



WILDLIFE AND THE ENVIRONMENT

OUR MISSION

Conservation and preservation is a challenge that touches us all. Through the Nature's Newsletter, we strive to facilitate the free access and exchange of information of critical issues in the world today; to educate, inspire and empower all to take part and take action to enable all life to exist and prosper on Earth.

This current issue features a diverse collection of articles about wildlife and the environment. We hope you enjoy and are as inspired as we are by the dedication, amazing work and successes of the individuals and organizations who have contributed to this issue.

Yoke Bauer DiGiorgio, Editor

INSIDE THIS ISSUE

- 2** **PROJECT UPDATE: Pocono Wildlife Rehabilitation and Education Center**
- 3** **BORN FREE SERIES Part 1**
Saving Africa's Big Cats by Adam M. Roberts
- 6** **Conversations With A Wolf Biologist**
by Yoke Bauer DiGiorgio
- 8** **Additional Mexican Gray Wolf Photographs**
- 9** **Collaborating To Save the Skimmer**
by Carol A. Butler
- 10** **More About Black Skimmers in New York State**
- 12** **World's 1st Baby Rhino Orphanage**
by Pete Richardson
- 15** **NEWS UPDATE: 1st US Rhino Horn Burn**
- 16** **Bridging Domestic and Wild: The Wildlife Friendly Enterprise Network** *by Abigail Breuer*
- 19** **Bats of the Upper Delaware** *by Jessica Newbern*
- 20** **More About Bats**
- 21** **Discovering Nature: National Bat Week**
- 21** **About the Delaware Valley Eagle Alliance**

FRONT COVER PHOTOGRAPHY

Top Center © Sandra Becka, WFEN Fellow
Left Top Provided By Jessica Newbern
Left Center Courtesy of USFWS
Left Bottom © George Logan, Photographer
Right Top © Richard Ettlinger, Photographer
Right Center Provided by The Rhino Orphanage
Right Bottom © Ken Bohn, Photographer,
San Diego Zoo Global



© Yoke Bauer DiGiorgio, Photographer

PROJECT UPDATE Pocono Wildlife Rehabilitation and Education Center

Wildlife rehabilitation is the treatment and care of sick, injured or orphaned wild animals with the goal of releasing them back to the wild. To be released, animals must be able to function in their natural habitats as normal members of their species, be able to recognize and obtain appropriate foods, select mates of their own species to reproduce, and respond appropriately to potential dangers. Human contact is kept to a minimum, and animals are held in captivity only until they are able to live independently in the wild. It is an all-consuming undertaking and requires a 24 hour 7 day commitment.

The Delaware Valley Eagle Alliance is proud to announce our collaboration with the Pocono Wildlife Rehabilitation and Education Center, Yoke and John DiGiorgio, and Nature's Art Productions LLC in the creation of a 4:57 minute documentary about and for the Pocono Wildlife Rehabilitation and Education Center.

The Pocono Wildlife Rehabilitation and Education Center (the Center) was founded in 1983 and incorporated as a nonprofit organization in 1988 by Kathy and Eric Ulher. The Center is funded entirely by community donations. That support provides food, shelter, and expert medical care for thousands of animals, and allows the organization to speak out for countless others. Staffed primarily by the generosity of volunteers, the Center serves six counties in northeastern PA and takes in an estimated 1,500 animals (primarily mammals and birds) annually. The Center also provides diverse and extensive educational programs and demonstrations to the public about the natural history, importance of, and ways in which we can coexist with the rich diversity of wildlife native to PA.

The goal was to produce a short documentary which would capture the "essence" of the Center, highlight their daily challenges, and provide them a tool for their marketing and fundraising initiatives. Feedback has been terrific!

Yoke Bauer DiGiorgio, Editor

VIEW DOCUMENTARY AT: <https://vimeo.com/178634126>

BORN FREE SERIES: Part 1



© George Logan, Photographer

Beyond Cecil -- The slaughter of Cecil opened the eyes of millions to the plight of lions and the price on the head of every member of Panthera leo in Africa.

SAVING AFRICA'S BIG CATS

by Adam M. Roberts
CEO, Born Free USA

We've been here before. We've watched the decimation of a continent's wildlife—big cats specifically. We've seen the estimated population of tigers across their Asian range devastated from 100,000 at the turn of the 20th century to fewer than 4,000 today. Tigers were hunted for sport and trapped to be slaughtered for their skins, bones, teeth, claws, and internal organs. They were incarcerated in zoos and forced to perform in circuses. They were reduced to an ingredient in expensive bottles of wine or faux medicinal remedies.

Today, the same trajectory befalls Africa's big cats, specifically and problematically for lions and cheetahs. These unmistakable symbols of the African savannah are losing their habitat at historically challenging rates, subjected to hunters' bullets and poachers who kill them for their parts, or who capture

them alive for sale into the captivity trade. There is an assault on Africa's lions and cheetahs; the question now is whether we will learn from conservation history or repeat its mistakes.

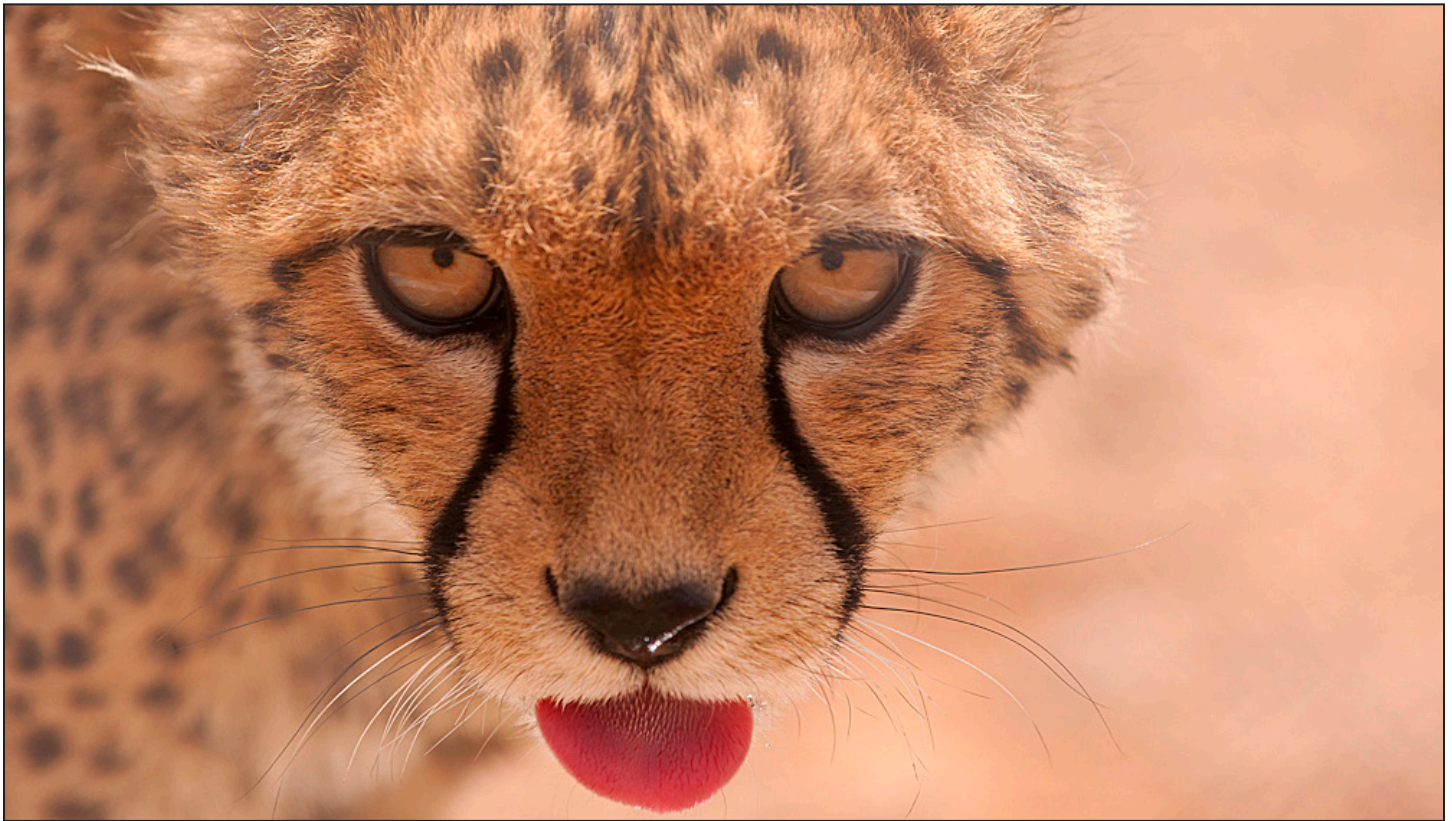
The lion is rapidly losing the habitat it needs to survive, currently thought to occupy about eight percent—*eight percent!*—of its historic range. And, according to the latest analysis from the International Union for Conservation of Nature (IUCN), the critically endangered lions of West Africa may have lost as much as 99% of their vital habitat. The places where lions thrive are primarily fenced areas of Southern Africa and, despite the fact that many of these areas are very large, they also limit the potential long-term viability of lions across the continent. While thought to number as many as 78,500 in 1980, there are likely fewer than 20,000 today—with fewer than 1,000 in West and Central

Africa. The African lion is clearly at risk.

