

INTERNATIONAL WOLF

A PUBLICATION OF THE INTERNATIONAL WOLF CENTER
WINTER 2018



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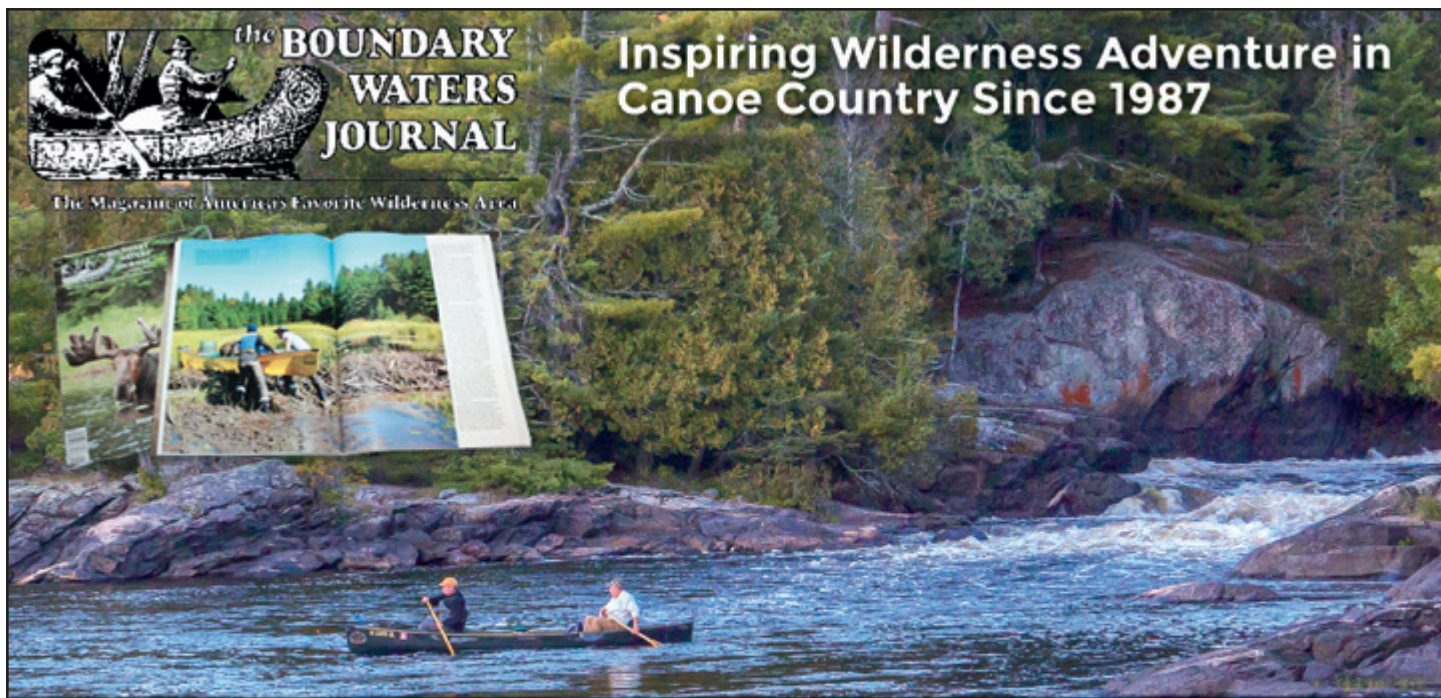
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INTERNATIONAL WOLF



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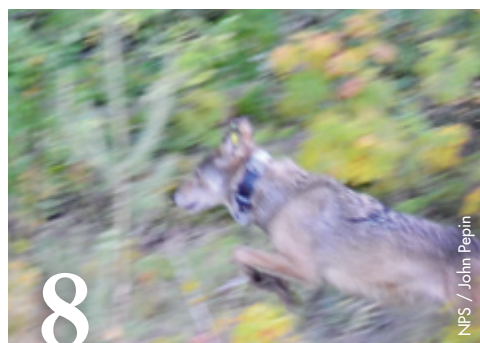
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Lobo: A Wolf's Story

America's 19th century ranchers saw wolves as outlaws that needed to be removed. One of the most notorious was named Lobo by his frustrated pursuers, and as tales of his elusiveness spread, the bounty on Lobo's head grew larger. This is the story of one wolf doing his best to survive with all the odds against him.

By Debra Mitts-Smith



NPS / John Pepin

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New Wolves Head to Isle Royale

Scientists have studied the interactions of wolves and moose on Michigan's Isle Royale for about 60 years. Now, after determining and analyzing the possible outcomes, The National Park Service is about to introduce new wolves—and new bloodlines—into the mix there. This is the background on a carefully considered intervention.

By Tracy O'Connell



International Wolf Center

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Immersive New Exhibit Planned for International Wolf Center in Ely

International Wolf Center lovers, take note! By Memorial Day, a brand new experience will await you there. "Wolves and Humans," having served since 1993, will be replaced by a dynamic new exhibit that tells the story of wolves today. Reflecting a modern understanding of wolves and the environment, it will delight and inform guests in a whole new way.

By Chad Richardson



Kelly Godfrey

On the Cover

Adobe Stock/hkuchera

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INTERNATIONAL WOLF

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From the Executive Director

Wolves of the Sea

This past summer, I felt heartbroken to read emails from advocacy organizations about a female orca in Puget Sound that had lost her newborn calf but was unwilling to let go of its body for nearly two weeks. From what was being conveyed, this was the first calf born to the southern resident orca population since 2015.

Orca whales are sometimes referred to as the “wolves of the sea” because they hunt in groups, communicate with each other and are highly social—much like wolves. Orca whales can be found around the world, but a distinct population segment in Puget Sound, known as southern resident orcas, have been listed under the Endangered Species Act since 2006. Only 70-80 individuals remain.



Rob Schultz

Wanting to learn more about what was happening to the orcas, I decided there was no better way to understand the situation than to go there and see it for myself. Two weeks later, my spouse and I boarded a boat for the San Juan Islands and found ourselves off Orcas Island, watching them first-hand.

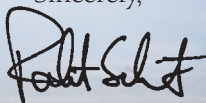
It was a powerful experience to be there. We learned a lot from the staff on our boat about the challenges orcas are facing due to pollution, shrinking salmon populations and the effects of boat traffic and noise. We observed the security patrols that the Washington Department of Fish and Wildlife have in place to protect the orcas. We could see the important role that orca whales play in local cultures and economy. The more I learned about what the State of Washington was doing to protect the orcas, the more thankful I was that I hadn't based my opinion solely on the emails I had received.

As our society continues to grapple with “fake news” and the blurring of reality, it's important to look beyond the surface of the messages we see online to better understand complex issues that are affecting our environment. The International Wolf Center works hard to deliver our members and supporters the facts about wolves, so that you can form your own opinions on relevant issues.

My trip to the West Coast confirmed for me the value of unfiltered, first-hand observation and the importance of investigating for oneself. It also underscored the importance of our role in educating people across the world who are unable to experience wolves in the wild.

Thank you for trusting us and for trusting this magazine. ■

Sincerely,



Rob Schultz
Executive Director

INTERNATIONAL WOLF CENTER

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Lobo

A Wolf's Story

Wolves have long been a part of human storytelling. From the devious wolves of Aesop to the deadly wolves of Perrault and the Brothers Grimm, Western European storytellers have used the wolf to represent myriad aspects of human behavior, and novelists have populated their literary landscapes with wolves to denote the wild or the supernatural.

By DEBRA MITTS-SMITH

By the late 19th and early 20th centuries, people—with the aid of technology—were winning their battle against nature. Wolves, once a threat to humans, were extinct in many former habitats, and different, more nuanced representations of nature and the wolf began to appear. Wolves became the subjects of scientific studies, books, photographs, websites, blogs, videos and documentaries. Some of these animals became celebrities—wolves that for a variety of reasons such as hunting prowess, visibility in Yellowstone, social struggles or dramatic deaths, simply captured the public's imagination. Yet they were not the first wolves to gain notoriety. “Outlaw” wolves were once a widespread focus of popular attention.

During the late 19th century, as people moved west across North America claiming the land for cattle and sheep ranches, wilderness disappeared, and big game animals grew scarce. Wolves and other large predators that had relied on elk, moose and bison were forced to turn to livestock as a food source. As that occurred, particular wolves and wolf packs gained reputations as cattle- and sheep-killers. In the eyes of shepherds and cattlemen, these wolves were outlaws that endangered families, property and livelihoods. In the opinions of these folks, the wolves needed to be removed. Bounties were offered, and hunters who trapped and killed outlaw wolves were rewarded for their efforts.

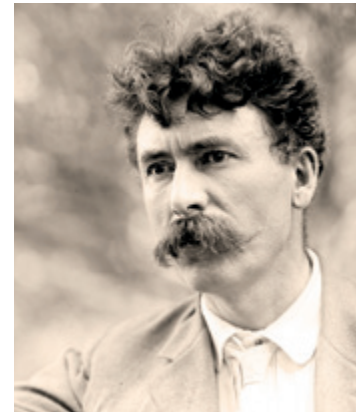
One of the most famous of these outlaw wolves was called Lobo.

