

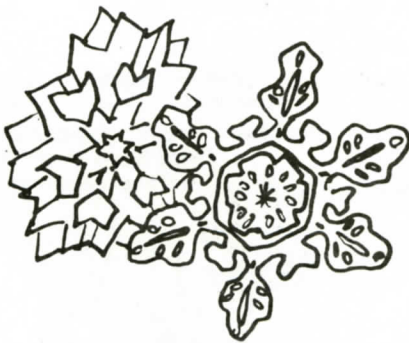
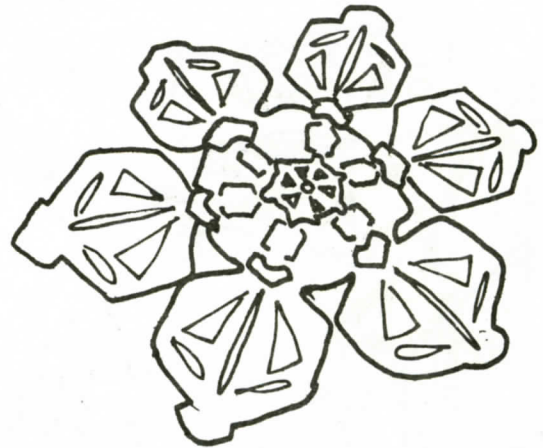


# NATURE DETECTIVES

## Out We Go!

The new snow is as soft and white as a marshmallow. The sun is out and it's not too windy. Let's go for a walk!

Look how the sunlight shines on the snow. Each snowflake sparkles like a tiny fairy. And the dried grasses poking through are so golden. I see little tracks near that clump of grass. Maybe a mouse was eating grass seeds.



There are some red berries! They are so bright against the white, white snow. What other colors can we find? The willows down by the stream are yellow. The sky is as blue as a pot of paint. And the sun makes rainbow colors in the icicles hanging from the stream bank.

Whoosh! A flock of chickadees just landed in that cottonwood tree. Listen to them chattering and pecking the bark for bugs. Now some of them have found seeds on a dried flower stalk. Look how they hang sideways and upside down to get the seeds out.

You know, I never realized how fun a walk in the snow could be!



Listen for the chickadees calling to one another as they search for food. "Chickadee-dee-dee. Chickadee-dee-dee." What do you think they are saying?

You can make clouds with your breath! When the warm air coming from your mouth meets the cold outdoor air, it forms lots and lots of tiny droplets of water. You can see the tiny water droplets (the cloud) for a few seconds until they break apart.

Wind is air that moves. A common winter wind in our area is called a chinook. Boulders chinook winds often melt the snow because they get warmer as they blow down from the mountains onto the plains. Chinook, an Indian word, means snow-eater.

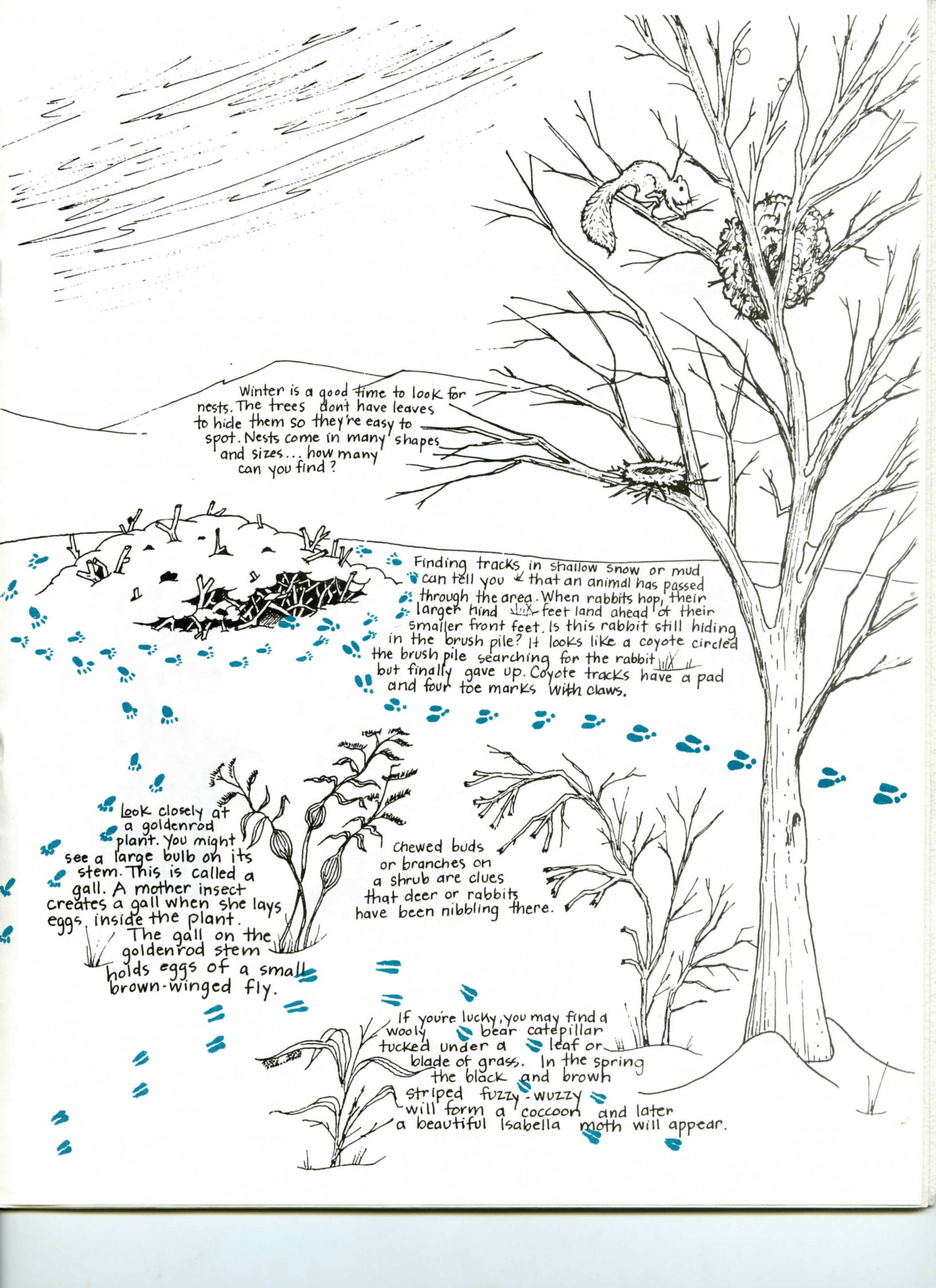
Snowshoes are fun - they help you stay on top of the snow like a snowshoe rabbit.