The perils befalling this beleaguered species are multi-faceted, ever-present, and intertwined. As human populations expand on the continent, the lion loses the habitat it needs to thrive. With habitat loss and human encroachment into lion range comes increasing conflict between lions and humans—and when a lion kills a herder's valuable livestock, the result is often a gruesome retaliatory killing, including by poisoning. But, the human population boom also leads to increased hunting of wildlife, including those species that would normally comprise the lion's natural diet. So, when lions lose their prey-base and have increasing accessibility to livestock, it is not surprising that they turn to killing cows for food.

All of this is in addition to the targeted

Continued on page 4



© Born Free Foundation Ethiopia

Cheetahs are disappearing from the wild too rapidly, including live animals captured in Africa and sold as “pets” to the Middle East for life in captivity.

Continued from page 3

SAVING AFRICA'S BIG CATS

killing of lions by American and European trophy hunters. Between 2005 and 2014, European hunters imported nearly 3,500 lion trophies and Americans nearly 5,500. Poachers are killing lions for their bones to feed the southeast Asian trade (that historically consumed tiger bone) or for their internal organs and body parts that are used in traditional African medicines.

Cheetahs face similar challenges throughout their range—which, like lions, has been dramatically depleted to only about 10% of the known historic area, according to IUCN. There are likely fewer than 7,000 cheetahs remaining, and only a few hundred in West Africa. Habitat loss affects their ability to survive, but so, too, does hunting, which still occurs legally in some southern African countries. The ongoing pervasive threat to cheetahs, however, is compounded by the live trade of cheetahs from the Horn of Africa to the Middle East. They are captured live and sold into the pet trade throughout the region, fetching as much as \$10,000 per individual animal. Cheetahs were certainly not meant to live on the end of a leash.

Born Free Foundation Ethiopia has first-hand experience with the live cheetah trade at its wildlife rescue center outside Addis Ababa, Ethiopia. Time after time, cheetahs are confiscated from the illegal trade, including in the Somaliland region, and are sent to the rescue center

for lifetime care. (It would be extremely challenging to reintroduce these young animals to the wild, though it may be possible.) Much as there are cruel captive breeding operations in South Africa for lions, who are subjected to the indignity of “canned hunts,” cheetahs are also bred in the country to be legally sold around the world. This compounds law enforcement challenges when trying to determine the true origin and legality of any animal in trade.

For lions and cheetahs, action is clearly necessary—action that is consistent and enforced—to ensure that neither species is depleted beyond redemption. There are both national actions in the United States and international actions through the Convention on International Trade in Endangered Species (CITES) in play to save lions and cheetahs before it's too late.

The United States already added Africa's lions to the list of species protected under the U.S. Endangered Species Act at the end of 2015, after Born Free USA and others submitted a petition urging protection back in March 2011. The U.S. Fish and Wildlife Service listed lions in West and Central Africa as “endangered” and in Eastern and Southern Africa as “threatened.” With that threatened designation, however, comes a special rule that will only allow importation of sport-hunted lion trophies from nations “with established conservation programs and well-

Continued on page 5

Continued from page 4

SAVING AFRICA'S BIG CATS

managed lion populations.”

Now, at the upcoming CITES meeting, to be held in Johannesburg, South Africa from September 24 – October 5, Niger, Chad, Togo, and other African nations have petitioned to increase international protection for lions from Appendix II of the Convention to Appendix I. This would close down all trade in lions that is primarily commercial, and require that any sport-hunted trophy trade be authorized by permits from *both* the country of origin and the importing country. This level of additional control on lion trade is vital if the species is to survive.

Similarly, CITES will address the international trade in cheetahs after years of discussion and a cheetah trade stakeholder workshop in Kuwait late last year. A number of recommendations will be considered, including enhancing wildlife law enforcement through better capacity to identify illegal cheetahs or cheetah parts in trade, and trying to use social media to dissuade cheetah trade rather than glorify it (as too many people are currently posting pictures with their pet cheetahs, generating hundreds of thousands of “likes” from unwitting individuals).

Governments across the globe have a serious, affirmative responsibility to stop the trade in species such as lions and cheetahs in order to ensure their long-term survival. There is no benefit to lions being slaughtered for sport or cheetahs being captured and sold into the pet trade. There are, to be sure, many complicating factors and conservation threats negatively affecting lion and cheetah viability in the wild—but there are also mechanisms to save the species that are available to decision-makers at all levels of government (and to citizens who can speak out against these atrocities and object to the slaughter).

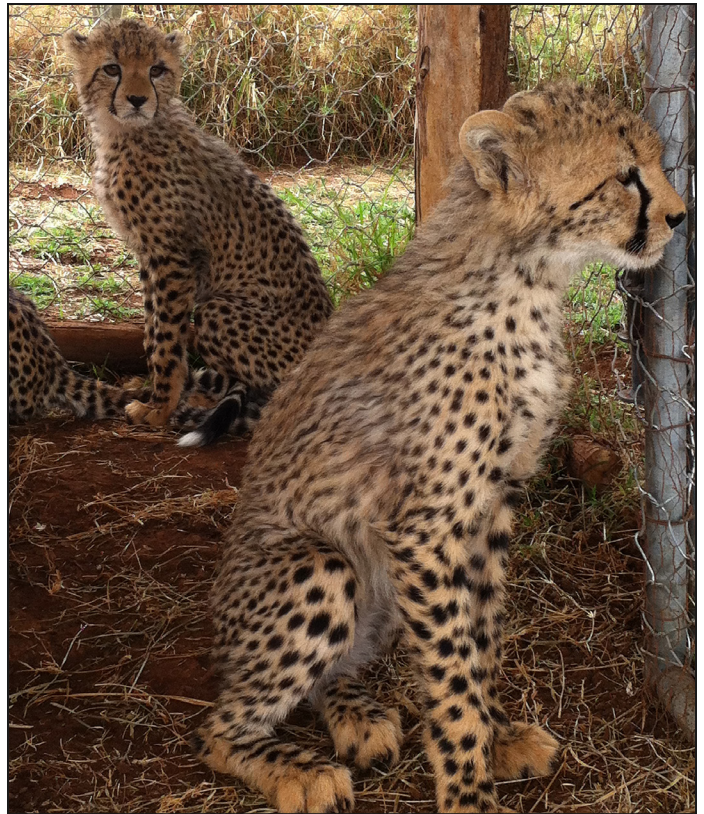
I often say that it would be a shameful indictment on humanity to know the risks facing certain species, not take swift and significant action, and lose the species in my daughter's lifetime. With lions declining to 20,000 and cheetahs to 7,000, habitat disappearing rapidly, and human-induced threats continuing, these are two species that, without bold action, could go extinct in mine.