During the early 1890s, Lobo's pack roamed the Currampaw plains near Clayton, New Mexico. Rich in pasture

lands, mesas and water, it was ideal country for cattle and sheep ranching. Lobo's skill as a leader, along with his uncanny ability to outmaneuver even the best human hunters and trappers seeking to rid the region of wolves, brought him considerable notoriety. After several well-known and skilled wolfers failed to kill Lobo, a \$1,000 bounty (\$27,700 value in 2018) was placed on the wolf's head.

Like the wolves in stories and fables, Lobo and his pack were described as large, fierce and cunning. Ranch hands recounted stories about wolves in the region—and like fishermen telling tales, they augmented Lobo's size, abilities and intelligence in every retelling. Lobo emerged from these stories as a skilled, loyal and stern leader that taught his pack how to select and kill the best cattle and how to avoid carcasses tainted with poison. He allegedly showed his disdain for the wolfers who tried to snare him by defecating on their traps and spitting out pieces of poisoned meat. A French-Canadian trapper declared that Lobo was no ordinary wolf, but instead was a *loup-garou*, or werewolf, that could be killed only through a mixture of poison and black magic charms.

As Lobo continued to evade the human hunters' arsenal of dogs, poison, traps and guns, his notoriety grew.



Ernest Thompson Seton

Bain News Service

It was claimed that Lobo wore a golden collar to denote his kingly status and that he had an inverted cross on his body as a sign of his pact with the devil.

Louis Fitz-Randolph, a rancher near Clayton, in the fall of 1893 invited the wildlife artist and experienced wolfer Ernest Thompson Seton to try his hand at capturing Lobo. Seton spent the next four months learning about his adversary by studying his tracks and the pack's behavior around traps and kills. Rumor had it that Lobo had learned to be suspicious of livestock carcasses that he or his pack had not killed, as they often contained poison or concealed traps. By examining the tracks left by Lobo's pack, Seton discovered Lobo's weakness. Tracks revealed that Lobo's mate, a she-wolf called Blanca, lacked his caution when approaching a carcass. Seton hit upon a new way to capture the outlaw; he would use Lobo's loyalty to Blanca to lure him.

...like fishermen telling tales,
they augmented Lobo's size,
abilities and intelligence in every retelling.



National Scouting Museum: Seton Memorial Library



Ernest Thompson Seton

With experienced hands, Seton baited a series of foothold traps with a heifer's carcass. Seton's plan worked, and Blanca was caught. To protect her pelt and to keep it as free as possible of human scent, Seton and his companion lassoed the trapped Blanca, strangling her by directing their horses to walk in opposite directions. Seton had struck the first blow against Lobo.

Seton then set his traps for Lobo, scenting them by dragging Blanca's lifeless body over them. Then he removed one of her paws and made tracks around the traps. And then he waited.

Two days later, as Seton checked his traps, he found Lobo in the jaws of four traps. He tried to stand and run, but the traps held. Lobo, "exhausted with hunger and struggling and loss of blood," fell to the ground. Seton took the opportunity to photograph his prize caught in the traps. He later claimed that these photos were his most prized possessions.

With Lobo trapped and lassoed, Seton and his companion prepared to kill the wolf—but before they could finish the deed, Seton called a halt to it. Instead, he brought Lobo back to the ranch. Having secured him, Seton for the first

time examined the wolf closely, "...and at once proved how unreliable is vulgar report when a living hero or tyrant is concerned. He had not a collar of gold about his neck nor was there on his shoulders an inverted cross to denote that he had leagued himself with Satan."

Lobo was just a wolf trying to survive in a changing landscape.

Seton placed water and meat by the outlaw. The next day, when Seton went

to check on him, Lobo was dead. Seton assumed that Lobo, having been robbed of his strength, his freedom and his partner, died of a broken heart. He placed Lobo's body next to Blanca's.

Though Seton's earlier artwork reflected his interest in wolves, his encounter with Lobo marked a turning point in his life. Something had changed. He began to question the destruction of nature and extermination of wild animals. His journal entry on Lobo's capture and death ends with one enigmatic word: "Why?"

After Lobo, Seton stopped hunting wolves and began incorporating a wolf track into his signature as a way to represent his "kinship" with wolves.

Seton's short story, "The King of the Currumpaw: A Wolf Story," was first published in *Scribner's* magazine in November 1894, bringing fame to both Seton and Lobo. It is a tale of one hunter in pursuit of another. (Seton claimed to have

written the true story of how he captured Lobo, but he admitted that some of the exploits and behaviors attributed to the King of the Currumpaw were based on ranch hands' stories about other wolves in the area.) In the wake of the story's publication, Seton began a lecture tour in which he recounted the story of Lobo and shared with a wide, urban audience his insights on the loss of wilderness. These talks played an important role in the burgeoning conservation and preservation movements of the late 19th and early 20th centuries.

Seton said, "Ever since Lobo, my sincerest wish has been to impress upon people that each of our native wild creatures is in itself a precious heritage that we have no right to destroy or put beyond the reach of our children." Lobo, the first celebrity wolf, has been credited with helping to change people's views of wolves and other wild animals.

Although Seton's animal stories, including the story of Lobo, were criticized for their anthropomorphic depictions, in literary terms they mark the beginning of new type of animal story that blends human perspectives and emotions with facts about animals. As a wolf story, Seton's tale of Lobo is one of the earliest sympathetic depictions of a wolf. The author individualizes Lobo, endowing him with feelings and

behaviors admired by humans. And even though Lobo shares some characteristics of fairytale wolves (large, voracious and deadly) Lobo is not the enemy—humans are.

The story of Lobo remains in print. Seton included it in *Wild Animals I have Known* (1903), a collection of



Ernest Thompson Seton



animal stories for children. It has also been retold and adapted for film in Disney's 1962 "The Legend of Lobo" and in a 2007 *Nature* documentary, "Lobo: The Wolf That Changed America." In 2016, William Gill retold and illustrated it as a picture book titled *The Wolves of Currumpaw*.

Continued interest in Lobo suggests that this story still has a role to play—that it still resonates—in part because, while Lobo may have died more than 100 years ago, the battle between ranchers and wolves is still a part of our human story. ■

Additional Reading

- 🐾 Andersen, H. A. *The Chief: Ernest Thompson Seton and the Changing West*. College Station: Texas A&M University Press, 1986.
- 🐾 Samson, J. G., ed. *The Worlds of Ernest Thompson Seton*. NY: Alfred A. Knopf, 1976.
- 🐾 Seton, E. T. *Wild Animals I Have Known*. Reprint. Chapel Hill, NC: Yesterday's Classic, 1903; 2007.
- 🐾 Witt, D. L. *Ernest Thompson Seton: The Life and Legacy of an Artist and Conservationist*. Layton, UT: Gibbs Smith Press, 2010.

Debra Mitts-Smith is a School of Information Sciences faculty member at the University of Illinois. Her research and teaching focus is on visual culture, children's literature, history of the book, and storytelling. Her book, *Picturing the Wolf in Children's Literature*, was published by Routledge in 2010.

Lobo's skill as a leader, along with his uncanny ability to outmaneuver even the best human hunters and trappers, brought him considerable notoriety.



New Wolves Head to Isle Royale

Intervention Begins as
60-Year Study Continues

By TRACY O'CONNELL

AdobeStock/illuminatePhoto



Rolf Peterson



David Newland

The reintroduction of 20 to 30 wolves to Michigan's Isle Royale over the next three years has begun.

The first four wolves were captured at the end of September on tribal lands in northern Minnesota. A 4-year-old female, a 5-year-old male, and two additional females had GPS tracking collars attached before they were released in the park, where they have found the moose carcasses left there for them.

A third wolf died in the holding process and is being necropsied for cause of death. In response, park service officials adjusted their procedures, allowing animals more time to recover from sedation before being taken to a holding facility, and altering the sedative dosage. Other wolves were captured and released back on the mainland due to health, age or gender-balance requirements. Captures were made jointly by the Grand Portage Band of Lake Superior Chippewa and USDA Wildlife Services, according to media accounts.

Background

Four reintroduction plans were proposed in a 2016 environmental impact statement released by the Park Service in response to the concern that an increasing moose population was threatening the island's flora and all the animals that depend on it. They ranged from no action at all, to an "as-needed" infusion of wolves, to a short- and long-term infusion of 20 to 30 wolves. In the final decision, which followed hearings and other opportunities to weigh alternatives, a three-year timeline was chosen, during which wolves will be captured in Minnesota, Michigan and possibly Ontario, and translocated to the island, with more following in the event of a setback (such as a disease outbreak) for up to two additional years.

The animals are being caught by foot-hold traps or possibly darted from helicopters to maximize genetic variation, sedated and transported by boat or air to their new home, according to Park Service personnel. The costs may

total \$660,000 for the three-year effort. Including follow-up monitoring, the total could go to \$2 million.

