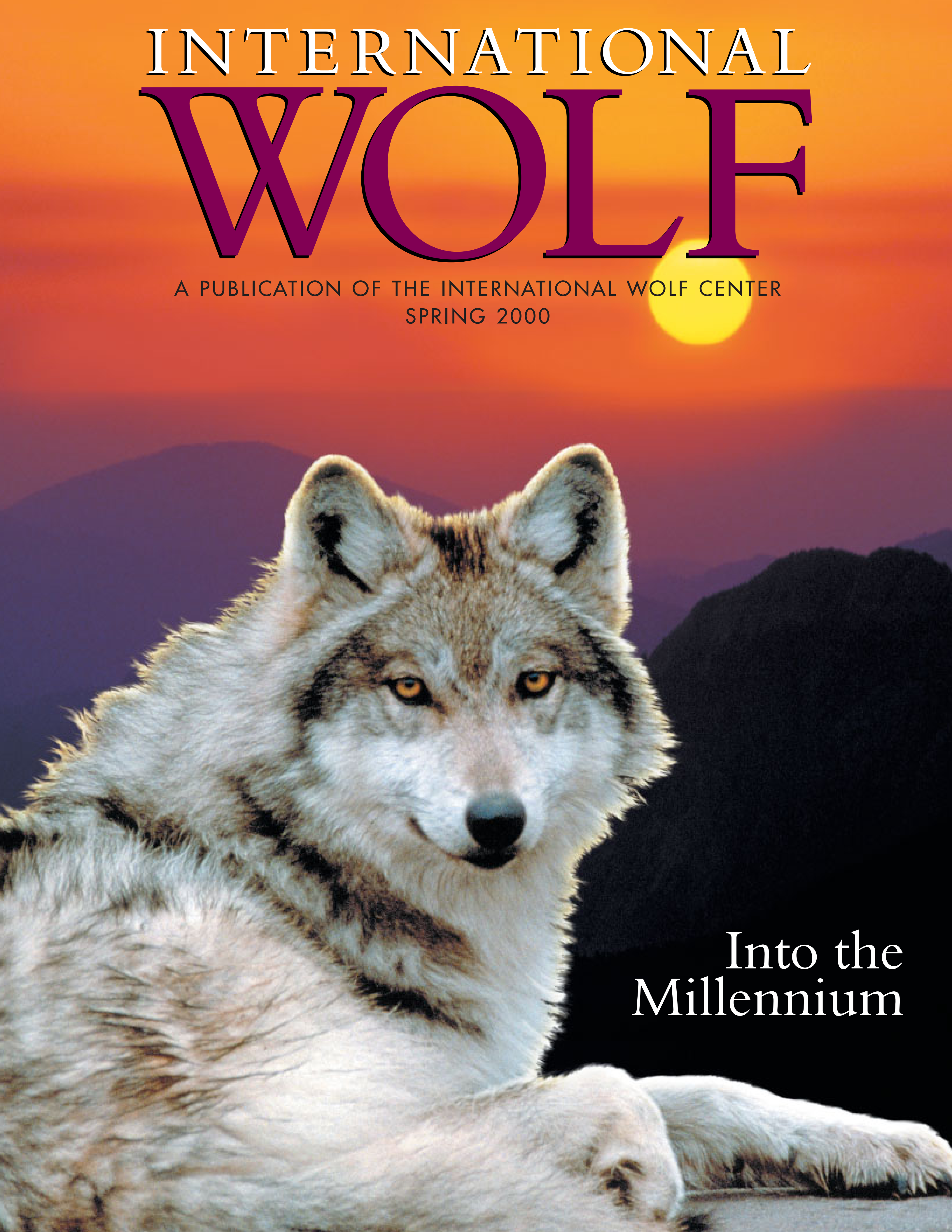
INTERNATIONAL WOLF

A PUBLICATION OF THE INTERNATIONAL WOLF CENTER
SPRING 2000



Into the Millennium

INTERNATIONAL WOLF

THE QUARTERLY PUBLICATION OF THE INTERNATIONAL WOLF CENTER

VOLUME 10, NO. 1 SPRING 2000

Features

J. Henry Fair

Rolf Peterson

Departments

On The Cover

Wolf photo by Waverly Traylor
Photo montage by Shawn Wallace,
Evolutionary Illustration and Design Studios.

L. David Mech

International Wolf Center

Letters

INTERNATIONAL
WOLF

Publications Director
Mary Ortiz

Managing Editor
Tina Perpich

Technical Editor
L. David Mech

Consulting Editor
Brenda Kramer Bredahl

Graphic Designer
Tricia Hull

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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.

Wolf Management

I feel obligated to respond to Mr. McMillan's response regarding his solution to wolf management. Like all hunters, his is, "Shoot to kill." Perhaps we should look at human population control as an alternative. We keep minimizing wildlife areas with our urban sprawl. As a result, there are more animals in smaller spaces. Some spill over into human domains and the hunters and trappers have an excuse to maim and kill. Let mother nature take care of the problem. Too many wolves, or any other predators, will result in less prey and they either starve or, by nature, have less pups. Nature has always been a case of checks and balances, and like the old saying goes, "Why fool with mother nature?" Guns, traps, snares and arrows are not the solution. Those methods belong in the 19th century, not in the 21st. We humans are the problem, not the wildlife.

Roy Vanderleelie
Joshua Tree, CA

Besides guard dogs, llamas and asses (donkeys) are fiercely protective of their lands and herds against predatory animals. They will chase away wolves, coyotes and even wild or homeless dogs. Raised with the herd, they form a bond, much like guard dogs, to their herds of cattle or sheep. And, because they are larger than the guard dogs and have more powerful muscles, they can chase away potential threats. If the threat does not flee swiftly enough, they may even kill the trespasser. Llamas and donkeys are very useful in holding back predation from diminishing livestock. They have highly developed senses and, much as wild animals, are always on the look out for predators.They are also relatively cheap when compared to [the expense of] livestock loss.

Suzanne Ellis
Tyler, Texas

Technical Editor's note: We know of no documentation that wolves are regularly deterred from killing livestock protected by llama or donkeys.

Herds of Wolves

I got a good laugh reading the last statement and correction of "Don't Believe..." on page 26 of the Fall 1999 *International Wolf*: "...10 packs of at least 100 wolves each... ." Wow, those would be very large packs, and 1,000 wolves per area! Herds of wolves! The recovery goal's primary objective is listed in the Northern Rocky Mountain Wolf Recovery Plan of 1987, page 12: "To remove the northern Rocky Mountain wolf from the endangered and threatened list by securing and maintaining a minimum of 10 breeding pairs in each of three recovery areas for a minimum of three successive years."

Norm Bishop
Bozeman, Montana

Editor's Note: The sentence should have read, "The population cannot be removed until the 10 packs, or at least 100 wolves, in each of the three areas have existed for at least three consecutive years."

What is a Black Wolf?

In the Fall 1999 issue of *International Wolf*, one line in Dick Dekker's article, "Is 'Gray' Wolf a Misnomer?" confuses me. When referring to Young and Goldman's wolf research of the 1940s, Dekker states that black wolves, once common in Florida, were considered a subspecies of the red wolf and

continued on page 22

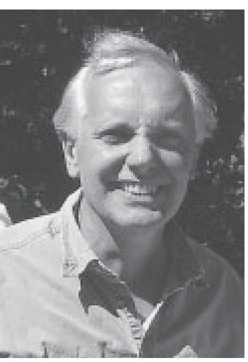
From the Executive Director

New Millennium, New Endeavors: Facing the Challenges and Planning for the Future

Walter Medwid

Welcome to the new century and to the new design of *International Wolf* magazine in honor of its first decade of publication. Whether or not we put great stock in the significance of the new millennium, it is difficult to avoid thinking about how life will be different in the future. Just think of recent major social changes such as the globalization of the economy and the massive infusion of computers, the Internet and various other electronic communication devices upon our lives.

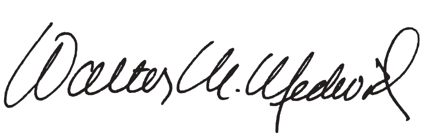
Some see technology as *the* future. From my perspective, a bold, bright future is not possible without keeping one foot firmly planted on Earth and focused on things somewhat less technological. This includes clean air and water, a rich global biodiversity supported by a profusion of wildlands balanced with a new emphasis on smart human-population growth rather than growth at any cost, and a greater understanding of the natural world that sustains us.



Together, we have much to learn and share.

To me, the significance of the year 2000 suggests a clean slate to rethink our individual and collective lives. In this issue we explore problems that will likely grow in importance as we enter the new millennium, including wildlands, levels of tolerance in living with a growing number of large predators, and controversial questions about limits to human population growth. Even with the challenges facing us, we continue looking toward the future with our announcement, in this issue, of plans to introduce two new members to the resident wolf pack at our interpretive center in Ely. These arctic wolf pups, bred this year from captive animals, will serve as new millennium ambassadors, offering valuable educational opportunities and understanding to a new generation of students and visitors.

Also in this issue we ask you to tell us what you are doing with and for wolves, along with your thoughts about saving wildlands. We want you, our loyal members and readers, to educate us and each other. Together, we have much to learn and share as we begin a new century and millennium with opportunities and challenges as great as ever. ■



MISSION

The International Wolf Center supports the survival of the wolf around the world by teaching about its life, its association with other species and its dynamic relationships to humans.

Educational services and informational resources are available at

1396 Highway 169
Ely, MN 55731-8129, USA
1-800-ELY-WOLF
1-218-365-4695

e-mail address:
wolfinfo@wolf.org

Web site:
http://www.wolf.org

The Wolf at the Turn of the Millennium

As the new millennium dawns, it is beneficial to review the past. A thousand years ago wolves lived almost throughout their original range. However, as human populations increased, as livestock herding spread and as technology developed, the incentive and the ability to curb wolf numbers affected their existence.

During the past few centuries, wolves were wiped out of much of western Europe, Japan, Mexico, and all of the 48 contiguous United States except Minnesota and Isle Royale, Michigan. In other areas, their ranges and numbers were much reduced. Except for the last 70 years or so, the human mindset throughout the northern hemisphere was that the creatures were vermin, perhaps worse than rats, mice and cockroaches.