What's under the snow? A blanket of snow doesn't seem like it would keep you warm. But many animals spend the winter under the snow to stay protected from

the cold. Heat from the earth warms the air trapped between snowflakes. If you dig in some snow that is a foot deep or more, you may find tunnels that belong to mice, squirrels, or moles.

Look at these prickly seed pods! They are from the tassel flower. Pioneer women used them to comb wool before spinning it into yarn.





Winter is a good time to look for nests. The trees don't have leaves to hide them so they're easy to spot. Nests come in many shapes and sizes... how many can you find?

Finding tracks in shallow snow or mud can tell you that an animal has passed through the area. When rabbits hop, their larger hind feet land ahead of their smaller front feet. Is this rabbit still hiding in the brush pile? It looks like a coyote circled the brush pile searching for the rabbit but finally gave up. Coyote tracks have a pad and four toe marks with claws.

Look closely at a goldenrod plant. You might see a large bulb on its stem. This is called a gall. A mother insect creates a gall when she lays eggs inside the plant.

The gall on the goldenrod stem holds eggs of a small brown-winged fly.

Chewed buds or branches on a shrub are clues that deer or rabbits have been nibbling there.

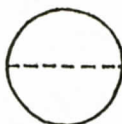
If you're lucky, you may find a woolly bear caterpillar tucked under a leaf or blade of grass. In the spring the black and brown striped fuzzy-wuzzy will form a cocoon and later a beautiful Isabella moth will appear.



## Make a Flake

It's possible that no two snowflakes are exactly the same. But they all happen to be six-sided ice crystals. Try designing one of your very own out of paper. Start with a circle of paper. You may want to trace a plate or plastic lid.

Fold the circle in half.



Now fold it in thirds.



Fold it in half again.



Snip out small shapes from the edges of your pie shape.



Unfold your paper and a beautiful six-sided paper flake will appear.



Experiment with your cutting -- are any two flakes the same?

## Keeping Warm

Both of these children know that the secret to staying warm on a cold day is wearing layers of clothing. The layers trap air like the fur or feathers of animals and trapped air is the best insulator around! In winter, children today dress much like the child on the right. Years ago, Eskimo children dressed like the child on the left. Can you tell which child would be wearing each item from the list below?

- polyester or wool hat
- sealskin or caribou skin mittens
- fox fur jacket with hood
- polyester filled snow pants
- rubber or plastic boots
- dried grass pressed between double soles of sealskin boots (called kamiks)
- long sleeved cotton t-shirt
- acrylic scarf
- animal skin stockings
- birdskin undershirt with feathers worn on the inside
- wool or polyester fleece jacket
- polyester mittens
- wool sweater
- two pairs cotton socks



## Winter at Walden

A lot is going on at Walden Ponds this winter. Animals are busy keeping warm, snowflakes are sparkling, and the Nature Detectives are exploring the wonders of winter. See the "Discover" calendar for details.

