

Refuge News

July 2014 Newsletter

A Publication Funded by Seney

Natural History Association for its Members.

Seney Natural History Association

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Manager's Corner

by Mark Vaniman



As many of you may know I celebrated my thirtieth year working for the Fish and Wildlife Service last July. As of now there are only two things in my life that I have done for thirty years or more: one is being alive and the other is being married. Discussions of retiring started popping up more frequently in my house once I reached the 30

year milestone. Most of these talks had the word years sprinkled liberally throughout but, through a series of events, years were reduced to months and months were reduced to days until I was notified that my retirement date was March 21 (somewhat earlier than expected).

I am excited yet frightened and happy yet sad but must reflect on my good fortune. I have enjoyed what I think is a remarkable career doing something I love and I can't think of a better way to end than at Seney National Wildlife Refuge. Having worked on many Refuges over the years, and never being on a bad one, I can easily state that this place is truly special. In my short tenure here a lot has been accomplished, not because I was here but because I was blessed with a team of staff and volunteers who love this place and what we do. I have no concerns about the future of Seney – a landscape this large will always prevail and with the aid of the folks here now and those that will be here in the future, Seney will always be “a place of excitement and wonder where wildlife comes first.”

So what am I proud of? I'm proud to have been part of a staff with a work ethic and passion for our mission that is second to none. I am proud to have been associated with the SNHA and our volunteer cadre whose selfless contribution to our mission has been so important. I'm proud of our relationship with other partners – some new and some old and I'm proud to have had the privilege to occupy the corner office at this fabulous spot.

As for the Vanimans – we are heading west to plot our future and, who knows, maybe we'll end up back in the UP once the wanderlust is diminished by age. In the meantime we hope to enjoy the things we love: travel, children, GRANDCHILDREN and all the things that come with retirement.

Even though this is not goodbye I leave you with a quote from

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Photo: Cattail - Richard Borth, 2013 Photo Contest.



Seney Natural History
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Sara Giles
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Photo: Morning Reflection - Canada
Geese - Fred Gaunt, 2012 Photo
Contest.

Changes in the Board

by Nancy Strawe and Tom Kenney

The Seney Natural History Association held its annual membership meeting on May 7th, 2014. The members present re-elected Nancy Strawe and Dave Fleischmann to the SNHA Board of Directors, and elected new board member Bill Hart. Bill fills the seat vacated by Liz Hill. We thank Liz for her service and welcome Bill to the board.

The SNHA Board elected officers at its next regular meeting on June 11th, 2014. Tom Kenney replaced Dee Phinney as President and Dee will now serve as Vice-President. Thank you Dee for your leadership for the past five years. Nancy Strawe was re-elected as Treasurer and Joe Kolder was re-elected as Secretary. George Phinney, Pat Foldenauer and Laura Gasaway complete the nine-member Board of Directors.

The SNHA Board continues to focus on maximizing bookstore income and helping to bring grants to the Refuge. As most of you know, the bookstore is the primary source of funds for SNHA. Its continued success enables us to support Seney interns, programs and research. Stop in and see the newly remodeled and upgraded bookstore when you get a chance. Special thanks to Sara Giles (Seney Refuge Visitor Services Manager) and Claudia Slater (SNHA Bookstore Manager) for helping to make this happen.

Please contact any board member if you have ideas about how SNHA can better support the Refuge.

Bookstore Renovation

Over the winter of 2014 SNHA and Seney National Wildlife Refuge funded bookstore renovations and they look great!



The makeover included hanging new slatwall and putting up dry wall to give the bookstore a lighter, more modern look. In addition a new bookshelf was installed replacing the book towers.

A special thanks to Matt Canfield, Don Gardner, Rich Wilson and Jim Patton for doing the construction. Sara Giles, Claudia Slater and the bookstore committee for the planning, and Dave Fleischmann for constructing the bookshelf.



2014 Calendar of Events

Wildlife Wednesdays

June, July, and August

Wednesday nights 7:00pm-9:30pm

Experience the Refuge backcountry, traveling roads otherwise closed to public vehicles. Rangers will share Refuge history and management practices, while everyone scans the scenery for wildlife. A tour bus, binoculars, and radios for private vehicles are all provided. People wishing to drive their own vehicles are required to wash potential seed sources from their vehicles before being allowed behind closed gates.



