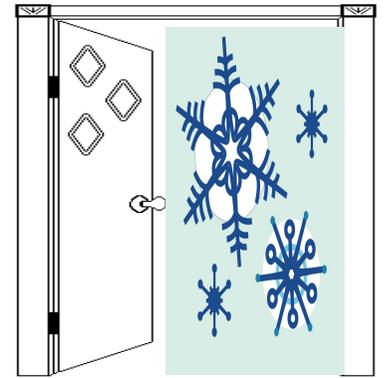


# “Looking OUT THE BACK DOOR...”

## The Sac County Conservation Board’s Quarterly Newsletter

Winter 2010

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**Our Mission: “To initiate an awareness and foster stewardship of nature’s rewards.”**

### Snow Homes

For many creatures winter is a time of rest, from the Woodchuck snuggled up in its den to the seed patiently waiting to burst into a tree.

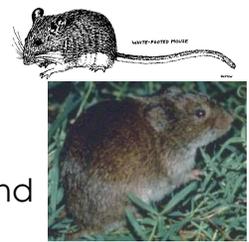
However, not everyone sleeps the winter away! Some animals use the snow to their own advantage. Before we get too far into what animals make their homes under the snow, let's first understand why they would do this. Think of the snow on the ground as a big blanket, all of the air trapped between snowflakes help to insulate against the raging winds and freezing temperatures above the snow. During the first snow fall spaces naturally form around plants that overhang the ground, these combined with the heat rising from the earth partially melt this layer and create larger tunnels and

the formation of ice crystals. Lastly the snow is white and reflective to sunlight, which for the most part keeps the tunnels from collapsing in when the sun shines on them. This layer of snow is called Pukak which is an Inuit word.

Although most insects go into a state of hibernation there are some that move around under the snow blanket. The most commonly seen insect is the Snow Flea, which is not a flea at all but belongs to a group of insects called the springtails. These animals are detritivores, eating off of dead and decaying matter. During particularly cold days these insects are not very active but when it warms up they can be



seen on the surface of the snow hopping about being flung by their spring like tails. On very warm winter days you may see insects and spiders scrambling across the snow.



The mice and voles utilize this layer of snow to build a network of tunnels and rooms. Instead of being exposed to predators and the weather these critters utilize natural cavities and dig out new tunnels. The tunnels and rooms will have entry or air holes that can be seen above the ground. Mice and voles eat the seeds and  
Cont. on page.....6

Fact Files.....	Page 2
Upcoming Events.....	Page 3
Kid’s Korner.....	Page 4
Eyes to the Skies.....	Page 5
Snow Homes Cont.....	Page 6



# Update on Conservation Center

This fall is on its way out and it seems winter is well on its way. During the fall the conservation board staff have been busily packing and moving into the new conservation center. We have moved in! The center's hours are Monday through Friday from 8:00 am to 4:30 pm. Please feel free to come visit the facilities, however do bear in mind that we are still moving in.

The Conservation staff and board would like to invite the public to an open house on December 15th from 1pm to 8 pm. There will be a grand opening this spring however, the dates have not yet been settled upon.

The conservation board are looking for volunteers. In particular for volunteers who be willing to donate some time during the weekends to help keep the center open for visitors. Currently, the display room is filled with the first permanent interactive tree and two temporary displays. The temporary displays include an albino exhibit and the animals among us exhibit. The animals among us exhibit focuses on lowan's writings and photographs of nature. At the open house we are planning on unveiling the particulars for a Sac County photography contest, of which the winners will be displayed in the center.

## Looking into the fact files! The White Breasted Nuthatch



(*Sitta carolinensis*)

- Listen for the whoit- whoit of this year round Iowa dweller.
- The arrangement of this birds' toes allows it to jump up and down the tree as well as hang upside down.
- They get their names due to their habit of gathering large nuts and wedging them into the bark then whacking them with their sharp bills until they hatch out the nut meat
- When insects are available they will probe their straight bills into bark to fish them out
- This small bird has a unique profile as it has a short tail, long narrow beak and almost no neck at all.
- This bird is common to feeders and is easily lured to one using large nuts like sunflowers and peanuts or even suet.
- This bird is common in Iowa and it ranges throughout most of the United States and the range extends into parts of Mexico and Canada.
- These birds prefer forests or stands of deciduous trees, especially maples, hickories, basswood and oaks.