ABOUT BORN FREE USA: *Keep Wildlife in the Wild*

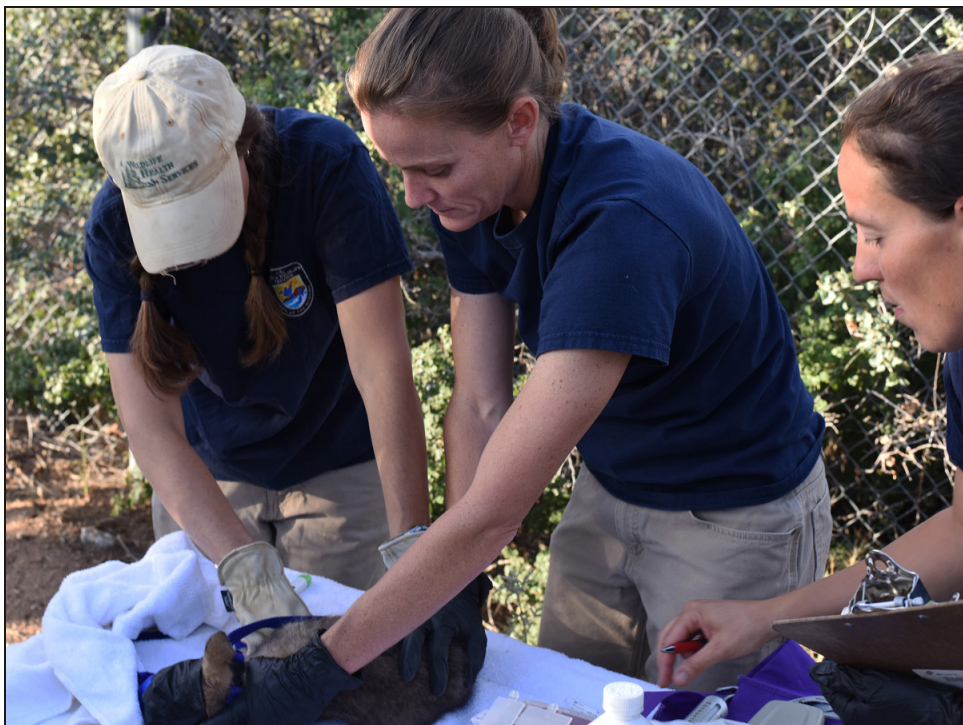
Born Free USA is a national animal advocacy nonprofit 501(c)(3) organization, with a mission to end the suffering of wild animals in captivity, rescue individual animals in need, protect wildlife (including highly endangered species) in their natural habitats, and encourage compassionate conservation globally.

We use powerful tools in our campaigns against cruelties, including legislation, public education, litigation, and grassroots networking. We also work actively with media to spread the word about challenges facing animals.

For more information: www.bornfreeusa.org



© Born Free Foundation Ethiopia
Some cheetahs are confiscated from illegal trade and repatriated to Ethiopia where they can be given humane lifetime care with others of their own kind.



Maggie Dwire with a captive female wolf pup (6.5 weeks old) at the captive Mexican wolf facility at Sevilleta Wildlife Refuge in New Mexico. The wolf pup is being processed for the first time.

Photographs courtesy of U.S. Fish and Wildlife Service

CONVERSATIONS WITH A WOLF BIOLOGIST

by Yoke Bauer DiGiorgio

Director, Delaware Valley Eagle Alliance, Naturalist, Filmmaker and Author

I have always been passionate about wolves and their plight. Being able to include articles about the work being done and collaborations to save two very different and very endangered species of wolves in opposite sides of the world – the Mexican Gray Wolf and the Ethiopian Wolf – in the last quarterly issue of Nature's Newsletter (Vol 11, Issue 2), enabled us to share critical and compelling information with our readers and all who are concerned with the preservation of wildlife.

Being able to "bring back" a naturally functioning wolf population to an area is an opportunity to bring back a natural balance and fully functioning ecosystem. Wolves strengthen the environment and other animals in the ecosystem by preying on the old, sick and young, and prevent their populations from growing so numerous that they overgraze and destroy habitat that countless other species depend on.

Recently, I was so fortunate to have had the opportunity to follow up and spend time talking with **Maggie Dwire, Assistant Mexican Wolf Recovery Coordinator for U.S. Fish and Wildlife Service** about wolf conservation and her role in the **Mexican Gray Wolf Captive Breeding Program**. Maggie answers some questions below:

1. How did you become interested and involved in helping the Mexican gray wolf?

"While attending UC San Diego I volunteered at the California Wolf Center, an education and research facility that was just becoming a part of the Mexican wolf captive breeding program. My background is in biology and anthropology, and wolf recovery has always interested me because it's as much about humans as it is about wolves."

2. Please talk about the Mexican Gray Wolf Recovery Program, your job at USFWS and role in the recovery program - and in particular - about providing captive born pups for fostering in a wild pack.

"My current position with the US Fish and Wildlife Service (Service) is as the Assistant Mexican Wolf Recovery Coordinator. One of my duties is as the Service's liaison to the Mexican wolf captive breeding program. My role in our efforts to foster captive-born pups into wild dens is primarily to coordinate between the captive breeding program and the reintroduction project. This means determining, genetically, which captive-born litters are appropriate to consider for fostering efforts, and communicating with the captive facilities to document breeding behavior in order to estimate future whelp dates. Additionally, the field team monitors potential denning behavior in wild packs and reports that information to me. When the two align - a captive litter is born very near the same time denning behavior is observed in the wild - we move quickly to arrange for pups

Continued on page 7

Continued from page 6

CONVERSATIONS WITH A WOLF BIOLOGIST

and animal care handlers to travel to the den site. I have performed the care of the pups and the actual fostering into the wild den, but it isn't always me and more often it is members of our on the ground field team."

3. As part of the recovery program, adult and offspring wolves at Brookfield Zoo were chosen as potential candidates for release to the wild. How are the "captive born pups" and the "wild pack" chosen?

"Adult wolves in the captive breeding program are first considered for release based on genetics. The animals are moved to a Service-approved pre-release facility where they are evaluated for release potential (we consider things like behavior, reproductive/pairing ability, etc.). If a wolf is determined to be a good candidate for release, the process is typically to pair it with a mate for release. F1126 from the Brookfield Zoo is a good example of this process."

For fostering pups from captivity to the wild, the litters expected in captivity are first evaluated to ensure their release to the wild would increase gene diversity in the wild population (while at the same time not significantly impacting the gene diversity of the captive population - eg some captive litters may be deemed "too valuable" to consider for fostering). Once we determine which captive litters could be pulled from, we wait. If captive whelping and wild denning align, that's when fostering occurs. We do consider the previous experience of the wild female (an experienced mom is better than a first time mom), the location of the wild den (public land, accessibility, etc.), and other factors."

4. Regarding M1471 (Blaze) and F1472 (Brooke) and the wild Elk



Close-up of captive female wolf pup.

Photograph courtesy of U.S. Fish and Wildlife Service

Horn Pack - how are they all currently doing? All the pups should now be about 3 to 4 months old. Will you be attempting to radio-collar and monitor them? Please describe that effort. Have you done this before with other packs and how has that worked?

"The success of our fostering efforts in 2016 is not yet known. We will continue to monitor all three packs, including trail cameras at various locations to try and determine the number of pups traveling with the pack. We will begin late summer/early fall trapping efforts within the next month, as well as conduct our aerial survey and capture operation in the winter. Some of these efforts will focus on these three packs in an attempt to radio-collar animals and confirm the survival of any fostered pups."

In 2014 we placed two wild-born pups into another wild den. During the annual aerial survey conducted in 2015, one of the pups was captured and collared. This wolf, M1347, has recently been confirmed in Arizona with a companion (presumably a female)."

5. Benjamin Tuggle, USFWS southwest regional director, has stated that, "Pup fostering is just one of the management tools we can use

to improve the genetic health of the wild population." Please describe some of the other management tools that are being used.

"There are other methodologies for release of wolves we have used in the past. What has proven to work best, so far, is the release of an adult pair with their young offspring (~6-12 weeks of age). In this process an adult pair is selected as described above, and allowed to breed at a pre-release facility. When the pups are young, the family group is moved to their release site. The pups are not as mobile, which serves to anchor the adults in the area we have selected for release. The group is provided supplemental food until they are documented hunting on their own."

