and cable can weaken after use. Be sure to periodically check for kinks, nicks or fraying.
- <u>Pliers and Cable Cutters</u> Pliers are used for cutting wire and adjusting traps. A cable cutter is needed if you use multi-strand aircraft cable for cable snares, cable restraints or anchoring systems.
- <u>**Trap Stakes, Drags or Grapples**</u> Staking is very important whether you are a dryland or water trapper. You must be sure to stake strong enough for the largest animal you may end up catching. Steel stakes (rebar) or earth anchors (disposable stakes) are used to anchor traps. You may need to use drags or grapples in certain sets. Please refer to Dryland Trapping Equipment and Water Trapping Equipment further in this chapter for specific details on staking.
- <u>Lures, Scents and Baits</u> Most sets have some type of lure, scent or bait applied to them to be an attractor to the furbearer you are targeting. Keep these items separate from your other trapping equipment to eliminate the chance of contamination.
- <u>Spare Parts</u> It is essential to carry extra spare parts including swivels, Shooks, trap tags, rivets, stake swivels, safety hooks and other parts or tools associated with your trapline along with you in case there is an immediate need to repair or change out any broken or contaminated traps or equipment.

Dryland Trapping Equipment

• <u>Dirt Sifter</u> – A dirt sifter is a frame about 8"x 10"x 3" with a quarter inch mesh screen or hardware cloth tacked on the bottom. Most commercial sifters are metal. Some trappers make their own out of wood. The sifter is



Hammer and hatchets



Bucket, bag, and pack basket



Cable cutter and pliers



Earth anchors.



Dirt sifters, gloves, stakes for land trapping



From "Missouri Cable Restraint Training Manual." Copyright 2004 by the Conservation Commission of the State of Missouri. Used with permission. Catchpole



Chris Bezio

Trappers use a variety of gloves to keep dry and warm. Some canine trappers use separate gloves for handling their traps. This keeps other scents from getting on the trap.

Many trappers work hard to avoid contaminating their trapping areas with unusual scents or human odor. used to cover traps with fine soil. Sifters remove rocks, chunks of dirt or twigs or anything else that could interfere with the trap closing properly. It also adds a natural appearance to the set.

- <u>Kneeling Pad</u> Some trappers use a cloth, canvas, or rubber pad to kneel on when making lands sets. A rubber kneeling pad works well as an odor barrier.
- <u>Stakes or Drags</u> Soil conditions, terrain and cover type are all factors that determine what type of staking should be used at each set. Steel stakes (rebar) and earth anchors, or disposable stakes, work well and have the advantage of holding the animal at the set so it can be easily located. The length of the stake varies depending on the texture of the soil you are pounding into and the largest size of animal you could expect at your set. In some cases cross-staking may be necessary. In areas where the trapper is unable to drive in stakes or if the trapper wants the animal out of sight after capture, drags and grapples can be used. The best drag to use is a metal grapple attached to the trap with a longer length of chain. This allows for easy concealment. Drags should only be used by experienced trappers or under the supervision of experienced trappers.
- <u>Gloves</u> Some trappers use a pair of cloth or rubber gloves when making their dirt sets to keep human scent off of their traps. They may have another cloth pair or just use their bare hands when baiting their sets. Be sure not to mix your gloves or to get any bait, lure or other odors on your setting gloves.
- **Rubber Boots or Waders** Some trappers have a preference to wear rubber boots and set traps from a squatting position so only their rubber boots are in contact with the ground. Others prefer hip waders so they can kneel while making their set.
- <u>Catchpole</u> Many trappers carry a catchpole which is used to hold an animal so it can be safely released or **dispatched**. A catchpole is an essential tool for the land trapper. Also it's a good tool to have on board when water trapping if otter are present.
- **Pan Cover** A pan cover is used by many land trappers to keep dirt and debris from getting under the trap pan and preventing it from going off. Wax paper, screen, plastic or plastic baggies and clean patches of cloth are items that can be used for pan covers.
- **Trapper's Cap** A trapper's cap can be used instead of pan covers. This device temporarily fits over the trap pan while dirt is packed inside the jaws. When it is removed it leaves the area beneath the pan free of dirt.

- <u>Underalls</u> Some trappers use pieces of foam rubber, fiber silk batting or fiberglass insulation cut to the shape of the trap pan and to the thickness of the space under the pan. This is another way to keep dirt and debris from getting under the pan.
- <u>Pre-Sifted Dry Wax Dirt or Anti-Freeze Flakes</u> Pre-sifted dry dirt, waxed dirt, propylene glycol and/or anti-freeze flakes come in handy when the weather gets below freezing for dryland foot-hold sets. These items help to keep the dirt from freezing and allow your trap to work properly.

Water Trapping Equipment

- <u>Gauntlets</u> Most water trappers use some type of rubber glove when trapping. The most common is the gauntlet that covers the arm up to the shoulder to keep dry in cold weather. Some gauntlets are even insulated.
- <u>Rubber Boots or Waders</u> Depending on the depth of the water you will be trapping in you will need rubber boots or hip waders for water trapping. Some trappers even use chest waders to keep them better protected and dry from the elements.
- <u>Stakes or Drags</u> Wooden stakes are sometimes preferred over metal when water trapping because they are easily accessible on the shoreline and blend in more with the scenery. Metal stakes are more durable though. When trapping for beaver wood stakes should be pre-cut and dried or be a dead stake or limb because beaver tend to gnaw on green stakes. Wood laths work well when trapping for mink and muskrat using body-grip traps. Drags are used in water sets where the soil is too rocky or too loose to hold a stake. Drags used in water sets are usually heavy objects like bricks, pieces of iron or rocks.
- Drowning or Submersion Wire Slide Lock A drowning lock is a simple one-way slide lock designed to use when water trapping. The drowning lock is on a cable or wire with one end staked in shallow water and the other end in deep water. When an animal becomes caught in the trap it tends to dive for deep water. The device allows the animal to go only into deep water and not return. Before staking, double check the **drowning or submersion device** to be sure it is set up going in the right direction. Swivels can also be used as a drowning device. Drowning or slide wires can be made in various lengths to meet your needs. Common lengths include 5, 10 and 15 feet.
- <u>Ice Chisel or Spud</u> An ice spud is used for cutting holes in the ice for trapping muskrat, mink and beaver.



Rick Tischeafer

Stakes



PFD stands for Personal Flotation Device, an inexpensive item that can save your life! • <u>Trapping Staff</u> – A staff is used by many water trappers to help them navigate through muddy shorelines. A staff can also be used to check water depths when wading, detect underwater muskrat dens and runs, and with a hook on one end can retrieve traps from deep water especially under the ice. The use of a hook is much safer than reaching under the water to feel for a missing trap and becoming caught. A trapping staff of the proper weight and strength can also be used in the **dispatch** of animals caught in live-restraint traps. Painting a section of the staff florescent orange makes it easier to locate when leaving a set.

Additional Trapping Equipment

- <u>Plastic Flagging</u> Plastic surveyor flagging is used to mark trap sites or other areas of interest.
- <u>Setting Tongs</u> A setting tongs is used to set body-grip traps. This tool saves the wear and tear on your hands when running a long line.
- <u>Safety Gripper</u> A safety gripper is placed on the jaws of a body-grip trap once it's set to prevent it from going off when you are placing your bodygrip traps. Just be sure to remove the safety gripper and wire back the safety hooks on the trap before finishing the set.
- <u>Stabilizer</u> A stabilizer is a support system for body-grip traps that holds the trap solid in a specific area instead of having to try and stabilize it with sticks.

Safety Equipment

Safety should always be a priority when trapping. Some items to carry with you at all times when you trap include a **flashlight**, a **cell phone**, a **map**, **waterproof matches** and a **compass**. Keep them in the same place at all times so you know where to reach for them in case of emergency.

Trappers need **<u>clothing</u>** for a variety of weather conditions. Weather conditions change during the trapping season, or even during a single day while on your trapline.

Dress in layers. You can remove some clothing if temperatures rise during the day. When you water trap or trap in cold weather, wearing wool clothing is a good choice. <u>Wool</u> retains heat even if it gets wet. Wool also allows perspiration to evaporate, so you don't get damp and cold.

Carry a <u>**rain suit</u>** along with you in your vehicle when you trap. This will help to keep you dry when raining and block off the wind on windy days.</u>

Keep your clothes <u>clean and free of unusual scents</u>. Fox and coyote are especially wary of certain scents. Try to wear clothing that is <u>quiet</u>. Some kinds of clothing are noisy when you walk. If you are quiet you will see more wildlife.

Visibility to other people is important during certain hunting seasons. Make yourself easy to see and identify. Trappers may be concerned about being too visible because of concern about trap thieves. From a distance, most people will assume you are hunting if they see <u>hunter orange clothing</u>. Your personal safety is more important than the potential loss of a few traps.

Some water trappers wear a <u>life jacket</u> or vest in case they fall into deep water. An inflatable personal flotation device that takes up less space could also be used with or instead of a life vest. If you need more flotation you can pull the string on an inflatable, which releases gas into the vest and expands it. A mouth tube should be available to use in case the gas canister doesn't work.

All trappers should have <u>warm hats</u>. Body heat can escape through your head if you do not wear a hat. A hat also protects your head and face from sun and wind.

It may be a good idea to carry a **trigger start propane torch** for water trapping in case you find yourself in need of a quick fire in cold weather.

Many water trappers will carry a **long pole with a hook** on the end to assit them with checking traps, water depth, and pulling equipment towards them.

Keep an <u>axe</u> within reach for chopping ice

Always have a <u>first aid/ saftety kit</u> within reach. The wilderness is unpredicatable



John Olson

Paul Peterson and Steve Hoffman setting traps for BMP research.

Chapter 9 Review – Trapping Equipment

Objective - Students identify essential and nonessential clothing and equipment used to set traps and run a trap line.

1. _____ are required to be attached to all traps in Wisconsin.

2. _____ are used to make dirthold sets on dryland and pocket sets on water.

3. A ______ is used to cover traps with fine soil.

4. As essential tool for the land trapper, a ______ is used to hold an animal so it can be safely released or dispatched.

5. When using a ______ or ______, always check to be sure it is set up going in the right direction before you stake it.

6. Trappers need ______ for a variety of weather conditions.



Objective - Students explain responsible use of lure, bait, and urine to attract furbearers to sets.

Introduction

Baits, scents and lures are used as attractants or fear reducers at or near sets. Effective use of bait, lure, and urine will increase your catch and help you avoid non-target animals. The more you learn about an animal and its habits, the better you will be at using lure, bait and urine.

Use Bait, Lures, and Urine to Attract Furbearers

Bait, lure, and urine can be used alone or in combination to help you trap furbearers. Scents should match the interests of the animal you are trying to catch, often times reducing interest from other mammals, especially domestic pets.

Baits

Baits are used to attract animals to your sets and make them stay longer. Your choice of bait and its placement is based on the furbearer's food source and eating habits. Baits can be chunks of meat and fish, or plant food such as corn, carrots, and apples. Meat and fish bait may be fresh, tainted or liquid in form.

Bait must be used carefully to prevent catching non-target wildlife or domestic animals. Pay close attention to trapping regulations concerning bait. Uncovered flesh baits are attractive to hawks and owls, which hunt by sight. Lightly covered flesh baits work for furbearers because they have a keen sense of smell. Baits such as corn may attract a variety of non-target animals. In Wisconsin, a trap or device cannot be placed within 25 feet of sight exposed bait consisting of feathers, animal flesh, fur, hide or entrails.

Lures

Lures are used to attract animals to your sets from a distance. Lures are classified as gland, food or curiosity attractants. Gland lures are made from anal or other glands of the target animals. Gland lures appeal to an animal's sexual attraction or territorial instincts. Food lures or scents appeal to their desire to eat; these lures are used in liquid, semi-liquid or solid form. Curiosity lures appeal to a furbearer's instinct to investigate something unfamiliar. Common curiosity lures include: beaver **castor**, skunk essence and cheap perfume.



Chapter 10

SECRET SCENTS, BAITS.

URES

Using Bait, Lure & Urine

Ohio DOW Photo Baits - Canned fish, apple, and carrot

If you find a dead animal, do not set traps there, you may catch non-target animals. Wisconsin, and other states have laws that restrict the distance between exposed bait and the capture device. Know the law.

Visual attractants, where legal, are sometimes used. Bobcat, for example, may be attracted to strips of cloth or pieces of metal fluttering in the breeze. Generally, food lures are most effective in the early part of the trapping season; gland lures become more important later in the season when the animals are looking for mates; curiosity lures may work at any time in the season, especially when the animal is not hungry or looking for a mate.

Urine

Urine is often used for trapping bobcat, fox and coyote. Like dogs, fox and coyote mark their territory by urinating on various objects. Urine triggers a territorial response that may encourage a bobcat, coyote or fox to investigate your set.

Some trappers enjoy making their own lures and attractants. It is part of the challenge of becoming a successful trapper. Commercial lures work, but if a certain kind is used frequently, animals may become wise to the scent and avoid it.

The Responsible use of Baits, Lures, and Urine

The use of bait, lure and urine is a key factor in selective trapping and varies by time of year, location and the type of furbearer you want to catch. Each furbearing animal will respond to certain food smells. Glandular lures can appeal to a specific animal's mating urges. Avoid other baits that might attract dogs or cats. For example, fish might attract cats if you are trapping near homes that have pets. *Never use pet food for bait!*

Odors of lures and baits should be kept off the traps and the soil covering the traps. Lure contaminated traps or soil may cause some furbearers, like fox or coyote, to dig the traps out.

The presence of non-target species or domestic animals will also affect your choice. Remember, each non-target animal that comes to your set reduces your chances of catching the animal you want.

In the first ten years of BMP restraint trap research in the United States 13,294 animals were caught during 300,000 trap nights with only 1.4% being dogs. All dogs were released alive with little to no injury!

NOTE: Beginning trappers may want to use commercial lures until they develop their own. Experience and experimentation are critical for determining which lures are effective in a variety of situations.

Be conservative with baits, lures and scent. Too much smell will take away the curiosity of the set and the animal will be less attracted to the area. Very little is needed, just enough to be carried by the wind (a few drops).



Fish Oil. Use a piece of glass on top rather than screwing on a lid. This allows gases to escape rather than exploding the bottle!

Never use pet food for bait!

Select Lure Receipes

Coon Lure

1 pint Fish Oil 4 oz Molasses 4 drops Anise Oil

Fox Lure

4 oz Fish Oil Anal Glands from 4 Fox (Ground) 2 drops Skunk Essence ½ Tsp Tonquin Musk

Canine Gland Lure

1 oz Fox Glands
¹/₄ oz Tonquin Musk
¹/₂ oz Glycerin
¹/₂ oz Beaver Castor
1 oz Fox Urine
Add 2 drops Skunk Essence for cold weather

Muskrat Super Carrot

¹/₂ oz Carrot Seed Oil2 oz Carrot Oil1 oz Amberette Oil2 oz Glycerin

Mink Lure

2 oz Mink Glands2 oz Muskrat Glands1 oz Beaver Castor10 drops Tonquin Musk

Muskrat Sweet Flag

1 oz Calamus Oil
2 oz Sweet Flag Oil
1 oz Aberette Musk Oil
2 oz Glycerin



Ohio DOW Photo Urine and lures

Bait and lures come in a variety of textures and smells.

Chapter 10 Review - Using Baits, Lures and Urine

Objective - Students explain responsible use of lures, baits and urine to attract furbearers to sets.

Explain when and how to use bait, lures, food lures, curiosity lures and urine to attract specific furbearers.

1. ______ are used to attract animals to your sets and make them stay longer.

2. ______ are used to attract animals to your sets from a distance.

3. NEVER use _____ for bait!

4. _____, ____ & _____ can be used alone or in combination to trap furbearers.

5. In Wisconsin, a trap or device can not be placed within ______ feet of sight exposed bait consisting of feathers, animal flesh, hide or entrails.

Chapter 11 Water Sets





Junior Prudlick

Reasons to start with water sets using kill-type traps and techniques.

- No need to dispatch
- Reduces chance of catching a non-target animal
- Less chance an animal will escape



Jolene Kuehn

Objective - Students demonstrate an understanding of the procedures for making safe, effective, and selective sets in or near water.

Introduction

First-time trappers can focus on water sets for muskrat and mink. This is an excellent way to gain knowledge and experience while using a minimal amount of equipment.

Water trapping saves on startup expenses and avoids most non-target animals. It also avoids the need to **dispatch** animals held in foot-holds or other liverestraining devices when connected to submersion systems. When a trapper becomes skilled at trapping muskrats and mink, additional equipment can be purchased to use for larger furbearers such as fox, coyote, raccoon, beaver and otter. Generally equipment used for these furbearers is more expensive than the small traps used for muskrat and mink.

Best Management Practices for Water Sets

Trappers, biologists, veterinarians, and researchers have evaluated many traps. BMP traps have been tested for:

- Animal welfare.
- Efficient ability to capture and hold animals.
- Selectivity for furbearers.
- Practical use in the field.
- Trapper safety concerns.

Body-grip traps of suitable size or foot-holds in a submersion set should be used whenever possible for water trapping. Cable snares are also used for water submersion sets.

It is beneficial for beginning trappers to start with water sets as they are easier to make than dry land sets. Due to the location of the sets, water trapping is selective for semi-aquatic species and avoids most non-target animals.
The use of body-grip traps and properly made submersion sets result in a furbearer's death. Additionally, these sets make it unlikely a furbearer will escape.

Submersion sets frequently are used for semi-aquatic furbearers (muskrat, mink, river otter, and beaver) and raccoon. Semi-aquatic furbearers in or near the water tend to dive below the surface of the water as a "flight" response to danger. Properly made submersion sets allow the captured animal to dive but not return to the surface. The lack of oxygen causes the animal to die.

If for some reason submersion does not occur for a target furbearer, blunt trauma to the head is accepted by the American Veterinary Medical Association as humane **dispatch**.

Describe Two Basic Techniques for Making Submersion Sets

Use submersion trapping techniques whenever possible for semi-aquatic furbearers. Submersion sets also work well for raccoon. Using a heavy trap that will prevent the animal from resurfacing is recognized as a submersion set (though making sure it is properly staked is important), but a trap that is heavy enough for a muskrat may not submerge a large mink or a raccoon, so care must be taken when setting that way. The two most common and recommended techniques for making submersion sets with foot-hold traps are:

- Sliding cable technique
- Tangle stake technique

The sliding cable technique:

- Prior to the trapping season, cut lengths of galvanized cable (long enough for the captured animal to reach deep water) and slide a "one way" lock onto the cable. Use double ferrules to make closed loops on each end of the cable. These premade, one-way sliding wires are ready for use.
- When you find a good trap location, make sure the sliding lock points toward the deeper water. (The lock will prevent the animal from swimming back.)
- Use a heavy object such as a rock for an anchor or use a stake you can push into the stream bed in deep water that will not pull out easily.
- Slide a stake through the closed loop on one end of the cable.
- Put the anchor or the stake in water deep enough to fully submerge the intended furbearer.

Small body-grip traps are good choices for trapping muskrat and mink in shallow water. Set body-grip traps at the entrance to a muskrat den or in a muskrat channel.



Guarded foot-hold traps are sometimes used for muskrat trapping where kill-type traps are not usable and the water is too shallow for a submersion set. The guard is designed to prevent muskrats from escaping.

Submersion Set - Before the set is finished, push the stake the rest of the way into the ground at the water's edge to keep the animal from tangling on the stake.

Sliding cable anchor - You can use a heavy object or a stake to anchor the sliding wire in deep water.





Joe Goodman



Muskrat Hut.

Muskrat slide.

Some waterfowl refuge systems restrict trapping near muskrat lodges in Wisconsin. Know the regulation where you intend on trapping.



- Bring the cable to the shoreline (making sure the sliding lock is in the correct direction) and slide a stake through the closed loop on this end. Drive the stake in the bank near your set so that the cable is tight.
- Make your set.

When the animal is trapped it will swim to deep water and remain there.



Tangle wire technique:

- Attach a length of 11 or 12ga wire to a long stake.
- Attach the trap chain to the wire with an S-hook.
- Stake the trap securely in deep water, put another stake on the deep side of the first stake or downstream.
- When the animal swims the wire cable will force it to swim in a circle, wrapping the wire around the two stakes; the weight of the trap will soon pull the animal under.