Morning Bus Tours

Mondays and Fridays

July 11, 14, 18, 21, 25, 28

August 4, 8, 11, 15

Meet at the visitor center at 10:00am

Enjoy a casual outing into the backcountry with a member of our seasonal staff. This is a great opportunity to check out the habitats behind the gates. Tours last approximately 2½ hours.

Interpretation Programs

June - August

Interpretive programs are developed around topics relevant to the Seney National Wildlife Refuge. These programs are varied, so call ahead or check the website to find out about topics, dates and times.

Jr. Duck Stamp Exhibit

July 2 – July 30

Regular Visitor Center hours 9:00am-5:00pm

Take advantage of viewing the first place winners of original waterfowl artwork, by kids from each US state and territory. The artwork will be on display in the Visitor Center the month of July.

Youth in the Outdoors

Saturday, September 27

Youth in the Outdoors is a spinoff from our annual "Scout Activity Day." The day is designed to get youth out into the Refuge to explore and learn. Participants may choose from a variety of sessions. The event is open to kids ages 7-17. **(Pre-registration and a \$5 registration fee are required.)**



Fall Color Float

Saturday, October 4

Take a float down the Manistique River and see the beautiful fall colors. Join Refuge staff for a 4 -5 hour canoe/kayak trip October 4th. Pack a lunch and dress for the weather (could be warm or cool) Bring your own boat or rent one from one of the local outfitters. Participants should have some experience paddling. Trip will be cancelled if it's raining or temperatures are below 50° F. **(Pre-registration is required).**

**Visitor Center &
Marshland Wildlife Drive
Open May 15 – October 20**

**As the summer progresses more activities
will be added to the calendar, please
check the website for updates:
www.fws.gov/midwest/seney**

Fan us on Facebook

Phone: (906) 586-9851 x15

Fire & Black-backed Woodpeckers in Upper Michigan

A research brief for resource managers written by: Rhiannon Jakopak & Julia Polasik (Applied Sciences Program Interns, Seney NWR)

On April 29, 2007 a prescribed fire turned wildfire in the Ottawa National Forest of Upper Michigan burned approximately 998 acres of a predominantly mixed-pine forest. This study was conducted to determine the nesting densities and nesting phenology of black-backed woodpeckers (*Picoides arcticus*, BBWO), an uncommon fire-dependent species of the coniferous northern and western United States. Work was conducted by surveying a 230-acre plot during the second post-fire breeding season.

From January 2008 to December 2009, systematic sampling surveys were conducted two to three times a week to find BBWO nests by using the behavior of each BBWO observed during the surveys. The researchers documented nest and tree characteristics for each BBWO nest they found as well as nest phenology information, including date of excavation and nestling activity.

Twenty active BBWO nests were found within the study area from March to July of 2008 - 30% (6) of these nests were in a 47-acre subset of the study area which had a density of 0.13 nests/acre, while the nest density for the 230-acre study area was 0.09 nests/acre. Nestling activity began on June 4th and estimated fledging dates ranged from June 16th to July 1st. There was an 85% nest success rate based on observations of young close to fledging at the nest entrances.

Nest heights ranged from 28.0 inches to 27.3 feet above the ground. Nest entrances were randomly distributed and not related to compass direction. Tree diameter at breast height (dbh) ranged from 6.5 to 16.0 inches and 90% of the nests were in jack pine (*Pinus banksiana*). Of the nests found, 70% were in trees killed by the fire, while 20% were in trees recently dead before the fire, and 10% were in trees dead long before the fire (Figure 1).

This fire provided a novel opportunity to study a fire-dependent bird species that is understudied in Upper Michigan and elsewhere in the northern Lake States. Compared to pre-fire BBWO nest densities,



Black-backed woodpecker Photo by: Mike Laycock National Park Service

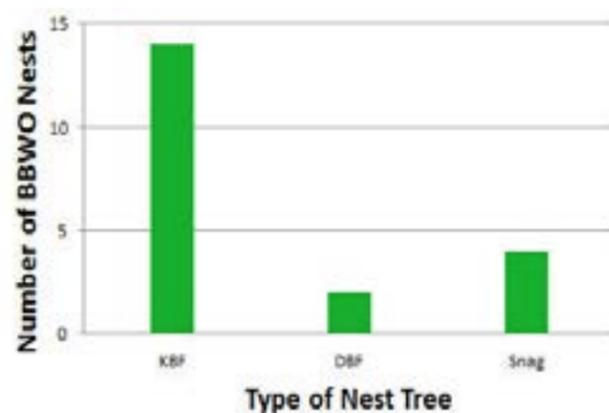


Figure 1. Number of BBWO nests found per type of nest tree (KBF=killed by the fire, DBF=dead before fire, Snag=dead long before)

