The Roost

NEWSLETTER OF THE OWL RESEARCH INSTITUTE (ORI) & NINEPIPES CENTER FOR WILDLIFE RESEARCH & EDUCATION
NOVEMBER 2012 VOLUME 16 NUMBER 1

Message from the President

It's a cool late-October morning at the Owl Research Institute's (ORI) office in Charlo, Montana. We're finally getting a few rain showers in the valley, and snow showers in the mountains. However, much of autumn has been beautiful, a mix of warm daytime temperatures and cool evenings. After months of hot, dry summer days, and heavy valley smoke due to forest fires, we are all feeling refreshed. The resident Great Horned Owls that live in a willow tree thicket behind the ORI raised two young again this year.

It's hard to know what to highlight each year in the president's message. Sometimes it's difficult not to repeat information when talking about ongoing projects. However, I'll do my best to give you an overview of 2012.

We had a very busy year. It all started with the widespread North American Snowy Owl winter irruption migration of 2011/2012. This was one of the largest migrations on record, as thousands of Snowy Owls poured into southern Canada and the U.S. Indeed, owls were recorded in over 30 states, and as far south as Dallas, TX. Here in Montana, they also arrived in large numbers. In between fielding calls from various news media and interested citizens, we guided a number of interpretive field trips in our Mission Valley.

And if that wasn't busy enough, read on. Each year we hope for a productive breeding season on all our research projects. As the old adage states, be careful what you wish for. In 2012, most species of owls at our Montana sites had good breeding years. We were stretched thin. One day we were researching Boreal Owls, and the next day we were 200 miles away researching Hawk Owls. This went on all season and our crews were exhausted. Now add in numerous lectures, field events, and travel.

I was fortunate enough to be an invited speaker at several venues. I spoke at the International Festival of Owls in Houston, MN. This is the largest owl festival in the U.S. Here, I was honored as an inductee to the World Owl Hall of Fame. I spoke at the Nuttall Ornithological Club (NOC) meeting, held at Harvard University. The NOC is the oldest ornithological society in North America. This is also the area where I grew up, and many old friends attended the talk. I also spoke at the largest owl festival in the world – Festival Dei Gufi, in Piacenza, Italy. Over 10,000 people attended the two-day event. I was one of the keynote speakers, along with long-time friend Heimo Mikkola, of Finland and author of the newest book on Owls of the World. Finally, as part of an academic seminar, I was invited to speak to the Max Planck Institute for Ornithology (MPIO) in Seewiesen, Germany. The MPIO is considered to be the top scientific bird research facility in the world. What an honor for the ORI. We are in preliminary stages of establishing a cooperative research project between the ORI and MPIO. The MPIO director and a few researchers will be in Montana in February 2013.

On another topic, this past summer the BBC's "Frozen Planet" film finally aired in the U.S. We were excited to have our Snowy Owl research highlighted in the film. Also, the Magic of Snowy Owls documentary by Beeley Productions of England aired on PBS in October 2012. The film was shot on our study site in Barrow, AK. We set the filmmakers on one of our nests, and provided breeding biology and behavioral information. We worked with this crew for about 6 weeks.

In November, I was invited to Churchill, Manitoba to serve as a panel member for Polar Bears International, Tundra Connections Program. Our panel objectives were to discuss Arctic bio-diversity, climate change, and Arctic wildlife conservation. This program was timed to coincide with the Polar Bear gathering, as the bears congregate and wait for the sea-ice to freeze, and then embark on their winter journeys. Other participants included National Wildlife Federation, Center for Biological Diversity, and several Arctic scientists from a variety of disciplines.

Finally, because of our service as natural history guides, I was asked to speak about the economics of the ecotourism industry, and how it relates to western Montana. I had positive dialogue with district Senators, Chambers of Commerce, Rotary Clubs, Community Foundations, and local business owners. This is a $100 billion per year industry and growing.

I ask for funding once per year. Similar to last year however, I realize the state of our economy, and that people are concerned about finances. If you can contribute, I thank you. If not, I understand and thank you for supporting us in spirit, and hope after you read this newsletter, you pass it on to a friend.

Thanks and
Happy Holidays.

~Denver Holt

RESEARCH

Barn Owl (BNOW). After five years passed without finding a BNOW nest, we were encouraged to find two nests in the Mission Valley in 2012. One nest failed and one fledged chicks. We are hopeful that sporadic sightings of BNOWs in Missoula and Mission Valleys in 2012 are indicative of a population rebound. However, as with many species of farmland birds, BNOW populations are also declining throughout their range in the U.S. and Canada.

Barn Owl chicks in natural nest cavity

Flammulated Owl (FLOW). This was a disappointing year for our FLOW research. Despite enormous effort, just one nest was located. Interestingly, the nest was the first to be located in a live tree in our study area. The nest was approximately 60 feet high in an 80 foot Ponderosa Pine. This made capturing the adults difficult, and we were only able to band the chicks. Unlike most FLOW nests in our study area, the cavity opening was small and located at the site of a broken branch. We can only wonder if they were the same pair that nested 50 yards away in 2011. We did detect FLOWs on other territories, however no additional nests were located.