In Wisconsin and many Midwestern states, a special muskrat trap, called a **colony trap**, is also used as a submersion set.

Common Water Sets

Runway Sets

When muskrats travel back and forth in shallow water they create a runway in the mud. Colony traps are a special type of cage trap designed to catch muskrats in a runway and keep them submerged. You can catch several muskrats at a time in a colony trap. There is a swinging door on each end. The door opens easily when a muskrat travels the runway. The door falls closed after the muskrat enters. There are specific regulations for using colony traps in Wisconsin. Be sure to check the annual trapping regulations prior to the beginning of the trapping season. In addition, make certain the trap is 100% submerged underwater to ensure quick dispatch. During cold weather, water levels may drop a bit at night because some water sources may freeze. In this situation, make sure colony traps are a few inches below the daytime water level.



Body-grip traps are also used in runways. You can set more than one per runway if it's long and well defined, but space them so that the captured animal doesn't trigger nearby traps. Runways may easily be spotted through clear ice as there will be a trail of small bubbles defining the travelway.

Pocket Set

A pocket set is one of the most effective water sets for muskrats and mink. To make a pocket set, find a bank that is straight up and down. At the waterline start digging a pocket into the bank at a level where the bottom will be about two inches below the water. The pocket should extend one to two feet into the bank and angle up. Put the bait or lure above water level at the back of the pocket.

The pocket should be about six inches in diameter for muskrat or mink. Set a body-grip or foot-hold trap of the correct size for the animal you plan to catch.

How to make a Pocket Set



Dig pocket at water line.



Shave bank on both sides.



Put bait in pocket.



Place trap at pocket mouth.



Beaver take out - an area used by beavers and otters to enter or exit the water.



The trap can be placed at the mouth of the hole in case the animal doesn't want to go all the way inside. If you are in an area where dogs may be a concern do not use meat or fish bait. To avoid dogs you can place the trap well inside the pocket, or make the set under cover such as low-hanging branches or exposed tree roots.

Trail Set (Blind or Natural Set)

Furbearers use the same trails at the water's edge on a regular basis. Find a narrow spot on the trail to make your set. If you don't find a natural place for a trail set use logs or rocks to narrow the path. This is a good location for a small body-grip trap.



When setting in water, dig a shallow depression in the bank at the narrow spot. Set a foot-hold trap in the depression, bedding it firmly into the mud. Use the sliding cable or tangle stake technique to make it a submersion set.

You do not need to use lure or bait on a trail set. Trail sets are effective for muskrat, raccoon, mink, beaver and otter.

Cubby Set

Cubby sets are used for mink, muskrats and raccoon where the bank slopes too much to make a pocket set. If you find tracks on a sloping bank, make a cubby out of rocks, logs or old boards. Place your bait or lure at the back of the cubby. You can use your foot or a trowel to make a depression for your foot-



Beaver dam.



Women's trap camp setting water sets

hold trap at the entrance to the cubby. Use a submersion trapping technique with a slide cable or a tangle stake.



Muskrat lodge or bank hole set

Muskrats make dens in the banks of streams, rivers, lakes and ponds just under the surface of the water. If you see chewed up pieces of vegetation floating on the water look for a den nearby. Muskrats also make lodges out of cattails or reeds in shallow water marshes. You will find openings around the base of the hut where you can make den sets. When iced over, den entrances will be identified by small bubbles. As the furbearer swims from the lodge or bank den, air within the fur is compressed out and floats to the surface and collects on the underside of the ice.



Muskrat lodge set.

Body-grip traps are the best choice for den sets. You can place small sticks in the upper jaws of the trap to hold it in an upright position.



How to make a Cubby Set



Cubby - Make the sides first.



Make the top of the cubby.



Place trap connected to submersion system at entrance.



Muskrat Den.



Den Set - Body-grip trap.



Den Set - Sticks hold trap in place and guide muskrat or mink.



chris Tischaefer Castor mound set with body-grip trap. Be sure these large body-grip traps are at lease half submerged. Monitor water levels .

In preparation for winter, muskrats create push-ups for use after the water freezes. Push-ups look like miniature muskrat lodges and usually are only large enough for one muskrat. Muskrats use these to temporarily get out of the water and for shelter while feeding. The push-ups and lodges are critical habitat and important to the survival of the remaining muskrats.

Climb Out Set

Muskrat, beaver, and otter leave distinct trails, sometimes called slides, at the spot where they climb out of the water to feed. You can put a foot-hold trap just under the water where the slide enters. Use a tangle stake or sliding cable submersion technique. If there are many slides in a certain area, use bait or lure to encourage use of the slide protected with the trap.

Float Set

Muskrat often climb onto floating logs. You can take advantage of this habit by setting traps on logs or homemade platforms.



Make float sets in water more than a foot deep. Use muskrat size foot-hold traps on a chain or cable. When the muskrat is trapped it will enter the water and the weight of the trap will prevent the muskrat from reaching the surface. Place branches or sticks over the top of the trap to keep ducks or other birds from using the same float.



Spring Run Set

The place where a spring run or small stream enters a larger body of water is a good place to trap muskrat, mink or otter. Use a foot-hold trap and submersion techniques.

Obstruction Set

An obstruction set is a variation of a trail set. Look for a tangle of tree roots, log piles, or similar obstructions on the bank that forces a mink traveling the water's edge to enter the shallow water. You can bed a foot-hold trap in shallow water using a tangle stake or sliding cable submersion rig. This is a blind set and no bait or lure is needed.

Scent Mound Set

Beaver make mounds of mud and mark them with **castor**. Conceal beaver sized foot-hold traps with a securely staked sliding cable submersion rig. If beaver are using the waterway, make a scent mound to imitate beaver activity and mark it with castor lure. Depending on conditions, a body-grip or foot-hold trap can be used in this set and are effective both late fall and spring.



Body-grip trap with a beaver. Proper trigger configuration allows the trap jaws to close on the body just behind the head.



Channel Set

Muskrat, mink, otter and beaver follow paths under the water called channels. This is a good place to set a submerged body-grip trap. These furbearers regularly enter confined spaces so they don't usually shy away from a body-grip trap in their path.

Place the trap at the bottom of the channel. If the channel is too wide you can arrange sticks or brush in a way to narrow the path and guide the furbearer into the trap. Use a blocking pole across the top of the trap to make the animal dive below it. Stakes and sticks are used to anchor the body-grip trap and position it correctly in the channel.

Spring Run Set

Use body-grip traps with bent corners to reduce fur damage.

Joe Goodman Set body-grip traps so the trigger is on the bottom to reduce fur damage.

Body-grip traps with weak springs can cause fur damage.

If an animal is frozen in a body-grip trap, thaw it before removal to prevent fur damage.

Making a set under the ice for beaver is not for beginners. Find someone experienced to help you. Always trap with a friend or family member, especially when you are using large body-grip traps and working on ice!

WATER TRAPPING EQUIPMENT



Open Water Beaver Set

An open water beaver set is made like a scent mound set, except that it is baited with fresh aspen or other food instead of castor lure. The set imitates a location where a beaver leaves water to eat and rest.

Otter Latrine (Toilet) Set

Otter regularly visit certain spots near the water called latrines. You will see piles containing fish scales and bones at otter latrines. Set a foot-hold trap in 3 to 4 inches of water at the spot where the otter travels in and out. Use a sliding cable submersion technique.

Under Ice Beaver Bait Set

You can catch beaver under ice using foot-hold, cable snare or body-grip traps. Make sure the ice is safe and have someone with you when you make these sets in case you need help.

Chop a hole in the ice near a beaver lodge or den. Wisconsin has a minimum distance the trap must be set away from the dam, so check the regulations. Attach the trap and the bait to a long pole and push it deep down into the mud under the water. The pole should extend well out of the ice. A trapped beaver should not be able to reach the hole in the ice where it can breathe.

Chapter 11 Review – Water Sets

Objective – Students demonstrate an understanding of the procedures for making safe, ef-fective and selective sets in or near water.

Explain the benefits of using traps that meet Best Management Practice specifications for water sets.

- 1. BMP traps have been tested for:
 - a. ______ welfare.
 - b. _____ ability to capture and hold animals.
 - c. _____ for furbearers.
 - d. _____ use in the field.
 - e. Trapper _____ concerns.

Describe three reasons new trappers should start with water sets using kill-type traps or submersion trapping techniques.

- 2. No need to ______.
- 3. Reduces chances of catching a ______ animal.
- 4. Less chance an animal will ______.

List two techniques for making submersion sets.

5._____





Objective - Students demonstrate an understanding of the procedures for making safe, effective and selective sets on land.

Introduction

Trapping on dry land presents many challenges to the knowledge and skill of trappers. You must know how to properly prepare your equipment, make selective sets, how to release non-target animals and humanely **dispatch** live animals.

The dirt-hole set, flat set, post set and cubby set are commonly used for coyote, red and gray fox, bobcat, raccoon, skunk, opossum and other furbearers.

Trap Placement Influences Animal Welfare and Selectivity

Avoid setting traps near homes or places that are heavily used by people and their pets. Trappers should choose set locations that:

- Minimize exposure to domestic animals and human activities.
- Prevent entanglement with fences or other objects that might result in injury.
- Are selective to capture furbearers.
- Avoid trails used by people.

Best Management Practices for Land Sets

Trappers, biologists, veterinarians and researchers have studied many traps. BMP recommended traps have been tested for:

- Animal welfare.
- Efficient ability to capture and hold animals.
- Selectivity for furbearers.
- Practical use in the field.
- Trapper safety concerns.

Good Places for Land Sets:



Brush rows and fencerows.



Ohio DOW

Brush filled gullies and drainages.

Use selective techniques to avoid pets. If you catch a dog or cat, release it and notify the owner.



Steel and wood stakes.



Natalene Cummings Cross-stake method.



Cross-stake fasteners.



Stake swivels/ fasteners.

Good Locations for Land Sets

Good places for land sets include:

- **Brush rows and fence rows** that guide animal movements and provide rodents, birds or other food for furbearers. Be aware, it is important when setting in these areas to avoid entanglement, especially when using cable restraints. Always consider where you are setting!
- Brush filled gullies that provide food and shelter.
- Areas **near farm lanes** that intersect changing cover types, pass through brush rows, or provide gateways to other fields.
- **Saddles** or draws between terrain features or areas where predators can observe prey or watch for danger.

Anchoring Traps on Land

Trappers must know how to anchor their traps properly to hold furbearers and prevent injury. Incorporate swivels, shock springs and appropriate chain length to reduce the potential for injury. Traps are normally anchored with stakes, but sometimes drags, earth anchors or grapples are used.

Steel stakes are recommended. Stakes must be long enough to hold the largest animal that may be caught. Under most conditions they should be 18-24 inches in length. Even longer stakes are needed in sandy soils. For fox and coyote a more secure method is required to prevent the animal from pulling out the stake. You may need to use a double-stake swivel with the cross-staking method for a better hold. **Cable stakes** or **earth anchors** are another choice, but take time to dig them out when you remove your set.

In some terrain you may need to use drags or grapples. Drags and grapples allow animals to find cover nearby.

Shock springs are used on trap chains to help hold animals and prevent injuries. Use high quality shock springs of sufficient strength for animals you are trapping.

Swivels are important parts of your anchoring systems. Stake swivels and two or more chain swivels allow an animal to move freely without twisting the chain down to a point where it is easy for the animal to pull out of the trap or injure itself.

Bedding a Foot-hold Trap on Dryland

Traps must be properly bedded for land sets to work. Traps should be set level or slightly below the level of the soil around it. The steps for bedding a trap are:

- Dig a hole slightly larger than the outside profile of the trap. The depth will depend on the amount of chain you need to conceal under the trap. When finished, the top of the trap should be covered by 1/8 inch of soil and the pan should sit slightly lower than the ground around it.
- 2) Test the hole to make sure your trap will fit and make adjustments if needed. Position and drive your stake at the front of the hole (the side nearest you) where the loose jaw of the trap can rest on it.
- 3) Place the trap chain in the trap bed, cover it with soil and pack it with your hand or fist.
- 4) Place the trap in the trap bed with the loose jaw resting level on the top of the stake. Twist the trap from side to side to settle it in the dirt.
- 5) Pack dirt tightly around the outside of the trap except for over the spring levers.
- 6) Use your fingers to apply pressure to each jaw and spring lever (one at a time). If you detect movement, add some soil or a small dirt clod under the low spot.
- 7) Put the cover over the pan (if used). Sift dirt over the trap until it's nearly level with the surrounding area.
- 8) Locate the pan by brushing away some of the dirt. When you know where it is, pack dirt around the outside of the pan using the back of your hand.
- 9) If needed, sift a fine layer of dirt over the set to blend it in with the surroundings.

The four-point system check includes:

- 1. Press on the loose jaw
- 2. Press on the other jaw
- 3. Press on a lever
- 4. Press on the other lever

*If the trap is wobbly, pack more dirt under that area and repeat the check.



RAISE FREE JAN 1/4"-1/2" AND REST ON STAKE OVER TRAD

Bedded trap.



Dirt hole set.



Covering a Foot-hold Trap on Dryland

Generally, foot-hold traps set on land must be covered to hide them from furbearers. Dirt, leaves and grass can be used to cover your traps. The covering must not interfere with the action of the trap.

Leaves and grass will work when you set a trap for raccoon or opossum, which are not as wary as fox or coyote.

Make sure nothing gets under the trap pan, or the trap may not work. Likewise, make sure there are no objects above the jaws that might keep the trap from closing properly.

Crumple up a piece of wax paper and unfold it for a trap cover. Crumpling wax paper softens it so it won't make noise when the animal steps on it. Using a small amount of fiberglass insulation between the underside of the trap pan and the baseplate also serves the same purpose as a pan cover.

Use a dirt sifter to remove small sticks and stones from the dirt used to cover your trap.

Common Land Sets

Four sets every land trapper should know are:

- 1) Dirt-hole set.
- 2) Flat set.
- 3) Cubby set.
- 4) Scent post.

Dirt-hole Set

The dirt-hole set is popular with fox and coyote trappers, and this type of set also attracts other furbearers. To make a dirt-hole set:

- Select a natural feature (clump of grass) for a backing at your set.
- Dig a small hole, about the diameter of a coffee cup, that slants back about 8" deep under the backing and put the dirt in your sifter.
- Dig a bed for your coilspring trap in front of the hole so the trap center will be about 7 inches from the hole for fox or 12 inches for coyotes. (Bed can be dug 2 inches off center for fox and 4 inches off center for coyote to take advantage of the natural step pattern when approaching dirt-holes and other attractants.)
- Stake the trap down and bed as described previously.
- The bedded trap should be slightly below ground level.
- Put a cover on the pan and sift the dirt on top.
- Bait the set.

The hole by itself will attract a fox or coyote, but many trappers place bait in the hole. If you use bait, cover it with some light vegetation. A furbearer will smell it, but the grass will prevent birds of prey from seeing it and landing at your set.

You can apply lure to the back edge or inside the hole with the bait. Fox or coyote urine can also be put on the backing using a squirt bottle. Make certain you do not get any bait, lure, or urine on the trap bed.

Step-down Set

This set is a variation of the dirt hole set. Setting the trap in a shallow trench that extends in front of the dirt hole helps direct the animal's approach so it steps squarely on the trap pan.

Flat Set

A flat set is most effective for fox and coyote, but it too attracts other furbearers. The flat set is similar to a dirt-hole set, but no bait hole is dug. Instead, an attractor such as an old chunk of wood is used to get the furbearer's attention. To make a flat set:

- Place the attractor where a furbearer will see it.
- Dig a bed about 6 inches in front of the attractor.
- Stake the trap, bed it, and sift dirt over it.
- Put a few drops of lure or a squirt of urine on the attractor.

Scent Post Set

A scent post set (a variation of the flat set) is made the same as a flat set, except that a broom-handle sized stick is used instead of an attractor. The post should be about 8 inches tall. Use lure or urine on the side of the post nearest the trap.

Walk-through Set

This is a variation of a flat set and is useful when remaking the set after a capture has been made. Loose dirt and vegetation that is saturated with animal odors is used to guide the animal's approach.





Step down set.



Flat set.



Enclosed trigger foot-hold traps are selective for raccoon and opossum. Due to this selectivity, in Wisconsin, they can be used in places where other traps cannot.



Duffer'sTM Trap



Lil" Griz" trap.

Joe Goodman



Joe Goodman

Cubby Set

The cubby set on land is made the same way as a cubby set for water trapping. Cubby sets are used for raccoon, fisher, opossum, bobcat and other less wary furbearers. Cubby sets are generally not used for fox or coyote. To make a cubby set:

- Build a cubby and make certain the back is secure so the furbearer will enter from the front.
- Dig a bed for a coilspring trap at the opening.
- Bed the trap and cover it as previously described.
- Place appropriate lure or bait in the back of the cubby.

Enclosed Trigger Foot-hold Traps

Several types of enclosed trigger foot-hold traps are available for raccoon trappers. These traps are highly selective for raccoon because of their design and the feeding characteristics of raccoons. Enclosed trigger foot-hold traps are anchored and placed in the ground with baits attractive to raccoons, such as marshmallows, jam, and anise. The bait is placed in the bottom of the trap, below the trigger. Larger animals cannot get their paws through the smaller opening and smaller animals cannot reach the trigger. Additionally, the trigger is activated by pulling rather than pushing. When the raccoon attempts to remove the bait from the device, the trigger releases a small spring arm that keeps the foot within the device.

Procedures for setting and using enclosed foot-hold traps vary. Some require disassembly and special tools. Some need to be placed in the ground. Enclosed foot-hold traps made of metal may be dyed to help conceal them and reduce the chance of theft. Some trappers prefer to leave them shiny as a visual attractant for raccoons.

Body-grip Traps

The use of body-grip traps on land is highly regulated. However, even legal body-grip traps should be used with care to prevent the capture of pets or non-target wildlife.

Body-grip traps can be placed in boxes, buckets or other enclosures to prevent non-target animals from getting caught. *Check the regulations for Wisconsin carefully.* Various sized body-grip traps require special criteria for use on dry land. The size of the box enclosure, dimensions of the opening, distance the body-grip is set back, and placement of the enclosure on the landscape make this a selective method of trapping.



Below is a view of a body-grip box enclosure. Note the slots for the trap springs, and the wire hanging from the top. The back is covered with wood or wire mesh to keep the animal from reaching the bait without going to the trap.



Practice safety when setting body-grip traps - use setting tongs, safety latches, and a safety gripper.

Use sweet baits for raccoon to avoid non-target animals:

- Marshmallows
- Anise
- Hard Candy
- Jam

Wooden boxes can be painted or allowed to weather so they blend in.



"Dog-proof" Raccoon Sets

Avoid using this set in any location where dogs or cats could find the traps.



Wooden box for body-grip trap wired to a tree. The box can be placed low to the ground, face down to prevent dogs from getting in. Dig a depression under the trap for an added attractant.



Bucket Set with Mesh Enclosure

Leaning pole sets can be used for fisher. A body-grip trap baited with any fresh meat (muskrat/beaver) works well; salt can be used to prevent the meat from freezing. Use fisher musk, fisher urine, beaver castor or skunk essence for fisher lure. Making running pole sets under evergreen limbs helping to keep snow from covering the traps. You can also use evergreen boughs to conceal bait from sight exposure.



Chapter 12 Review – Land Sets

Objective - Students demonstrate an understanding of the procedures for making safe, effective and selective sets on land.

Know that land trap locations influence animal welfare and the selectivity of trap sets.

- 1. Trappers should set their land traps at locations that:

 - a. Minimize exposure to _______ and _____ activities.

 b. Prevent entanglement with ______ or other objects that might result in ______.
 - c. Are ______ to capture furbearers. d. Avoid _____ used by _____.

2. Identify four good places to make land sets.

- a. _____ b. _____ c. ____
- d. _____
- 3. Name four types of common land sets.
 - a.____ b._____ c._____ d._____
- 4. Name three furbearers commonly caught in dryland sets.
 - a._____ b._____
 - c._____

Chapter 13 Cable Devices







Natalene Cummings Multi-strand steel cable - Used in modern cable devices.





