Idaho Wildlife Review

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NOTICE

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COVER

Airplane Lake (foreground) and Ship Island Lake, deep in the Big-horn Crags. Both are famous for their excellent fishing for rainbow and cutthroat trout.

A Dark Picture . . .

Another year of hunting and fishing soon draws to a close in Idaho. A year of increased use of our wildlife resources and enjoyment in the forests and along the stream banks. A year that has established a record for sales of licenses and should be cause for general satisfaction except for a dark picture draped with the somber title of "Hunting Accidents."

We should be concerned with this problem. We should be in a position to discuss it logically and factually. And we should be in a position to do something more to alleviate this unnecessary loss. Perhaps a limited analysis of some of the factors is not sufficient, but we feel that it should be helpful.

In the first instance our records show that 21 persons have lost their lives, and 33 have been wounded as a result of gunfire in our state since January 1, 1953. Records maintained by the fish and game department since 1946 show the death loss to be higher than at any previous time.

We may assume that firearms accidents will increase in some proportion to the total sales of hunting licenses. That may account for the increase—but it certainly is no cause for satisfaction!

We have abundant material available regarding all types of firearms accidents throughout the country. Age groups are classified; weather conditions listed; time of day considered; color of clothing included and many other items, all factors related to each accident. In the judgment of trained firearms experts most of the information can be reduced to two main faults: Greed and Carelessness.

As an example we find that most accidents occur in the age group from 12 to 20 years. We must assume that this is so because of lack of proper training in the handling and use of firearms, and *lack of training and supervision while hunting.*

We have listened to many suggestions regarding ways and means to curb these accidents. A favorite one is that each hunter should pass an examination. It sounds good—but it has been determined that the individual reacts entirely differently when seeing a bird or animal that he desires. He becomes excited and eager. He fires hastily, and perhaps unwisely. Examinations given during the calm of everyday routine cannot disclose these faults.

Other types of legislation have been suggested from time to time. A law requiring a hunter to keep his gun on safety at all times before actual shooting; laws compelling the use of red clothing; prohibition of loaded firearms in cars; prohibition of sale of licenses to persons physically or mentally unfit to carry firearms; and minimum age requirements.

We know that many states have one or more of these laws in effect. They are still having a high accident rate. Making another law is not the answer. It is not the lack of laws or failure of enforcement of the ones that we have that causes hunting accidents. *It is the fault of the hunters who fail to respect and observe the laws!*

There are several programs presently operating in Idaho to make the public aware of the problem. They include distribution of posters, leaflets and firearms safety and training films. But they are not enough.

We need a statewide program of education and training if we are to make any real progress. Much remains to be done. Sportsmen, educators, radio stations, newspapers and national agencies must assume much of the responsibility if we are going to effect a worthwhile safety program.

Wildlife Management

By
Ross LEONARD
Director

The people who live in Idaho and who enjoy the great out-of-doors are extremely fortunate. Nature has endowed us with abundant resources—with some of the best fishing and hunting areas found anywhere on the continent. We live in one of the few inland States which enjoy an anadromous run of salmon and steelhead. Mountains and valleys abound with game which many other States, less fortunate, eye with envy.

It is commendable that the people of this State recognized the value of their wildlife resources and took steps to protect and perpetuate them before they become dissipated. Complete restoration programs have had to be undertaken in many States because they dissipated their resource before they realized its value. This has not been the case in Idaho. We still have a great many problems facing us, however, if we are to maintain hunting and fishing for the future.

Human Population a Factor

The biggest problem facing the wildlife manager today is the fact that the human population is increasing so rapidly. The United Nations have stated that we have a complete increase in population of 60,000 people every twenty-four hours. It is not difficult to imagine that sometime we will reach a point where our natural resources will be insufficient to satisfy the needs of the human population. Wildlife will continue to be crowded into smaller areas with less desirable living quarters.

In addition to the reduction in habitat, the number of people participating in hunting and fishing activities is increasing. The number of people participating in this activity has doubled in the last ten years. This means that, even if the supply of fish and game remain constant, the amount available for each license buyer would be only half what it was ten years ago. Human populations, as well as wildlife populations, place similar demands upon the soil, the forests, and the water supply. The areas where game may exist in its natural habitat and streams that run free of pollution are becoming smaller and fewer each year.

Since America has assumed the white man's burden and is attempting to improve the economic status of people all over the world, the demand for food has resulted in more intensive agriculture. Also the clearing and tilling of land formerly considered of little value, has resulted in the draining of many valuable nesting and resting areas for waterfowl, which in turn has resulted directly in restrictions in hunting activities.