6. What are the challenges you see for the Mexican gray wolf and the Mexican Gray Wolf Recovery Program going forward?

"In our recent 2015 Listing Rule, we determined the Mexican wolf meets the definition of an endangered subspecies primarily because of illegal killing, inbreeding, loss of heterozygosity, loss of adaptive potential, small population size, and the cumulative effects of the aforementioned threats (for more on

Continued on page 8

ADDITIONAL MEXICAN GRAY WOLF PHOTOGRAPHS



Photographs courtesy of the Mexican Wolf Interagency Field Team

LEFT and RIGHT-TOP: Wolf count conducted in Feb. 2016. Members of the IFT are analyzing a male wolf from the Mexican wolf experimental population. After the IFT takes statistical data from the wolf, he is released back into the wild. RIGHT-CENTER and BOTTOM: "Cross foster program" in New Mexico April 2016.

Continued from page 7

CONVERSATIONS WITH A WOLF BIOLOGIST

that see: https://www.fws.gov/southwest/es/mexicanwolf/pdf/Mx_wolf_listing_final_rule_to_OFR.pdf).

One of the biggest challenges wolves face on the landscape is social tolerance. Every day our program works with a diverse group of people and organizations that are impacted by or involved with wolf recovery efforts. In order to achieve recovery of the Mexican wolf, it must be done on a working landscape with stakeholder collaboration.

The Interagency Field Team continues to make every

effort to build connections with the local elected officials and the neighboring ranching communities. On a nearly daily basis, we speak with landowners and ranchers and provide them with up-to-date information pertaining to the Mexican wolf. This includes the current locations of wolves, following up on recent sightings, and any possible release of a wolf into the area."

ADDITIONAL RESOURCES:

<http://www.fws.gov/southwest/es/mexicanwolf/>



The male Black Skimmer typically offers the female a fish or other token of his fitness in order to encourage her to mate. If she accepts, she will typically hold the nuptial gift in her bill until the mating is complete.

© Richard Ettlinger; Photographer

COLLABORATING TO SAVE THE SKIMMER

by Carol A. Butler
Naturalist and Author

Iconic and elegant, Skimmers are among the most unusual birds in the world. These unique medium-sized birds are easily identified. They almost always nest on exposed sand, and they have a specialized way of foraging that is unforgettable. They are the only birds with a lower mandible that is longer than the upper, and the only birds with pupils that close to a vertical slit.

The Skimmer searches for food day and night in shallow water where small fish swim close to the surface and the wind is light. Flying continuously along the water's surface, alternately flapping its wings and gliding, the Skimmer's head is angled down, lower mandible submerged. Unlike other animals that locate prey using sight or smell, the Skimmer uses touch. When the lower mandible strikes a small fish or shrimp, the upper jaw clamps down on the prey and the Skimmer's head flexes down and back so that its face is momentarily submerged. When the head comes up out of the water there is usually a silvery fish dangling from the bill.

There are three main species of Skimmers: the Black

Skimmer (*Rynchops niger*) in the Americas (including two subspecies in South America), the Indian Skimmer (*Rynchops albicollis*) in Asia, and the African Skimmer (*Rynchops flavirostris*) in Africa. There are a few small resident populations, but most are international migrants, making their vulnerability an issue of worldwide concern.

I first became interested in Skimmers when I met Richard Ettlinger, an accomplished nature photographer and long-time avid birder. We met at the American Museum of Natural History in New York City almost 10-years ago. Richard's photographs from his book, *On Feathered Wings: Birds in Flight*, were on exhibit at the Museum, and I was working at the butterfly vivarium in the Museum (working one day a week as I had for many years). At that time I was also writing a book about birds of prey, *How Fast can a Falcon Dive?*, a collaboration with Peter Capainolo, an ornithologist at AMNH. Richard donated several of his beautiful raptor images for that book.

A friendship developed and over time I learned about

Continued on page 10

More About Black Skimmers in New York State

Currently, the U.S. Fish and Wildlife Service does not list the Black Skimmer as threatened or endangered. It is however, protected as a Species of Special Concern in NYS; the primary reason being the limited no. of breeding colonies in the state.

Description

Are are medium sized, with adults ranging in size from 15.5 - 19.5 inches; have a wingspan of 14 - 15 inches; and weigh between 0.5 and 0.8 lbs,

Are easily identifiable with predominant black markings on the top half of their bodies and white below, and have bright reddish orange colored webbed feet.

Have a uniquely shaped bill, an evolutionary adaptation to its feeding and foraging behavior. Colored bright reddish orange at the base and black at the tip, the bill is 2 - 2.5 inches long with the lower mandible longer than the upper.

Juvenile Skimmers are mottled brown and black on top and off-white underneath; both upper and lower mandibles are the same length during early juvenile development.

Concern, Management, Research Needs

The North American subspecies of Black Skimmer relies almost entirely upon marine resources for both nesting habitat as well as for forage. Located primarily within the Caribbean and Gulf of Mexico during the winter months, they migrate northward along both the east and west coasts beginning in early spring to breed. Migrants along the east coast arrive in NYS in early April and select barrier beaches, salt marsh, and dredge spoil islands as nesting habitat. Except for a small group that continues on into Massachusetts, NYS represents the northern breeding limit of this subspecies.

In NY the Black Skimmer almost always forms mixed species colonies with either least or common terns. Although there are about 10-colonies, the majority of successfully nesting birds are found at only 2-sites - in Breezy Point, Queens and on Nickerson Beach in Nassau County, located just 17 miles apart

Primary concerns for this subspecies center around conflicting or competing use of limited coastal resources with human development and recreation, predation of adults, eggs, and hatchlings by both wild and domestic animals, and changing climatic variables. Symbolic fencing, beach maintenance, and other endangered species management actions designed to benefit the piping plover often encapsulate Black Skimmer nesting habitat as well.

Black Skimmers are currently surveyed annually as part of the Long Island Colonial Waterbird and Piping Plover (LICWPP) survey. While this survey provides a reference for annual abundance and distribution it does not provide any measure of breeding productivity. The annual population is highly variable, but typically averages 490 adult pairs. The recently developed species conservation guide for the Black Skimmer calls for increasing the number of annual breeding locations coupled with a larger geographic range of stable colonies.

Research needs are centered on understanding marsh loss occurring along NY's coast and the potential for providing alternate breeding locations such as rooftop nesting which has shown to be beneficial to terns in southern states.

RESOURCE: <http://www.dec.ny.gov/animals/79513.html>

Continued from page 8

COLLABORATING TO SAVE THE SKIMMER



© Richard Ettlinger; Photographer

Black Skimmer colonies share space with Gulls and other shorebirds that are typically more aggressive than the Skimmers. They offer Skimmers some protection from predators, but of course it has its downside, as seen here.

Richard's passion for Black Skimmers. His enthusiasm was contagious. After 12 years of intensely observing and photographing Black Skimmers during the summer breeding season on the South Shore of Long Island, Richard had amassed a dazzling portfolio of incredible close-up sequences of Black Skimmers in action. The dramatic images of this engaging bird-- feeding, fighting, courting, fledging, and migrating—are all in brilliant color and astonishing detail. Richard talked about publishing them in a book. We discussed it and agreed, it would be a wonderful collaboration for us and a very much needed project.

Richard has been able to document aspects of Skimmer development and behavior that are of scientific importance because they have never been described or photographed. His images show us how the lower bill of a juvenile Skimmer elongates as the chick grows until it is no longer able to pick up food morsels by pecking at the ground. At this stage it needs to learn how to skim in order to survive, and he has captured a startling image of a juvenile practicing skimming on the sand. We see an adult pushing a juvenile out towards the shore to encourage it to start skimming, and a perfect image of a juvenile with a partially-developed lower bill making what may be its first attempt to forage for itself.

Skimmers are perfect candidates to become a flagship group and a vehicle for the implementation of environmental restoration goals, in no small part because their amazing

Continued on page 11



© Richard Ettlinger, Photographer

This image was taken at Nickerson Beach, Nassau County, NY in late August when Black Skimmers are almost ready to begin their migration south.

Continued from page 10

COLLABORATING TO SAVE THE SKIMMER

foraging behavior has a strong emotional appeal. As is the case with monarch butterflies, flagship animals can serve as ambassadors by inviting people to participate in saving them from extinction by preserving the ecosystems on which they rely. Descriptions and images of the animals' beauty and cultural/scientific importance can engage citizens and governments, motivating them to see conservation imperatives as part of their civic duty.