7x7 Cable

Natalene Cummings
7x19 Cable

Objective - Students demonstrate an understanding of cable restraints, cable snares and responsible techniques for using them.

Introduction

Cable devices have a long history in Wisconsin. At one time, the use of cable devices were prohibited due to unregulated use and irresponsible behavior. In the mid-1980's, the WDNR again allowed regulated use of **cable snares** as water sets to reduce increasing beaver damage.

In 2001 and 2002, the WDNR, WTA and WCC conducted a large scale, science based field test of the **dryland cable restraints**. The results of the study showed cable restraints to be a highly selective, efficient and humane tool for restraining fox and coyote. As a result, cable restraints were allowed on dryland for coyote, fox, and bobcat.

The legislature directed the use of **cable devices** with the conditions that individuals use these systems with prescribed components and they be used responsibly. To do anything less will result in cable devices again being prohibited.

Cable Devices can be different things in Wisconsin!

Based on furbearer selectivity and intended restraint, Wisconsin trappers can use two cable devices. These cable devices, based on their intended use, will have different key components. The **cable restraint** is a cable device used on land to live restrain fox, coyote and bobcat. The **cable snare** is a cable device used in water to act as a kill device for semi-aquatic furbearers, primarily beaver and otter.

It is very important that you read your current Trapping Regulations and follow all regulations for cable restraints and cable snares.

Components of Cable Devices

Cable restraints and cable snares are made of the same basic components: a cable, a lock, swivels, ferrules and an attachment for anchoring. However, they also differ in several major ways. The following section will describe the shared compenents of each device. Specific details will be described in additional sections (cable restraints and cable snares).

Cable

Galvanized aircraft cable is the backbone of both cable restraints and cable snares. Cable sizes used vary from 3/32nd to 1/8th inch and are constructed of several smaller wires wrapped together.

The three types of cable are wrapped wires configured as 7x7, 7x19, or 1x19. The 7x7 consists of seven strands of small diameter wire wound into a larger strand. Then, seven of these larger strands are wound together to make the finished cable. This cable is of medium weight, is very durable, has a coarse finish, and is the most commonly used cable. The 7x19 uses 19 small wires wound into a strand with seven of these strands making up the cable. This cable is light, supple and has a smooth finish. Cable configured as 1x19 uses 19 strands wound tightly together to make the one. This cable is light, stiff, and has a smooth finish.

Lock

~ Relaxing lock (Cable Restraint)

A relaxing lock will move in either direction on the cable. When an animal pulls against the device it tightens, drawing the loop smaller. If an animal does not pull against the device, it relaxes. Animals can be released unharmed from cable restraints with relaxing locks. In Wisconsin, cable restraints can only use a reverse bend washer lock (with a minimium outside diameter of 1 1/4 inches).

~ Nonrelaxing lock (Cable Snare)

A non-relaxing lock keeps a cable from loosening after an animal is caught. This lock will allow the loop to become smaller with tension, but will not relax when tension stops. There are many types of non-relaxing locks available.

Swivels

Swivels are used in cable device anchoring systems to keep the animal from twisting and kinking the cable.

Ferrules

An end ferrule, also called a cable end or stop, is crimped on the end of a cable to keep the strands from unraveling. A specially crimped ferrule can also serve as a breakaway device for cable restraints.



Natalene Cummings Cable ferrule or stop.



Joe Goodman Closed loop for anchoring incorporating a double ferrule.



Joe Goodman

Slip noose for anchoring. Sometimes the double ferrule is crimped on one side to allow cable to slide through the other.



Ohio DOW Photos End swivel for anchoring.



Breakaway Devices ~Breakaway Ferrule ~Breakaway S-Hook



Natalene Cummings End swivel with box swivel.

Cable Restraints

The cable restraint is designed to capture and restrain unsuspecting animals during travel. The device is non-powered, and relies on forward movement of an animal to place and close the loop around its neck. In Wisconsin, cable restraints can only be used as a *Live-Restraining System* on dryland, requiring a relaxing lock and lock stop. The cable restraint system is versatile, and in other states with less domestic animals, can be designed to kill.

In Wisconsin, cable restraints incorporate a relaxing lock and are set in nonentanglement situations. They must be set in a manner that prevents the restraint from reaching a fence, rooted vegetation (over 1/2 inch in diameter), or other immovable objects. For most targeted animals, it is the probability of entanglement at the set, rather than the lock, that determines whether or not the device will kill. Consider all possibilities in a given area to be certain that entanglement is not possible.

Identify Cable Restraint Equipment and Materials

- A. Relaxing lock
- B. Side Profile of
 - Nonmechanical lock
- C. Breakaway Device S-hook
- D. End Ferrule
- E. Stabilizer Tube
- F. Maximum Loop Stop
- G. Inline Swivel
- H. End Swivel
- I. Trap Tag
- J. Deer Stop
- K. Cable



A. - **B.** Relaxing Lock – For a cable device to be a cable restraint it must have a relaxing lock. Only the reverse bend washer lock, with a minimum outside diameter of 1 ¹/₄ inches, is legal in Wisconsin.

C. Breakaway Device – In Wisconsin, breakaway devices must be used to allow livestock, deer, wolves or other large mammals to escape. This breakaway is rated at 350 pounds or less. There are two acceptable breakaway devices: the breakaway "S" Hook and the ferrule. When sufficient force is applied, the "S" hook opens up on both ends or the ferrule breakaway slips off the end of the cable allowing the animal to leave with no part of the device on its body.

D. End Ferrule - Ferrule used to attach the loop system to the inline swivel.

E. Stabilizer Tube – A support collar, or whammy, is a small piece of coiled wire or plastic tubing slightly larger in diameter than the cable. The tube is slid on the cable during assembly. The support wire fits snuggly into the support collar on the cable allowing the cable restraint to be set at a specific height in the targeted animal's trail.

F. Maximum Loop Stop - The maximum loop stop prevents larger animals from entering the device, and the minimum loop stop prevents the device from closing too tight. Heavy gauge wire, steel nuts, or crimped ferrules are used to make the maximum loop stop.

G. Inline swivel - Prevents the cable restraint from binding as the animal moves in the capture circle. Inline swivels have a distinct advantage in areas with thick grasses and sedges.

H. End Swivel – The end swivel is used for anchoring the device. It also provides additional comfort to the animal and prevents the cable from kinking.

I. Trap Tag - A copper or brass tag with operator's name and address or customer ID number is required in Wisconsin.

J. Deer stop - Trapping regulations require the use of a "stop" to prevent the cable loop from closing below a certain diameter. Some trappers call them deer stops or foot stops. Heavy gauge wire, steel nuts, or crimped ferrules are used to make deer stops.

K. Cable – Cable can be 7x7, 7x19, or 1x19. It must be 7 feet or less in length.

Constructing Cable Restraints

A variety of tools and knowledge are required to construct cable restraints. Quality parts and tools are purchased from reliable manufacturers or supply dealers. A working knowledge of cable behavior and device function is required.

For a cable restraint to perform efficiently and reliably, it must be constructed of good quality material and be assembled with care. Special attention is given to ensure each component matches the diameter of the cable and appropriate cable strength to capture the animal.

During construction, lay the cut lengths of cable on a flat surface and make sure they lay flat and are not sprung, kinked or damaged.

The parts are assembled in a logical sequence on the cable until the device

Joe Goodmar 9 gauge loop support wire with unfrozen ground.



Natalene Cummings



9 gauge support wire with frozen or unfrozen ground. If woody vegetation is greater than 1/2" diameter, it must be severed from the root system to prevent entanglement.



9 gauge loop support wire with frozen or unfrozen ground.



Avoid setting cable devices in areas of high human or domestic animal activity.

is complete. An example would be to cut the cable to length, use a swagger to crimp an aluminum ferrule, add a washer and swivel, add the metal identification tag, crimp a stop, thread the lock on the cable, and attach a release ferrule or hook to the lock. In Wisconsin, the release must have a breakaway rating of 350 lbs. or less.

Check the operation of the device after assembly. The lock should move down the cable smoothly and relax when pulling stops. A completed cable restraint will lay flat on a horizontal surface.

Treating your Cable Restraints

Cable restraints can be treated before use on a trapline. Treating removes manufacturing lubricants from the metal parts as well as foreign odors from handling. Treatment steps:

- 1) Lay the cable restraints in a flat pan with high sides.
- 2) Mix a solution of water and concentrated soap.
- 3) Cover the cable restraints with the solution. Boil for ten minutes.
- 3) Remove from heat, pour off the liquid, and rinse with clean water.
- 4) Next, pour in a solution of one cup baking soda to two quarts of water.
- 5) Bring to a rapid boil, reduce temperature, and simmer for 20 minutes.
- 6) Pour off the liquid. Allow to air dry in an odor-free environment.
- 7) Store the restraints separately, each in their own sealed containter.

Treating the cable restraints in this way turns them a dull gray color and helps to conceal them in the field. Natural scents can also be added by immersing them again in a solution containing bark, moss, plant leaves or spruce needles collected from your trapping area. This will also darken the cable restraints.

Setting Cable Restraints

Anchoring Systems

The end swivel can be attached to a single stake swivel, a double stake swivel, or an earth anchor. Be aware that any attachment, stake or loop needs to be strong enough to hold an animal that can pull with all four legs. A poorly anchored device will fail to hold the target species, and will not allow the break-away system to function properly should a non-target species be captured.

Support wire

A support wire can be of 9 or 11 gauge wire. One end is inserted into the support collar to suspend the cable restraint in the animal's travelway. The other end is attached or welded to a piece of metal, such as a railroad tie stake, heavy nail or rebar. The piece of metal is then pushed or hammered into the ground.

The support wire needs to be of sufficient length to suspend the device over the trail and accommodate for increasing snow depth throughout winter.

Responsibly Setting Cable Restraints

When setting cable restraints, stay away from trails used by people, livestock or domestic animals. Cable restraints work best in trails as blind sets. Narrow points and crossovers are common locations. Animal carcasses can also be used to draw animal activity. Animals frequently visit carcasses in their territory and trails lead to these locations. **Be advised that you must follow the sight-exposed bait law and that any sight exposed bait used with cable restraints must be greater than 25 feet away from the cable restraint!**



Coyote.





Capture Circle.

Loop Sizes and Heights

Loop size and height are critical to the animal's welfare as well as the effectiveness and selectivity of the cable restraint. Small loops placed near the minimum height allowed are selective for neck catches on bobcat and fox. Larger loops placed near the maximum height allowed are selective for coyote.

The following list indicates general loop size and heights for various species. The loop size refers to the width and the height refers to the bottom of the loop above the packed surface directly below the loop (dirt, packed snow, or ice).



- **Coyote cable loops** Use a loop 10 12 inches in diameter and the bottom of the loop is 10 12 inches from the ground.
- **Bobcat cable loops** Use a loop that is 8 inches in diameter and the bottom of the loop is 8 inches from the ground.
- Fox cable loops Use a loop that is 6 8 inches in diameter and the bottom of the loop is 6 8 inches from the ground.



Reusable Components

A cable restraint becomes unusable once a capture is made. The captured animal exerts pressure on the cable and causes the cable to kink, bend, or curve against the natural wrap of the cable strands. The cable will no longer lay flat or be able to hang in a natural loop. The lock and swivel may be reused if they are not damaged. Inspect each carefully to insure they will work properly in the future. Simply cut the cable, remove the re-usable parts, and construct a device with new cable and ferrules.

Cable Snares

A **cable snare** is a non-powered cable device that uses forward movement of an animal to place and close the loop on its body. Cable snares use a nonrelaxing lock that continually tightens, and is used as a killing system. The more force that is exerted the smaller the loop closes, resulting in a prompt death. In Wisconsin, cable snares can only be set in water and must be at least half submerged. Trappers commonly set cable snares to catch beaver around the body, as the head and neck are too short. They are commonly connected to submersion systems.

Identify Cable Snare Equipment and Materials



A. Non-relaxing Lock - Lock which continually tightens, and prevents the cable from relaxing.

B. Ferrule/Stop - Ferrules are crimped on the end of a cable to keep the strands from unraveling.

C. Trap Tag - A copper or brass tag with operator's name and address or customer ID number is required in Wisconsin.

D. End Swivel - The end swivel is used for anchoring the device. It also provides additional comfort to the animal and prevents the cable from kinking.

E. End Ferrule - An end ferrule, also called a cable end or stop, is crimped on the end of a cable to keep the strands from unraveling.

Set locations

Cable snares are placed in water where animal activity is either observed or animal activity is encouraged with lure or bait. As examples, beaver are enticed through a device at a lured castor mound or baited set, or in a blind set in a runway.

Beaver under water: Loop 9"-10" Height 1/3 above water, 2/3 below water



• Beaver cable loop in water (for swimming beaver) – Use a loop that is 9-10" in diameter with one third of the loop above the waterline.



Chris Tischaefer Equipment belt used with cable restraints. Tools include pistol, lineman's pliers, fencing pliers and cable cutters. A careful trapper can make sets under ice using cable snares. The cables can be attached to stout poles and stuck in the mud to make channel sets or baited sets for beaver. During the winter, trappers can chop a hole in the ice and push poles through the hole into the mud with cable snares baited for beaver. The under ice beaver set is one of the rare times when bait is recommended with a cable snare.



Key Points to Remember with all Cable Devices

- A cable restraint is NOT a cable snare.
- A cable snare is NOT a cable restraint.
- A cable restraint can ONLY be used on dryland and is a live-restraining device.
- A snare is used ONLY in the water and is a killing device.

Cable Devices and Incidental Catch

Wisconsin is blessed to host a variety of wildlife. As dedicated outdoorsmen and women, we must learn the landscape where we hunt and trap and know the types of animals we may encounter. The goal of setting cable devices is to catch the target species, and one of the primary considerations in doing so is to avoid incidental catches. Incidental catches of wolves, deer and livestock is addressed through the breakaway requirement. The incidental catch of domestic dogs is addressed through the relaxing lock and non-entanglement requirements. However, as responsible, ethical trappers, it is our responsibility to do everything within our power to reduce these occurrences.

We must be risk managers on our traplines. Knowing what animals may be present, knowing the appropriate capture system to employ, and evaluating the risk associated with each must be an ongoing and daily process. Incorrect loop size or loop height, poor location, illegal equipment, or failing to check your sets as required, will surely draw unneeded attention, and thereby increase the potential to lose these types of capture devices in Wisconsin.

Some incidental catches are sure to happen every season. Be prepared with the right equipment to release an unwanted catch. Make sure you have the contact information for the local Conservation Warden. You may need assistance.

Chapter 13 Review – Cable Devices

Objective - Students demonstrate an understanding of cable devices and responsible techniques for using them.

Identify cable device equipment and materials.

- 1. Match the labels below with their pictures.
 - a. Multi-strand steel cable
 - b. Cable restraint, relaxing lock, and deer stop
 - c. Swivel and ferrule
 - d. Support wire in collar





2. Use our state trapping regulations to determine which cable devices are legal to use in Wisconsin. If so, describe legal restrictions on the types of cable devices you can use.

- a. Cable Restraints: Legal on land? ____ Yes ____ No
- b. Cable Snares: Legal on land? _____Yes ____No
- c. Powered Cable Restraints: Legal on land? ____ Yes ____ No

- 4. Match the cable loop sizes and heights to the animal you want to catch.
 - a. Loops 6-8 inches, bottom 6-8 inches off ground
 - b. Loops 10-12 inches, bottom 10-12 inches off ground Fox
 - c. Loops 9-10 inches, 1/3 above water, 2/3 below water Bobcat
 - d. Loops 8 inches, bottom 8 inches off ground Coyote

5. Wisconsin cable restraints can only be used as a ______ device.

6. ______ and _____ design are the two factors that determine whether the set will be lethal or just restrain.

Beaver

Note: Due to the importance of understanding cable restraints a separate publication titled: Cable Restraints in Wisconsin, A Guide to Responsible Use, Publication # WM-443 is provided with this manual.





Chapter 14 Trapping Safety

Objective - Students demonstrate an understanding of potential risks to their personal health, safety and welfare from trapping activities.

Introduction

Trapping is not a dangerous activity, but there are risks related to weather, drowning, animal bites and disease. Develop safe attitudes. Make safe behavior a habit. See Chapter 9, Trapping Equipment, for suggested safety equipment.

Trapping Safety

Hypothermia

Hypothermia is a leading cause of death among people who enjoy outdoor recreation. Cold weather, wind and water can lead to a loss of body heat. When your body temperature starts to lower, hypothermia sets in.

Shivering is one of the first signs of hypothermia. When this happens, go to a warm place, put on warmer clothes, or build a fire. Soon after shivering starts, a person may become confused and clumsy. Watch for signs of hypothermia whenever you are outdoors in cooler weather. Even when air temperatures are in the 50s, hypothermia can occur.

Trappers can prevent hypothermia by wearing warm, dry clothing. Wool clothes are a good choice. Wool insulates even when wet.

When working in or near water, use hip boots (or waders) and gauntlets. If you get wet, return to home, or camp, and put on dry clothes.

Frostbite

Frostbite occurs when ice crystals form in your body's cells. It is a common cold weather injury to people's cheeks, ears, nose, toes and fingers. Frostbite symptoms include white to grayish yellow skin and an intense cold, numb feeling. Pain and blisters also may be present. Protect frostbitten skin from further injury. Drink warm fluids, put on more clothes, or wrap up in blankets. The frozen area can be soaked in warm water (102 to 105 degrees F). Never rub frostbitten skin as rubbing will cause further injury.



Trapper wading in stream.



Silvertip Productions

Hypothermia is a leading cause of death among people who participate in outdoor activities.

Frostbite is a common injury. Don't rub a frostbitten area. Warm it gently.





Mike Kortenhof Success and safety go hand in hand.

When walking on ice keep ice picks where you can reach them fast. If you fall through in deep water you will need the picks to pull yourself out to safety.



Silvertip Productions

Travel on Ice

Avoid traveling on ice-covered streams and rivers. Water currents cause weak, dangerous ice. Ice on a pond or lake is usually more consistent, but be cautious. Springs and underwater structures can cause weak spots on lakes and ponds.

Newly formed clear ice generally is the strongest. Four inches of good ice is needed to support a walking individual. Six inches or more of strong ice is recommended for multiple people, or snowmobiles. Ice cleats can help you maintain safe footing. Carry a walking staff or ice spud to help you check for ice conditions in front of you as you travel.

White ice, or ice mixed with snow and slush, is weaker than clear ice. Candle ice, usually found in the early spring, forms when good ice starts to decompose. Candle ice may be unsafe, even if it is two feet thick.

Many trappers carry ice safety picks while working their trap lines. Ice safety picks have strong handles with short spikes in the ends. The handles are tied together with rope. Thread the rope and picks through the sleeves and back of your coat so you will have them handy if you fall through. It is difficult to pull yourself out of the water without ice picks.

If you do fall through the ice, try to climb out by facing the direction you came from when the ice gave way. When you get out, roll in the direction you came from when you fell through. The ice may be even weaker if you try to go a different direction.

If a companion falls through, lie down on the ice to distribute your weight. Reach out to the victim with a walking staff, or throw them a rope. If you approach too close you may also fall in.

After escaping from icy water build a fire immediately unless you are close to shelter or a vehicle where you can get warm. After falling into icy water, hypothermia will set in quickly. If you have a cell phone with you, call for help immediately. Keep your cell phone in a zip lock bag in an inside pocket.

The Danger of Drowning

Trappers need to be aware of the danger of drowning. It is easy to slip and fall down a steep bank, or slip into deep water holes of rivers and streams when wading. It is difficult to swim when wearing waders or hip boots or when your coat pockets are filled with heavy gear. When trapping on ice while using snowshoes or skis for access, be sure to have bindings that allow for a quick release.

Ice safety picks

It is a good idea to wear an inflatable personal flotation vest when trapping around water. Good ones have a gas canister that can be used to inflate the vest instantly if you need it. The vest should also have a tube you can use to inflate it by mouth if the gas canister fails.

When wading, it is best to travel upstream because the water depth generally increases gradually. You are more likely to encounter steep drop-offs caused by currents when walking downstream. You can also see the bottom by walking against the current. Debris and sediment flow behind you.