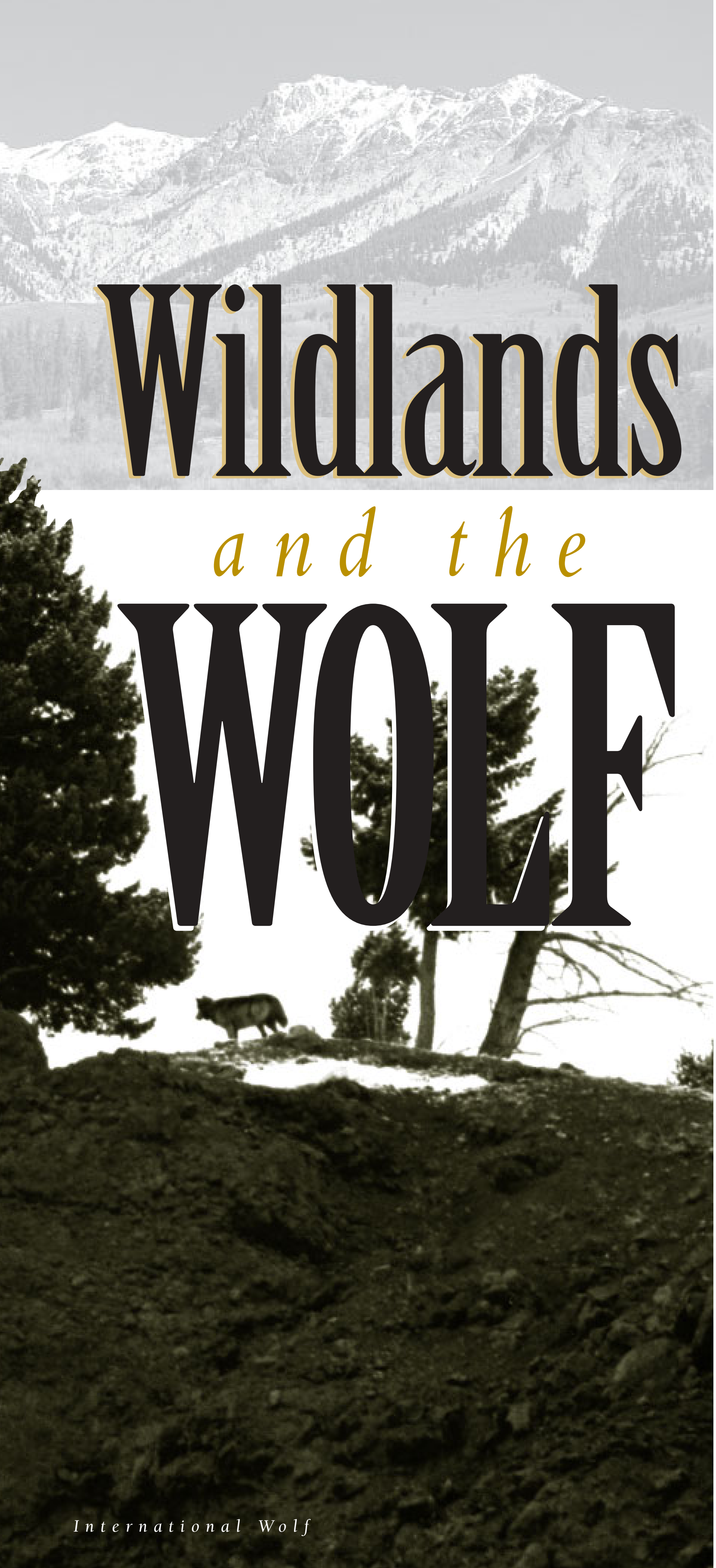
Widespread poisoning, bounties, traps, snares, pits and actions such as digging pups out of dens were used to persecute the wolf and eliminate it wherever it competed with humans for livestock and sometimes even where it did not. At the same time, market hunters were depleting herds of the wolf's wild prey, forcing the predators to turn more to domestic animals.

Only in the last several decades—primarily the last 30 years—have public attitudes about the wolf begun to change. We are fortunate to be bringing that change into the new millennium. Wolves are responding well. Through human protection and nurturing, they are repopulating such areas as France, Germany, Scandinavia, Wisconsin, Michigan, Montana, Wyoming, Idaho, North Carolina and Arizona. Populations are strong in Minnesota, Alaska, Canada, Spain, Portugal, Poland, Eastern Europe, Italy, Russia, several areas of the Mideast and central Asia.

As we enter the new millennium, the International Wolf Center celebrates this significant success and congratulates all the citizens, organizations, government agencies and media outlets that have together wrought this change.

We know that the new millennium will bring even greater challenges as the increasing populations of both wolves and humans continue to conflict. Thus we will strive through education to promote a greater understanding and tolerance of the wolf and a reduction of this conflict. With the solid support of our members as we enter this new era, we are confident of continued success.

Wildlands *and the* WOLF



J. Henry Fair

BY NANCY JO TUBBS

When the Rose Creek pair of wolves were flown from Canada and released in Yellowstone National Park in 1995, they explored the wilderness, killed elk and behaved like healthy wild wolves. But the pair traveled outside of the park. A few days after they reached the outskirts of Red Lodge, Montana, wolf 10, a classically handsome 122-pound male affectionately nicknamed "The Big Guy," was illegally shot and skinned. His mate, wolf 9, had just given birth to eight pups. What happened next is perhaps a textbook example of why Mike Phillips, project leader for wolf restoration in Yellowstone at the time, believes that wildlands make the best home for wolves.

"I asked the U.S. Fish and Wildlife Service to return wolf 9 with her pups to Yellowstone's wildlands," Phillips said. "It may have been the most important management decision of the project." Relocated back to the park, wolf 9 gave birth to several more litters, and her first four female young and two of the males parented pups in 1997 and later years. No longer near people who intended them harm, the pack infused generations of young wolves into the greater Yellowstone ecosystem.

"While wolf populations ebb and flow in other places," Phillips contends, "wildlands will always be the nidus—the nest or breeding source—where wolves can flourish in safety."

The Wolf on the Porch

In northern Minnesota, some wolves living around humans have become relaxed, much like "nuisance" bears that hang around dumps and garbage containers. Bill Paul, district supervisor of the U.S. Department of Agriculture's Minnesota Wildlife Services office, handles such complaints of wolves killing livestock and pets.

Sometimes wolf incidents seem like fiction, even to experienced wildlife officers, says Paul. In one instance, a woman was fixing a friend's hair in her kitchen. She heard pounding outside, investigated, and found a wolf trying to kill her dog on the front porch. She grabbed a snow shovel and whacked the wolf until it backed off into the yard. Investigators didn't know whether to believe the telephone account until they arrived and found blood from the wounded dog in the snow on the porch.

As wolf populations grow in many areas, wolves are forced to colonize near humans. When a wolf comes up on a porch to eat suet from a bird feeder, it naturally provokes concerns for kids and pets playing in the yard. While there has been no attacks on children in Minnesota where the wolf populations are thriving, it could happen, Paul says.

Wildlands for Wildlife

Indeed, the success of wolf recovery near people inevitably leads to wolf-human conflict. With conflicts on the rise, it's time, say some conservationists, to consider the idea that great wild spaces are the wolf's most appropriate home. Phillips, now head of the Turner Endangered Species Fund and an International Wolf Center board member, addressed this issue with colleagues at the Center in 1999.

"Wildlands supported populations of gray wolves long after the species had been exterminated from most of its historic range," wrote Phillips in a proposal to the board of directors. "These populations produced dispersers that recolonized Montana, Michigan and Wisconsin. As wolf populations grow, conflicts with humans will increase. Conflicts will often be resolved by killing the wolves involved. Wildlands will, therefore, always be the last best refuge for wolves. He concluded, "Accordingly, the International Wolf Center should integrate into its mission the understanding and conservation of wildlands."

Wolves can survive nose-to-nose with livestock and rural communities, but tensions run high wherever wolves and humans live in proximity. Italian wolf biologist Luigi Boitani tells of a wolf pack denning 25 miles from Rome; wolves were spotted at the city garbage dump eating spaghetti. In Italy's northern sheep-dotted Apennines Mountains, herders' flocks are vulnerable to increasing wolf numbers. Shepherds showed up in Tuscany to shout their concerns at a 1995 seminar on wolf issues. Until recently, wild game was nearly nonexistent in Italy, so wolves had to live off the community refuse heap or kill domestic animals. Another concern is that while pet dogs sometimes fall victim to wolves, wildlife managers fear that interbreeding with feral dogs will dilute the genetic identity of wild wolves.

In the wildlands of Yellowstone National Park, wolves have recovered with very little wolf-human conflict.

Courtesy of Yellowstone National Park

Lynn Rogers

Though wolves are adaptable animals and able to exist close to people, most experts believe wildlands are the best environment for them.

Working for Wildlands Conservation

Along with environmental organizations like the Sierra Club and the Nature Conservancy, a bold-thinking newsmaker has joined the land ethic defense team: The Wildlands Project was founded in 1991 by a group of scientists and activists including Dave Foreman, founder of Earth First!, and conservation biologist Michael Soule. The Tucson-based group looked at the ecological needs of charismatic carnivores such as wolves and grizzlies and began planning to preserve an interconnected network of wilderness throughout North America so that these species and others could re-inhabit the wild.

The project's founders believe that remnants of habitat are inadequate to guarantee the long-term health of wild populations of such species. Young adult wolves, for example, usually disperse from the pack to find prey and a mate, to breed and establish new territories. Radio-collared wolves have been tracked traveling more than 500 miles. Barriers such as highways, timber operations, cities and subdivisions interrupt corridors that linked viable habitat for these and other species 200 years ago. Studies have shown that roads are a threat to large carnivores because of collisions, and also because they provide access for illegal hunting.

To reconnect the dots, the project will work with various partners to design wildlands networks stretching across the least inhabited parts of North America, from Alaska to Yellowstone and from Maine to the Florida everglades. While the project is sure to provoke wise-use, property-rights, anti-government and other interest groups, it will also seek partners large and small, from the U.S. Forest Service to individual ranchers.

Considering an Expanded Mission

In considering adopting wildlands conservation into the International Wolf Center's mission, board and staff members have wondered if the Center can maintain its policy to advocate only through education on such a controversial issue. "Expanding our mission to include wildland preservation need not push the Center into any more of an advocacy role than we are now," says Dave Mech, Center founder and board vice-chair. "Our expanded mission could be to advocate for wolf survival and wildland preservation through public education. Wildland preservation doesn't always mean keeping snowmobiles out of wilderness. It can mean saving a brushy vacant lot for inner-city kids to explore or setting aside parcels of land around a housing development, as well as advocating for more large wilderness tracts."