Like many other species, Skimmers are struggling to survive because human activity and climate change have upset the ecosystems on which they depend. The beaches where

they breed are being taken over for recreational use, the rivers where they feed are being diverted to provide irrigation and power, and the sand on which they nest is in demand as construction material. We have the option of simply continuing to adjust as the baseline of the natural world keeps getting defined downward, or we can try to sustain a species we choose by actively fostering change in the world around them so that the future tilts in their favor.

Conservation should strive to build healthy populations of animals that are as wild as possible in a tame and increasingly unnatural world. We believe this is an appropriate wildlife

goal and it is the type of realistic effort we are recommending on behalf of Skimmers. There are only some local efforts to keep track of Skimmer populations, but almost nothing is being done to limit the destruction of their ecosystems.

Our soon to be available book, *Saving the Skimmer: A Flagship Conservation Species* does not aim to be the definitive taxonomic or scientific reference about Skimmers - there is a lot of research that still needs to be done. Rather it is an opportunity to see these birds, to join them in their colony. It is scientific communication of a special type that bridges the gap between readers and birds. It establishes that Skimmers are worthy of our attention and can become a flagship group and a focus of worldwide conservation efforts.

For information about the availability of *Saving the Skimmer: A Flagship Conservation Species* by Carol A. Butler with Richard Ettlinger, Photographer: cabutler1@verizon.net

For information about Carol A. Butler and Richard Ettlinger:

<http://amazon.com/-/e/B001K8HQ2Q>
(Other wildlife and environmental books authored by Carol A. Butler)

www.members.authorsguild.net/cabutler - *How Fast Can a Falcon Dive?*

<http://www.richardettlinger.com/>

http://www.abramsbooks.com/product/on-feathered-wings_9780810995253/ - *Birds in Flight: On Feathered Wings*

ADDITIONAL RESOURCE:

http://www.dec.ny.gov/docs/wildlife_pdf/blskmgt2015.pdf

Upcoming Bird Festivals and Events

A great way to enjoy bird watching is by going to festivals. They're organized to get you to great birding spots at a great time of year, and they're a great way to meet other birders.

For more information:

<https://www.allaboutbirds.org/birding-festivals/>



Rhino Orphanage staff member with baby rhino named Faith

Photograph provided by The Rhino Orphanage

WORLD'S 1st BABY RHINO ORPHANAGE

by Pete Richardson
Director, The Rhino Orphanage

"Not on my watch". Words I will never forget and will always associate with the battle to build a specialist centre to care for orphaned baby rhinos. My friend, Arrie van Deventer uttered those words as we presented to various corporate groups in an attempt to raise the large amounts of cash needed - words which sum up Arrie's determination not to let a species be butchered out of existence... at least not without us doing something to try and stop the bleeding.

The first battle was won when Arrie approached Peet Cilliers, the CEO of Legend Lodges Hotels & Resorts, with the idea to create a proper care facility for orphaned baby rhinos, managed by rhino specialists in the field. Being a conservationist and entrepreneur, Peet immediately saw the existing need in the battle to save the species and agreed to make this dream a reality. The idea was that this would become a modern and scientific but non-commercial place, where rhino orphans would grow up and be cared for in a natural environment, with limited human contact. This was important to make sure that the rhinos would eventually be successfully released into the wild again. Peet, together with the other shareholders of Legend IFA developments (developers of Legend Golf & Safari Resort), gave their commitment and support to this worthy cause and made

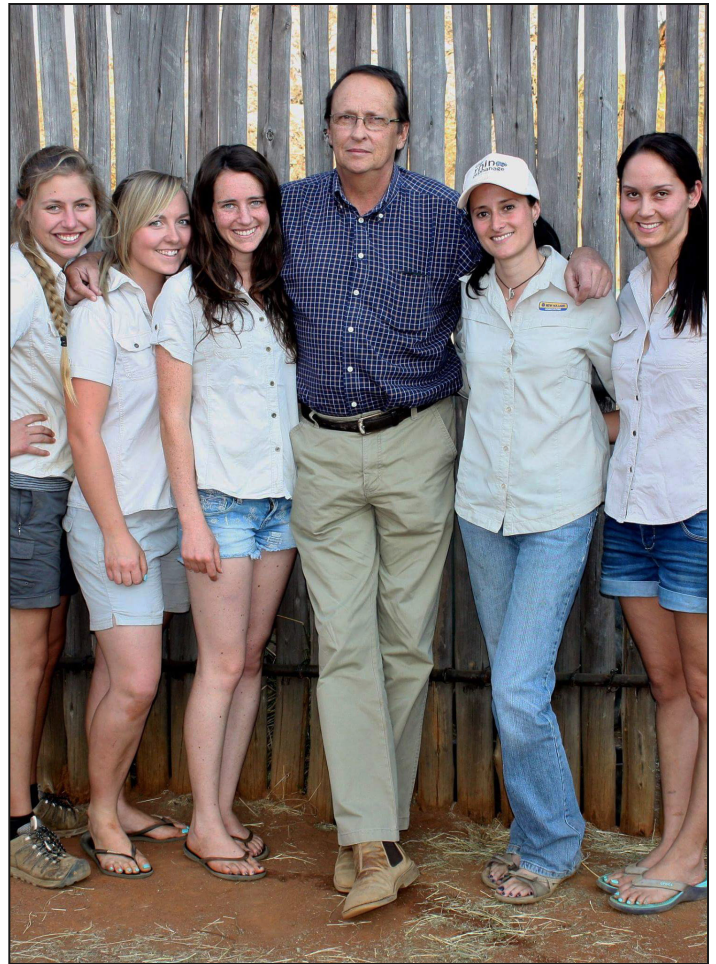
the land and resources available to build the orphanage.

But building a world-first is always a challenge - but a challenge we have been proud to attempt. Many thanks must go to Insitucrete Construction for their sponsorship on the construction of the orphanage. Thereafter the likes of New Holland, Lafarge, First National Bank, Bayer, and many other corporate companies, as well as individuals, came on board and made large contributions to this project. Without the expert input and time and efforts of rhino specialists, the orphanage would, however, not have been such a success. The likes of rhino expert Karen Trendler, the Endangered Wildlife Trust, wildlife veterinarians like Pierre Bester all need to be mentioned for their time and professional contribution.

Now, the Legend Golf & Safari Resort is home to the world's first specialist, dedicate, non-commercial centre to care for baby rhinos. A flourishing rhino orphanage, it has already helped save the lives of more than 20 rhinos, whose mothers were slain or the babies were abandoned.

South Africa is home to more than 90 percent of the rhinos on the planet, and the world's first rhino orphanage is a

Continued on page 13



LEFT TOP AND BOTTOM: Rhino Orphanage staff member playing in the mud with Kumba. RIGHT: Arrie van Deventer with Rhino Orphanage staff - From left - Hillary Lipham, Laura Ellison, Jamie Traynor, Arrie Van Deventer, Gaby Benavides, and Simone Mizen.

Continued from page 12

WORLD'S 1st BABY RHINO ORPHANAGE

major step forward in the battle to protect the species despite the continuing carnage.

Arrie has driven the project with determination and pride. He said: *"This is a war we cannot loose. The treatment of rhinos is something I couldn't stomach without at least trying to do something - especially the little ones. I have stood next to the bleeding carcass of a mother whose baby was killed next to her because the baby refused to leave her after she was hacked to death. When a mother is killed the baby won't leave her side so IF they survive the slaughter they are often in a terrible state - traumatized, hungry, and often beaten so badly that they can't even stand. It's pitiful and heart-breaking."*

"Two years ago there were limited options for them to be cared for in the way they needed - with the ultimate aim of rehabilitating them to the wild. So we decided to change all that."

The Rhino Orphanage is not open to the public so the rhinos can be protected by state of the art security and they can have the very best chance of survival and ultimately be

released back into the wild.

