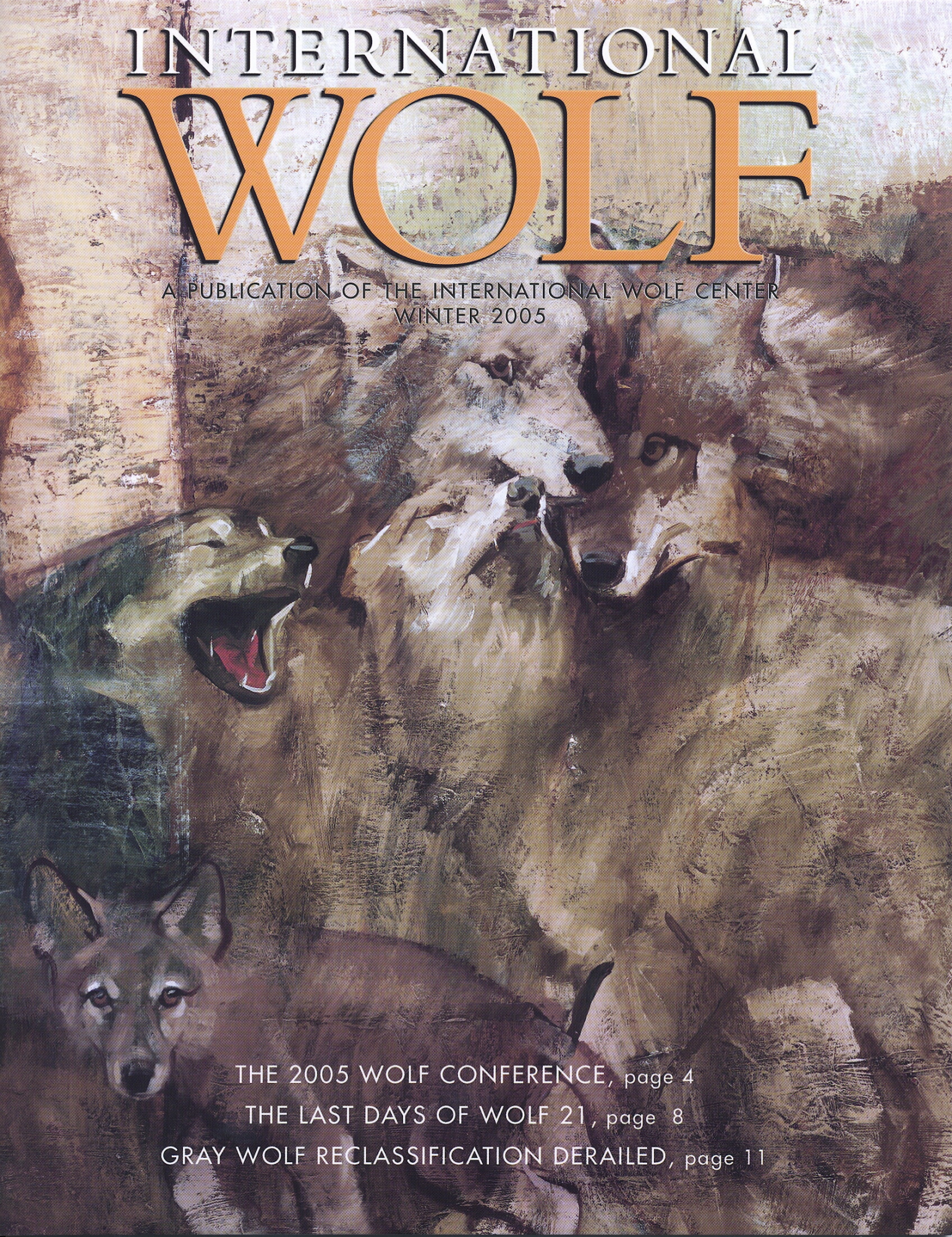
INTERNATIONAL WOLF

A PUBLICATION OF THE INTERNATIONAL WOLF CENTER
WINTER 2005



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THE QUARTERLY PUBLICATION OF THE INTERNATIONAL WOLF CENTER
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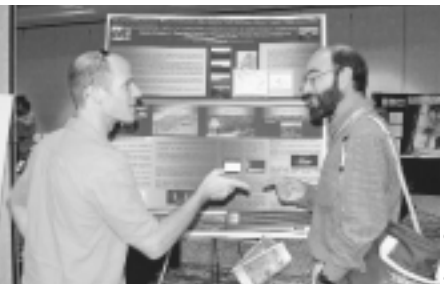
Features


Steve Grooms


Jim Peaco, National Park Service

Departments

On The Cover

"Wolf Painting #11" by Mary Roberson

Mary Roberson has been featured in *Wildlife Art* magazine, and will be featured in *Southwest Art* magazine's November 2005 issue and *Informart* magazine's fall issue.

To view and purchase additional artwork, visit www.maryroberson.com, or call 208-788-3865.

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International Wolf welcomes submissions of personal adventures with wolves and wolf photographs. 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

Question: Where did Adolph Murie conduct his primary wolf study?

Answer: Adolph Murie conducted his primary wolf study in Alaska. Between 1939 and 1941, Murie conducted one of the first formal studies of wolves anywhere, at Mount McKinley National Park (now called Denali National Park). ■

New Question **What is RLU?**

Correction: A photo on page 10 of the Summer 2005 issue of *International Wolf* was mistakenly credited to Leo and Dorothy Walter. The photo was taken by Leo and Dorothy Keeler.

West Gate

From the Executive Director

After spending hours watching the pack, we had many questions on our minds, one of which was, where was the sixth adult? The previous day all members of the pack—the six adults and three pups—were settled into their rendezvous site. The pups spent most of the day sleeping, interspersed with moments of activity to adjust positions, often staying in the same place, just pointed in a different direction. It was as if they were fluffing up the pillows provided by the Arctic hummocks.

This pack was on the western coast of Ellesmere Island, well north of the Arctic Circle, thus allowing us to observe the wolves anytime of the day. I had the great fortune of accompanying Dave Mech on his twentieth year of wolf research in the remote location. I had joined Dave in 2001, but we saw no wolves that year.

Walter Medwid

This year was different.

After two days of searching, we found the pack, and because these wolves had not suffered persecution by humans, their fear was minimal, allowing us to get very close to them. We watched them for hours on end as they largely ignored us. It was simply an amazing experience to be *that* close.

This brings me back to the "missing" wolf. In this landscape where trees grow laterally, not vertically, it is easy to see any movements on the tundra. And sure enough "number 6" suddenly appeared heading up the streambed toward us with a deliberateness to its stride. It held its head high as it searched to find the other members of its pack. As it passed a tongue of the ridgeline, it saw the adults and quickly approached them. The usual greeting of moving tails, ears, heads and most of the rest of the body followed as each adult was met. But this greeting seemed a bit shorter than the usual. Number 6 seemed intent on other business—to find the pups. It again held its head high and keenly looked around, but failed to see the pups, who had nestled themselves deep in the hummocks. The wolf picked up a scent and quickened its pace in a direction that would take it to the pups. Before it got close, the three pups popped out of the hummocks, and an exuberant greeting ensued. Pups rolled over each other as they begged food from the adult. Their ears pointed down and then up, their tiny tails wagged, and their back and front halves wiggled from side to side. The pups' exuberance was rewarded with regurgitated food from the adult. We could see one pup carrying a piece of bloodied meat, and when their heads came up from eating, their white manes were colored with blood from the fresh meal—likely a young arctic hare.

Often I've read that members of the pack help care for the wolf pups. Never again will I read that without visualizing number 6 making its triumphant return to its own pack, determined to make sure it did indeed take care of the pups. ■

MISSION

The International Wolf Center advances the survival of wolf populations by teaching about wolves, their relationship to wild lands and the human role in their future.

Educational services and informational resources are available at:

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Jacquelyn Fallon

Tom Schwab

The 2005 Wolf Conference

by STEVE GROOMS and NAOMI HUIG

Conference Sponsors and Partners

The International Wolf Center gratefully acknowledges the following conference donors:

- Valerie Gates
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- Wolf Forum of Southern Rockies
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  - Denver Zoo
  - Albuquerque BioPark's Rio Grande Zoo
  - International Wolf Center
- National Park Service
- The Leighty Foundation
- The Harold W. Sweatt Foundation
- Defenders of Wildlife
- Sinapu

Once every five years, the International Wolf Center organizes an international wolf conference. In early October 2005, approximately 450 people from 18 nations met in Colorado Springs, Colorado, for the fourth such wolf conference: "Frontiers of Wolf Recovery." A wolf conference is a bit like a class reunion, a bit like a fair, a bit like a celebration and a lot like an advanced college seminar in wolf research. In short, a wolf conference is pretty special.

Attendees this year included a colorful international mix of wolf researchers, wolf managers, wolf educators, wolf fans and environmental activists. Also present were "stakeholders" in the great debate about wolf management, including people who raise sheep and cattle. What that mixed group had in common was a passionate interest in wolves, positive or negative.

The four-day conference offered a great deal for participants to think about. Saturday afternoon featured an IUCN World Conservation Union Wolf Specialist Group meeting including people from 13 different countries. As a part of this world's foremost international conservation organization, their goal is to promote ecologically sound management of the wolf worldwide and

especially endangered wolf populations. In more than a hundred oral presentations, wolf experts shared cutting-edge research and the kind of wisdom that comes from decades of political wolf wars. Some of those presentations were moving. Some were funny. Some were contentious. All were fresh and intriguing.

The particular focus of this conference was wolf recovery in the Southwest. The U.S. Fish and Wildlife Service has launched an effort to recover wolves in the southwestern United States. This represents only the third time federal managers have determined to recover gray wolves in a specific region (the first two being the successful efforts to restore wolves in the upper Great Lakes and the Northern Rockies). As the panel discussions made clear, many questions and challenges remain to be dealt with before wolves can be restored to the Southwest, but interest in the project is high.

The conference wasn't limited to wolf talk, although that was the heart of it. Attendees also saw slide shows and wolf films. One slide show demonstrated how better photographic technology is advancing wolf research. Authors of wolf books signed their books. One evening featured a ranchhouse meal, followed by an evening of cowboy music. Filmmaker Bob Landis gave attendees a sneak preview of some of his latest footage, including some never-before-filmed interactions between wolves and other species. Trainers demonstrated how dogs can be used to perform wildlife census work by discovering wildlife scats. Some attendees toured beautiful parks in the Colorado Springs area.

