Annuals or perennials?

When you visit a garden centre, you see signs that label flowers as either annuals or perennials. In general, annuals are plants that completely die at the end of the growing season, although they may produce a lot of seeds for next year. Perennials, however, don't die completely. Their roots remain alive throughout the winter and they begin to grow again in the spring.

More about wildflowers

Check your library or bookstore for these books.

A Field Guide to Wildflowers of Northeastern/Northcentral North America by Roger Tory Peterson and Margaret McKenny. Houghton Mifflin, Boston, Massachusetts, 1968.
Mysteries and Marvels of Plant Life by Barbara Cook. Osborne Publishing Ltd., London, England. 1983.
Newcomb's Wildflower Guide by Lawrence Newcomb. Little, Brown and Company, Boston, Massachusetts, 1977.
Peterson Field Guide to Wildflowers Colouring Book. National Audubon Society. Houghton Mifflin, Boston, Massachusetts.
Plant by David Burnie. Eyewitness Books, Stoddart Publishing Co. Ltd., Toronto, 1989.
Plants in Winter by Joanna Cole. T. Crowell Co., New York, 1973.
Plantwise by Pamela Hickman. Kids Can Press, Toronto, 1991.

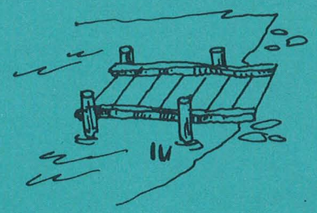
Introducing flowers

Order one of FON's new wildflower posters today. Judie Shore's beautiful, watercolour poster illustrates many of Ontario's lovely wildflowers, ferns and fungi. Size: 18"x24". Price: $3.50 plus $2.50 postage and handling, plus GST. For more information, contact FON at (416) 444-8419, 355 Lesmill Rd., Don Mills, Ontario M3B 2W8.

Picture puzzles

Use the pictures below as clues to the names of these wildflowers. The answers are below.

1



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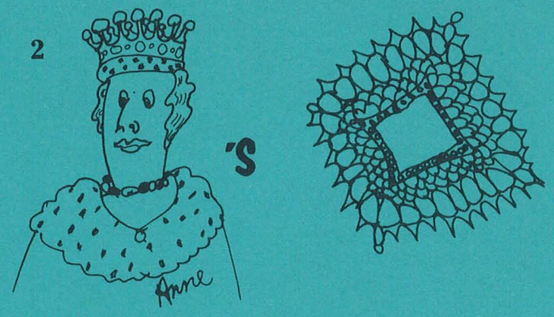

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5

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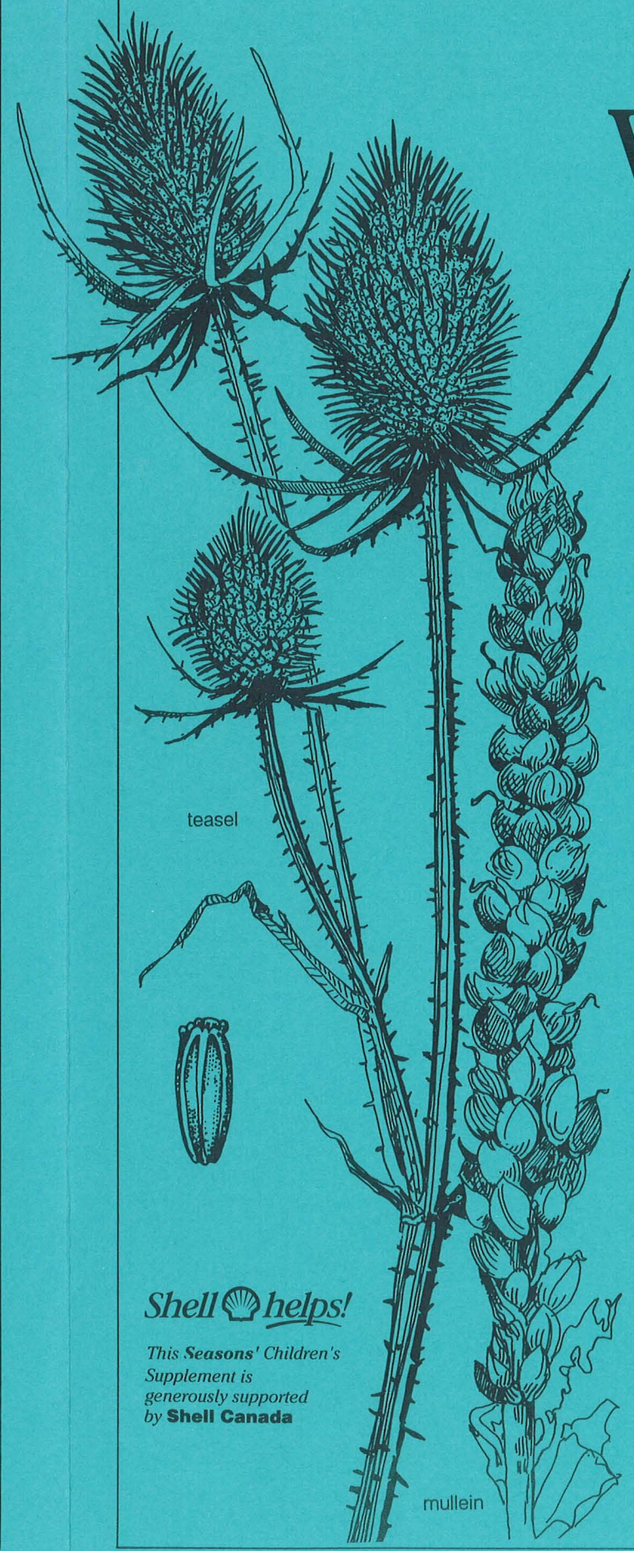
1. dock, 2. Queen Anne's lace, 3. buttercup, 4. skunk cabbage, 5. bedstraw