## Thank You

- Linda Workmeister for donation of flameless candles for Pumpkin Carving Contest
- All of the wonderful volunteers who helped at the Halloween Night Hike
- To all the generous businesses that donated to the Pumpkin Carving Contest.
- Wall Lake Community Center for use of their facilities
- The Extension office and volunteers for assistance at the fishing clinic
- DNR for use of the shelter house at Ice House Point





# Upcoming Programs

## Open House—December 15th

The public is invited to come to Hagge Park and visit the new facilities. The open house will begin at 1 pm and end at 8 pm.



## Christmas Bird Count— December 18th

Do you enjoy watching the birds? Help scientists monitor bird populations by participating in the Christmas Bird Count. We will meet on December 18th at 8 am or you can call in your Call 712-662-4530 for more details.

## Winter Camp

Looking for something to do over the winter break? Then come to winter camp! Enjoy hikes or snowshoeing, games, crafts and much more!

December 28th: PK– 1st grade

December 29th: 2nd –4th grade

Camps run from 1-3 pm. Sign up by calling 662-4530.



## Ice Fishing Clinic- January 15th

Meet at the Lake View Library to learn about ice fishing then carpool out to Arrowhead Lake. In order to sign please contact the extension office at 662-7131. We will be starting a fishing club which will meet every quarter year, if you are interested in joining the club please come 15 minutes early.

## Cross-Country Ski Clinic - January 15th

Learn the basics of cross country skiing as well as take a try at it yourself. The clinic will run from 2-4pm and will take place at Hagge Park. Be sure to call 712-662-4530 to sign up.



## Nature Lovers— February 12th

Are you a nature lover? We will go outdoors and explore the February woodlands as well as make recycled Valentine’s Day cards. This free program will take place at Hagge park from 10 am to noon. Please call 712-662-4530 to reserve a spot.



Look for the grand opening coming in spring!

# Kid Korner

To survive the winter animals use different adaptations to survive. An adaptation can be physical like growing thicker fur or adding a layer of fast burning brown fat, or it can be a behavior like migrating to a warmer area or hibernating. One adaptation mentioned in the first article was about animals that use the snow to stay warm and protect them from the weather. Large animals and predators of mice and voles find snow to be a hindrance. Unscramble the words of animals that stay awake in the winter and figure out the puzzle's secret message.

## Animals awake in the winter are called..

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## What is 350.org?

There is a new organization located at [www.350.org](http://www.350.org) that is using grass-root approaches inform the public of global climate change issue and to motivate policy makers to start working on climate change issues. Why the number 350? When it comes to climate change the number seems to be 350 parts per million of carbon dioxide. Carbon Dioxide is a greenhouse gas, which means that it has the capacity to trap heat radiated from the sun and keep the planet warm. During the reign of humanity our atmosphere has contained about 275 ppm of carbon dioxide, this amount has given us the climate in which agriculture and humanity have thrived. This number has risen as the industrial revolution and modern needs have

taken ancient carbon (coal, oil, natural gas) and have released it into the atmosphere. Currently we have an average of 388ppm and it rises 2ppm per year. The most obvious evidence and also possibly the most eminent for people is



the increase of glacial melt which leads to a rise in sea level. According to the journal *Science* by the end of this century the seas may rise three feet higher than they are today. This would put low lying states and whole countries at risk of drowning. This is just one issue that arises with global warming or climate change. Whether it is all our fault, nature or both it would be best not to have erratic changes occur in our climate which is so important for growing

food and supporting life as we know it. Researches believe that the climate and glacier melting would stabilize if CO2 emissions were capped at 350 ppm. This number is attainable by simply changing some of our actions and asking the government to take this issue seriously. It is worth the time to check out what this organization is doing from forming international work parties and supplying third world countries with solar cookers to writing congress on current climate change issues. Of course don't forget the many things we can do everyday to save the world like turning off lights, turning the thermostat down when no one is home; like during the work day or while on vacation, sealing your windows, recycling and much more.

