

INTERNATIONAL WOLF

A PUBLICATION OF THE INTERNATIONAL WOLF CENTER
FALL 2002

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The Electronic
Revolution, page 8

Grazing Permit
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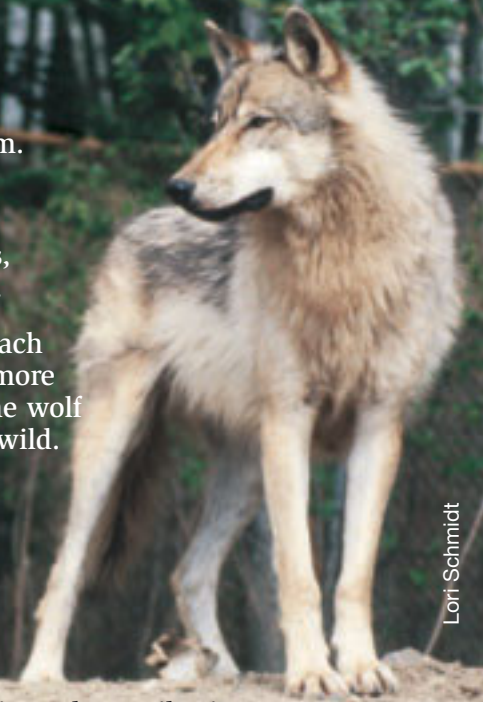
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INTERNATIONAL WOLF

THE QUARTERLY PUBLICATION OF THE INTERNATIONAL WOLF CENTER
VOLUME 12, NO. 3 FALL 2002

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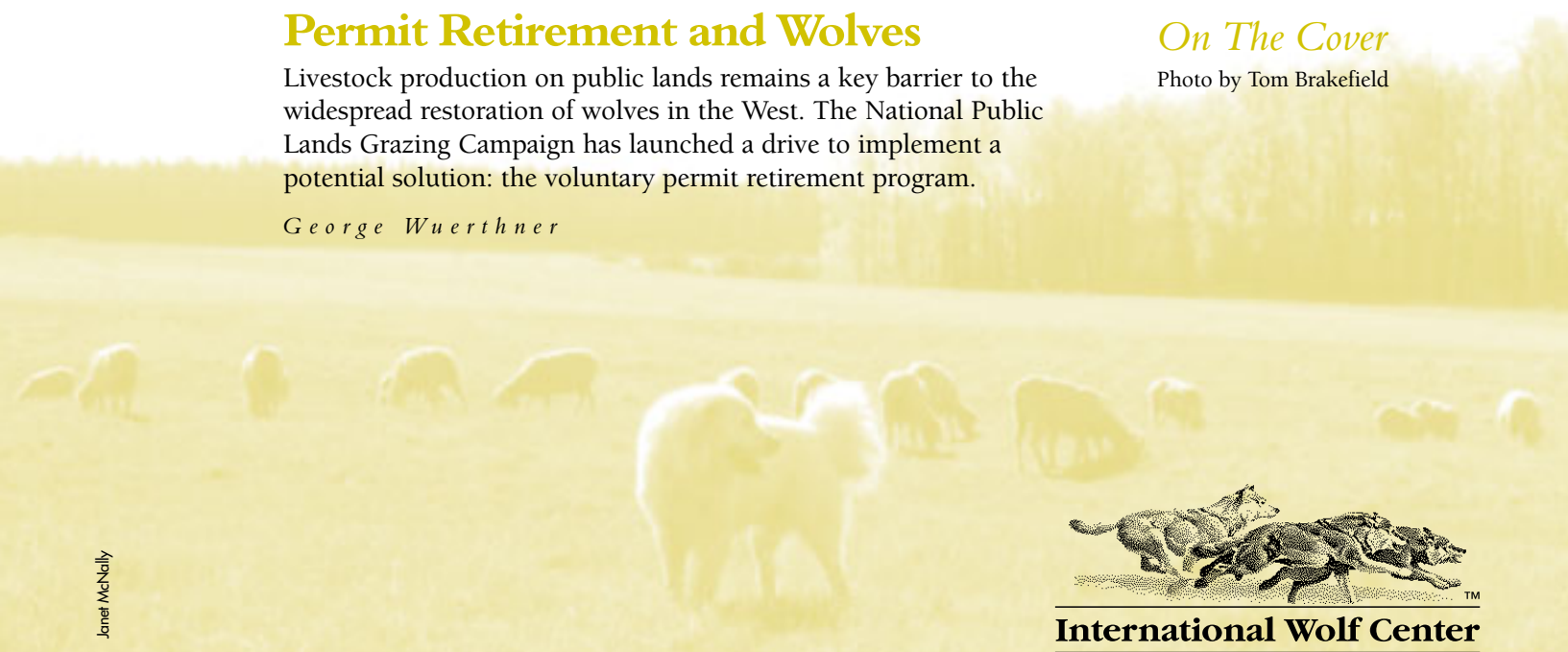
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INTERNATIONAL WOLF

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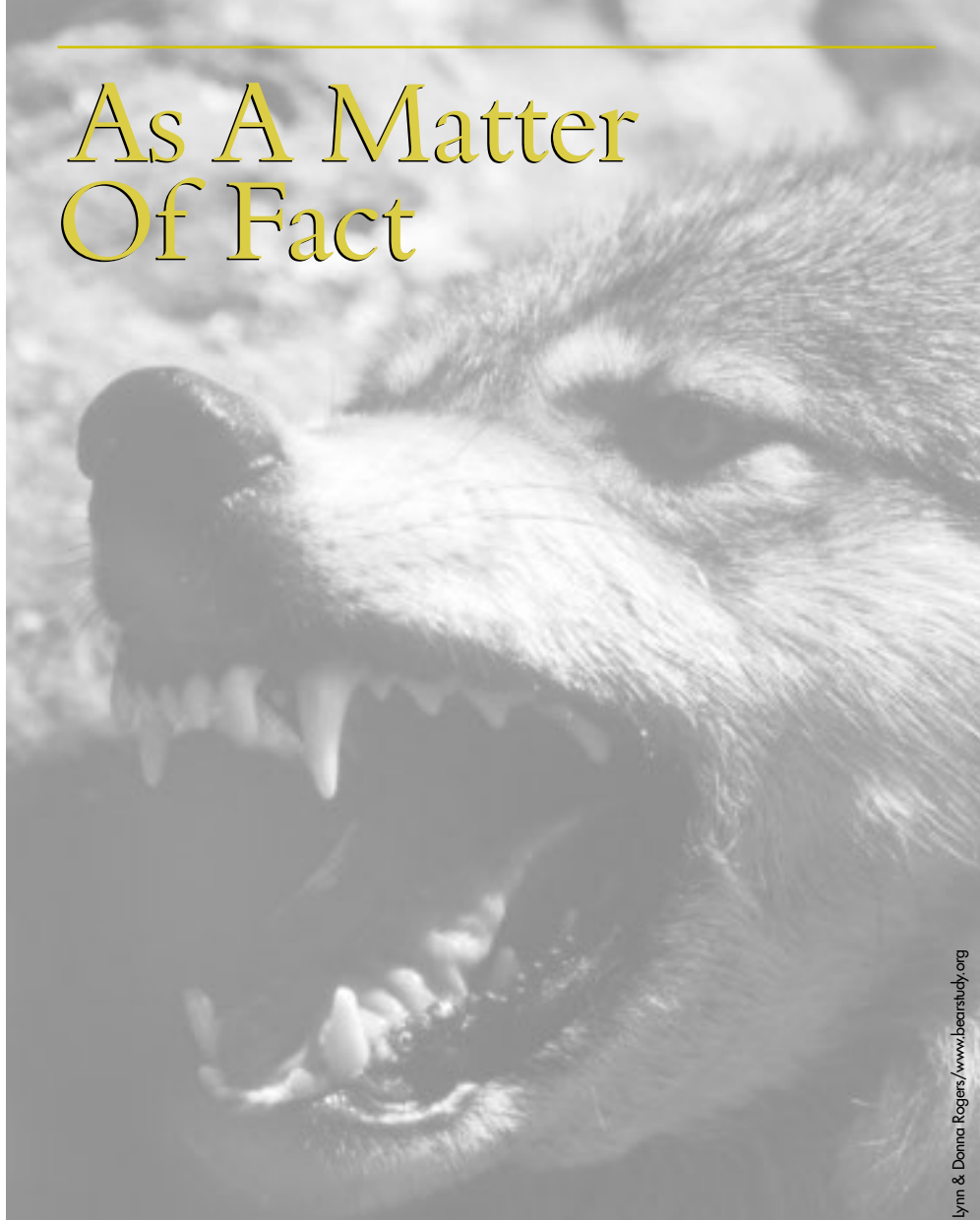
International Wolf is a forum for airing facts, ideas and attitudes about wolf-related issues. Articles and materials printed in *International Wolf* do not necessarily reflect the viewpoint of the International Wolf Center or its board of directors.

International Wolf welcomes submissions of personal adventures with wolves and wolf photographs (especially black and white). Prior to submission of other types of manuscripts, address queries to Mary Ortiz, publications director.

International Wolf is printed entirely with soy ink on recycled and recyclable paper (text pages contain 20% post-consumer waste, cover paper contains 10% post-consumer waste). We encourage you to recycle this magazine.

PHOTOS: Unless otherwise noted, or obvious from the caption or article text, photos are of captive wolves.

As A Matter Of Fact



Lynn & Donna Rogers/www.bearstudy.org

What are the jaw pressure and number of teeth of a wolf compared to a human's?

The biting capacity of a wolf is 1,500 pounds of pressure per square inch. A human has a much lower biting pressure of 300 pounds per square inch. The massive molars and powerful jaws of a wolf are used to crush the bones of its prey. The strength of a wolf's jaws enables it to bite through a moose femur in six to eight bites. Wolves have 42 teeth, whereas humans have 32. ■

New Question

In the most recent assessment, what is the number of gray wolf subspecies populating North America?

CORRECTION The photo on page 16 of the Spring 2002 issue of *International Wolf* was mistakenly credited to the International Wolf Center. The photo was taken by Dan Groebner.



From the Chair of the Board

A New Vision

What will the world look like if we at the International Wolf Center do our job well? Here is our answer:

The International Wolf Center envisions a world in which populations of wolves thrive well distributed in many more parts of their native range. A global system of designated wildlands supports abundant habitat and prey for wolves and other large carnivores. The Center provides useful scientific information and learning opportunities to diverse individuals and groups, and supports well-informed dialogue about management of wolf-human conflict. As a result, more humans adopt an attitude of respect toward wolves. As informed participants, humans create policy and act in support of ecological sustainability, which includes the survival of wolf populations. In day-to-day life, more humans accept coexistence with wolves.