Isle Royale: Remote, Unique

The island lies 55 miles from Michigan's Upper Peninsula in Lake Superior, the largest of the five Great Lakes that lie between Canada and the United States. It is just 15 miles from both Minnesota and Ontario. Isle Royale, together with 450 smaller, surrounding islands and the adjacent waters, is the least visited national park in the contiguous United States. Yet it is the most revisited park, according to *The Greatest American Road Trip*, an Internet-based "tour" of 59 national parks produced in 2016 in honor of the 100th anniversary of the park system.

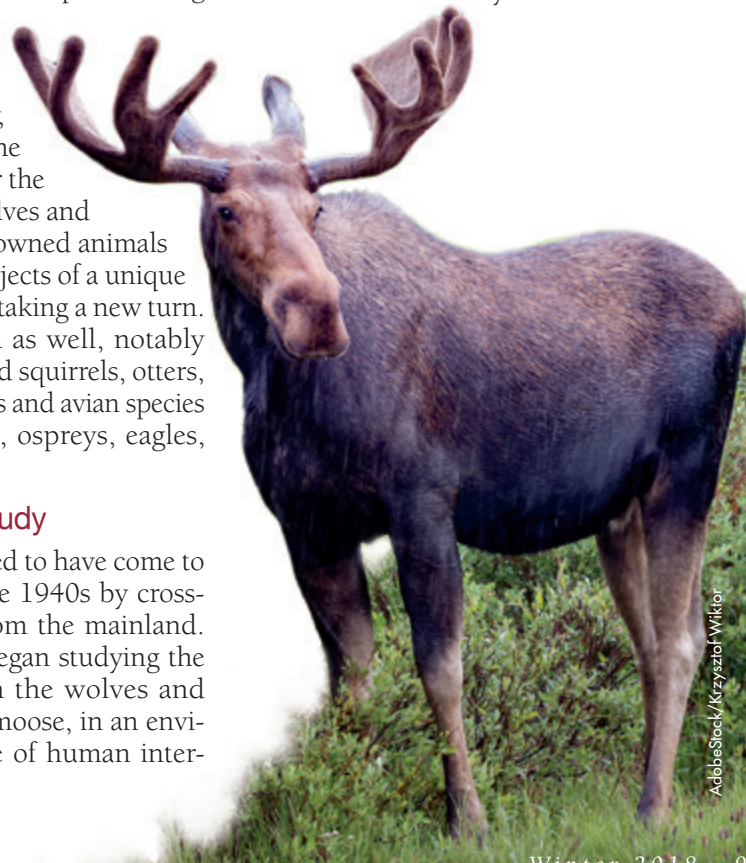
Isle Royale was formed a billion years ago by the world's largest known lava flow and sculpted by glaciers for millennia. Accessible only by boat or sea plane, it is 45 miles (72 km) long and 9 miles (14 km) across at its widest point, with only wilderness between Windigo and Rock Harbor, the two points from which visitors typically access the park. Hiking the length of the island, which takes up to six days, is a typical visitor activity, along with viewing the northern lights under the starriest of skies. Wolves and moose, the most renowned animals on the island, are subjects of a unique interplay that is now taking a new turn. Others are common as well, notably beavers, red foxes, red squirrels, otters, snakes, tortoises, frogs and avian species including songbirds, ospreys, eagles, ducks and loons.

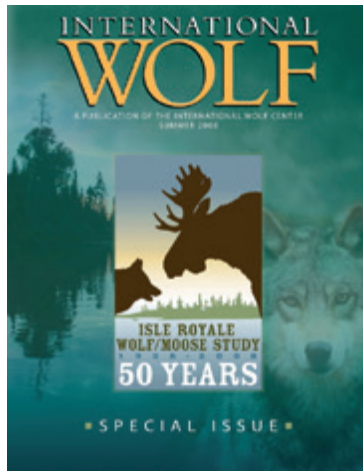
The Isle Royale Study

Wolves are believed to have come to Isle Royale in the late 1940s by crossing an ice bridge from the mainland. In 1958, scientists began studying the interaction between the wolves and their chief prey, the moose, in an environment mostly free of human inter-

vention. Wolf numbers once peaked at 50, but over time, the island wolf population averaged in the 20s before falling sharply in recent years. Moose numbers, meanwhile, peaked at 2,400 in 1995 and collapsed a year later when the most severe winter on record was followed by an unexpected outbreak of winter ticks. It dropped to just 385 in 2007. A decade later, as wolf numbers continued to decline, the moose population was reported to be about 1,600 individuals.

For 60 years, researchers have tracked the rise and fall of wolf and moose numbers in this closed, offshore setting, in what has become the world's longest continuous study of this type. Begun at a time when wolves were being eradicated throughout the nation and the world, the study has presented wolves in a positive light, revealing their role in maintaining equilibrium in the wolf moose system. The ongoing research has fostered a more favorable attitude toward the wolf, according to Dr. Rolf Peterson, wolf biologist and now-retired professor at Michigan Technological University, who has led the study since the 1970s.





The Summer 2008 issue of *International Wolf* was dedicated to the 50th anniversary of this research. Stories featured the early participants, from scientists on the ground to the pilots who flew researchers across the landscape for aerial population surveys. One might wonder, after 60 years, what could possibly remain to be discovered about wolf and moose interaction—but new questions and opportunities to learn continue to arise.

Peterson and his colleague Dr. John Vucetich maintain a website, isleroyale-wolf.org, which discusses their work. The website illustrates that in the 22 years



Dr. Rolf Peterson



Dr. John Vucetich

between 1959 and 1980, wolves had the greatest influence on moose abundance, while climate and forage abundance were similarly important. For the next two decades, following the crash of the unusually high wolf population in 1979, the annual

variation in winter severity replaced wolves as the greatest influence on moose population.

What explains this shift? Peterson and Vucetich note that after observing the interactions between wolves, moose and their forage for 20 years, “You might think you’d have a reasonably good idea about how those populations worked, especially after getting such a clear answer as we did about the

importance of wolves. But after watching for another 20 years, we got an entirely different answer.”

Overarching these issues for many decades was wolf inbreeding, the result of which was not initially clear to the scientists, because they had no way to observe the skeletal abnormalities that resulted until they studied the bodies of wolves that died on the island over the years. It was then revealed that one in three wolves suffered from a skeletal deformity called lumbosacral transitional vertebrae (LSTV), which in mainland populations affected only one animal in 100.

In the late 1990s a wolf that researchers dubbed 93 came to the island from Minnesota or Canada, bringing a new genetic line that offset, to some extent, what had been intense inbreeding. As a result, the wolf population increased despite declining moose numbers to support it. That single genetic infusion, however, did not entirely correct the inbreeding problem. He began mating with his own daughter in 2002, and within a decade of his arrival on the island, his genes were found in seven of the eight breeding wolves.

Intervention by the National Park Service wasn’t an easy decision.

With only two aged wolves remaining on the island and rapidly increasing numbers of moose destroying vegetation—in turn threatening the island’s ecology and the success of other wildlife—the choice was made to intervene. That decision, however, was announced only after a number of organizations and wolf biologists weighed in with divergent views on how to proceed.

As the wolf population began to drop, wildlife managers followed the Park Service’s “Let’s wait and see what happens” principle of letting nature progress unimpeded. Biologists in that camp considered the opportunity to see how the saga played out as more valuable, in terms of research results, than rescuing the dying population. It was suggested that additional wolves might come to the island of their own accord in a winter cold enough to freeze the water between the island and the main-

With only two aged wolves remaining on the island and rapidly increasing numbers of moose destroying vegetation...the choice was made to intervene.

land—an increasingly unlikely outcome as warmer winters are being recorded.

A differing view, called genetic rescue, involved bringing diverse bloodlines in the form of new wolves that would mate with the existing population. But with wolves on the island aging, that became a questionable option, and the more aggressive introduction of a new population was seen as the only choice to offset burgeoning moose numbers. The increase in moose, it was feared, would over-stress the island vegetation—and the wildlife that relied on it— before coming into better balance. Spreading the introduction of new wolves over 20 years was also discussed, but rejected in favor of a speeded-up timeframe.

The ongoing story of Isle Royale comprises many issues, some of which remain unresolved. For instance, when is it appropriate to intervene in the natural progression of things, and for what purpose? Variables are still being discovered that may potentially affect the outcome (for example, the introduction of Wolf 93, a new breeder that dominated the gene pool, unexpectedly increased inbreeding rather than adding genetic diversity). Could actions taken now have unintended consequences later for wolves and the other species that share Isle Royale? Stay tuned to find out. This very exciting program is entering a new chapter. ■

For More Information

🐾 Mech, L. D. 1966. *The Wolves of Isle Royale*. National Parks Fauna Series No. 7. U.S. Government Printing Office. 210 pp. (Reprinted 2002. University of the Pacific, Honolulu Hawaii).

🐾 Peterson, R. O. 1977. *Wolf Ecology and Prey Relationships on Isle Royale*. National Park Service Scientific Monograph Series No. 11. 210 pp.

Tracy O'Connell is professor emeritus at the University of Wisconsin-River Falls in marketing communications, and serves on the Center's magazine and communications committees.



A USFWS seaplane is used to transport wolves to Isle Royale.