A Southwest Wolf Stakeholder Meeting co-hosted by the Colorado Wool Growers Association, the National Wildlife Federation, the International Wolf Center and Arizona rancher Darcy Ely followed the conference. Representatives from livestock, hunting, governmental and environmental organizations discussed efforts to educate the public about wolves and their effects on people in the Southwest. Jackie Fallon, Mexican Wolf Education Advisor for the Mexican Gray Wolf Species Survival Program and Minnesota Zoo Keeper, and Lori Schmidt, Wolf Curator for the International Wolf Center, addressed the unique and important issues surrounding day-to-day wolf management at their facilities in a Captive Wolf Management Meeting, another post-conference event.

In short, it was a splendid event, and I hope you didn't miss it. If you did, on the next pages are a few quotes to give you a taste of the provocative and thoughtful presentations at the 2005 wolf conference.

Kelly Godfrey

Left: Doug Smith, shown here, and other authors signed their books for conference participants.

Below: Wolf experts shared their research with conference participants through poster exhibits and oral presentations.

Steve Grooms

Carissa Knaack

Carissa Knaack

Conference participants enjoyed a ranch-house meal at the Flying W Ranch, followed by an evening of cowboy music.

Carissa Knaack

Walter Medwid presented the Distinguished Service and Education Award to Valerie Gates in recognition of her commitment to the environment and environmental education and generous support of the International Wolf Center.

Jacquelyn Fallon

The conference focused on wolf recovery in the Southwest, where the U.S. Fish and Wildlife Service has launched an effort to recover the Mexican gray wolf.

Steve Grooms

"Increasingly, wolves and humans are competing for space. It might not seem like that is the issue, but it is. When we grow our food, we consume space that is not available to wolves. We have this attitude of wanting to eat our cake and have our wolves, too. Over the next 25 to 50 years, we will have more and more problems finding enough suitable space for wild wolves. While some folks worry about Alaskans aerially shooting a few wolves, what we really should be worried about is saving wild lands."

L. David Mech,
U.S. Geological Survey

"While the depredation compensation program is perhaps better than nothing, it doesn't address the emotional loss. We ranchers don't talk much about feelings. But I have to tell you, I just don't like the feeling I get when my cows and calves are attacked by wolves."

"When I read some statements by environmentalists, I feel they favor an ethnic cleansing of the range of all ranchers."

Tom Compton, rancher

William Rogers Photography

"I don't agree that the purpose of the Endangered Species Act is to prevent extinction. The purpose of the Endangered Species Act is recovery of the species. The act is supposed to recover an endangered species in a 'significant portion' of its original range. Shouldn't the significant portion be larger than the insignificant portion? If we don't get this right for a species like the wolf, what are the chances we will get it right for a species that is not celebrated?"

Mike Phillips,
Turner Endangered Species Fund

"Habituation to humans is the response wolves or other animals have to frequent nonconsequential contacts with humans. It is interesting to note that we consider habituation to humans a bad thing in the United States, but in Europe such habituation is seen as good because it makes it possible for wolves to live in densely settled areas."

Diane Boyd, ecological consultant

"Wolves are well studied, but this does not mean we should no longer study them. The first 10 years of wolves in Yellowstone has produced some amazing insights: interactions we have seen between wolves and grizzly bears, coyotes, elk and bison have been some of the best looks into this anywhere. And documenting the impacts on the ecosystem has also presented a remarkable scientific opportunity in that there was great data on Yellowstone without wolves; now we have great data with them, a wonderful chance for comparison."

Doug Smith,
Yellowstone National Park

"We are born with two ears and one mouth, so we should be listening at least twice as much as talking to the various interest groups. When government agencies start saying they are going to listen to the various interest groups instead of talking to them, we will be making progress in public involvement in resource management decision-making. I have yet to see any interest group get upset because they were listened to. We have the tools to reach decisions that all interest groups agree to, but managers must be willing to work with interest groups toward a better understanding and addressing of each group's concerns."

Alistair Bath, Memorial University of Newfoundland

"Saying that wolf losses to the cattle industry are insignificant—which is true, statistically speaking—is like saying the loss of New Orleans to the national economy is insignificant."

Ed Bangs,
U.S. Fish and Wildlife Service

"Long-range studies offer the only chance to study ecosystems in detail. And the ironic truth is that the more you study, the less you know—or the less you think any simple explanation will suffice. Long-range studies offer the only chances for us to find out how little we know."

Rolf Peterson,
Michigan Technological University


Mary Ortiz

"In parts of India, the lives of wolves and humans are intimately interwoven. In some agricultural areas, there is no natural prey for wolves. In these areas, without livestock there would be no wolves."

Yadvendradev Jhala,
Wildlife Institute of India

Steve Grooms has recently rewritten his best-selling book, The Return of the Wolf. *He was assisted in this article by Naomi Huig, a wildlife student from the Netherlands.*

International Wolf Center Awards Presented

DISTINGUISHED SERVICE AND EDUCATION AWARD was presented to **Valerie Gates** in recognition of her commitment to the environment and environmental education and generous support of the International Wolf Center.

The annual *"WHO SPEAKS FOR WOLF"* (from a Native American myth) award is given by the International Wolf Center to an individual or individuals outside the organization who have made exceptional contributions to wolf education, both by teaching people how the wolf lives and by placing the wolf in the broader context of humankind's relationship to nature.

This year's recipients are:

Bob Landis, cinematographer

Rick McIntyre, Naturalist, Yellowstone National Park

Jennifer Gilbreath, Red Wolf Coalition

Bobbie Holaday, founder and director of Preserve Arizona's Wolves


Jacquelyn Fallon

Among the members of the famed Druid Peak pack, one wolf stood out due to his size and charisma—wolf 21, the Druid dominant male.

Jim Peaco, National Park Service

The End of an Era~ The Last Days of Wolf 21

by RICK MCINTYRE

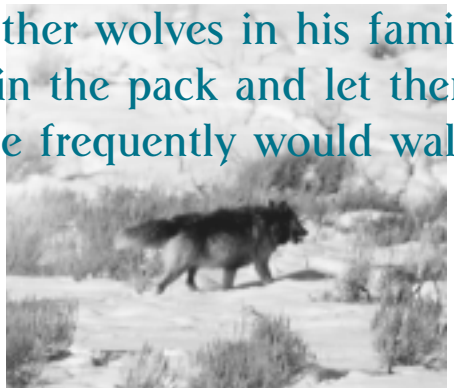
Editor's note: Stretching across the northeastern portion of Yellowstone National Park, the Lamar Valley has been called America's Serengeti. With its broad vistas and abundant wildlife, the Lamar has long been a favorite destination for park visitors. Since 1995, when wolves were reintroduced to Yellowstone, the valley has gained renown as one of the best places in the world to see wolves.

Throughout the decade of Yellowstone wolf recovery, no wolf pack has enjoyed celebrity status more than the famed Druid Peak pack. And no individual wolves have captured the hearts and imaginations of wolf supporters more than wolf 21 and wolf 42.

June 11, 2004, seemed like a typical day in Lamar Valley. We found the Druid wolves feeding on a freshly killed elk just after first light. Word spread quickly through the valley, and soon scores of park visitors were watching the pack. As always, one member of the pack stood out due to his size and charisma—21, the Druid dominant male. Most of the wolf watchers there that morning knew about 21 and his history before they came to the park. To see him, just 400 yards away, was like seeing their favorite rock star in person.

At that time 21 was just over 9 years old, the oldest known wolf in the park. He had been born in April 1995 to wolf 9, one of the original reintroduced Canadian wolves. Just before his birth, 21's father, wolf 10 (the magnificent Yellowstone "poster wolf") was illegally shot and killed. Wolf 21's mother gave birth to eight pups under adverse conditions near the remote town of Red Lodge, Montana. Since it would have been almost impossible for her to get enough food by herself for such a large litter, the National Park Service and U.S. Fish and Wildlife Service captured the family and put them in the Rose Creek acclimation pen in Lamar Valley. Wolf 9 and her pups spent the summer and early fall in the enclosure.

Wolf 21 was amazingly benevolent toward the other wolves in his family. At times he would wrestle with younger males in the pack and let them win. Even though he was the dominant male, he frequently would walk off after a kill and let the other wolves feed first.



Jim Peaco, National Park Service

Jim Peaco, National Park Service

For many wolf watchers in Yellowstone's Lamar Valley, to see Wolf 21 was like seeing their favorite rock star in person.

The plan was to release the family in mid-October 1995. Around that time Wolf 8, a low-ranking yearling from the Crystal Creek pack, wandered up the Rose Creek drainage, where he found some of the pups and befriended them. Wolf 9 accepted him into her pack, and since wolf 8 was the only adult male in the group, he became the Rose Creek pack's dominant male by default.

Wolf 21 eventually became the second-ranking male in the pack, and he helped wolves 8 and 9 raise litters in 1996 and 1997. During the 1997 denning season, 21 was particularly devoted to caring for the pups. One of the pups in that litter was sick and did not play or interact with the other pups. I remember seeing 21 deliberately go to that pup and sit beside it, much like a dog might sit by its sick owner.

In late 1997, the Druid Peak wolves, which lived just east of 21's pack, headed out of the park, and both of its adult males were illegally shot and killed. The surviving three adult females and five pups returned to Lamar Valley and ran into wolf 21, who acted friendly toward them. The adult females tested 21 by snapping at him. He just stood there with a wagging tail and did not snap back. Wolf 21 joined their pack as its dominant male and adopted the pups of wolf 38, just like wolf 8 had adopted him.

Wolf 21 sired many pups from 1998 to 2004, including 21 pups in 2000. At one point, the Druid Peak pack numbered 37 wolves, the second or third largest known wolf pack in history. Many of 21's offspring have left to start new packs and now have pups of their own. For example, his son 253 is now raising pups in a new pack near Jackson, Wyoming.

Wolf 21 was amazingly benevolent toward the other wolves in his family. At times he would wrestle with younger males in the pack and let them win. Even though he was the dominant male, he frequently would walk off after a kill and let the other wolves feed first. I often saw pups harass him by biting his tail or ears. He never retaliated. He would just walk away. Once I saw him cross the road and hide in bushes to get away from pups that were bothering him.

When necessary, Wolf 21 would use his great size and strength to benefit his pack. If the younger wolves were attacking an elk but could not pull it down, 21 would run in, leap up and grab the elk's throat in an iron grip. The elk could not shake him off and would die in a minute or two. As he got older and slower, that ability to quickly kill an elk enabled him to still contribute to the pack's welfare. On two occasions I saw 21 run into clusters of big wolves from rival packs and defeat them by himself, like an action-movie hero.