This addition to the Center's mission would result in more regular informational articles on wolf landscapes in *International Wolf* and on the Center's Web site. Staff and speaker's bureau educators would compare the damage wolves do on agricultural lands with that on wildlands and would discuss with various groups the rate at which open spaces are disappearing and the difficulty in restoring them. Educational programs could explore the importance to wolves of the location, size, connectivity and variety of wildlands and discuss methods of preservation, such as land trusts and conservation easements.

No stranger to controversy in the wars that surround the wolf, the Center would hope to facilitate conversation rather than incite arguments with competing interests. Industry, developers and loggers are important to this dialogue, just as the Center's current exhibits include the perspectives of hunters, trappers, ranchers and wolf advocates.

"The Center has a tradition and a desire to promote education, facts and discussion," says Executive Director Walter Medwid. "We support the recovery of one of the world's most controversial predators; for the wolf's allies, the next challenge will be the jump from the frying pan of recovery into the fire of land issues. Soon, in parts of North America, the wolf may not be considered endangered, but we have to ask, 'Where can it live in peace?'"

In its mission and educational efforts, the International Wolf Center teaches about the wolf in the context of other species and in its relationship to humans. That context includes the wolf's landscape as well. Perhaps the time has come when, no matter what else is done for wolf survival, it will not be enough unless the Earth's caretakers also preserve wildlands. ■

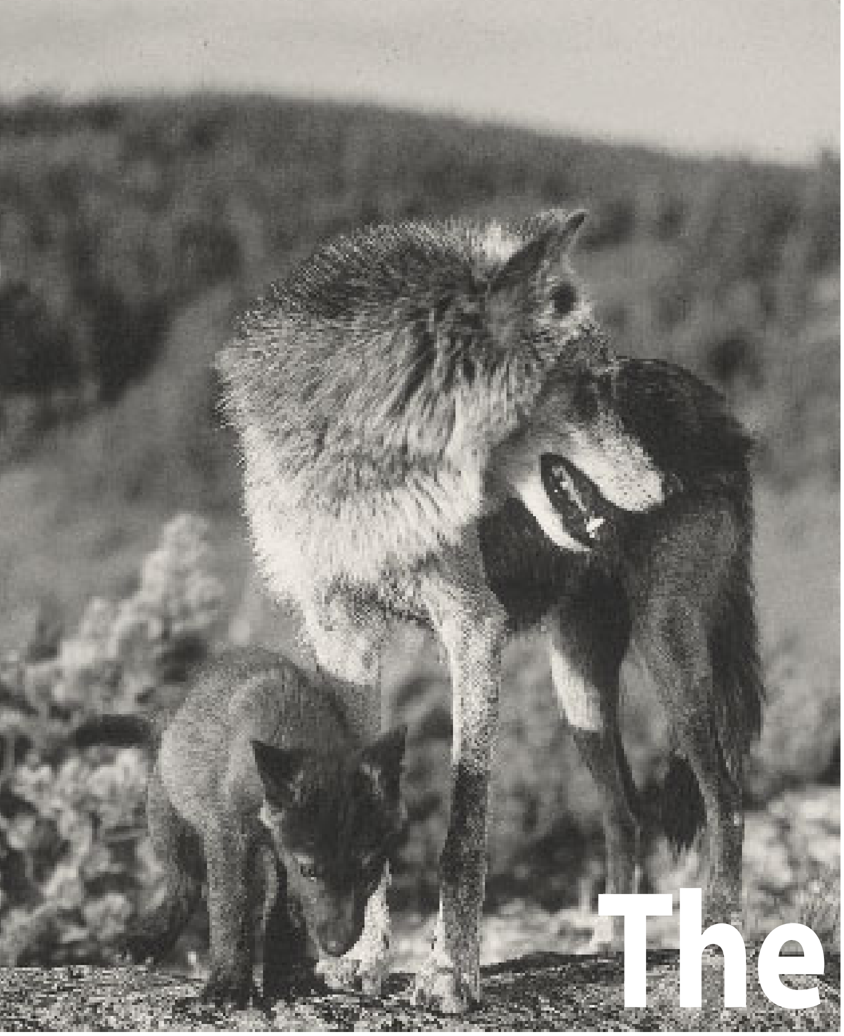
Nancy jo Tubbs is a writer and resort owner and chairs the Board of Directors of the International Wolf Center, where she relishes working with resident packs of directors, staff and wolves.

What's Your Opinion?

The International Wolf Center proposes to expand its mission.
The proposed additions are in parentheses:

"The International Wolf Center supports the survival of the wolf (and its natural environment) around the world by teaching about the wolf's life, its associations with other species, its dynamic relationships with humans (and about the importance of wildlands to its survival)."

Please tell us your opinion of the proposal to extend the Center's mission to incorporate education about wildlands. In April 2000, the Center's board and staff will consider your ideas during discussion on the mission at an annual planning retreat. Please address your comments to "Wildlands," *International Wolf*, 5930 Brooklyn Boulevard, Suite 200, Minneapolis, MN 55429 or send via e-mail to magcoord@wolf.org. Comments will also be selected for the magazine's letters to the editor page.



William Rideg, Kishenehn Wildlife Works

A GREATER TOLERANCE: The Coexistence

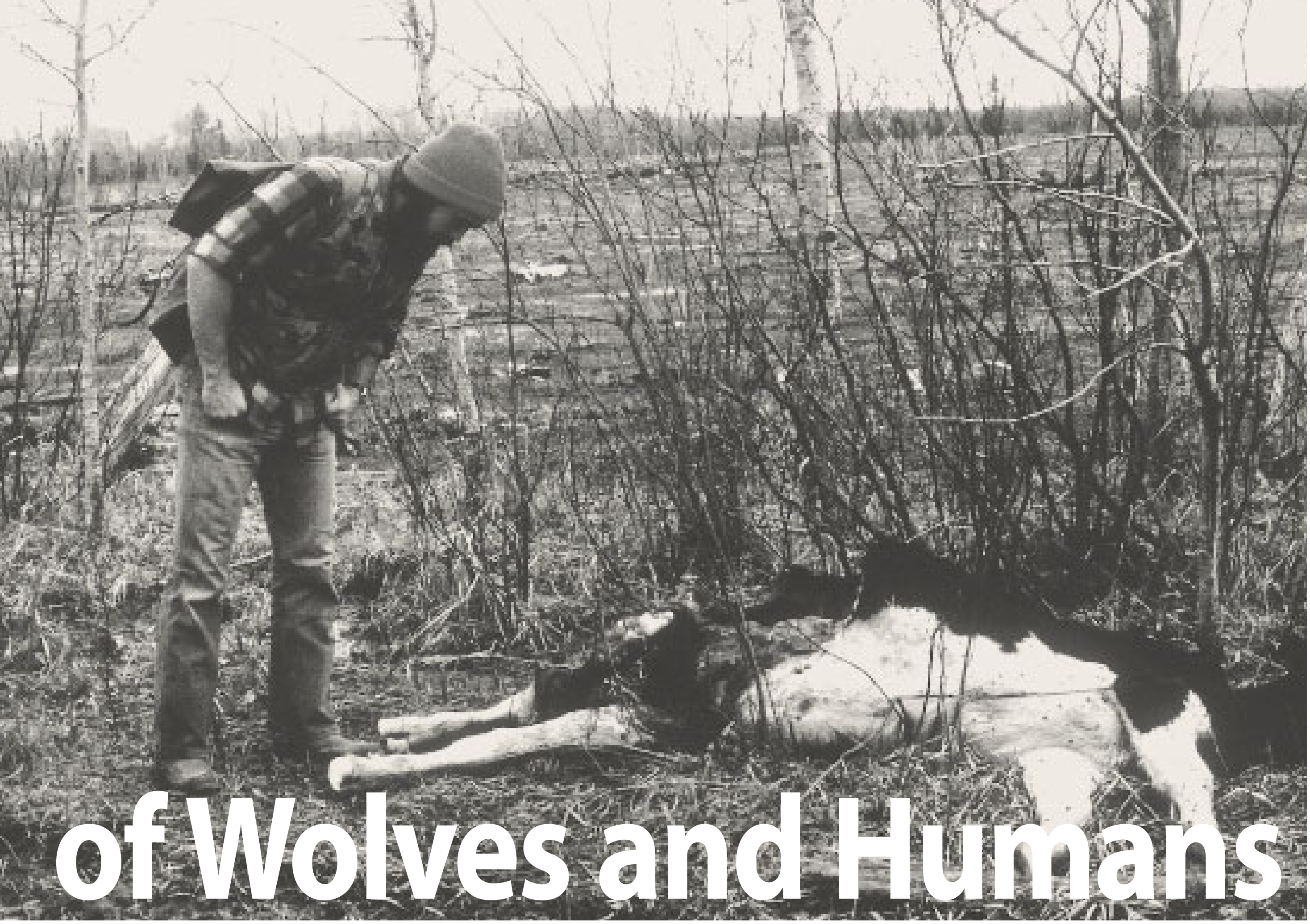
BY STEVEN FRITTS

If humans and wolves survive for another thousand years and if the history of the relationship between the two species is ever chronicled in detail, the beginning of the third millennium will be recorded as a period of great change. In the last half of the 20th century, people in North America and western Europe began to alter their views about the wolf and about nature in general. For example, increasingly favorable attitudes were expressed in books, movies and art. Other indicators of this attitude change included the pleas to restore wolves to Yellowstone National Park, the creation of protective legislation, and the founding of organizations to defend and promote the wolf. Beginning in the 1970s, numerous opinion surveys showed considerable acceptance of the animal in several nations. Surveys show more support—a broad trend occurring in the United States, Canada, Europe and Asia. The rabid anti-wolf rhetoric of earlier decades has largely subsided.

Now, often wolves are not only tolerated but valued and admired. A recent public opinion survey in Minnesota showed strong appreciation for wolves, with only a small minority disliking them. Even most farmers in the state now have favorable attitudes about wolves! Moreover, many people are willing to make economic sacrifices for the well-being of wolves, for example, contributing to livestock compensation funds either voluntarily or through tax dollars.

Recognizing an "environmentally friendly" niche in the consumer marketplace, some farmers and ranchers offer "predator-friendly" products; no wolf or other predator is killed in raising the meat animal or the sheep for its wool, and customers are willing to pay a higher price for products derived from them. It seems that Western societies are willing to tolerate at least some of the added costs of maintaining substantial numbers of wolves.

Wolves have responded to this greater tolerance by expanding their range and increasing in numbers, reclaiming some areas in Canada and reoccupying places in western Europe where they were long absent. In the United States, several states that lost their wolf populations now have wolves from reintroduction or natural colonization. In Minnesota, the wolf population has quadrupled in the last three decades, and populations in the northern Rockies are increasing rapidly.



