Newsletter for Dickinson County Conservation Board & Conservation Foundation of Dickinson County

Blue Water Nature Notes

Volume 11, Issue 1 Winter 2012

Conservation concerns include invasive species

Zebra mussels have a new foe

By Brandon Hurley
Dickinson County News Staff Writer

Officials in the Iowa Great Lakes are fearful of a water pipe-clogging, freshwater mollusk.

But they soon may have an ally against the tiny zebra mussels. The invasive species from Asia spread rapidly to cover the entire bottom of Clear Lake in 2007.

To avoid a similar fate in the Iowa Great Lakes, the DNR, Iowa Great Lakes Water Safety Council and lake protective associations have taken the initiative to combat the zigzag-patterned intruders. Billboards and boat ramp signs have gone up. Maps have been printed and messages have been transmitted on a radio information system. Community volunteers and summer interns have waited by boat ramps to help educate boaters about the threatening species

Now man's best friend, a hunter's companion and a police officer's trusty partner can be used as a weapon against the zebra mussels.

Iowa Great Lakes advocates are in early discussions with Mussel Dogs, operated by Central Valley Detection Canine in California. The proposal calls for two dogs to be used at area boat ramps this summer. Grants are needed to help cover the $45,000 cost for the two dogs and the local handlers.

The idea was first brought up to the Okoboji Protective Association through an acquaintance who knew the Iowa Great Lakes efforts to block the arrival of zebra mussels. Research helped the group locate Debi DeShon and Mussel Dogs.

The Denair, Calif., business has been using canines to detect contraband since 1996. In 2008, Mussel Dogs began training their animals to search for zebra and quagga mussels.

DeShon, owner and operator of Mussel Dogs, realized the need for zebra mussel detecting dogs and decided to go with it. This past summer, word spread to northwest Iowa that there may be a quicker way to finding the invasive species. The training process is very familiar to DeShon.

"It's basically the same concept as a drug dog," DeShon she said about the training process. "You find a dog that's absolutely ball crazy and do hide and seek to find a ball that smells like a zebra mussel. To them, it's a big game."

The trainer does an initial program with the canine for five to six weeks. The hardest part, according to DeShon, is finding the dog that has the right motivation.

Debi DeShon and her zebra mussel sniffing companion, Popeye, toured the county's waterways while shedding new light on an innovative way to combat the infestation of this prolific invasive species which threatens our lakes.

"Usually, you like to use the hunting breeds," she said.

The only canine Mussel Dogs has trained right now is a chocolate lab, but that doesn't worry DeShon. A second dog, usually between eight months and three years of age, can be trained with minimal notice.

"At least once a month we get people inquiring about our mussel detecting dogs," DeShon said. "The concept is so new that a lot of people don't even know about it. Something like this with the Iowa Great Lakes will help get the word out."

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Bighead carp, like those caught in East Okoboji Lake last summer, are not indigenous to the lakes and may cause unforeseen impacts on area waterways. Plans to halt them include an electric barrier at the weir in Lower Gar.

Bighead carp travel to East Lake Okoboji

The Iowa Department of Natural Resources has verified the presence of bighead carp in East Okoboji Lake after two fish were collected last summer during the DNR's annual fish sampling effort.

Bighead carp, native to Asia, are present in the Missouri River, Mississippi River, Des Moines River and the lower reaches of their tributaries. It is not known for certain how bigheads got in to East Okoboji Lake, but fisheries experts believe that the flooding on the Missouri and Little Sioux rivers allowed these fish to pass over area dams.

