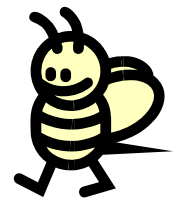


Bee Pathfinder



After you know what your research questions are, your first step is to hit the card catalog!

Try using the subject search words below to get you started.

Possible Subject Search Words for *Bees* & Related Subjects

Bees	Honey
Beekeeping	Honeybee
Beehives	Extinction

Dewey call numbers for bees include...

- 595
- 638

Databases

Check out our library's databases first!! They have tons of reliable information about your topics, including PRINT SOURCES like magazine articles and articles from books, as well as multimedia content (video, images, etc.). Databases are the next best thing to books. 😊

Gale

Includes two databases:

1. **Student Resource Center**
 - a. general topics, like an encyclopedia
2. **Opposing Viewpoints Resource Center**
 - a. debatable issues, exploring different sides of various issues

**To logon, go to <http://infotrac.galegroup.com/default>

Username and password information is available at the circulation desk in the library.

General Websites

[Bee](#)

Topic: Bees

The World Almanac for Kids has information on many topics, one of them being bees. Bee is the common for any of the insects that make up the superfamily Apoidea of the order Hymenoptera. Approximately 20,000 species of bees exist. Learn about the characteristics of bees. Information on social structure and nesting habits are provided. Discover the differences between social, solitary, and parasitic bees. Read about the classification of bees. Research other animals and search the almanac for information on various topics.

URL: http://www.worldalmanacforkids.com/WAKI-ViewArticle.aspx?pin=wwwwak-066&article_id=13&chapter_id=1&chapter_title=Animals&article_title=Bee

[How Bees Work](#)

Topic: Bee culture, Beehives, Beekeeping, Bees

From beliefs in spontaneous generation to using honey for folk medicine, the role of bees and their colonies have been a wondrous mystery to humans throughout history. Read this article from How Stuff Works and learn more about bees and their hives. Did you know that many bee species don't live in hives? Investigate bee anatomy, bee stingers, and the differences between social and solitary bees. Take a look inside the honeycomb and learn about the bee's life cycle and how worker bees care for larvae. Explore bee navigation, honey production, beekeeping, and colony collapse disorder.

URL: <http://animals.howstuffworks.com/insects/bee.htm/printable>

Insects: Bee

Topic: Beehives, Bees

Investigate the buzz about bees and gain a greater appreciation for these unique insects. You probably realize that honey comes from bees but this site will help you understand the benefits of bees in enjoying apples, oranges, berries, and tomatoes. Discover the pollen baskets bees have on their legs and find out where they store nectar for the return flight to the hive. Explore the difference between the nests built by solitary bees and the complex colonies of honeybees. Learn about honeycomb construction, dancing bees, and killer bees.

URL: <http://www.sandiegozoo.org/animalbytes/t-bee.html>



Where Have All the Bees Gone?

Topic: Beehives, Bees

Bees are fleeing their hives in record numbers and entomologists want to know why. Investigate the mystery of why bees across the country are abandoning their hives, never to return. This unusual phenomenon is known as colony collapse. Compare a healthy hive to one that is collapsing. Since bees are essential for the pollination of many foods we eat, colony collapse is a concern for agriculture. Explore potential causes like sickness or chemical poisoning. Even insects who inhabit abandoned beehives are waiting longer to move in. Discover why scientists are conducting genetic tests on these bees.

URL: <http://www.sciencenewsforkids.org/articles/20070613/Feature1.asp>

Alternative Pollinators: Native Bees

Topic: Bees, Pollinators

This fourteen page publication from the National Sustainable Agricultural Information Service is a quality resource about using native bees as pollinators. You can learn about the advantages native bees have over honeybees as pollinators of crops. Find out what steps can be taken to encourage native bees by understanding their biology, nesting habits and suitable crops and wild forage they need. There are suggested plants for native bees and facts about the harmful use of pesticides. Several types of native bee species are described.