MANAGEMENT IMPLICATIONS

1. Burned coniferous forests provide breeding habitat for black-backed woodpeckers due to an abundance of prey.
2. Burned, mature jack pine forests support higher densities of nesting black-backed woodpeckers than burned, mixed-pine forests.
3. Salvage logging adjacent to suitable habitat may constrain breeding habitat.

this study showed higher BBWO nest densities in the study area post-fire.

This study supports previous research from the western United States that showed BBWO occur at higher densities in burned forests, likely due to the high post-fire abundance of wood-boring beetle larvae. BBWO also foraged outside the study area, indicating that their foraging range could include burned mixed-pine and mature unburned jack pine stands adjacent to the study area.

Previously observed post-fire BBWO nest densities in Quebec were only half of those observed in this study. This could be due to differences in forest composition (mixed-pine vs. spruce (*Picea*)), or the fact that BBWO nesting densities were higher in exclusively burned jack pine stands than in mixed-pine stands. Jack pine may provide a richer prey base than spruce, leading to higher nesting densities of BBWO in this study area.

The high densities of BBWO nests could have been due to artificial constraints from salvage logging that occurred just prior to the 2008 breeding season. A clear cut of 39.5 acres of the initial 86.5-acre mature jack pine stand likely limited BBWO breeding habitat and constrained them in high densities to the 47-acre plot. Further studies are necessary, however, to demonstrate patterns in BBWO nesting densities related to fire activity and forest composition.

Related information:

Hansen, A. J., S.J. Spies, J.L. Swanson, and J.L. Ohmann. 1991. Conserving biodiversity in managed forests: Lessons from natural forests. *BioScience* 41:382-392.

Nappi, A., and P. Drapeau. 2009. Reproductive success of the Black-backed Woodpecker (*Picoides arcticus*) in burned boreal forests: are burns source habitats? *Biological Conservation* 142:1381-1391.

Want to learn more?

Greg Corace at Seney National Wildlife Refuge (greg_corace@fws.gov; 906-586-9851 x14).

Youngman, J. A., and Z. G. Gayk. 2011. High density nesting of Black-backed Woodpeckers (*Picoides arcticus*) in a post-fire Great Lakes jack pine forest. *The Wilson Ornithological Society* 123:381-386

Research Brief for Resource Managers
February 2014 RB-14-1
@LSFireScience
www.lakestatesfiresci.net

Manager's Corner Continued from page 1

Winnie the Pooh. "How lucky I am to have something that makes saying goodbye so hard." I hope you all fare well which is exactly what Susan and I are planning on doing.



Black-backed Woodpecker "*Picoides arcticus*"
"Birds of New York" watercolor reproduction

Junior Duck Stamp Art

On display at the Visitor Center in July

By Jen McDonough

What is a Junior Duck Stamp?

A Junior Duck Stamp is art inspired by wetlands and wildlife. It is a product of exposure to our natural resources combined with observation, education, understanding, talent, patience and passion. Junior Duck Stamps are inspirational works of art created by the efforts of our youth.

One piece, from more than 29,000 annual entries, is selected and produced as a stamp by the U.S. Fish and Wildlife Service's Junior Duck Stamp Conservation and Design Program. The stamp is not valid for postage but recognizes the conservation efforts of young people and supports environmental and conservation education programs in the United States. The art competition is the culmination of students' study of waterfowl and wetlands conservation in the classroom, homeschool, or non-formal education setting, often using the Junior Duck Stamp Program educational curriculum. The stamps are sold by the U.S. Postal Service and Amplex Corporation for \$5. All proceeds of the stamp are used to fund environmental education programs, award students for their work and market the Junior Duck Stamp program.

Junior Duck Stamps are a spinoff from Federal Migratory Bird Hunting and Conservation Stamps, commonly known as "Duck Stamps". Anyone over the age of 16, hunting migratory waterfowl, must buy a federal Duck Stamp every year they hunt.