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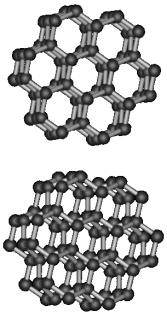
Snowflake science

By Kenneth G. Libbrecht, Caltech physicist

Although we haven't seen much of them this year, snowflakes are fascinating. If you look closely at falling snow, you can see a great many different crystal shapes. There's a lot more to see than you might think! Snowflakes and snow crystals are made of ice, and pretty much nothing more. A snow crystal, as the name implies, is a single crystal of ice. A snowflake is a more general term; it can mean an individual snow crystal, or a few snow crystals stuck together, or large agglomerations of snow crystals that form "puff-balls" that float down from the clouds. The water molecules in an ice crystal form a hexagonal lattice. Each ball represents an oxygen atom, while the grey sticks represent hydrogen atoms. There are two hydrogens for each oxygen, so the chemical formula is H_2O. The six-fold symmetry of snow crystals ultimately derives from the six-fold symmetry of the ice crystal lattice. Snowflakes are not frozen raindrops. Sometimes raindrops do freeze as they fall, but this is called *sleet*. Sleet particles don't have any of the elaborate and symmetrical patterning found in snow crystals. Snow crystals form when *water vapor* condenses directly into ice, which happens in the clouds. The patterns emerge as the crystals grow.



The story of a snowflake begins with water vapor in the air. Evaporation from oceans, lakes, and rivers puts water vapor into the air, as does transpiration from plants. Even you, every time you exhale, put water vapor into the air.

When you take a parcel of air and cool it down, at some point the water vapor it holds will begin to condense out. When this happens near the ground, the water may condense as dew on the grass. High above the ground, water vapor condenses onto dust particles in the air. It condenses into countless minute droplets, where each droplet contains at least one dust particle. A cloud is nothing more than a huge collection of these water droplets suspended in the air. In the winter, snow-forming clouds are still mostly made of liquid water droplets, even when the temperature is below freezing. The water is said to be *supercooled*, meaning simply that it is cooled below the freezing point. As the clouds gets colder, however, the droplets do start to freeze. This begins happening around -10 C (14 F), but it's a gradual process and the droplets don't all freeze at once.

If a particular droplet freezes, it becomes a small particle of ice surrounded by the remaining liquid water droplets in the cloud. The ice grows as water vapor condenses onto its surface, forming a snowflake in the process. As the ice grows larger, the remaining water droplets slowly evaporate and put more water vapor into the air. Note what happens to the water -- it evaporates from the water droplets and goes into the air, and it comes out of the air as it condenses on the growing snow crystals. As the snow falls there is a net flow of water from the liquid state (cloud droplets) to the solid state (snowflakes). This rather complicated chain of events is how a cloud freezes.

If you grow ice crystals — snowflakes — just below freezing, then you get thin, plate-like crystals. These include the canonical snowflakes, the star-like crystals. But if you get a little colder (around 5 degrees Celsius below freezing), then instead of plates, you get long thin columns — which is really almost the opposite of a plate. Think wooden pencils, little hexagonal columns, as opposed to a hexagonal plate. In the star type, the faces grow slowly and the edges grow quickly, and in the pencil type, the edges grow slowly and the faces grow quickly.

And so in just a few degrees of temperature change, the growth changes from plate-like to columnar. And as you go colder, to 15 degrees below zero, it changes back to plate-like. At even lower temperatures, below 30 degrees below zero, the shape changes back to columnar. So there are these transitions as a function of temperature, and that's really hard to explain. It's been a puzzle for 75 years, and it's still really not known what causes this.

There are also variations in humidity. And the higher the humidity in the clouds, the faster the crystals grow and the more structure they develop and the bigger they get. So at low humidities, you get simple, small crystals, and at high humidities, they're more complex.

One of my favorites is the capped column. That's a crystal that first forms as a column, and later on it changes and has plates on the ends of a column. So it's an odd looking thing — like two wheels on an axle. When I started reading the literature on the subject, I found pictures of these capped columns and just found them really interesting. I mean, I grew up in North Dakota — how come I've never seen one of these before? On a trip to visit family at Christmastime, I took along my magnifying glass and I went outside and looked and the falling snow — and there they were, capped columns all over, and these other shapes too. You just don't notice if you don't pay any attention.