Wolf 42, the Druid dominant female and 21's long-time companion, died in February 2004. Her remains were found at the west end of the Lamar Valley on Specimen Ridge near a bull elk carcass. It looked like she had been killed by other wolves, most likely Mollie's pack. The Druid and Mollie's wolves probably encountered each other at the carcass site and fought. In the confusion, some of the rival wolves must have killed 42.

Whatever happened, 21 and all the younger wolves survived and made it safely back to their territory. There was some evidence that 21 may not have known what had happened to 42. Over the next few days he did more howling than usual, and he traveled extensively to the pack's most

commonly used areas, including their den. All this indicated he might have been searching for her.

After 42's death, 21 carried on with the pack as best he could. He mated with wolf 286, a young pack member that was not his daughter. She returned to the traditional Druid den site in early April and gave birth to a litter of at least six pups. As he had for so many other litters of pups, 21 worked hard to feed and care for them.

Those of us who were watching 21 on the morning of June 11 knew that he was very old for a wild wolf and that he might not survive much longer. Later that day the pack went to their rendezvous site at Chalcedony Creek and bedded down. In the evening a bull elk walked into that meadow, and several wolves chased him. I remember seeing 21 jump up with the other wolves, but he did not join in the chase. Perhaps he was tired or just not feeling well.

www.wildlifealongthe rockies.homestead.com

Wolf 42, the Druid dominant female, shown here with wolf 21, died in February 2004. She was probably killed by other wolves.

Over the next few days, we saw Druid wolves, but not 21, and I started to worry. His radio collar had not been working for awhile, and that meant that we might never know what had happened to him. Some people who knew 21 well were desperate to know his fate; others preferred not to know in case that fate might not be pleasant.

In July, an outfitter reported finding a dead radio-collared wolf high on Specimen Ridge. He had brought the collar down with him and given it to a ranger, who showed it to me. It was 21's. Doug Smith, head of the Yellowstone Wolf Project, several other Wolf Project personnel, and I rode horses up to the site a few days later.

Wolf 21 had died in the pack's Opal Creek rendezvous site, a late-summer site the Druids have used for many years. We found his remains under a tree at the edge of a meadow. If a person or a wolf wanted to pick a tranquil place to spend his last day of life, this would be a good choice. There was no sign of struggle or violence. I think he knew his time was coming, and went to a site he liked and lay down.

That meadow will likely be used by the Druid wolves for many more years. The legacy of 21 will live on in that special place and in the future generations of Druid pups. Wolf 42 died only a few miles west, on the same ridge. During their many years as a mated pair, the two were rarely apart, but when they were separated, they could always find each other again quickly. Certainly in the memories of the people whose lives were enriched by them, 21 and 42 will always be together. ■

Rick McIntyre, author of A Society of Wolves *and* War Against the Wolf, *has been watching wolves for the past 27 years in Denali, Glacier, and Yellowstone National Parks. He currently works for the Yellowstone Wolf Project.*

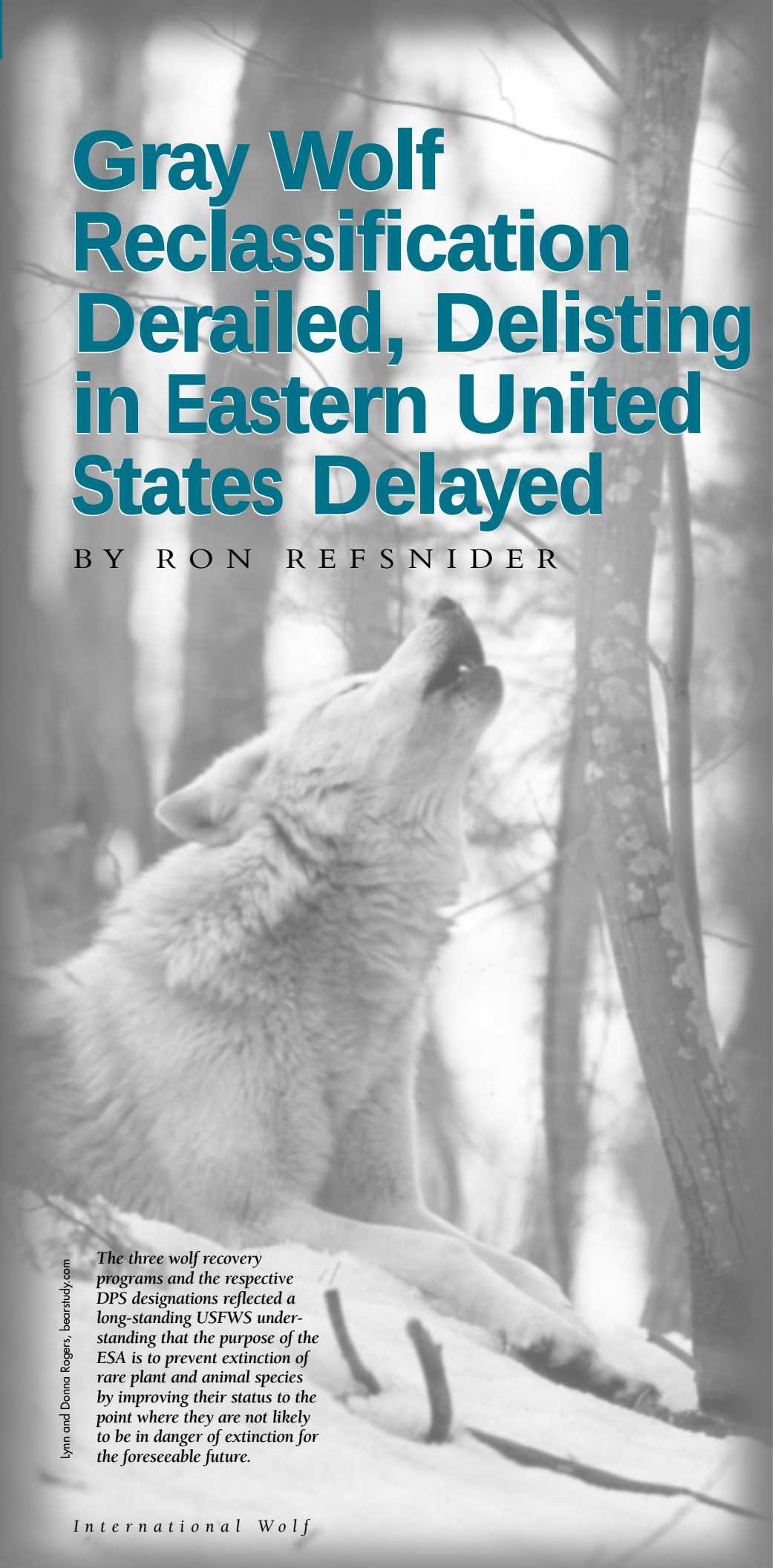
With its broad vistas and abundant wildlife, Yellowstone National Park's Lamar Valley has long been a favorite destination for park visitors. Since 1995, the valley has been even more popular and for one reason—the return of the wolf to Yellowstone.

Jim Peaco, National Park Service

Wolf 21 died in the pack's Opal Creek rendezvous site, a late-summer site the Druids have used for many years. We found his remains under a tree at the edge of a meadow. If a person or a wolf wanted to pick a tranquil place to spend his last day of life, this would be a good choice.

Gray Wolf Reclassification Derailed, Delisting in Eastern United States Delayed

BY RON REFSNIDER



Lynn and Donna Rogers, bearstudy.com

The three wolf recovery programs and the respective DPS designations reflected a long-standing USFWS understanding that the purpose of the ESA is to prevent extinction of rare plant and animal species by improving their status to the point where they are not likely to be in danger of extinction for the foreseeable future.

On January 31, 2005, U.S. District Court Judge Robert Jones delivered an important ruling against the U.S. Fish and Wildlife Service (USFWS). The ruling wasn't just a surprise to me—it was a shock! I had been the leader of a team of USFWS endangered species biologists that had crafted the gray wolf reclassification overturned by the ruling. With the help of several career Endangered Species Act (ESA) attorneys for the Department of the Interior, we had spent nearly three years developing the initial proposal, held 14 public hearings across the nation, and analyzed comments from 43,000 individuals and organizations interested in the changes we had proposed. We spent an additional three years carefully making changes based on those comments and to comply with the legal requirements of the ESA. We were convinced that we had followed the law and had used the best scientific data in making the final decision that we announced in April 2003. So you might understand why we were shocked when Judge Jones ruled that we had misinterpreted and improperly applied the ESA, and that he was vacating—overruling—our gray wolf reclassification final rule and the three Distinct Population Segments (DPS) that it had established.

Our 2003 gray wolf reclassification had subdivided the 1978 48-state-wide listing of the gray wolf into three geographically delineated DPSs. Under its definition of "species" the ESA allows the listing/reclassification/delisting of DPSs of vertebrate animals, so our 2003 reclassification had "listed" three DPSs that corresponded to the USFWS's three on-going gray wolf recovery programs. These DPSs were an eastern one encompassing the area of the 25-year-old Eastern Timber Wolf Recovery Plan (from the Dakotas to the Atlantic Coast), a western one that was centered around the Northern Rocky Mountain Gray Wolf Recovery Program, and a southwestern one that was built around the Mexican Gray Wolf Recovery Program in the United States and Mexico. Because wolves in

the Eastern and Western DPSs had already achieved the numerical criteria that their respective recovery programs had established to trigger reclassification from endangered to threatened status, our 2003 final rule had reclassified gray wolves in these two DPSs to threatened status. Wolves in the Southwestern DPS remained listed as endangered due to their low numbers, limited range, and continuing threats to their survival.

These three recovery programs and the respective DPS designations reflected a 30-year USFWS understanding that the purpose of the ESA is to prevent extinction of rare plant and animal species by improving their status to the point where they are not likely to be in danger of extinction for the foreseeable future. We believed that establishing three gray wolf metapopulations—three isolated populations of wolves, each of which are composed of semi-isolated subpopulations, are sufficiently large and geographically dispersed, and preserve genetic diversity so that they are independently viable—would guarantee that the gray wolf would not be threatened with extinction in our lifetime or in the lifetimes of our grandchildren. Those of us who had spent many years working in the ESA program—over 20 years in my case—did not believe the ESA required rangewide restoration of a species before it could be considered to be recovered and removed from the list of threatened or endangered species.