Arrie said: *"The orphanage has all the specialist medical facilities to care for these often extremely young and badly injured creatures, from an intensive care unit – which is being upgraded in 2017 thanks to Bayer and hopefully construction giants Saint Gobain - to a special ambulance to transport them under proper medical supervision from the place of the killing. Security is vital to give the babies the very best chance of one day returning to the wild where they belong so they will only be cared for by the medical and rehabilitation staff and protected by a special anti-poaching unit."*

Baby rhinos are hand-reared by the rehabilitation staff, a milk substitute is fed as well as supplementary food. Exercise is encouraged by daily walks in which the rhinos also have the opportunity to graze and browse in the bush. The rhinos are split in groups according to ages and how depending they are on their human moms. Natural behaviour such as playing and wallowing are highly encouraged and are developed normally if rhinos are socialized with other

Continued on page 14

Continued from page 13

WORLD'S 1st BABY RHINO ORPHANAGE

rhinos. Health checks, diets and medical problems are treated by specialized veterinary staff. Human contact is restricted to prevent the imprinting of rhinos to humans and in the future turn them into problem animals when in adulthood.

Some of the baby rhinos who have been through The Rhino Orphanage have no real right to be alive. Perhaps the most amazing of many amazing little animals is Ntombi. Some vets advised us that there was little that could be done and she should be put out of her misery. But our staff did not want to give up. After months of intensive care and rehabilitation that faith has been rewarded as Ntombi was released back into the wild in early August 2014 as part of a small herd all saved by The Rhino Orphanage.

But there have been dark days. Despite the best efforts of staff and vets some of the little ones have not made it. It is a daily battle of life and death in a tragic war that now has a global profile. And The Rhino Orphanage is at the heart of that battle thanks to the dedication of our amazing staff, all the volunteers and supporters.

The Rhino Orphanage was established in 2012 as a not-for-profit organization based in the Limpopo Province in South Africa with all donations going directly to fund the centre and the care and rehabilitation of the rhinos. Donations and support from all over the globe are so much needed to help keep the centre open and sustainable. Arrie has spent the past four years determined that The Rhino Orphanage will be a lasting contribution to conservation given the dire need for urgent action.

In addition, to managing the world's first rhino orphanage and providing an environment where orphaned rhinos are safe from poachers, we are training volunteers in the rehab of baby rhino on a daily basis, working with a vet college to increase rhino rehab knowledge, working to create a network of similar facilities, and keeping the public informed on the progress of the rhinos without commercializing or exposing these animals for any profit or gain.

We continue the fight on behalf of these wonderful animals who cannot fight for themselves.

"Too many people take too much time to act decisively. We cannot stop the slaughter at the moment and demand for rhino horn, no matter how worthless it really is, it's rising. So there is the real danger that hundreds more baby rhino will be shot, maimed and left to die - but not on my watch!"

Arrie van Deventer



Photographs provided by The Rhino Orphanage

TOP: Black rhino named Shaka enjoying his milk; BOTTOM: White rhino named Thandi who was shot by poachers when her mother was killed.

**For more information: <http://therhinoorphanage.co.za/>
Follow us on Facebook: [www.facebook.com/](http://www.facebook.com/TheRhinoOrphanage)
TheRhinoOrphanage**



LEFT and RIGHT: © Ken Bohn, Photographer, San Diego Zoo Global

NEWS UPDATE

1st US RHINO HORN BURN

During a Sept. 8, 2016, ceremony, confiscated rhino horn items with an estimated black market value of approximately \$1 million -- including whole horns, ornate objects and items falsely marketed as medicinals -- were destroyed by burning at the San Diego Zoo Safari Park. The U.S. Fish and Wildlife Service (FWS) partnered with the zoo and California Department of Fish and Wildlife to stage the symbolic event, **the first of its kind in the nation.**

It is illegal to trade in rhino horns in interstate commerce within the US, and it is also illegal to trade commercially across international borders, with very limited exceptions. The majority of the rhino horn destroyed at this event was contraband, seized from illegal activities. Like drugs and counterfeit items seized in trade, these items could never be re-sold.

This is the first time the US has destroyed rhino horn. During the past few years, approximately 7-tons of elephant ivory was destroyed in two ivory crush events (Nov. 2013 and Jun. 2015). The ivory destroyed had been seized at US ports of entry and as a result of law enforcement investigations for US law violations.

So why was the rhino horn burned, instead of crushed? Rhino horn is ground up to be consumed for alleged medicinal purposes. Therefore, grinding it or crushing it would not effectively destroy its black market value. Burning it however, ensures it is rendered useless for any form of trade. Ashes and other material left over from the burn will be sent to the National Wildlife Property Repository in Colorado.

Within the past decade, Africa's rhinos were beginning to recover in some countries until an upsurge of trafficking in horns occurred. This surge was in response to increased demand for horn in east and southeast Asia and particularly, Vietnam and China. As the black market value of rhino horn has skyrocketed, poaching has reached unprecedented levels in Africa. In 2015, 1,175 rhinos were killed in South Africa alone (home to the largest remaining populations of the species). Rhino poaching has also shifted from opportunistic poaching done by locals to coordinated, targeted poaching commissioned by organized networks or syndicates who are believed to be moving most of the horn, and are often involved

in trafficking of other illegal substances as well.

Rhino horn has been used in traditional medicines in some cultures, even though no unique or particularly effective medicinal properties can be scientifically attributed to the substance. Rhino horn is made of keratin, like human hair and finger nails. In the past few years, consuming rhino horn was considered a display of success and wealth. In addition, objects such as libation cups made of rhino horn are desired by some as a status symbol. Once used primarily as a fever reducer, it is now being marketed as a cure for everything from cancer to hangovers.

There are now only 20,000 white rhinos and 5,000 black rhinos left in the wild. Currently, a rhino is poached every eight hours in Africa. At this rate, rhinos could become extinct in the wild in 15 years. "The poaching of rhinos in Africa is an international tragedy that is pushing these magnificent creatures to the brink of extinction," said FWS Director Dan Ashe. "Only a rhino needs a rhino horn, and it's time we all understood that."

The rhino (rhinoceros) is an herbivore of prehistoric origin. All species of rhino are protected under US and international law. Since 1976, trade in rhino horn has been regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), a treaty signed by more than 180 countries around the world to protect fish, wildlife and plants that are, or may become, imperiled due to commercial trade.

The battle against rhino horn trafficking is being fought around the globe. In Apr. 2016 120 tons of elephant ivory and 1.3 tons of rhino horn were destroyed in Kenya. Many other countries are also publicly destroying confiscated wildlife products. These and those events in the US are all creating greater awareness and urging consumers to be informed about wildlife products, especially those that may contribute to the poaching crisis.

SOURCES:

<https://sandiegozoo.app.box.com/s/9ltzmgdgyr9chqa9ts2rg7v6sawp1f1u>

<https://www.fws.gov/home/feature/2016/pdfs/RHB-WhatPeopleAreSaying.pdf>

<https://www.fws.gov/le/pdf/RHB-Frequently-Asked-Questions.pdf>



© Sandra Becka, WFEN Fellow

The Ayrshire Farm of Virginia manages heritage breed cattle, pigs and poultry on large acreage using Predator Friendly® practices. Bobcats from a nearby rehabilitation center have been released onto the farm.

BRIDGING DOMESTIC AND WILD THE WILDLIFE FRIENDLY ENTERPRISE NETWORK

by Abigail Breuer

Program Director, Wildlife Friendly Enterprise Network

With over one-half of the 2.3 billion acres of the U.S. in agriculture—and nearly one-third of the nation used for grazing—farms and ranches offer both a great threat and a tremendous opportunity for the conservation of wide-ranging carnivores. Making room for wide-ranging carnivores on agricultural lands is critical to the viability of wildlife populations, especially as open space diminishes and once-remote areas become accessible.

So who are we? We are the Wildlife Friendly Enterprise Network, a 501(c)(3) non-profit organization working to conserve threatened wildlife while contributing to the economic vitality of rural communities. Our mission is to protect wildlife in wild places and on agricultural lands by certifying those enterprises that assure people and nature coexist and thrive. Our certifications include Certified Wildlife Friendly® and Predator Friendly®.

We believe in the power of the educated consumer to change the world. By creating incentives for the protection of biodiversity around the world, we work to institute best practices on the landscape. Through compelling storytelling, branding and marketing we work towards changing attitudes and behavior.