That's what got me into popularizing the science of it, because it seemed like if you live in snow country you ought to know a little a bit about what's falling out of the sky.

Foundation Update

For those of you who are wondering "what's up" at the Conservation Foundation of Dickinson County (CFDC)...we have exciting new plans for the installation of an elevator. This will allow patrons who are at a disadvantage of using the stairs to move freely from one level to another with ease. Although currently in the planning stage, it's just one of the many new additions that continue to allow this center to evolve into one of the state's premier centers for environmental awareness, conservation, education and exploration of our natural habitats. With the help of generous gifts and grants from several other foundations and individuals, the final touches are either being completed or are in the design stage. Projects yet to be finished are the completion of the observation deck, final landscaping and the installation of the elevator.

We are continuing to build our endowment fund. Donations of cash, stocks or real property may be made to this fund either through the Northwest Bank Wealth Management in Milford or to the CFDC directly. We respectfully ask that you consider the Nature Center endowment fund in your next giving consideration. We wish to thank all of you for your past and future support of this important project.

~Jack Jones, CFDC President

Check out our new websites!

Conservation Foundation of Dickinson County

www.CFofDC.com

The new Dickinson County Conservation website is:

www.mycountyparks.com/county/dickinson.aspx

Exotic mussels destroy ecosystems

Continued from page 1

DeShon conducted a demonstration for lake protective associations in November. Under a proposed arrangement, local residents would be trained to handle the mussel dogs The plan is to have the dogs out for each weekend of the summer.

Right now in California, DeShon said they put "Popeye" out on patrol on the busy weekends of the summer, such as Labor Day and July 4.

"This opportunity will be fantastic," DeShon said. "People need to realize how devastating mussels are. The whole point is to keep them away from the Lakes."

The biggest obstacle for the Iowa Great Lakes groups is covering the cost of the project. "Money is a real concern," said Phil Petersen of the Iowa Great Lakes Water Council. "It's not an inexpensive proposition."

The Water Safety Council has been contacting various organizations throughout the past few months seeking grants. Unfortunately, they are looking for money at an inopportune time. The lakes are frozen over and many boaters have headed home for the winter or gone down south. "Every lake would like to have dogs searching for zebra mussels," Petersen said. "Although it's innovative it's not all that common, and I think that may help when it comes to grants."

Everything with Mussel Dogs isn't set in stone yet, the WSC is still trying to gather up the funds. Petersen said council's cutoff point for funding is March 1 to allow DeShon to train the two dogs. And even though the Iowa Great Lakes have avoided infestations so far, Petersen said the threat remains.

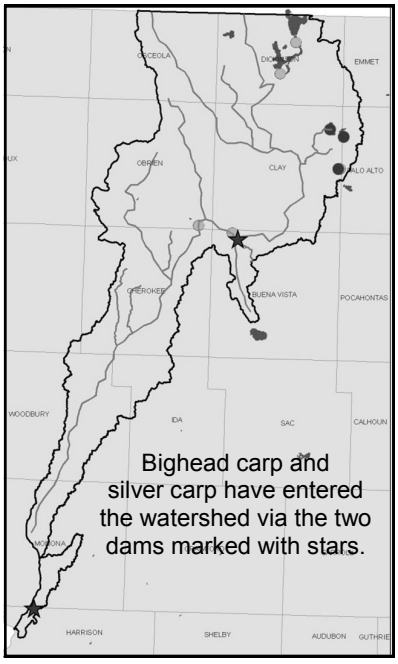
"Our area does have it's advantages," he said. "We aren't near any big lakes or large rivers so the mussels aren't transported to us easily. We also have a lot of local boaters that aren't coming from other areas."