Nancy jo Tubbs as the organization's bottom-line goal. Education is still our tool, to be sharpened and to serve audiences who can make measurable differences to wolves.

Our members, donors and other educators remain the heart link in this work, telling the wolf's story in schools and to friends, legislators and media. We asked ourselves and the wolf biologists who work in wolf recovery who else the Center needs to reach. Our new audiences, one said, should include people in love or in conflict with wolves. We need to talk and listen to rural people who own guns and live among wolves, and whose livestock, pets and hunting interests are affected by wolves. We also need to listen and talk to urban people whose view of the wolf may be more romantic than realistic. Offering information that points audiences toward coexistence with the real wolf is a continuing challenge for the Center.

International Wolf and our Web site (www.wolf.org) are windows through which we share many views of the wolf's world. Here you will read about the trials of ranchers working in wolf country as well as the spiritual meaning that comes to some people's lives from meeting a wolf in the wild. If we are to attain coexistence with the wolf, we need to draw on compassion for each other and courage to listen to each other's stories. Thank you for joining us at the window. ■

Nancy jo Tubbs

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LIVING IN WOLF COUNTRY

A classic wolf howl, answered by innumerable squabbling puppy voices in the tamarack bog, signaled the arrival of our first wolves in 1991. I contemplated the news with mixed emotions. Awed though I was to have just witnessed a wolf pack rendezvous, I was uneasy. It was too close to home for comfort. We live in east-central Minnesota, an area once thought to be uninhabitable by wolves because of the high density of people, farms and roads.

My farm consists of many small (10- to 40-acre) pastures interspersed by swamps, woodlands and neighboring farms. Most of the land is leased from neighbors desiring to maintain a green firebreak around their homesteads, or is not suitable for cropping. While not productive under the plow, most of this land produces outstanding clover pastures. I make my living harvesting this clover with grazing animals. Our flock consists of 200 to 300 breeding sheep and 10 to 30 beef cows. Typical

Text and photos by
J A N E T M c N A L L Y

of a large portion of the Great Lakes region, much of our grazing land interfaces intimately with wildlife habitat. This benefits some wildlife species, but conflicts can arise with predators.

Throughout the 1980s we successfully prevented depredation from coyotes, dogs, foxes and bears by using one or two livestock guarding dogs. Livestock guarding dogs are specially bred dogs that have been used in the mountainous parts of Europe and Central Asia for nearly as long as man has tended sheep. When properly reared, these unique dogs develop social bonds with the livestock they are bred to protect. The dogs display aggressive behavior that keeps the intruder out of the flock, or they gather the sheep together and move them away from danger. If more than one dog is available, both strategies may be used. All guarding dog breeds are large (90 to 150 pounds), and many have a distinctive heavy white coat. Most people are familiar with the Great Pyrenees from France and Spain, but there are many other breeds. An outstanding feature of

these dogs is their willingness to stay with and protect the livestock they are raised with.

My previous success with deterring coyotes left me somewhat confident that we could handle wolves. But I was naive. My learning curve commenced quickly, however, and I soon discovered the wolf is not a large coyote. As of today, my predator losses total 93 sheep, a loss of over \$12,000, despite having invested in several experienced guard dogs and electric fencing. Of the 93 sheep, very few were ever found. There simply was nothing to find. Most were young lambs. Unlike coyotes and foxes, a wolf eats everything, leaving only “crumbs” scarcely bigger than a pinkie fingernail, when it eats a small lamb.

Because I had no carcass as evidence, I was not eligible for compensation through the Minnesota Department of Agriculture (MDA) program designed to compensate producers for wolf-killed livestock. To receive compensation, producers must present carcass remains to


experts to determine the cause of death. Without physical evidence, the producer cannot prove anything. I am not alone. Surveys of sheep producers suggest that only 1 in 10 sheep killed by wolves is found. With no proof and no compensation, most producers see only one solution: to exit the business before they lose everything. Close to 60 percent of the sheep producers in parts of northern Minnesota's wolf zone have left the sheep business during a decade of rapid wolf expansion. This is double the average attrition of 30 percent outside the wolf zone for the same period.

As my encounters with wolves increased, I added more electrified fencing and guard dogs. In 1999, with most of the sheep inside a high-tensile, five-strand electrified fence touted at the time as predator-proof, four adult guard dogs and floodlights in four of the pastures, I experienced the greatest losses yet. The timing was bad. Just months before lambing began, a wolf pack moved into the

neighborhood. The wolves displaced the local coyote population. Our farm was essentially wedged between a population of wolves and coyotes. Our losses to both wolves and coyotes totaled 75 newborn lambs in just a few weeks. Our dogs were simply overwhelmed and overworked, and despite our best efforts, our fences proved to be ineffective at deterring the predators.

Fencing is problematic. Even a fortress of a fence can be heaved up by frost, drifted over by snow, or dug under by a wolf. With over eight miles of fence, much of it along rough land, wolf-proof fencing proved unaffordable and physically unmanageable for a commercial-sized livestock operation such as ours.

The frightened and plaintive barks of the dogs led me to another discovery. The dogs need backup. While dogs find it sporting to chase coyotes with confidence, the same dogs behave differently with wolves. When alone in the presence of wolves, the dogs seek refuge in the



Livestock guard dogs protect sheep in a variety of ways. Here Jack and Jake follow the trail of a coyote. They will follow the trail to just outside the pasture and then leave scent marks on the trail and around the perimeter of the pasture.

flock or sometimes abandon the sheep and seek out another guard dog for security. Perhaps the dogs even need to outnumber the wolf pack to be truly effective. I have noted that in parts of Europe, where sheep have existed in mountainous regions inhabited by wolves for thousands of years, some flocks are guarded by as many as eight or more dogs. It is also more common in Europe for guard dogs to be unneutered. If using more dogs is the key, U.S. sheep producers need to hear the word, as it has been customary to run just one dog with a flock to prevent depredation from coyotes and domestic dogs. A dog

sector). Unable to penetrate the now fortified dog pack, the wolves moved on just before lambing began.

Rotational grazing is perhaps the best substitute for tending a flock with a herder, as the herder's primary job is to keep the sheep together and to move them to fresh grass. With rotational grazing, the fencing and sheep are moved frequently. Instead of allowing livestock access to the entire farm at once, they are given just a small fresh portion each day. The relatively small pasture size used with rotational grazing keeps the sheep within the protective custody of the dogs. Rotational grazing also benefits soil and water in addition to helping guard dogs protect their charges.

Wolves seem to be fascinated by sheep and will persistently check back every night, sometimes hanging out for hours. If the sheep are heavily guarded, after a number of visits, the wolves leave for an extended time, maybe for several months.

Since we have increased our dog numbers, the last few wolf visits have lasted only a few days.

Perhaps being outnumbered by guard dogs is the key to convincing wolves to leave sheep alone, or perhaps using unneutered dogs somehow sends a stronger message to a wolf pack. But I am still cautious about depending on dogs as the sole tool in the box. One reason is that wolf populations can quickly fluctuate. One year a producer may have just a pair of wolves; the next year he may be facing 10. Since dogs

can be trained only 1 or 2 at a time, it may take years to go from owning 3 dogs to 10 dogs. With no reserve of trained dogs available in the United States, it is impossible to respond quickly to a sudden increase in the predator population such as might happen when a pack colonizes new territory. Some method of crisis intervention is needed to protect farms when they are caught unprepared with a sudden change in the predator population.

My biggest worry is the most vulnerable point in the year: lambing. While rotational grazing with a pack of dogs has been an effective strategy after lambing is complete, it is not a suitable strategy during lambing. Baby lambs will not travel very far from their birth spot and become lost when moved. Recommended solutions to depredation include lambing indoors and sheepherders. The cost of these methods must be pitted against the harsh economic realities of the sheep business in a global market, which often leaves little room for environmental concerns. Lambing indoors means added costs—feed, bedding, labor and manure removal—often totaling \$16 extra per ewe. A sheepherder costs \$28 per ewe for a season for 200 ewes, while six guard dogs cost \$11 per ewe. A depredation rate of 12 percent will cost the producer \$15 per ewe. With the net returns per ewe often only \$15 to \$25, guard dogs provide the most affordable, the most flexible and the most effective method, although they are not always a foolproof solution.

Will guard dogs solve the wolf-livestock conflict? For producers who are committed to making it work, they provide a viable option that can minimize depredation. While no solution is 100 percent wolf-proof, dogs can prevent losses from becoming devastating. Sheep producers who use livestock guard dogs seem to be



Current wolf range in the northern Great Lakes region.

alone is in serious jeopardy when confronted by wolves, and most guard dogs are smart enough to know that.

In 2001, wolves returned. This time, a pack of three took up residence nearby and came to check out the sheep every night for a month. A repeat of the 1999 fiasco seemed probable. But by this time, I had six dogs, and lambing had not begun. I was able to place all of the dogs and sheep together into one group, moving them frequently (known as rotational grazing in the farming



Left: Fencing out predators has its downsides. The fence shown here was installed by a professional three years ago with the bottom wire 6 inches off the ground, and posts driven 6 feet deep. The forces of freezing and thawing have pushed it out far enough to permit a wolf to easily enter the pasture.



Above: This electrified netting will baffle predators for a while, but as Jack demonstrates, can easily be jumped. Fencing alone is not sufficient to deter wolves.



Livestock guard dogs have been selected and trained for centuries to protect livestock from wolves.

less fearful and more tolerant of predators. But for guard dogs to provide the kind of resolution people are looking for, a great deal of knowledge and support needs to be made available to farmers and ranchers

who find themselves listening to a new chorus in the tamaracks. ■

Janet McNally is a sheep and beef producer living in Minnesota just south of the designated "wolf zone." She has been raising sheep for 28 years and is a public speaker/consultant on pastoral methods of sheep production.

A Brief History of Wolf Research

PART II

by STEVE GROOMS

Illustrations by Luke Eidenschink

Wolf research has come a long way in a short time. By the middle of the 20th century, decades of ferocious persecution had radically reduced wolf numbers and shrunk wolf range to a fraction of its former size.

The wary survivors were ghostlike inhabitants of North America's densest wilderness. That situation plus the wolf's tendency to wander a broad range made it difficult to find and observe wolves. Much early science on wolves was based on indirect evidence of behavior such as tracks, scats and kill sites.

What was needed was a way of keeping track of an animal that was difficult to find and watch. What was needed was an electronic revolution that would give scientists a way of monitoring an intelligent and wary animal that had learned to avoid humans at all costs.

Radio Telemetry Collars

HISTORY: The radio collar is a rugged collar fitted with a device that emits a beeping radio signal for up to six years. Researchers waving what looks like a small television antenna can pinpoint the location of an animal wearing a radio collar. Ground-based researchers can detect these signals a mile away, whereas airborne researchers can pick up the signals from distances as great as 15 miles.