Our paper, "Breeding Status of Flammulated Owls in Montana with a Call for Research", is in review for publication. We continue to share results from this ongoing research with conservation agencies and forest managers. This information is vital for forest managers to maintain FLOW habitat and populations. The FLOW is listed as "sensitive" by the U.S. Forest Service (Region 1), U.S. Bureau of Land Management (Montana/Dakotas), and U.S. Fish and Wildlife Service (Region 10). The owl is also deemed a "Tier 1 Species of Concern" by Montana Fish, Wildlife and Parks.

A bird's-eye view from the 2012 nest

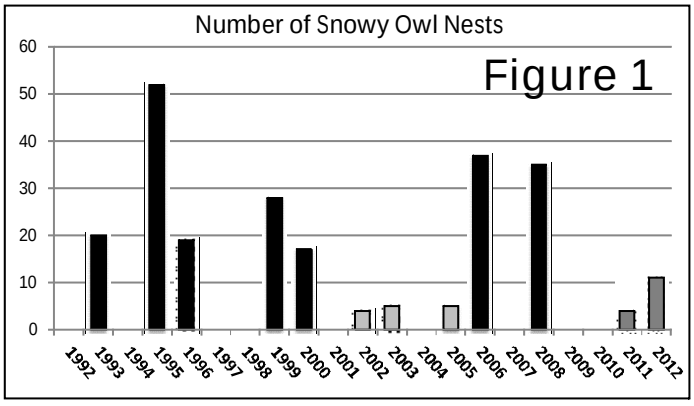
FLOW chick and unhatched egg

An adult Flammulated Owl

Snowy Owl (SNOW). We completed our 21st season studying breeding ecology of Snowy Owls and lemming population fluctuations at Barrow, Alaska. We saw a slight increase in the number of Snowy Owl nests and found 11 (Figure 1). Of the 11, two failed and nine fledged young. About 40 additional non-breeding adult SNOWs were present in our study area. We have now found about 220 nests. Lemming numbers slightly increased in 2012, but we still consider it a low lemming year. This was the fourth consecutive year of low lemming numbers.

Photo by Chuck Andrews

This has happened one other time during our 21-year study (2001-2005). We are currently advocating using Snowy Owls and lemmings to monitor effects of Arctic climate change. Lemmings are dependent on Arctic grasses, sedges, and forbs, for nesting and reproduction. Any changes to this vegetation due to climate change could have an effect on Snowy Owls and other Arctic species. We plan on working with climatologists and plant ecologists to explore this link. Recent studies have already verified a similar scenario in other Arctic regions.



Columns in black and gray denote years when Snowy Owls nested.
Columns in black denote years when numbers of Snowy Owl nests and lemming populations were high.
Columns in gray denote years when numbers of Snowy Owl nests and lemming populations were low.
Years with no data denote zero Snowy Owl nests and low lemming populations.

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RESEARCH

Northern Hawk Owl (NHOW). This was an exciting year for our NHOW project in Glacier National Park and Flathead National Forest. We confirmed one nest in West Glacier, and had two breakthroughs in other areas. In May, we had the first recapture of a Northern Hawk Owl in our study. We originally banded this owl as a nestling in 2006, and it was recaptured this spring (2012), approximately 4.5 miles from its natal nest. This owl was repeatedly observed interacting with another owl in what appeared to be mating behavior. However a nest was never located. In July, a tip from Chris Peterson, editor of Glacier Park Magazine, led to a family of NHOWs. We banded one fledgling, our first on the east side of the park. We have banded over 60 NHOWs in our study. Now with an adequate sample size of marked individuals, we anticipate additional recaptures.

NHOWs in flight

Photos by Chris Peterson, "Glacier Park Magazine"

Examining molt of NHOW

Photo by Christina Nealson - Her latest book is "Drive Me Wild: A Western Odyssey" www.christinanealson.com

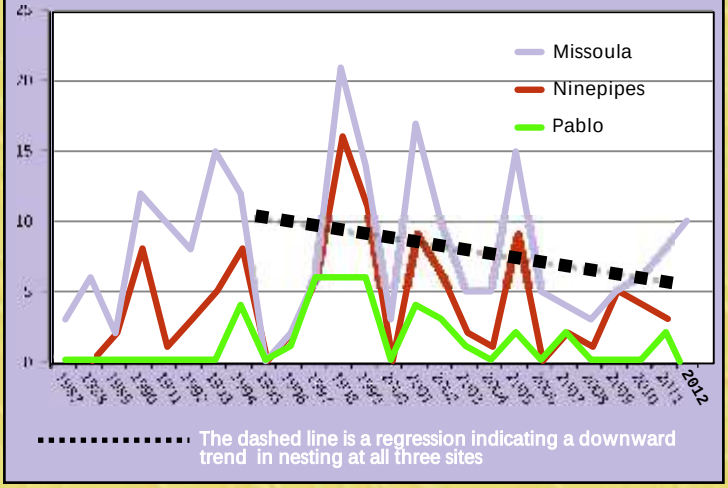
LEOW chick just days after leaving the nest