Use a walking staff when wading to probe the water depth and bottom conditions. Smooth rocks or debris in the water can cause you to slip. You may encounter soft bottoms or hazardous conditions at points where two streams come together.

If you use a canoe or a boat for trapping follow all safety regulations. Take a boating safety education course available from the Wisconsin Department of Natural Resources.

Risks Associated with Setting Large Body-grip Traps

Some traps, such as large body-grip traps used for beaver, can be dangerous to a trapper who doesn't know how to use them. If you accidentally are caught in a large trap you need to know how to release yourself, which may be difficult if you can't use one of your arms. Large body-grip traps are most often placed under water. You can drown or die from hypothermia if you get caught in a large trap set underwater.

When using large body-grip traps, carry setting tongs and a length of rope with a loop in the end. Keep it in a pocket where you can easily can reach it with one hand. If you are caught, thread the rope through the ends of the springs. Put your foot in the loop and use your free arm to pull the loose end. This releases the pressure on the springs so you can free yourself.

Firearm Safety

Many trappers carry firearms to shoot animals caught in traps. Take a hunter education course from the Wisconsin DNR to learn about firearm safety. Practice safe habits around firearms at all times.

When trapping, it is a good idea to keep your firearm unloaded until you need to use it. It can be difficult to maintain control of a firearm when you are carrying gear and making sets.

When you shoot a firearm at an animal in a trap be careful about ricochets off the trap or rocks. If you are trapping with companions, everyone should stand behind the shooter.



Silvertip Production: Always use a safety gripper when setting large bodygripping traps

Using rope to set a body-grip trap.





2.





Chris Tischaefer

Topographic map and compass.



Silvertip Productions Use the "buddy system." It could save your life!



A canoe is a good mode of transportation when trapping.

PFD stands for Personal Flotation Device, an inexpensive item that can save your life! Always look beyond your target when shooting a firearm and only shoot if it is safe. Keep the muzzle under control and pointed in a safe direction at all times, even when the gun is not loaded.

Always remember TAB-K, the 4 rules of firearm safety:

- **T** Treat every firearm as if it is loaded.
- A Always point the muzzle in a safe direction.
- **B** Be certain of your target and what's beyond.
- **K** Keep your finger outside the trigger guard until ready to shoot.

Use a Map and Compass When in Unfamiliar Territory

It is easy to get lost if you are in unfamiliar territory. When you are looking for sign and places to make sets you may not be paying close attention to landmarks and trails. Always carry a map of the place you are trapping and a compass. Many people carry a global positioning system (GPS) unit. If you carry a GPS, make certain you know how to use it. Carry a compass for a backup.

Always Let Someone Know Where YOU Are!

Although many people trap alone it is best to use the buddy system for any outdoor activity. That way if you are injured or sick, your buddy can assist you or go for help.

Always tell your family exactly where you are going and when you plan to return. If you change locations or plans, let your family know. Leave a map of your trap line at home.

Cell phones are a good safety tool for trappers. Do not rely on a cell phone to get you out of all situations, though. You could be out of range or find yourself with a dead battery when you need your phone the most.

A trapper must know how to start a fire. Carry waterproof matches and firestarters with you at all times. If you find yourself in a hypothermia situation it may be difficult to start a fire without a firestarter.

Wear a Seatbelt!

Trappers need to be careful when driving. Wear a seatbelt – it's the law. You may need to pull off the road in unusual places where other drivers are not expecting a car. Trappers also develop a keen eye for observation, but you should not be intent on watching fields and other habitats when you are supposed to be watching the road.

Be Visible!

Trappers should make themselves visible to hunters. Wear hunter orange clothing, especially during hunting seasons where orange clothing may be required for hunters. Trappers occasionally have been wounded by hunters who did not see the trapper or failed to properly identify their background. Wearing blaze-orange clothing also will make it easier to find you if you are lost, injured or sick.

Animal Bites and Scratches

Animal bites and scratches can cause serious injuries. Wash wounds thoroughly with soap and water, apply bandages and seek medical assistance. Keep the animal confined for observation if possible. If you can't confine the animal, kill it without damaging the head so that health authorities can test it for rabies.

Wildlife Diseases

Wild animals can carry a number of infectious diseases that can cause human illness. Some diseases are specific to one or a few species of furbearers, while other diseases affect many species of wildlife. Wildlife diseases transmittable to humans or domestic pets should be of concern to anyone who regularly encounters or handles wildlife.

Infectious diseases can be caused by numerous organisms and may spread by direct and/or indirect contact with infected animals. Trappers can also be exposed to parasites associated with wild animals. Follow the recommended precautions to protect yourself from potential hazards. If you become ill make certain your doctor is aware of your trapping activity.

General precautions include:

- Wear latex or other protective gloves, eye protection and protective coveralls when handling carcasses or **scat**.
- Wash hands and arms thoroughly with soap and water after handling animals.
- Clean and disinfect knives, skinning boards, cutting surfaces and other equipment with a solution of one cup household bleach in one gallon of water.
- Avoid sick animals or animals that do not act normal.
- Do not drink untreated water from lakes or streams. Cook all wild game thoroughly.



Wear latex gloves when skinning animals.



Center for Disease Control Raccoon can carry several diseases.

Rabies and tularemia are two of the diseases humans may get from furbearers Animal diseases and parasites that may affect humans include:

Rabies (Hydrophobia)

Rabies is a virus that infects the central nervous system. Left untreated, rabies is nearly always fatal. The rabies virus may be carried by all mammals but it occurs most often among wildlife species such as raccoon, bat, skunk and fox. Rabies usually is transmitted by the bite or scratch of an infected animal. Rabies can also be transmitted by contamination of a cut or scratch when skinning an infected animal, or from contact with your eyes, nose or mouth.

Rabies occurs in two forms in wildlife; "dumb" and "furious." In the dumb form the animal is lethargic and may suffer paralysis. In the furious form the animal is restless, aggressive, and may bite at real or imaginary objects.

If you are bitten by a wild animal, wash the bite with soap and water, then seek medical attention. If possible, capture or kill the animal without damaging the head. Health authorities will test the brain tissue for rabies. Keep the animal refrigerated at 35-40 degrees F until it can be examined. Human Diploid Cell Vaccine (HDCV) can offer protection from the rabies virus without serious side effects. Ask your doctor for advice about HDCV, especially if you are trapping in areas where animals are known to carry rabies.

West Nile Virus

Most people who are infected with the West Nile virus (WNV) will not have any type of symptoms. About 20 percent of people who become infected will develop West Nile fever (WNF). Symptoms include fever, headache, tiredness and body aches. There may be a skin rash on the trunk of the body and swollen lymph glands.

The symptoms of severe infection (West Nile encephalitis or meningitis) include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness and paralysis. It is estimated that approximately 1 in 150 persons infected with the WNV will develop a more severe form of the disease. The incubation period is 3-14 days, and most WNF symptoms last for a few days. Severe infection symptoms may last several weeks. Neurological symptoms or damage may be permanent.

It is best to prevent the WNV by avoiding mosquito bites. Stay out of the field at dusk and dawn during mosquito season. Wear long sleeve shirts, long pants and socks when outdoors. Use a mosquito repellent containing DEET on exposed skin. The Center for Disease Control advises that you should not use DEET repellent on skin under your clothes. Do not apply repellents containing permethrin directly to your skin.



Center for Disease Contri Mosquitoes may transmit the West Nile virus.



Center for Disease Contri Tularemia lesion on hand. Contracted from muskrat.



Cottontail Rabbits may carry tularemia.
Tularemia (Rabbit Fever)

Tularemia is a bacterial disease most commonly associated with rabbit and hare. Beaver and muskrat may also carry this disease.

Tularemia is most commonly transmitted to wild animals by the bite of bloodsucking ticks or fleas. The bacteria enter the body, multiply, and invade internal organs. The liver and spleen enlarge and become covered with white spots. Humans can get tularemia from skinning infected animals, drinking contaminated water, getting bitten by infected deer flies and ticks and sometimes by eating undercooked meat. Symptoms include fever, infected sores, swollen lymph nodes and flu-like feelings. These symptoms may become severe. With prompt antibiotic treatment, few cases of tularemia are fatal.

Lyme Disease

Lyme disease is a bacterial infection spread by the bite of a deer tick (*Ixodes dammini*). When diagnosed early the disease can be treated with antibiotics.

People get Lyme disease when they are bitten by ticks carrying *Borrelia burgdorferi* bacteria. Ticks that carry Lyme disease are very small and can be hard to see. If these tiny ticks bite mice infected with Lyme disease and then bite people or other animals, the disease can be passed on. After several days or weeks the bacteria may spread throughout the body of an infected person.

Diagnosis is difficult since Lyme disease symptoms vary and are similar to other common illnesses. One of the first symptoms may be a red circular skin lesion, but often the rash will not appear. Other early symptoms are flu-like and may include weakness, headaches, nausea, fever, stiff neck, dizziness, muscle aches, sore throat and swollen glands. In advanced stages more serious symptoms may occur including facial paralysis, arthritis and heart problems. Consult your physician if you have symptoms of Lyme disease.

Prevent Lyme disease by preventing tick bites. Wear light colored clothing when walking in tick habitat. Wear long sleeves and long pants. Check yourself thoroughly for ticks. If bitten by a tick, remove it promptly and disinfect the bite with rubbing alcohol.

Leptospirosis

Leptospirosis is a bacterial disease that infects humans and animals. Almost all mammals can be infected, but it is more common in domestic animals than wildlife. The disease is known to infect striped skunk, raccoon, fox, opossum, bobcat, muskrat and woodchuck. Leptospirosis spreads from eating infected food, contact with the urine of an infected animal, or contact with urinecontaminated water. The bacteria may enter the body through skin wounds, mucous membranes or cuts. Leptospirosis bacteria multiply in the blood



Center for Disease Control Deer Tick. Ticks that carry Lyme disease.

Ticks and fleas

Coyote and other furbearers may have ticks and fleas that carry bubonic plague. The Center for Disease Control reports 10 to 15 cases of plague a year in rural parts of the western U.S. If you catch an animal with fleas, handle the animal in a plastic bag immediately, spray generously with insecticide, and tie the bag shut. This will kill most of the ticks and fleas before they leave the body when it starts to cool.



Coyote with mange and a healthy coyote.



Center for Disease Control Wood tick - carries Ehrlichiosis



Giardiasis parasite carried in beaver feces.



Diseased raccoon.

Do not risk your health or the health of others by handling sick or diseased animals. The value of the pelt is not worth the risk. stream. It may affect the kidney and leave the body in the urine. Infection can cause flu-like symptoms in humans including headache, fever, muscle ache, vomiting and kidney damage. Antibiotics are very effective for treatment.

Rocky Mountain Spotted Fever

Spotted fever is a bacterial disease transmitted by ticks. Symptoms include a sudden onset of fever that lasts for 2-3 weeks, muscle pain, headaches, chills and weakness. A rash may develop on the hands, arms and legs and then spread to the rest of the body. Furbearers may carry the ticks that carry spotted fever. The disease occurs most often in the eastern half of the United States. Limiting exposure to ticks is the most effective way to reduce the likelihood of infection.

Sarcoptic Mange

Mange is caused by a parasitic mite. It occurs throughout North America and is most commonly found among red fox, coyote, squirrels, raccoon and domestic dogs. Adult female mites burrow under the skin and deposit their eggs. This makes the animal scratch, chew or lick the infected area, which leads to inflammation and infection. When the eggs hatch the condition worsens. The animal's hair falls out, and the skin thickens and gets crusted with scabs and cracks. Mange is usually fatal to red fox and sometimes to coyote and wolf. The mite is transmitted among animals through direct contact or by contact with contaminated areas such as dens or burrows. People can get the mites by handling mange-infested fox, coyote, wolf or domestic dogs.

Trichinosis

Trichinosis is caused by eating raw or under cooked pork and wild game infected with a roundworm parasite called trichinella. It affects people and many kinds of domestic and wild animals. The parasite forms cysts in muscle tissue.

Cook furbearer meat thoroughly until the juices run clear. Freezing game meat, even for long periods, may not kill all worms. Likewise, curing (salting), drying, smoking or microwaving meat does not consistently kill infective worms.

Giardiasis

Giardiasis is caused by a parasite that can be carried by many animals, including beaver. Beaver do not appear to be severely affected by the disease, but infected beaver can contaminate water sources used by people. Giardiasis spreads from drinking contaminated water or eating contaminated food. Human symptoms include diarrhea, cramping, weakness and mild fever. The condition can last 1-2 weeks. Medication usually is prescribed to treat this ailment.

Raccoon Roundworms (Baylisascaris procyonis)

Baylisascaris procyonis is a common intestinal roundworm parasite found in raccoon and can cause a fatal nervous system disease in wild animals. The worms develop to maturity in the raccoon intestine, where they produce millions of eggs that are passed on with the feces. Released eggs take 2-4 weeks to become infective to other animals and humans. The eggs can survive for years.

Raccoons tend to defecate in specific places over a period of time. Likely places are at the base of trees, barn lofts, sand boxes, chimneys, attics or on high surfaces such as rocks or roofs. People become infected when they accidentally ingest the eggs. The eggs can become airborne as dust where people can inhale them. When humans eat or inhale raccoon roundworm eggs, they hatch into larvae in the person's intestine and travel through the body, affecting the organs and muscles. Severity depends on how many eggs are ingested and where in the body the larvae spread. Symptoms can include nausea, tiredness, loss of coordination and blindness. Infected animals may shows signs similar to rabies.

Echinococcosis (hydatid disease)

Echinococcosis is caused by infection with the larval stage of Echinococcus multilocularis, a microscopic tapeworm found in fox, coyote, dogs and cats. Infection causes parasitic tumors to develop in the liver, lungs, kidneys, spleen, nervous tissue or bone. The disease may be fatal. One form of the disease mainly affects wild animals including fox and rodents. Wild fox, coyote and cats are infected when they eat Echinococcus multilocularis infected rodents such as field mice or voles. Dogs can also be a host. Cats are less likely to develop Echinococcosis than dogs, but may also become infected. Once the animal is infected, the tapeworm matures in its intestine where it lays eggs that are passed on in feces. The infectious tapeworm eggs are too tiny to see and will stick to anything.

People can get Echinococcosis by eating eggs in game meat or from contaminated food, water or soil. Surgery is the most common form of treatment. Medication may be required. Use latex or other non-latex rubber gloves when skinning animals and disinfect your work areas to prevent this disease.

Viral Diseases and Protecting Your Pets

Pseudorabies, parvovirus, and distemper are diseases that can be carried by furbearers and passed on to pets or livestock. Have your pets vaccinated and seek treatment for them if you suspect these diseases.



Center for Disease Control Cotton rat - died from echinococcis.



Tapeworms.

Chapter 14 Review – Trapping Safety

Objective - Students demonstrate an understanding of potential risks to their personal health, safety and welfare from trapping activities.

Describe the conditions that cause hypothermia, symptoms of its presence, and treatment procedures.

1. L	st three signs of hypothermia:
a b	
с	
Explain	how to prevent hypothermia.
2. T	appers can prevent hypothermia by wearing clothing.
3. U	se boots or waders, plus long-sleeved gloves when trapping in water.
4	is a leading cause of death among people who participate in outdoor activities.
Recogn	ze the danger of traveling on ice covered lakes, ponds, rivers and streams.
5. A w	void traveling on ice-covered and where water currents can cause eak spots.
6. C	arry a walking staff to help you check for in front of you as you travel.
7. If ic	you fall through the ice try to climb out by facing the direction you when the e gave way.
8. Y o	ou should build a immediately when you reach shore unless you are close to shelter your vehicle.
9. It o	is a good idea to wear an inflatable personal when trapping water.
10.	Vhen wading in streams, it is best to travel
11. c	f you use a boat or canoe follow all regulations and take a safety urse.

12. General trapping precautions to follow to protect against diseases include:
a. Wear protective gloves, eye protection and protective coveralls when handling or
b. Wash and thoroughly with soap and water after handling animals.
c. Clean and disinfect, boards, surfaces and other
equipment with a solution of one cup household bleach in 1 gallon of water.
d. Avoid animals or ones that do not act
e. Do not untreated water from lakes and streams.
f. Cook all thoroughly.
13. If bitten by an animal you should wash wounds thoroughly with and, apply bandages and seek
14. Keep the animal confined if possible, or kill it without damaging the so authorities can examine it for rabies.
15. Trappers should make themselves visible to hunters by wearing hunter clothing.
16. When setting large body-grip traps, trappers should carry setting tongs and a length of with a in the end.
17. When shooting at an animal in a trap be careful about off the trap or rocks.
18. Define TAB-K, the 4 rules of firearm safety:
T –
A –
B –
K –
19. Always tell your family exactly you are going and you plan to return.
20. A trapper should know how to start a



Chapter 15 Running a Trapline



Introduction

Your success on the trap line begins long before the season opens. Trappers need to obtain permission, scout properties, and prepare equipment before the opening day.

Obtaining Permission to Trap

Early summer is a good time to ask farmers and other landowners for permission to trap. During the spring, farmers are busy planting crops. In the fall, they will be busy again, preparing for the harvest.

Dress neatly when you ask a landowner for permission to trap. Be polite, even if the landowner denies your request.

When talking to landowners, ask about possible problems with too many furbearers or neighbors who might want someone to trap their property. If you establish a reputation as a responsible trapper, you may find that landowners will call you and ask you to trap problem furbearers.

Contact landowners again shortly before the season opens. Ask about other people, such as hunters, who may be using the property. Let landowners know the days and times you will be on their property and the type of vehicle you plan to drive. Make sure they have your phone number in case they need to reach you. Show the landowner the equipment you intend to use and how it operates.

Obtaining permission early will give you plenty of time for preseason scouting. When scouting or trapping, treat the property and the owner with respect.



Ohio DOW Photo

Don't wait until trapping season opens to ask for permission.



Chris Tischaefer

Plat books help identify landowners and boundary lines.



A tree girdled by a beaver.

Check the Wisconsin trapping regulations for information on how often you are required to check your traps. Regardless of the law, responsible trappers will visit their traps daily. It is good for animal welfare, and it will increase your success.

Why daily checks increase success!

- Less chance animals or traps will be stolen
- If traps have been disturbed you can remake the set
- Less chance for predation
- Less chance an animal will escape from a restraining device
- Less chance an animal will injure itself or damage its pelt
- If you remove an animal and set the trap again you may catch another one
- Most furbearers are active at night (nocturnal), so check your traps early each day



Silvertip Productions Pre-season scouting leads to success

Pre-season Scouting

During preseason scouting trips find specific places to make your sets and plan the materials you need. Make notes of what you find and sketches of areas that look promising. This will allow you to set your traps out quickly when the season opens.

If you wait until the season opens to scout, it will be time-consuming and difficult to cover ground carrying your equipment. Scouting during the season may alert wary furbearers such as fox and coyote. Preseason planning allows you to make sets quickly and leave the area without creating much disturbance.

A Commitment to Check Your Traps

When you set out a trap line, you assume responsibilities. Animal welfare is a top priority. Most furbearers are nocturnal so it is best to check your liverestraint traps as early in the day as possible.

One important difference between trapping and hunting is your commitment to work your trap line until you remove your traps. Hunters can choose the days they want to hunt, but trappers must check their dryland sets daily in Wisconsin.

If you cannot personally fulfill your responsibility to wildlife and fellow trappers because of illness, have another licensed trapper check your line. If a licensed friend or family member knows where your sets are located they can check or remove your traps for you. Keep notes and sketches showing where to find your traps. **Be sure to contact your local conservation warden if you need someone to check your traps and they do not have a trap tag on your trap!**

Check Your Traps Early Each Morning

There are many good reasons to check your traps as early in the day as possible:

- Animal welfare Most important!
- Prevent escape from live-restraint traps.
- Release nontarget animals.
- Reduce chances of fur or trap theft.
- Reduce chances of predation on your catch.
- Lets landowners and others know you are responsible.
- Gives you time during the day or evening to skin or sell your fur.
- Gives you time to remake sets.