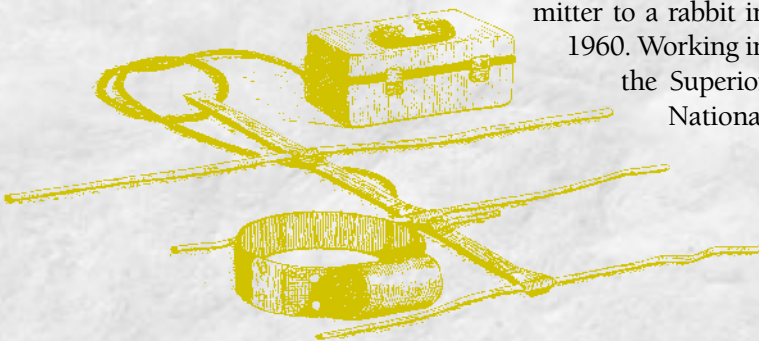
Illinois engineer William Cochran pioneered radio telemetry with wildlife when he attached a radio transmitter to a rabbit in 1960. Working in the Superior National

Forest in the late 1960s, L. David Mech was one of the earliest researchers to use radio collars to study wolves.

ADVANTAGES/DISADVANTAGES: Radio collars give researchers an effective way to locate individual wolves. Telemetry collars yield data on the movements of a particular wolf over time. Radio collars enable researchers to follow wolves at all times of year, not mainly in winter. Even when a collared wolf cannot be seen with the eye, researchers gain valuable data when they pinpoint the wolf's location. Modern radio collars can also indicate whether a wolf is moving, inactive or dead.

The main limitation of telemetry collars is the need for a human to collect the data. Wolves can travel out of the range of a receiver and become lost from a study. Because it is difficult to monitor radio collars at night on the ground (and impossible with an airplane), radio collars mainly disclose wolves'

continued on next page





Satellite Collars

HISTORY: Satellite collars have been used for 30 years to track large mammals but only became light enough for wolves in the past decade. These collars are basically telemetry collars that transmit signals to Argos satellites. The satellites calculate the approximate location of the animal and send the data to the researcher's computer.

ADVANTAGES/DISADVANTAGES: Satellite-based locations are only accurate to about half a mile, so the main use of satellite collars is to track long-distance movements of wolves wherever they go. Besides the advantage of being able to automatically follow wolves wherever they go, day and night, regardless of weather, satellite collars also minimize the biologist's field time. Once a wolf is outfitted with a collar, field time is over; the data are analyzed as they come into a desktop computer. One disadvantage, however, is that satellite collars usually last only 6 to 18 months, depending on how frequently they locate the wolf.

RESEARCH ISSUES: Because of the above advantages and disadvantages, satellite collars are usually used for two main purposes: (1) to monitor seasonally migrating wolves such as those in Canada that may follow migrating caribou for hundreds of miles north and south, and (2) to follow long-distance dispersing wolves.

continued from page 8

daylight behavior. Before a wolf can be collared, it must usually be trapped, a step that requires expensive fieldwork and sometimes a bit of luck.

The telemetry collar revolutionized wolf research and still probably gives more "bang for the buck" than any other single research aid.

RESEARCH ISSUES: Telemetry collars show researchers where wolves go and how they spend time. That breaks down into many smaller issues. Radio collars gave the first solid information about the dramatic movements of dispersing wolves. Radio-collared wolves continue to show researchers a great deal about wolf territory: its size, its relation to the territories of other packs, the variables that affect it and so on. Using telemetry, researchers can locate packs from airplanes in winter and study pack size (and thus population size) and such complex behavior as hunting techniques.

GPS Collars

HISTORY: During the mid-1990s, Global Positioning Satellite (GPS) technology was incorporated into collars. GPS collars receive signals from a special set of 24 satellites, calculate the location of the wolf, the time and the date, and store the data in the collar.

Some GPS collars drop off after they acquire a full set of data so a researcher can retrieve the collar and access the stored information. Some models store data that can be accessed remotely by a researcher in the field. Other models send data directly to satellites, which pass the data back to the researcher's computer.

ADVANTAGES/DISADVANTAGES: GPS collars track wolf movements with great precision (within a few feet) and offer a great many more data points so that a wolf's movements can be analyzed virtually continuously. GPS collars make it possible to map the travels of wolves in difficult terrain (such as in nearly roadless Alaska) where researchers on the ground lack the mobility to follow wolf movements.

The two key disadvantages are high cost (\$3,000, 12 times the cost of a simple telemetry collar) and a short usable lifespan (3 to 12 months) due to the many data collections. Some of that initial cost is recaptured because it costs less to monitor these collars. Typical data capacity for a GPS collar is 2,000 locations.

RESEARCH ISSUES: The precision and frequency of data collection by GPS collars allow researchers to study how wolves use various portions of their range, such as the way they choose specific routes. Additionally, GPS collars tell researchers much about wolf activity patterns.



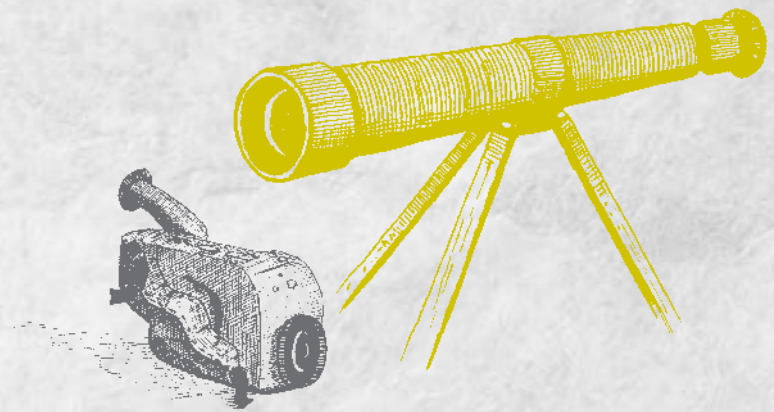
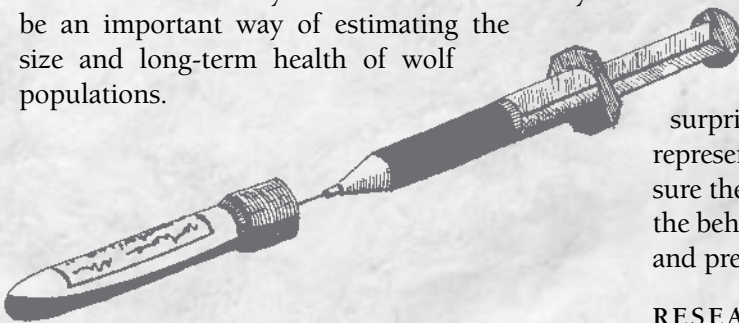


DNA Analysis

HISTORY: Basic science by Watson and Crick allowed scientists to create the new field of DNA sequence analysis. The analysis of wolf DNA began in the 1980s.

ADVANTAGES/DISADVANTAGES: The analysis of wolf DNA opens vast new areas of research, allowing researchers to find answers to questions that previously were unknowable. The work can be slow and painstaking, but it offers great potential.

RESEARCH ISSUES: Using DNA sequencing, researchers are answering critical questions about the uniqueness and developmental history of the red wolf. DNA analyses allow researchers to determine the genetic relatedness of members of a single pack or even genetic relatedness between members of different but nearby packs. DNA research offers insights into the past and likely future of isolated wolf populations, such as the one on Isle Royale. Genetic research may be an important way of estimating the size and long-term health of wolf populations.



Visual Observation: Yellowstone

HISTORY: When wolves were reintroduced into Yellowstone National Park in 1995, most biologists predicted wolves might be heard but rarely seen by park visitors. They were wrong. The open vistas of Yellowstone favor long-distance wildlife observation. For reasons not understood, many of the park's wolves quickly became comfortable with the presence of humans and made no special effort to keep out of sight. This has resulted in an unanticipated and exceptionally exciting opportunity for researchers to observe wolf behavior.

ADVANTAGES/DISADVANTAGES: The obvious advantage of the spectacular wolf observation opportunities in Yellowstone is that virtually the whole range of wolf behavior can now be monitored and filmed. In just a few years Yellowstone wolf observations have produced stunning discoveries and surprises. The single disadvantage is that it is difficult to know how representative this behavior might be. That is, researchers cannot be sure the behavior of reintroduced wolves in this one park is typical of the behavior of wolves in other settings, where humans are dangerous and prey are harder to locate.

RESEARCH ISSUES: Park observations have produced especially rich observations of wolf hunting and killing behavior, but the park has also made it possible for researchers to observe and film the whole range of wolf behavior except life underground in dens. Amazingly enough, the oldest wolf research technology—just watching wolves—is now producing some of the most exciting scientific results. ■

*Steve Grooms has been writing about wolf management since 1976. He is the author of the book *The Return of the Wolf*, and serves on International Wolf magazine's advisory committee.*