Long-eared Owl (LEOW). Our 26th year of LEOW research was a busy one. We found 11 nests in Missoula Valley (Figure 2). Ten nests were successful, and this marks the highest number of nests in Missoula since the study began. We attribute the number of LEOW nests to a rise in the local vole population. In the Mission Valley, no nests were found at our Pablo site, and our Ninepipes Wildlife Management Area study has been discontinued.

Our year-round study is one of the longest-running Long-eared Owl studies in the world.

Figure 2

LONG-EARED OWL NESTS:
MISSOULA & MISSION (NINEPIPES, PABLO) VALLEYS, MT



RESEARCH

We have recorded about 230 nests and banded over 1600 individuals. The trend for breeding numbers in our entire study has been downward. We were delighted and puzzled as to why the Missoula population increased so dramatically this year. Perhaps the population is rebounding, and this exemplifies the importance of long-term study and monitoring.

As with other grassland species, population declines of LEOWs and loss of habitat are serious. Our data mirrors a few long-term migration studies in North America, showing noticeable declines of this species. We believe the LEOW should be considered a candidate for a "Species of Special Concern" in Montana.

The LEOW is a classic example of our concept that owls can be indicators of ecosystem health. Any disturbances affecting grasslands will affect small mammals, which are the major food for LEOWs. In turn, monitoring LEOW populations could indicate changes to grassland ecosystem health.

Photo by Christina Nealson

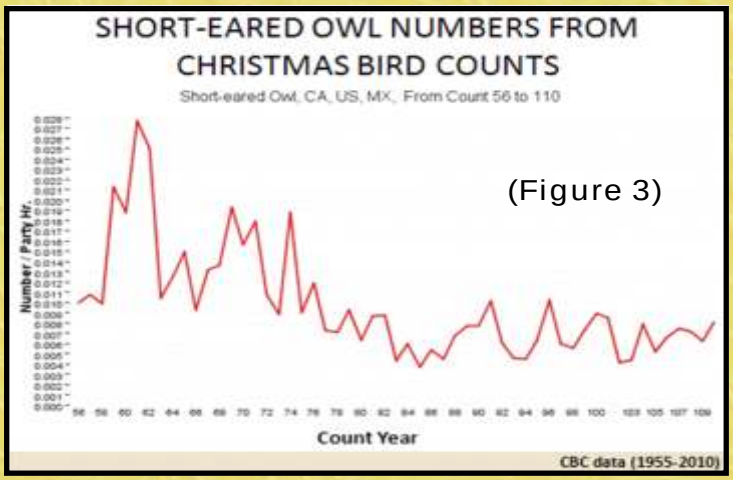
Long-eared Owl

Short-eared Owl (SEOW). We expanded our SEOW breeding project in the Mission Valley this year. Numerous wintering SEOWs and voles were promising signs. However, as spring neared, vole and SEOW numbers appeared to decline. We found two nests, but one failed during incubation. In the other, one chick was found preyed upon, but we suspect others fledged. It is difficult to surmise the reason for the nest failure, but we suspect lack of food or predation.

Matt Larson continued his survey protocol research and is poised to publish these results. Denver Holt and Matt also collaborated on a manuscript with other members of the North American SEOW Working Group, titled "Addressing the Decline in Short-eared Owls in North America: Status and Conservation Priorities".

The formation of the North American SEOW Working Group is a direct response to the serious decline of SEOWs throughout most of Canada and the U.S. (Figure 3). Most authorities suggest a 70% decline of this open-country species over the past 40 years. There appears to be a direct correlation between the decline of SEOWs and loss of open grasslands, shrub-steppe, and marshes. In Montana, the owl is listed as a "Potential Species of Concern" by Montana Fish, Wildlife and Parks. Surveys to assess the owl's population status are critically needed.

Currently, we are working with the Confederated Salish and Kootenai Tribes and the USFWS National Bison Range, to establish a management strategy. Our objective is to develop a schedule that allows these ground-nesting owls an opportunity to breed, before cattle are allowed into the grasslands.



(Figure 3)

RESEARCH

Other Small Cavity Nesting Owls.

Each spring we scour our study sites, inspecting countless trees and looking into hundreds of nest holes, in search of cavity nesting owls. Our hard work paid off this year with increased numbers of Northern Saw-whet Owl (NSWO), Boreal Owl (BOOW) and Northern Pygmy Owl (NOPO) nests. We found five NSWO nests. Of these, three failed. We discovered four BOOW nests, all in nest boxes. Of these, one failed. We found three NOPO nests, and all were successful.