NPS staff carried a crated wolf to the release site on the island.



A female wolf emerged from her crate to her new wild home.



GPS tracking data shows movements of the first female wolf relocated to Isle Royale. She visited a provisioning site within two hours of release and stayed through the following morning, then moved northeastward.



Immersive New Exhibit Planned for International Wolf Center in Ely

Expected to open to the public
in May 2019

A dynamic, immersive exhibit is coming to the International Wolf Center to replace the celebrated “Wolves and Humans” exhibit that has been on display at the Center since it opened in 1993.

This new experience for International Wolf Center visitors is to be installed in May 2019, in time for the busy summer tourist season in Ely, Minnesota.

“This is a complex, creative undertaking, and we’re ready for the challenge,” Executive Director Rob Schultz said. “Staff members, board members, wolf biologists and volunteers have been meeting for months to review ideas with the team that will develop the exhibit. We can’t wait to share the powerful stories of today’s wolves!”

Since the original exhibit was built in 1985 for display in St. Paul at the Science Museum of Minnesota, the world has learned a lot more about wolves. Scientific methods are evolving, the



By CHAD RICHARDSON

climate is changing, research is expanding, and biologists now have a deeper understanding of wolves and wolf behavior than when the display was created.

"We want the new exhibit to accurately portray the importance of wolves in our ecosystem," Schultz said. "Our understanding of wolves has matured over 30-plus years, and our exhibits will reflect this advanced knowledge."

Funding and Development

The new exhibit will be funded largely by a \$1 million grant from the Legislative-Citizen Commission on Minnesota Resources (LCCMR). The funding was secured when Gov. Mark Dayton signed the budget bill on May 30.

"Our local legislators and the Ely City Council all helped make this grant happen," said Nancy Jo Tubbs, chairperson of the Center's board of directors. "We sincerely thank Representative Rob Ecklund, Senator Tom Bakke and Mayor Chuck Novak, as well as Governor Mark Dayton and members of the Ely City Council for their support of this grant and the Center."

Split Rock Studios, based in Minnesota, has been selected to design and install the exhibit. The studio has worked on award-winning exhibits across the nation, including projects at Alaska's Kenai National Wildlife Refuge, the Nebraska State Fair, the National Great Lakes Museum, the Houston Zoo, the Minnesota Department of Natural Resources and numerous nature centers and parks.

Since the funding was secured, teams of International Wolf Center employees and board members, including the Center's founder and renowned wolf expert Dr. L. David Mech, have been meeting with Split Rock representatives. Among the entertaining and edu-

cational features of the new exhibit are a unique howling experience and an interactive, hands-on learning lab where visitors of all ages can play the role of citizen scientists. Visitors will even be able to sit in a mock-up airplane to see how researchers use aircraft to track wolves in the wild.

"From the moment visitors arrive, they will be immersed in an interactive journey of discovery," said Schultz.

The Original Exhibit

When the current exhibit was built, it was celebrated at the Science Museum of Minnesota. The 6,000-square-foot display won awards, set attendance records and eventually went on tour in 19 cities around the United States and Canada. Since it was built, more than 3.5 million people have been exposed to wolf behavior and wolf lore, viewed the animal artifacts and masks, explored the wolf-kill diorama and learned from the groundbreaking research tools.

Later, when the International Wolf Center opened in Ely in the 1993, the exhibit

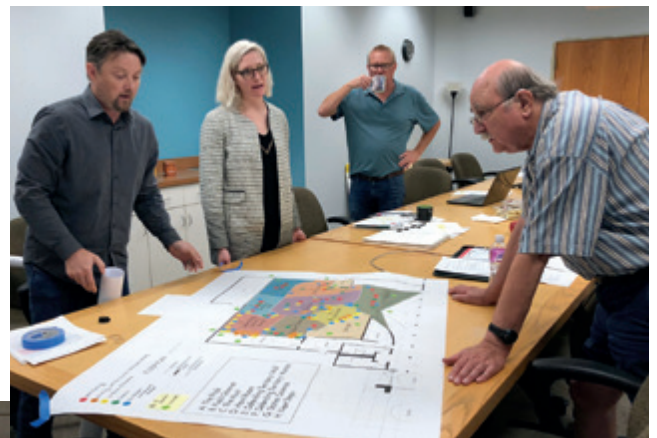
moved north to its next home. Much of the original taxidermy, still beautiful and realistic, will be incorporated into the new exhibit.

What Happens Next...

The "Wolves and Humans" exhibit will remain in place through 2018 and into 2019. The Center will remain open during construction of the new exhibit, which will begin in late April and is expected to conclude prior to Memorial Day.

Everyone at the International Wolf Center is excited to share more details with you as they become available. We promise to update you all as the exhibit takes shape! ■

Chad Richardson is the International Wolf Center's communications director.



International Wolf Center



International Wolf Center founder and renowned wolf expert Dr. L. David Mech reviews the proposed exhibit layout with Split Rock representatives.

International Wolf Center

Tracking the Pack

A Leadership Change Months in the Making

By Lori Schmidt

If you follow the dynamics of the International Wolf Center Exhibit Pack, you're aware that we transitioned 10-year-old Aidan into retirement after a winter of testing for rank order by younger pack members. This decision was months in the making; there was no single event that caused the action.

To understand the dynamics of the exhibit pack, one needs to remember that our pack is not a natural one like those in the wild. Wild packs are primarily families—usually a set of parents and their offspring. Our pack is artificial in the sense that it is made up of non-breeding wolves, at least some of which are unrelated. This type of pack is still valuable for displaying and studying interactions among individual wolves.

Last winter, a series of interactions affected Aidan's confidence, resulting in a pack that started to form leadership independent of Aidan. Axel and Grayson began testing all pack members for rank as they reached maturity between 18 and 24 months. Testing for status is a process we observe with all young wolves. Axel, born in 2016 and Boltz, born in 2012, were the instigators of most of the dominance behavior that led to Aidan's loss of status as pack leader.

Rank order is inherent in wolves. Some of the first behaviors we witness in young pups involve posturing for rank. Pups display high tails, standing over littermates even before they can walk. With strong instincts instigating this behavior, pack leadership and



Awen Briem

Rank order dominance is inherent in pups; they often display tail postures before they have gained the skills to walk.

rank drive most interactions within the social group, and when a leader shows lack of confidence, the pack pushes harder to test and replace the leader. (In a natural pack, this would probably take place only when a parent begins aging, an opposite-sex step-parent is present and a maturing pack member of the same sex as the aging parent challenges its parent.)

Many people contacted me to ask why the transition did not happen earlier, when the tension began. The reason



Wolf Care Staff

By spring 2018, Aidan's lack of confidence in the pack was resulting in a defensive threat display towards other pack members.



Member Profile

is that Aidan needed time to accept a lower-ranking position. Our experience has revealed that, if they are retired while still showing leadership, pack leaders will do what they can to get back to the pack, including fence biting, digging and testing fences. Aidan needed to be ready to let go of leadership—and by late July, our behavioral assessments determined that the time was right. When he came into retirement, he was calm; some staff interpreted it as “relieved.” His calmness was necessary to re-establish and affirm social relationships with former Exhibit Pack members Luna and Grizzer, also in retirement.

Captive wolf management is a process modified to fit each wolf's unique personality and circumstance. It was staff's ability to apply the right process that led Aidan to assume leadership in 2011 as a 3-year-old male, and that same ability will help the Exhibit Pack form new leadership in the upcoming year.

Consider subscribing to the Wolf Care Webinar series for a monthly update on pack dynamics, featuring a live video feed and staff availability to field questions. To subscribe, go to www.wolf.org/programs/webinars. ■

Aidan's calm attitude as he transitioned into retirement resulted in a nose-to-nose greeting from Grizzer.

Wolf Care Staff

A Lifelong Devotion Creates a Notable Volunteer

By Maddie McHugh

There are few people who can claim they have personally nurtured every current member of the Exhibit Pack at the International Wolf Center. Andi Nelson, longtime member and well-versed Center volunteer, is one of those rare people.

Andi enjoys all kinds of wildlife—especially canids. She is particularly fascinated by predator-prey relationships and the roles animals play in balancing the ecosystem of which they are a part. Her love of animals inspired Andi to become a veterinary technician, but she did not expect that a writing assignment for her academic degree would lead her to the International Wolf Center and fuel a real passion for wolves.

Her task was to write about a controversial topic. Andi chose “Hybrid Wolves as Pets,” and her research turned into a lifelong devotion to learning about wolves.

Andi contacted Wolf Curator Lori Schmidt for the project and traveled to Ely in 1995 to see the Center's first permanent Exhibit Pack. Mackenzie, the pack's dominant female, locked eyes with Andi and, as Andi described it, “looked right through me,” awakening a curiosity that kept her coming back for more.

Since then, Andi has become one of the Center's most active volunteers. She participates in Working for Wolves Day, the International Wolf Symposium and Minnesota State Fair events; she also helps plan the annual Howl at the Moon Gala. She has served multiple times as



a pup nanny and plays a crucial role in helping socialize new pups.