Permit Retirement and Wolves

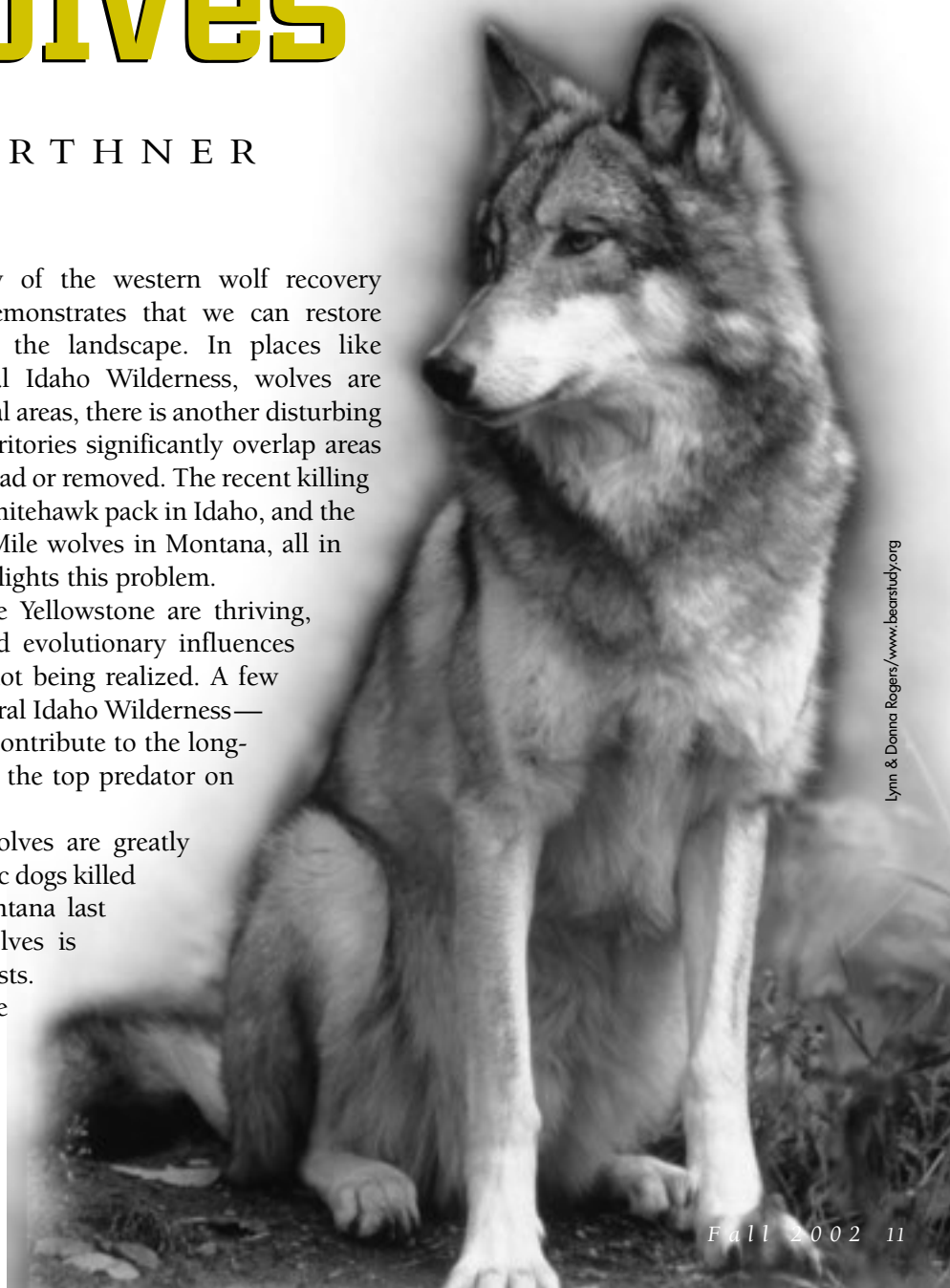
by GEORGE WUERTHNER

The Problem

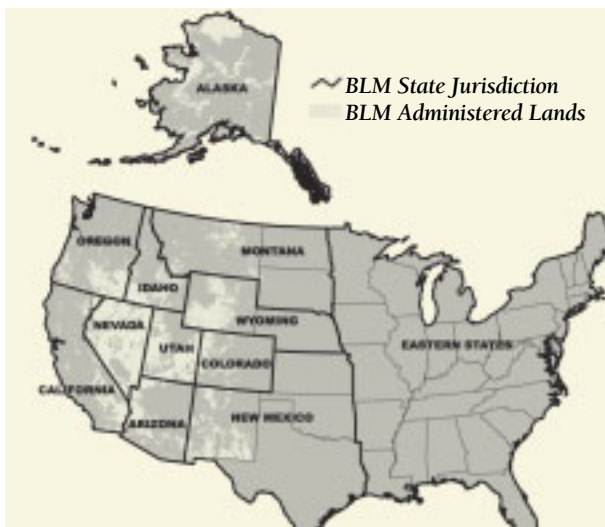
A quick review of the western wolf recovery program demonstrates that we can restore wolves to the landscape. In places like Yellowstone National Park and the Central Idaho Wilderness, wolves are thriving. But if you go beyond these few special areas, there is another disturbing trend: nearly all of the wolf packs whose territories significantly overlap areas with domestic livestock eventually wind up dead or removed. The recent killing by the U.S. Fish and Wildlife Service of the Whitehawk pack in Idaho, and the Dome Mountain, Gravelly Range and Nine Mile wolves in Montana, all in the name of livestock protection, merely highlights this problem.

While wolves in livestock-free zones like Yellowstone are thriving, the real goal of restoring the ecological and evolutionary influences of a large predator across the landscape is not being realized. A few token populations in Yellowstone or the Central Idaho Wilderness—as wonderful as that may be—do not really contribute to the long-term biodiversity goal of restoring wolves as the top predator on the public lands of the West.

Though the sheep and cow losses to wolves are greatly exaggerated by the livestock industry (domestic dogs killed 10 times as many domestic animals in Montana last year as wolves did), the restoration of wolves is nearly universally opposed by livestock interests. And it is the presence of livestock that more than any factor determines the fate of wolf restoration goals in the West.



Lynn & Donna Rogers/www.bearstudy.org



Nearly 90 percent of all BLM lands are leased for livestock production.

Western ranchers have successfully externalized one of their costs of production, namely, protecting their animals from predators by simply eliminating the predators. Rather than spend money on animal husbandry practices that could reduce or eliminate most predator–livestock conflicts, such as use of shepherds, guard animals, lambing and calving sheds, night penning animals to reduce predator opportunities, and rapid removal and disposal of animal carcasses to avoid attracting predators to the area, western livestock producers have simply extirpated the wolf from the landscape. But this “solution” comes at the expense of wolf supporters and the land, which needs a top predator to maintain its evolutionary influences.

Due to the aridity that characterizes the West, livestock must roam widely to find sufficient forage. That means animal are spaced over vast acreage,

often with little direct supervision from ranchers, what some call the “Columbus” method of animal husbandry. They put their cows out on the range in the spring and come back in the fall and “discover” how many are left alive. Such lax animal husbandry gives wolves and other predators many opportunities to snatch a cow or sheep.

Even so-called “predator-friendly” livestock operations can have a negative effect on overall wolf recovery in several ways. First, there is

no free lunch. Currently the majority of forage is allotted to livestock, leaving less to support native herbivores. This can and often does significantly reduce the overall number of prey animals available to wolves.

Second, the mere presence of domestic livestock displaces many ungulate species, including mule deer, elk and antelope. Displacement can sometimes push native herbivores into habitat that is less desirable, making them more vulnerable to weather, low forage quality and other impacts that may reduce their overall numbers.

Third, dead animals that are left lying in the landscape act as attractants for wolves. Wolves often get their first taste of beef or lamb through consumption of dead animals, and then later turn to killing live animals. By creating the conditions that can turn a wolf into a livestock killer, even a predator-friendly producer can contribute to the death of wolves if they wind up killing livestock elsewhere.

These issues loom large in western wolf recovery efforts because livestock are found nearly everywhere except for the few livestock-free parks and preserves. Nearly 90 percent of all BLM lands are leased for livestock production, 69 percent of all U.S. Forest Service lands, and even a significant number of western livestock refuges and national parks. Indeed, overall more than 300 million acres of the West including state and federal lands are leased for livestock production. That is an area as large as the eastern seaboard states from Maine to Florida with Missouri thrown in—a sizable tract of land by anyone’s standards. There are few large tracts of public land outside of Yellowstone and the Central Idaho Wilderness where there are no livestock; thus livestock production remains a key barrier to the widespread restoration of wolves in the West.

The Solution

Removing livestock from public lands would significantly reduce conflicts between livestock and wolves (there would still be some on private lands), plus would benefit other native species, from trout to bison. Although the courts and federal agencies for years have asserted that livestock grazing permits are a privilege, not a right, federal agencies seldom reduce livestock numbers or close an allotment, even when there is clear evidence of ecological abuse or conflicts with other public values—such as wolf restoration.

In response to these realities, the National Public Lands Grazing Campaign (NPLGC) has launched a drive to implement a potential solution: the voluntary permit retirement program. Under this proposal, if approved by Congress, any rancher who volunteers to relinquish his or her public lands grazing permit would be paid \$175 for each AUM (an AUM is a measure of the forage consumed by one cow and calf per month) they grazed on public lands. For instance, a rancher grazing 200 cows for 12 months of the year would receive a one-time payment of \$420,000. The payment would be awarded once the federal agency permanently closed the allotment to all future commercial livestock grazing.

Ranchers would be free to use the money any way they chose. They could invest the money and retire. They could pay off the bank. They could buy more private land to expand their ranching operations.

If all 23,000 permittees opted to close out their grazing allotments, the overall cost of this program could exceed \$3 billion dollars. Despite this cost, terminating grazing permits would still be a saving to taxpayers. Administration of the public lands livestock program is estimated to cost a minimum of \$500 million annually. And this cost does not include any of the many ecological costs associated with livestock production, such as destruction of riparian areas, degradation of water quality, the spread of weeds, loss of wildlife habitat and so forth. Given the current annual expenditures of the public, the permit retirement would have a payback in less than six years.

While wolves in livestock-free zones like Yellowstone are thriving, the real goal of restoring the ecological and evolutionary influences of a large predator across the landscape is not being realized.

A permit retirement program could be especially useful in resolving western livestock-wolf conflicts. In many cases, conflicts occur in the same places over and over because some places are just better habitat for wolves. If ranchers in these areas elected to terminate their grazing allotments, the major source of conflict would be removed, creating the potential for greater wolf recovery throughout the West, not just in the few presently livestock-free zones. A permit retirement program may be essential if we are ever to recover the Mexican wolf in the Southwest or reestablish wolves in places like Oregon or Colorado, which have plenty of potential wolf habitat but

few large areas without livestock.

In the end everyone wins. The ranchers get a tidy windfall profit. The taxpayers ultimately save money. And wolf supporters can see the day when wolves are free to roam unfettered not only in Yellowstone or the Central Idaho Wilderness but perhaps on hundreds of millions of acres of the West.

For more information on the permit retirement program see NPLGC's Web site at www.publiclandsranching.org. ■

George Wuerthner is an ecologist, writer, and photographer based in Eugene, Oregon. He has written 28 books on natural history topics.



Lynn & Donna Rogers/www.bearstudy.org

Concert Celebrated Wolves and Wolf Center



Grimaud performed the concert on Valentine's Day at the Belford, home of Elinor Watson Bell. She and Dr. and Mrs. Ford Bell hosted this extraordinary event. Center founder Dr. David Mech introduced Grimaud, revealing his intense interest in music. Ever eager to learn more about music, Mech jokingly told the guests that he and Grimaud frequently have question-and-answer sessions, trading between music and wolves. Grimaud reminded the guests "that the International Wolf Center has been the leader for dispelling myths about wolves and that good information and wild places are critical for their survival."

Center member Kathy Davies exclaimed, "It was one of the most exhilarating and soul-satisfying musical experiences I've ever had." Others called it "euphoric."