# of Wolves and Humans

Bill Paul examining a wolf-killed cow.

A Wilder Place?

We would be deluding ourselves to think that the calendar has been turned back to a time when the world was a wilder place. Many areas being reoccupied by wolves are not what they once were, but rather are used by people for a variety of purposes, including livestock production. The expansion of the Minnesota population has resulted in more wolves living near people and livestock than at any time in the state's history. In the next few years there will be further range expansion, and the wolf population will increase in several countries. As this happens, more people will hear wolves howl, observe their tracks, and see the chewed remains of animals—both wild and domestic—that they have killed.

Indeed, not all of those human-wolf encounters will be welcomed. Wolves will cause anxiety to parents of children who wait for the school bus in wolf country. Wolves will fight with the family dog. They will kill more and more domestic animals,

Unlike our ancestors, we know that wild wolves are extremely unlikely to harm people.

and in some circumstances compete with hunters for big game. How far will future societies that value the wolf go to address those situations? Will they consider the wolf an "untouchable" animal, like cattle in India, and do nothing, or will they insist on corrective action to safeguard the interests of people who are adversely affected by wolves?

Reasons for Action

There are three reasons why our descendants will want to take action against individual wolves or wolf populations. First, wolves will continue to be perceived as a threat to people, especially children, and will affect the peace of mind of people who live in wolf country. Unlike our ancestors, we know that wild wolves are extremely unlikely to harm people. However, a few recent incidents of wolves grabbing and injuring children in Algonquin Park, Ontario, and the recent documentation of wolves carrying away and eating small children in India, requires that this issue be taken seriously. Some wolves seem to have less fear of humans than decades ago when the animals were avoiding bullets, steel traps and poisons. Although the risk is still minor, the potential for a wolf harming a human has increased. Even a single documented human death from a wild wolf in North America, which would undoubtedly be highly publicized, might be enough to sway public opinion against the species. Therefore, any wolves that are "hanging around" a populated area should be removed.

Another reason to take action against wolves is increased depredations on livestock and pets. This problem creates economic losses and causes resentment against wolves and those who venerate them. Some believe this problem can be solved through changes in farm management practices and nonlethal means such as guard dogs and scare devices. While most Americans prefer those nonlethal approaches, the hard truth is that killing problem wolves is the most effective tactic available, and often the only option. No viable substitute is in sight.

Monetary compensation, an important supplementary tool in wolf management, offers no permanent solution to the depredation problem. Some European countries pay huge amounts for livestock killed by wolves, and payments are increasing in the United States. Compensation in Minnesota has totaled some $664,361 through 1998. Increased payments could ultimately result in political opposition to compensation programs — and wolves. As stated by Italian biologists Paolo Ciucci and Luigi Boitani, compensation payments may "encourage a state of permanent conflict."

A third reason to take action is for the management of big game herds. There are circumstances in which wolves can hasten the decline

Steven Fritts

Many nonlethal methods to control wolf depredation, such as the use of guard dogs, have been employed; however, no such techniques have proved very effective so far.

The hard that killing is the tactic

of animals like deer and moose and suppress their numbers for extended periods. In those instances, wildlife managers might want to remove some wolves to allow such populations to recover faster. However, the programs that have sought to do this, such as those in Alaska and northern Canada, have been assailed by wolf supporters as being anti-wolf, unenlightened and unethical.

Much has changed over the years that will affect the future management of wolves. Wolf protection organizations will try to prevent the loosening of legal protection and minimize killing of wolves, especially by the public. Perhaps because the public has been so sensitized to the past persecution of the animal, it might not easily understand the need to kill wolves. Proven techniques of wolf control, such as traps, snares, hunting or poison, are now less acceptable by citizens, even in wolf country. Management actions that could help control local wolf populations in high conflict areas, such as public sport hunting or fur trapping, are much less popular than in the past. A growing number of people believe it is morally wrong to kill any wolves. Thus, while wolf-human conflicts increase, Western societies' collective will and means to deal with them seems to be declining. We seem to be moving into an era of increased wolf-human conflicts yet we are largely ill-equipped to deal with such conflicts.

To Live with Wolves

Living with more wolves in the future will create many challenges. Management agencies will have to address local interests and problems while considering an urban public that has a great deal of sympathy for the wolf and little empathy for rural concerns. This could foster animosity within society.

Will the current trend toward tolerance of wolves continue to keep pace with the increase in wolf numbers? Not likely, but at what point will it end? Might wolves someday become nuisance animals like urban deer and geese? Certainly wolves are demonstrating their willingness and ability, if not persecuted, to live near people. What would happen to our collective conservation ideals if the most powerful symbol of wilderness were to become a common nuisance animal?

These are some of the issues that wildlife managers and citizens must address. Hopefully, societies can preserve healthy wolf populations while being sensitive and responsive to the needs of those who are negatively affected. Just as tolerance for the wolf has increased, there must be tolerance and understanding among people who see the wolf from different perspectives. ■

Steven H. Fritts, Ph.D., has worked with wolves in Minnesota and the northern Rockies for several years. He currently is a wildlife biologist with the U.S. Fish and Wildlife Service's Federal Aid Office in Denver, Colorado.

truth is problem wolves most effective available.

Don Zippert

INTERNATIONAL WOLF CENTER

Notes from the Field

Let Us Sing Your Praises!

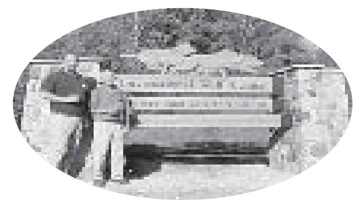
In each issue, we tell you—our members—what we are doing to fulfill our mission of promoting wolf survival. In addition to supporting our efforts, many of you support wolves in other ways great and small. Tell us, in 250 words or less, or with a photograph, what you are doing in your personal or professional life to support wolf survival. Send your submissions to *International Wolf* magazine, 5930 Brooklyn Boulevard, Minneapolis, MN 55429 or magcoord@wolf.org.

Lynn Rogers

International Wolf Center volunteers join in the fun at the volunteer appreciation event at Westwood Hills Nature Center in Bloomington, Minnesota.
International Wolf Center photos

Finishing Touches

Six years after the Center's flagship visitors' center in Ely, Minnesota opened to rave reviews, a new entrance sign befitting the $4 million facility was completed. Last September, board members, staff and local supporters gathered to celebrate the hand-crafted structure positioned to greet travelers on Highway 169.



International Wolf Center

The new sign welcomes visitors to the Center in Ely, Minnesota.

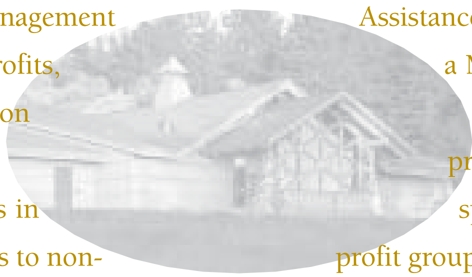
Board member and architect Paul Anderson designed the sign to mimic the Center's logo. Anderson, who donated design and project management services, selected Ray Theilbar of Ely to carve the running wolves and the letters from Douglas fir. John Sjoberg crafted two support pillars using split-face fieldstone gathered from the Ely area and Ralph Swanson excavated the site.

A generous donation by Nancy Gibson and Ron Sternal made the sign possible. Other contributors included Dave Mech, Nancy jo Tubbs and the U.S. Forest Service, a tenant in the Center's facility.

3M Volunteers to Conduct Marketing Study

Seven people from the Strategic Marketing Group at Minnesota Mining and Manufacturing (3M) have volunteered to develop and conduct a marketing study for the International Wolf Center in 2000. The study's objective is to increase attendance at the Ely educational center.

Na-Nama Adoo, Lisa Hake, Karla Hillier, Jeff Hillins, Jeff Petru, Kyle Rackiewicz and Tom Roddis were recruited by the Management Assistance Program for Nonprofits, a Minnesota organization that matches professional volunteers in sponsoring companies to non-profit groups needing assistance in a variety of management areas. The team will work with Center staff to conduct a situation analysis, design surveys for members, visitors and Ely tourists, analyze the data collected, and make recommendations for marketing strategies.



The International Wolf Center is grateful to 3M and its staff for the leadership on this important project. Although the team is donating its time and expertise, funds are needed to cover printing, mailing and other costs. If you or your company would like to help with this project, contact Mary Ortiz at (612) 560-7374 or send your contribution to Marketing Study, International Wolf Center, 5930 Brooklyn Boulevard, Minneapolis, MN 55429.

Center Remembers a Leader of the Pack

Wolves and wolf lovers lost a dear friend last fall with the death of Jan Volkman of Wyoming, Minnesota. Jan, recipient of the International Wolf Center's 1999 "Who Speaks for Wolf" award along with her husband O.J., devoted most of her life to wolves. She rescued and cared for many captive wolves over the years, taking every opportunity to teach others about her favorite animal. Jan tirelessly supported the International Wolf Center's education efforts by bringing arctic ambassador wolves to events in Minnesota, Wisconsin, Iowa and Texas. Wolfwood Ranch, the Volkman home, is known to wolf enthusiasts from around the world who have visited the ranch on their travels through Minnesota. Jan's memory will live on as O.J. faithfully continues their work on behalf of wolves.

In recognition of her contributions to educating the public about wolves, the International Wolf Center has established the Jan Volkman Memorial Fund to help bring wolf programs to schools and organizations with limited financial resources. To contribute to the memorial fund, send donations to Volkman Memorial Fund, International Wolf Center, 5930 Brooklyn Boulevard, Minneapolis, MN 55429.

Jan Volkman was a long-time supporter of wolves.

INTERNATIONAL WOLF CENTER

Notes from the Field

The International Wolf Center is Expecting

by Nancy Gibson

To help the International Wolf Center usher in the new year, the exciting decision has been made to add to the Center's captive wolf pack: two arctic wolf pups! Thus, a challenging task faces the International Wolf Center in the year 2000: arranging for two captive, genetically suitable wolves to meet, successfully breed and then whelp a healthy litter. Add the task of hand-raising rare arctic wolf pups for the awaiting public, and the burden doubles.