A given piece of land will support only so much life—be it wildlife or human. There are some places, however, where game populations are increasing but in general it is not keeping up with the increase in human populations and the number participating in hunting and fishing.

A Living Resource

Another important factor to be considered by the wildlife manager is the fact that we are dealing with a living resource—birds, animals and fish all have mobility and freedom of action. They do not necessarily follow the human idea of what is good for them. Passing resolutions or making laws is not the answer to the problem. It would probably simplify our problem if the game animals would read the proclamations and regulations adopted by Fish and Game Commissions.

Wildlife populations can be increased above present numbers only by better protection of breeding stocks and improvement of year around habitat. As man destroys living quarters, wildlife will decrease, no matter how much money is spent or how much talk is indulged in by interested groups. Resolutions will not produce wildlife on the concrete pavements of city streets or the super-highways stretching from coast to coast.

Only long term, intelligently planned projects can increase wildlife under present land use programs. Many of the methods and programs designed to improve hunting and fishing in the past are no longer adequate to meet present conditions.

Many groups have been of the opinion that increased artificial propagation and more intense control of predators is the answer. These methods, under particular conditions, may be of some value but they fail

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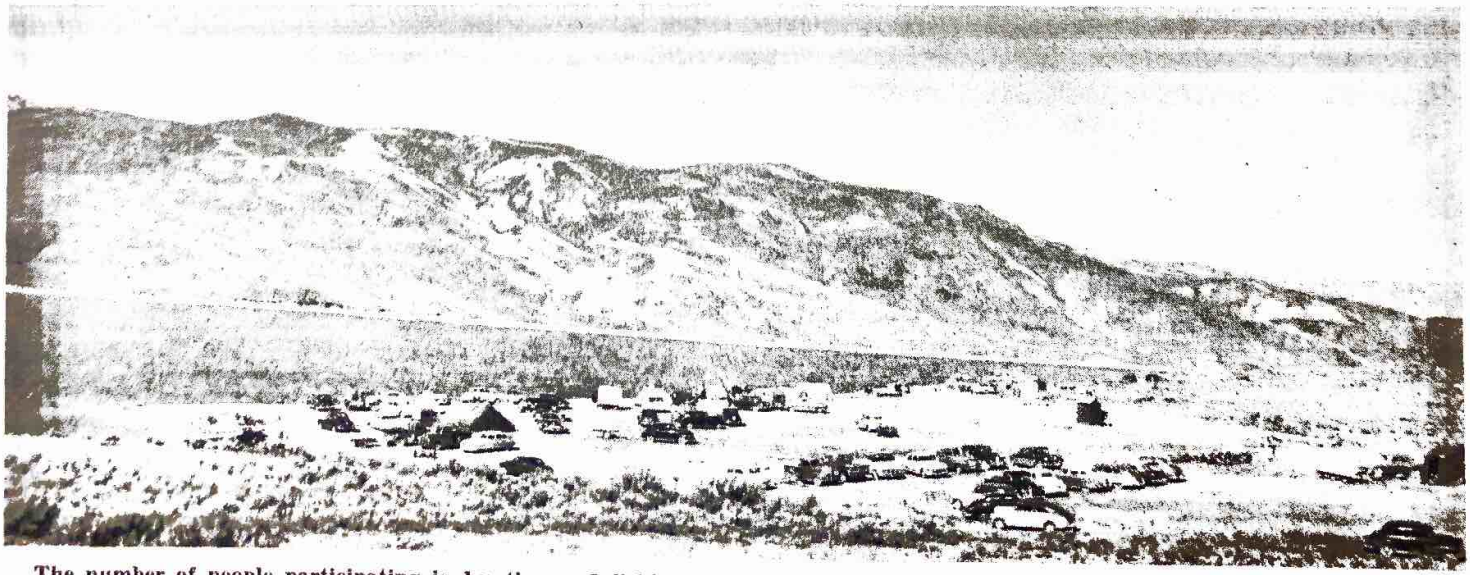

The number of people participating in hunting and fishing activities has doubled in the last ten years. This increase in human population is one of the biggest problems facing the wild life worker today.

Wildlife Management

(*Continued from page three*)

completely to meet the problems caused by increased land use.

A History of Effort

The history of man's efforts to prevent the complete extinction of wildlife has been one of trial and error. Some of it has been wasted effort. Much of it has had some impact on the maintenance of wildlife. When it became apparent that our wildlife resources were not inexhaustible, immediately the hue and cry went up that we must save our diminishing game and fish. Laws were passed making it illegal to kill game or take fish except during certain seasons. Each hunter or fisherman was allowed only so much in his possession. In spite of strict laws and concentrated law enforcement, our wildlife resources continued to decease.