Humane Dispatch

Nearly everyone agrees that animals should be killed as humanely as possible. However, their ideas about a particular method might be quite different. Some people believe that guidelines developed by the American Veterinary Medical Association (AVMA) should be followed when killing wild animals in the field. The WCTEP believes, as does the AVMA, that standards developed for veterinarians are not necessarily applicable or appropriate for activities like hunting and trapping. Licensed veterinarians can use lethal drugs that aren't available to the general public, they have more control over animals and don't need to worry about chemicals that make meat unfit for human consumption. While these limitations explain why methods used to kill animals on the trap line differ from those used to kill animals in a laboratory or clinic, you have the same obligation to kill animals as quickly and painlessly as possible – for their sake and yours.

The best way to kill a live raccoon, coyote, fox, or bobcat is with a wellplaced shot with a .22 rimfire cartridge to the brain. Before firing, check for solid objects that may cause a ricochet. Anyone who comes with you should stand well behind you when the shot is fired. For a more complete overview of hunter safety, we suggest attending one of Wisconsin's hunter education courses. Successful completion of this course is required for all first time hunters born after January 1, 1973.

If a skunk raises its tail before you can get close enough to shoot accurately, approach it slowly from upwind and talk in a soft, monotone voice. Aim for the heart (just behind the front leg between the elbow and shoulder). Avoid shoot-ing the skunk in the head to reduce the risk of transmitting rabies. Skunks also tend to spray when shot in the head and direct contact with the spray can cause temporary blindness.

Using body-grip traps can reduce the need to kill the animal directly. However, these traps are effective only for capturing certain species of furbearers. Using submersion systems with foot-hold restraint systems in or near water also aids in killing the animal.

Trappers must plan the method of **dispatch** prior to setting traps. Planning reduces stress on you and the captured animal.

Releasing Non-target Animals

Your personal safety is the top priority when you release an animal from a live-restraint trap. Your second priority is to release the animal without harming it. If you cannot do this on your own, get help.



Silvertip Productions Noosing a bobcat. Releasing a large animal, such as a bobcat, is difficult.



Joe Goodman



Joe Goodman

Shot placement is important for a quick, humane kill.

Our goal is to make a few good sets, not to make a lot of sets.

Practice set construction before the season opens - practice makes better!



Rinse dirty animals in clean water.

The first step in releasing an animal is to restrain it without hurting it. Trapping equipment dealers sell **catchpoles** for this purpose. To use it, slip the noose over the animal's head and pull it down snuggly so the animal cannot escape. Use the pole to steer the animal's head away from the trap while you depress the levers or springs with your feet. When the animal's foot is free you can position yourself behind the animal and release the noose.

An alternative to a catchpole some trappers use is a plywood board with a vshaped notch cut in the bottom. You can hold the board between yourself and the animal and place the notch over the foot of the animal. This will allow you to open the trap with your feet, or allow a trap partner to open the trap while you hold the board. Often, basic handles are attached to the board to make it easier to hold in place.

You should have no problems with birds of prey if you have properly covered flesh baits at your set. If by chance you do catch one of these birds, examine it closely for injury. If the bird is injured contact a Conservation warden for help getting it to a rehabilitator. If you can release the animal unharmed, you should cover it with a blanket or coat while you depress the springs on your trap. Be extremely careful. Birds of prey have strong talons and beaks that can cause serious injury. Once the foot is free, remove the covering and allow the bird to fly away.

Do not attempt land trapping if you cannot safely and humanely release nontarget animals.

Capture of a Domestic Animal

If you catch a domestic animal, examine it for injury before releasing it. Although the animal may appear to be a pet, do not assume it will not bite. Carefully restrain any animal when you release it.

If a domestic animal is injured, contact the owner or the landowner and make arrangements for medical care. No one wants to lose an animal or have it live with a permanent injury that could have been prevented with prompt treatment.

A Few Good Sets vs. Many Sloppy Sets

It is better to make a few good sets than to make many sets in a rush. Preseason scouting and planning will help you make sets that have a high chance of success. If you rush your sets, they may be of low quality and catch fewer furbearers. As you gain experience you can increase the number of traps you set.

Responsible Fur Handling in the Field

Proper fur handling begins in the field. If an animal is wet and muddy, rinse it off in the cleanest water you can find. Remove the excess water by stroking the animal or gently shaking it. When you get the animal home, dry the fur as soon as possible.

When animals are trapped on land, keep them dry. Use a brush or comb to remove burrs or dirt.

Put any furbearers that are not bloody from shooting in a burlap bag or other protective cover. If an animal has fresh blood on its fur, lay it separately on newspaper or other material in the back of your truck or car trunk. Be sure not to display animals in ways that may offend people who see them.

Care in the field shows respect for your harvest and it will make the skinning job go faster at home. Proper handling in the field improves the quality of the final product.

Keep a Daily Journal

It is a good idea to keep a journal. Over time, it will help you increase your catch and bring back many good memories. Make notes about the types of traps you use, how you make your sets and how many animals you catch at a set before you remove it. Keep notes about different lures or baits you use. Soon your journal will help you know how to make your sets work the best during different parts of the season.

A journal is also a good place to keep sketches and information about your sets. Remember, sketches will help someone else find your traps if you get sick or cannot run your line.

Three Reasons to Keep a Journal

- Increase your success.
- Guide others to your traps if you get sick.
- Save your memories to enjoy over the years.

Responsible fur handling respects the life of the animal.

Proper fur handling begins in the field.

Chapter 15 Review – Running a Trap Line

Objective – Students demonstrate an understanding of the knowledge, skills, and attitudes needed to safely and responsibly harvest furbearing animals using Best Management Practices.

Explain the importance of obtaining permission to trap on private land before the season opens.

- 1. Early ______ is the best time to ask a farmer for permission to trap.
- 2. Obtaining permission early will give you plenty of time to ______ before trapping season opens.

Describe the advantages of preseason scouting.

- 3. Preseason scouting trips allow you to find ______ places to set your traps and plan the ______ you will need to make your sets.
- 4. Preseason scouting and planning will help you make sets that have a ______ chance of ______. If you rush your sets, they may be low quality and catch ______ furbearers.

Make a commitment to check your traps.

- 5. Animal ______ is the top priority.
- 6. Most furbearers are nocturnal, so it is best to check your live-restraining traps as early ______as possible.

7. State four reasons to check traps as early in the day as possible.

a	
b	
c	
d	

8. Describe two methods to safely, quickly and humanely kill a furbearing animal caught in a live-restraint trap.

а.	
b.	
-	

9. Describe two ways to release a nontarget animal from a foot-hold trap.

- a. ______ b.
- 10. If you catch a domestic animal in a foot-hold trap examine it closely for ______ before you release it. If it is ______, contact the animal's ______ or the landowner where you trap so the animal can be treated.

Describe responsible fur handling procedures in the field and why it is important.

11. Care in the field shows ______ for your harvest and will make the skinning job go faster at home. Proper handling in the ______ improves the quality of the final product.

12. Three reasons to keep a daily journal of your trapping activities include:

- a. Increase your ____
- b. Guide others to your traps if you get _____.
- c. Save your ______ to enjoy over the years.



Chapter 16 Handling Fur

Objective - Students demonstrate an understanding of the knowledge, skills and equipment needed to safely skin animals and prepare the pelts for market

Introduction

Proper fur handling is the key to getting a good return for your product. Furbearer carcasses can spoil quickly, especially in warm weather. If you don't know how to skin and prepare pelts you may want to consider selling your furs unskinned on the carcass. Selling your animals on the carcass is less work for you and more work for the buyer. You will receive a lower price for unskinned furs. If you do decide to skin your catch, proper fur handling begins in the field.

To avoid spoilage, sell unskinned animals daily if the outside temperature is above 40 degrees or every two or three days if below 40 degrees and the animals have been left hanging. You can freeze whole animals if you have the room. Make sure that they are clean and dry. Animals that were killed recently should be allowed to cool long enough to let their body heat escape before placing them in the freezer. Small animals should be wrapped individually in sheets of newspaper. Place newspaper or cardboard between animals that are too large to wrap.

Never seal animals or pelts in plastic bags without proper cooling. Plastic will trap heat and moisture and spoil the pelt. Fur is a great insulator and piling animals in a freezer will cause those in the middle to spoil. If you have too many, rotate animals from the middle to the outside after 12 to 24 hours.

If a furbearer is trapped in water it should be removed from the trap and rinsed clean of any dirt, mud or vegetation. Shake excess water from the animal, and stroke it from head to tail with your hand to remove as much water as possible. If snow is available, roll the animal vigorously in it to take the moisture from the fur. If it is below freezing don't lay a wet animal on ice or a metal surface. The **guard hairs** of the pelt will freeze to ice or metal, damaging the pelt when you pick it up. Animals can be placed in a burlap bag to protect the fur while transporting them back to the fur shed. If an animal's fur is still wet when you get home, hang it up by the head or forelegs in a cool place to dry. Circulating air with a fan will reduce drying time. Generally, pelts should be dry before being skinned and placed on a stretching frame.



Paul Peterson Trapper Education student skinning a muskrat.



Opening cuts on a beaver.



Chris Tischaefer Skinning gambrel.



Illlinois Dept of Natural Resources Knife sharpening.

Fur IN

Otter Skunk Weasels Raccoon Mink Muskrat

Fur OUT

Gray Fox Red Fox Coyote Fisher Bobcat

OPEN Fur

Beaver

If a furbearer is trapped on land and is already dry, simply place it in a burlap bag to protect the fur while transporting it back to the fur shed. Brush or comb the pelt to remove any burrs or dirt prior to skinning. Land furbearers may have external parasites such as fleas, ticks or mites, so keep the carcasses in a place where they won't contaminate your house, clothing or vehicle.

Wearing Latex Gloves

Furbearers should be skinned as soon as possible after they are trapped. The pelt is easier to remove and less likely to be damaged when the animal is fresh. Before skinning, remember to put on a pair of latex gloves. The gloves will help protect you from any diseases the animal might be carrying.

"Cased furs" vs. "Open furs"

Pelts are prepared for the market by skinning in one of two ways: **cased** or open. Except for beaver, all furbearers should be skinned cased.

Case skinning is much like removing a sweater or sweatshirt by grasping the bottom and turning it inside out as you pull it up over your head. To do this with a furbearer pelt, make a cut from the top of the foot pad along the inside of one back leg to the top of the foot pad of the other back leg. Then simply remove the pelt from the carcass by turning it inside out, skinning down over the back legs, forelegs and head.

To skin a beaver using the open method, make a cut on the underside of the animal from its chin to the base of its tail. Removing the fur this way is much the same as you would take off a coat. Some fur handlers may also use a technique that combines case and open skinning to make beaver **fleshing** easier.

"Fur in" vs. "Fur out"

Fur markets want cased-skinned, dried furs presented either "fur in" or "fur out," depending upon the species. "Fur in" means that the fur side of the pelt is on the inside when the pelt is sold. "Fur out" is just the opposite: The fur should be on the outside of the pelt, the skin on the inside. Check with your fur buyer to see how the individual pelts are to be prepared for market.

Most fur buyers are glad to explain proper fur handling techniques and preparation to you since it means more profit for both of you. Don't be afraid to ask.

Tail Handling

Furbearers with furred tails should have their tails split from the underside with a knife and the tail bone removed. A tail-stripper comes in handy for this purpose. The deboned, furred tail should remain attached to the pelt. Tails of furbearers that are not furred should be cut from the pelt at the hairline during skinning and discarded.

Fleshing Board and Fleshing Tools

Once you've skinned a furbearer the next step is **fleshing**. A fleshing beam is a wooden (or fiberglass) support that holds a pelt when removing meat or fat still on the skin. If not removed, this meat or fat could rot and spoil the pelt.

Once pulled onto a fleshing beam (skin side out), the pelt is scraped with a double-handled draw knife, a single-handled scraper or other type of fleshing tool.

Wire and Wooden Stretchers

The final step in preparing furs for market is to place the skinned, fleshed pelt on a wire or wooden **stretcher**. The term "stretching" may be a little misleading, as the pelt is not being stretched at this point in the process. Rather, it is simply being held in place as it dries so that it does not shrink or shrivel. Most cased-skinned furs should first be placed over a stretching board or wire frame fur-side in. Remember to center the pelt on the board or frame, meaning that the forelegs and belly of the pelt should be on one side of the frame and the eye holes, ears and back should be on the other side. Pull the pelt snug, but not too tight. If you are using a wooden stretching board, secure the pelt in place with a few tacks or push pins near the base of the tail and back legs. Wire frames usually have two metal arms with prongs that hold the base of the pelt taut.

Drying Pelts

Once a pelt has been properly placed on a stretching board or wire frame it should be hung up and dried slowly in a room with a temperature of about 55-60 degrees Fahrenheit. Use a fan to circulate air throughout the room to reduce drying time. Pelts of fox, bobcat, fisher and coyote should be turned fur side out.



Plastic tail puller and opener.



Fur combs.



Illinois Dept of Natural Resources Fleshing beam.



Pelting Equipment.



Trapper education instructor, John Irwin, teaching a student how to skin a muskrat.



Illinois Dept of Natural Resources Starting cut for open skinned beaver.



Illinois Dept of Natural Resources Open skinning beaver.



Wire stretchers come in many sizes.

You must check the pelts as they dry fur side in. Once the skin is dry to the touch, remove the fur from the stretcher and turn it fur side out. Place the pelt back on the stretcher fur side out and pin it in place to finish drying. The skin may be dry to the touch in as little as two hours for fisher.



Complete drying of a pelt may take anywhere from just a few days to a week or more depending upon the temperature and air flow. Regardless of how long it takes, a pelt should be completely dry before removing it from the stretching board or wire frame. If not properly dried, the pelt will rot.

Freezing Pelts

An alternative to stretching skinned pelts is to quick-freeze them. Care must be taken if you choose this method or the pelts could be ruined. Always freeze the pelt flat, fur-side out, with no exposed flesh. Do not roll furs, and never freeze or thaw your fur in plastic. Animals with heavy flesh such as coyote, raccoon, and beaver should be thawed out for 5-6 hours in a cool room before selling. Never allow frozen **green pelts** to thaw for so long that the grease melts. Muskrat pelts should be frozen flat and not thawed at all before selling. Small furbearers such as mink and muskrat can be frozen whole, without skinning. Allow whole frozen animals to partially thaw before selling. In the case of selling whole frozen muskrat, only the feet need to be thawed when presenting to the buyer.

Tips for Freezing Skinned Pelts

- Turn the pelt fur-side out and match the belly to the back so that the leather side of the pelt is less prone to freezer burn.
- If the pelt has the tail attached, flip the tail under the belly, wrap the pelt in newspaper, and lay it flat in the freezer.
- Never wad or roll up pelts to freeze them the inside can spoil. Never freeze skins inside sealed plastic bags they collect moisture that can damage the fur.
- Remove muskrat, mink and fox pelts from the freezer about two hours before you take them to a fur buyer they should still be "frosty."
- Remove raccoon, coyote and beaver pelts from the freezer about six hours before taking them to a fur buyer they will be partially frozen.
- Never thaw pelts by laying them next to a heater or fire.

Individual fur buyers may have different instructions for freezing pelts or whole animals. Check with your buyer for specific directions on freezing fur.

Health Precautions

Some furbearers carry diseases and parasites that can be passed on to humans during the skinning process. To avoid health threats, use band-aids to cover open cuts or sores on your hands before skinning wild animals. Wear latex gloves. Disposable latex gloves like the ones used by surgeons are available from pharmacies or trapping supply dealers. When finished skinning, wash your hands well with anti-bacterial soap. Don't handle soda cans or food during the skinning process – they can pass bacteria to your mouth.

Skinning

Skinning animals takes time, but it has some advantages. If you have limited freezer space, pelts take up less room than whole animals. Most dealers pay more (depending on the species) because it saves them the cost of having someone skin your catch. Meat from some furbearers can be used as bait, eaten or sold. You can use secondary markets for glands, skulls, teeth and claws.

You'll need some basic equipment for skinning. A sharp, high-quality knife is a must. Blades with pointed tips are best except when skinning beavers. A rounded tips come in handy for this job.



Opening cuts for a fox or coyote.



Opening cuts for a raccoon.



Opening cuts for a muskrat.

Illustrations courtesy of Illinois Dept. of Nautral Resources

Pelting a raccoon



Brush and comb the fur.



Line show where to cut.



Cut both legs from ankle to 1" below vent, then around the ankles. Photo provided by Ohio DOW

Open skinning involves making a slit in the belly skin from the chin past the vent. **Case skinning** involves making a cut from heel to heel and around both ankles, then pulling the hide over the animal's head like you would remove a tight glove or sweater.

Case-skinning muskrat

Muskrat are among the easiest furbearers to skin because the connective tissue that joins the pelt to the muscle is weak.

Some trappers prefer to hang the animal from a **gambrel**; others feel this is a wasted step. If you use a gambrel, poke the top of one hind foot through a hook. Grasp the tail and make a cut from the base of it (where the fur ends) to the heel of the hind foot that's held by the gambrel. The cutting edge of your knife should face upward and angle away from you, just under the skin. Repeat on the other side.

Make cuts around the ankles of both hind feet. Some people make cuts around the wrists of both front feet, but this isn't necessary. Make a cut completely around the base of the tail where the hair ends.

Work the skin free from the muscle tissue on one of the hind legs. After it's started, push your forefinger and index finger under the pelt toward the backbone, then upward under the tail, pulling the pelt free. Peel the skin away from the muscle all the way across the cut. Follow through with your thumb around the leg bone and start removing the pelt on the animal's belly side.

Pull the pelt downward toward the animal's head. It should come off freely until you get to the front legs. Pass a finger between an armpit and the pelt to loosen it then pull downward until the front leg comes free. Repeat this on the other side.

Grasping the pelt at the tail end, pull downward until it stops at the ears (you'll notice some whitish cartilage where the ears connect to the skull). Make small cuts to separate the bases of the ears from the skull. Pull downward until you get to the eyes. Use a knife to make small cuts that separate the eyelids at the skull (be sure to leave the eyelids on the pelt). Pull downward until the pelt is free, or make a small cut at the tip of the nose.

Case-skinning raccoon

Make cuts around both ankles and wrists. Some people prefer to cut both front feet off at the wrists with a hatchet. Next, make a cut from the inside of one heel to the other, passing below the vent. Grasp the end of the tail and split the underside toward the vent. If you have a tail stripper, you can start the cut about 4-6 inches from the base of the tail. Continue the cut along one side of the vent until it meets the cut that goes from heel to heel. Make a cut on the other side of the anus, forming a triangle around the vent.

Using your knife, separate the pelt from the muscle around both ankles. You'll need to loosen enough of the pelt to grab it. Pull downward with some force. This should separate the pelt along most of the leg. Repeat this procedure on the other side.

Work the pelt free near the base of the tail. If necessary, cut some of the connective tissue. Peel the pelt away from the tail bone for a distance of 3-4 inches. Place a tail stripper around the tail bone and yank downward with one hand while using your other hand for leverage against the lower back of the raccoon. If the tail bone doesn't pull out, extend your cut a few inches toward the tip of the tail and try again. Split the tail all the way to the tip after the bone is removed.

Tails remain attached to the pelts of raccoon, fox, coyote, bobcat, mink, weasels and skunk. After removing the bone, split the tail along its entire length. Using a guide can help you to make a straight cut.

Pull the base of the tail toward you and run your fist downward between the pelt and the muscle tissue along the backbone. Turn the animal around and loosen the pelt from the belly. If the raccoon is a male, the skin will stop at the tip of the penis; a small cut can be used to separate it from the pelt.

Run your fist downward between the pelt and the muscle tissue along the centerline of the belly. Pull the pelt downward, freeing the sides. It will stop at the front legs. Using a knife, make a slit through the connective tissue at the shoulder and upper arm. Be careful not to cut through the pelt itself.

Loosen the pelt near the armpit by pushing between the pelt and muscle tissue with your fingers. After it's started, cup your fingers from both hands through the opening and pull downward. This should separate the pelt to the wrist, where it will pull free. Repeat this procedure on the other side.

After both front legs are free, pull downward on the pelt. The pelt of young raccoons will usually separate to the base of the skull. The connective tissue on the necks of older raccoons is stronger. You'll probably need to use a knife in some places, but be careful – a light touch with a sharp blade will get the job done, especially if you're applying pressure to the pelt by pulling it downward.