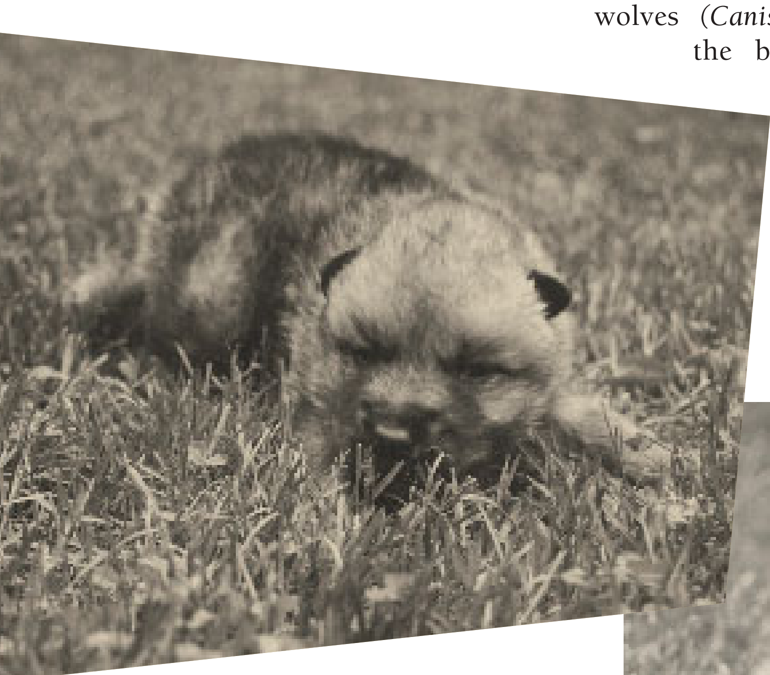
Recently focusing on increasing its captive wolf pack, the Center has researched options for adding new exhibits, but the rolling forested landscape prohibited exhibit space expansion. Not wanting to decrease the space of the Center's current wolf enclosure, there was only one option: add more wolves to the existing enclosure.

The Center is adding a different wolf subspecies to complement its international education mission. Discussions concluded that arctic wolves *(Canis lupus arctos)* were the best solution. Arctic wolves are about the size of the resident wolves, yet they are distinctly different with white coats. Moreover, the Center has solid information and resources about arctic wolves from Dr. Dave Mech's 13-year study on Ellesmere Island in the High Arctic.

In 1999, the untimely death of Kiana, one of the Center's original four wolves, stimulated the decision to consider two arctic male wolf pups for the enclosure. Plenty of space exists in the wooded area for two more wolves. And who can resist playful pups?

A Rare Breed

Arctic wolves are rare; in captivity there are only 40-50 animals. The captive wolf genetics have been traced back to 1961 when two arctic wolves were captured on Axel Heiberg Island located six miles west of Ellesmere Island. These animals were studied, bred and later donated to a zoo in Vancouver, British Columbia. In 1983, captive breeding of arctic wolves began in the United States, according to an article by N.E. Federoff in the *Canadian Field-Naturalist* (Vol. 110, No. 4, 1996).



Pups at 12 days old (above) and at 17 days old, (right). Photos by Nancy Gibson

5 - 6 week old pups.
Photos by Nancy Gibson

This gene pool was later expanded with new wolves from the Toronto Zoo. While such a small gene pool presents a challenge, a captive facility in southern Minnesota is well known for responsible breeding of wolf subspecies. Some of these arctic wolf offspring are already part of the Center's national education outreach programs.

Raising Pups

Regardless of the challenges, hand-rearing wild animals is a welcome assignment. Many theories exist about the best process for rearing and socializing wolf pups, and each theory is fiercely defended. The Center's plan is to remove the newborn pups from the mother after nine or 10 days, which allows the pups to suckle the initial nutrients and antibodies from the mother. Born in mid- to late-May and weighing about one pound, the pups are deaf and their blue eyes are closed. It is best to take the pups from their mother before they open their eyes at around 12 days old, so humans are the first image they see.

Getting the pups to transfer from the mothers' nipple to a bottle is the first struggle. Some pups need to be quite hungry to make the adjustment. Pups are generally fed every four hours, with the amount of formula increasing with the weight of the pups. Fresh goat's milk is the major ingredient in the formula.

The presence of parasites and other diseases needs to be detected early, as fast-growing pups have few defenses against such afflictions, many of which can be quite contagious. Vaccinations are similar to those that a pet dog receives and must be started at six weeks of age. Rabies shots are a precaution for the wolves and their human handlers.

Socialization with People and Other Wolves

Positive early socialization with humans will serve the wolves and handlers well. Since these arctic wolves will always live in captivity, it is best that they be accustomed to humans. Wolves that are pacing at the far end of the exhibit would be stressful for both the wolves and the humans viewing them. Hand-reared wolves make it easier to administer annual immunizations and check-ups for any ailments or injuries without tranquilization. In addition, hand-rearing facilitates cleaning and maintaining the exhibit for the health of the wolves.

This socialization process should not be confused with domestication. Domestication changes the species genetically and takes many generations. While humans provide the wolves' food, housing and health care, they will never be pets. It is best for the wolf pups to be exposed to any situation they will face as an adult as early as possible. Exposure to people in the first six weeks is important for human imprinting as well as for intense feeding and health care. This time will definitely

It will be exciting to watch the Center's resident pack adjust when the new pups arrive.

test the handlers' "nurturing" skills. The arctic wolf pups will be fully weaned at six to nine weeks old.

When armed with sharp puppy teeth to devour a steady diet of chopped deer meat and select dry food, the pups will be transferred to the Center so visitors can enjoy buoyant puppy behavior during scheduled appearances. More importantly, they will be temporarily housed next to their new pack mates. Safe fencing will separate the pups and the adults initially to allow the handlers to insure the pups receive the necessary food and health care. However, visual interactions between the adult wolves and the pups will be encouraged.

Wolves are natural mothers who are very protective, and unrelated adults and offspring readily bond. In one instance, a newly introduced pup anxiously licked an adult's mouth until he regurgitated his food for the pup, and this adult had never fathered pups. The introduction of the pups into the wolf enclosure will be assessed as the summer progresses. The reaction of the adult wolves toward the pups will determine the method of introduction.

But one thing is certain. The introduction of new pups to the pack will be exciting for all involved—the wolves, Center staff and visitors. The wolf pack dynamics will likely be enhanced, providing visitors with many more reasons to come north to the Center. ■

Nancy Gibson is an Emmy-award winning naturalist, co-founder and board member of the International Wolf Center and author of Wolves (Voyageur Press 1996). Mother of one child, she has raised many newborn animals—from bats to leopards—and will test her nurturing skills once again with the Center's arctic pups.

Reintroduction Victory: Yellowstone's Wolves Can Stay

About 120 wolves in the greater Yellowstone ecosystem, and a similar number in Idaho, won the right to stay and avoided a probable death sentence when the 10th Circuit court of Appeals ruled in their favor January 13.

The circuit court unanimouly overturned a 1997 Wyoming District Court decision which ordered the reintroduced wolves and their offspring removed. The district judge then stayed the order, pending appeals.

The January decision brought to a head the legal battle fought by the federal government to overturn the ruling and by the American Farm Bureau Federation (AFBF) which wanted the wolves removed. The AFBF argued that the reintroduction had been illegal, since a fully protected naturally recovering population of wolves in the area was likely to intermix with the wolves reintroduced from Canada.

J. Henry Fair

Government attorneys argued that the two populations of wolves do not have to be kept geographically separate in order for the reintroduction project to meet the intent and purposes of the Endangered Species Act. The court agreed.

Had the Wyoming court ruling stood, the wolves in Wyoming and Idaho probably would have to have been killed, for there was no place to which to remove them.

"This historic decision ends the last impediment to repopulating the northern Rockies with wolves," stated Walter Medwid, Executive Director with the International Wolf Center.

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Tracking the Pack

March 17–19, 2000

$275 per person, includes meals and resort lodging

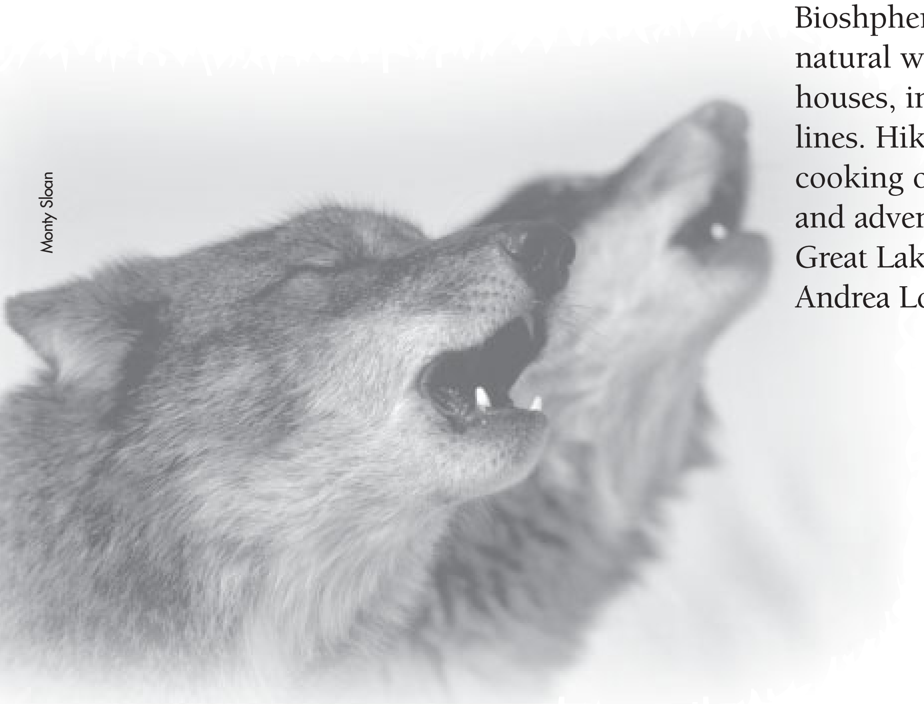
Discover how the world's top wolf biologists study wolves in Minnesota's northern forest. In just two days, you will learn how radio telemetry works and go up in a plane to locate area packs. Back on the ground, you'll explore the surrounding country looking for kill sites and other wolf signs. Top off the weekend by howling to a local pack.