Judge Jones' ruling indicated that he interpreted the ESA differently. While stating that gray wolves have achieved their recovery goals in the Western Great Lakes and Northern Rockies, he indicated that the USFWS's reclassification of much larger DPSs around those recovered populations was improper because we had not analyzed the threats to gray wolves throughout all "significant portions" of historical wolf range within the Eastern and Western DPSs. Without such DPS-wide assessments of threats, our newly designated DPSs were invalid, according to the judge, as were our reclassifications of wolves in two of those DPSs from endangered to threatened status.

Judge Jones viewed "significant portions" of gray wolf range to be any large areas of historical range in the DPSs that still have suitable habitat, while the USFWS had viewed the significant portions of wolf range to be those areas in each DPS that were necessary to establish and maintain viable wolf populations for the foreseeable future. Thus, we had limited our assessment of threats to those smaller areas, instead of conducting the geographically larger analysis that Judge Jones envisioned. Because the USFWS has no written policy or guidance on the meaning of "significant portion of range" as the phrase is used in the definitions of "threatened" and "endangered," Judge Jones was able to provide his own interpretation.

At this writing, the Department of Justice has not yet decided whether to appeal the ruling of the Oregon District Court to the Ninth Circuit Court, so the long-term impacts of the ruling are uncertain. (A "Protective Notice of Appeal" was filed with the court on July 1, retaining the government's ability to appeal for an additional period.) But these immediate impacts have already occurred:

- All changes made by the April 1, 2003, gray wolf reclassification final rule are canceled, including the establishment of three gray wolf DPSs.
- Minnesota's 3,000 wolves remain listed as threatened, as they have been since 1978.
- Gray wolves throughout the remaining 47 conterminous states and Mexico have reverted to endangered status, except where they are listed as part of an experimental population for reintroduction purposes (throughout Wyoming and in portions of Montana, Idaho, Arizona, New Mexico and Texas).
- The April 1, 2003, Special Regulations for parts of the Eastern and Western DPSs (primarily dealing with the control of wolves attacking domestic animals) cannot be implemented.
- The 1994 and 1998 Experimental Population Regulations remain in effect for the experimental populations in the Northern Rockies and the Southwest.
- The 1985 Special Regulations that apply to control of depredating wolves in Minnesota remain in effect.
- Our July 21, 2004, proposal to delist gray wolves through-out the Eastern DPS cannot be finalized.

The 2005 regulations for the experimental populations of gray wolves in the Northern Rockies remain in effect, as they were not linked to the 2003 reclassification. These regulations increase management flexibility for states and tribes in the Northern Rockies experimental areas if they have wolf management plans approved by the USFWS.

In February, the Departments of Natural Resources in Wisconsin and Michigan requested that the USFWS issue subpermits to them that would restore some or all of their ability to kill wolves verified as attacking domestic animals. The states and tribes in the Eastern DPS had gained such "lethal control" authority under the 2003 special regulations for that DPS;

Those of us who had spent many years working in the ESA program— over 20 years in my case—did not believe the ESA required rangewide restoration of a species before it could be considered recovered and removed from the list of threatened or endangered species.

the two DNRs had used that authority to kill a total of 34 wolves in 2003 and 2004. After careful review of the impacts of the 2003–04 lethal control actions in those states, we issued one-year subpermits to each DNR. The subpermits authorize limited lethal control programs under stricter conditions than those previously contained in the 2003 special regulations. Details of each subpermit and our analysis can be found on our Web site at http://www.fws.gov/midwest/WisconsinWolfNEPA/ and http://www.fws.gov/midwest/MichiganWolfNEPA/.

Two things are crystal clear to me: The wolves have done their part, by reproducing and colonizing suitable habitat areas in the Midwest at a faster rate than most biologists expected. And the ESA has done its part, by protecting and fostering that expanding wolf population and providing legal flexibility to effectively deal with wolf-human conflicts during the recovery process. But now we face a new dilemma, and the solution is far from clear: how do we go about downlisting and delisting recovered populations of a species that once ranged over almost all of the United States?

The USFWS and the federal court system have had a great deal of experience with ESA listing actions and recovery programs, but we have had very little experience with the downlisting and delisting of species. Hopefully the public will bear with us longer as the USFWS, the courts and the environmental groups who opposed our DPS designations figure out how to make it work. ■

Ron Refsnider is the Endangered Species Listing Coordinator for the Midwest Region of the U.S. Fish and Wildlife Service. He has been working in the Endangered Species Program for over 21 years and has been involved in gray wolf recovery for the past 15 years.

Editor's note: Also see "Should the Wolf Be Delisted?" in the Spring 2004 issue.

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Lori Schmidt, International Wolf Center

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Nanny Passes Forward Wolf Education

Deborah Lucchesi

If someone had told me five years ago that I'd be standing in front of people talking about wolves and wolf pups, I'd have told them they had me mixed up with someone else! But life has a way of weaving its strands to create unexpected connections between people and animals, places and experiences.

This past summer when I volunteered to become a surrogate pack member to the three pups at the International Wolf Center, I planned to use my canine experience to help out, learn about wolves and pups, and return home to resume my life. But the experience was too powerful for me to leave the pack behind, so I found a way to keep them close to me by "passing them forward" all over Minnesota!

I put together a PowerPoint presentation from the hundreds of digital images I (and other nannies) had of the Center's ambassador wolves Maya, Grizzer and Nyssa, which included bottle feeding through their 7-month birthdays in January 2005. Then I took the show on the road to some unlikely organizations, businesses, outdoor expos, colleges and schools. I also published a couple of articles in Minnesota magazines, one of which featured Grizzer on the cover!

While I've enjoyed meeting wolf enthusiasts, the most rewarding aspect of these talks is answering questions and watching the faces of people who probably would have never taken an interest in wolves and our role in their future. People immediately relate when I tell them that the first few months after returning home, I didn't wash my red nanny jacket because I couldn't bear to wash away the scent of the pups' fur. From that point on, the captivating images of the pups tell the rest of the story.

William Rogers Photography

Deborah Lucchesi is passing the word on about her experience as a wolf pup nanny.

The true treasure of the Center's nanny program is opening eyes to wolves and their place in the web of life and passing it forward, one nanny at a time.

Courtesy of Kevin Ericson & Renee Meissner

Kevin Ericson and Renee Meissner, shown here at a Renaissance festival, were engaged to be married at the Center on July 8, 2005.

Romance Flourishes at the International Wolf Center

Keeping secret one's plans to propose marriage is no easy task, as Kevin Ericson found out. His girlfriend of nearly a year, Renee Meissner, kept figuring out every plan he came up with. But he was finally able to surprise her.

The two went on vacation to Ely, Minnesota. Renee had been there and visited the International Wolf Center nearly every year since 2001. Kevin knew Renee would appreciate the location, so he popped the question by the bronze wolves in front of the Center on July 8, 2005.

The timing surprised Renee, who was expecting to be asked on her birthday, one week later. The reception inside the Center surprised them both.

Kevin had notified Center staff of the pending occasion. So everyone was peering through the windows, watching the event unfold, and the happy couple were greeted with cheering and applause as they walked through the doors.

A time and place for the wedding hasn't been set, but maybe they'll end their vows with a nice loud howl.

"Leave Your Zoom Lens at Home"

Not-for-profit organizations rely heavily on the generosity of others to fulfill their mission. The donation of time, money and expertise is always appreciated. And the International Wolf Center is highly indebted to an advertising team at Campbell-Mithun, which has gone above and beyond in their quest to help.

Campbell-Mithun is based in Minneapolis but is known around the world for its amazing advertising campaigns for many corporations. Randy Gerda, Mark Francel, Reid Holmes and Gretchen Heim took time from those campaigns to do pro-bono work for the Center.

They've created posters, print ads, rack cards, postcards and even a billboard with catchy taglines and incredible designs—the wonderful result of which is that more people are drawn to the Center and learn more about wolves in the process.

A couple of the taglines they have created are "Leave your zoom lens at home" and "Wolves are born with every skill necessary for their survival. Except fundraising." It's impossible to tell what they'll come up with next. Whatever it is, it will be appreciated.

International Wolf Center

A Campbell-Mithun advertising team did pro-bono work for the Center. Back row, left to right: Linda Francel, Mark Francel holding Jakob Francel, Reid Holmes with Peter Holmes on shoulders, Randy Gerda with Lucas Gerda on shoulders; front row: Josef Francel, Elaina Francel, Katy Holmes, Gretchen Heim, Alina Gerda.

Norwegian Students Study Wolves in Minnesota

A group of exchange students got to know the wolves of Minnesota during an April 2005 visit. Twenty-six students enrolled in natural resource management and forestry courses at Nord Trondelag University College, Steinkjer, Norway, experienced a week of study in the United States through the University of Minnesota. A portion of that week was spent learning about wolves at the International Wolf Center.

Their wolf experience began the day after arrival with a talk by famed wolf biologist and Center founder Dr. L. David Mech in St. Paul. A couple days later the group headed north to the interpretive center in Ely, Minnesota, for what many students called "more than just a field trip." There, Program Director Jen Westlund discussed wolf biology, ecology and ethology with them. Wolf Curator Lori Schmidt took them to the U.S. Forest Service and U.S. Geological Survey's Kawishiwi Field Lab to learn more about telemetry and field study.

University of Minnesota program coordinator Bill Ganzlin says everyone on the trip gave enthusiastic reports after the week was done, describing what they learned and experienced. It was a trip they're not likely to forget. ■

Bill Ganzlin

Twenty-six students from Norway spent part of a week at the Center learning about wolves.

INTERNATIONAL WOLF CENTER

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MAY–AUGUST 2005

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Tracking the Pack

A World Run by Wolf Rules

by Lori Schmidt, Wolf Curator, International Wolf Center

On the morning of May 11, 2005, the wolf care staff encountered a day like no other. Upon arrival, staff member Jen Westlund prepared for the morning wolf check. She noticed that Nyssa, who was lying upright in a wooded area of the enclosure, wouldn't come to the fence. We put the other members of the pack into an adjacent holding area, and Jen and I went into the enclosure. It was immediately evident that Nyssa had suffered trauma; we crated her and transported her to the vet clinic. After a thorough examination, the veterinarian determined that her wounds were beyond repair and the damage left no options but euthanasia.

Nyssa had grown into a strong, healthy and independent adult. She weighed in at 95 pounds during the May medical exam, compared to Maya's 79.5 pounds, but size doesn't always mean status. Natural wolf behavior includes a rank order with dominant wolves aggressively forcing lower wolves to submit. Nyssa was the lowest-ranking wolf in the pack, and Maya actively showed her more dominant status. The events of May 11 stand as a reminder of the instinctual social dynamics that dictate life in a wolf pack. The wolves were being wolves in a world that is clearly run by wolf rules.