The Center benefit was a success. The education program was greatly enhanced with the funds raised from the event. In addition, members met a stellar piano soloist who devotes her endless energy to music and wolves. Grimaud began her music career at the age of 13 at the Paris Conservatory, performing her first concert the following year. At age 15, she recorded her first CD, and nine more have followed. Holding a degree in animal behavior, Grimaud joined the International Wolf Center board in 2000. With famed photographer J. Henry Fair, she co-founded the Wolf Conservation Center (www.nywolf.org) in South Salem, New York, where three wolves reside in a large enclosure. While it is obvious that wolves captivate her, the young visitors grab her attention as well. Whether for music or wolf education, Hélène Grimaud will be a talented resource for years to come.



Top: World-renowned concert pianist and International Wolf Center board member Hélène Grimaud with Elinor Watson Bell

Bottom: Hélène Grimaud

It was not a normal night for wolves: city lights lingered, and no howls echoed off granite rocks. But it was a night to remember. This night belonged to world-renowned concert pianist and International Wolf Center board member Hélène Grimaud. At a concert to benefit the Center, the audience was privileged to hear her intimate piano performances of works by Beethoven and Brahms, and the thunderous Bach-Busoni "Chaconne."

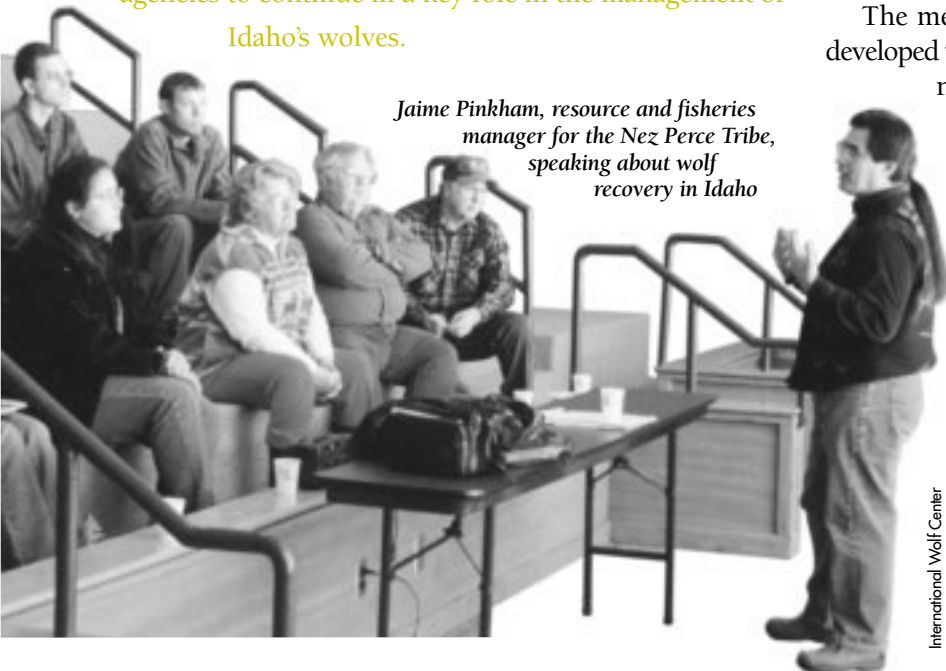
Cooperation Fuels Idaho Wolf Recovery

Cooperation among diverse bedfellows is resulting in a successful wolf recovery project in central Idaho, according to Jaime Pinkham. He spoke during the Sigurd Olson Lecture Series at the International Wolf Center and Vermilion Community College in Ely, Minnesota, on March 13. Pinkham credited many groups with the achievement: state and federal agencies, the Nez Perce Tribe of Idaho, livestock and timber industries, hunting guides, a supportive media and conservative legislators who allocated essential funding.

Pinkham is the resource and fisheries manager for the Nez Perce Tribe, which managed the wolf population as it grew from the original 35 gray wolves translocated from Canada to central Idaho in 1995 and 1996. The tribe promised livestock owners, outfitters and guides that the wolves would be closely watched, and removed if they caused problems. As wolves recolonized Idaho, faster than expected, wolf biologists Curt Mack and Mike Jimenez worked closely and sensitively with all the interested parties, Pinkham said.

Now the Idaho wolf population numbers about 170. As the wolf nears proposed removal from the endangered species list, and a state wolf management plan is undergoing public review, the tribe is negotiating with state and federal agencies to continue in a key role in the management of Idaho's wolves.

Jaime Pinkham, resource and fisheries manager for the Nez Perce Tribe, speaking about wolf recovery in Idaho



International Wolf Center



International Wolf Center

Rolf Peterson, speaking to the Midwest Wolf Stewards about the Isle Royale wolves

Midwest Wolf Stewards Meet

Two Harbors, in northern Minnesota, welcomed 76 people on April 3 and 4 for the Midwest Wolf Stewards Meeting, sponsored by the International Wolf Center and the University of Minnesota-Duluth Continuing Education. Attendees included people from federal and state government agencies, colleges and universities, law offices, ranching industries, and various environmental, educational and wolf advocacy organizations.

The meeting agenda was developed to provide the latest news on a variety of important wolf issues. Invited speakers came primarily from Minnesota, Michigan and Wisconsin, but some traveled from as far as

Montana, Washington, D.C., and New Jersey.

The first day focused on the status of Midwest wolf populations, federal wolf reclassification, depredation and stakeholders' attitudes. The day concluded with a presentation by Ed Bangs, U.S. Fish and Wildlife Service Gray Wolf Recovery Coordinator for the northwestern United States. Bangs spoke about the western wolf reintroduction and what it can teach us about future wolf management.

The second day focused primarily on educational curricula, scientific studies and public policy. The meeting ended with a presentation by Rolf Peterson on the wolves of Isle Royale.

There was also a post-meeting discussion on the future of a proposed Midwest Carnivore Committee. Participants left the event feeling it had a good balance between biological and social topics and a great mix of people, topics and discussions. Next year's meeting will be held in Michigan. ■



INTERNATIONAL WOLF CENTER

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International Wolf Center Student Board Seat Available

The Board of Directors of the International Wolf Center is seeking candidates for the student seat on the board. This volunteer will serve as a full partner with other members in addressing the range of issues facing an active board of directors. This is a unique opportunity to be on the "inside," gaining experience in leadership of an environmental not-for-profit organization.

Requirements for the position include the following: enrollment in a four-year college or university with preference for a sophomore or junior, allowing for a two-year term; the ability to attend meetings held in Minneapolis, Duluth and Ely; a major in environmental studies or relevant field; and recommendation by a college advisor. If you are interested, please submit a letter of application describing your interests, experiences and contact information to: Tom Dwight, Chair, Nominating Committee, 1200 Hallam Avenue North, Mahtomedi, MN 55115.

2001 Annual Report Now Available Online!

The 2001 overview of International Wolf Center activities and accomplishments will be available in September. The annual report also includes a summary of significant 2001 developments in wolf conservation, commentary from our director and board chair and recognition of our generous supporters and benefactors.

To download your free copy, please go to www.wolf.org.



Tracking the Pack

Canine Cousins

by Lori Schmidt, Wolf Curator,
International Wolf Center

If you are a dog owner, you have probably observed your pet demonstrating behaviors that make you question whether you live with a beloved pet or share your house with something from Wild Kingdom. These behaviors may be as entertaining as watching your dog howl to sirens or as distressing as finding the cushions of the living-room sofa shredded like a deer carcass. Many of your dog's behavioral traits, even its habit of completing smaller and smaller circles until finally lying down, have a genetic link to wolves.

For years, biologists have theorized that the domestication of dogs began about 10,000 to 15,000 years ago. Recently, DNA analyses have suggested that this process may have begun as long as 100,000 years ago. In either case, domestication was a long process of selective breeding to keep the traits beneficial to humans and eliminate the negative traits. Over time, domestication changes the genetic makeup of an animal, but genetic evidence can tie a domesticated animal to the DNA of its

ancestors. Recent genetic studies reveal strong evidence linking the domestic dog to its likely ancestor, the wolf.

To acknowledge this close relationship, a 1993 review of the taxonomic classifications of wolves led to a scientific name change. The dog had been called *Canis familiaris* and was considered to be a separate species from the wolf. Since 1993, the scientific name of the dog has been *Canis lupus familiaris*, a subspecies of the wolf.

Does this mean you have a wolf in your living room? No. Your dog is still believed to be a domesticated version of its wild relative, but the close relationship means you can expect your dog's behavior to be motivated by instincts from its ancestors.

During summer 2002, the International Wolf Center, in cooperation with Vermilion Community College's Natural Resource Department in Ely, Minnesota, conducted daily educational programs titled "Canine Cousins."

Students enrolled in the college's wolf behavior class served as the dog handlers for the program, which featured visiting dogs to demonstrate behaviors. Both puppies and adult dogs were included to compare dog and wolf behaviors at various ages. While the dogs and the students were demonstrating behaviors inside the building, the ambassador wolf pack looked on through the large observation windows, curious about the visiting dogs. At times, the wolves demonstrated territorial behavioral traits, pawing at the windows.

Some of the behaviors featured in the Canine Cousins program included:

- Social pack behavior
- Territorial defense and marking behavior
- Predatory behavior and hunting techniques
- Communication through body language and vocalization
- Specialized behaviors associated with specific dog breeds

By learning more about the behavior of wolves and dogs, Center visitors developed a better understanding of dogs and the motivations behind their behavior. ■



Top right: Members of the ambassador pack at play

Bottom: Lori Schmidt with Jake, a visiting Canine Cousin, and members of the ambassador pack

International Wolf Center

Wolves of the World

WOLVES OF THE UNITED STATES

Dispersing Dicey for Yellowstone Wolves

by Norman A. Bishop

Dispersal of wolves outside Yellowstone National Park was anticipated in the 1994 Environmental Impact Statement (EIS) and Federal Rules for the experimental population of wolves reintroduced to Yellowstone in 1995 and 1996. Preparers of

those documents also recognized that outside the park, life would be perilous for dispersing wolves.

Projections were accurate. New packs have formed in various locations outside the 2.2-million-acre park, both on private land and on parts of the 10.6 million acres of federal lands surrounding Yellowstone (see map). One problem

facing dispersing wolves is that winter ranges of prey outside the park are mostly in privately owned valley bottoms or in rolling country containing both wintering wildlife and domestic livestock.

Since wolves occasionally kill sheep or cattle, the U.S. Fish and Wildlife Service (USFWS) is trying to ameliorate the situation by aversive conditioning. Methods include using tools such as shotgun-propelled bean bags, flares, strobe lights, electric fences and guarding dogs. Finally, wolves may be moved or killed. The Turner

Norm Bishop

When elk leave the north entrance of Yellowstone National Park, they become fair game for regulated hunting. When wolves leave the park, they are confronted by livestock.