Isle Royale Revealed

June 3–8, 2000

$750, includes meals and outfitting

Journey to Lake Superior's northwest corner to a roadless island of wild creatures, unspoiled forests, scenic lakes and rugged shores. Here wolves and moose strike a dynamic equilibrium which has been studied for over three decades in the longest-running wildlife study anywhere. Dr. Rolf O. Peterson, who now leads this study, will visit with participants to describe the changing nature of the wolf-moose dynamic and then give a "behind-the-scenes" tour of the research facilities. Designated as an International Bioshphere Reserve, Isle Royale has many historic and natural wonders that we will explore, including lighthouses, inland lakes, scenic vistas, and rocky shorelines. Hiking forested ridges, sleeping in tents, and cooking on campstoves will be your route to solitude and adventure. Trip leaders are Tom Beery of the Great Lakes Aquarium at Lake Superior Center and Andrea Lorek Strauss of the International Wolf Center.



Monty Sloan

Field adventures available for symposium participants.
See inside back cover for more information.

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Happy Birthday Nick, To my Alpha Male, Dolores Lakis

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Dolores Lakis

In Memory of Madeleine Oliver

Russ DeVillier
Don Schmeckpeper

Jan Volkman, a dear friend of the International Wolf Center, has passed away. An article about her appears in International Wolf Center Notes From the Field column.

In Memory of Jan Volkman

Bonnie, Dave & Eric Arneson
Eleanore L. Bunker
Patrick Collins
Terry Farrankop
Nancy Gibson and Ron Sternal
Jeffrey & Robin Johnson
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Wolf Education Internships

Join the International Wolf Center in Ely, Minnesota as an environmental education intern! We need enthusiastic individuals to conduct wolf education programs, lead interpretive walks and field trips, and assist in program development. Preferred candidates will have a degree and/or experience in environmental education or a related field. Internships last three months and provide housing plus a $400 monthly stipend.

For more information, please contact us at 1-800-ELY-WOLF (359-9653), visit our Web site at www.wolf.org or write to: Internships International Wolf Center 1396 Highway 169 Ely, MN 55731-8129

Famine or Feast (burp)

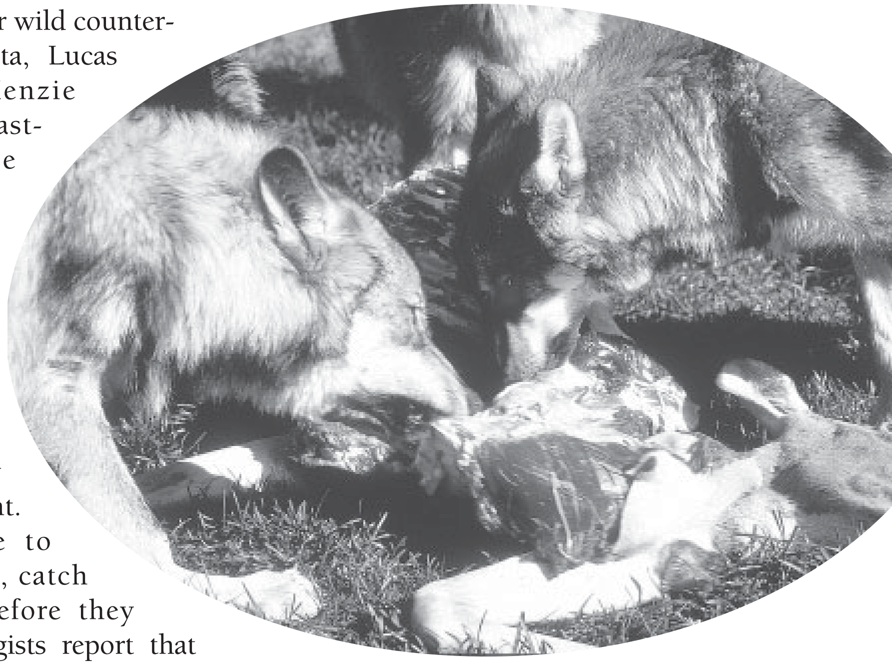
by Nancy jo Tubbs

Do you want to see what it means to "wolf down" dinner? Mealtime for the wolf pack at the International Wolf Center is one of visitors' favorite viewing activities. As a youngster, Kiana once ate so much that her caretakers rushed her to the veterinarian, fearing that her bulging stomach meant she was deathly ill. An X-ray showed she'd consumed pounds and pounds of deer meat. In fact, Kiana chowed down more than her share many times. For example, once her brother and sisters dug their way under a little fence inside the enclosure; Kiana, too full to crawl under, sat haplessly whining at her siblings from inside.

Kiana died in 1998, and Lakota succeeded her as the big eater of the Center's resident pack. Now the second-ranking female, weighing 105 pounds, Lakota is normally found with a full belly the morning after a feeding, and still guarding a deer leg from her brother, Lucas, and sister, MacKenzie.

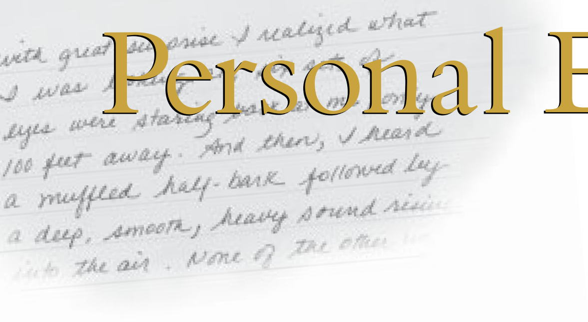
Like their wild counterparts, Lakota, Lucas and MacKenzie eat on a feast-or-famine regimen. For wild wolves, irregular feedings are determined by the unpredictability of the hunt. They have to find, chase, catch and kill before they feast. Biologists report that a wolf pack brings down a deer in only about one of a dozen tries. More than a week may pass between kills — then the wolves gorge and bury leftover food so that scavengers or other predators cannot steal it.

A wolf's stomach can hold as much as 22 pounds—the equivalent of a 100-pound person gobbling 88 quarter-pound beef patties. When prey is scarce, wolves eat everything from the deer carcass except undigested stomach contents. Even the hide, hair and bones make their way through the wolf's digestive system. Because deer hair becomes wrapped around small bone fragments, it protects a wolf's stomach and intestines from punctures and makes wolf scats or droppings easily identifiable in the wild.



Wolves can adapt to an abundance or a shortage of food. Photo by Lynn Rogers

The Center's wolves are fed weekly to replicate the feast-or-famine regimen. Their diet includes road-killed deer, beaver donated by local trappers and other meat scraps. They wolf down most of the fare the first night, some the second day, and then snack later in the week on small pieces that they've unearthed. An average week's food for a captive wolf would be about three pounds a day in the summer and up to five pounds a day in the winter when temperatures drop below zero. Captive wolves are fed as much as they want, sometimes eating up to 15 pounds a day. ■



Personal Encounter

This regular feature of International Wolf encourages a dialogue among stakeholders in the future of the wolf. By listening to different voices and perspectives, people can learn about the real and complex wolf—the wolf as pup, parent and predator. Readers can also discover what the wolf means to the people who share their personal experiences. In order to make wolf management policy, we need to communicate these meanings to one another. Through these shared experiences, perhaps we will discover how wolves and people can coexist and thrive for years to come.

Has it Happened to You?

Have you seen them? Heard them? Discovered their tracks? Connected with them in some way? Experiences with wild wolves are unique and extraordinary events, and we want you to share your personal experience with other wolf enthusiasts through the pages of *International Wolf*. Although we can't guarantee that we'll use all submissions, we will seriously consider yours. We would prefer stories that are 500-600 words in length.

Send your stories to:
International Wolf
Magazine Coordinator
5930 Brooklyn Boulevard
Minneapolis, MN 55429-2518

Thieves in the Night

by Cheryl Dahl

On a quiet moonlit night in August, we were awakened by our dog's growling. We could hear the cows bellowing and, then, in the distance, wolves howling; first one, then two, and finally five were howling long and loud. Chills went up and down my spine as the howls were closing in on our farm.

My husband, Greg, and I went outside and circled the barn and house. Greg got the hauler to use the headlights while I called the cows to the barn. The cows were making angry noises. Suddenly, we heard a wolf screaming. We thought that a cow was holding it down, trying to force it away from the area. Then the cows began stampeding in circles while the wolves howled. In the middle of all the commotion, we identified the sound of a cow crying for her calf. We were sure that the wolf or wolves had killed a calf. For the next week, that cow bellowed for the calf in the area where it was probably taken.

At first light, Greg checked the area for remains. He returned home with the calf's front leg and some hide that had been torn from its body. Angry tears burned my eyes and my heart ached. I called 911 to report the incident and they referred me to a local game warden. After he confirmed it as a wolf kill, he called for a trapper.

Upon arrival, the trapper checked around our farm for signs, such as wolf droppings containing white calf hair and fresh tracks on the trails in the surrounding woods. He set up his gear, and in nine days he trapped four wolves.

Two years later, the wolves stole from us again. This time it was a two-

Mary Ortiz

Dahl raises show horses in northern Minnesota.

Lynn Rogers

year-old horse. Not just any horse; it was our beloved Nash. I came home during the late afternoon one day and started my night chores. I put grain, hay and water in the stalls for the horses as they came in the barn for the night. As usual the horses came quickly, except Nash. Was he on the other side of the big shed, where we keep hay? I jumped on Snickers and rode around the shed and then the entire farm, but Nash was nowhere to be found. When a friend stopped by, we checked the wooded pasture on horseback. We searched for hours through brush and snow; there was no trace of Nash.

I had the same feeling as when the calf was killed: someone or something had taken someone very important from me. I felt a huge pit open in my stomach—if Nash was hurt, I must find him and help him. But we had to turn back because the horses were tired and sweaty, and steam was rolling off their bodies. About a half-hour after we got back, Greg returned from his own search to tell me that Nash was dead.

I cried as if a member of the family had died or been killed. I had been robbed by wolves again—how unfair—a brutal death. I remembered when Nash was born, we checked on his mother, Pride, every half-hour. Helping Nash into this world and then having him taken away so young tore me apart. He was beautiful, kind, loving and gentle as a teddy bear. We called the federal trapper again.

The trapper pieced together Nash's death, based on traces and an examination of his torn body. Most likely the wolves circled the horses in the pasture and drove them toward a swampy area. Because Nash was the slowest horse, the wolves probably separated him from the others and chased him until he was tired, evident by the running wolf and horse tracks. By biting at the horse's hamstrings, the wolves forced Nash into the swamp area, where he could not maneuver on top of the snow like the wolves. Probably exhausted but still trying to get home, Nash moved onto thin ice and fell into water and mud in the ditch.

Although they were close, leaving their frozen, mud-filled tracks all around, the wolves could not get to Nash. He was beneath the ice, mud and water, and his hooves sticking out of the surface made a horrifying sight. Nash went home only in spirit, where he was loved so very much.