Ninety-eight cents out of every dollar generated by the sale of Federal Duck Stamps goes directly to purchase or lease wetland habitat for protection in the National Wildlife Refuge System. Since their establishment in 1934, money from the sale of Duck Stamps has been used to purchase or lease over 6 million acres of wetlands protected under the management of the National Wildlife Refuge System. Understandably, the Federal Duck Stamp has been called one of the most successful conservation programs ever initiated and is a highly effective way to conserve America's natural resources.

Conserving a habitat is like painting a background. Without it the picture is not complete. - The 2014 winning Junior Duck Stamp conservation message, written by Max Cheng, 15, of Fremont, California.

Anyone can purchase a Duck Stamp and help preserve habitat and wildlife dependent recreation opportunities. Do you have yours?



Refuge Geocaching Activity is a Benchmark for Excitement

By Mindy Grabko

Seney National Wildlife Refuge, like many Refuges, offers wildlife dependent recreational opportunities such as hunting, fishing, wildlife observation, and wildlife photography. Another Refuge activity you could consider is geocaching.

The term "geocaching" contains two words, *geo* and *cache*. *Geo* meaning the geography of the area and *cache* which refers to the bin that stores materials that one can trade. Essentially, it is a treasure hunt that challenges you to travel to different geographical locations using a Global Positioning System (GPS) receiver. Upon reaching the location you can collect a little souvenir or trinket to prove you were there or help you remember your geocaching experience.

It's easy to get started geocaching! If you are geocaching off of Refuge property, you can find coordinates online or through apps. Then you follow the GPS unit by driving, walking, biking, etc. until the coordinates match closely. When you think you have reached your destination you search for a hidden cache, often an object or bin of some type, and trade out a personal item for a new treasure.

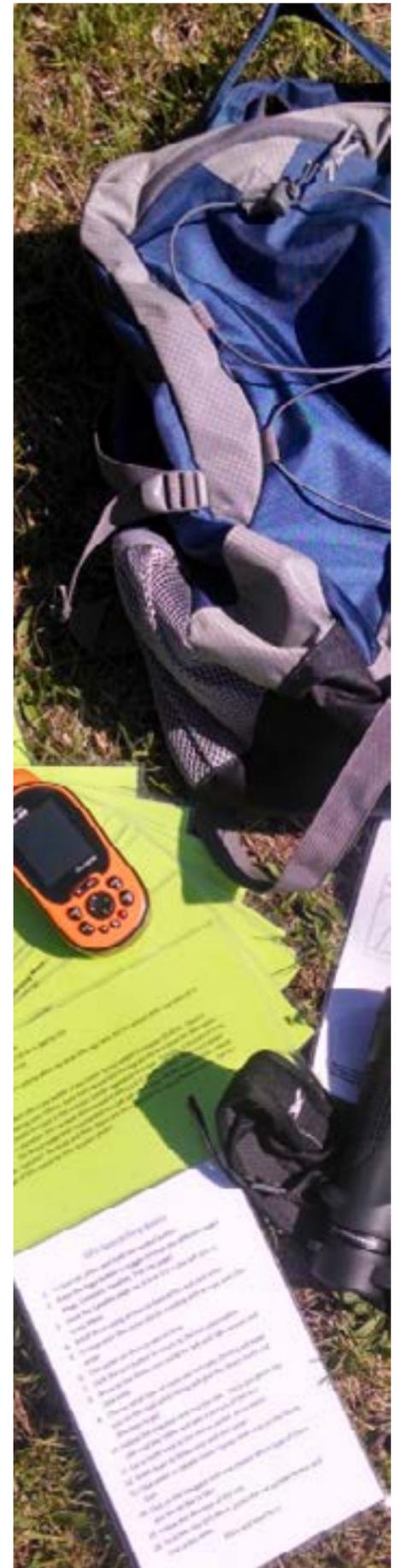
Geocaching on the Refuge is a little different. The Refuge provides you with coordinates on the property. You use a GPS unit to guide you to the geocache location. Once you have found the location instead of finding a cache you must find the object described in the clue. Because Seney National Wildlife Refuge is Federal land, geocache bins cannot be left out on the property.

The educational clues are used to showcase the natural history of the Refuge. Can you use the clue to find the location of the Master Fisherman or Nature's Time Capsule and discover the mystery it holds? After you have finished your quest of discovery, you may claim your prize! Prizes can be claimed at the Visitor Center after taking a picture or describing the location.