Lori Schmidt says about Andi's contributions, “Her extensive training and knowledge are real assets, especially when we are dealing with wolf health issues. My appreciation for Andi was greatest when we took Luna, a 1-month-old pup, to the University of Minnesota Veterinary Medical Center. During that stressful time, Andi helped us navigate the facility, find the right people and understand technical details.”

Andi watches wolves for a slightly different reason than some people do. She likes to observe the *differences* between wolves and dogs. She says that wolves seem more mature and complex than man's best friend, pointing to the complex behavioral cues and relationships exhibited within a pack as evidence of the wolves' evolutionary advantage.

Andi believes that it takes a long-term commitment to education to change a person's mind on a controversial animal like the wolf. This is why she dedicates so much time to the International Wolf Center. And the Center recognizes that volunteers like Andi help make its work... *teaching the world about wolves*... a success. ■

Maddie McHugh is the executive assistant to the executive director at the International Wolf Center.

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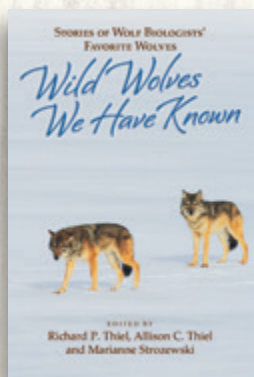
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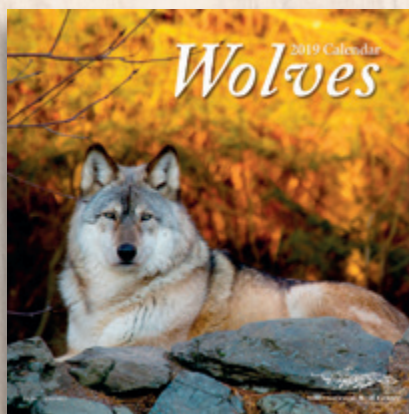
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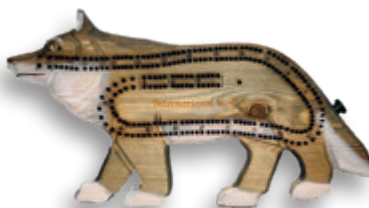
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Thank You!



Canine Communication

Humans communicate in lots of different languages, both spoken and written, in order to exchange information and express feelings. We can use words to communicate with people—and even with some animals—but animals have other ways of communicating with each other. By studying wolves for many years, we have learned a lot about how they communicate with members of their own species. Wolves can use *vocalizations*, or sounds, to communicate feelings or situations, but they also position their body parts in ways that provide information to other wolves. This is called postural communication.

Vocalization

In a way, wolves have their own language. They use specific vocalizations in different situations to communicate with other wolves, and with other species, like humans—for example, when they bark at humans approaching their den of pups.

Lone Howl

This “language” is made of sounds rather than words—mostly howling and growling.

Three common types of howls are **chorus** howls, **lone** howls and **bark** howls.

Chorus howls take place when multiple wolves in a pack howl together. This

Wolf Care Staff

Chorus Howl

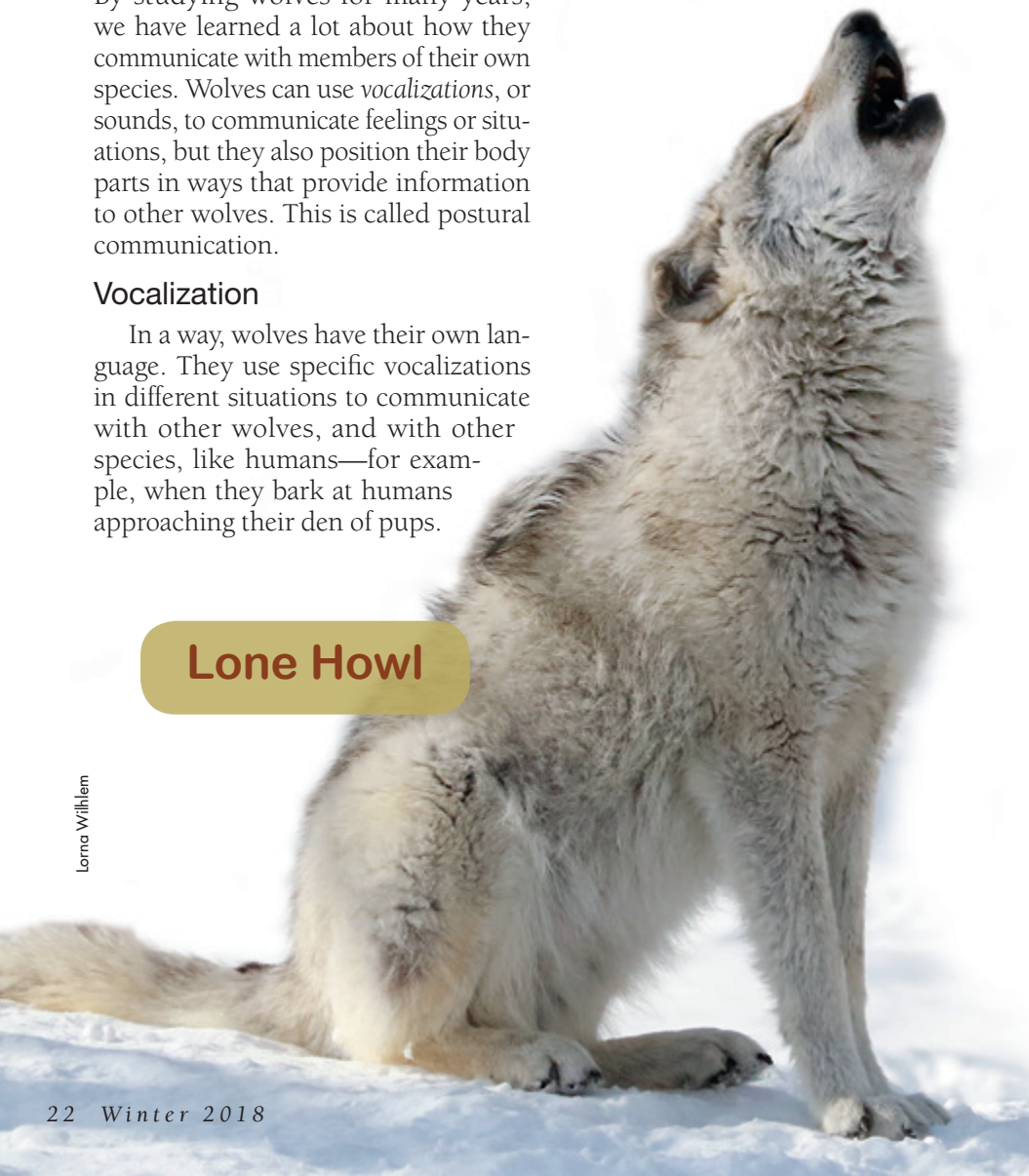
kind of howling is used for socializing with other wolves (it’s like a party!) and also for locating distant pack members. Wolves also use chorus howls to ask for the location of a pack member that has been successful getting food for the pack to eat.

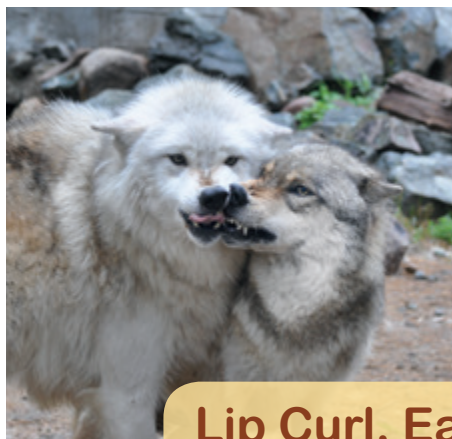
Another purpose for chorus howling is that it can *deter*, or keep away, other wolf packs from the territory. The wolves in a pack can change their pitches while chorus howling. It can make their pack seem larger and convince neighboring packs that there are too many wolves to compete with for more territory. (It’s like a warning). And sometimes, it seems to be just for fun. The wolves at the International Wolf Center sometimes howl at sirens—and at other times, for no reason their keepers can detect.

Next, **lone** howls refer to a single wolf howling alone. They are used to find other wolves or packs in the area for several reasons—for instance, finding a mate or locating the pack if a wolf becomes separated.

Finally, **bark** howls are described as alternating between howls and barks, and they are typically used when a wolf is feeling threatened. The bark howl is a type of “final warning” to whatever is threatening the wolf. Wolves can use growling for a similar purpose—either to threaten, or to give a warning to whatever threatens them. Growling can be used to tell another wolf not to do something. Growling and other vocal cues are used during dominance-play behavior or when a wolf is claiming food.

Lorna Willem





Wolf Care Staff

Lip Curl, Ears

Other canines make sounds similar to the ones wolves make. They also use other noises that are specific to their species. For instance, coyotes howl, too, but their howling tends to be less social. It is used to communicate with mates or other coyotes, and possibly to prevent other canines from entering their territory. The coyote howl is typically higher pitched than that of wolves, and usually contains a series of yips between long howls.