As a farmer all of my life I consider our animals as family, each with a name and distinct personality. Right now we have 15 horses; some stay with us for a long time. I like wolves as long as they live in the wilderness, but I believe that wolves should be controlled when they cross the line between their place and ours. Perhaps if they feared humans more, they would stay away from our homes, ranches and farms. ■

Cheryl Dahl raises cows and horses in northern Minnesota.

Mary Ortiz

Urban residents are often unaware of the challenges that face people in rural areas, such as raising livestock near forests where wolves live.

Don't Believe Everything You Read

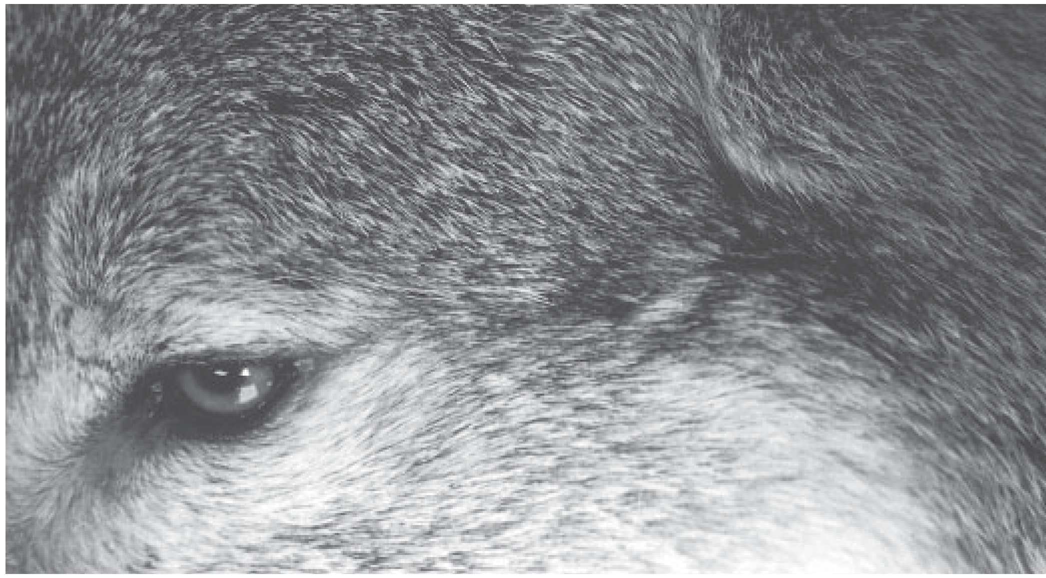
From **"Peregrine falcon takes flight off nation's list of endangered species,"** Associated Press, Star Tribune, August 23, 1999, p. A6.

STATEMENT

"…Three animals recently removed from federal endangered lists…the bald eagle, the gray wolf and the peregrine falcon… ."

CORRECTION

The gray wolf has not yet been removed from the endangered species list. In 1998, the federal government announced plans to remove it from the list in Minnesota, Wisconsin and Michigan.



Case McCrea

From **"Whither a wolf hunt in Wisconsin?"** Associated Press, Star Tribune, September 14, 1999.

STATEMENT

"Wolf numbers have increased in Minnesota… to an estimated 2,400 today."

CORRECTION

The Minnesota Department of Natural Resources estimated that the winter 1997-98 wolf population was about 2,450 and increasing about 4.5 percent per year. Thus a reasonable estimate for winter 1998-99 would be about 2,560. Furthermore, more than 2,000 pups would have been born each year in spring 1998 and 1999. While some of the new pups and some of the estimated 2,560 wolves would die during the year, there would still be more wolves today than in winter 1997-98.

From International Wolf magazine, **News and Notes**, Fall 1999

STATEMENT

"…A satellite-collared wolf from Minnesota visited the center of Portage, Wisconsin (population 62,000)…"

CORRECTION

The 1996 population estimate for Portage, Wisconsin is 9,064. Portage County includes about 62,000 people.

CHECK **www.wolf.org** FOR FURTHER WOLF INFORMATION

Letters *cont. from page 2*

had been given the name *Canis lupus niger*. Shouldn't it have been *Canis rufus niger?*

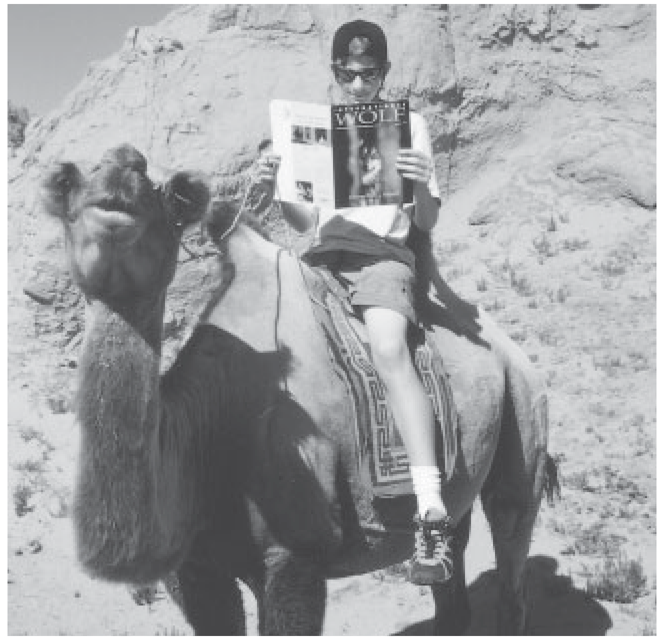
Andrea Barrett
Massapequa, New York

Technical Editor's note: It appears that neither is correct. Young and Goldman (1944:486.489) used Canis niger rufus *for one of the red wolf subspecies,* Canis niger niger *for another, and* Canis niger gregoryi *for a third.*

Wolf Tales, Wolf Trails

International Wolf Center member Code Sternal, 13, perused the Summer 1999 issue of *International Wolf* while visiting the Gobi Desert in Mongolia. When asked why he chose to read the magazine up on a camel, Code, a resident of St. Louis Park, Minnesota, replied, "Because my mom (International Wolf Center board member Nancy Gibson) asked me to. She said it would make a good photo." Unimpressed by the possibility of his picture appearing in the magazine, Code didn't have much to say except, "I like wolves." ■

Please send photos or slides of you or a friend reading the magazine in a favorite or far-off place to magazine coordinator, International Wolf Center, 5930 Brooklyn Blvd., Suite 204, Minneapolis, MN 55429. Identify the person pictured and include their permission to use the photo, the photographer's name and the location. Regretfully, we are unable to return slides or prints.



Nancy Gibson

News and Notes

DELISTING OF MINNESOTA WOLVES is still being considered by the federal government. After the state legislature failed to pass a wolf management plan recommended by a stakeholders' roundtable last year, Minnesota Department of Natural Resources wildlife specialists devised a plan that the Legislature will consider in 2000. If passed and approved by the U.S. Fish and Wildlife Service, the Service will likely begin the delisting process.

THE DISPERSING WOLF from Camp Ripley that traveled across Wisconsin and back (Fall and Winter 1999 *International Wolf*) is now "off the air." Biologists Sam Merrill and Dave Mech reported that her last signal was heard on November 14, 1999. At this writing, the biologists have heard a weak secondary signal by ground tracking and are trying to find the collar.

THE MEXICAN WOLF RECOVERY PROJECT suffered a severe setback when recovery coordinator Dave Parsons retired. Parsons was told that he could continue working for the project under a U.S. Fish and Wildlife Service program for retirees, but the Service then decided against it. In addition, another setback occured when the adult female member of the Campbell Blue pack that had been expected to produce pups in 2000 was killed by a mountain lion. The other four packs released into the wild continue to do well.

Lynn Rogers

ISLE ROYALE WOLVES are affected by the North Atlantic Oscillation (NAO), a major weather force in the North Atlantic Ocean, according to an article in the prestigious journal *Nature*. Authors Eric Post, Rolf O. Peterson, Nils Chr. Stenseth and Brian McLaren found that the NAO influences Isle Royale snowfall that also affects moose vulnerability, wolf predation and the growth of balsam fir.

YELLOWSTONE WOLF 9, the famous female progenitor of so many of the park's wolves, has either been ousted from her pack or left on her own. Her daughters have been producing pups for the last few years, and one of them now appears to be assuming the top breeding role. Wolf 9 remains in the area, and could even become a pack helper as happened with "Mom," an Ellesmere wolf, when her daughter "Whitey" began breeding.

THE NORTH AMERICAN INTER-AGENCY WOLF CONFERENCE is scheduled for April 11-13, 2000 at Chico Hot Springs, Montana. Contact Suzanne Laverty, PMB 217, 3355 N. Five Mile Rd., Boise, ID, USA 83713; e mail: Slaverty@defenders.org or phone(208) 672-1732.

WOLVES IN INDIA may soon be studied using state-of-the-art technology. In December, Sam Merrill, Minnesota Department of Natural Resources, visited the Wildlife Research Institute in Dehra Dun, India, to introduce both satellite tracking collars and Global Positioning System collars to Indian researchers. (For information on GPS collars, see the Spring 1999 *International Wolf*.)

WOLVES OF THE WORLD will be the subject of a new International Wolf Center traveling exhibit to be produced during the next few years. Demonstrating the great variation in wolf size and color around the northern hemisphere, the exhibit will be produced in modular form so that schools, visitors centers, museums, and other venues can display all or part of it. Center board member Nancy Gibson heads the project.