Does this sound fun? You don't have a GPS unit? No problem, you can borrow one from the Visitor Center. All you need to do is exchange a drivers license for a geocache kit. The kits are in backpacks and contain everything you need including geocache descriptions with coordinates, a GPS unit, binoculars, a map, and a bird identification book. More than one person can participate in the quest to solve the riddles and it can be a great family activity!

You don't have to travel great lengths to participate in the geocaching trend. Geocaches can be found right in your neighborhood or even in your local park! If you are inspired after participating in geocaching at the Refuge, check out www.geocaching.com to learn more about coordinates that will lead you to new sights and treasures!

Refuge geocache information can be found at: <http://www.fws.gov/refuge/Seney/visit/geocaching.html>



Introducing the Interns

Dawn Marsh

*Applied Sciences Intern
Hometown: Greenville, MI*



My name is Dawn Marsh and I am returning to Seney National Wildlife Refuge for my third summer in a row as the Applied Sciences intern “Crew Leader”. I am originally from Greenville, MI, but I have spent many summers in Germfask and the surrounding area. I graduated in May from Northern Michigan University with a B.S. in Environmental Science (Natural Resources concentration) and a Biology minor. This summer I will be conducting the majority of the bird and vegetation surveys in the Huron Mountain Club (just north of Marquette) and in the Kirtland’s Warbler Wildlife Management Area. I am currently looking at graduate school options and hope to start my master’s in 2015. In my spare time, I enjoy birding and documenting my adventures with my camera.

Carolyn Fado

Applied Sciences Intern



Carolyn Fado will be working as an Applied Sciences intern, starting this July. In 2013, she interned remotely for Seney, supervised by Dr. Corace. She wrote simple summaries of articles about fire ecology for the visitors of the Refuge.

From an early age, Carolyn has been passionate about writing and the natural world, and she hopes to combine these interests into a career. Her degree is in Comparative Literature, and she is excited for the opportunity to strengthen her science background this summer. While at the College of Wooster, she worked as the Environmental Studies department assistant and also served as the assistant editor to *Human Ecology Review*. In the winter of 2012, she interned in the Information Technology Department at the Smithsonian Museum of Natural History, where she edited transcriptions for the online publication of the *Biologia*

Centrali Americana, a compilation of flora and fauna from Mexico and Central America. She has spent the past year living at the foot of the Balkans and teaching English to Bulgarian high schoolers, as a Fulbright fellow.

Sarah Rademacher

*Applied Sciences Intern
Hometown: New Hope, Minnesota*



My name is Sarah Rademacher and I grew up in New Hope, Minnesota. I am currently a senior undergraduate student at University of Wisconsin – Stevens Point with a major in Forest Ecosystem Restoration and Management, minors in Soil Science and Conservation Biology, and will be receiving a Wetland Certificate. I am heavily involved in our student chapter of Society for Ecological Restoration and will start my term as vice president this fall. This summer I am one of the Applied Sciences Interns at Seney working for Dr. Corace and I am focusing specifically on the marsh bird surveys and invasive species management. After graduating from UW-Stevens Point I want to broaden my field experience in ecosystem management in different regions of the US. After a few years of gaining those new experiences, I want to attend graduate school.

Shelby Weiss

*Applied Science Intern
Hometown: Kirkwood, Missouri*



related to human-wildlife conflicts.

My name is Shelby Weiss and I am originally from Kirkwood, Missouri just outside of St. Louis. I recently graduated from Colorado State University (CSU) with a Bachelor of Science (B.S.) degree in Fish, Wildlife and Conservation Biology concentrating in Wildlife Biology and I have a minor in Applied Statistics. During my time at CSU I had the opportunity to study abroad in Tanzania where I did a small project looking at farmer perspectives on wildlife crop raiding. This summer I am working as an intern for the Applied Sciences Program at Seney National Wildlife Refuge where I will be doing frog/toad surveys, common tern monitoring, invasive plant species management and many other activities and projects. I am interested in conservation issues that have impacts on human livelihoods and perspectives. Later on, I hope to attend graduate school doing research

April Payne

*Visitor Services Intern
Hometown: Lapeer, Michigan*



guide me to a solid career within a federal preserve.

