

Howling Herald



Winter 2007

Newsletter for Northern Michigan's Young Naturalists

The Making of a Snowflake

Big and fluffy or small and icy, snowflakes are pretty and it's fun to watch them fall to the ground, catch them, or roll them into balls and create snowpeople. So just how do these flakes get formed? Read on to find out.



First, you have to have water vapor in the air. Energy from the sun evaporates water from the land, lakes, oceans, and rivers. When this water vapor rises and meets colder air up in the sky, it condenses into water droplets and forms clouds. Tiny pieces of dust and salt are also carried up into the sky by wind.

When the cloud is colder than about 15 degrees Fahrenheit, water droplets freeze onto the bits of dust and salt, making ice crystals. As the snow crystals are tossed around in the cloud, more water molecules freeze onto the crystals, making them bigger. When these crystals grow larger and get too heavy to float in the cloud, they fall as snowflakes.

As they fall to the ground, snowflakes can be changed by wind, different air temperatures, different moisture levels, or by smashing together and breaking off pieces or colliding and sticking together.

After they reach the ground, snowflakes continue to change. The outer parts of snowflakes turn to water vapor from heat rising from the ground. This water vapor rises then recrystallizes onto colder flakes, making those flakes larger, while the other ones get smaller and smaller, eventually disappearing. The shapes of flakes on the ground change all winter long until they melt in the spring and become liquid again.



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Fall Picnic-Venture

One young naturalist attended the fall picnic venture. We missed the others who couldn't make it! It was a windy, cool day, but we had a great walk through Spring Lake Park, along the north country trail, and through Little Traverse Conservancy's South Round Lake Preserve. Doing a scavenger hunt along the way made for fun observations. After lunch and hot cocoa, mosaics were made using a variety of different seeds. Check out the next page to see what's happening at the winter picnic-venture.



Name Change: Take Note!

We want to let you know that we will no longer be using the word *club* in our newsletters, event descriptions, or news releases. In other words, we won't be referring to the young naturalists as a club anymore. Why are we making this change? A club implies that a group meets regularly and probably has officers. Club seems rather formal for Little Traverse Conservancy's young naturalist program. Don't worry, you really won't notice the change, because you will still be receiving the quarterly newsletter and activity pages. There will also still be a young naturalist event each season and a series of outings during the summer.

Winter Outing

Join Little Traverse Conservancy
at the Andreae Nature Preserve for a
Fun Winter Picnic - Venture on
February 16, 2008.

10:00 a.m. - 12:30 p.m.



Explore

the Andreae Nature Preserve

on snowshoes with other young naturalists. Find and identify tracks left in the snow by woodland animals. Learn about track patterns as well as how animals survive the winter. After working up an appetite, have a winter picnic lunch. Please bring a lunch. Snowshoes and hot chocolate will be provided. **Registration is required.**

Call Melissa at 231-347-0991 to sign up and get directions.



Learn About It.....

Dubbed adorable by many due to their long ears and feet and fluffy fur, snowshoe hares are one of several animals that stay active during the winter, braving cold temperatures and chilly winds. Let's take a look at how snowshoe hares live and survive.

Habitat

Snowshoe hares prefer hanging out in coniferous forests, swamps, and brushy areas.

Food

In summer, plants like grasses, clover and blackberry shoots are main menu items. In winter, they munch on tree bark, twigs, and buds. They eat the needles and leaves of many evergreen trees too.



Size and Behavior

They weigh from 2 - 4 pounds and measure 10 - 15 inches long. During the day, they rest or hide in vegetation, hollow logs or in another animal's abandoned burrow. They are active at night. Snowshoe hares create networks of trails to travel between resting and feeding areas as quickly as possible. They are always on the look out for predators. A female hare may have one to six young at a time and up to four litters a year.



Camouflage

Snowshoe hares change their coats twice a year exchanging a thin brown one for a heavy, white winter coat. This helps them blend in with their surroundings, making it easier to escape their many predators including coyote, fox, bobcats, weasels, and great horned owls. The furry white coat also keeps them warm during the winter.

Special Features

Long ears help the hare gather sounds from many directions, giving it a great sense of hearing. **Large hind feet** help it reach branches to gnaw on. **Strong teeth** allow it to eat woody plant parts.



Did You Know?

A young hare is called a leveret? Hares eat their soft droppings for the nutrients in them? Snowshoe hares can run up to 30 mph and leap 12 feet? They can walk and hop soon after being born? Most hares do not live more than 3 years in the wild?

Snow-lympics!

Gather some friends and have some friendly competitions in the snow!



Shot Put: Each person makes a snowball about 6 inches across. Everyone stands in a line and says "Ready, Set, Throw" at the same time and then everyone throws their snowball as far as they can. Who threw the furthest?

Long Jump: Mark a line in the snow for a starting line. One at a time, each person runs up to the starting line and then jumps as far as they can. Who jumped the furthest?

Hurdles: Every 10 or 20 feet, build a short wall, like a hurdle, out of snow. You should have at least three and you can make as many snow "hurdles" as you want. Each person should take turns running the course, jumping over the hurdles without hitting them.

Unscramble These Wintry Nature Words

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(Answers On Back Page)

Henry Knows

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Subnivean Layer

The subnivean layer is the zone between the snow surface and the ground. The temperature in the subnivean layer stays around 32 degrees once the snow depth is 6 inches. It acts as an insulator for plants and animals.

Small mammals such as mice, voles, and shrews, rely on this snow cover for survival. The snow layer acts like a blanket and helps protect the animals from heat loss. It provides some cover from predators also, although foxes, large owls, and other predators can hear the little critters under the snow and will pounce on them. When the snow melts, tunnels left by mice, voles, and shrews can be seen, like in the photo to the right.



Answers to Wintry Word Scramble: Left Column, Top to Bottom: snow, cold, flakes, white, blizzard. Right Column, Top to Bottom: snowshoes, berries, tracks, frost, snowfleas



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