Red foxes can make other noises—one example being their scream, which helps them find a mate during the mating season. Gray foxes have a raspy bark that they use to warn something threatening them, or to tell their pups to hide from a potential threat.

All canines use vocalizations unique to their own species, and a few that are similar to other species, in order to communicate with each other and possibly with other species, as well.

Postural and Facial Communication

Wolves and other canines can also use physical expressions to communicate with each other. One such way of communicating is through facial expressions—examples being lip curls and ear positioning. Wolves use **lip curls** to tell each other not to do something or to provide a warning. The animals curl their lips in situations like dominance-play behavior, or when they are claiming food or a cache (hidden food).

Ear placement also has meaning for wolves. Researchers have studied ear positions enough to get a basic idea of a canine's mood or intentions by looking at the ears. **Ears** that are tipped back are typically a sign of discomfort or submission while ears tipped forward are a good indicator that some-

thing has caught the wolf's attention and interest. The "ears forward" wolf is alert and serious.

Researchers have also been able to recognize communication patterns in a wolf's **tail** position. A tail held high is a good indicator of confidence—it is typical in a dominant male or female, and observed in lower-ranking members occasionally. If the tail is just hanging, relaxed, then the wolf is probably relaxed, while a wagging tail is a good indicator of the wolf with excess energy that may begin to exhibit play or social behaviors. If the tail is positioned down next to the legs, but not tucked, then the wolf is starting to feel uncomfortable or losing confidence. If the tail is completely tucked between the legs, the wolf is extremely uncomfortable, lacking confidence or being submissive, depending on the context.

These physical behaviors are strong indicators of a wolf's mood or condition. They can be seen throughout a wolf's life in many different social or survival situations. ■

Word Search

Wolf Communication

Lip	Pack
Curl	Growl
Pitch	Lone
Ears	Bark
Chorus	Whine
Howl	Tail

W	Y	X	O	N	O	S	R	A	Y	B	J	H	E	U
Z	D	M	H	G	V	B	U	F	V	Z	L	L	L	L
N	Y	C	D	C	E	B	J	W	H	O	W	L	O	G
N	X	T	H	N	P	I	T	C	H	V	O	K	F	Q
O	M	Z	Y	P	L	P	N	C	A	I	S	K	I	S
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In Many Lands, Wolves Compete, Flourish in Adversity

By Tracy O'Connell



INDIA

A malnourished, wild wolf found with a plastic container on its head was rescued when observers called the Nagpur Forest Department and waited with the animal for the rescue team to cut off the container, which had holes that apparently allowed the animal to breathe and drink water, but not to eat.

The Times of India and other media report that accountant and amateur photographer Tanay Panpalia, 26, from Nagpur, was visiting a lake at the Tadoba-Andhari Tiger Reserve with his friends when he saw a pack of 10 wolves. The men moved closer to take photos and discovered the unfortunate wolf's plight.

"The other wolves watched us from a distance," he said. "We were scared, as there were only three of us and 10 of them." The wolf was released unharmed.



Solent News & Photo / Tanay Panpalia



ITALY

While in some places, wolves are seen as the solution to an over-population of wild herbivores, some farmers here are complaining that too many red deer—so many that domestic cattle must compete for grazing land, and farmers must purchase hay to feed livestock—are attracting wolves to the area, which in turn are eating their cattle, and not the deer. It is believed there are around 14,000 red deer in the region, and farmers fear parasites and infections are spreading from the deer to the cattle.

The issue hits hard in the Dolomites, a mountain range in northeastern Italy that forms part of the Southern Alps, near the fashionable Cortina d'Ampezzo ski resort. London's *Telegraph* newspaper quotes an area farmer describing how "Deer numbers are increasing all the time. In one night, they can strip a meadow."

Abandoned mountain farms and the decline of traditional agriculture have allowed farmland to revert to woodlands that attract deer, the article states—and last winter's conditions worsened the situation for farmers, as deep snow in mountain passes pushed the deer into low-lying meadows where cattle graze. The article compares the deer population in Italy with that in Britain and Scotland, where similar overpopulations of herbivores exist.



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UKRAINE

Wolves are ranging outside the Chernobyl Exclusion Zone—the 2,672 square mile (6,920 square kilometer) area that has been sealed off due to safety concerns over radiation fallout since a 1986 nuclear accident in Pripyat, in northern Ukraine. The explosion is considered to have released 400 times more radioactive rays than the atomic bomb dropped on Hiroshima, Japan.

While hundreds of humans fell ill and many died from the accident, and some studies have reported harm to wildlife, as years passed, many plants and animals have thrived there due to lack of human interference, turning the area into a type of nature preserve. Michael Byrne, wildlife ecologist at the University of Missouri at Columbia and author of a recent study published in the *European Journal of Wildlife Research* and reported by *Livescience*, says gray wolf population density around Chernobyl is up to seven times higher than in surrounding reserves.

He noted that a young male wolf, one of 14 fitted with GPS collars, left the exclusion zone in 2015 and was

tracked for a couple of hundred miles (300 km) over 21 days, until its collar failed. While the other collared wolves were older and stayed near their home turf, scientists believe that some wolves are leaving the exclusion zone as their numbers rapidly increase within it.

The potential for the dispersing wolf to carry mutated genes and spread them to the larger population has been suggested by a rash of media in varying degrees of lurid imaginings, but Byrne says he has seen no reason to validate such concern. Bridgett von Holdt, an evolutionary biologist at Princeton University who studies wolf genetics, stated that “mutations are the bread and butter of diversity,” and can be beneficial as well as harmful. She explained that they are generally caused by recessive genes, so an offspring must have two copies to manifest the mutation, and the genes must be “functionally linked,” or relating to the same body part or process. Those factors reduce the likelihood of mutations outside the exclusion zone to almost nothing.



StockPhoto/Byshev



AFRICA

In the Ethiopian highlands, researchers from nations including Ethiopia, Norway, Germany, the United Kingdom and the United States studied interactions between African and Ethiopian wolves (neither of which is a true wolf) to determine the impact of their competition for food and territory on the survival of the endangered Ethiopian wolf. Published by the Royal Society, their work explored whether these two canids could successfully share space, or whether the African wolf, formerly called the golden jackal, would out-compete the larger but solitary and ecologically specialized Ethiopian wolf, of which only 500 remain.

Scat samples were studied to assess diet, which included, among other things, rodents, hunted and scavenged livestock, insects, hares, domestic poultry, wild birds and potatoes. Rodents

constitute a major portion of the diet for both canids; rodent density was therefore measured to determine habitat quality.

Researchers note that the African wolf is an opportunistic forager that regularly consumes livestock, and is thus relatively tolerant of habitat alteration by the humans who tend the prey animals. Thus they are more likely to inhabit a buffer zone surrounding the core wilderness that is the territory of the Ethiopian wolf, which feeds more heavily on rodents.

For this reason, both the core area of the wolves' territory and the buffer zone were studied and compared. Territorial dominance of their respective regions had a greater impact on the outcome of interactions between the canid groups than body size, according to researchers who note that where fighting did occur, there was evidence of biting. This caused them to be con-

cerned with disease transmission as well as hybridization where territory for both groups overlap.

The report continues, "Rodent abundances and species compositions did not differ significantly between the core area and the buffer zone, suggesting that, in the absence of African wolves, Ethiopian wolves could also exploit the buffer zone habitat, facilitating an increase in population." Researchers add, "Our study calls attention to the behavioral mechanisms that underlie competition" between Ethiopian and African wolves, suggesting that increasing human encroachment and habitat loss may offer a competitive advantage to the latter over the former. They conclude that Ethiopian wolf conservation efforts would benefit from monitoring both groups of wolves where their territories overlap. ■

Tracy O'Connell is a retired professor of marketing communications at the University of Wisconsin-River Falls and a member of the International Wolf Center magazine and communications committees.

Adobe Stock/Henk



Ethiopian Wolf

Adobe Stock/Wim



African Wolf

CANIDS of the World

An expansive field guide by José R. Castelló
subtitled: "Wolves, Wild Dogs, Foxes, Jackals,
Coyotes and Their Relatives"

Book Review by Nancy jo Tubbs

After watching a fox leap high and dive head-first into the bushes in pursuit of a chipmunk in my garden one morning, I used *Canids of the World* to look up the phrase "hunting pounce," along with the subspecies Northern Plains red fox and extensive info on *Vulpes fulva regalis*. Standard listings for each animal in the book are the physical description, other names, distribution by description and map, taxonomy, reproduction, behavior, habitat and conservation status (of "least concern" in the case of my fox).

An introduction to the book serves as an elementary course worthy of "Canid 101" status. The guide's readers will come away having learned about animals as well known as the wolf, and as rare as the critically endangered West, Central and North African Wild Dog. Conservationists will see population numbers and learn that at least a quarter of canids have threatened status.

The wolf relatives referred to in the subtitle include species from the most wild and exotic to our family dogs. *Canis lupus familiaris* is represented by the German Shepherd, the Pariah Dog or Basenji, and the New Guinea Singing Dog.