Our Network includes conservationists, businesses, artisans, farmers, ranchers, herders, and harvesters. Business members benefit through consulting on product development, sustainable sourcing, eco-agriculture, best practices for biodiversity and business, addressing illegal

wildlife trade, and building Wildlife Friendly® value chains. Certified producers gain access to marketing assistance, support tools, and their global peers.

From the Cascades to the Blue Ridge Mountains, a little-heralded bunch of Wildlife Friendly® producers is raising sheep and cattle in areas where wolves now roam, producing honey in bear country, and pasturing poultry near coyotes and eagles, through proactive management and use of non-lethal, humane deterrent practices. True stewards, these producers bridge the domestic and wild by maintaining habitat and protecting wildlife as an integral part of their production systems.

Driven by personal commitment in far-flung locales, some producers that rely upon Wildlife and Predator Friendly® practices do not wish to attract attention to themselves. Yet, those who do benefit from loyal customer bases, price premiums, and market access. Through the expansion of the market for verified stewardship practices, Certified Wildlife Friendly® provides a meaningful new tool for the conservation of North American carnivores.

Initially launched in other regions, Certified Wildlife Friendly® has assisted conservation enterprises in Asia, Africa and Latin America to reach markets. Now, by offering scientifically-sound, measurable standards to agricultural producers in the U.S. and Canada, Certified Wildlife Friendly® increases the credibility and raises the profile

Continued on page 17



© Sandra Becka, WFEN, Fellow

The Windshadow Farm of Michigan uses secure fencing to keep its goat herd safe while also providing wildlife passage along waterways and corridors. Among other Wildlife Friendly® practices, the farm manages its pastures to ensure that ground-nesting birds such as bobolink have a chance to fledge.

Continued from page 16

BRIDGING DOMESTIC AND WILD THE WILDLIFE FRIENDLY ENTERPRISE NETWORK

of farm-level wildlife stewardship to producers and consumers alike.

Meet the Producers

Certified Wildlife Friendly® and Predator Friendly® producers range from long-standing ranch families with deep roots in their land to comparative newcomers who wish to become wholly knowledgeable about their farm environment.

They include Ivanleigh Farms of Ontario, Canada, which raises heritage Kunekune pigs and sheep on pasture, Windshadow Farm & Dairy of Michigan, whose exceptional goat's milk is featured in fine cheeses, Brattset Family Farm of Wisconsin, devoted to grass-fed beef and pastured pork, Ayrshire Farm of Virginia, raising rare breeds of cattle, turkey, chicken, and ducks, and

Traders Hill Farm of Florida, which keeps the majority of its 800 acres for wildlife while raising market greens via aquaculture.

Despite their varied locations and production specialties, each of these farms has found means to protect its livestock through proactive, coexistence activities that help black bear, coyote, bobcat, fisher, fox and other predators to remain on the landscape. Some host rare and endangered species, including the Florida panther and Eastern Massasauga rattlesnake. All are home to thriving ecological systems that provide habitat for songbirds, amphibians and reptiles, and mammals. Taking on restoration activities in order to ensure a place for free-ranging species is inherent to the goals of each participant.

Predator Friendly® Practices

Each Certified Wildlife Friendly® and Predator Friendly® farm uses a mix of practices to keep its livestock safe, engaging in what is called “adaptive management” in response to changing conditions. Emerging research supports what these farms have found in practice—despite the work involved, it is often more effective to practice vigilant observation and attempt to stay a step ahead of keenly-aware predators, than to engage in a continuous cycle of predation-predator removal-predation.

While the specific actions vary by farm, common to all is a belief that farming practices must include room for wildlife. Some certified farms are home to expansive natural areas,

Continued on page 18



LEFT: Livestock guardian dogs are specialized breeds with strong protection instincts developed through the ages in Europe and Asia. RIGHT: The highly-adaptable coyote is one of many predators with which Certified Wildlife Friendly® farms have learned to coexist (See Information Box Below)

Photographs Provided by Wildlife Friendly Enterprise Network

Continued from page 17

BRIDGING DOMESTIC AND WILD THE WILDLIFE FRIENDLY ENTERPRISE NETWORK

drawing a boundary only when livestock are present via temporary electric fence, livestock guardian animals (such as special breeds of dogs, llamas and donkeys), and human presence. These farms usually avoid remote pastures when predation pressure may be greatest and keep especially vulnerable animals such as young lambs and kids where they can be watched closely. They may also change their pasture rotations and bunch livestock, which can be positive for the health of land at the same time as helping to keep predators wary.

Scare tactics, including loud and unfamiliar sounds, flashing lights of changing duration and patterns, and flagging that moves with the wind may also be used carefully, in order not to lead to habituation. Of necessity, producers devise their own methods. One places life-size cut-outs of the farm's border collie in her pastured chicken flock, moving locations daily, to supplement the dog's presence as a deterrent to hawks, falcons and eagles. Another covers his much smaller flocks' pen with strings of compact discs, so their glint in sunlight may deter aerial predators. Some experiment with hot pepper spray and other odors on fences and gateposts. Yet another strives to enter pastures from alternate directions and varying times of day to reduce predictability.

Certified Wildlife Friendly® and Predator Friendly® farms show that proactive coexistence practices are a viable option, and provoke producers and consumers to consider the impact of their choices on wildlife. With less than 11% of North America in any type of protected area, Certified

Wildlife Friendly® promotes healthy predator populations and strengthens the ability of farms and ranches to serve as essential habitat.

Products certified by the Wildlife Friendly Enterprise Network contribute to the conservation of over twelve million hectares of diverse wetlands, forests, and grasslands; protect keystone endangered species in Asia, Africa, Europe, the Americas, including the Snow Leopard, Elephant, Cheetah, and Wolf; and benefit over 200,000 people through increased food security, income and employment.

For more information: www.wildlifefriendly.org

The Highly Adaptable Coyote...

is one of many predators with which Certified Wildlife Friendly®/ Predator Friendly® farms have learned to coexist by using a mix of proactive practices. These may include:

- Using guardian animals such as llamas, donkeys and dogs to keep livestock safe;
- Scheduling pasture use when predation pressure is low;
- Grazing cattle with smaller livestock to protect sheep, goats and calves;
- Timing calving and lambing to avoid predation risk;
- Lambing in sheds, secure fenced lots or protected pastures;
- Making frequent and unpredictable patrols in pastures;
- Protecting vulnerable animals by fencing out predators;
- Learning the ecology and habits of area wildlife.

Absence of larger predators in the East is now considered a factor in the spread of Lyme's disease, extirpation of native plants, and highly-abundant deer populations.



Photograph Provided By Jessica Newbern

A big brown bat captured during the bat inventory in Rock Creek Park during the 2016 Rock Creek BioBlitz

BATS OF THE UPPER DELAWARE

by Jessica Newbern

Biologist, Upper Delaware Scenic & Recreational River

Looking to the sky at dusk, on a warm day, it is likely you will see bats zipping through the air, foraging for nighttime insects like moths, beetles, and aquatic insects. They can be fascinating to watch; zig-zagging in flight, turning away from an object just before collision, or exiting and returning through the smallest openings. These small mammals are the only mammals capable of true flight, and it is an incredible show to watch. Unfortunately bats aren't always regarded as incredible, and sometimes that can be attributed to how much people know about bats.

It may seem like all bats look alike, but there are actually 9 different bat species in the Upper Delaware region. There are the solitary/tree-bats; the Hoary bat, Eastern red bat, Silver-haired bat and there are the social/cave-bats; the Little brown bat, Northern long-eared bat, Indiana bat, Small-footed bat, Tri-colored bat, and Big brown bat. The tree bats are typically found roosting alone, hanging underneath leaves/pine

needles, hidden under loose bark or in a crevice. Not all of the cave-roosting bats use caves for a roost or hibernacula, but they typically form large colonies in buildings, caves, abandoned mines, or tree cavities. Most interactions between humans and bats involve the Big brown bat and the Little brown bat, as these two species often roost in buildings used/occupied by human beings.