Electric barrier prevents invasive carp from entering area lakes

Continued from page 1

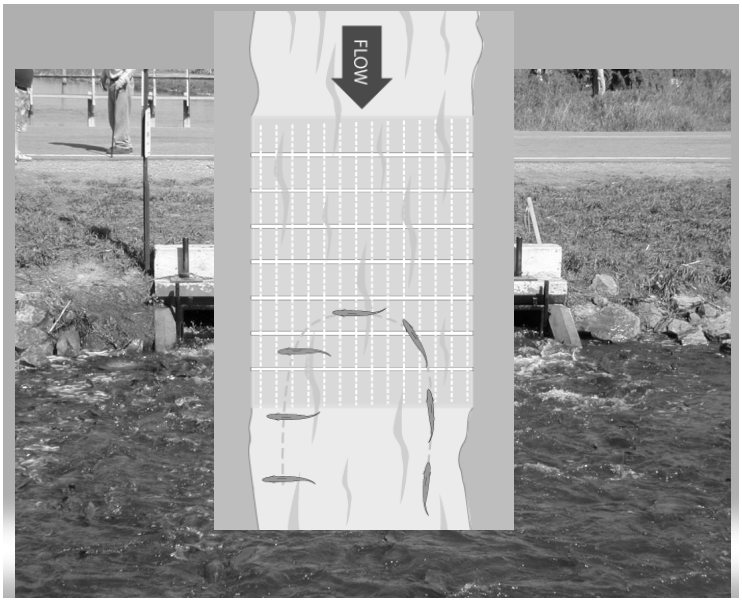
Those dams include the Little Sioux Dam in Harrison County and the Linn Grove Dam in Buena Vista County. Bighead carp were found in the Little Sioux River below the Linn Grove Dam in 1996, and the samples collected last August was the first time bighead carp had been found above that barrier. Bighead carp are part of a group of fish known as Asian carp, which includes silver carp, grass carp, and black carp. Silver carp are best known for their ability to jump out of the water when startled, however, bighead carp do not exhibit this behavior.

"At this time, we do not know if silver carp migrated into the lakes along with bigheads," said Joe Larscheid, chief of the fisheries bureau for the Iowa DNR. Bighead carp feed on plankton and may compete with native fish, like buffalo, some panfish and larval sport fish, for food. "We do not anticipate much angler interaction with these fish because they are a plankton eater and will most likely need to be snagged to be caught," said Larscheid.



"We also believe these fish will have a difficult time reproducing in a large natural lake because bighead carp require large river systems to spawn. If this is the case, it is unlikely the population will increase unless we receive additional fish through future high water events," he said.

The two bighead carp, one 14 inches and one 15 inches, were collected in seine hauls near the narrows on East Okoboji Lake on August 9. Spirit Lake was also sampled at the same time and did not have any bighead carp among the fish collected. It is unknown how many fish entered the lakes, but the DNR will continue to monitor the status of Asian carp populations in the Iowa Great Lakes and the Little Sioux River watershed.



"Asian carp continue to adapt and spread in their new environment which poses significant challenges to managing our aquatic systems in the future not only in Iowa, but throughout the Midwest," Larscheid said. "More research will also lead to a better understanding of their life history and impacts on our natural lakes."

The barrier system, shown above, produces a graduated, pulsed field of direct current in the water that affects muscular control in fish. The animal feels uncomfortable in the field and moves in the direction that reduces the discomfort. Safety is always a concern, and the pulse rates are well below the levels that are harmful to people and livestock. Initial studies and proposals are being conducted by Smith-Root, Inc. of Vancouver, WA, the manufacturer of the barrier.

2012 Summer

Dickinson County Conservation Board Activities

Come enjoy programs in the Dickinson County Nature Center, Dee and Kate's Butterfly House, Nature Explore Play areas, Hands-on Rock Sculpture area, Nature Trails for jogging, walking and baby buggies, outdoor fitness trail, and a hundred-year old one-roomed schoolhouse. Explore the outdoors in our tallgrass prairie, wetlands and Burr Oak Savannah. Climb the Kame for a bird's eye view of the landscape. Travel "the Art on the Trail" bike path connecting the Pearson Lakes Art Center to Kenue Park and the nature center. Bring a Lunch or roast hotdogs on our outdoor fire pits. There's plenty of FREE FAMILY FUN to be had for an engaging, memorable and enlightening outdoor experience.