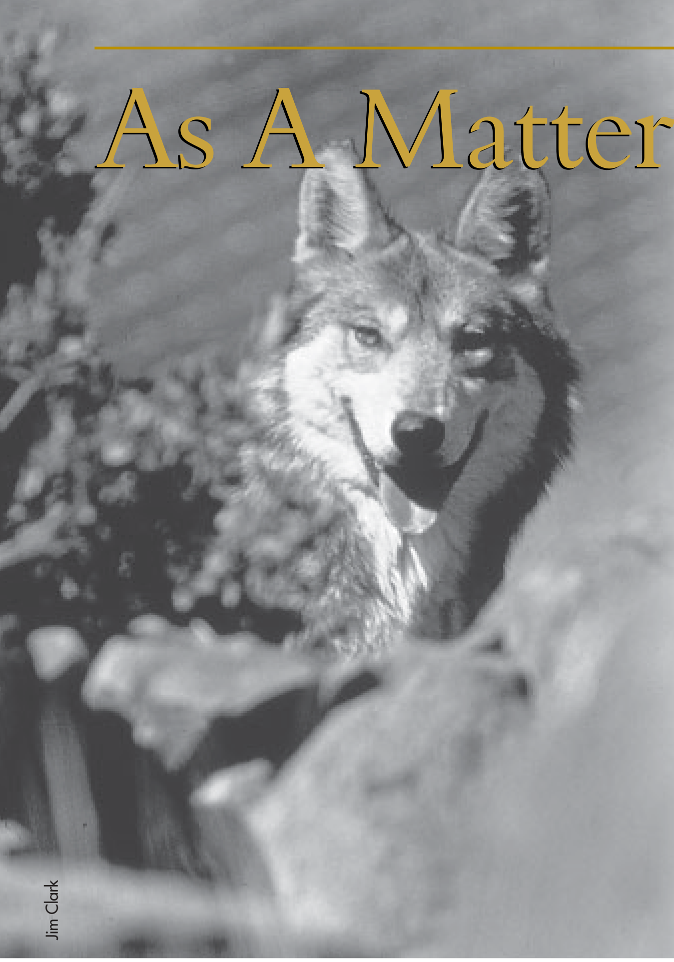
WOLF CONSERVATION IN EUROPE got a big boost in December. A plan for the conservation of five large carnivores, including the wolf, in Europe was approved by the Standing Committee of the Bern Convention administered by the Council of Europe. The Council is comprised of all European countries, including Russia and the European Union. The Committee also approved establishment of an ad hoc group of experts on large carnivores to administer the plan and monitor it at national levels and to advise on the technicalities of conservation of large carnivores in Europe. The first meeting of the large carnivore group is in Norway in June.

DEFENDERS OF WILDLIFE is teaming up with carnivore experts and various government and non-profit organizations to present Carnivores 2000, a conference on predator biology and conservation in the 21st century, November 12-15, 2000 in Denver, Colorado. For more information or to register, visit the website at www.defenders.org or call (202)789-2844.

Check www.wolf.org for further wolf information.


Janice Templeton

As A Matter Of Fact



Jim Clark

Fall 1999 Question:

What is the historic range of the Mexican gray wolf?

Answer:

The original range of the Mexican wolf included most of Mexico, plus southwestern Texas, and southern Arizona and New Mexico. Because wolves disperse hundreds of miles, some Mexican wolves probably reached the northern portions of Arizona, New Mexico and Texas, as well as southern California. ■

New Question

What is the wolf's main prey in Yellowstone National Park?

Wild  Kids

On the Run for Dinner

by Nancy jo Tubbs


L. David Mech

A white wolf chases an arctic hare across the summer tundra. At frantic speed, the white rabbit dodges around mounds of tiny pink wild flowers. The wolf zigzags in close pursuit. Down a gully, up the other side, around a rocky mound, the rabbit surges ahead; it might get away. But the wolf anticipates the hare's next turn and is there to meet it. A pounce, a bite, a shake of the wolf's head—the hare is dead. The wolf carries her prize back to a litter of excited pups.

In this scenario, the wolf won the race for life-sustaining food, but sometimes the hare gets away; then the wolf and her pups go hungry. It is the same with wolves and their prey around the world—elk in Yellowstone National Park, gazelle in Israel, beaver in Canada and wild boar in Russia. Not all are as fast as the arctic hare, but each has its own unique defense system.

You may be surprised to learn that in nature, each prey animal's defenses are well matched against the predator's hunting skills. If the wolf could kill all the elk, it would soon go hungry. Likewise, if elk were so well defended that they always got away, their numbers would grow so large that they would eat themselves out of house and home. The predator-prey cycle keeps the two species roughly in balance. ■

What do you know about these four prey animals—**whitetail deer, moose, beaver** and **musk ox?** See if you can match the prey animal to the list of skills and physical advantages below. Answers at bottom of page

A. ANIMAL: ____________

SKILLS:
- Runs 35 miles per hour
- Sharp hooves for striking
- Sharp antlers
- Babies have no scent
- Sensitive ears, nose and eyes
- Coat is the color of the woods

B. ANIMAL: ____________

SKILLS:
- Weighs 600-1,200 pounds
- Stands up to 6 1/2 feet tall
- Runs 35 miles per hour
- Massive antlers
- Thick, heavy hooves

C. ANIMAL: ____________

SKILLS:
- Lives in a herd
- Forms a defensive circle
- Thick skull bone
- Short pointed horns
- Long, thick coat
- Massive body up to one-half ton

D. ANIMAL: ____________

SKILLS:
- Can retreat to water
- Fast swimmer
- Can hide underwater for 15 minutes
- Warns others with tail slap
- Good hearing
- Stick and mud house, difficult to penetrate

Use the encyclopedia or another reference to describe defenses that other animals use against wolves. Some choices are bison, woodland caribou, elk, wild boar, and Dall sheep.

1. ANIMAL: ____________

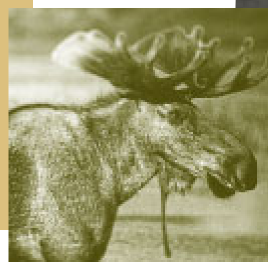
DEFENSES:

2. ANIMAL: ____________

DEFENSES:

Answers: A–Whitetail deer B–Moose C–Musk ox D–Beaver


L. David Mech


Int'l Wolf Center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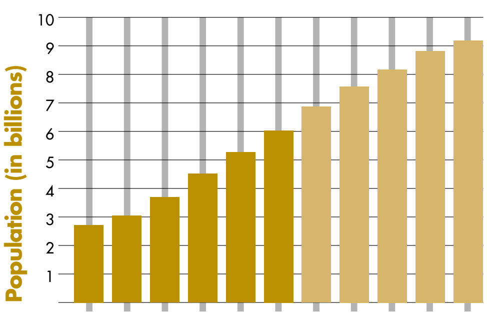
A Look Beyond

A World of Wolves and People: Coexisting in the Next Century

by Frank Babka and David Paxson

In recent times, attitudes toward wolves have become more enlightened. Many people are aware that there have been only a few verified attacks by wild wolves on humans in North America. Environmental pioneers such as Rachel Carson have also spurred citizens from all backgrounds to become more environmentally conscious as well.

But another problem is threatening the wolf and thousands of other plant and animal species. Throughout the world, human population is increasing at an alarming pace. At World Population Balance, we believe that stabilizing human population is crucial in order to live harmoniously with the wolf and other species.



Actual and Projected Human World Population: 1950 - 2050.

Credit U.S. Bureau of Census, International Data Base)

Ten times as many humans are living today as just three centuries ago. World population has doubled in the last 40 years, and we now stand at 6 billion, a staggering number. Every day, the number increases by more than 210,000 people! Human growth in the United States has been rapid—our numbers have more than doubled since 1940, from 130 million to about 275 million. With present levels of immigration and current population growth, we will reach about 400 million by 2050.

Worldwide, the average number of children per woman has declined in the last 50 years, from six to three. However, this is still well above the replacement level of 2.1 children per woman. Furthermore, a huge population momentum exists because so many of the world's people are young. Also, life expectancies are increasing everywhere, as people live longer due to better access to health care and other factors. In most of the world's countries, births exceed deaths annually by a factor of two, three or four!

Every person needs a huge amount of resources during a lifetime. As the human population increases, more humans take up more space and need more farmland for food, more energy for cooking, more land for recreation, etc. The rapid human population growth worldwide has resulted in 30 times more species becoming extinct, as compared with 1980.

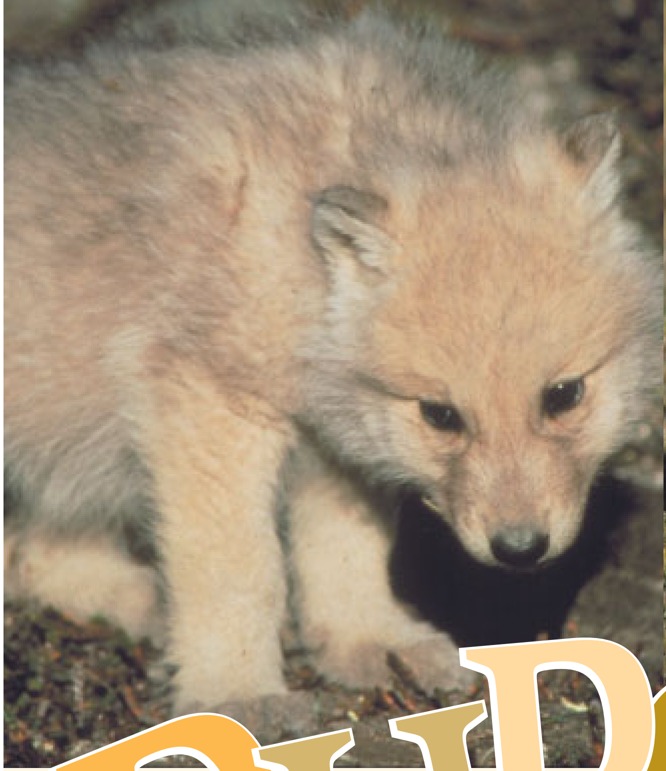
The coexistence between humans and wolves will continue to be uneasy as we enter the next century. If we in Minnesota, and the nation, fail to take action to reduce our high population growth, the human population in Minnesota alone will increase by almost a million in the next 25 years, with an increase of more than 600,000 people in just the Twin Cities. And the resulting increase in recreation and tourism will put additional pressure on land use and wildlife habitat in Minnesota, and bring more conflicts.

At World Population Balance we are committed to educating people about the life-sustaining benefits—for everyone—of humanely stabilizing human population as rapidly as possible. And one of the most effective things anyone can do to help wolves is to actively support human population stabilization efforts both at home and abroad. ■

Frank Babka and David Paxson are population educators with World Population Balance, (612)869-1640, WPBdPax@tc.umn.edu. http://www.WorldPopulationBalance.org

Lynn Rogers

International Wolf
5930 Brooklyn Boulevard
Minneapolis, MN 55429-2518

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PUPS!

Our four-legged family is expanding this summer!

Make plans to visit the International Wolf Center after July 4 this year and meet the newest members of our ambassador pack: a pair of cute, fuzzy, playful arctic wolf pups.

CENTER HOURS:

May, June, September and October	9:30 AM to 6 PM	Daily
July and August	9:30 AM to 7 PM	Daily
November through April	10 AM to 5 PM	Fri., Sat. and Sun.

They won't be pups for long, so plan your visit today!
Visit **www.wolf.org** or call **1-800-ELY-WOLF** for more information.