I grew up in Lapeer, Michigan, a rural town where I spent the majority of my childhood outside in the woods. It is there that I developed a deep love of nature which drove me to seek out a career in such a field. Straight out of high school I enrolled at Mott Community College in Flint, Michigan. After three years, I graduated with three Associates Degrees, in General Education, Science and Arts. From there, I was accepted to the University of Michigan, Flint, to work towards a Bachelor’s Degree in Wildlife Biology. Degrees are not the only important component in finding a good career these days, you also need experience. This is why I applied for Seney’s Visitor Services Internship. I will be building programs for the public, conducting bus tours on the Refuge, and doing general visitor center duties. I hope that my time here will mold and prepare me for future jobs that will hopefully

Mindy Grabko

*Visitor Services Intern
Hometown: Sussex, WI*



“Interpretation is the revelation of a larger truth that lies behind any statement of fact.” ~ Freeman Tilden (1957)

Freeman Tilden has inspired educators around the world through his publication of *Interpreting Our Heritage* in 1957, and has inspired me. Tilden’s discussion of interpretation provided a personal connection to the world around me. After finding this truth in my life, I continued to develop my knowledge through an education at Northern Michigan University where I studied Outdoor Recreation Leadership and Management. I moved to the Upper Peninsula from Sussex, Wisconsin. I recently graduated from the program and will begin testing my knowledge base at the Visitor Center here at Seney National Wildlife Refuge. At the Visitor Center, I will be responsible for developing interpretive programs, media, and interacting

Nature Nut Column



Dear Nature Nut,

I have had at least two birds hit my large bay window in the past week. Is there anything I can do to prevent this from happening?

Signed,
Concerned Birder

Dear Birder,

This is an unfortunate and common occurrence with birds. Birds fly into windows because they reflect their natural environment, trees, shrubs, and the sky. Window hits are estimated to kill millions of birds a year. Yet, there is good news because there are many easy and affordable ways to prevent window hits from happening. These include:

- add flying bird silhouettes to the outside of the window,
- mark the outside of your window with lines of soap, paint, or tape so that they are no larger than 6 inches apart,
- if you have internal blinds, keep them half open,
- installing mesh screens on windows 3 inches from the glass so the bird bounces off.



Fortunately, there are times when the bird is just dazed after hitting the window. However this is still dangerous for the bird. While dazed, they are unable to fly away and are open to predators. The bird could also be injured, externally or internally. In this situation, there are some things you can do to help. First, carefully apprehend the bird. Make sure it's



wings and legs aren't broken and the eyes appear normal. Next, place the bird in a shoe box or a small paper bag and place it in a safe quiet area. This will keep the individual safe from predators and allow it time to recover from the impact.

Do not try to feed it or give it water; instead contact a wildlife rehabilitator immediately. Even if the bird doesn't have any apparent broken bones, it could be injured internally and needs urgent medical attention. If a rehabilitator cannot be contacted, open the shoe box or paper bag slightly. This way the bird will be able to leave the enclosure once it recovers.

We had a similar incident occur here at the Seney Visitor Center this week as well. This yellow warbler (right) was found dazed on the ground after flying into one of our windows. We placed it in this small paper bag and set it on the bench to recover. Not twenty minutes later, it left the bag and flew off. Happy ending for all!

Michigan DNR list of licensed wildlife rehabilitators: <http://www.michigandnr.com/dlr/>

Sincerely,
The Nature Nut

Dear Nature Nut,

I was watching television the other night, and I saw a movie called *Blood Lake: Attack of the Killer Lampreys*. After I was drawn into the film, I was really disturbed and puzzled by the sea lampreys. They were climbing along the walls and coming out of drains! Are the sea lampreys portrayed in the film just like the sea lampreys in the Great Lakes?

Sincerely,
Scared!

Dear Scared!,

Television is a powerful tool that can be used to get the public's attention, but just like everything in this world, there is an element of human error. Television uses fictional plot twists to draw the viewer in and keep them watching. The U.S. Fish and Wildlife Service was not involved in and did not endorse any part of the movie. Thankfully for us, the sea lampreys portrayed in the film are not an accurate account of the species. Your concern brings up an excellent opportunity for learning!

A little background information is needed before we bite down on the issue. These "jawless fish" have been on earth since before the dinosaurs. They look similar to an eel and can grow up to 20 inches long. Sea lampreys are invasive in the Great Lakes. This means that they were not really supposed to be in the Great Lakes ecosystem. Sea lampreys, originally from the Atlantic Ocean, were blocked from getting into the Great Lakes by Niagara Falls. When industry started to boom in the Midwest, shipping routes were modified to bypass the Falls. Sea lamprey easily attached to the bottom of ships and were carried into all of the Great Lakes by 1930.