With 20 years of data, our sample size is now robust enough to begin analysis, and the publishing process. This quantitative information will be especially useful to forest managers. For instance, different owl species need different tree species, ages, and size classes for nesting. Managers will then have data to prescribe snag retention guidelines, and plan future snag management policies for cavity nesting owl species.

Top: BOOW chicks ready for banding

Left: Female BOOW peering from nest box

Photo by Steve Hendricks

Migration Study.

Because of a busy spring breeding season, we could not run a spring migration site. We hope to reinstate this part of the project in the future. In August we continued our autumn owl migration study at a new site near Missoula. Last year, we ran high and low elevation autumn sites, but due to a lack of funding, we decided to run the lower elevation site only. August was slow with few captures, but we were delighted when the migration picked up the first week of September.

As of late October, we have caught 288 Northern Saw-whet Owls (NSWO), four Long-eared Owls (LEOW), and one Flammulated Owl (FLOW). This is about 40 less than our low elevation site last year. Of note are eight recaptures and one between-season recapture. These recaptures provide a unique glimpse into NSWO movements (Figure 4). This information buttresses the importance of long-term migration banding studies.

Photo by austin.trayser@blogspot.com

We were pleased to host two public lectures at our new study site in October. Montana Audubon and Five Valleys Audubon promoted the events which made for two wildly successful nights. We gave an overview of migration studies, our projects, and NSWO ecology. We were lucky enough to capture NSWOs on both nights.

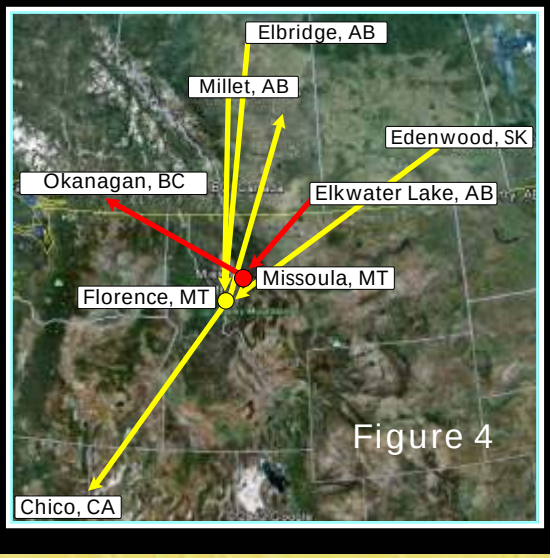


Figure 4

Research Profile: Northern Pygmy Owl (NOPO)

The Northern Pygmy Owl (Glaucidium californicum) is a small owl that appears to use a variety of forest habitats. From dense coniferous woodlands, cottonwood river-bottoms, and isolated Aspen patches, the nests of this obligate cavity nester are seldom found. It needs natural holes in trees or holes excavated by woodpeckers in order to nest. In North America it does not seem to use nest boxes, as does its European counterpart. This 6-inch sized owl is not common anywhere, yet it has a wide distribution in western North America. The owls are solitary except during the breeding season. They usually hunt from a low perch and drop down on potential prey, but have been observed flying in pursuit of birds. Pygmy Owls eat insects, amphibians, reptiles, birds, and small mammals.

Northern Pygmy Owl face . . .

. . "eyespots" or "false face"

Photos by Steve Hendricks

However, studies reveal a high preponderance of birds in this owl's diet, This may explain why they are mobbed (harassed) so frequently by small birds such as chickadees, nuthatches, and the like. Migratory behavior is not known for Pygmy Owls. However, local movements, and perhaps elevation changes (not true migration in the classic sense), are suspected.

What little we have learned about this species' breeding biology comes from a few studies, primarily in Montana. The Pygmy Owl is believed to be monogamous, and breeds once per year. Compared to other small forest owls, Pygmy Owls lay large clutches, and up to 7 eggs have been recorded. Also, unlike most other species of owls, there is evidence that Pygmy Owls may hatch eggs near synchronously. Indeed, they may begin incubation before the clutch is completely laid or nearly so - like ducks, for example. Incubation is thought to last about 28 days.

Nestlings grow quickly, and when the cavity becomes crowded, the female begins to roost outside. When the nestlings are a little over 3 weeks old, they fledge from their cavity and continue development high in trees.

Interestingly, some data indicates they all leave the nest on the same day or nearly so. This behavior buttresses the theory of near synchronous hatching. Unlike other cavity nesting species, Pygmy Owl nestlings are believed to have weak flight as soon as they leave their nest. They probably make sustained flights at around 4-5 weeks of age. Young Pygmy Owls are dependent on their parents after fledging, but may become independent by about 7-8 weeks of age.