Norm Bishop

Endangered Species Fund (TESF) and two other conservation groups, Defenders of Wildlife (DOW) and the Predator Conservation Alliance (PCA), help in those efforts. They compensate livestock owners for animals killed by wolves and compile maps of livestock density, land ownership and elk winter range to determine where wolves can live with fewest conflicts.

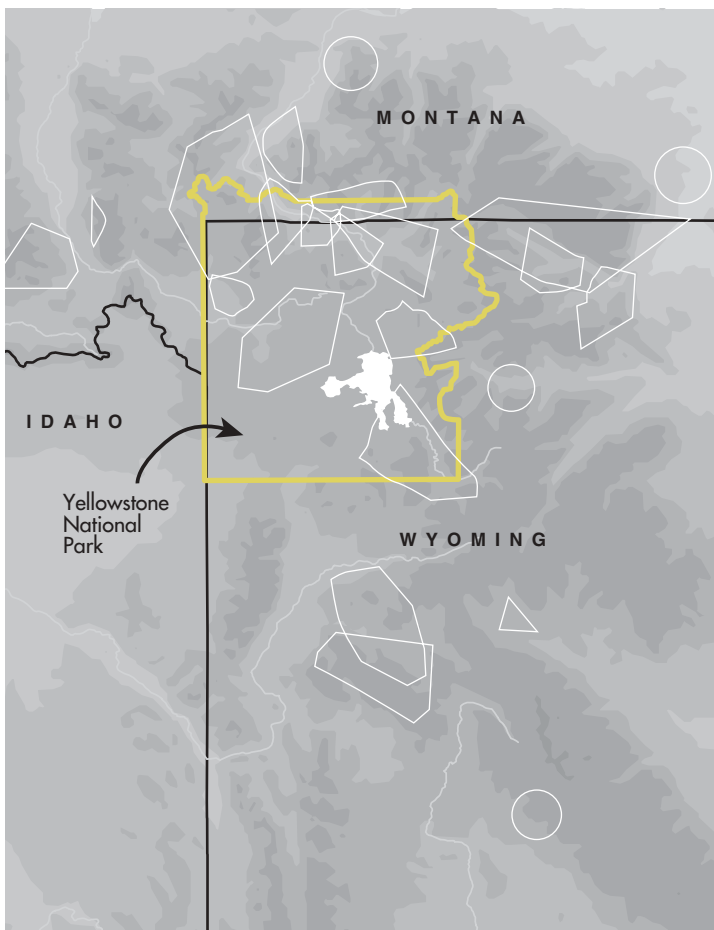
By the end of 2001, the 31 original wolves translocated from Canada to Yellowstone had generated a population of 216 wolves. Within the park, 132 wolves lived in 10 packs, and outside the park, another 14 packs contained 84 to 93 wolves. Pack size is highly variable, but packs outside the park boundary tend to be smaller than those within the park perimeter.

The difference in pack size reflects contrasting conditions within and outside the park. Inside the park, where mortality is low, the complex social fabric of the packs is preserved, and larger packs contain more than one generation of wolves. Eight packs live entirely in the park, and two packs den within the park but also roam outside.

Outside the park, smaller pack size appears to result from several factors. First, most of the wolf packs are

newly formed from young, inexperienced dispersers from within the park. Second, more opportunities exist for conflict with livestock, and many dispersers are killed either in control actions or illegally. Of known mortalities in 2001, 2 wolves died from vehicle strikes, 6 in control actions, 1 from illegal shooting, 1 from a handling accident, and 3 from natural causes. North of the park, illegal mortality has delayed potential delisting of wolves from full protection under the Endangered Species Act because key individuals—breeding animals—have been killed. Since 1995, 53 percent of wolf deaths have been caused by humans.

In the greater Yellowstone area during 2001, wolves killed 21 cattle, 71 sheep and 3 dogs. Seven wolves were killed in control



Adapted from map produced by the Yellowstone Gray Wolf Restoration Project

Territories of collared wolf packs (polygons) and sightings of non-collared wolves (circles) in the greater Yellowstone area in 2001.

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actions, and 8 were translocated. Remarkably, the question in summer, when livestock are vulnerable to wolves on pastures remote from home ranches, is not, Why do wolves prey on livestock? but rather, Why do they prey so infrequently on livestock? The answer is perhaps that they are afraid of animals unfamiliar to them as prey, and are more comfortable killing deer and elk, which they learned from their parents to hunt.

To qualify wolves for reclassification under the 1994 Federal Rules, a stringent definition of wolf packs must be used. The definition stipulates that a pack must consist of a breeding pair with 2

surviving pups at year's end. This rule must be used in counting toward the goal of 30 packs breeding for three successive years distributed throughout Montana, Idaho and Wyoming.

Meanwhile organizations such as TEF are responding to ranchers' concerns. Methods include flagging around calving pastures, RAG (radio-activated guard) boxes, removal of carcasses from calving grounds, limited use of nonlethal

munitions (rubber bullets and cracker shells) and training ranchers to haze wolves out of cattle or away from ranch houses. Such proactive measures may help minimize conflicts so that as more and more wolves disperse from Yellowstone, a higher number may be able to survive outside the park.

Norman A. Bishop is the International Wolf Center field representative for the greater Yellowstone region.

For more information about the potential reclassification of wolves in the Northern Rockies under the 1994 Federal Rules, see "Reclassification Controversy," *International Wolf*, Summer 2001; and the reclassification section of the International Wolf Center's Web site at <http://www.wolf.org/learn/mgt/delist/delist.shtml>.

WOLVES IN ETHIOPIA

Endangered Means There Is Still Time

by Neil Hutt

Time may be running out for one of the world's rarest and most endangered canids. Ethiopian wolves (aka Ethiopian jackals), numbering fewer than 400, face increasing threats to their survival. The recent population decline of this highly specialized carnivore is due mainly to habitat loss from subsistence agriculture and livestock grazing. Ethiopian wolves are also threatened by direct persecution, hybridization with domestic dogs and exposure to infectious diseases such as rabies and distemper.

An article in the Spring 2001 issue of *International Wolf* ("On the Edge of Extinction: Saving the Imperiled Ethiopian Wolves") alerted readers to the necessity for swift intervention from the international community. The Ethiopian Wolf Conservation Program (EWCP) considers such an initiative essential to diminishing the possibility that this unique predator will become the next mammal candidate for extinction.

The EWCP, established in 1995, is acting to save Africa's only possible wolf species. (Authorities still disagree on whether this animal is a true wolf or a jackal.) Using the Ethiopian wolf as a flagship species,

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Martin Harvey



Martin Harvey

Ethiopian wolves (aka Ethiopian jackals), numbering fewer than 400, face increasing threats to their survival.

the organization is working to consolidate the management of protected areas and to monitor and manage the remaining wolf populations. Strategies include reducing the impact of domestic dogs in wolf range through vaccination and control programs. Additionally, the EWCP is carrying out community education campaigns to promote responsible dog ownership and to

raise conservation awareness among the Ethiopian people. A captive-breeding program is planned to promote Ethiopian wolf genetic variability.

The work of the EWCP is receiving international attention through its official Web site. The site contains extensive information on the biology and status of the Ethiopian wolf, photographs, the annual report of the

EWCP and a complete bibliography. Also on the Web site is a section detailing the ways in which the public can help the EWCP safeguard the future of the Ethiopian wolf and the Afro-alpine ecosystem where it lives.

EWCP Web site: <http://www.wildcru.org/endangered/species/ethiopianwolf/ewcp/ewolf.htm> ■

Neil Hutt is an educator and International Wolf Center board member who lives in Purcellville, Virginia.

With great surprise I realized what I was hearing. The wolf's eyes were staring at me from 100 feet away. And then, I heard a muffled half-bark followed by a deep, smooth, heavy sound rising into the air. None of the other

Personal Encounter

Wild About Yellowstone

by Pete Nettrour

Northeast of Old Faithful with its tourists and motor homes is Yellowstone National Park as few people have experienced it. It is also Yellowstone as President Theodore Roosevelt meant it to be—unbridled nature preserved for the benefit and enjoyment of future generations.

Nearly 3 million tourists visit Yellowstone annually, most of them flocking to the well-known sight-seeing spots between June and September. Even though Yellowstone is open year-round, only 140,000 visitors witness the grandeur of the park in winter. I was fortunate to be among this minority when I joined a wolf wilderness trip to the Yellowstone area in March 2002, sponsored by the International Wolf Center.

My wife, a biology professor, stumbled upon information about the trip on the Internet while researching an upcoming lesson. She logged onto the International Wolf Center's Web site (www.wolf.org), and news of the upcoming adventure caught her attention. The Center hosts several ecotourism wilderness trips a year to various locations, such as Yellowstone and the central Arctic in Canada's Northwest Territories.

Due to the small size of the wilderness trip groups, reservations tend to fill quickly. Ordinarily, the trip would have been filled by the time we learned about it, but one member canceled and left an opening for me. A few short weeks after making the necessary arrangements, I was on a plane heading to Bozeman, Montana, to rendezvous with the rest of the group.

The mild Pittsburgh winter did not prepare me for winter in Yellowstone. In March the weather can vary from extreme cold to almost springlike. During our trip, we experienced the former. Near-zero morning temperatures were our wake-up call, and pushing our 15-passenger van through deep snowdrifts added to the adventure.

March is a busy time for wolves and wolf researchers in the Yellowstone area. During this time, park biologists and technicians monitor wolves daily from both air and ground. Their objective is to determine the maximum kill rate during the period when prey is most vulnerable.

Up before sunrise, our group spent each day the way the park's biologists do—searching for wolves



that are often on their own search for prey. We were out in the Lamar Valley in the northeast corner of the park by dawn each morning after a hearty breakfast followed by a radio check-in with Rick McIntyre, one of the wolf project naturalists. We set up scopes and waited patiently beside the technicians monitoring the activities of the wolves. Our goal was to position ourselves where the wolves were most visible. Though the wolves we observed were typically seen from a distance of 150 yards to 2 miles, they were dramatically magnified through spotting scopes (45–60x), and we could clearly view the wolves in their natural habitat.

By 6:30 a.m. on our first day in the field, we had watched a variety of wildlife foraging through the snow, including bison, elk, mountain sheep and a rare cow moose. Within minutes of these observations, our scopes and cameras were focused on four wolves: the alpha male, alpha female and two yearlings of the Druid pack, the largest pack of wolves in Yellowstone. They passed within yards of two bison before bedding down in a snowpack. Bison, especially healthy bulls, are rare targets of wolf predation, which explains the wolves' apparent lack of interest as they passed by.

Distinguished wolf biologist and International Wolf Center

Up before sunrise, the group spent each day the way the park's biologists do—searching for wolves that are often on their own search for prey.