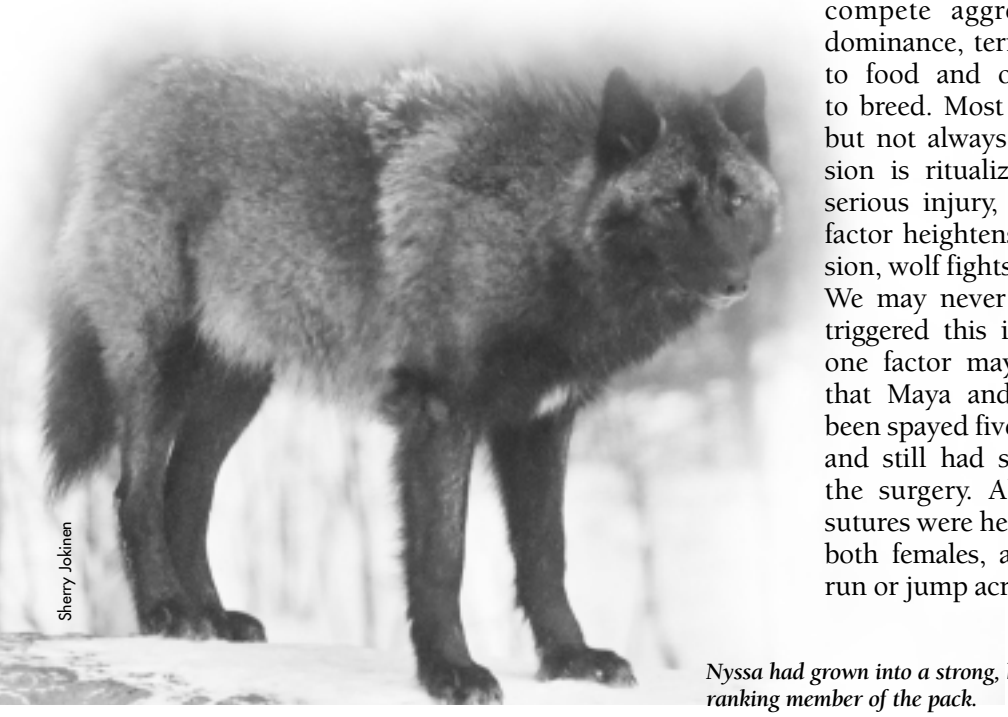
International Wolf Center

Several staff observed this wild wolf crossing the highway in front of the Center within days of the incident that led to Nyssa's death. The presence of a wild wolf could have triggered the aggression toward Nyssa.

Wolf-on-wolf aggression is one of the top two causes of natural mortality to wolves in the wild. Wolves compete aggressively for dominance, territory, access to food and opportunities to breed. Most of the time, but not always, the aggression is ritualized to avoid serious injury, but if some factor heightens the aggression, wolf fights can be fatal. We may never know what triggered this incident, but one factor may have been that Maya and Nyssa had been spayed five days earlier and still had stitches from the surgery. Although the sutures were healing well on both females, an exuberant run or jump across the pond could have popped a stitch and caused bleeding, drawing the wolves' attention to the suture site.

The Center's exhibit is unique compared to other facilities because wild wolves live near the Center. Several staff observed a wild wolf crossing the highway in front of the Center within days of the incident. Wolves are very territorial; the presence of another, strange adult wolf and an inability to deal with the threat from behind the enclosure fence would have likely agitated the captive wolves. The wolves could have redirected their aggression to the lowest pack member.

The philosophy of the Center is to "teach the world about wolves." The actions of the captive pack continue to do just that. ■



Sherry Jokinen

Nyssa had grown into a strong, healthy and independent adult, but she was the lowest-ranking member of the pack.

Wolves of the World

SWITZERLAND AND THE WOLF

Who's Afraid of the Big, Bad Wolf?

by Mark Schulman

This article was originally published online at http://www.panda.org/news_facts/newsroom/features/news.cfm?uNewsID=19492.

Looking for wolves in Switzerland is a bit like looking for a needle in a haystack. Perhaps even harder as there are only a handful of them roaming throughout the country's vast mountain ranges and alpine meadows made famous by the 19th-century children's classic, and later the popular television series, *Heidi*. But for many living in the Swiss Alps, this is a handful too many.

"If I ever came across a wolf, I would shoot it," a Swiss hunter from the Italian-speaking canton of Ticino said point-blank. "They are cold killing machines that threaten farmers and their livestock."

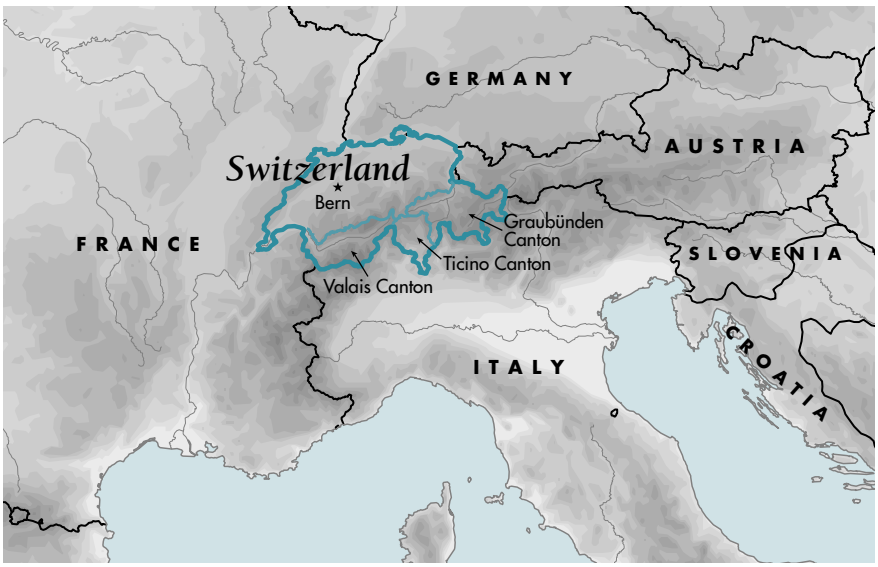
It is attitudes like this that first led to the wolf's extinction in Switzerland some 100 years ago. Despite continued persecution (and vilification through numerous folk tales, such as "Peter and the Wolf," "Little Red Riding Hood," the "Three Little Pigs" and others), the European wolf *(Canis lupus)* is showing signs of a comeback as several have sneaked across the border in recent years from Italy via France in search of new territory and food.

The presence of a single male wolf was first spotted in the Swiss canton of Valais in 1995 (and reportedly killed in 1996). Since then there have been wolf traces and other sightings in the southeastern cantons of Graubünden and Ticino. No breeding has so far been recorded, but the first female sighting came in July 2002 along the Swiss-Italian border near Valais.

"In the beginning there were rumors being spread that the wolves were being brought in by environmental groups," said Doris Calegari, a large carnivore specialist with WWF's European Alpine Programme. "No one actually believed that they came on their own naturally."

A Wolf's Paradise

Wildlife experts believe that there are up to six wolves in Switzerland, originating from packs in the Abruzzo region of central Italy some 600 kilometers (372 miles) away. Because of increased wolf protection in Italy in



There were once hundreds of wolves living throughout Switzerland, but years of population growth, industrialization, and forest conversion for agriculture and logging saw their habitat encroached upon. With little game left in the Alps, large carnivores turned to domesticated animals, like sheep and goats, for their meals. Seen as dangerous competitors, the wolf and the lynx were exterminated in the Alps.

the 1970s—resulting in increased wolf populations (today, there are about 600 wolves in Italy)—some have been forced to look for greener pastures. And nothing is greener than the alpine slopes of Switzerland.

"We welcome this natural recovery in Switzerland," said Calegari. "Wolves are one of the alpine region's top three predators, along with the brown bear and lynx. The fact that they have returned is an indicator that the habitat is much healthier than it was in the past."

There were once hundreds of wolves living throughout Switzerland, but years of population growth, industrialization, and forest conversion for agriculture and logging saw their habitat encroached upon. The loss of mountain forests, coupled with uncontrolled hunting, also resulted in the reduction of the deer population, the wolves' main prey. With little game left in the Alps, large carnivores turned to domesticated animals, like sheep and goats, for their meals, often bringing them into conflict with farmers who saw them as a threat to their livestock. Seen as dangerous competitors, the wolf and the lynx were exterminated in the Alps.

Today, however, mountain forests have recovered, and with them an abundance of herbivores, thanks to more protected areas and better land management. Switzerland is now a true wolf "paradise" with large populations of roe and red deer, marmots and chamois (horned antelope). Wolves never lost their taste, though, for easily accessible livestock, which often graze without protection in the high alpine meadows.

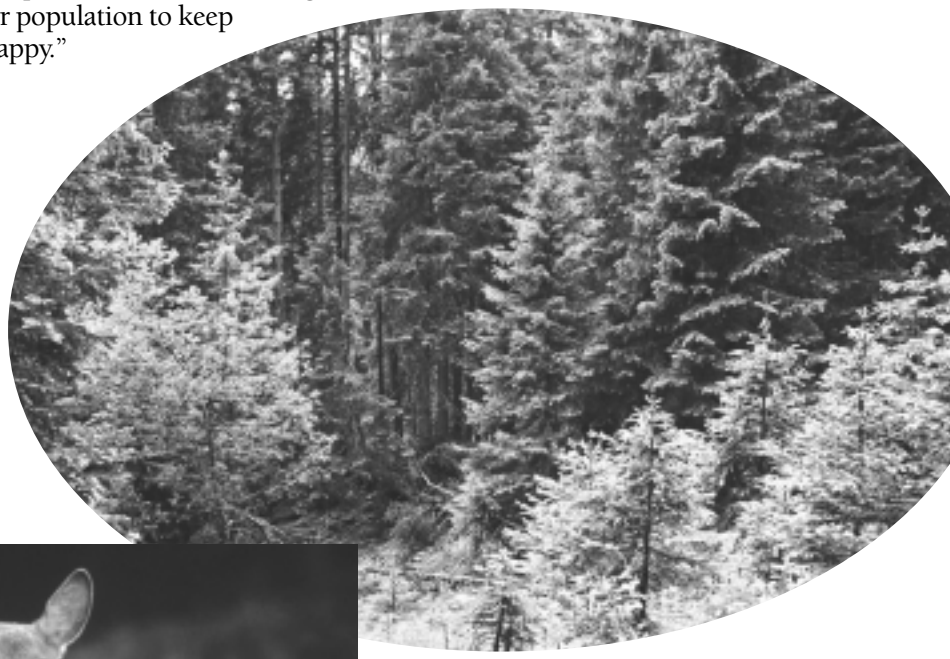
"Wolves are opportunists," said Joanna Schoenenberger, WWF-Switzerland's European Alpine Programme Officer working on wolf issues in Ticino. "Yes, they will go after sheep, but there is now enough of a deer population to keep them happy."