Another very interesting trait of Pygmy Owls is the distinctive feather arrangement on the back of their head, also known as "false eyes" or "false face". Researchers from the ORI conducted field experiments, and believe the false eyes/face redirect birds that mob or attack Pygmy Owls from behind, to the real face or real eyes. Thus, the owl can monitor the threat. Results also showed that mobbing intensified with species more likely to be eaten by Pygmy Owls, than those less likely to be eaten.

Day 1

Day 3

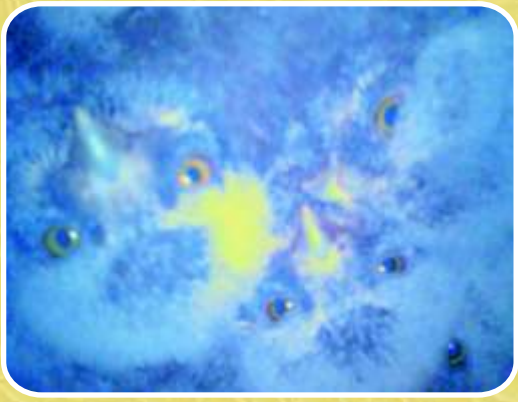
Day 5

Northern Pygmy Owl Photo-documentary Project. In order to address some of the breeding biology questions mentioned previously, retired heart surgeon and current ORI citizen scientist Steve Hiro, took on a photographic documentary project in 2012.

Excerpts from Steve's field notes: Early morning and early evening surveys were conducted to locate the owls. After the potential pair was located, relocation and observations were conducted every other day. Copulation was witnessed several times for about a week. The female was intermittently in the cavity, but also spent long periods of time roosting outside the cavity.

Once the female committed to staying in the cavity, I assigned that as the onset of incubation. The male provisioned food to the female during this period. At this time I acquired a wireless Video Borescope and a monitor, to conduct regular nest checks. On the 29th day of incubation, I observed that two chicks had hatched, but was unable to see more due to the female's body position.

The next day, the female left the cavity and I was able to observe five nestlings and one egg. From then on, I serially recorded growth and plumage development of the nestlings using the Borescope. All the chicks' eyes were open by day 9. By days 12-13, the female began to hunt, but still solicited the male for food. By day 21, the chicks began peering from the nest hole.



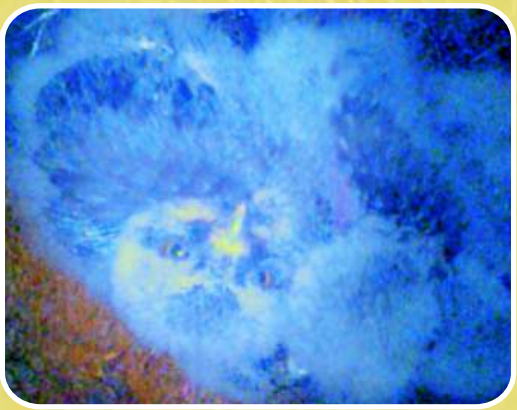
Day 13

Day 15

Day 17

Day 7

Day 9



Day 11

On the morning of day 28, five chicks, apparently identical in size and plumage development, were in the cavity. Three hours later, four chicks fledged and flew 40-60 feet up, high in a nearby tree. They were observed capable of sustained horizontal flights of about 50 feet. The remaining chick was banded, weighed, measured, and placed on a branch. It eventually flew up to its siblings high in the trees. The sixth egg never hatched.

Steve's study gave support to several aspects of Northern Pygmy Owl nesting biology that have remained in question, or need of additional data. For example, it again appears that females do not begin sustained incubation duties until the full clutch is laid, or nearly so.

Further buttressing this theory is the fact that all chicks were essentially identical in size and plumage development, and all departed the nest and were capable of sustained flight on the same day.

Additionally, fledging has been reported to be about 23 days, and Steve's data indicated about 28 days. This is within a reasonable range, but perhaps gives a more accurate estimate of the time chicks fledge.

Steve's data adds more knowledge to the rather somewhat synchronous hatching and fledging of Northern Pygmy Owls, which is an unusual trait among any owl species.

Day 19

Day 21

Chick out of the nest

EDUCATION

ORI education programs are focused on volunteer opportunities, internships, hands-on field classes, and lectures. Participants are of all ages. Conservation education is now more important than ever before. Economic woes, political party division, and an increasing public skepticism about science, have resulted in increasing challenges for conservation. Recent surveys place U.S. education literacy in math and science somewhere between 17th and 25th in the world.

To remedy this, we need proactive conservation education at all levels. Although we often emphasize children as the conservationists of the future, we also need conservation-minded adults, and we need them now. We understand the role of children as future conservationist's, however, adults vote, have influence, provide money, and often commit time to heartfelt causes. Ultimately parents are their children's teachers, and influence how their children view, value, and interact in the world. We need more adult outdoor education, and the ORI provides that.

Volunteer Researchers. We extend our deepest gratitude to the countless volunteers who have participated in the ORI's research over the years. We could not achieve our goals without them.