The pioneer conservationists then decided it was not wholly the gun in the hands of the hunter or the line in the hands of the fisherman that was responsible for the diminishing game and fish populations. Evidently there was some other reason. The next program inaugurated by conservationists was an attempt to control depredation of certain undesirable species upon the more desirable game animals. An extensive warfare has been waged against the wolf, the coyote, the cougar, and the grizzly bear; however, it soon came to light that this was not the sole answer to the maintaining of our desirable wildlife population.

We then launched into an era of construction of fish hatcheries and artificial planting of fish. Game farms were built by State Departments from one end of the country to the other and still our populations continued to decrease. Exotic species of fish, game and birds were imported from abroad. Few of them have made a desirable impact upon our wildlife populations. Two notable exceptions, of course, are the German Brown trout and the Chinese pheasant.

Each of these methods has made some contribution to our knowledge and enabled us to establish more satisfactory management plans. It has been found, however, that game departments cannot be operated upon the *whims* of individuals and so progressive departments today have established research programs utilizing highly trained technical men who are constantly working to maintain wildlife populations and still provide suitable hunting and fishing.

Marsh lands can, and should be, protected from unwise drainage if suitable waterfowl habitat is to be maintained. This is an aerial view of the Boundary County Refuge.

Authority Necessary

In order to establish a sound administrative program, it is necessary that the administrative agency have adequate authority to properly manage wildlife. It is impossible for a Legislature to make regulations on an annual, or a two-year basis, and meet constantly shifting factors which affect, adversely or otherwise, wildlife populations. A game commission must have authority to fix seasons, bag limits, prescribe the methods, manner and means by which the game and fish may be taken. They must have authority to make regulations concerning small areas where special conditions prevail. In other words, they should be given the same authority to manage wildlife as a rancher has in managing his livestock.

We have some areas where it would be possible to maintain larger game populations. We also have some areas, especially winter areas, where we have *over-populations*—where we have insufficient winter food to carry an excessive number of game animals. Game administrators should have adequate authority to close areas where it is desirable to build up populations, and they should also be able to make reductions where study and research has indicated that it is necessary for the good of the herd itself.

A Long-range Program Necessary

Planning a long-range program is an essential part of proper wildlife management. A long-range program will require considerable study and analysis to be sure that it is in conformity with the best practices of wildlife management. Once established, the program should not be changed to meet suddenly developed demands of local groups. The program should be sold to those groups with the implication that it will not be changed except as new information may become available and make it advantageous to do so.

One of the biggest handicaps we encounter in carrying on a sound program is the fact that we encounter a feeling among many people from different organizations in different sections of the State that something should be done each year for their locality. Whether or not that something is a waste of funds is usually of secondary consideration. Our money must be spent where there is a potential which will result in a benefit to our wildlife population. As an example—it may be possible to improve habitat in a certain section for upland game birds. Upon the completion of such a project, demands may

arise immediately from some other section of the State that the same expenditure be made for the same purpose in that area.

It is becoming more and more recognized that the management of our fish and wildlife is a professional matter. At least one university or college in every State in the Nation has established courses to train people for work in this field and, with the constantly changing conditions, it is going to require additional training and experience in the future if our fish and wildlife resources are to be maintained.

Public Support

These are a few of the essentials required for good management but there is one more and that is intelligent public support. Pressure groups have been responsible for much good administration but they have certainly been responsible also for much of the bad. Groups organized to secure unwise privileges have caused the unsound expenditure of funds resulting in appalling waste of money. For example, they have often insisted on more liberal harvesting privileges than stocks of wildlife would stand. They have insisted on the release of costly, artificially propagated birds and fish in lands or waters that were totally unsuitable habitats. They have insisted on costly and unproductive predator campaigns.

There have been many other similar mistakes that could be pointed out. It is a curious fact that a business or professional man who *would not* think of telling his doctor how to treat his sickness, *may insist* that he knows all the answers to wildlife problems simply because he hunts and fishes. There are so many constantly changing factors involved that a person who does not devote constant attention to the problems has almost no chance to correctly solve them.

No one would hire a man to build a house and then insist on telling him what tools to use. *He would expect him to have intelligence to use the proper tools.* Anyone would insist that the carpenter use sound materials and do good work. Yet many will insist on dictating programs, and demand that wildlife agencies, employed to produce fish and game, use certain prescribed tools.