How could they latch on to the ships? Many depictions of sea lampreys show their gnarly circular rows

of sharp teeth. This adaptation allows them to latch on to host fish and the base of ships. They feed off the blood and bodily fluids of the host fish. Problems arose when the sea lampreys in the Great Lakes did not have a predator to balance the population, so the parasitic sea lampreys multiplied quickly and attached themselves to thousands of fish. According to USFWS reports, a sea lamprey can kill more than 40 pounds of fish in its lifetime!

Some nonnative species die and never spread, some spread but not invasively, others are invasive and will negatively impact the habitat of native species. The sea lamprey is an example of the latter and their ability to spread quickly has disturbed the Great Lakes trout population. Trout are native to the Great Lakes and provide aquatic diversity along with recreational and economic opportunities.

Attempts to eradicate, or at least lesson, the sea lamprey population have been carried out for years. Chemical controls have been used since the 1950's and reduced the population by 90 percent. While total elimination of sea lamprey populations from the Great Lakes is unlikely, continued lampricide treatments along with new technologies and techniques such as mechanical and electrical barriers are leading to increasingly healthier fish populations and an economic powerhouse fueled by the resulting recreational fishery.

It is important to understand that there are different kinds of lamprey, just like there are different types of trout, pines, and warblers. Some species of lamprey are native to the Great Lakes, meaning they are part of the ecosys-

Meet the Interns Continued from page 9

with the public through outreach events. In recent years, I have come to a deep understanding that we as humans are made to learn through stories, not just facts. A future goal is to make facts come alive to the general population. Humans do not love what they do not know. I will practice revealing a deeper natural understanding to visitors this summer, and in the future, continue to tap into people's hearts.

Dustan ("Dusty") Hoffman Visitor Services Intern Hometown: Green Bay, WI



My name is Dustan "Dusty" Hoffman, I am a US Fish and Wildlife Service Pathways Intern at Seney in Visitor Services, which means if you are a part of any of our events it is likely that we will meet. I love nature and people, and I feel that of all the wonderful and meaningful things we experience in life, none of them would matter, if we didn't have each other to share them with. I grew up in Green Bay, WI but have lived in Winona, MN for twelve years where I have attended Saint Mary's University completing an undergraduate degree in Environmental Biology, and am currently working on a Masters in GIS (Geographical Information Science). I am a fly fishing and fly tying nut, and I have had adventures such as living in a cave for a month, almost dying on a mountain in Alaska, and living on harvested wild food only for an entire week. I hope I have the opportunity to meet many of

you and I want you to know I am pumped up to be in Seney and the U.P.

tem and do not create devastating impacts. Chestnut lamprey can be found in the open waters of the Great Lakes and northern brook lamprey, silver lamprey, and American brook lamprey are found in rivers and streams.

If what you see on television, in a book or magazine, or on the internet puzzles you, do not be afraid to seek out information and find the truth. If you're interested in digging your hands into Sea lamprey work volunteer opportunities are available in the Marquette and Ludington Michigan Biological Stations. Contact Tracy Demeny at (906) 226-120 to volunteer in Marquette or Jenna Tews at (231) 843-7310 to volunteer in Ludington.

Sincerely,
The Nature Nut



The questions in the Nature Nut column come from questions posed by visitors. This month the nature nut column was written by April Payne (window strikes) and Mindy Grabko (sea lamprey), Visitor Services Interns. If you have a question you would like the Nature Nut to answer email Sara_Giles@fws.gov.

Seney Natural History Association
1674 Refuge Entrance Road
Seney, MI 49883



Seney Wilderness

Step into the far western region of the Seney National Wildlife Refuge and you will enter....



... an area containing no roads or man-made structures. This wild space has escaped much human influence, including most turn-of-the-century logging, and its ecological processes remain relatively intact. This is a place affected primarily by the forces of nature. Visitors must rely on their own skills to navigate through it.

Over half of this 25,150 acres is comprised of patterned peatland typically found in more northern boreal ecoregions, the rest is a mixture of muskeg bog, mixed conifer swamp, shrubby wetlands, red & white pine stands and hardwood forest.

The Seney Wilderness was designated by Congress in 1970 and was given permanent protection under the guidelines of the Wilderness Act of 1964.

Two other Wilderness Areas, Huron Islands Wilderness in Lake Superior and Michigan Islands Wilderness in Lake Michigan, are also managed by Seney National Wildlife Refuge.