## Eyes To the Skies

- December 5th– New Moon
- December 13th and 14th– Geminids Meteor Shower– This shower has been known to produce 60 multicolored meteors per hour. Although this shower will be seen the 6th through the 19th the best time to view it will be the night of the 13th into the early morning hours of the 14th. The shower will emanate out of the constellation Gemini.
- December 21st– Full Moon
- December 21st - Lunar Eclipse– This eclipse will be visible to North America after midnight. The moon will be full and it should be quite a show! It should be a good chance to take some neat photographs.
- December 21st– Winter Solstice—On this day we have an equal length of day and night.
- January 3rd and 4th– Quadrantids Meteor Shower– This shower will peak at 40 meteors per hour and will emanate from the constellation Bootes. Parts of this constellation will be visible from January 1-5th.
- January 4th –New Moon—On this dark night taking the camera out for some night time photography may produce some neat shots.
- January 19th– Full Moon
- February 3rd– New Moon
- February 19th–Full Moon



plant remains that they can uncover or come across. However, being under the snow does not mean one 100% protection from predators. Some smaller predators like the shrews and ermine are able to enter the tunnel system. Shrews may even stay under the snow pack for quite a while. Larger predators utilize their sense to pick up when a mouse is near by. Owls are able to hear them under the snow and a fox will stalk a mouse or vole then pounce breaking through the snow to catch the critter in it's paws. To escape a bad cold snap the ruffed grouse will roost under the snow. This behavior has been known to give snow-shoers quite a fright when they've spooked a grouse and it suddenly flushes out from under the snow. Most of the ruffed grouse seen in the state are the northeast corner. These creatures create a home called a kipple. The birds fly into snow that is deep and loose then tunnel for a few feet before roosting. The snow will insulate them from the weather but eventually they will need to come out to feed upon tree buds and such.

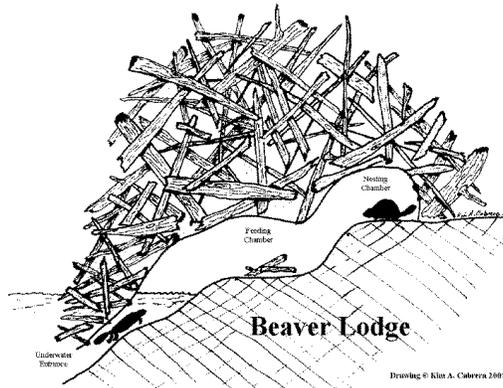


2nd nature creations  
2ndnaturecreations.com

One of the hardest thing for any creature living under snow or ice is a lack of oxygen. Animals of the snow can burrow out and make breathing holes assuming no ice storms have made the snow impenetrable. However creatures under the ice have a bit of a harder time. Without the wind and waves mixing air into the water and no photosynthesis from plants, the dissolved oxygen the lake or pond had in it before it froze must supply the needs of the animals and decomposition process for the winter. Some fish stay active under the ice, being ectotherms (cold blooded) there bodies slow down. This helps them in a world of little food and oxygen, as their bodies require less to survive. Another water loving animal is the muskrat. These critters forage for food (roots and stems) everyday. They endure the chilly water without too much problem and when they need a breath of air they find air bubbles trapped under the ice. Their larger

cousin does things a bit differently. The industrious beaver prepares for winter by stockpiling wood under the water. Their lodge which may hold up to 10 beavers during the winter have access holes to the water. If you run across a lodge and observe it closely you may be able to hear them stirring inside or spot the breathing hole which allows fresh air in. Once the beavers are hungry they don't spend much time lollygagging in the water. They quickly swim to their cashe of sticks gather some then return home with them then eat. Just like in any habitat, even those under the ice have their predators.

Otter and mink visit these icy worlds for a meal. Their thick fur tend to protect them as they swim around looking for primarily fish, but in tough times they will take any prey they can get. Even though we can not see these animals scurry around under the snow and ice they are there doing their best to survive the winter weather and if we are observant you might just see a vole hole or mouse tracks, a jumping spring tail or hear the rustling of beavers gnawing away within their den.



## Sac County Conservation Board

### Board Members

Kenny Bentsen—Sac City—Chairman  
Rich Feilmeier--Early--Vice Chairman  
Barb Bloom—Odebolt—Secretary  
Dean Stock—Lake View—Member  
Andy Meredith—Lake View--Member

### Staff

Chris Bass—Executive Director  
Sandi Huster—Secretary  
Rene Stroud—Naturalist

### Meetings

Regular board meetings are held the second Thursday of each month at 7:30 PM at the Hage Park office. These meetings are open to the public.

Hage Park Office Phone: (712) 662-4530  
Email: saccocon@frontiernet.net



The Sac County Conservation Board in the provisions of services and facilities to the public does not discriminate against anyone on the basis of race, color, sex, creed, national origin, age, or handicap. If anyone believes he or she has been subjected to such discrimination, he or she may file a complaint alleging discrimination with either the Sac County Conservation Board Office or the Office of Equal Opportunity, U.S. Department of Interior, Washington D.C. 20240