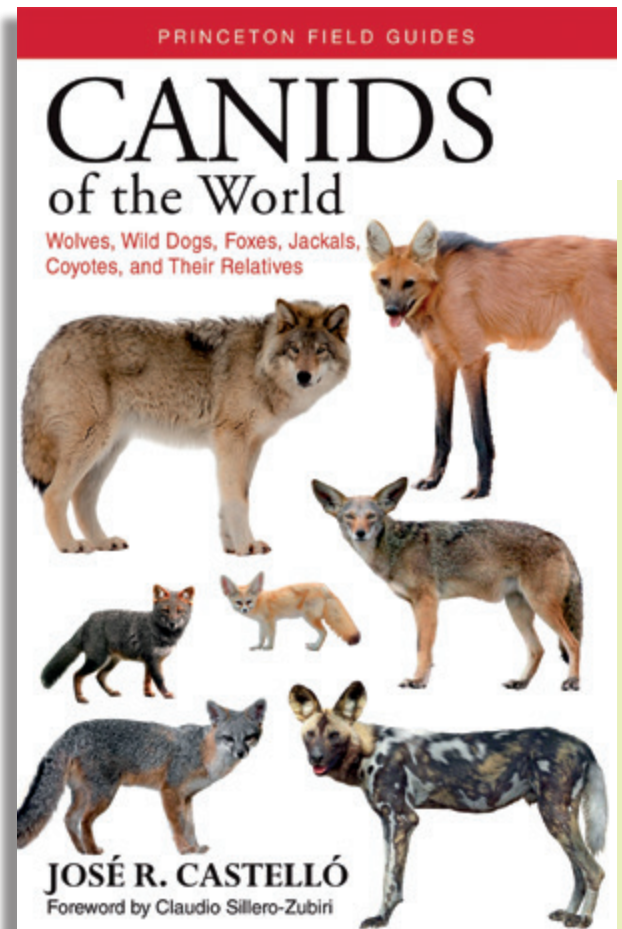
While the two former animals have worldwide distribution, the Singing Dog is known only in the upper mountains of Papua, New Guinea in Indonesia. Graphic descriptions pepper the field guide. For example, vocalizations of the New Guinea Singing Dog: "...the howl

is similar to the Wolf howl with overtones of whale song...Some vocalizations resemble birdcalls. They also whine, yelp, bark and scream." World travelers may want to look up the Southern Crab-Eating Fox while visiting in Argentina, the Dingo in Australia and the tiny Fennec Fox in the deserts of Egypt.

Roughly 600 photos in 150 color plates help readers identify all species. The simply curious may want to view the Chinese Raccoon Dog (that startlingly lives up to the raccoon part of its name) and the Arctic Wolf with its stark white pelage. Biologists may be particularly interested in photos comparing the skulls of 26 species.

The author cautions that the color and markings of species may vary among regions, and that controversial taxonomy continues to evolve as scientists disagree on classifications and further unravel the validity of subspecies.

Wildlife research will add to our knowledge with information gathered and updated in the future. Meanwhile, *CANIDS of the World* is a timely resource and a fascinating survey of wolves and their canine relatives. ■



*CANIDS of the World:
Wolves, Wild Dogs, Foxes,
Jackals, Coyotes, and
Their Relatives*

Author: José R. Castelló

Publisher: Princeton University Press

336 pages

Nancy jo Tubbs chairs the International Wolf Center board of directors and owns Camp Van Vac, a summer resort near Ely, Minnesota.

PERSONAL ENCOUNTER

A Hybrid's Tale

A young scientist meets his research subject in her den

John Benson, Ph.D.

Ed. Note: This encounter is adapted by Tracy O'Connell from A Hybrid's Tale, one of many in the book Wild Wolves We Have Known, edited by Richard Thiel et. al., which is available at shop.wolf.org.

We huddled about 300 meters from the suspected den site. I told Pete and Aaron to hang back—I would go on ahead to find the den. I moved quietly through the misty woods alone. Stopping 100 meters from the suspected den, I was standing along a swampy, flooded area between two ridges. Based on my previous tracking and the strength of the current radio signal, I assumed the den was just beyond the ridge in front of me. I took a moment to draw in a deep breath and relish the moment. The previous month of tracking had paid off, and the conditions were perfect. This was the moment of truth!

Our goal that chilly and damp May morning in 2009 was to visit the den of the Axe Lake pack to capture the 4-week-old pups. The pack included a wolf-coyote hybrid that was the breeding female (49-09, wearing a radio-collar) and an eastern coyote as the breeding male (49-116). Capturing and tagging wolf, coyote and hybrid pups with radio transmitters allowed us to track their survival throughout their first year. This information was critical to my Ph.D. research—investigating hybridization dynamics between wolves and coyotes in Ontario, Canada.



Wolves and coyotes do not interbreed in western North America. Only here in Ontario (gray wolves) and in North Carolina (red wolves) do wolves and coyotes hybridize, providing my advisor Brent Patterson and me with a unique research opportunity.

I stole across the ridge-top before reaching the edge of a bluff that dropped off to a muddy bank along a wide slough. I jumped off the ridge about ten feet to the bank below. The signal was roaring from a hole burrowed into the base of the ridge. No doubt about it—she was in that hole! Many large canid scats with thick beaver hair and small bone fragments were strewn about outside the den. My approach had gone well, but perhaps a little too well. Most females flush before I arrive. I had seen a few walk out of the den in front of me and look back briefly before disappearing into the bush. But I had never had one remain inside the den when I arrived—well, until today!

“C'mon in, guys. And bring the catchpole. I've got the female cornered in the den,” I said to Pete and Aaron through my walkie-talkie. I grinned wolfishly as I imagined the effect these words would have on their excitement level. Then I turned on my headlamp and stuck my head in the hole. The strong, distinct odor of a wild wolf hit me deep in the back of my sinuses. The tunnel angled upward where a big mound of sand blocked my view. Intermittently, however, I could hear pup noises coming



Justine Smith

John Benson

from inside the dark tunnel, including suckling, occasional squealing and grunting. Jackpot!

As long as 49-09 remained inside the den it would be next to impossible to get to the pups. Luckily, Pete and Aaron arrived with the catchpole. In their eyes I could see the same exultation I was feeling. We lived for days like this. I wriggled up through the entrance, pushing my body over the mound and down into the chamber. And there she was! 49-09 was staring directly at me from 5 feet away. Her big yellow eyes gleamed in the light of the headlamp and I saw a small, gray-brown pup squirming underneath her. I quickly pulled myself back over the mound and out of the hole. I looked at Pete and Aaron and blurted, “She's right there—and I saw at least one pup!” Their eyes widened.



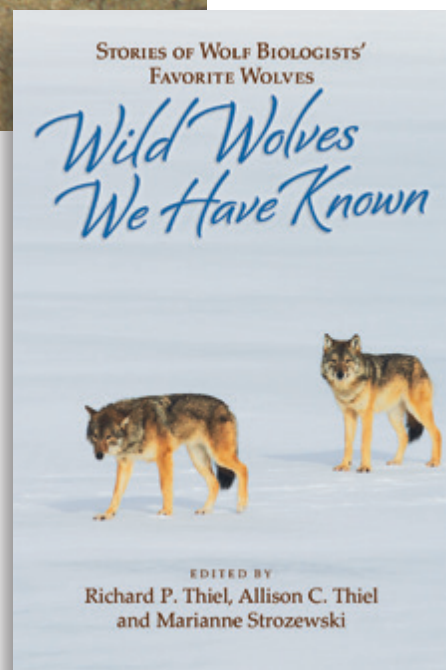
Peter Mahoney

John Benson

Going back in with the catchpole, it took a while to get the rubber-coated cable over her head. She snapped at it and then held it tightly with her powerful jaws, convincing me to keep my distance. A couple of times, I got the cable around her but she managed to pull out before I could tighten it. She was amazingly strong and very smart. I finally got control of her head and, using all the effort I could muster, managed to slowly drag her from the den. I emerged from the hole and onto the bank with 49-09—a magnificent, grayish-gold bundle of hybrid fury. I felt myself being dragged momentarily as she attempted to bolt before I could release the cable lock. The cable ring fired open and I flipped the noose off of her. She shot down the bank and was out of sight in several bounds. Pete and

I glanced at each other briefly as if to say “Wow!” while the rest of the crew (who had only just arrived) looked on in amazement. I dove back inside the den and found a pile of seven squirming, blue-eyed, hybrid wolf pups. My body relaxed slightly as I felt some adrenaline dissipate. Mission accomplished! ■

John Benson is assistant professor of vertebrate ecology in the School of Natural Resources at the University of Nebraska. At the time of this article, he was a doctoral student at Trent University in Ontario, Canada studying wolf-coyote hybridization dynamics. John conducts basic and applied ecological research across North America on species such as mountain lions, wolves, mule deer and white sharks.



Olympic Mountains— A Suitable Reintroduction Site?

Ed. Note: This piece is adapted from an article previously published in the The Daily World newspaper in Aberdeen, Washington.