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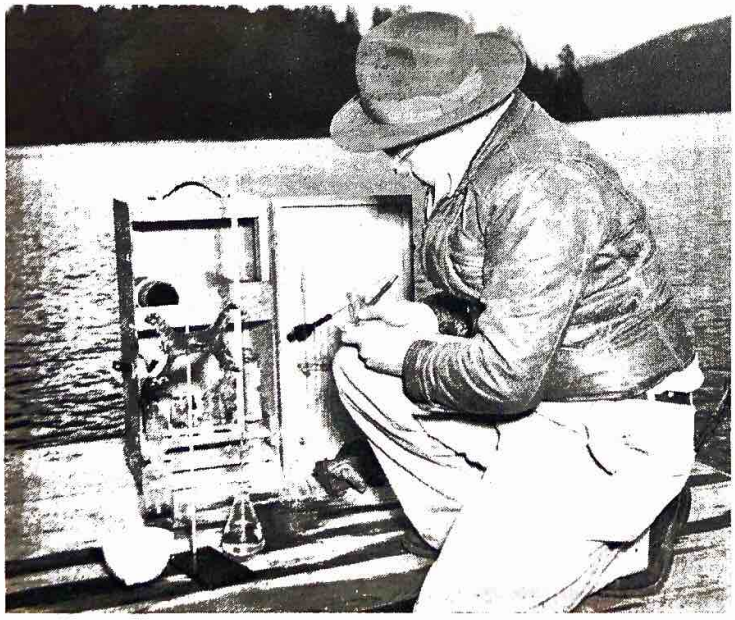
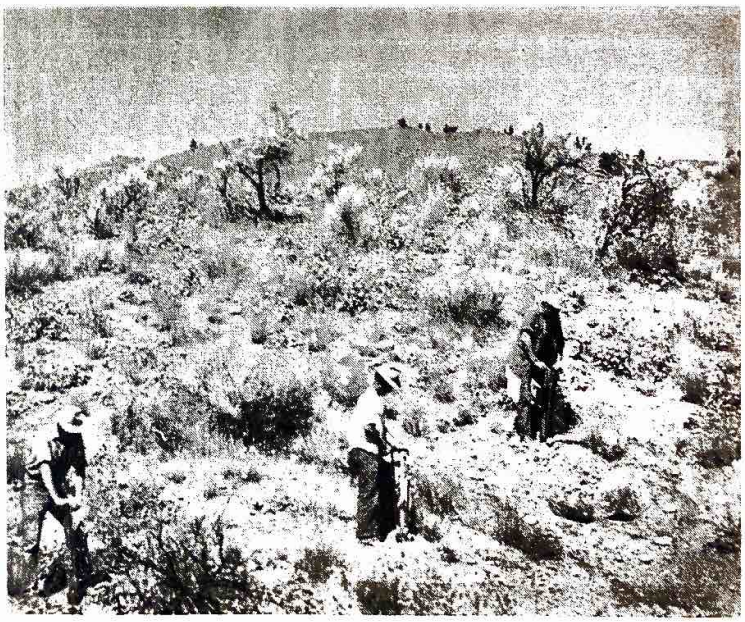
The Sand Creek Wildlife Management Area is one example of acquisition and development to provide additional range for big game animals and permit migration of animals to wintering areas.



Research forms an important part of any long range management program. Well trained technical personnel are necessary in wildlife management programs.



Wildlife managers have found that they can obtain the best result in maintaining wildlife populations by providing suitable living quarters. Here a crew plants bitterbrush seed.

Wildlife Management

With food, water and cover present in sufficient quantities, wildlife always benefits. Waterfowl hunters form one segment of the hunting and fishing public who reap the harvest of our wildlife resource.

(*Continued from page five*)

Management Methods

There are only a limited number of methods that can be employed to favorably influence wildlife populations. We can regulate the annual harvest by making and enforcing regulations. When predators are the immediate repressive factor holding down wildlife populations we can take the necessary action. If there is suitable habitat available it can be stocked to advantage by using artificially propagated birds and fish. They are, however, much more rare than the average sportsman might think. The cost of artificially stocking legal-size fish on a put-and-take basis is enormous. In some instances the artificial stocking of birds and fish has been actually detrimental to the total population, by increasing the population beyond the available carrying capacity.