Continue working the pelt downward until it stops at the cartilage that forms the bases of the ears. Cut through the cartilage at a point close to skull. When both ears are free, pull downward until you reach the eyes. Using a knife, sepaPelting a raccoon (con't.)



Cut bottom side of tail. Start about 1/4 of the tail length down. Wear latex gloves when skinning. Keep your knife sharp.



Pull the pelt off the legs, down to the crotch. Work it loose with your fingers, then cut it away at the crotch.



Pull the pelt off the hips then pull it away from the back and part way down the tail.

Photo provided by Ohio DOW

Pelting a raccoon (con't)



Remove tail bone with puller.



Once the tail is free, you can use the tail splitter or the tip of a sharp knife to split open the tail.



Pull the pelt down to the animal's shoulders. Use a rag to get a good grip.

Photo provided by Ohio DOW

rate them from the pelt by cutting carefully next to the skull. Pull downward again to the tip of the nose and make a small cut through the cartilage to free the pelt.

Open-skinning beaver

Make cuts as shown earlier in this manual. Be careful not to cut into the muscle tissue – insert your blade just beneath the skin with the cutting edge facing up and angled away from you. We recommend removing all four feet with a hatchet or heavy-duty knife.

Beaver have a thin layer of fat between the pelt and muscle tissue on the belly. Starting at the edge of the cut you made down the beaver's belly, use a round-tipped knife to separate the pelt and fat from the muscle tissue. Continue this process along the entire length of the beaver – take your time and angle your blade toward the muscle tissue to avoid slicing into the leather.

You'll encounter a thin layer of connective tissue about halfway between the center line of the belly and the legs. Cut through it, leaving the connective tissue attached to the pelt. Continue separating the pelt until you reach the armpit and groin area. Pull the pelt back to expose the layer of connective tissue around the legs. Slice through the tissue, then run a couple of fingers under it along the legs. You should be able to flip the pelt over the end of the bones where you cut off the feet.

Flip the beaver on its side and continue separating the pelt from the muscle tissue, working toward the backbone. You'll probably need to cut into the muscle tissue near the lower hip and tail, leaving some of it attached to the pelt. The middle part of the pelt will separate easily by pulling it back or running your hand between the pelt and muscle. Don't worry about skinning out the shoulders and neck at this point. Lay the beaver on its back and repeat these procedures on the other side.

After the pelt is loose on both sides, lay the beaver on its belly and flip the pelt over the beaver's head. This exposes the shoulders, which can be separated easily from the pelt. Continue working toward the head until you encounter the ear canals at the base of the skull – they are somewhat bony and connected by cartilage. Cut through the cartilage at the skull and continue skinning out the head. You'll need to make some cuts to separate the connective tissue around the eyes and another when you get to the tip of the nose.

Fleshing Pelts

Fleshing removes fat and muscle tissue that can spoil and damage the pelt. Muskrat, mink, weasels, fox, coyote and bobcat are relatively easy to flesh. Raccoon, beaver, and skunks are more difficult.

Muskrat

For muskrat, you'll need a fleshing board and a scraper. You can make a fleshing board from a piece of 1×6 -inch lumber. Cut it to the shape of a wire **stretcher**, but not as wide. Use a rasp to round the edges, and then sand them smooth.

Turn the pelt so that the leather side faces out and pull it over the rounded tip of the fleshing board. Rotate the pelt until the sides are on the flat working surfaces (one of the holes from a front leg should be on the front, the other on the back). Pull the pelt downward until it's snug.

Using a one-handled scraper, serving spoon or dull knife, remove any chunks of fat or muscle from the skirt (bottom) of the pelt. Next, remove any muscle tissue attached to the pelt near the cheeks. Well-fed muskrats have a fat deposit under each armpit. Remove these along with the reddish membrane that covers them.

Over-scraping is usually more of a problem than under-scraping with muskrats. If you apply too much pressure, you'll tear a hole in the pelt. Small specks of fat aren't a problem because they'll dry out when you put the pelt on a stretcher. It's the larger chunks and deposits under the armpits that need attention.

Mink and Weasel

Place the pelt leather-side-out on a wooden stretcher. Use a narrow stretcher for females, which are smaller than males. Remove any muscle or chunks of fat along the skirt (bottom) of the pelt with a dull knife or one-handled scraper. Avoid getting fat or grease on the fur side of the pelt. If you do, rub the fur with sawdust to remove it.

Wild mink usually have a fat deposit under each armpit. Remove it along with the thin membrane that covers it. Be careful not to cut or rip the front legs.

You'll notice a thick red membrane across the lower back (below the shoulders). This is called a "saddle." Leave the saddle attached to the pelt unless it has a thick deposit of fat under it, which is rare with wild mink or weasels.

Fox, Coyote, and Bobcat

Remove all burrs by combing the fur. Nicking one with your fleshing knife while working on the leather side of the pelt can cause it to tear.

For the most part, fox and coyote require little fleshing. Remove any muscle tissue and chunks of fat. This is usually easier with a two-handled fleshing knife than a one-handled scraper. The cartilage at the bases of the ears should be cut off with a regular knife to avoid spoilage.

Pelting a raccoon (con't)



Work your fingers through the pelt at the armpit and pull the skin off the leg.



Pull the skin down to the ankle and cut the pelt.



Pull the pelt down over the neck. Cut through the ear cartilage at the skull without cutting the fur.

Photo provided by Ohio DOW

Pelting a raccoon (con't)



Pull the pelt down to the eyes. Work your knife around the eyelids without cutting the fur.



Cut the pelt free at the jaw hinge, and then follow the lips without hitting the teeth. The teeth will dull your knife.



Cut through the bottom of the lip and free the pelt. You don't need to skin all the lower jaw. Cut lip half way up.

Photo provided by Ohio DOW

Raccoon, Beaver, and Skunk

These pelts are the most difficult to flesh. The skin is covered by a thin layer of fatty material. This layer is covered by a membrane. You must remove both the membrane and the fatty layer for the skin to dry properly. We recommend spending time with a fur buyer or someone else with experience before trying to flesh these species yourself.

You'll need a fleshing beam, plastic apron and two-handled fleshing knife.

The belly is the easiest place to start. Starting at the head, use the dull edge to remove the membrane and underlying fat. Work it off as far as you can reach comfortably then rotate the skin enough to work on the next section. Be careful around the front legs because you can cut or rip through creases or folds of loose skin.

Starting behind the ears, use the sharp side of your knife to slice through the membrane on the neck. Let the blade of your fleshing knife ride under the membrane and push it away from you.

When the part of the pelt nearest you is fleshed all the way around, pull the pelt toward you and use your waist to pin it to the end of the fleshing beam. Continue fleshing all the way to the skirt (bottom) of the pelt. The edge of the skirt should be fleshed clean. The tail should be fleshed if it's fatty.

Fleshing beaver is similar except that most people prefer to start behind the ears and work all the way to the tail end of the pelt using the sharp edge of their fleshing knife. After a strip as wide as the shoulders is completed, rotate the pelt and work the fat and membrane off the sides with the dull edge of your fleshing knife. Be careful around the leg holes because it's easy to tear them.

Stretching and Drying

Muskrat

Most people prefer to use wire stretchers for muskrat pelts. Place the pelt on the stretcher with the fur side in. Adjust the pelt so that the eyes and ears are centered on one side and the front leg holes are centered on the other. Poke a small hole through the pelt at a point where the center of the tail would have been attached. Insert the middle tooth of one hook and pull it downward to remove any slack from the pelt. Attach the other hook to the belly with two teeth and remove any slack.

Hang stretchers from a rafter to keep them away from mice while drying. Temperatures between 40 and 60 degrees are best for drying pelts. Use a fan if the humidity is high.

Mink

Use wooden stretchers for mink. They come in two sizes. Narrow boards are used for females, which are usually smaller than males. Unusually small males can be put on a female board if the pelt looks too short and wide on a male board.



Place the pelt on the stretcher with the fur side in. Adjust the pelt so that the eyes and ears are centered on one side and the front leg holes are centered on the other. Grab the tail with one hand and use your other hand to stroke the pelt downward from head to tail. This removes slack without overstretching.

Pull up and out on the tail. This helps to move part of the underside to the back of the stretcher and creates an inspection window without cutting. Lay the tail back on the board. Pull down slightly if the pelt has any slack in it.

Tack the base of the tail to the board using an aluminum push pin. Bunch up the pelt on both sides of the push pin until the ends of the back legs come around to the same side of the board as the tail. Tack them at the edges of the board. Now tack the skin between the tail and the ends of the hind legs. It should be bunched slightly between each pin to make a pleat.

Spread the tail. Beginning at the butt end, push it upward toward the skirt in small increments. You want to make it short and wide instead of long and narrow. Pin the sides of the tail or place a piece of galvanized hardware cloth over the tail and pin it to the board.

Cut off the lower lip. Trim the front legs to about 3/4" in length and poke them back between the pelt and the board. Place a "belly board" (a narrow wooden wedge) between the board and the fur side of the pelt on the belly. The pelt will shrink as it dries. If you don't use a belly board, it can shrink so tightly to the board that it's difficult to remove when the time comes.

Fleshing a raccoon



Raccoons have a lot of fat. Work the pelt over the fleshing beam. Put a rag over the nose of the pelt and press your stomach against the beam to hold the pelt. Start scraping just behind the ears, working down the pelt and away from your body using a pushing motion.



Pull the pelt up on the beam as you work further down the skin. This picture shows the fleshing knife working the raccoon's stomach area.

Photo provided by Ohio DOW

Fleshing a raccoon (con't)



When you finish fleshing the body, do each leg and the tail. Be careful around the tail so you don't tear it off.



Slip the pelt over the wire stretcher and adjust it. Fasten the tail and rear legs.

Raccoon

Use wooden or wire stretchers for raccoon. Wire stretchers are cheaper than wooden ones. They also save time because the pelt is attached by two hooks instead of tacked along the skirt. The advantage of wooden stretchers is that they give you more control over the shape of the pelt. This makes for more uniform pelts and, on average, higher prices in some markets.

When using a wire stretcher, squeeze the two sides together and slip the pelt over the top. Release the sides and square the pelt on the stretcher so that the eyes are centered on one side and the front legs are centered on the other. Pull the pelt down snugly and fasten a hook to the tail (about 2-3 inches below the base) using one or two teeth. Use the other hook to fasten the tips of the hind legs on the belly side. Pull down on both hooks to remove any slack from the pelt. Cut off the lower lip, and then trim the front legs to a length of about 3 inches.

Some people enlarge the inspection window on the belly by trimming away some of the pelt that bunches up in the groin area. This gives a neater appearance without hurting the pelt because the thin, kinky hair on the lower belly has no value.

When using a wooden stretcher, slip the pelt over the end and adjust it so that the eyes are centered on one side and the legs on the other. Pull downward gently to remove any slack from the pelt. Tack it at the base of the tail using an aluminum push pin. Bunch up the pelt on both sides of the push pin until the ends of the back legs come around to the same side of the board as the tail. Tack the ends at the edges of the board. Now tack the skin between the tail and the ends of the hind legs. It should be bunched slightly between each pin to make a pleat.

Spread the tail. Beginning at the butt end, push it upward toward the skirt in small increments. You want to make it short and wide instead of long and narrow. Place a piece of galvanized hardware cloth or cardboard over the tail to hold it in place, then pin the hardware cloth to the board.



Chapter 16 - Handling Fur

Cut off the lower lip. Trim the front legs to about 3 inches in length. Place a "belly board" (a narrow wooden wedge) between the board and the fur side of the pelt on the belly. The pelt will shrink as it dries. If you don't use a belly board, it can shrink so tightly to the board that it's difficult to remove when the time comes.

NOTE: Never try to make a pelt bigger than it is by "stretching" it. Pelts should be pulled tight enough to take the slack out of them -no more, no less.

Boarding Beaver

Beaver are skinned open rather than cased. The pelt is then either tacked onto a plywood board, or sewn onto a wooden or metal hoop frame for drying. If tacked onto a plywood board (this should be done skin side up), use nails at least two inches long. Place the nails no more than one inch apart. The pelt should be shaped to form either a circle or oval. Once the pelt is tacked in place, raise it off the board up to the head of the nails in order to allow air circulation between the pelt and board. If sewing the beaver pelt onto a hoop, make your stitches about an inch apart. Regardless of whether you tack or sew, the four leg holes on the pelt should be closed, either by nails or stitching. Hogrings can be substituted for sewing when stretching on steel hoops.

Fox, Coyote and Bobcat

You can purchase solid wooden stretchers or adjustable wooden frames. Remember to use a belly board for solid wooden stretchers. Do not cut an inspection window in fox or coyote.

When using a wood stretcher, position and fasten the pelt with the fur side in, much like a raccoon. Trim off the lower lip with a knife. If necessary, trim the front legs to a length no longer than 2 inches.

Allow the pelt to dry until the skin side is no longer tacky (4-12 hours depending on the temperature and humidity). Remove the pelt from the stretcher. Turn it inside out (with the fur facing out). If dry, the front legs can remain inside the pelt when it's turned. NOTE: If a pelt is too dry to turn easily, wrap it with a warm, damp towel for a few minutes and try again.

Place the pelt back on the stretcher and fasten it. Reinsert a belly board to prop the pelt open so that air can circulate. Allow the pelt to dry completely before removing it.



S. Rossler

North American Fur Auctions, the Wisconsin Trappers Association and the Wisconsin Department of Natural Resources produced 8+ hours of instructional fur handling footage. Contact your state instructor to view these professional fur handling videos.



Beavers on boards.



Lifting the beaver pelt will allow for faster drying.

Note: Experienced beaver trappers sometimes skin a beaver partly open, and partly cased. This makes it easier to hold the beaver on a fleshing beam. After fleshing they finish cutting the belly so they can board the beaver.



Illinois Dept of Natural Resources Single hand pelt scraper.



Chris Tischaefer Knives and sharpener.



Fur Handling Tools Comb, Brush, & Fork.



Knives.



Knife Sharpeners.

Basic Fur Handling Equipment

- <u>Latex gloves</u> Latex gloves are very important to have when skinning furbearers they keep your hands clean, and protect you from any diseases the animal might be carrying.
- <u>Skinning Knives</u> A good skinning knife is needed for the animal to be properly skinned.
- <u>Knife Sharpener or Honing Stone</u> Skinning knives should be kept sharp at all times. Frequent touch ups with the stone or sharpener make the skinning job go much faster.
- **Gambrel** A gambrel is a device used to hang the animal by its hind legs while it is being skinned.
- <u>**Tail Stripper and Opener**</u> Furred tails should remain attached to the pelt. The tail should be split with a knife and then the tail bone removed with a tail stripper.
- <u>Fleshing Beam</u> A fleshing beam or board is a wooden or fiberglass support that holds a pelt when removing meat or fat still on the animal after skinning. If not removed, this meat or fat could spoil the pelt.
- <u>Fleshing Tools</u> There are many types of fleshing tools including double-handled draw shave knives, hog scrapers, and spoons.
- <u>Wooden and Wire Stretchers</u> After the pelt has been fleshed it is ready to be dried. The pelt is placed on a wooden or wire stretcher. If you are using a wooden stretcher the pelt is secured with a few tacks or push pins near the base of the tail and back legs. Wire frames have two metal arms with prongs that hold the base of the pelt taut.
- **Fur Combs and Brushes** Combs are used to remove any dirt or burdock in the fur prior to skinning. Brushes can be used to smooth out the fur.
- <u>Flea and/or Tick Spray</u> Many land furbearers have external parasites such as fleas, ticks or mites. They can be sprayed with flea or tick spray and placed in a bag to kill these parasites.

Summary of Fur Handling Techniques

Species	Skinning Method	Tail	Fur Side	Stretcher Size (Wire)	Fleshing and Stretching
Muskrat	Cased	Off	In	#1	Don't overflesh
Mink (male)	Cased	On	In	Not recommended	See boarding instructions
Mink (female)	Cased	On	In	Not recommended	See boarding instructions
Raccoon	Cased	On	In	Not recommended	Flesh through membrane
Skunk	Cased	On	In	Not recommended	Flesh through membrane
Weasel	Cased	On	In	Not recommended	Little or no fleshing required
Fox	Cased	On	Out	Not recommended	Turn pelt fur side out when skin is dry to the touch
Coyote	Cased	On	Out	Not recommended	Turn pelt fur side out when skin is dry to the touch
Bobcat	Cased	On	Out	Not recommended	Turn pelt fur side out when skin is dry to the touch
Beaver	Open	Off	NA	NA	Boards are better; correct shape is oval

Board Dimensions

Species	Length	Width at Base	Width From Nose to Base
Mink (male)	36	4-5	1¼ @ 1½; 2 @ 2¾; 2½ @ 7; 3 @ 15; 4 @30
Mink (female)	30	3-4	1¼ @ 1; 1¾ @ 3; 2 @ 6; 2¼ @ 14; 2¾ @ 27
Raccoon (XL+)	48-54	9	6½ @ 11; 8½ @ 30
Raccoon (XL-)	48-54	8	5 @ 5½; 7-7½ @ 25
Fox (XL)	66	7	21/2 @ 21/4; 3 @ 31/2; 4 @ 6; 5 @ 9; 6 @ 14; 61/2 @ 18; 7 @ 35
Coyote (XL)	72	9	4 @ 3; 51/8 @ 5; 6 @ 71/2; 63/4 @ 12; 71/4 @ 17; 9 @ 39
Bobcat (XL)	72	9	4 @ 3; 51/8 @ 5; 6 @ 71/2; 63/4 @ 12; 71/4 @ 17; 9 @ 39
Weasel (XL+)	18-20	2-1/2	1 @ 1; 1¾ @ 1¾; 1⅛ @ 3½; 2½ @ 16
Weasel (XL-)	16-18	2	1 @ 1; 1¼ @ 1¾; 1¾ @ 2½; 1½ @ 4
XL+ = pelts graded as extra large or larger. (All measurements are in inches.)			

Chapter 16 Review – Handling Fur

Objective - Students demonstrate an understanding of the knowledge, skills and equipment needed to safely skin animals and prepare the pelts for market.

Explain the importance of wearing latex gloves when processing furbearers.

1. Latex gloves will help protect you from animal ______.

Explain the terms "cased furs" and "open furs."

2. Except for beaver, all furbearers should be skinned ______.

Explain the terms "market fur in" and "market fur out."

3. Fur in means that the fur side of the pelt should be on the ______ when the case-skinned pelt is taken to market.

Explain why the tails of some furbearers are split and left on the pelt while the tails of others are removed.

4. Furbearers with ______ tails should have their tails split open and the ______ should be removed.

Know the purpose of a fleshing beam and fleshing tools.

5. Once you have skinned a furbearer, the next step is to ______ the pelt.

Describe the proper use of wire and wooden stretchers.

6. A stretcher holds the pelt in place as it ______ so that it does not shrink or shrivel.

Explain the process of drying pelts and why it is important.

7. If a pelt is not properly dried it can _____ and the value will be lost.

Explain the process for freezing pelts.

8. Be prepared to discuss proper storage procedures for pelts.

Explain the procedure for "boarding beavers."

9. Beaver pelts are skinned open. The pelt is then ______ onto a plywood board or ______ onto a hoop frame for drying.

Chapter 17 Marketing and Utilizing Furbearers





Beaver caught in a body-

Taxidermists often look for high quality specimens to mount.

Check regulations and obey the law.

Objective - Students demonstrate an understanding of the full value of harvested furbearers

Introduction

Responsible trappers make full use of furbearers they harvest. The primary value of a pelt is for clothing, but furbearers are also used for human food, pet food, glands, skulls and fertilizer. Making the most of what you catch is one of the many responsibilities that come with trapping.

The personal reasons for trapping are as individual as each of us. Regardless of what is individually important, trappers must respect and honor the life we affect. Whether your activity is for personal reasons or those considered in professional wildlife management, each animal we harvest is a gift. Treating the animal as such is the ultimate respect for the individual animal and for the resource.