Contact information:
Dickinson County Nature Center: 712 336-6352, 2279 170th St., Okoboji, IA 51355
EE Coordinator/Naturalist Barbara Tagami, 712 330-1080 btagami@co.dickinson.ia.us
Naturalist Charles Vigdal, 712 331-1493 cvigdal@co.dickinson.ia.us
Website: www.mycountyparks/dickinson

Dickinson County Conservation Board

Dickinson County Nature Center

Kenue Park
2279 170th Street
Okoboji, IA 51355
712 336-6352

2012 SUMMER PROGRAM SCHEDULE

For Free Family Fun exploring nature!

"Birding on the Greens", Meet at 7:00 AM in the Brooks Golf Club parking lot. For the early birders, this is a lovely outing on Brooks Golf Course! Bring your binoculars and join Ed Thelen, our Birdman of Okoboji, as we caravan in golf carts in search of our fine feathered friends. Our bird surveys help this Audubon certified golf course keep track of the variety and numbers of birds that use the golf coarse. June 4, July 2, August 6

"Monday Evening Outings", 6-8 PM, Nature Center. Join us for presentations on subjects that deepen your "sense of place" of this beautiful prairie pothole region. Native Americans, Pioneer History, Wild Edible and Medicinal Plant Use, Glacial Landmark Tour, and Local Flora and Fauna will be topics for exploration! June 4, 11, 18, 25, July 9, 16, 23,30 August 6, 13

Thursday Programs for Pre-school – 1st grade, 10-11 AM, Nature Center. These programs are sensorial, hands-on experiences geared to curious, adventurous little pre-scholars. Must register parents must attend with student. June 14, 28, July 12, 26, August 9

Friday's "Kayak a Wetland Tour", Meet at 8:30 AM at the Nature Center and caravan to a wetland or lake. Explore natural areas to observe wildlife. Guest kayakers from Soil and Water Conservation District, IDNR and colleges will add to our awareness of water quality, shallow lake restoration, aquatic wildlife, and more. Outing is usually 2-3 hours. June 1, 8, 15, 22, 29, July 6, 13, 20, 27, August 3, 10, 17 (Call Nature Center to reserve your kayak)

"Saturday Morning Nature Walk-a-Bouts", 10 AM Nature Center. This is a walk in the park! Bring your dog, baby, kids and get outside for fun outdoor exercise. Put it on your "exercise to do" list. Join us every Saturday morning. June 2, 9, 16, 23, 30, July 7, 14, 21, 28, August 4, 11

Saturday morning Young Naturalists for 4th- 6th Grade, 10:30- 11:30 AM, Nature Center.
These programs are for your young naturalist- geared to stimulate their investigative and observation skills in viewing the natural world. June 9, 23, July 7, 21, August 4.

Program Schedule

CAMPS FOR KIDS at the Nature Center

These two day camps are designed to "open doors" for further exploration of our wondrous natural world. (An ISU Extension and Outreach/ DCCB collaboration) For more information call 712 336-6352.

June 20- 21 **Solar Kids- 4th – 7th Grades** **9-4 PM**
Investigate and gain knowledge of this renewable energy resource through hands-on experiments. Make and take a solar powered car. Fee for supplies. Limit 10

August 7-8 **Butterfly Camp- 4th-7th Grade** **9-4 PM**
Investigate Butterflies through field studies, collecting and observations by working one on one with these amazing creatures. Make your own butterfly collection. Fee for supplies. Limit 10

SPECIAL EVENT

Saturday, August 25 Monarch Butterfly Festival 10-3 PM
Dee and Kate's Butterfly House, Kenue Park
All ages are welcomed to help us tag and release this super generation of Monarch Butterflies!