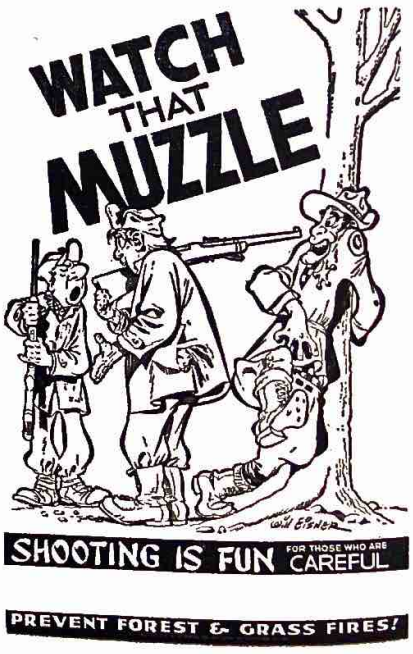
Wildlife managers have found that they can get the best result in maintaining adequate wildlife populations by providing proper and suitable living quarters—by improving the habitat. Much of our efforts should be directed toward this end. Marsh lands can and should be protected from unwise drainage. Better soil management practices which inevitably help farm wildlife can be promoted. Habitat can be improved particularly by fitting wildlife programs into other land uses. At present, in many sections, this would be the most productive use of wildlife funds. It should, however, be done intelligently. There is no point in providing additional food if plenty of food is present, and it is not advantageous to provide additional cover if cover is not the limiting factor. However, intensive agriculture has been the limiting factor on the annual crop of fish and game in many areas.

Adequate protection of our wildlife is necessary. Conservation Officer Hale Ebling with a waif of the woods.

Water, food or cover shortages or deficiencies may occur at various seasons of the year. Provision must be made to take care of them at all times. If one of these three factors —*Food, Water or Cover*— becomes scarce during *any* particular time of the year, it will be very effective in limiting the wildlife population.

We have outlined some of the methods that can be used to help maintain and develop wildlife stock. We can all assist in this effort by demanding a sound, long-range program, at the same time refraining from pressuring for local projects in order to get what we consider our fair share of license money spent in a particular area—whether the project be detrimental, or beneficial, to the general wildlife program.

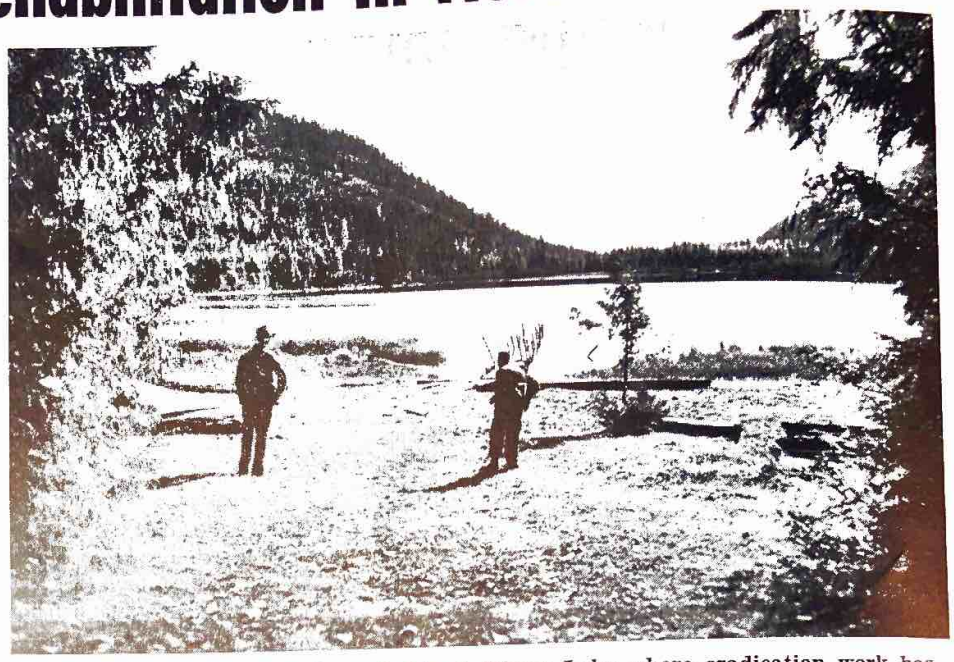
All of us who are interested in maintaining our vital wildlife resources—our soils—our water—timber—plant life and wildlife—must be constantly alert to prevent those who are not too friendly to this concept from destroying or dissipating our natural heritage.