A Commodity in a Global Market

Furs are a worldwide commodity. Their value at a given time is determined by supply (the number of pelts for sale) and demand (the number of pelts needed for manufacturing garments). Much of the demand for furs comes from markets in Europe, Russia and Asia. Therefore, the economic health and buying power of these regions affect their demand for raw furs and the return you receive for your pelts.

Manufacturers usually hire a broker to fill orders for pelts. When possible, buyers deal directly with brokers to resell your pelts. Buyers who don't have contracts with brokers resell your pelts to other buyers. This might take place several times before your pelts make their way to a broker.

Buyers' profits come from selling your pelts for more than they paid after accounting for their time and expenses. They usually operate on a narrow margin, and a sudden shift in supply or demand can increase their profit or turn it into loss.

While it's rare to meet a trapper without a story about being "taken" by a fur buyer, it's even rarer to find a fur buyer who stayed in business by cheating

customers. Established fur buyers provide a fair market return to keep your business. The return can vary from buyer to buyer, but it's usually in the same ballpark. To get the best possible return for your furs:

- Monitor market conditions by following reports in trade magazines.
- Shop around if you have doubts about an offer you aren't committed to taking it.
- Take pride in the way you handle your furs clean, well-handled furs without damage are worth more in any market.

At auctions, the sponsors charge customers a commission – usually a set percentage of your proceeds. This fee pays for the sponsor's expenses and includes their profits. Most state trapper association-sponsored auctions allow you to set a minimum bid price for your furs. International auctions don't allow you to set a minimum bid, but the sponsors can withdraw a lot if the price doesn't meet their expectations. After all, their profits are tied directly to yours.

Procedures for Selling Furbearers or Pelts

Fur harvesters have four choices for selling fur. There are advantages and disadvantages for each method. Options include:

Local Fur Buyers

Local fur buyers will know the most about furbearers in your area. They can be a valuable source of information and experience.

If you live close to a fur buyer you can sell animals as you catch them. This is an advantage if you don't have a good place to process fur and store it. A local buyer can also give you specific tips on fur handling, or possibly show you the best techniques. Local buyers also buy "green" pelts. **Green pelts** are skinned but not fleshed, stretched and dried. However, a trapper that learns how to put up fur properly is proud of his/her final products and is the person who will continue to trap for years to come.

If you are fortunate enough to live near several fur buyers you can shop around for the best return. This generally is best if you have a large number of furs. A disadvantage of selling to a local buyer is the return. A local buyer is a "middle man" who must buy low and sell higher to make a living.

Some local buyers advertise in area newspapers, but many rely on "word of mouth" for new customers. Asking experienced trappers is a good way to locate buyers in your area.



Fleshed raccoon.



Fox and coyote pelts.

Frozen pelts should be thawed before being sold. Make sure that they are slowly thawed in a cool place.

A wet hide can spoil in a few hours if it becomes too warm.

Traveling Fur Buyers

Traveling fur buyers work for larger companies. Some of the larger companies set up "truck routes." Their buyers travel from town to town, making stops at designated places and times. Most routes are run weekly or every other week. You can find out if a stop is scheduled in your area by checking the local newspaper beginning about two weeks before season opens.

You may be able to meet them at a local sporting goods store on scheduled dates, or make an appointment for them to visit you. Traveling buyers make it convenient for you to sell fur, but the return you receive may be lower than the return you could get selling by mail or at auction.

Traveling buyers will purchase whole animals, pelts that have been skinned but are not fleshed, or pelts that have been fleshed, stretched and dried. Unless you schedule your trapping activities so that your catch is fresh when a buyer stops in town, you'll need to freeze your furs or flesh, stretch and dry them so that they don't spoil.

Selling by Mail

Some trappers sell their fur by mail. Mail buyers advertise in trapping magazines. Selling by mail saves you the time and cost of driving a long distance. Mail buyers will usually make payment in a few days. Mail buyers do not charge a commission, and some will pay the shipping costs. Some also will give you 10 days or so to decide if you like the offering return. If not, they will ship your furs back to you.

Return lists for pelts from mail buyers can be deceiving. Returns can change, or a buyer may give you a good offer for some of your furs and downgrade the rest. When selling by mail you lose the advantage of having competitive bidding for your fur.

Fur Auctions

Auctions are an option if your furs are fleshed, stretched and dried. Some state trapping associations sponsor auctions as a service to their members. These auctions are advertised in newsletters or magazines that come with your membership.

All of the international auction houses advertise in trapping magazines. Contact a company's office or one of its representatives to set up an account. They'll assign an account number and provide shipping tags, receipts, auction schedules and instructions. When your pelts are fleshed, stretched and dried, you can ship them to a receiving station or, in some cases, deliver them to a representative who collects furs along a truck route before each auction. Payment for furs sold at auction is made within 30 days. All unsold pelts are stored



Badger skull.

for future auctions. If requested, the company will return unsold pelts for the cost of shipping and handling.

Each trapper must decide when and how to sell fur based on current returns, market forecasts, convenience and cost. Other trappers, magazines, and trapping associations can provide helpful information. The more you know about grading fur and market conditions, the better the chance you will earn a good return for your work.

Grading Pelts

The value of a pelt is determined by its size, fur density, damage, color and clarity. Standards for these criteria differ among species and regions.

To determine the size of **cased** skins that are stretched to meet industry standards, measure the pelt along the back from the tip of the nose to the nearest point that the leather ends at the skirt (bottom of back).

Larger-sized animals of one species generally bring a better return than smaller ones. Pelt primeness is an important grading factor. Trapping seasons are set to harvest furbearers when they are most often prime. Summer pelts are thin, flat, and have little value. Prime pelts have dense **underfur** and fully developed **guard hairs**. The skin, or leather, side of an unprime pelt is dark blue or black because the **hair follicles** are not fully developed. Later in the season furs may not be worth as much because of fading color, hair loss, rubbing or curling. Furs also can be damaged by careless handling.

Grades reflect the degree of primeness and, to a lesser extent, damage (in many cases, damage is evaluated separately). The best pelts are graded as selects; the worst as fourths. The best pelts are graded as "Ones" (I) or "Ones part Twos" (I pt. II). Seconds are lower quality due to slight damage, color, or other factors. Thirds (IIIs) are badly rubbed. Unprimed and fourths (IVs) are of very little commercial value.

Grading Terminology

- **Badly Sewn** Where leg holes and cuts are poorly sewn or where bad damage has been caused by too much sewing.
- **Badly Shot** A pelt peppered by a shotgun or large rifle. Bad bites may also be listed in this grade.
- **Bitten** Pelt has holes caused by bites. This is most common in muskrat and beaver during late winter or early spring when they're breeding and defending or establishing territories.
- **Blue Pelt** An unprimed pelt. When dried, shows dark blue or black on the skin side.



Beaver skull.





Fur Grading.



Meats

- **Burnt** Pelt is brittle and sometimes cracked, usually from drying too fast near a heater or in the sun or wind. Can also be caused by leaving too much fat on the pelt.
- Clear Pelt In mink and otter, this term indicates an even change in fur color from underfur to guard hairs.
- Clipped Patches of guard hair that have been chewed off by rodents.
- **Course** Guard hairs are dull, lifeless and hard to the touch. Usually seen in late-caught furs.
- **Flat** Guard hairs lay flat because the underfur isn't fully developed. Usually seen in early-caught furs.
- Loose Guard hairs are coming out, usually because the roots have been cut by over-fleshing. Sometimes seen in early-caught furs.
- **Overstretch** Stretching the pelt beyond normal size; thins the leather and gives a flat and weak appearance.
- **Rubbed Fur** Parts of a pelt where fur is damaged by an animal rubbing it on dens, roots or other objects.
- **Shedder** Fur "sheds" easily from the pelt when raked with the fingers. Can be seen with late caught furs or caused by putting the pelt on a stretcher while the fur is still wet.
- **Singed Fur** Metallic sheen on otter fur caused by curled tips of the guard hairs. This damage can occur from excessive dry heat, direct sunlight, stroking dry fur, contact with freezing metal, or by the otter itself during the late season.
- **Springy** Underfur is falling out or kinked or wooly in appearance. Usually seen in late caught furs.
- **Tainted** Part of the pelt is spoiled. Usually caused by waiting too long before skinning an animal or failing to remove enough of the tissue and fat during the **fleshing** process.
- **Understretch** Stretching smaller than normal size causing wrinkles and sloppy appearance.

Taxes and the Trapper

All earnings from trapping should be reported as regular income for tax purposes. However, a trapper should also keep accurate records and receipts of expenses incurred while trapping, most of which can be deducted.

Traps and other equipment which is purchased only for trapping can be deducted, either in a single year (for small purchases) or can be deducted over several years (for large purchases).

If you keep a daily log with odometer readings, mileage can be deducted at the standard rate per mile. Other items, such as boats and canoes, can be deducted only if they are purchased solely for trapping. Trappers who trap as a hobby may deduct expenses only to the amount of their earnings. Only trappers who trap as a business may claim a loss.

It is your responsibility to pay taxes on all income derived from trapping. Whether you can deduct expenses will be up to you and your ability to maintain records. Contact your tax professional for further information.

Furbearers Can be Used for Human Consumption

Many people enjoy eating meat from healthy beaver, muskrat, raccoon, opossum, and bobcat. Freshly caught, skinned, and gutted animals will taste the best. The front and hind quarters and back meat are most commonly eaten. Avoid meat from any animals that appear sick. Keep the carcasses clean and thoroughly cook any wild game you intend to eat. Below are a few receipes.

Fried Raccoon

Trim off all the fat and remove glands from a young, dressed raccoon (glands are soft, whitish and located under each front arm and the hindquarters). Cut into small pieces suitable for frying. Place meat in a bowl and cover with milk. Let stand for 30-40 minutes. Remove meat from milk and roll in flour which is well seasoned with salt and pepper. Fry in deep fat until brown.

For gravy, pour off most of the fat, leaving just enough to cover the bottom of the pan. Add three tablespoons of seasoned flour and brown. Pour about 2 cups of milk (used for soaking the meat) into browned flour and cook until thick while stirring constantly.

Roast Raccoon

Place the dressed raccoon in a large pot and cover with water. Put one or two pods of red pepper in the pot and salt the water to taste. Parboil until tender, then remove and place in a baking pan. Sprinkle with black pepper and flour. Add some of the stock to the roast as it is being baked. Onion may be added if desired. Cook until brown.

BBQ Raccoon

raccoon, dressed (remove fat & glands)
cloves garlic, chopped
large apple, quartered
cup vinegar

rib celery
large red onions, quartered
hot red peppers
tbs. salt

Pull celery apart and wash. Place all ingredients in pot with enough water to cover raccoon. Bring to slow boil and cook until tender or fork goes in easily, about 1-2 hours depending on size of raccoon. Remove meat from pot, cut off front and back legs, cut remainder into 4 pieces. Place on rack, brush with your favorite BBQ sauce. Place in 400 degree oven, turn and baste frequently with BBQ sauce until golden brown.

Using as much of the animal as possible is the right thing to do.



Trapper bagging fresh muskrat for freezer

Baked Muskrat BBQ

3 t. fat
2 t. tomato ketchup
1/8 t. black pepper
dash cayenne pepper

Soak muskrat in slightly salted water or in diluted vinegar for 12-24 hours. Wash thoroughly, removing all blood and visible fat. Cut into pieces for serving; drain. Place in greased shallow pan; baste with sauce made of remaining ingredients. Bake uncovered in 325-350 degree oven for 1-1/4 to 1-1/2 hours or until tender, basting every 15 minutes. Place on hot platter and garnish with parsley, celery leaves or curly endive if desired.

Muskrat Stew

1 muskrat, cut up	flour
salt & pepper	2-1/2 tbs. butter
7 cups boiling water	1 t. thyme
1 cup sweet corn	3 potatoes, cubed
1/4 t. cayenne	3 medium onions, sliced
2 cups canned tomatoes	

Roll the muskrat pieces in flour, salt and pepper. Brown in butter. Add muskrat and all other ingredients (except tomatoes) to the boiling water. Cover and simmer for 1-1/2 to 2 hours. Add tomatoes (including juice) and simmer another hour.

Baked Iowa Corn-Fed Raccoon

Dress raccoon shortly after it's killed. Remove as much fat as possible. Soak in salt water overnight and cook the following day or freeze until ready to use. Young raccoons may be left whole and are best for this recipe.

2 dressed raccoons, fat	1/3 pound salted pork, sliced
1/2 t. salt on each raccoon	1/2 t. pepper on each raccoon
3 lemon slices about 1/4" thick	2 large onions, sliced
1/4 t. each of marjoram, thyme, savory	2 cloves garlic, sliced thin
1-2 cups chopped celery	1-2 bay leaves
2 quarts strong bouillon	2 chilies

Place the carcasses on a rack in a roaster (electric, self-basting types work great). Salt and pepper and add bay leaves and other herbs. Strip with salt pork or fat back. Place lemon and onion slices over the meat. Sprinkle with garlic. Add chopped celery. Cook at 350 degrees for an hour or until done.



Bobcat skull.

Other Uses of Furbearer Meat

Some trappers feed muskrat and beaver meat to their dogs. Check with your veterinarian to see if furbearer meat would be a good choice for your dog's size, breed, age and general health. Fur ranchers may buy muskrat and beaver carcasses for mink food.

Use of Glands

Castor glands and oil sacs are found below the skin in the anal area of both male and female beaver. Castor glands and oil sacs are valuable and can be removed. Trappers can sell the glands for use in perfume or trapping lures.

Mink, weasel, skunk, otter and fisher have anal glands that contain a strong musk useful in making trapping lures. The glands should be cut loose with minimal squeezing and kept cool or frozen. Weasel glands particularly are good for attracting mink, otter, weasels, fox and coyote.

Fox and coyote anal glands and foot pads are used in lure-making for those species. Glands of raccoon, opossum and muskrat are also sometimes used.

Other Animal Parts

Furbearer skulls are often needed for science classes or nature centers. Dermestid beetles are useful for cleaning skulls or other bones you want to save.

Some companies specialize in animal parts that are used for arts, crafts and novelties. Check trade magazines for advertisements and contact companies for prices and instructions on handling. Universities and museums also collect and display animal parts for educational displays. Search the internet for optional techniques for cleaning skulls.

Proper Disposal of Carcasses

Responsible trappers use as much of each animal trapped as possible. Animal carcasses or parts can be used as baits or attractants when trapping or snaring. Any remaining parts should be taken to a rendering plant, used for fertilizer or buried. Improper disposal could lead to human or animal health problems. Other people could be offended by seeing animal carcasses and parts. Disposal methods may be regulated in some areas, so it is best to plan your carcass disposal prior to the start of the season.



Beaver castor glands



Coyote skull.
Chapter 17 Review – Marketing and Utilizing Furbearers

Objective - Students demonstrate an understanding of the full value of harvested furbearers.

 a. Local	1. List four ways to sell fur.		
 b. Traveling	a. Local		
 c. Selling by d. Fur 2. Trapping seasons are set to harvest furbearers when they are most often 3. Prime pelts have dense and fully developed hairs. 4. Name three kinds of Wisconsin furbearers that make great table fare. a	b. Traveling		
d. Fur	c. Selling by	·	
 2. Trapping seasons are set to harvest furbearers when they are most often 3. Prime pelts have dense and fully developed hairs. 4. Name three kinds of Wisconsin furbearers that make great table fare. a b c	d. Fur		
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 3. Prime pelts have dense and fully developed hairs. 4. Name three kinds of Wisconsin furbearers that make great table fare. a b c 5. All earning from trapping shoud be reported as regular income for 6. Male and female beaver have glands and oil that trappers can sell. Know that furbearer skulls are sometimes needed for science classes or nature interpretation. 7. Dermestid are useful for cleaning skulls and other bones to use in science classes. 	2. Trapping seasons are set to harv	est furbearers when they are most o	often
 4. Name three kinds of Wisconsin furbearers that make great table fare. a	3. Prime pelts have dense	and fully developed	hairs.
 4. Name three kinds of Wisconsin furbearers that make great table fare. a			
 a	4. Name three kinds of Wisconsin	furbearers that make great table far	е.
 b	a		
 c	b		
 5. All earning from trapping shoud be reported as regular income for 6. Male and female beaver have glands and oil that trappers can sell. Know that furbearer skulls are sometimes needed for science classes or nature interpretation. 7. Dermestid are useful for cleaning skulls and other bones to use in science classes. 	с		
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7. Dermestid are useful for cleaning skulls and other bones to use in science classes.	tion.		_
	7. Dermestid ar	re useful for cleaning skulls and oth	er bones to use in science classes.
Describe why it is important to properly dispose of any animal parts that remain after	Describe why it is important to	properly dispose of any anim	al parts that remain after
processing.	processing.		1

8. Improper disposal of animal parts could lead to ______ or _____ health problems and littering violations.



Chapter 18 Glossary

Activist	A person who takes direct, often confrontational, action to support or oppose a cause.
Additive Mortality	. Harvests that exceed natural mortality and reduce a species' population.
Aesthetic	. Concerning the appreciation of beauty.
<i>AFWA</i>	.Association of Fish and Wildlife Agencies.
Animal Rights	. The belief that animals should have the same "rights" as humans.
Apathetic	.Indifference, lacking interest or concern.
Asphyxiate	. To stop the breathing of an animal.
Bag Limit	. Number of animals legally allowed to be taken in a day or a season.
Best Management Practices	. The use of recommended equipment and techniques as determined by experts in an activity.
Biological Carrying Capacity	. The number of animals a given area of habitat is capable of supporting throughout the year.
<i>BMP</i>	Abbreviation for Best Management Practice
Body-grip Trap	A trap designed to close on an animal's body and quickly kill it.
Cable Device	. A device designed to capture a furbearer by use of a multi-strand steel cable.
Cable Restraint	. A cable device designed to hold an animal alive.
Cable Snare	A restraining device made from a cable and a locking mechanism, and a term used to describe old
	style devices made from other materials.
Cable Stake	An earth anchor attached to a cable and driven into the ground used to secure a trap without using
	a stake.
Cache	Food stored for use at a later time, for example, the food pile of branches made by a beaver, or a
	mouse buried by a fox.
Cage Trap	. A trap designed of wire mesh to enclose an animal and hold it alive.
Carnivore	. An animal that primarily eats other animals.
Carrying Capacity	.A term referring to the number of animals that a given area of habitat is capable of supporting.
Cased Pelt	. A pelt skinned by cutting along the hind legs and pulled down over the body.
Castor	. An odorous, glandular substance obtained from beaver, used in lures and perfume.
Catchpole	. A slip-noose on a rigid handle used to hold an animal while releasing it.
Colony Trap	. A wire mesh kill-type trap used in runways underwater for mink and muskrats, capable of catch
	ing multiple animals.
Compensatory Mortality	. Harvests that do not add to or exceed mortality from natural causes.
Conservation	. The careful guarding of an asset. Conservation allows for the use of resources within limits.
Cotton Mink	. A mink pelt with white underfur.
Crepuscular	. Active at morning and/or evening twilight.
Cultural	. The total product of human creativity and intellect.
Cultural Carrying Capacity	. The number of animals that humans will accept in a given area. When people want to reduce
	animal populations that are otherwise within the biological carrying capacity for the area,
	biologists may need to reduce the population until people find it acceptable.
Deadfall	A primitive device designed to kill an animal with a falling log or rock, commonly used before the
	manufacture of modern traps. Deadfalls are not legal in Wisconsin.
Delayed Implantation	.In animal reproduction, this refers to the fertilized egg not implanting in the uternine wall and
Discussed	beginning development for some time after mating occurs.
Dispatch	. To kill an animal without delay in a humane manner.
Dispersal	. The one-way movement of animals from their place of birth or home range, often coinciding with
Drowning Davies	sexual maturity.
Drowning Device	deep water. A trapped animal can go into deeper water, but not raturn, leading to deeth
Fchinococcus	A taneworm parasite that can form cysts in humans and other wild animals
Feology	The science of relationships between organisms and their environment
Ecology	A community of plants, animals and microorganisms linked by anarow and nutriant flows that
LC05y51Cm	interact with each other and with the physical environment
Efficiency	Skillfulness in avoiding wasted time and energy
	Skintuniess in avoluting wasted title and energy.