ON-GOING PROGRAMS

Dee and Kate's Butterfly House- Open to the public in mid-June. Come help us collect Monarch eggs and caterpillars to raise in our Butterfly House. Watch the metamorphosis of this incredible creature before your very eyes!

Osprey Nest Site. Our Ospreys will be returning as early as mid- March. We have successfully brought Ospreys back to Iowa. View the Ospreys at Kenue Park and watch their nesting behavior. Young hatch out in mid- June.

Butterfly Gardens, Children's Garden and Natural Playscape. The gardens will be full of colorful flowers that attract butterflies, birds and a host of insects. Enjoy the serenity and observe the abundance of wildlife in this lovely area.

Kenue Park Attractions. Hike natural trails, ride the bike trail, interact with our Rock Sculpture area, go on a geo-treasure hunt, climb the Kame for a bird's eye view of the area, walk through the tallgrass prairie and view wetland wildlife.

Westport Schoolhouse. Take a step back into time with a visit to our hundred year old one-room schoolhouse.

OTHER PUBLIC PROGRAMS AT THE NATURE CENTER

Prairie Lakes Audubon Society

First Thursday of the month at the Dickinson County Nature Center-Kenue Park at 7:00 PM

March 1 "Weather Folklore"
O'Brien County Conservation Board Naturalist Charlene Elyea
April 5 "Wild and Edible Spring"
Dickinson County Conservation Board Naturalist Barbara Tagami
May 3 " Audubon Sanctuary Project"
Spirit Lake Middle School , Jason Schneider and the SLM 6th Graders.
June 7 Field Trip : Emmet County Nature Center Tour
Emmet County Conservation Board Naturalist Anita Fisher
July 5 Field Trip: Osceola Nature Center and Fen Walk
Osceola Director Nick Schmalen
September 6 "Nature Art"
Camp Foster, Patrick Rice
October 4 "Bats"
Clay County Conservation Board Naturalist Stacie Young
November 1 "Bottled Water"
Palo Alto County Conservation Board Naturalist Miriam Patten

All Artwork Copyright Emma Metcalfe 2011

Circle of healing

By Jeff Guidry
Sarvey Wldlife Center

Every day at Sarvey Wildlife Center we witness first hand the incredible battle for life that our animal brothers and sisters go through. This is a story of one Bald Eagle's magnificent spirit and sheer will to live.

It was mid-summer when a call came in reporting a fledgling Bald Eagle had fallen out of a nest on a Seattle golf course. Our very own Crazy Bob went to the rescue and transported her to the Center. She arrived with two broken wings. When asked to take her to the vet, I jump at the chance.

When I load this hurt and terrified baby into the car, she neither whimpers nor fights; she can't even stand. This is not a good sign; she is obviously in very bad shape. As I drive to Sno-Wood Veterinary Hospital, I constantly look back to check on my very special passenger. She stares at me with big beautiful brown eyes, her mouth slightly agape. I drive a little faster—this Bald Eagle must live!

She is operated on and has both wings pinned; they are now immobile. Back at Sarvey we lay her in the bottom half of a huge carrier filled with shredded newspaper for support. The fight for her life begins.

Twice a day a tube is pushed down her throat so that food and medicine can be pumped into her. A week goes by with no change; she still cannot stand up. At three weeks, there's a slight change, but it's for the worse. I'm getting scared for this young Bald Eagle.

Working at the Center, you begin to recognize a look, a look that indicates death is winning. This bruised and broken Bald Eagle was losing the battle but not her dignity. The struggle for her life was not over. Every chance I get I talk softly to her, telling her to hold on, to fight, to live. Why I felt such a connection to this particular eagle, I do not know.

Four weeks go by and she is still on her belly. There is nothing so heartbreaking as seeing the life force of this majestic bird slowly slip away. At five weeks we are approaching the end.