Fisheries Rehabilitation In North Idaho

By
PAUL JEPPSON
Fisheries Biologist

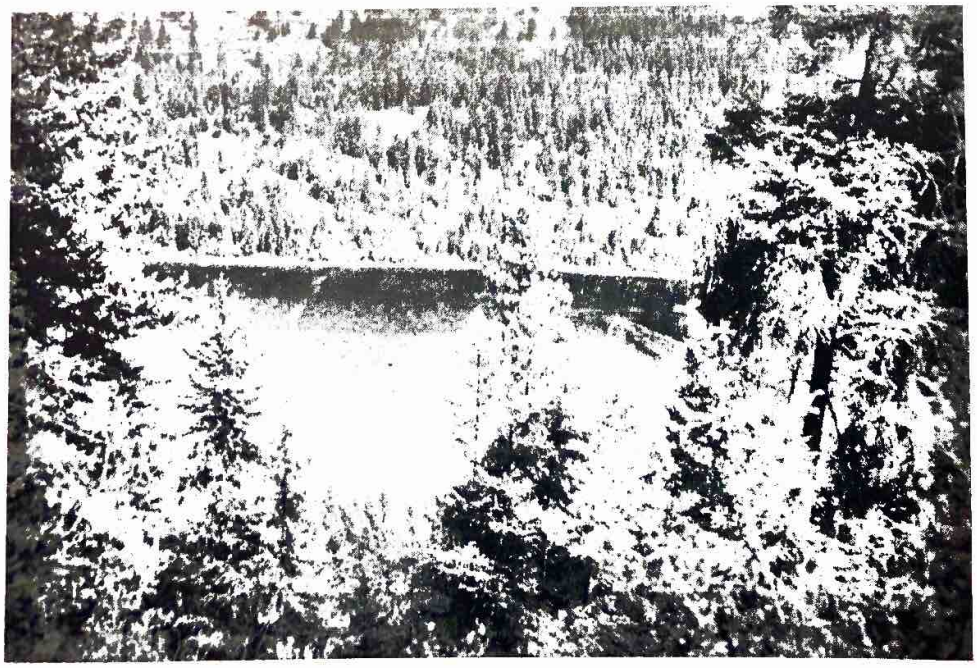
Early fisheries management attempts consisted mainly of raising fish in hatcheries to be stocked in public waters and regulating the take by various methods. During the past few years other management methods have been undertaken which include control of undesirable species of fish, habitat improvement, development of public fishing areas, and fact-finding methods such as creel census, fish-population studies, and life-history studies.



Public access has been made available at Mirror Lake where eradication work has been done. Docking facilities will be installed, and free access area made permanent.

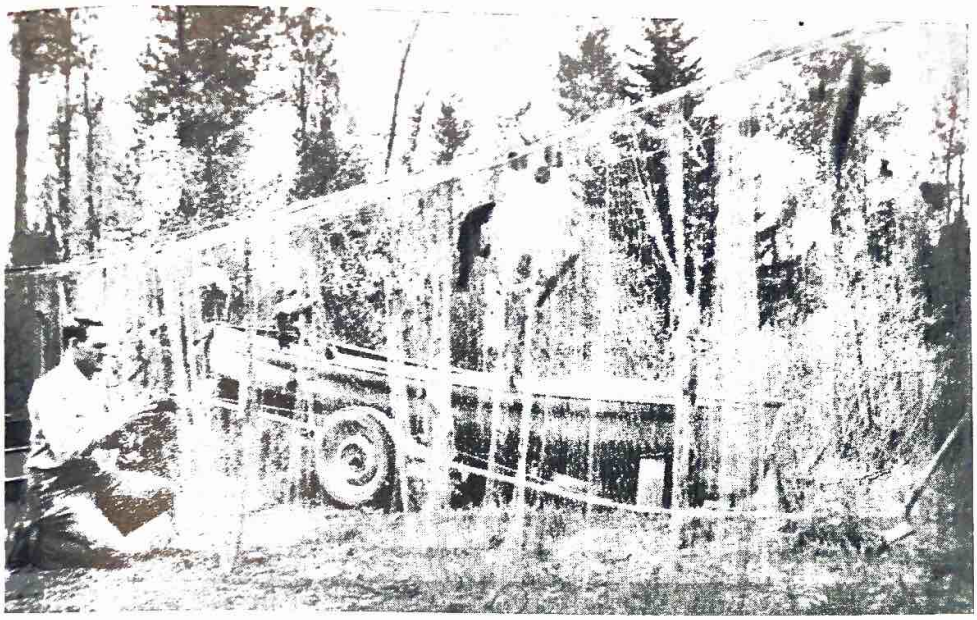
The control of undesirable species such as tench, squawfish, chubs, and suckers is important as a fisheries management method in North Idaho, where these species make up the greater portion of the fish found in many lakes and larger rivers. When an area has been productive of game fish but a natural increase of trash fish is evident, it is usually sound management to attempt to control the undesirable species. Populations of undesirable fish in some parts of the country have commonly become as high as 300 to 500 pounds per acre, and other species have been crowded out as a result. When such large populations are acquired, it is often feasible to eliminate the entire population by poisoning or draining and restocking with desirable species that are suited to the habitat.