Debunking the myth that wolves hunt for "fun" and not only for food, a recent camera trap showed a wolf in Ticino returning to a deer it killed the night before.

"Mass killing by wolves is extremely rare," added Calegari. "Even when going after livestock, the loss of just a few animals is more common."

Who's Afraid of the Big, Bad Wolf?

Not everyone has welcomed the predator's reappearance. Since crossing into the Swiss Alps from Italy, wolves have been blamed for hundreds of attacks on sheep and goats. In spite of compensation for losses by the government, resistance against the wolf returning to Switzerland is strong, especially among sheep farmers and hunters.



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© WWF–Canon/Fred F. Hazelhoff

Above: Today mountain forests have recovered, and with them an abundance of herbivores, thanks to more protected areas and better land management.

Left: Switzerland is now a true wolf "paradise" with large populations of roe deer (pictured), red deer, marmots and chamois (horned antelope).

According to the Swiss-based KORA Carnivore Research Centre, 44 sheep were reportedly killed in Switzerland in 2004 by a large canine out of some 250,000 grazing sheep. The numbers are significantly lower than in 2000, when 105 sheep were killed. From 1998 to 2003, 456 sheep and goats have been compensated as wolf kills.

However, not all livestock attacks are the work of wolves but by their next of kin. The European wolf is a bit smaller and leaner than its North American counterpart and can easily be confused with a large dog. In Ticino alone there are about 80 goats and 200 sheep killed by dogs each year. Despite the figures, farmers and hunters are still quick to blame wolves for their losses.

"Wolves present a problem, especially as there are lots of sheep which graze without shepherds," said Marco Mondada, president of the Ticino Hunters Federation. "Farmers' interests should not be put at unnecessary risk by animals which can be so destructive. They must be managed."

Although the wolf is legally protected under Swiss law, as well as under the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitats, farmers and hunters have in a number of instances won the support of local government to go after the few existing wolves.

Regulations were introduced in 2001 permitting the shooting of any wolf believed to have killed at least 50 sheep over a four-month period, or 25 in a single month. The minimum has now been lowered to 35 sheep over a four-month time frame, and may continue to be lowered if wolf attacks continue. But the law is not totally on the side of wolf hunting. WWF recently won the right from the Swiss Federal Supreme Court to oppose decisions made by cantonal authorities in Valais to shoot a female wolf. WWF is now appealing the Valais cantonal court to overturn the decision.

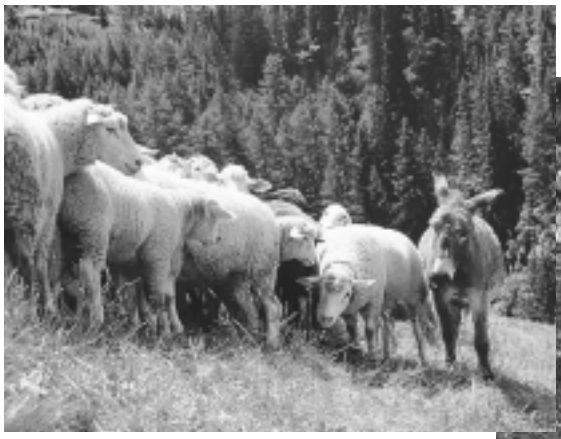
Wolf attacks may occur at any time during the year, but most tend to take place in July and August when sheep are left unattended for long periods of time high up on the alpine pastures. Some pastures can be located at more than 2,500 meters (8,200 feet) and spread out over several square kilometers. Last summer, Giacomo Cominelli, a shepherd of 40 years, saw his large flock of sheep attacked five times. Over 10 sheep, including lambs, were killed, and many more injured.

"It's a terrible thing to lose one's sheep, not just from a financial point of view, but emotional as well," Cominelli said. "If I wasn't a shepherd I probably would be for the wolf, but the sheep are my livelihood, and I need to protect them the best I can. Killing a wolf would solve a lot of problems, but I think I would have a dilemma killing it myself."

Send in the Dogs

Fortunately, Cominelli has not been quick to take up arms like some of his colleagues, and has been open to several alternatives supported by WWF and local government, including the use of specially trained livestock guard dogs.

"The use of guard dogs is something shepherds haven't used in



Above: In addition to guard dogs, donkeys have been used to protect livestock from wolves.

Right: Guard dogs are trained from an early age to protect the flock from wolves. Although not 100 percent foolproof, there is evidence that they have reduced livestock loss in some areas.

generations in Switzerland," said Alberto Stern, a veterinarian outside of Bellinzona who raises Great Pyreneans, a large dog breed suitable for livestock protection. Maremmano-Abruzzeses are also being used.

"These guard dogs are the best possibility of reducing wolf attacks. They work because they become attached to the sheep starting at birth and instinctively defend their herd."

Although not 100 percent foolproof, there is evidence that they have reduced livestock loss in some areas, not just against wolves, but also against foxes and golden eagles, who also prey on small lambs. According to Stern, there are about 70 to 80 dogs in Switzerland being used by shepherds for this purpose.

Trying to diffuse the growing human-wildlife conflict, WWF's European Alpine Programme initiated a livestock guard dog project to help those being affected by the wolf attacks.

"When we saw the problems farmers were having with their sheep, we decided to take measures to help protect them," Schoenenberger said. "We encouraged farmers open to the idea to buy and train dogs against potential wolf attacks. We are now offering advice on how to choose the right animals for protection."

For those not comfortable with dogs, donkeys have also been trained, as they are larger than wolves and can be equally aggressive when confronted by a threat. WWF has also helped farmers put up fences as another defense system against predators and is taking groups—school kids and adults alike—out to "wolf country" to meet with farmers to improve understanding between rural and city communities.

Last year, WWF volunteers helped Ottavio Cotti-Cottini construct an electric fence to guard his herd of alpine goats. Earlier that year, and the year before, Cottini lost nine of his goats in separate wolf attacks.

"I think more and more farmers are realizing that there are other ways to protect their livestock without having to shoot wolves," Schoenenberger added. "This is very encouraging."

Wolf recovery in Switzerland is at a very early stage, and its future by no means secure. But the reality of the situation is that more wolves are expected to cross the border in the years to come. Their permanent residency status will depend, however, on how well all sides involved in the issue can come to a common understanding about the wolf's place in the Alps.

"If you think about it, the whole area of the Alps is former wolf territory. It is a fact that they lived here long before we did," Schoenenberger said. "Their return would be an important contribution to enriching Switzerland's biodiversity." ■

Mark Schulman is Managing Editor at WWF International, based in Gland, Switzerland. Before joining WWF in September 2004, Mark spent seven years as a freelance journalist in Senegal, Australia and Israel, writing for the African Geographic, Asian Geographic, Christian Science Monitor, Environmental News Network, Earth Negotiations Bulletin, Jerusalem Post *and other publications.*

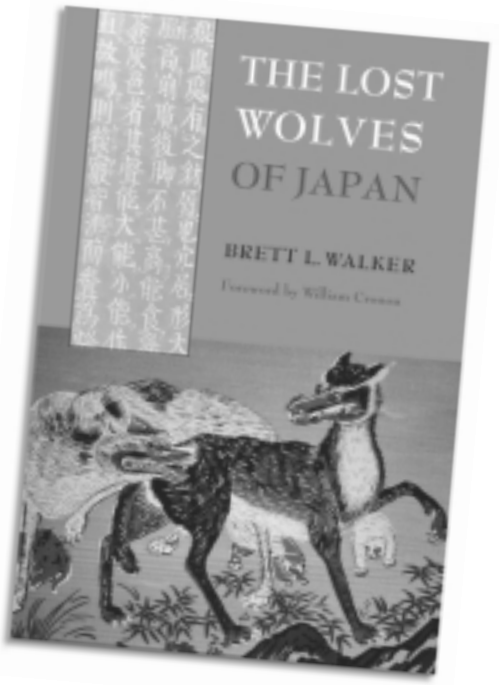
Book Review

by Jim Williams,
Assistant Director for Education, International Wolf Center

The Lost Wolves of Japan

Brett Walker

University of Washington Press, 2005



The islands of the Japanese archipelago were once home to two unique subspecies of the gray wolf: the Japanese wolf *(Canis lupus hodophilax)* and the Hokkaido wolf *(C. l. hattai)*. *The Lost Wolves of Japan*, an important new book by historian Brett Walker, reveals how Japan's adoption of Western cultural values in the 18th and 19th centuries abruptly reversed thousands of years of Japanese reverence for the wolf and ultimately led to the extinction of both subspecies by 1905.

Before the 18th century, Japanese culture was dominated by nature-worshiping religions that cast wolves as divine messengers. This beneficent image was bolstered by the belief that wolves protected the crops of the mostly plant- and fish-eating Japanese from the depredations of deer and wild boar. Walker is careful to point out that even pre-modern Japanese experienced problems with wolves—attacks on horses and, very rarely, people. However, their response was typically measured—killing the offending animals, not the whole population—and their respect for the wolf persisted.

The remarkable harmony between wolves and humans in Japan was violently upset in the 18th and 19th centuries, first by a rabies epidemic that transformed Japan's wolves into the lupine demons of Western imagination. This was followed by the Meiji restoration of 1868, which advocated and imported all things Western, including meat-heavy diets, industrial ranching, and conquest of the wolf's wild land habitat. In short order, wolves began killing more livestock, the Japanese commenced a wolf extermination program, and the spiral to extinction had begun.

This is a powerful book with rather dark implications for our own time. The contrast of pre- and post-Westernization Japan brings into bold and disturbing relief the destructive impact of Western attitudes toward nature. As though holding up a mirror, Walker guides us to look at the lost wolves of Japan and see the wolfless future that may await us if we cannot curb our excessive appetites.