Photos left to right: Christopher and Miranda Bly,
Pete Neltrour, International Wolf Center

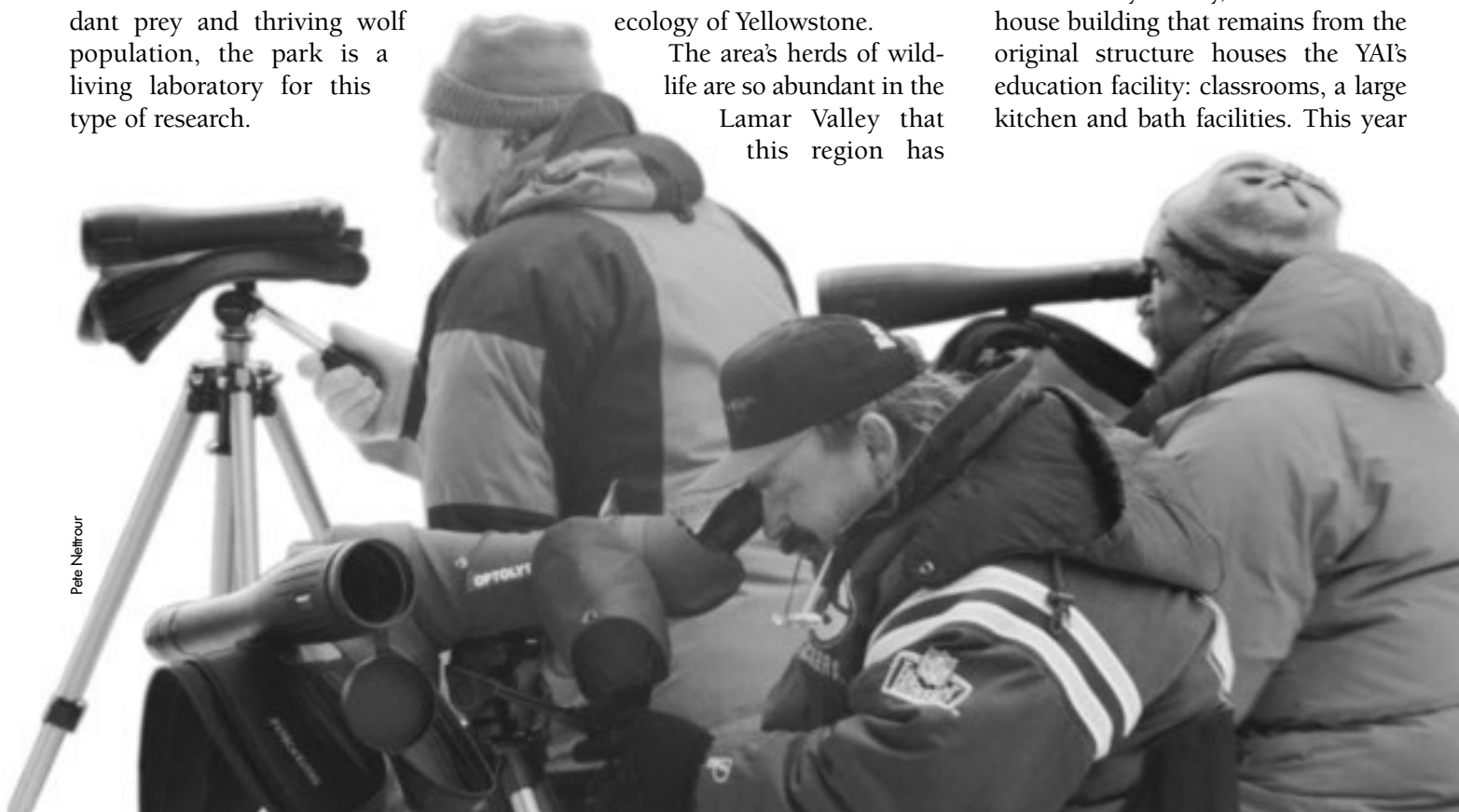
*Left to right: a wolf, an elk on a ridge,
and a bison in the Lamar Valley.*

founder Dave Mech was one of the trip leaders, and he discussed the wolves' hunting behaviors. Because it is difficult and dangerous for wolves to attack and kill large prey, they select animals compromised by age or physical weakness. How wolves determine such weakness is a subject of current investigation by biologists in Yellowstone. With its abundant prey and thriving wolf population, the park is a living laboratory for this type of research.

We continued to watch the wolves as they bedded down for most of the day. They rose just before sunset and passed within 200 yards of our party before disappearing into the twilight. Our group was pleased with the day's activities, and we returned to our lodgings for dinner and discussions with the experts about the day's observations and about the ecology of Yellowstone.

The area's herds of wildlife are so abundant in the Lamar Valley that this region has

been nicknamed the Serengeti of North America. In 1907, long before the establishment of the present Yellowstone Association Institute (YAI), this beautiful valley was chosen to be the home of Buffalo Ranch, a federal effort to turn around the drastic decline of the West's bison population that took place toward the end of the 19th century. Today, the old bunkhouse building that remains from the original structure houses the YAI's education facility: classrooms, a large kitchen and bath facilities. This year

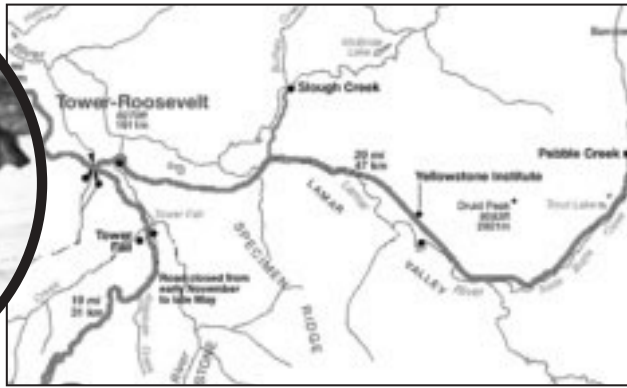


Pete Neltrour

Left to right: Dave Mech, Jerry Sanders and George Knotek use spotting scopes and binoculars to observe wolves and other wildlife in the Lamar Valley.



Christopher and
Miranda By



Located in the northeast section of Yellowstone National Park, the Lamar Valley has been nicknamed the Serengeti of North America because of its abundant herds of wildlife.

the institute will offer over 125 diverse courses, and more than 60 instructors will share their expertise with over 1,000 students.

The institute's facility at the Buffalo Ranch, where our group stayed, creates a comfortable, retreat-like learning atmosphere. The International Wolf Center made arrangements with a Bozeman, Montana, caterer so that we would have delicious meals during our stay at the ranch. Lunch was usually brown bag in the field, but the prepared breakfasts and dinners brought a touch of luxury to our rustic accommodations.

The mournful hooting of a great horned owl summoned us wolf watchers to breakfast in the pre-dawn hours of our third day. After finishing another hearty morning meal, we received a radio call from the field,

alerting us to the whereabouts of the Druid pack's alpha pair along the Lamar Valley Road in an area called Little America. The wolves' long moaning howls greeted us as we set up spotting scopes and scanned the snow-covered hillside with binoculars.

Soon, several members of the Druid pack, including the alpha male and female, emerged from a cluster of trees and set off together out of sight. As they disappeared from our view, a radio call reported 11 yearlings several miles farther west on the Lamar Valley Road. We missed their pursuit of a bull elk but arrived in time to witness the young wolves turn the hillside into a giant playground as they engaged in elaborate tag games and wrestling matches. This group of young wolves is the subject of intense interest among the researchers. The parents had separated from the

youngsters nearly a week before our arrival, and the young wolves seemed to be developing their hunting skills by trial and error.

Later in the week, these yearlings took down a cow elk only to have a herd of bison force them off the elk. The bison continued to protect the wounded elk from the wolves and ravens for several hours as it struggled to get back on its feet. The Yellowstone researchers had never seen such behavior. The elk eventually died, and the bison gradually lost interest. The wolves and bison singularly or in groups charged each other on many occasions. The patient and hungry wolves soon won the contest.

As the young wolves finally began to eat, Dave Mech explained that sometimes a wolf consumes as much as 22 pounds of meat at a feeding. Because digestion is rapid, the wolves return repeatedly to the carcass to eat. Meanwhile, smaller carnivores, birds and insects all have their turn at the kill until nothing is left but scattered bones.

All too soon, the week was over, and it was time for our group to head in different directions. We did not go home disappointed. The week of wolf watching in Yellowstone provided a unique opportunity to witness research in the field, to quench an amateur—or professional—wildlife photographer's thirst for natural habitat shots, and to participate in educational discussions with some of the world's most renowned researchers. After traveling the world extensively and visiting nearly every continent, I can say that this was as great as any adventure I've had. The International Wolf Center welcomed me into the pack. ■

Lewis "Pete" Nettrour, M.D., is one of the founders of, and an orthopedic surgeon with, Tri Rivers Surgical Associates in Pittsburgh, Pennsylvania. A wildlife enthusiast, he has traveled extensively throughout the world. He lives in the Pittsburgh area with his wife, Lila, and daughter, Barbie.

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News and Notes

DO WOLVES BENEFIT WOODPECKERS?

Ravens, eagles, coyotes, bears and other scavengers benefit from feeding on the leftovers of wolf kills. However, in a 2001 issue of the *Wilson Bulletin*, Dr. Jorge Servin and colleagues described a pileated woodpecker scavenging on cartilage and muscle on a bone fed to captive wolves. Conceivably the same could happen in the wild.

WOLVES BANNED

from Fremont County, Wyoming. The Fremont County Commission passed resolutions banning wolves and grizzly bears from the county, according to the Associated Press. Because federal law, including the Endangered Species Act, supersedes local law, however, the resolutions would have no practical effect even if wolves could read them.

ISLE ROYALE WOLVES are down this year to 17, a drop of 2 from last year, reported Dr. Rolf Peterson. Only two years ago, the population was 29, but conceivably a shortage of old moose (which form much of the wolves' diet) as well as a mild winter that favored moose resulted in poor food conditions for wolves, according to Peterson.

WOLF DEPREDACTIONS on livestock in Minnesota during the first quarter of 2002 increased greatly compared to the same quarter of 2001, probably due to an abnormally warm and snowfree winter. The number of verified complaints was 12 compared with 1 last year, and the number of wolves killed by the U.S. Department of Agriculture's Wildlife Services was 23 compared with 2 last year.



TWO FOSTER WOLVES

seem to be doing well in North Carolina. The red wolf pups were born at the North Carolina Zoo and given to a wild female red wolf raising her own two pups of the same age. As of this writing in early June, all pups were doing well, according to the U.S. Fish and Wildlife Service.

WOLVES HELP TOWN.