In Idaho, seining, trapping, gill-netting, poisoning, shocking, dynamiting or draining for the purpose of taking undesirable fish are limited to operations conducted or closely supervised by the Fish and Game Department. Hoop nets, gill nets, drag seines, dynamite and rotenone are used in lakes, and hoop nets, dynamite and rotenone in rivers as the principal methods of removal or eradication. Comparatively few fish are taken from the rivers; however, experiments conducted during the past year on the St. Joe River indicate that large numbers of squawfish and suckers can be eliminated in dewatered channels of the river during the late summer low-water period by using rotenone.



Sportsmen donated boats and assistance to treat Mirror Lake with rotenone under the fisheries rehabilitation program. Cutthroat trout will be released into these waters as temperature and food studies indicate the lake is ideal for these fish.

From 20 to 60 tons of trash fish, principally tench and suckers, have been taken annually from the waters of North Idaho by State-supervised fishermen using hoop nets. This method has been efficient in reducing populations of tench and suckers in Hayden, Chatcolet, Round, and Benewah Lakes and the lower waters of the St. Joe and St. Maries Rivers. Comparatively few squawfish have been taken. Because of the predacious habits of the latter species, various methods have been employed in an effort to reduce squawfish numbers. Experimental use of gill nets has



Gill nets were used at Hayden and Cocolalla Lakes on an experimental basis during the squawfish spawning season in an attempt to reduce their numbers. Approximately 2,400 pounds of squawfish were taken in two months by this method.

been tried in Hayden and Cocolalla Lakes during the spawning season of squawfish in an attempt to decrease the reproduction of this species. During the period from May 13 to July 7, 1953, 2400 pounds of spawning squawfish, 250 pounds of suckers, and 40 pounds of tench have been removed by this method. An estimated 2500 squawfish, weighing about 3000 pounds were also killed while in an etremely large spawning school by blasting with dynamite. These fish are easily eradicated in Hayden Lake during spawning time owing to their schooling in certain localities. Most of the trash fish removed by hoop and gill nets are ground as fish food in State hatcheries. Previously, fish were cut up and left in the lake for fertilization.

In addition to rough fish, panfish (pumpkinseeds, crappies, perch, bullheads etc.) populations often become stunted or overabundant. This situation can be best remedied by eradicating the entire population with rotenone and restocking with trout or other desirable species.

Unproductive waters which have been reclaimed by use of rotenone are Jewel and Antelope Lakes in Bonner County which were treated in 1949, and, since opening to fishing in 1951, have provided three years of excellent trout fishing. Solomon, Brush, and Smith Lakes in Boundary County and Mirror Lake in Bonner County have since been included in the program. Brush and Solomon Lakes are supplying good fishing to many fishermen, while factors not related to the rotenone treatment have prevented Smith Lake from furnishing the high quality of fishing which is characteristic of these reclaimed lakes.

Ninety-four-acre Mirror Lake is located in a scenic area about ten miles south of Sandpoint. During recent years few fishermen have fished for the pan-fish or squawfish which inhabited the lake and, as a result, fishing has become poorer in recent years, as numbers have exceeded the food supply, resulting in few fish "growing up." Temperature and food studies indicate that the lake will be ideally suited to cutthroat trout which, according to old-timers, provided excellent fishing prior to the introduction of the spiny-rayed fishes; therefore, the Department of Fish and Game secured a public access site on the northwest shore of the lake (see photo) and the lake was treated on September 17.

Many of the edible-size panfish were salvaged by the local citizenry for table use or by commercial fishermen for maggot culture. The remaining fish were left in the water for fertilizer.

As soon as the lake is no longer toxic, it will be replanted with fingerling cutthroat trout which should show remarkable growth, owing to the abundant plankton (microscopic fish food) resulting from the newly fertilized water. ▲▲▲

IDAHO SNAKES

The Rubber Boa

By

FERRIS WEDDLE

The snake I'm holding is probably one of the least harmful and retiring of Idaho's snakes. He is the rubber boa, cousin to the giant boas and pythons of the tropics. This one seldom grows to exceed a length of twenty inches, however.

Seldom seen, the boa is also called the "two headed snake" because he just seems to have a head on both

The rubber boa—They make good pets! (Photo by Ferris Weddle)

ends, and it takes a good squint with a good eye to tell which end is the leader. Other names include "silver" and "glass snake."

The color of these miniature boas ranges from brown through the grays and into olive, with the abdomen quite yellow. Their texture appears "rubbery," and in its actions the boa does appear to have some rubber in its body; it can contort into a ball, and can be bounced a bit.