Despite its melancholy subject, *The Lost Wolves of Japan* is ultimately enlivening and empowering. The story it tells is unmistakably important, sparking us, from page one, to sit up and *pay attention*. And though Walker himself refuses to offer any solutions, the bitter self-awareness he does offer may be just the kind of prod we need to choose a different fate for ourselves and our own wolves. ■

Recent Court Rulings

Modified with permission from the National Wildlife Federation's (NWF) e-WOLF NEWS #26

GREAT LAKES NEWS

In 2003, wolves in Michigan and Wisconsin were reclassified from endangered to threatened under the Endangered Species Act, and those states could lethally control wolves depredating on livestock. In January 2005, a judge nullified that reclassification, and the wolves' status reverted to endangered. The states were then granted permits to lethally control problem wolves.

In August, several organizations (not NWF) protested the permit, claiming lack of a public comment period on the applications, and were granted the injunction. Both Michigan and Wisconsin refiled applications, and a comment period is under way. While the permits were valid, Wisconsin killed 29 depredating wolves, and Michigan, 2.

NORTHEAST UPDATE AND NEWS

In Vermont, a court ruled in the NWF's favor that the 2003 Wolf Reclassification Rule illegally terminated federal wolf recovery efforts in the Northeast, where suitable wolf habitat exists and wolves may immigrate from Canada. The U.S. Fish and Wildlife Service is now trying to determine how best to proceed with wolf recovery and delisting.

News and Notes

WOLF PACKS, a National Geographic Explorer documentary by Bob Landis of Gardiner, Montana, won an Emmy for outstanding science, technology and nature programming. The award was presented at the National Television Academy's September 2004 ceremony.

WOLVES IN ARIZONA are popular with a high percentage of the state's citizens according to a Northern Arizona University poll. Wolf proponents outnumbered opponents seven to one, and nearly two-thirds thought wolves should get as high a priority on public land as does livestock grazing.

WOLVES AND WILD LAND increasingly go together. This fact makes wild land preservation an important tool for wolf recovery. That is one of the reasons why the Blandin Foundation and The Nature Conservancy's plan to protect 75,000 acres of Minnesota forest land from fragmentation is so important. The $6.25 million fund to do this was established by the Blandin Foundation in June.

NORTH DAKOTA WOLVES may have been spotted in May 2005 north of Minot. Although the state officially harbors no wolves, periodic reports of sightings are increasingly persuading authorities that animals from Manitoba, Minnesota and Montana may be finding their way into the state.

RECORD WOLF DISPERSAL. Scientists tracked a female wolf wearing a GPS collar from Norway to northeastern Finland, a 660-mile trip. The collar, which includes a Global Positioning System and a data storage chip, recorded 4,500 locations that will give researchers many details about the wolf's record travels. The previous dispersal record was 534 miles held by a Minnesota wolf that traveled to northern Saskatchewan. ■

Personal Encounter

They Are Always There

by David Radaich

The wolves were on our farm all winter. We knew it would just be a matter of time before they struck…and in early April 2005, they did. We called the Wildlife Service trappers, John Hart and Bill Paul, hoping they would come to help us out again.

I'm a beef farmer in Goodland, Minnesota. On our farm of 1,200 acres we run about 250 beef cows and a small flock of sheep. My wife, Robbie, and our three children are all involved with the farm. Our oldest son is in the farm partnership, and he has his own herd of cows. Our daughter owns the sheep, and the youngest, our 17-year-old son, has his own small herd of cows. It's a family affair.

Spring is a time of renewal, new grass, new leaves, and new calves. April and May are an especially busy time on the farm as they are the calving season. We will earn our farm income by selling the calves born this spring to other farmers next January, who will finish feeding them for harvesting. Beef from our farm eventually will make it to the Carnival Cruise ships that have exclusive steakhouses aboard them. The old adage that "farmers feed the world" is true.

In the 1970s as a teenager, I remember my father struggling with wolves preying on our cow herd. He would try shooting them, but they would never come out of the woods enough to be an open target. The conservation officers would come out, but they seemed too busy with all of their other duties to do much trapping. Eventually, the Wolf Depredation Program was set up to deal with livestock problems. That program has been a godsend for us. Bill Paul and John Hart, our federal trappers from Grand Rapids, have become regulars to our farm. They know the terrain as well as we do. When I tell them, "There was a kill just past the power line through the gate into the woods that goes to the back part of the farm," they know what I am talking about.

And that was the scenario in April when two calves were taken by wolves. One calf was less than one day old when he was taken, and the other calf was only an hour or two old when he was killed by wolves. I called the trappers, and they came right out to set their traps. Within a few days two were trapped. One was a yearling female, and the other was a much larger male with the biggest head I have ever seen on a wolf taken from our farm. It kind of scared me to think of the damage he could do. These killings didn't surprise me as we knew this pack was on the farm all winter. It would be just a matter of time before they struck.

We were very lucky to have found these calves that were killed. In most cases, the calves are dragged off to the den or killed in the woods, where we can't find them. I must have my losses

Christopher and Amanda Bly

It seems the best solution to our wolf problem would be to move the farm. We are in an ideal spot for the wolves to live.

The Radaichs run about 250 beef cows on their farm in Goodland, Minnesota. The 1,200-acre farm is also perfect habitat for wolves, with wooded ground and lots of deer and beavers.

John P. Hart

John P. Hart

David Radaich, his wife, Robbie, and their three children are all involved with the farm. Left to right: Neil, David, Robbie, Kristen and Lee Radaich.

verified to put in a claim for compensation. I need to show the trappers the calves that were killed. On a farm as large as ours, it is usually impossible to find them. We hate crying "wolf" when a cow can't find her calf. If we tell John Hart we have a cow crying for her lost calf and we can't find it, we are out of luck when it comes to being compensated for it. I guess that is one way to prevent abuse to the compensation program. We are excellent managers of our cattle. We do have natural losses of calves due to injury or sickness. But in some years, we know there are other forces out there. It hurts us financially when unexplained disappearances pop up.

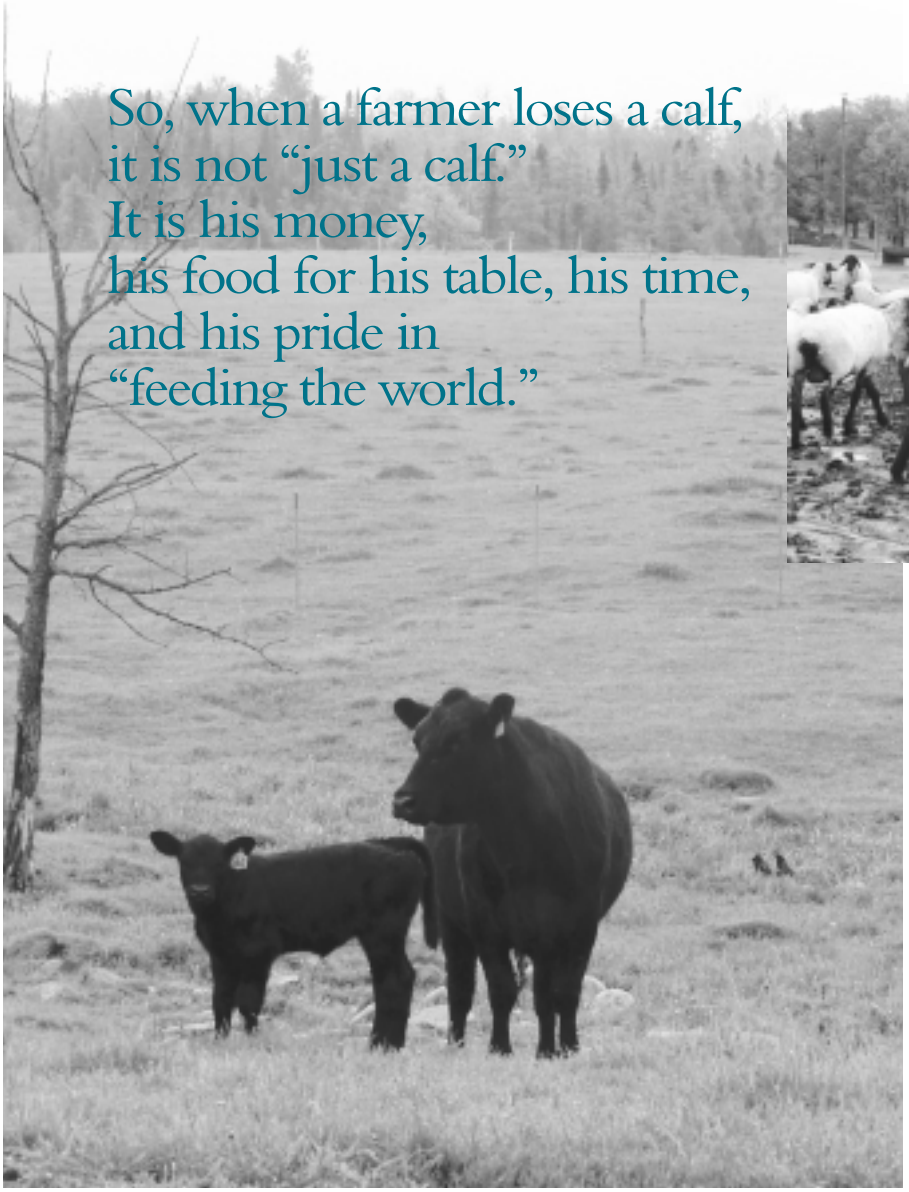
We have tried different management practices to reduce our wolf-related deaths. We used an Anatolian Shepherd guard dog with little success. He preferred to play with our pet dogs rather than shoo away the wolves. I think he helped alert us to their presence sometimes, but he didn't keep them at bay.

Another management practice is to bury our cows and calves that have died. That works very well in the summer, but winter losses are harder to bury with two to three feet of frost in the ground.

We also try to keep our calving cows as close to our house as we can. The new babies are in the greatest danger of being killed. We think the activities of people checking cows and running tractors to feed hay do help keep wolves at bay, but they certainly didn't help this year. At night, we see coyotes and wolves moving through our herd. Last week my son was doing the 2 a.m. calving check when he saw a wolf in his four-wheeler headlights and chased him off the field. It makes for interesting breakfast talk in the morning.

I do have to share with you my secret weapon for wolf control. It's my wife, Robbie. A few years ago she had just gotten up in the morning and was buttering her toast for breakfast. She heard our dogs making a commotion outside. There was a wolf, 200 feet away, eyeing our barking dogs. Robbie would have none of this and proceeded out the door and took after the wolf. Would you run if you saw some crazy woman in a robe, with morning hair, screaming obscenities, coming after you while waving a butter knife? You bet I would run!