This year, volunteers came from the Avian Science Center, Raptor View Research Institute, Audubon Societies, University of Montana, Montana Conservation Corps, and public citizens. We attempt to provide most volunteers with hands-on field experience in wildlife research.

However, volunteer projects have included stacking wood, building nest boxes, and entering data. We are especially grateful to Joseph Khilling, who consistently volunteered on our fall migration project – putting in late nights and giving crew members much need nights off. Joe worked many hours with us this year. projects.

Photo courtesy Ervin Davis

Also, special thanks goes to 86-year-old Ervin Davis, who has been working tirelessly to enter data from a number of projects.

Ervin Davis and friend

Photo by Christina Nealson

Steve Hiro hauling equipment to the site

Megan Fylling helping band a FLOW chick

Internships and Seasonal Employees.

Throughout the years we have hosted a number of interns. They are typically high school or undergraduate students. A typical internship lasts from a few weeks to one field season and is focused on a single species. The goal of our internship program is to provide students a deeper understanding of field methods, research design, literature awareness, natural history, and the importance of long-term study and monitoring. Some students participate in data analysis and write papers for publication.

University of Montana volleyball team co-captain and wildlife biology student Whitney Hobbs interned this past season on the Long-eared Owl study. Her duties included locating owls, setting nets and extracting owls. She learned to band, sex and age, interpret feather molt, take measurements, and record data. Whitney completed her internship and provided a report to her major professor and the ORI.

When funding permits, we hire seasonal employees. We had two incredible seasonal employees this year: William Blake of France, and Madison (Madi) McConnell of Montana. William worked with us on our NSWO winter roost projects and our LEOW project. Madi joined us in Barrow, AK where she worked on our SNOW ecology and lemming project. Both William and Madi were valuable members of our team. We hope to have them back next year.

Intern Whitney Hobbs works with a LEOW

William Blake and Carla Wambach, MT Audubon's Educator of the year

Photo by Ronan Dugan

Madison McConnell

EDUCATION

Day in the Field. For more than 20 years, we have been donating a Day in the Field with researchers. Essentially, we provide the opportunity for groups to join us for a day. These days typically go to schools, community groups, and charitable fund-raisers. For example, for charitable fundraisers, the groups received the donation and we provide the winners with a day in the field, observing and learning about owl research and natural history. In 2012, recipients included: Five Valleys Audubon, Glacier Institute, Glacier National Park Fund, Montana Audubon's Bird Migration Celebration, Montana Land Reliance, Montana Natural History Center, Montana Public Radio/NPR, Salish Kootenai College Public TV, and Safe Harbor.

A Day in the Field near Missoula, Montana

Photo by Rebecca Richter

Classes, Lectures, Radio Programs

- Field classes conducted: Five Valleys Audubon, Grizzly Peak Retirement Home, Montana Academy Youth Home, Montana Natural History Center, Montana Audubon, Potomac School, USFWS North Slope Science Culture Camp, Barrow, AK, Yellowstone to Yukon Conservation Initiative, YWCA GUTS program.
- Indoor lectures given: Big Arm Association, Chief Charlo School, Eden Prairie Elementary, MN, Edison Bird Festival, WA, Falcon Research Group, WA, Garden City Montessori, Greater Polson Community Foundation, Ninepipes Museum of Early Montana, Polson Historical Society, Sussex School.
- Interviewed by: Montana Public Radio, Mountain West Voices, NBC, Associated Press, All Things Considered / NPR, among others.

Photo by Rebecca Richter

Advisor Profile. Many people come and go through the ORI. Some are board members, others advisors, and some both. But Dale Becker has been here since the beginning. Dale served as a board member for many years, and now continues his association as an advisor.

Dale is a wildlife biologist, and currently the Wildlife Program Manager for the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation in western Montana. Under Dale's leadership, the CSKT Wildlife Management Program combines modern wildlife technology and wildlife management techniques, with good old-fashioned field work. Dale has created one of the top tribal wildlife management programs in the U.S., and one of the top wildlife management programs in all of Montana. In recognition of this, the CSKT Wildlife Management Program was recently awarded the 2012 National Wildlife Federation's Conservation Achievement Award.

Dale and Denver were friends at the University of Montana, and that friendship continues today. At 6'6", with black hair and a blackish beard, Dale is intimidating. His size,

however, lends no hint of his gentle demeanor. Dale is soft -spoken and always level-headed, and a savvy diplomat. Dale is frequently called upon by the ORI, particularly when we are immersed in wildlife politics. Dale has been the voice in our corner, and the liaison in helping build and restore relationships with other wildlife agencies. The ORI owes much to Dale, and herein we acknowledge that and extend many thanks.