Endangered Species	A species whose population is so small that it is in danger of extinction.
Ermine	White color phase of the weasel as seen during winter.
Ethics	A person's personal code of behavior, moral values, and principles.
Excise Tax	A tax that is measured by the amount of business done.
Extinction	No longer in existence. Total extermination.
Extirpation	Elimination of a species within a range or boundary where it once existed.
Fleshing	Removing fat and meat from a pelt.
Fleshing Beam	Wooden or fiberglass form to hold and support a pelt while removing the fat and meat left after
	skinning.
Foot-hold Trap	. A capture device designed to hold an animal by the foot. May be used to hold animals alive, or to
	kill them in submersion sets.
Frostbite	A serious health hazard involving the freezing of the skin or other body tissues.
Gambrel	A frame or device used for hanging an animal by the hind legs for skinning.
Gestation Period	Length of pregnancy.
Grapple	A hook-like device attached to the trap chain which allows an animal to move from the trap site
	and become entangled.
Green Pelt	A pelt that has not been stretched or dried.
Guard Hairs	Long, glossy hairs that overlap and protect the soft, dense underfur.
Guarded Trap	A foot-hold trap with a spring device that pins the animal and prevents it from twisting or pulling
	free.
Habitat	A place that provides all the food, water, shelter and space an animal needs to live.
Hair Follicle	The part of the skin that produces and holds the hair or fur.
Herbivore	An animal that primarily feeds on plants.
Heritage	Practices handed down from the past by tradition.
Hibernation	A state of inactivity that some animals enter in winter.
Home Range	The area where an animal lives or travels day to day.
Hudson's Bay Company	An early Canadian fur trading company is still active today as North American Fur Auctions.
Hypothermia	A serious health risk that involves the loss of body heat.
Lap Link	A metal ring attaching a trap to a stake. It allows the chain to rotate around the stake.
Live-Restraining	A trap or device designed to hold an animal without killing it.
Lyme Disease	A disease transmitted to humans by certain ticks.
Nocturnal	Active at night.
Omnivore	An animal that eats both plants and animals.
Open Pelt	. A pelt skinned by cutting down the midline of the belly.
Opportunist	An animal that takes advantage of the most abundant or easily obtainable source of food.
Pan Cover	A piece of canvas, cloth, wax paper or other material used to cover a trap pan and prevent soil
	from getting underneath it.
Pan Tension	The amount of force, measured in weight, that it takes to trip a trap pan.
Pan Throw	The distance a trap pan must move before the trap is sprung.
Parasite	A plant or animal that lives in or on a host, and derives nourishment from the host.
Pelage	An animal's hair or fur.
Pelt	An animal's skin and fur after it has been taken off the body.
Photoperiod	The length or amount of daylight; it regulates biological changes in animals, for example, prime ness of fur, breeding and hibernation.
Poaching	Killing protected animals, or killing animals out of season or by unlawful means.
Preservation	Protecting something from loss or danger. Implies very little or no use of a wildlife resource.
Prime Pelt	A desirable pelt with the winter fur grown in and mature hair follicles.
Privilege	A special advantage or benefit not enjoyed by all.
Protected Species	A species that may not be harmed or killed. Eagles, hawks and owls, for example, are protected
- rrrrrrrr	

Rabies	. A serious animal disease that can be transmitted to humans, primarily by saliva from infected animals
Rare Species	A species that is very uncommon even in its favored habitat
Raw Fur	A pelt that has been stretched and dried but not tanned.
Responsibility	An obligation. The social force that binds you to your obligations and the courses of action
<i>F</i>	demanded by that force.
Right	. An abstract idea of something that is due to a person by law, tradition, or nature.
S-Hook	. A "S" shaped device for attaching a trap chain to a stake, allowing the chain to rotate around the
	stake.
Safety Gripper	. A device used to hold a body-grip trap in the set position while it is being handled by a trapper.
Samson Pelt	. A pelt lacking or nearly lacking guard hairs.
Scat	Animal droppings or feces.
Scavenger	An animal that primarily feeds on dead animals instead of killing its own food.
Scored	. Mark left by a bullet or knife that cut part-way through the leather.
Selectivity	Tendency for a capture device set to target a single species.
Set (Trap Set)	The immediate area where a capture device has been set along with other preparations made by the
	trapper.
Snared	A term used to describe fur that is rubbed off the pelt by snare cable.
Social Carrying Capacity	The number of animals people will tolerate in a given area.
Species	. A group of like animals capable of interbreeding.
Stretcher	. A frame that holds a pelt in a standard shape while drying.
Submersion Set	. A capture device attached to a slide cable, or one where a tangle stake is used, designed to cause a furbearer to asphyxiate underwater. Sometimes called a "drowning" set.
Subsistence	A means of surviving.
Sustainable	. Capable of being maintained indefinitely.
Swivel	. A device used at the ends and/or middle of a trap chain to reduce injury to a trapped animal.
Tanning	. Treating a hide to make it into leather.
Territory	. The part of an animal's home range that it will defend from other animals of the same species.
Threatened Species	A species that is rare and declining, and likely to become an endangered species in the foreseeable
1	future through most or all of its range.
Trap Bed	A hole or depression dug in the ground where a trap is placed.
Trap Hook	A pole with a hook at one end to help find and recover traps from water. Often used as a wading
	stick.
Trap Line	All of the traps and sets in use at a given time by a single trapper.
Tularemia	A bacterial disease of rabbits and rodents that can be transmitted to humans through cuts or scratches while skinning infected animals.
Underfur	Soft, dense fibers lying below the guard hairs. Provides primary insulation for the animal.
Utilitarian	Someone who believes that a value of a thing or animal depends on its usefulness.
Voyageurs	French Canadians employed by the early fur companies to transport furs and trade goods through
	the wilderness, primarily by canoe.
Welfare	Something that aids or promotes well-being.



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- Conservation and the Use of Wildlife Resources, edited by M. Bolton, Chapman & Hall, Florence, KY, 1997. ISBN:0-41271-350-0
- Dynamite Snares and Snaring, by Tom Krause, Riverton, WY.
- Ohio Snaring Guide, by Ohio Department of Natural Resources—Division of Wildlife and Ohio State Trappers Association, 1999.
- Practical Wildlife Management by G.V. Burger. Winchester Press, New York, NY. 1976. ISBN: 0-87691-099-1
- Techniques for Wildlife Management of Uplands, edited by N.F. Payne and F.C. Bryant, McGraw-Hill, Inc., New York, 1994. ISBN:0-07-048966-1
- Techniques for Wildlife Management of Wetlands, edited by N.F. Payne, McGraw-Hill, Inc., New York, 1992. ISBN:0-07-048956-4
- Trapping and Conservation Manual, 5th Edition, by Alberta Forestry, Lands, and Wildlife Fish and Wildlife Division, Edmonton, Alberta, Canada 1987
- Urban Wildlife Habitats: A Landscape Perspective, by L.W. Adams, University of Minnesota Press, Minneapolis, 1994. ISBN:80-8166-2212-4
- Wild Furbearer Management and Conservation in North America, edited by M. Novak, J.A. Baker, M.E. Ob bard and B. Malloch. Ontario Trappers Assoc., Toronto, 1987. ISBN:0-7743-9365-3
- Wild Mammals of North America: Biology, Management and Economics, edited by J.A. Chapman and G.A. Feldhamer. The Johns Hopkins University Press, Baltimore, MD, 1982. ISBN:0-8018-2353-6
- Wildlife-Habitat Relationships: Concepts and Applications, by M.L. Morrison, B.G. Marcot and W. Mannan, University of Wisconsin Press, Madison, 1998.
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Species Accounts

- Beavers: Water, Wildlife and History, by E.L. Hilfiker, Windswept Press, Interlaken, NY, 1982. ISBN:1-55787-068-3
- The Biology of the Striped Skunk, by B.J. Verts, University of Illinois Press, Urbana, 1967.
- Eastern Coyote: The Story of Its Success, by G. Parker, Nimbus Publishing, Halifax, Nova Scotia, 1995. ISBN:1-55109-111-9
- Ecology and Management of the Eastern Coyote, by A.H. Boer, Wildlife Research Unit, University of New Brunswick, Fredericton, NB, 1992. ISBN:0-920114-17-2
- Muskrats and Marsh Management by P.L. Errington, Stackpole Co., Harrisburg, PA and The Wildlife Manaement Institute, Washington, D.C., 1961.
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Wildlife Diseases

Infectious Diseases of Wild Mammals, Third Edition edited by E.S. Williams and I.K. Barker, The Iowa State University Press, Ames, 2001.
Parasitic Diseases of Wild Mammals, edited by J.W. Davis and R.C. Anderson, The Iowa State University Press, Ames, 1971. ISBN:0-8138-1240-1

Magazines

Fur – Fish – Game 2878 East Main Street Columbus, OH 43209

Fur Trade Magazines Trapper and Predator Caller 700 East State Street Iola, WI 54990

Trapper's Post P.O. Box 128, Scandinavia, WI 54977 office@trapperspost.com

Web Resources

Association of Fish & Wildlife Agencies www.furbearermgmt.org (includes information and updates on Best Management Practices)

Furbearer Resources Technical Workgroup www.furbearermgmt.org/

Fur Information Council of America www.fur.org

Fur Institute of Canada www.fur.ca

Fur Takers of America www.furtakersofamerica.com

International Fur Trade Federation www.iftf.com

National Trappers Association www.nationaltrappers.com

Searchable Field Guides for 5,500 Plants and Animals: www.enature.com

U.S. Fish and Wildlife Service www.fws.gov

U.S. Forest Service www.fs.fed.us U.S. Sportsmen's Alliance www.wlfa.org

The Wildlife Society www.wildlife.org

The Wisconsin Department of Natural Resources http://dnr.wi.gov/

The Wisconsin Trappers Association http://www.wistrap.org/

Addresses for the following companies are provided for the convenience of students seeking trapping supplies or related services and does not imply endorsement or preference by the Wisconsin Department of Natural Resources, Wisconsin Trappers Association or the Wisconsin Company Supplies of Program: Fur Harvesters Auction, Inc. Program:

www.furharvesters.com

Groenewold Fur & Wool Co. www.gfwco.com

Minnesota Trapline Products www.minntrapprod.com

Northwest Trappers Supply www.nwtrappers.com

Rolley Hess Enterprises

The Snare Shop http://www.snareshop.com/

Sterling Fur Company 11268 Frick Road Sterling, Ohio 44276

Trapper Art's Supply http://www.trapperartssupply.com/

Trapper and Predator Caller Magazine www.trapperpredatorcaller.com

USA Foxx and Furs http://www.usafoxx.com/



Appendix A – Trap Selectivity Matrix

TRAP SELECTIVITY MATRIX

TRAP TYPES:

	Foot-hold	FootEncapsulating	Stoploss	Cage	Body Grip	Cable Restraint		
1. Set location	Yes	Yes	Yes	Yes	Yes	Yes		
2. Sized to target furbearer	Yes	Yes	Yes	Yes	Yes	Yes		
3. Strength	Yes	n/a	Yes	n/a	Yes	Yes		
4. Pan tension	Yes	n/a	n/a	n/a	n/a	n/a		
5. Treadle tension	n/a	n/a	n/a	Yes	n/a	n/a		
6. Trigger design	n/a	n/a	n/a	n/a	Yes	n/a		
7. Trigger tension	n/a	n/a	n/a	n/a	Yes	n/a		
8. Capture device design	n/a	Yes	n/a	Yes	n/a	n/a		
9. Type or design of set	Yes	Yes	Yes	n/a	Yes	Yes		
10. Use of lure or bait	Yes	Yes	n/a	Yes	Yes	n/a		
11. Loop size	n/a	n/a	n/a	n/a	n/a	Yes		
12. Loop height from ground	n/a	n/a	n/a	n/a	n/a	Yes		
13. Sliding lock or mechanical lock	n/a	n/a	n/a	n/a	n/a	Yes		
14. Break-a-way system	n/a	n/a	n/a	n/a	n/a	Yes		
n/a – not applicable to this type of trap								

Trap Test - Authentic Assesment

Name:_____

Criteria	Failed	Passed with Assistance	Passed	Notes
IDs traps as kill-type or live-restraining devices: Show minimum of foot- holds, body-grip, cable restraints, and cage trap.				
Trap ID – Style, Size: Show longspring, coil- spring, body-grip, cable restraints, cage, enclosed foot-holds				
IDs legal traps for state				
Matches traps with spe- cies:				
Safely sets legal traps				
Describes trap prepara- tion: Minimum of foot- hold and body-grip trap preparation				
Describes foot-hold trap tuning				
Passed – Y/N				

Date:_____

Furbearer Identification – Authentic Assessment Date:

Name:_____

Criteria	Failed	Passed with Assistance	Passed	Notes
IDs furbearers from pelt collection				
Describes habitat				
Track identification				
Describes food habits				
Trap/hunt legal status				
Passed – Y/N				

Laws and Regulations – Authentic Assessment Date:_____

Name:_____

Criteria	Failed	Passed with Assistance	Passed	Notes
States where regulation brochures can be found				
Correctly states name of agency that regulates trapping				
Demonstrates use of regu- lations to show legal spe- cies to trap, seasons, legal traps				
Describes requirements regarding permission to trap				
Describes penalties for violating trapping regula- tions				
Describes training and licensing requirements for trapping				
Describes precedures for reporting trapping viola- tions				
Passed – Y/N				

Marking Sets – Authentic Assessment

Chanton 20 Annoudin	
1 $n n n n n n n n n n n n n n n n n n$	

(One water sets and one land set)

Name:_____

Instructor Name:_____

Criteria	Failed	Passed with Assistance	Passed	Notes
Selecting location				
Select proper trap				
Staking/anchoring				
Digging the bed				
Bedding the trap				
Use of lure, bait, urine				
Selectivity				
Animal welfare				
Safety considerations				
Regulation compliance				
Passed – Y/N				

Date:_____

Trapping Knowledge – Authentic Assessment Date:______

Name:_____

Criteria	Failed	Passed with Assistance	Passed	Notes
Describe wildlife habitat used by furbearers				
Explain "carrying capac- ity"				
Describe how wildlife management is funded in North America				
Participation in class dis- cussions on responsibility				
Describes or demonstrates fur handling procedures				
Describes how to sell fur				
Demonstrates safe and re- sponsible attitudes about his/her role as a trapper				
Passed – Y/N				

Cable Devices – Authentic Assessment

Date:_____

Name:_____

Criteria	Failed	Passed with Assistance	Passed	Notes
Identifies components of device and purpose				
Identifies or describes suitable locations for le- thal and non-lethal sets				
Uses appropriate support system				
Uses appropriate anchor- ing system				
Uses appropriate loop size and loop height for target species				
Understands regulations related to cable devices				
Demonstrates a safe and responsible attitude about using cable devices				
Passed – Y/N				

Appendix C - Traps, Sets and Attractors

Furbearer	Traps	Sets	Bait & Lure
Coyote	#1.5 - 3 Coilspring Cable restraint	Dirt-hole, flat, post, trail	Bait: Covered meat or fish Lure: Fox or coyote lure, urine
Red Fox	#1.5 - 3 Coilspring Cable restraint	Dirt-hole, flat, post, trail	Bait: Covered meat or fish Lure: Fox lure, urine
Gray Fox	#1 - 2 Coilspring Cage trap	Dirt-hole, flat, post, trail	Bait: Covered meat, eggs, fish Lue: Fox lure, urine
Beaver	#330 Body-grip traps #4 or #5 foot-hold trap Cable snare	Climb out, scent mound, channel, open water beaver set, under-ice	Bait: Small sticks of poplar, willow, cottonwood Lure: Commercial or homemade castor scents
Muskrat	#110 - 150 Body-grip traps #1 - 1.5 Longspring Guarded longspring Colony trap	Feedbed, trail, pocket, runway, floating	Bait: Apples, carrots, ear corn, turnip, orange peels Lure: Musk glands from male muskrats
Bobcat	#1.5 - 3 Coilspring, #3 Longspring Cable restraint	Dirt-hole, cubby, trail	Bait: Fish, beaver or rabbit meat Lure: Anise, catnip, fish oil, beaver castor, other glands
Mink	#1 - 1.5 Foot-hold traps #110 - 160 Body-grip traps	Pocket, trail, cubby, channel, obstruction	Bait: Chunks of fish or fresh muskrat Lure: Mink/muskrat musk, scat, urine, fish oil
River Otter	#220-330 Body-grip	Otter latrine or channel sets	Bait: Fresh fish or muskrat Lure: None recommended
Fisher	#160 - 220 Body-grip traps #1.5 - 2 Foot-hold Cage traps	Dirt-hole, cubby, lean- ing pole	Bait: Raccoon or porcupine meat, fish Lure: Fisher musk & urine, beaver castor, skunk essence
Weasel	#1.5 Coilspring, #0 - 1.5 Longspring Victor rat trap #50 - 110 Body-grip traps	Cubby, traps in boxes or hollow logs	Bait: Bloody meat or rabbit Lure: Weasel gland scent
Striped Skunk	#1 - 1.5 Longspring or coilspring Cage traps #160 - 220 Body-grip traps	Dirt-hole, cubby	Bait: Fresh or tainted meat, fish, or eggs Lure: Fish oil, skunk musk, anise, honey
Opossum	#1 - 1.65 Coilspring Enclosed Foot-hold traps Cage trap	Dirt-hole, cubby	Bait: Jelly, jam, fruit, meat eggs, cheese, fish Lure: Not necessary
Raccoon	 #1 - 1.5 Coilspring, #11 Longspring traps Enclosed foot-hold traps Cage traps #160 or 220 Body-grip traps 	Pocket, cubby, spring run, cage, dirt-hole	Bait: Chunks of fish or muskrat Lure: Fish oil, anise, honey, hard candy

Appendix D - Pelt Preparation

Funkaarar	Pelt Preparation	Stretcher Size - Inches						
Furbearer		Size	Length	Base	Shoulder	Neck		
Coyote	Skin cased, split tail. May be little fat or flesh. Pelt immediately. Turn pelt fur side out when skin is dry to the touch	Large Average Small	75 70 65	13 12 11	9.5 9 8	14 13 12		
Red Fox	Skin cased, split tail. May be little fat or flesh. Pelt immediately. Turn pelt side out when skin in dry to the touch	Large Average Small	56 54 50	8 7 6.5	6 5 4.5	11.5 11 10		
Gray Fox	Skin cased, split tail. Gray fox have more to flesh than red fox. Pelt imme- diately. Turn pelt side out when skin is dry to the touch.	Large Average Small	56 54 50	9 7 6.5	6 5 4.5	11.5 11 10		
Beaver	Skinned open, dried in oval shape by nailing on pattern board, or sewn to hoop. If nailed, lift pelt on nails a short time after boarding. This allows air to circulate between pelt and board.							
Muskrat	Skin cased with tail removed, don't overflesh, market fur in	Large Average Small	22 21 20	20 7.5 7	6.5 6 5.5	6 5.5 5		
Bobcat	Skin cased, remove claws, remove all flesh and fat, market fur out	Large Average Small	70 60 48	10 9 7	7 6.5 5	12 11 10		
Mink	Skin cased, split tail, market fur side in, fleshed lightly	Large male Large female	40 36	5 4	3.25 3	8.5 8		
River Otter	Skin cased, cut front legs short and sew closed, pin tail in V shape, mar- ket fur in	Large Average Small	65 58 32	8 7.5 7	6.75 6 5	15 13.5 9		
Fisher	Skin cased, flesh well, market fur out	Large male Large female	50 48	8 7	6 5	10 9.5		
Weasels	Skin cased, market fur in, remove tail bone but do not split the tail	Large Average Small	22 16 12	3 2.5 1.75	2.5 1.75 1.25	5.5 4 3		
Striped Skunk	Skin cased, flesh well, market fur in	Large Average Small	40 38 34	8 7.5 7	6 5.5 5	10.5 10 9		
Opossum	Skin cased, tail off, fur side in; flesh carefully to avoid tears	Large Average Small	38 36 32	8 7.5 7	6 5.5 5	10.5 10 9		
Raccoon	Skin cased, tail split. Remove all flesh & fat; market fur in	Large Average Small	48 42 34	10 9 8	7.5 6.5 5.5	12.5 12 11.5		