In the summer, the building or object that a bat uses to rest during the day is called a roost. The tree bats are usually solitary, except groups of females that form small maternity colonies. Maternity colonies are formed when several female bats roost together for birthing and rearing their flightless pups. The tree bat maternity colonies are usually only made up of handful of bats, whereas cave bat maternity colonies are made up of many females, some having several hundred bats. The female bats roost together to increase their pup's chances of survival, because young bats aren't capable

of thermoregulation yet, and need the warmth of the adult bats. In the evening, females will alternate between staying with the pups in the roost, and leaving their pup in the roost while they forage for insects. A strategy that maintains the optimal warmth in the roost for the bat pups. The bat pups are usually ready to forage on their own by mid-July, about 4-6 weeks after a late spring birth.

As summer fades away and signs of fall start to appear, the number of bats in our area begins to dwindle. Most of our bat species will begin to move to their winter habitat in the fall. The tree bats will migrate south to their winter habitat to hibernate, sometimes in small colonies. The cave bats will form large colonies in caves, abandoned mines, fissures, abandoned bunkers, just about any structure that has the optimal temperature and humidity the bats need to hibernate.

Some of our bat species will remain in the area year-round such as the Big brown bat, commonly found in buildings during the winter. On warmer nights in the fall and spring, the year-round residents can be seen flying at dusk.

Unfortunately, not all of our bats may return the following spring. Each year tens to hundreds of thousands of tree bat species are being killed by wind turbines, and cave bat populations are dwindling after being devastated by the disease White-nose syndrome (WNS).

Wind turbines are typically located along ridgetops, which are also used by the tree bats as migratory routes, resulting in the high number of bat fatalities. WNS is a disease caused by the fungus *Pseudogymnoascus destructans* that infects bats during hibernation, a time when their bodies are in a state of very little physiological activity. Since the discovery of WNS in 2006, it is estimated that the cave bat populations have declined by eighty-percent.

With such large population declines

Continued on page 20

MORE ABOUT BATS

There are more than 1,300 species of bats worldwide.

Bats are critical to the health of natural ecosystems and globally play an essential role in pollination, tropical reforestation and pest management.

From deserts to rainforests, nectar-feeding bats are critical pollinators for a wide variety of plants of great economic and ecological value. In North American deserts, giant cacti and agave depend on bats for pollination, while tropical bats pollinate incredible numbers of plants. Bats are so effective at dispersing seeds into ravaged forestlands that they've been called the "farmers of the tropics."

Pregnant or nursing bats of some species will consume up to their body weight in insects each night.

Bats are believed to save US farmers an average of \$23 billion annually in reduced crop damage and lower pesticide use.

In addition to being able to see as well as other mammals, most bats also use a unique biological sonar system called echolocation, which lets them navigate and hunt fast-flying insects in total darkness. A bat emits beep-like sounds into its path, then collects and analyzes the echoes that come bouncing back. Using sound alone, bats can see everything but color and detect obstacles as fine as a human hair.

Out of the over 1,300 bat species, there are only three that feed on blood (vampire bats) and only one targets mammals. They don't suck blood, they lap it like kittens with milk. All vampire bats are limited to Latin America.

A bat that can be easily approached by humans is likely to be sick and may bite if handled. Simply do not touch or handle a bat, or any other wild animal, and there is little chance of being bitten.

The world is a dangerous place for bats. Although they provide vital environmental and economic services, **bat populations are declining around the globe, largely as a result of human activity. Loss of habitat remains the most widespread peril worldwide.** The forests many bats use for roosting and/or foraging for food are disappearing at a frightful rate.

DID YOU KNOW?

A powerful anticoagulant found in vampire bat saliva, which they use to keep blood from clotting, has been developed into a medication that helps prevent strokes in humans.

ADDITIONAL RESOURCES:

www.batcon.org

www.nwhc.usgs.gov

www.dec.ny.gov

www.pgc.pa.gov

Continued from page 19

BATS OF THE UPPER DELAWARE



© Jessica Newbern, Photographer

Little brown bats in one of the summer roosts we know about. We counted 50 bats at the site in 2015, and over 140 in 2016. The little brown bats are also very healthy looking, and have no evidence of WNS infection.

there is a lot of concern about whether bats will be able to recover from the impacts of wind turbines and WNS. Bats are long-lived animals that can live from 15-30 years in the wild, and typically only have one pup a year.

There are also concerns regarding controlling insect populations without our bats. Bats are natural predators of the insect pests that can destroy crops or spread diseases, and every night bats eat countless insects, saving our farmers an estimated 4 to 50 billion dollars a year.

Bats play a critical role in managing insects in our area, and **they are a fascinating animal that we are so fortunate to have around.**

DISCOVERING NATURE



© Phil Wooldridge, Photographer

NATIONAL BAT WEEK, 2016

(Monday, Oct 24, 2016 through Monday, Oct 31, 2016)

Organized by conservation organizations and governmental departments across the US and Canada, Bat Week is an annual, celebration of the role of bats in nature and to inspire people to protect bats and conserve biodiversity.

Bats are one of the most unique animals in the world. Since they are the only mammals that developed true flight, they are put in their own scientific order: Chiroptera (Greek for hand-wing). Bats are also crucial to many ecosystems around the world. Insect-eating bats are the primary predators of night-flying insects. For example, one little brown bat can eat 1,000 insects per hour. Nectar-feeding bats help pollinate plants like bananas and cashews and fruit-eating bats spread seeds. Unfortunately, due to many years of fear and misunderstanding, bat populations are decreasing and some are nearly extinct.

During Bat Week, Bat Conservation International, Inc., invites interested parties to host and or attend a "Pulling for Bats" event - an invasive plant pull to help improve habitat and food for bats and other wildlife. Bats that feed on insects can have a harder time finding healthy food when invasive plants move in. For more information: <http://www.batweek.org>

You can be involved in Bat Week in lots of other ways too - as an organizer or participant. You could give an educational presentation at a local school to get kids interested in bats, throw a Bat Week party at your local library or visitors center, host an outdoor event for families such as a Fall night hike, or anything that will help spread the word about bats.

During Bat Week, the National Park Service (in Lacawac Sanctuary, Lake Ariel, PA) is hosting a lecture "Autumn Evening with Bats" by one of its biologists about how white-nose syndrome (WNS) affects bats and why bat conservation is important. Participants will be able to see the echolocation calls of bats flying overhead as they are recorded using acoustic monitoring equipment. For more information: <http://www.lacawac.org/public-programs.html>

Get involved, take part in events around the country, and join us in celebrating bats.

ADDITIONAL RESOURCES:
www.whitenosesyndrome.org
www.batconservation.org
www.batmanagement.com
<http://southeastee.org>

THE DELAWARE VALLEY EAGLE ALLIANCE

*working towards the conservation of
our wildlife and natural resources*

ABOUT US

The Delaware Valley Eagle Alliance is a 501 (C)(3) not-for-profit organization; our mission: to increase awareness, understanding and promote conservation of our wildlife and the natural environment.

We believe that raising awareness and understanding will change attitudes toward conservation and our natural resources. We are committed to this because we believe that it essential to enabling all life to exist and prosper on Earth.

We are dedicated in our focus to bring awareness through our publications, educational programs and events, and projects.

*John A. DiGiorgio, Chairman and President
Richard Crandall, Director and Vice President
Yoke B. DiGiorgio, Director and Treasurer
Debra Reimer, Secretary*

ABOUT OUR PROGRAMS AND EVENTS

We work with communities and other organizations on wildlife and environmental programs and events. Our focus, education and entertainment, is accomplished by providing enhanced programs with new speakers and presentations and providing all attending, young and old, opportunities to see and experience new and interesting programs.

ABOUT OUR PROJECTS

We are available to work closely with biologists and conservation groups to document ecological and wildlife research on rare, sensitive and endangered wildlife and environmental issues.

SUPPORT

The Delaware Valley Eagle Alliance grew out of a grassroots effort of individuals who want to help protect our wildlife and habitat. Our organization depends on responsible citizens and organizations who share our concern for the environment. Our educational publications, documentaries, programs and events would not be possible without the generosity of our sponsors and supporters.

For more information about having a project, program or event and/or to make a tax deductible donation contact:

**Yoke Bauer DiGiorgio at yokedvea@gmail.com
or call 201-841-5168.**

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