In a modern twist of wildlife management, fencing has been modified around Jasper, Alberta, Canada, to allow wolves, bears and cougars to enter the town area and help scare the local elk, according to Charlie Gillis in the *National Post*. The urban elk had become so tame that they had been injuring humans. Upon recommendation by wildlife officials, down went the fences, in came the wolves, and frightened became the elk.

A WOLF IN SOUTH DAKOTA

probably originated in Minnesota, Wisconsin or Michigan, according to DNA tests. The animal was killed by a coyote "getter" (a device that shoots poison into an animal's mouth when triggered) in northwestern South Dakota, over 300 miles west of Minnesota.

MEXICAN WOLF RECOVERY

continues to progress, with six packs known or thought to have denned. U.S. Fish and Wildlife Service officials captured a litter of 7 pups and the breeding pair of the Pipestem pack, which had been preying on livestock, and brought them into captivity. One of the pups looks unusual and is being tested genetically.

FAMOUS WOLF DEAD.

Yellowstone's Female Wolf 7, the progenitor of the Leopold pack, which occupied the Blacktail Plateau between Mammoth and Tower, was killed by other wolves. The pack has new pups, but they will probably survive because the male and other pack members are caring for them.

WOLF DELISTING.

Some 48 scientists, including 2 practicing wolf biologists, wrote Secretary of the Interior Gale Norton imploring her to scrap the U.S. Fish and Wildlife Service's proposal to reclassify the wolf. They felt that the proposal would "end prospects of the species to return to vast areas of the wolf's former range." ■

Wild Kids



The Many Faces of the Wolf

by Kevin Strauss

Have you ever read or heard a story about a wolf? Stories often help us learn about animals that we don't see everyday. You probably remember hearing stories like "Little Red Riding Hood" and "The Three Little Pigs" in which the wolf acts like a villain. But there are other kinds of wolf stories. In other, less known stories, wolves may act wise, foolish, or helpful.

Read the following story and think about what kind of wolf character the author was trying to portray.

Wolf and Dog (an Aesop's Fable)

retold by Kevin Strauss © 2001

Long ago, Wolf was hungry. Now you might think that Wolf is always hungry, and you would be right. But on this day, Wolf hadn't eaten for weeks. It was almost as if all the deer and rabbits had evaporated from the forest like mist in the morning. Wolf was so hungry that he decided to look for food near where the humans lived. It was dangerous for Wolf to hunt near humans. Some wolves that go there never come back. But Wolf had never been this hungry before. So as the sun dipped red behind the western hills, he walked through the forest to the edge of a farmer's field.



Illustrations by Joan Ouellette

Wolf sniffed the air and scanned the field, looking for a calf or lamb to eat. It was then that he heard a strange sound. The barking noise was coming from a creature that looked a lot like he did. The creature was running toward Wolf.

"Woof!" said the creature.

"Brother, why are you speaking so strangely? We wolves never bark that way," said Wolf.

"I'm not your brother. I am a dog and we bark when we see wild animals near the farm," said Dog.

"Well we certainly do look alike, perhaps we are related in some way," said Wolf. And then he noticed how fat Dog was.

"Say brother, how is it that I am starving while you seem to have plenty of food?"

"I work for my meals. I chase wild animals and robbers away from the farm, and for that work I am well paid. Every evening, my master scrapes his table scraps into a bowl and feeds me until I am full," said Dog.

"You mean you don't have to hunt for your food and catch it in the forest?" said Wolf.

"Of course not, why would I do that? The only hunting I do is for fun," said Dog.

"Say brother, do you think that your master could use another worker? I could chase wild animals away from the farm, too," said Wolf.

"Well, I guess so," said Dog, "There is always work to do. Let's go ask my master."

So as evening settled on the fields, Wolf and Dog walked up to the farmhouse. As they got closer to the house, the light from the windows shone on them, and for the first time, Wolf noticed that Dog had no fur around his neck.

"Dog, why do you have no fur on your neck," said Wolf.

"Oh that, it's nothing, you'll get used to it," said Dog.

"Get used to what, Dog?"

"Well it's nothing, really. My master doesn't want me running off during the day, so he ties me up near the house, and when I pull at the rope, it wears away the fur on my neck. It's fine though; all I do is sleep through the day. You'll get used to it," said Dog.

Wolf stopped. He looked at the forest, then back at Dog and then back at the forest.

"No, Dog, I don't think I can get used to that."

And Wolf turned and ran back to the darkness of the woods. People say that from that time on, wolves have lived in the forest, and dogs have lived with people, and they have never spoken since. ■

Kevin Strauss is a naturalist storyteller from Ely, Minnesota. His new CD, *The Mountain Wolf's Gift: Wolf Tales From Around the World*, is available through the Wolf Den Store. Contact him at kevintale@hotmail.com.



Activity:

Go to your local library and check out as many books as you can find that have wolf characters in them. Make a list of the ways wolves are portrayed. Is the wolf a villain? foolish? wise? helpful?

Answer these questions:

- What personality does the wolf have?
- How do you think the author of this book wants you to feel about wolves?
- What problems are there in learning about wolves from folktales?

A Look Beyond

A Look Beyond

by Walter M. Medwid,
Executive Director, International Wolf Center

Noted wolf biologist Rolf Peterson reported in a recent news article that “on Isle Royale, if there was an equilibrium between the species, it would be about 30 wolves and 1,000 moose. But that level is almost never reached—one of the two species is almost always out of whack.”

The idealized concept of the balance of nature has a strong hold on our understanding of the environment. It is a grand law of nature, especially when applied to predators and their prey. The concept appeals to the public and has resulted in support for the protection of birds of prey, bats, wolves and other animals. Clearly the fly in the ointment of this ecological principle is that balance “works” in the long run, but chances are that any given wildlife population at any given time is not likely to be in balance. The history of Isle Royale’s moose and wolf populations is a great example of this seesawing.

Which brings me to some Minnesota statistics that highlight a kind of balance in the world of wolves and humans. First, the wolf numbers—they’re high. Current estimates place the number at 2,600, higher than at any time in the past century. With that kind of growth (a doubling of the wolf population since the late 1980s), one would expect that the deer population might be decreasing, a trend that would be reflected in the

take by deer hunters. Yet the state is expecting that the kill by hunters in 2001 when finally completely tallied will be one of the highest on record. And interestingly enough, the top five deer harvest years all occurred after 1990. Last year’s harvest is expected to be the state’s third highest, and especially intriguing is the fact that deer harvests were up by 3 to 15 percent in wolf range (roughly the northern third of the state) over the previous year, depending on the region.

Equally interesting is the number of wolf–livestock conflicts in 2001. It was the lowest in Minnesota since 1991 despite the fact that wolf range has spread south and west into agricultural lands. Verified complaints (those in which wolves have been determined to have killed or maimed domestic animals) for 2001 totaled 54, down from 95 in 2000—a 43-percent drop. The abundance, if not superabundance, of deer probably was an important factor in this drop in conflicts.

At this moment, there may be a symmetry. Recent winters have been mild enough to keep deer populations high, and the relative abundance of deer has kept wolves largely out of the riskier fields of ranchers. Wolf supporters, deer hunters and ranchers can all take some comfort in the 2001 statistics.

But if one thing is certain, it’s that the balance of 2001 won’t last. Severe deer-killing winters like the ones in 1995-96 and 1996-97 will occur, and complaints about wolves killing too many deer will increase. Wolf conflicts and livestock depredation will increase; wolf–human conflicts will be in the media once again. And 2001’s remarkable confluence of favorable numbers will become a distant memory.



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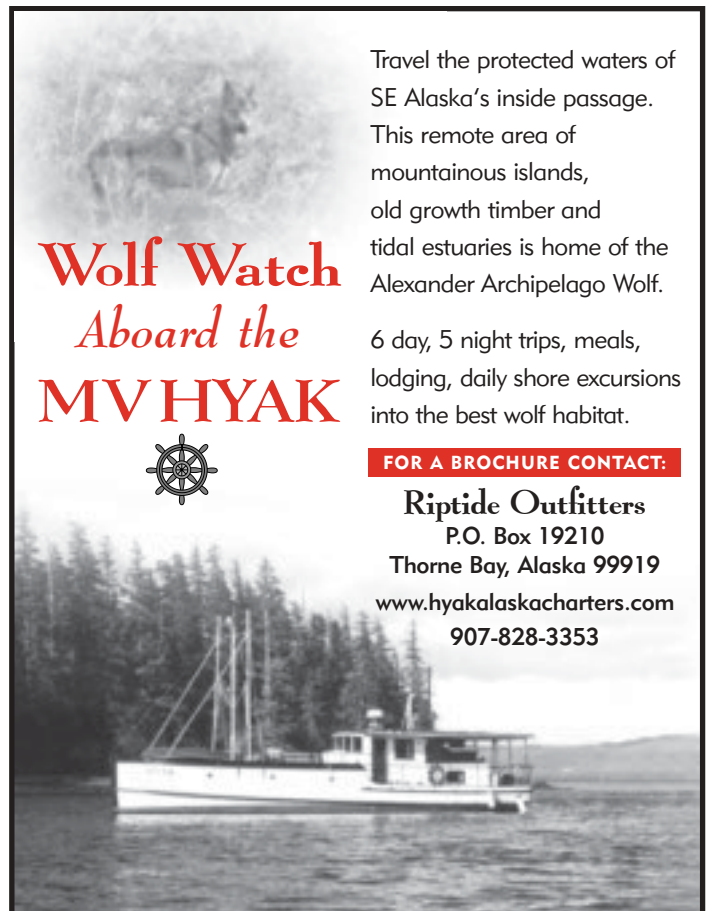
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Janice Templeton

It is in this spirit that Lucas, MacKenzie, Lakota, Malik and Shadow greet the thousands that come to the International Wolf Center every year. These special wolves do their part to represent wolves everywhere and to educate the world about the need for conservation.

Now we need to do our part. The Wolf Care Fund is dedicated to care for the needs of our Ambassador Wolves, now and into the future. We hope you will consider making a donation for their care.

Here are just two of their most pressing needs:

FIRE EVACUATION KENNELS

Due to the July 4, 1999, windstorm, an increased fire hazard is growing in the Boundary Waters Canoe Area Wilderness. Our Ambassador Pack needs transportation kennels to carry them to safety in the event of a wildfire.

RETIREMENT ENCLOSURE

As the elders in our Ambassador Pack continue to age and grow old, they will need a safe retreat, with ample room, to spend their final days. This fall, work will begin on a retirement enclosure. Plans call for the new facility to provide aging wolves with high-quality care, in a relaxed environment.

All donations to the Wolf Care Fund will be used for the care of our wolves exclusively.

Please make your contribution to the care of our Ambassador Pack.

Send your check or credit card donation to:

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Call 1-800-ELY WOLF or visit our Web site at: www.wolf.org

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