

Wild Times for kids!



The World of

Wild Pollinators

Imagine lying in the middle of a field of wildflowers and long grass on a warm summer day. You feel drowsy listening to the drone of thousands of insects. The loudest is the buzz of bees that are working hard, flying from flower to flower. They are gathering pollen and nectar to bring back to their nests to provide food for their young. While taking care of their own needs, they provide an essential service to flowering plants by pollinating them.

Bees aren't the only pollinators. Many other animals help with this important natural process that helps plants reproduce. Let's take a look at the world of wild pollinators!

POLLINATION POWER!

Pollen is the yellow powder inside flowers. It grows on the anther and contains male reproductive cells. When a bee lands on a flower looking for food, pollen sticks to the hairs on its body. When the bee flies to the next flower of the same species, some of the tag-along pollen (the male cells) touches and sticks to that flower's pistil. The flower's female cells are located at the base of the pistil. Fertilization occurs when the male and female cells join. Fertilized plants are able to grow fruit that contain the seeds needed to produce new plants.



*Close-up of
pollen on
an anther*

Anther

Pistil

Oriental lily



Check out some cool videos about pollinators at <https://wildlife.state.nh.us/multimedia/wild-times.html>

Bees vs. Wasps

It's a good idea to learn the difference between bees and wasps



Bees

- Hairy
- Thick waist
- Fat rear legs



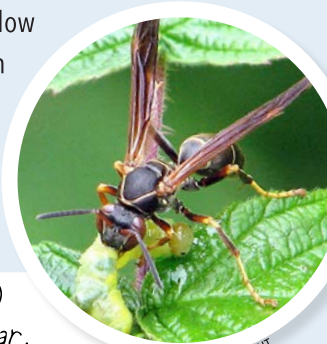
Wasps

- Smooth
- Thin waist
- Skinny rear legs

Did you know that many of the stings we get are from wasps, which are not bees at all? Yellow jackets and hornets are types of wasps. Like most wasps, they prey on other insects such as caterpillars, flies and crickets for food for their young. Many of the insects they prey on are garden pests. As predators, wasps are more aggressive than bees and can sting repeatedly. Bees are more passive and not as likely to sting unless directly threatened. In addition, bees are hairy and wasps are not.



Bumblebees feed on nectar and pollen.



A Paper wasp (hornet) feeds on a caterpillar.

HONEYBEES

Honeybees are not native to North America. Early settlers brought them from Europe to produce the honey and beeswax they enjoyed. Honeybees are now important crop pollinators. Beekeepers raise them in man-made hives that they move from farm to farm to pollinate crops.



Apiary - A collection of beehives where bees are kept.



A beekeeper checks on the health of his beehive.

POLLINATORS IN PERIL



Bees and other insect pollinators are in decline throughout the world. One of the greatest threats is loss of habitat. When land is cleared or mowed, pollinators have to fly farther to find flowers to feed on. Chemicals used to protect crops from insect pests and weeds are harmful to bees and butterflies. Although the chemicals may not kill bees right away, they become stressed and weak. Hunger and the need to fly greater distances to find food is also a stressor. Like us, when stressed, bees have fewer defenses to fight off diseases and parasites.

WHAT CAN WE DO?

Planting a pollinator garden is a great way to create habitat that helps pollinators. To start a garden, plant these flowers and follow a few simple tips:

- Pick a sunny spot, sheltered from the wind.
- Select a mix of native flowers that produce blossoms all season long.
- Flowers of different shapes and sizes will attract many kinds of pollinators.
- Choose flowers with a variety of colors. Blue, yellow, and purple flowers attract bees.
- Plant each flower of the same type in clusters to attract the attention of pollinators.
- Provide water in a shallow dish or birdbath, with stones as perches for thirsty pollinators.
- Avoid using pesticides that are harmful to pollinators.



BLACK-EYED SUSAN



PURPLE CONEFLOWER



HAWKWEED



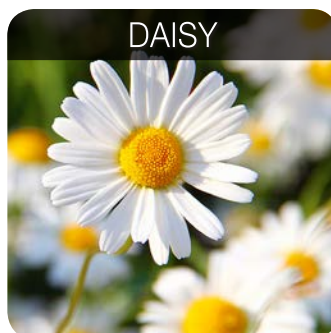
SALVIA



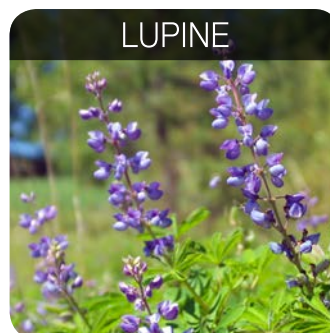
BUTTERFLY WEED



BUTTERFLY WEED



DAISY



LUPINE



SUNFLOWER

WORKER BEE

Word Search!

How many words from the list on the right can you find in the set of letters below? These words may be written horizontally, vertically, diagonally, or even backwards!



D F S K S Y W M B I E X S B Q
 D B E J W W L J T M T R R D H
 M F C H C I T F P N O P W G M
 I E O Z U U L I R T Q T L E U
 Z R S W M M S D A E F B F X M
 O T Y A F T M N F P T L N V P
 P I S N I H I I O L O T S I B
 B L T L E L H L N W O E U U M
 L I E Q L C L I E G I W M B S
 O Z M O A E T R N L B B E T J
 S A P S N U N A F U L I Z R J
 S T B H T A L R R E A P R C S
 O I E T H I F Y B N O P E D Z
 M O E O E Q N E X B E E T L E
 F N S M R T E Q W W W A S P A

POLLINATORS

~~WASP~~

ANTHER

PISTIL

FERTILIZATION

BEES

BUTTERFLY

MOTHS

FLIES

BEETLE

HUMMINGBIRD

BUMBLEBEE

POLLEN

NECTAR

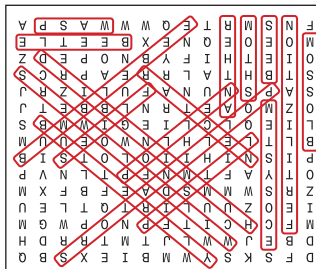
WILDFLOWERS

BLOSSOM

ECOSYSTEM

The NH Fish and Game Department receives Federal Assistance from the US Fish & Wildlife Service, and thus prohibits discrimination on the basis of race, color, national origin, disability, age, religion and sex, pursuant to Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, Title IX of the Education Amendments of 1972, and the Age Discrimination Act of 1975. If you believe you have been discriminated against in any program, activity or service, please contact or write to:

The U.S. Fish and Wildlife Service • Division of Wildlife and Sport Fish Restoration
 4001 N. Fairfax Drive, Mail Stop: WSFR – 4020, Arlington, Virginia 22203,
 Attention: Civil Rights Coordinator for Public Programs



ANSWERS

Wild Times for Kids is published annually by the New Hampshire Fish and Game Department. Multiple copies are available for schools and youth groups upon request. Send your request to:

N.H. Fish and Game Department, Public Affairs Division
 11 Hazen Drive, Concord, NH 03301 • 603-271-3211 • WildNH.com



Support for this issue of *Wild Times* is provided by the Wildlife Heritage Foundation of New Hampshire, the official non-profit partner of the New Hampshire Fish and Game Dept.