It seems the best solution to our wolf problem would be to move the farm. We are in an ideal spot for the wolves to live. We live on the dead end of a dirt road about three miles from town. Then think about the 1,200 acre farm we have. Our farm is almost two miles in length. And then we have UPM Paper Company forests on three sides of us. That's another 10,000 acres. No people around for miles and miles. Perfect habitat for the wolves, with wooded



John P. Hart

The new calves are in the greatest danger of being killed by wolves.

So, when a farmer loses a calf, it is not "just a calf." It is his money, his food for his table, his time, and his pride in "feeding the world."

John P. Hart

The Radaichs' daughter, Kristen, owns a small flock of sheep on the farm.

ground, lots of deer, beaver, and an occasional Black Angus calf for lunch. What more could you ask for!

The problem that has arisen is the "other" pack of wolves to the west of our farm. John Hart said that pack is larger than the one Bill Paul is trapping right now. When Bill is done trapping, we expect a pair to break off and move onto our unoccupied farm, and the cycle will begin again. Gary LeFebvre, our conservation officer, came by last week to fill out compensation forms for our losses. He asked me a question that didn't take long to answer. He said, "If you could do it all over again, would you have built your farm someplace else?" I said, "No." I would not trade our farm for any other in Minnesota.

I want to talk about the psychosocial and economic impacts of wolves. Most farmers have a strong work ethic. We spend hours and hours tending to our animals and crops. It's a family affair. Spouses and children are all bonded by the work that must be done. There is not much complaining. We enjoy our lives. We don't have much extra money for fast cars or other toys. It seems we put any "extra" money back into the farm, or more specifically, back into the cow herd. Our cows are our most important asset beyond our family. You see, we are farmers. My father was a farmer. His father was a farmer. It's in our blood. Some days we wish we could shake it from us, but it's too hard to do.

We are in a business that has a low return on investment and seems to take a million hours to accomplish our goals. In the United States, 80 percent of all beef farms have less than 40 cows. Beef cattle farming is a part-time business. In the end, it means that most beef farmers must also have another job off the farm. Working 40 hours at the factory and then working evenings and weekends on the farm is long and hard. Remember when I said farming is in our blood? It's a tough cycle to break. So, when a farmer loses a calf, it is not "just a calf." It is his money, his food for his table, his time, and his pride in "feeding the world." All of that gets caught up in his mind.

I don't think farmers hate wolves. They really are preservationists and conservationists. Without everything that nature has given us, we would be nothing. There would be no farms today. I think that farmers just want everything to live. We want the grass to grow and the calves to stay alive. And we want the wolves to live too… and that's the catch. How do we do all of that? ■

David Radaich took over his family's beef cattle farm in Goodland, Minnesota, in 1978, after graduating with a B.S. in animal husbandry from the University of Minnesota. In addition to farming, Radaich is currently pursuing a degree in nursing.

Dinner Is Served—Carnivore Style!

by Kelly Burns, International Wolf Center Intern

Does everyone in your house help out at mealtime? A whole wolf pack usually gets involved with big meals, too. Most of the time, the meal wolves eat is meat. Wolves are called carnivores, because they eat meat such as deer or moose. A predator must hunt for its food, which is called prey—so when a wolf goes out hunting, that's its way of preparing for a meal.

A lot of hard work is involved in a hunt before any eating takes place. A wolf gets more energy from food in return for the energy it uses when it kills a moose, but it's dangerous for a wolf pack to hunt something so much bigger than itself. Sometimes the prey is just too strong or quick, and gets away from the pack.

A wolf can eat 25 percent of its weight at one meal. Most wolves weigh about 80 pounds. Of course, these numbers will depend on the age of the wolf, the pack size, or the time of year, but roughly translated, that's like a 100-pound person ordering 80 quarter-pounders and eating them in one sitting!

Scientists estimate that a wolf would eat about 1,800 pounds of food in a year. Most of this would be meat from animals that would have to be hunted. Using the chart below with animal weights, see how many animals would be eaten in one year. ■

Fun Fact:
Wolves have a hunting success rate of about 5-25 percent. That would be like going to the refrigerator 10 times and only finding food there two times!

Lynn and Donna Rogers, bearstudy.com

A wolf can eat 25 percent of its weight at one meal. Most wolves weigh about 80 pounds, and can usually take in 20 pounds of meat in one meal.

Think about this:

Be a researcher! Use an encyclopedia or the Internet to answer the following questions:

? Do you think a wolf would eat only one kind of animal all year long? Why not?

? If three moose would provide a wolf with more than enough pounds of meat for the year, why doesn't a wolf just catch three and eat them for the rest of the year?

? Can you name some scavengers and decomposers who would share a wolf's meal?

Try it on for size.
If you were a wolf, how much could you eat at one sitting?

(your weight) _____
Multiply by .25
= _____
what you could eat at one time as a wolf!

Fill in this chart

Estimated pounds of meat for one year:	Divided by:	Average weight of animal:	Equals:	Number of animals wolf would have to eat in one year:
1,800 pounds	÷	Snowshoe Hare–3 pounds	=	
1,800 pounds	÷	Beaver –40 pounds	=	
1,800 pounds	÷	Deer–100 pounds	=	
1,800 pounds	÷	Moose–800 pounds	=	

A Look Beyond

Home

by Bruce Weide and Pat Tucker

Modified with permission from Wild Sentry, Newsletter #48

Home is where you live, the place you know and feel comfortable to move around in. Most humans understand the rules of home ownership. We'd be shocked, incensed, and probably a little more than righteously indignant to find a stranger clear-cutting the backyard trees or bulldozing the family garden to make way for a tennis court. But when we buy a piece of vacant land and build a house, we often overlook the fact that tenants already live there. They didn't pay for the land or possess a title, but from their point of view it's theirs, and we're the intruders.

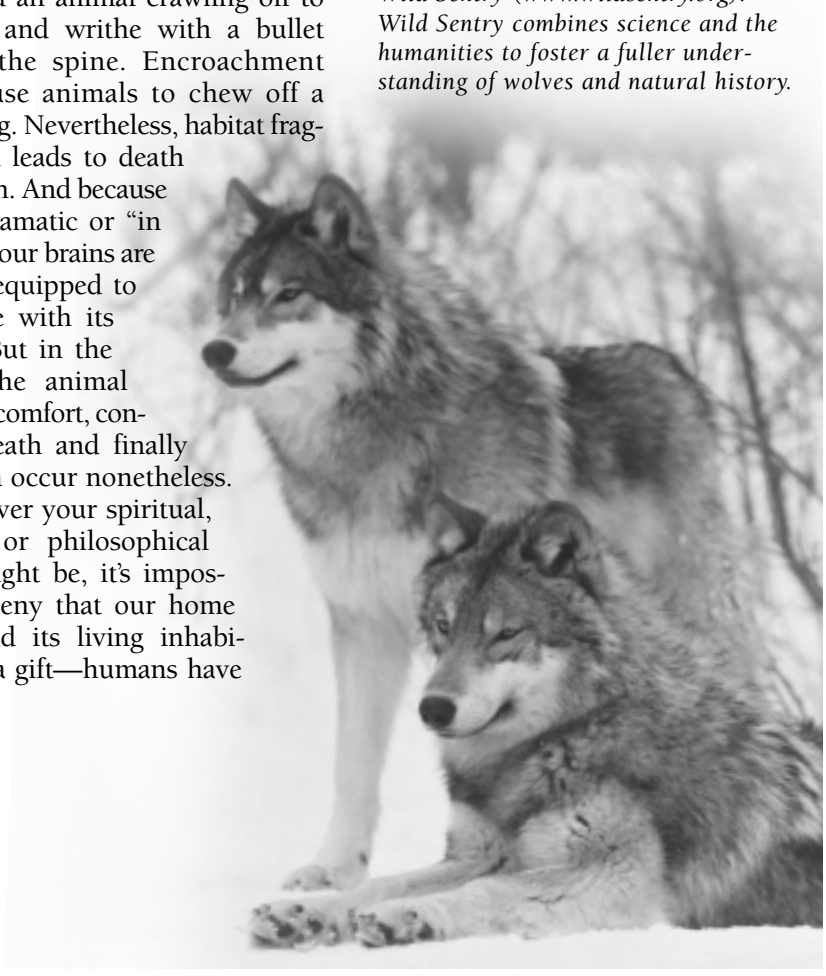
As houses are built, habitat for wildlife becomes an island amid a sea of human development. That is habitat fragmentation. It's insidious. It's difficult to control. It isn't vivid or gory. Yet, over the long run, habitat fragmentation poses far graver repercussions for wild wolves than aerial hunting or leghold traps; in fact, it is a major threat to most wildlife.

While a return to an early-Pleistocene mode of existence seems an unsavory and impractical solution to this problem, at the very least we can be aware of our impacts and mitigate them when possible. We can actively back politicians who understand that there are limits to how many humans this planet can support. We can choose fuel-efficient vehicles and overcome our reluctance to use public transportation. We can educate ourselves to act as responsible consumers. We can question wants versus needs. We can affirm those who live in town and not ogle over McMansions. We can choose to keep our eye on the ball—focusing on threats that truly constitute a major menace to animals—and not get sidetracked by peripheral wildlife issues. Comprehending limits and playing a role in community planning can't compete with the drama of protest, but when it comes to the longevity of a species, they are the more critical.

Our insatiable appetite for goods and services takes a toll on the reproduction and survival rates of our wild brethren. Those cumulative effects don't send an animal crawling off to whimper and writhe with a bullet through the spine. Encroachment won't cause animals to chew off a trapped leg. Nevertheless, habitat fragmentation leads to death by attrition. And because it's not dramatic or "in our face," our brains are not well equipped to empathize with its victims. But in the rest of the animal world, discomfort, confusion, death and finally extinction occur nonetheless.

Whatever your spiritual, religious or philosophical beliefs might be, it's impossible to deny that our home planet and its living inhabitants are a gift—humans have evolved and adapted along with the entirety of life, not merely a selection we deem "good" or beneficial. Now, more than at any time in our past, we need to direct our big brains toward envisioning a future that provides for the needs of wild creatures as well as our own. Without a home, life is impossible. Like climbers connected by a rope, each dependent on the other not to make a fatal slip, our lives are linked to all of life on the earth. The quality of my future, your future, and the future of our children and grandchildren depends on us comprehending this simple fact. ■

Bruce Weide and Pat Tucker direct Wild Sentry (www.wildsentry.org). Wild Sentry combines science and the humanities to foster a fuller understanding of wolves and natural history.



Sherry Jokinen