The snake will also "play 'possum'" or sulk at times. These actions, along with a shy, secretive nature, are its means of protection. The boa makes like its giant cousin through the use of constriction to kill prey which includes small birds and various insects.

Many other western states also have these snakes, and two other species range in the southwest. Incidentally —they make good pets!

FINANCIAL REPORT

JULY 1, 1952 TO JUNE 30, 1953

RECEIPTS

Fish and Game Fund No. 6

License Tags and Permits	$1,258,168.55
Fines and Confiscations	16,585.71
Receipts in Lieu of Licenses Sold	106.65
Beaver Hides (State's Share)	29,874.40
Rentals	10,517.65
Royalty, Non-game Fish	4,571.17
Refunds	4,975.26
Miscellaneous Sales	35,852.26
Credit on previous Biennium Cancelled Warrants	32.95
Total Fund No. 6	**$1,360,685.60**

Wildlife Restoration Fund No. 61

Miscellaneous	$ 3,538.71
Federal Refunds	212,150.58
Credit on previous Biennium Cancelled Warrants	54.75
Total Fund No. 61	**$ 215,744.04**

Fish Restoration Fund No. 65

Federal Refunds	16,514.42

Beaver Suspense Fund No. 149

Beaver Hides (Trappers' Share)	82,831.75
Total Receipts all Funds	**$1,675,775.81**

EXPENDITURES

Fish and Game Fund No. 6	
Salaries	$ 460,294.26
Travel	34,712.51
Operating Expenses	350,230.77
Capital Outlay	174,791.65
Refunds	1,113.80
Sub-Total, Fund No. 6	$1,021,142.99
Social Security, Fund No. 165	7,469.34
Special Audit Fund No. 06-3	1,450.00
Total, Fund No. 6	$1,030,062.33
Fish and Game Director's Predator Animal Fund No. 60	
Salaries	$ 18,052.45
Travel	1,093.46
Operating Expenses	4,963.30
Cougar Bounties	4,125.00
Magpie Control and Miscellaneous	771.43
Sub-Total, Fund No. 60	$ 29,005.64
Social Security Fund No. 165	122.91
Total, Fund No. 60	$ 29,128.55
Wildlife Restoration Fund No. 61	
Salaries	$ 158,812.26
Travel	8,269.13
Operating Expense	82,144.33
Capital Outlay	71,991.59
Sub-Total, Fund No. 61	$ 321,217.31
Social Security Fund No. 165	2,145.63
Total, Fund No. 61	$ 323,362.94
Fish Restoration and Management No. 65	
Salaries	$ 12,700.92
Travel	2,415.97
Operating Expenses	6.869.44
Capital Outlay	6,027.31
Sub-Total, Fund No. 65	$ 28,013.64
Social Security Fund No. 165	80.70
Total, Fund No. 65	$ 28,094.34
Beaver Suspense Fund No. 149	
Claims Paid to Trappers	$ 82,846.87
Total Disbursements	**$1,493,495.03**

SUMMARY AND PERCENTAGE OF CONSOLIDATED EXPENDITURES

Name	Amount	Percent
Administrative	$ 28,145.60	2.73
Big Game	23,317.27	2.26
Commissioners	3,503.88	.34
Conservation Officers	321,203.15	31.18
Fisheries — Operating Cost	360,864.87	35.03
Fisheries — New Construction	40,255.54	3.91
Fur Supervision	8,586.40	.84
General Expenditures	54,001.61	5.24
Office Expense	81,007.74	7.87
Refuges	21,983.99	2.13
Birds	57,941.39	5.63
Public Relations	29,250.89	2.84
Totals	$1,030,062.33	100.00

OPERATION IN FUNDS

Funds	Balance 7/1/52	Receipts: Cash	Receipts: Transfers	Disbursements: Cash	Disbursements: Transfers	Balance 6/30/53
Fish and Game	$420,819.11	$1,360,685.60	$	$1,030,062.33	$145,000.00	$606,442.38
Predatory Animal	11,183.06		20,000.00	29,128.55		2,054.51
Wildlife Restoration	39,716.41	215,744.04	100,000.00	323,362.94		32,097.51
Fish Restoration	17,165.32	16,514.42	25,000.00	28,094.34		30,585.40
Beaver Suspense	270.90	82,831.75		82,846.87		255.78
Revolving Fund	1,000.00					1,000.00
Totals	**$490,154.80**	**$1,675,775.81**	**$145,000.00**	**$1,493,495.03**	**$145,000.00**	**$672,435.58**