Printed on recycled paper

Wildflowers in Winter

Written by Pamela Hickman
Illustrations by Judie Shore



When winter comes, wildlife hibernate, migrate or "tough it out," but what do the wildflowers do?
Once the freezing temperatures have settled in, the only live flowers you see are indoors. How do wildflowers survive winter? It depends on what kind of plants they are. The above-ground parts of wildflowers such as trilliums, bloodroot, violets and hepatica die when the heavy frosts come. Below the ground, however, their roots, tubers or rhizomes stay alive, although they don't grow or take in water because the ground is frozen. When the warmer weather returns, the ground thaws and the roots begin sucking up water and minerals again to fuel the growth of the new plants. Plants like teasels and dock also die in winter; however, their tall, dead stems and seed heads remain standing in the snow. Some wildflowers, such as mullein and pussytoes, survive under the snow as a ring of ground-hugging leaves called a basal rosette. In spring, a new stem sprouts from the roots through the middle of these leaves.

Between spring and late fall, many different kinds of wildflowers grow, blossom and produce seeds. Plants such as shepherd's purse may hold on to their seeds all winter long, but the seeds of other plants are scattered on the ground in many different ways: by gravity, wind, water and animals. Even if the seeds land in a place with good soil, light and water - the things they need to grow - they will not germinate, or sprout, until they have first been frozen. The seeds must lie dormant, or inactive, throughout winter and can't begin to grow until spring. This requirement prevents seeds from sprouting in late summer or fall when the young plants wouldn't have time to finish growing before they were killed by the cold. Instead, the seeds germinate in spring when the weather is ideal for growing.

Turn the page to discover how you can find some overwintering wildflowers beneath the snow. Then collect some winter seeds and try growing your own wildflowers in the spring.

Shell helps!
*This **Seasons'** Children's Supplement is generously supported by* **Shell Canada**

Wildflowers under the snow

If you visit a woodlot or field in late winter, you can sneak a peek at some spring flowers under the snow. Sketch a map to record where you find the flowers so you can return in late spring and see the results of your winter detective work.

What you need
a trowel
paper
pencil
a clipboard
a field guide to wildflowers

What to do

1. Visit a woodlot or field where you've seen spring flowers blooming in past years. If you can remember just where certain flowers bloomed, that's great. If not, look for open spaces away from tree trunks or at the base of dead plant stalks.

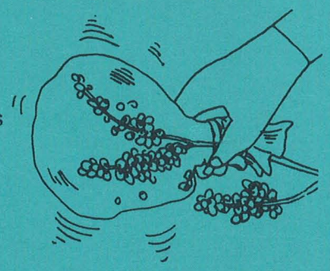
2. If the snow is deep, use the trowel to clear a patch of ground. With your hands, gently brush away the fallen leaves and look for the leaves of overwintering wildflowers. Some flowers may appear as a ring of green leaves hugging the ground, while others may show the remains of last year's dead leaves through which the new season's growth will appear.

3. Make a note of where they are by sketching a small map. Return in the spring to see what has bloomed. If you record the locations of spring wildflowers in bloom, you can find them much more easily next winter.

4. Cover the "sleeping" flowers up with the leaves and snow to keep them protected from the cold.

Seeds in winter

Take a winter walk in an open meadow where the tall, dried stalks of last summer's wildflowers are still standing. You can collect some seeds from different kinds of plants and take them home for a closer look. Then you can try planting some seeds in the spring and grow your own wildflowers in pots or in your garden.



What you need
some plastic bags with twist ties
a magnifying glass
some potting soil
some plant pots

What to do

1. Look closely at the seed heads of different plants. How are the seeds arranged on the plant?

2. Without breaking the plant stems, carefully place a bag tightly over a seed head and shake it in order to loosen the seeds. The seeds will fall into the bag. When you have enough seeds, remove the bag and close it with a twist tie.

3. Repeat step 2 with different plants.

4. At home, use your magnifying glass to get a close-up view of the seeds you have collected. What shape, colour and texture are the different seeds?

5. Place the seeds in your freezer until spring, to simulate the winter weather conditions.

6. In early spring, fill a few pots with potting soil. In each pot, plant several seeds of the same kind. Place the pots in a sunny window and water them to keep the soil moist. You can also plant the seeds directly into your garden outside when the soil has warmed up.

Other ideas

1. Make a seed collection by sorting your seeds by colour, size, shape or texture. Glue them to sheets of paper and label them with the date you collected them, where they were collected, and what kind of seeds they are, if you know.

2. Use your seeds to make a picture or mosaic pattern on a piece of thin cardboard with glue.