By Louis Krauss

Aside from werewolves in the fictional “Twilight” series set near Forks, Washington, actual gray wolves haven’t inhabited Olympic National Park in northwest Washington state for almost a century. But a recent study found that the Olympic Mountains could be a suitable place to reintroduce the species.

The report, conducted by Oregon State University (OSU) ecology professor William Ripple and postdoctoral faculty Christopher Wolf, looked at hundreds of potential “rewilding” sites—areas around the world where threatened

large carnivores once lived and could be reintroduced.

Due to the large size of Olympic National Park (1,442 square miles or 3,690 square kilometers), its abundant prey species and the relatively slight human footprint in the surrounding area, it was highlighted as a site that deserves consideration for wolf reintroduction.

The study comes at a time when there is pressure from ranching and farming interests in eastern Washington, where most of the wolves live, to relocate some to the western part of the state. In the just-ended legislative session, a bill was passed requiring the Washington Department of Fish and Wildlife (WDFW) to do an environmental analysis of potential ways to translocate wolves into western Washington.

Gray wolves are not endangered globally, but they are in western Washington state and much of the western third of the United States. Currently at least

122 wolves inhabit the state, according to a March WDFW report.

The OSU report also mentions potential ecological benefits of adding wolves to the Olympics.

In a 2008 study, Ripple found that when wolves were hunted out of existence in the Olympics, it caused a cascade of effects. Because elk didn’t have as many predators, their numbers went up and increased stream erosion due to elk feeding more heavily on riverside plants that held soil intact.

“After wolves were killed off, the elk population, in the absence of their primary predator, were browsing on woody plants severely, to the point where young cottonwood and maple trees couldn’t grow taller,” explained Ripple.

The study also considered whether reintroducing the species would complete a predator “guild” in the Olympics. The idea is if you restore predators such as bears, cougars and wolves in the Olympics, they will more effectively control the population of prey like elk and deer, as each predator has a unique hunting style.

Some locals in the Olympics object to adding gray wolves. Tom Northup, a former WDFW shellfish biologist who lives on Lake Quinalt, is one.

Northup said he is opposed to reintroducing wolves to the area and believes the environment isn’t ideal for them, considering there are already a fair number



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of bears and cougars competing for food. “I understand the place of wolves, but to me, it seems like introducing them into an area that small, with prey species already under a lot of stress from existing predators, that it wouldn’t be fair to the wolves,” said Northup.

While wolves can cause negative impacts for hunters and ranchers, Ripple and Wolf said there are potential benefits, like increased tourism. In Yellowstone, reintroducing wolves in the 1990s generated additional revenue each year for the regional economy, simply due to people who come to view wolves, a University of Montana study found. And while wolves would likely reduce the elk population, Ripple said he could envision some hunters being in favor of adding the predators.

“I’ve heard comments from hunters in the Yellowstone region appreciating having wolves on the landscape because the elk are very wary,” he said. “It’s even a better challenge for them to understand the predator and prey before they

hunt the elk, which are more alert due to wolves.”

In February, state legislators passed a bill created by northeast Washington Rep. Joel Kretz, R-Wauconda, which requires WDFW to conduct an environmental analysis of potential ways to translocate wolves into western Washington.

Kretz’s intention is to speed up a section of the WDFW 2011 wolf conservation and management plan, which says the department may examine possible wolf relocation strategies if population recovery isn’t going well.

Along with many northeast Washington ranchers, Kretz is upset that wolves have been killing livestock. He worries that the analysis will take a long time and may not lead to action.

“I don’t have 30 years to wait; my people are going out of business here,” said Kretz. “I have a rancher that lost 72 head two years ago (due to wolves).”

Although he hopes to proceed with wolf translocation to the west to allevi-



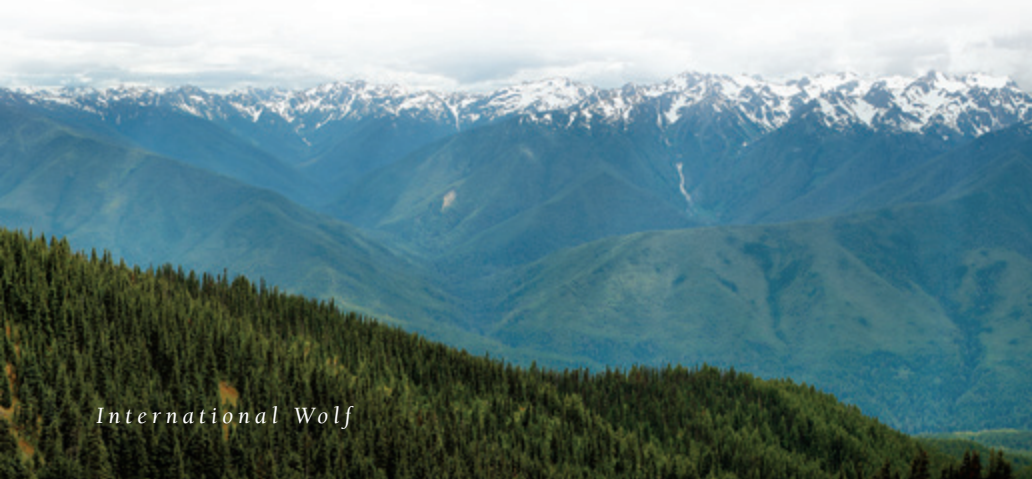
Adobe Stock/imatlon

ate problems for northeast ranchers, Kretz said he doesn’t think it’s a good idea to relocate wolves in general, and would have preferred to delist wolves as a threatened species in the state.

There is no certainty that the OSU report will be used by WDFW in an upcoming analysis, but the state’s 2011 wolf management plan did use Ripple’s earlier work on the ecological effects of extirpating wolves from the peninsula.

Ripple said a decision to relocate wolves wouldn’t be made unless a large “coalition of people in (groups like) the ranching community, environmental groups and government agencies wished to make a consensus.” ■

Louis Krauss is a reporter at The Daily World in Aberdeen, Washington. This article originally appeared in April 2018.



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Highlights from the 2018 International Wolf Symposium

Hundreds of people from 22 countries traveled to the beautiful Marriott Hotel in Minneapolis, Minnesota to hear fascinating stories about wolves of the world at the 2018 International Wolf Symposium, October 11-14.

"Wolves in a Changing World" featured the world's top wolf biologists in plenary sessions and more than 100 oral and poster presentations on topics including wolf-human interactions,



management and policy, emerging research and others.

Many of the world's next top wolf biologists—students and recent graduates—also presented and, along with all 450 attendees, were treated to world-class wolf education and inspiring plenaries.

Nobody in attendance will forget the personal perspective Wolf Restoration Project leader Doug Smith brought to his address on the value of nature and wildlands for their own sakes, not just their value in service to humans. Likewise they

WOLVES IN A CHANGING WORLD

OCTOBER 11-14, 2018
MINNEAPOLIS, MN USA

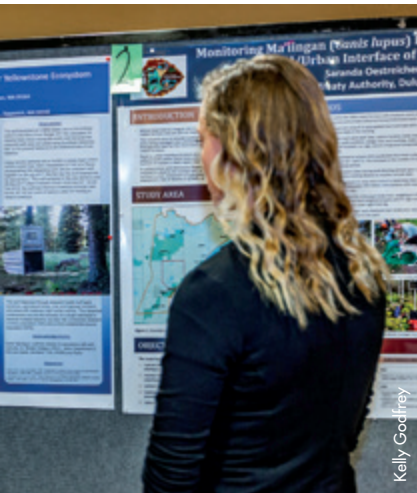
will remember Dr. Dave Mech's closing keynote on "Wolf Facts, Fallacies, Fables, and Fake News" that left us laughing, better informed and grateful for his 60 years of wolf research.

Plenary and concurrent sessions inspired rich conversations as participants gathered for the Saturday banquet with a "formal flannel" theme, Mike Phillips' presentation on "The Last Great Wolf Restoration—Colorado" and a chance to rock the night away with a DJ-hosted dance.

Center board members Judy Hunter and Debbie Hinchcliffe received standing ovations for their three years of work to coordinate the event. They



Kelly Godfrey



Top left: Doug Smith delivers a moving speech during a special presentation with Bob Landis.

Top right: Symposium co-chairs Debbie Hinchcliffe and Judy Hunter pose for a photo.

Middle row—Far left: Amaroq Weiss speaks during a plenary discussion on livestock depredation.

Middle: Steven Borrego from Washington State University in Olympia, Washington, discusses his poster with an attendee at the symposium.

Middle right: Dave Mech reminisces about the 25 summers he spent studying wolves on Ellesmere Island. Also pictured is Dean Cluff.

Below: Shannon Barber-Meyer presents during a plenary session on Isle Royale. Also pictured is John Vucetich.

shared their accolades with staff, other board members, presenters and dozens of International Wolf Center volunteers.

Important stories of wolf distribution, conservation, ecology, ecosystems around the world, powerfully enriched and inspired us all. Our interests expanded, our challenges shared and our networks enriched, we can carry powerful work on behalf of the wolf forward into the future. And speaking of the future, we look forward to hearing the next chapter of those important wolf stories in four more years—we hope to see you in 2022. ■



Kelly Godfrey



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