Consulting. Although we are known for owl research, our staff's expert knowledge diversifies to all terrestrial wildlife and habitat. ORI Program Coordinator Jessica Larson has taken the lead in exploring wildlife consulting for private landowners. Our goal is to provide habitat evaluation, a complete wildlife inventory, and future monitoring for the interested private landowner. One of our first consulting projects was the establishment of nest boxes to determine presence of resident owls.

Guiding. For years we have served as professional wildlife guides on private vacation ranches. We see this as an opportunity to help vacation ranches and resorts create their own wildlife viewing guide services, and, at the same time, contribute to species identification and distribution throughout Montana. As hunting continues to decrease throughout the U.S., wildlife watching continues to grow. Professional wildlife guides will be needed. We plan on being in the forefront of this discipline.

OWLS AS INDICATORS OF HEALTHY ENVIRONMENTS

We continue to suggest that many species of owls can be used as indicators of healthy environments. Given their position at the top of the food chain, owls are likely indicators of environment disruptions. Owls are one of the most recognized groups of animals in the world. And, if we highlight charismatic species such as owls, we have a better chance of conserving wildlife and wild lands. To buttress this point, peruse the internet, newspapers, magazines, and other outlets to explore how often owls are used as icons and to sell products. Although many other species of animals could be good indicators of environmental health, people often admire and care for animals based upon looks. Owls meet that appeal.

Barn Owl

Western Screech Owl

Photo by Chris Peterson

Northern Hawk Owl

Snowy Owl

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Long-eared Owl

Photo by Ashok Khosla/www.seeingbirds.com

Short-eared Owl

Great Gray Owl

Photo by Laura Kamala

Northern Saw-whet Owl

CONSERVATION PARTNERSHIPS

Ultimately, conservation is about land preservation and stewardship. However, we need information about these landscapes. Our partnerships with the groups listed below allow us to conduct owl research and education programs. In turn, our data on owls and our wildlife observations in general contribute to a better understanding of specific species. For example, our information contributes to Montana Important Bird Conservation Areas (IBA), Montana Vertebrate Distribution, Montana Bird Conservation Partnership, Montana Bird Records Committee, and Montana Natural Heritage Program. Two examples include: 1) working with the Flathead Indian Reservation to promote the Mission Valley as one of the most important wintering areas for birds of prey in northwestern U.S. And 2) we provided over 30 years of detailed notes of Montana wildlife sightings for the Montana Natural Heritage Program. Partners include:

Alaska

Alaska Fish, Wildlife and Parks. Permits and research sharing for Snowy and Short-eared Owls and lemmings.

North Slope Borough, Department of Wildlife. Info sharing.

Ukpeagvik Inupiat Corporation (UIC). Info sharing, land access, permits, and housing.

US Fish and Wildlife Service. Info sharing.

Montana

Avian Science Center, U of M. Provided volunteer field assistance.

Bureau of Land Management. Research funding for FLOW project.

Flathead Indian Reservation. Permits, land access, and info sharing.

Marshall Woods Project. Cooperative partnership with U.S. Forest Service and Lolo Restoration Committee for forest restoration efforts and FLOW conservation in the Rattlesnake National Recreation Area.

Montana Bird Conservation Partnership. A state run collective group that helps disseminate information and suggest strategies for Montana bird conservation.

Montana Fish, Wildlife and Parks. Permits, land access, info sharing.

US Fish and Wildlife Service. Permits, land access, info sharing.

US Forest Service. Research funding for Northern Hawk Owl, land access, info sharing.

Private Landowners

A special thanks to landowners who allow our research and education programs to be conducted on their properties.

OTHER PROFESSIONAL PARTNERSHIPS

Furrow Productions. The ORI and Furrow Productions (Missoula, Montana) are finishing their film to promote awareness of Intermountain Grasslands in Montana. These unique habitats are designated “of greatest conservation need” by the state of Montana. These grasslands, more than any other habitat type, are most frequently converted to urban and rural development. This is also a national issue.

Natural Exposures. Dan and Tanya Cox generously share their wildlife photographs for our publications and presentations. See www.naturalexposures.com.

Nikon Corporation. Nikon provides high-quality optics for ORI staff. They also feature Denver Holt as a member of their “Pro Staff.” Learn more at www.nikonbirding.com. Support Wildlife Research - Buy Nikon.

2012 Snowy Owl Irruption and Watchers

Photo by Pam Moriarty

Photo by Chuck Andrews

Photo by Rebecca Richter

Photo by Rebecca Richter

Photo by Rebecca Richter

Photo by Chuck Andrews

Photo by Rebecca Richter

Photo by Rebecca Richter

Photo by Pam Moriarty

NATURAL HISTORY TOURS

Our affiliate, Wild Planet Nature Tours, provides the following tours, led by Denver Holt and Megan Fylling:

WILD PLANET nature tours

WINTER RAPTOR WORKSHOP
Western Montana

GUATEMALA
Antigua, Tikal, and more

MONTANA OWL WORKSHOP
Western Montana

ALASKA
The North Slope of Alaska at Barrow

WHERE THE DESERT MEETS THE SEA
La Paz, Baja California, Mexico

YELLOWSTONE NATIONAL PARK
Yellowstone National Park, Montana






- Dates announced later. See www.wildplanetnaturetours.com.
- Most tours cater to small groups and individuals.
- Denver and Megan also guide a few specialty tours for Victor Emanuel Nature Tours (VENT). VENT is the largest nature tour company in the world. See www.ventbird.com.