Sarvey Wildlife Center believes in giving every soul that comes in a chance to live; but when it is painfully clear that death is the only way out, the decision is made to let that particular spirit continue on its journey. We were at this juncture; this beautiful baby eagle was given one week to see if she could, or would, stand up. This was a crushing blow. Every day that next week I checked to see if she was up. The answer was always the same... "No."

On the following Thursday I could barely face going to the Center. As I walked in not a word was spoken but everyone wore a huge grin. I raced back to the young Bald Eagle's cage, and there she stood in all her glory!

She was standing! She had won. This girl had cheated death by a mere 24 hours. She was going to make it. She was going to get her second chance.

After another week the pins in her wings were removed. Her right wing was perfect, but her left was not. She couldn't fully extend it. We tried physical therapy and hoped a little time was all she needed, but there was no significant progress. Her wing was too badly damaged. She would never fly, never soar the skies with her people. At least her life was saved, but for what? Was she doomed to live her life in a cage? Not exactly, for this was a special soul.

Bald Eagles normally want nothing to do with humans and will go to great lengths to get away from them. This girl liked people; she wanted to see what you were doing, to follow where you were going, and to see whom you were going with. She was very curious.

About this time our director suggested that I try to glove train her. She had the right temperament; maybe she could do educational programs. Wouldn't that be something? Very few eagles are able or willing to be handled, much less remain calm in front of large crowds. The work began.

I started getting her used to the glove, a little at a time. At first she was thinking, "OK, I'll step on your hand but only with one foot." Then, "OK, I'll use both feet but only for a second." Later, "Yeah you can take me part way out of my cage, then I'll jump right back in." And finally, "OK, I'll let you walk around with me on your arm. Hey, this is fun!"

At this point, every day a volunteer would take this Bald Eagle out for a cruise around the clinic. It was time for her final test—jesses, the leather straps that attach to the ankles of birds-of-prey to give control to the handler and to protect the bird from injury or escape. I put the jesses on her—a piece of cake. It was as if she were born with them on. This was certainly a very mellow Bald Eagle.

Now it was almost time for her first program, but she needed a name. None that we could come up with seemed right, and then Paula, a volunteer, said, "Hey, what about Freedom?" That was it; that was her spirit and her spirit was why grandfather sent her to us. She was ready.

Freedom is now four years old and one of Sarvey Wildlife Center's premier ambassadors. She clearly enjoys our programs and really knows how to turn on the charm. She is a star. Freedom has been on national television, on the front page of major newspapers, and is known across the country.

She is also one of the great loves of my life. She will touch her beak to the tip of my nose and stare into my eyes. At that moment our spirits are one. I am the luckiest person on Earth. Thank you, Freedom.

(editor's note)...Jeff said, "Why I felt such a connection to this particular eagle, I do not know." Now we all know why:

Freedom is alive because Jeff fought for her life, and there is no doubt that Freedom sensed his love and commitment. Jeff gave Freedom the support she needed to want to live.

When Jeff was later diagnosed with a serious illness requiring chemotherapy, he found himself turning to Freedom for support. Two or three times a week, whenever he felt well enough, he would drive from Bothell to Arlington to walk with Freedom around the grounds. Now it was Freedom's turn to give Jeff a reason to fight for his life.

Only a short time ago Jeff was informed there was no trace of the disease left in his body. He immediately left for the Center. When he took Freedom out of her flight, she did something she had never done before: She extended her wings and wrapped them around him. The circle of healing was now complete.

Jeff has a book out that takes you through this journey. It's called "An Eagle Named Freedom." You may also check out info by going to www.sarveywildlife.org.

Young Explorer Nature Corner

Hey young nature explorers, you have some friends at the Nature Center that would like you to come and visit them, but first, you have to figure out who is who! Read the clues below, and see if you can figure our which animal is which! Then come to the Nature Center, and see if you are right! Read the description and write what kind of critter it is in the blank left of the name.

_____ **Rosie** is one of the most popular pets of her kind, and they come in many beautiful colors. They are known to be hardy and docile, which means healthy and calm.