For more information, visit www.wildplanetnaturetours.com.

Photo by Ronan Dugan

TRAPPING STATION SPONSOR OPPORTUNITY

Due to budget constraints, we could not afford to run two Northern Saw-whet Owl migration sites in 2012. Therefore, we have decided to ask for a corporation, foundation, or individual to sponsor the migration sites for 2013. Sponsors would be recognized only if they elected to receive the recognition, and thus the site honored in their name. Please contact us if you are interested in sponsorship.

BUILDING MAINTENANCE SPONSORSHIP

We have begun upgrading buildings at our facility. We would love to hear from any individuals, corporations or foundations interested in sponsoring this task. The farm house needs energy-efficient windows, and some foundation work. An energy-efficient wood stove is also desirable. New roofs are needed on the shed and barn. The storage building needs interior finishing. Please contact us if you are interested in sponsorship.

Photo by Ronan Dugan

2012 WISH LIST

In addition to donations and grants, the ORI is in need of other contributions. Among many gifts in 2012, an Arizona couple donated and delivered an Achilles rubber boat with a motor. This boat will allow us to visit sites along river ways and lakes to survey for owls. Another couple donated a collection of bird and wildlife related books for our library.

- ATV – 2 newer four-wheelers
- Banding equipment (banding pliers, nets, rulers, scales, calipers)
- Books, journals, wildlife art
- Camper trailer (in good cond.)
- Chainsaw (newer model)
- Climbing Ropes
- Flatbed trailer (heavy-duty)
- Lawn & Deck Furniture
- Power tools (saws, drills, etc.)
- Riding lawn mower (large)
- Snowmobiles and trailer (newer models)
- Vehicle (fuel efficient)
- Wall tent (large)
- Wood stove & pipes (modern variety)

Our programs would not be possible without your generosity. Thank you.

Corporate Sponsors

ABR Incorporated, AK
Barrow Arctic Science Consortium, AK
Boyle, Deveny, Meyer, MT
ConocoPhillips, AK
GlaxoSmithKline Biologicals, MT
Grizzly Woods Services, MT
Natural Exposures, MT
Nikon Inc., NY
Patagonia, MT
Triple Creek Ranch, MT
Umiaq, LLC

Foundation Sponsors

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American Express Giving Program
Banbury Fund
Bobolink Foundation
Cinnabar Foundation
Charlotte Y. Martin Foundation
Community Foundation of North Texas
Conservation Congress
Fanwood Foundation
Fidelity Charitable Gift Fund
Glacier National Park Fund
GlaxoSmithKline Foundation Matching Gifts
Goldman Sachs Philanthropy Fund
Hal Eric Myers Trust
Hess & Helyn Kline Foundation
JP Morgan Chase Foundation
Kendeda Foundation
Microsoft Matching Gifts Program
My Good Trust
Norcross Wildlife Foundation
Pleiades Foundation
Plum Creek Foundation
Seligson-Johnson Foundation
William H Harris Foundation
Woods Foundation

Government Sponsors

Bureau of Land Management, MT
Flathead National Forest, MT
Glacier National Park, MT

NonProfit Sponsors

Five Valleys Audubon, Missoula, MT
Mission Valley Audubon, MT
Montana Audubon, MT
Yellowstone to Yukon Conservation Initiative, MT

WALL OF SUPPORT

To secure your name on the Wall of Support, please fill out and return the form below. Complete the form exactly as you wish it to appear on the wall. We will use the weathered exterior wood siding from one of our buildings for your name. When the barn renovation is complete, the Wall of Support will be constructed. There are four size categories to choose from for your donation: $100 = 2"; $250 = 3"; $500 = 4"; and $1000 or more = 5". Included with a $1000 donation is an animal and/or plant of your choice.

Name_____

Size: 2"_____ 3"_____ 4"_____ 5" _____

Animal, Bird, Plant _____

Donation amount enclosed $_____

Address_____

City _____

State_____ Zip_____

Phone ( )_____

Email _____

Location of the Owl Research Institute and the Ninepipes Center for Wildlife Research & Education

NOTE ABOUT SPONSORSHIPS: In our newsletter, our practice is to recognize only "entities" — e.g., businesses, nonprofits, foundations, and agencies. We do not list individual names as a courtesy to our constituents, for many wish to remain anonymous. Only in special cases, and with permission, do we list the names of individuals. On the Wall of Support, however, we will list all sponsors, individual or otherwise. This decision ensures a certain measure of privacy.

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