_____ **Itsy Bitsy** gets her name because she gives off a musky odor when she is handled, just like her furry counterpart. She can shake her tail and hiss, but won't hurt you!

_____ **Michelangelo** is a work of art and appears as if someone has painted her belly with water colors! She sure can swim, and loves to bask in the sun.

_____ **Ardie** has a long nose, just like an aardvark. He is a swimmer though, and loves to burrow in on cold winter days. He is a shy one!

_____ **Wally** is lucky, because he will always have a home at the Nature Center. Anglers come from all over to try to catch others just like him.

_____ **Zorro** has a mask, is large, elusive and lives in fresh water. The record for the largest caught of his kind in Iowa weighed a whopping 50 pounds and was 52 inches long.

_____ **Sal and Company** are a group of critters who look like lizards, but are amphibious, and really love to burrow. They like to eat worms, insects and spiders.

Put on your thinking hats...can you think of any other friends that should live at the Nature Center? Write them below, and bring your list with you when you come and identify the creatures that already call the Nature Center their home.

_____

_____

_____

_____

Become a member—be an important part of this natural legacy

The backbone of the Conservation Foundation of Dickinson County, as with most foundations, is its membership. By becoming a member you are helping the Foundation to do its job which is to help, enhance and further the efforts of the Nature Center. Your membership contribution helps to fund our many events, programs, conservation projects, and the Dickinson County Nature Center.

To those of you who have already joined the Foundation...a hearty Thank You!! To those of you who are considering membership, please join.

If you are also interested in becoming active in our organization, we are looking for board members and volunteers to help with our annual events and Nature Center programs. The Conservation Foundation of Dickinson County meets the second Monday of every month, at 7pm in the Nature Center. The public is welcomed to attend.

Help us build a better understanding of our natural surroundings by using the membership form below. Please fill it out, talk to your friends and coworkers, or pass it on to someone else who can offer us their support.

CONSERVATION FOUNDATION OF DICKINSON COUNTY
Box 973—Okoboji, IA 51355

Member Name(s) _____

Street Address _____

City, State, Zip _____

Email Address _____

◊ **I am interested in volunteering**

◊ **Robin**—Student membership **$15**

◊ **Goldfinch**—Individual membership **$30**

◊ **Cardinal**—Family membership **$40**

◊ **Bluebird**—Contributing membership **$50**

◊ **Oriole**—Sustaining membership **$100**

◊ **Wood Duck**—Patron membership **$250**

◊ **Great Blue Heron**—Vision membership **$500**

◊ **Osprey**—Foundation membership **$1000 and up**

Dickinson County Conservation Board Nature Center
2279 170th St.
Okoboji, IA 51355

Dickinson County Conservation Board Members

Pam Jordan—Chairperson
Joan Gronstal—Vice Chairperson
Steve Anderson—Member
Kathy Kleen—Member
Eric Stoll—Member

Dickinson County Conservation Board Staff

John Walters - New Director of the Recycling Center
Barbara Tagami – Environmental Ed Coord./Naturalist
Charles Vigdal – Naturalist
Arin Miller—Events Volunteer Coordinator
Angie Wills—Secretary
David Booth—Conservation Technician
Cory McCartan—Conservation Technician

Conservation Foundation of Dickinson County Board Members

Jack Jones – President
Ron Williams – Vice President
Mary Kay Donovan – Treasurer
Erica Leupold – Executive Secretary
Shirley Rassmussen – Membership Chair
Barbara Tagami – Member
Paul Arnold—Member
Becky Peters—Member
Charles Vigdal—Member
JoAnne Sackett —Member
Jim Tuel—Member
Carol Armstrong—Member

Mission Statement: To encourage environmental awareness among visitors and residents while fostering appreciation, preservation and conservation of the Iowa Great Lakes region's unique cultural history, glacial geological formations, native species and natural habitats through education and action.