URL: http://www.attra.ncat.org/new_pubs/attra-pub/nativebee.html

As Bees Go Missing, a \$9.3B Crisis Lurks

Topic: Beehives, Bees

Bee colonies across the nation are in trouble as worker bees desert their hives. Maybe you're wondering what the big deal is about bees dying and what it has to do with you. Discover how honeybees play an important role in one-third of the food crops we eat including wheat, corn, apples, berries, pumpkins, melons, onions, and zucchini. Billions of dollars of crops are endangered and food crops that depend on bee pollination could become very expensive. Entomologists and beekeepers have been studying the possibilities of new viruses, mites or chemicals suppressing the immune systems of bees.

URL: http://money.cnn.com/magazines/fortune/fortune_archive/2007/09/03/100202647/

[Wasp and Bee Control](#)

Topic: Bees, Pest control, Pests--Control, Wasps

Wasps and bees are considered to be pests by many people. In this article you can read about both types of insects. At the beginning is a description of their appearance. This is followed by food preferences and a description of nesting sites. The article describes the life cycles of wasps and bees. Of concern to most people is the sting of wasps and bees, so descriptions of these stings and what to do about them follow. You can also read about controlling the nests of wasps and bees, and interesting photographs and diagrams are included.

URL: <http://www.extension.umn.edu/distribution/horticulture/DG3732.html>

[Bees, Hornets and Wasps](#)

Topic: Bees, Hornets, Pest control, Pests--Control, Wasps

Not all stinging insects are bees. It is important to be able to recognize the difference between bees, hornets, and wasps in case you need to find a method to control them. Not only will you find descriptions of many types of bees, hornets, and wasps, but you will also find information on their lifecycles, how to prevent problems before they occur, facts about nests and food, and also facts about the stings of these pesky insects. Many additional links are available on other types of pests you will find inside and outside of your home.

URL: http://www.pestcontrolcanada.com/INSECTS/bees_and_wasps.htm

[Colony Collapse Disorder](#)

Topic: Beehives, Bees

One-third of the plant foods we eat depend on honeybees for pollination. As Colony Collapse Disorder threatens America's bees, it also threatens our food supply. Although the causes of this disorder are complex and not fully understood by scientists, Burt's Bees believes the best way to help the bees is to create pesticide-free and naturally organic environments for bees to forage and thrive. So next time you bite into an apple or kiwi, think about the bees that made it possible.

URL:

<http://www.burtsbees.com/webapp/wcs/stores/servlet/ContentView?contentPageId=531&storeId=10001&catalogId=10051&langId=-1>

[Colony Collapse Disorder: Revisiting the Hive](#)

Topic: Beehives, Bees

Honeybees have thrived on Earth for millions of years but are disappearing in record numbers in recent years. The mass exodus has affected bee colonies in 35 states. Investigate why beekeepers are concerned as you learn about the dozens of food crops that depend on bees for pollination. When bees colonies collapse, apple orchards only produce a few misshaped apples and almond trees produce only a fraction of the harvest. Analyze the role of pesticides that might be highly toxic to bees as well as the spread of mites and viruses. Consider if organic farms might be the solution.

URL: <http://www.pccnaturalmarkets.com/sc/0710/sc0710-bees.html>

[The Great Sunflower Project](#)

Topic: Bees, Sunflowers

By becoming a part of the Great Sunflower Project you can help scientists study bee behavior. To participate all you need to do is sign up, plant your sunflowers when your seed arrive in the mail, describe your garden, time how long it takes before the bees visit your sunflower plants and then submit your data. Everything you need to know about sunflowers and bees can be found at this site. Even if you choose not to participate in the project, there's still a lot to learn.

URL: <http://www.greatsunflower.org/>

[Beekeeping for Beginners](#)

Topic: Bee culture, Beekeeping

Do you ever wonder how the beekeepers get the honey from the thousands of their bees to your breakfast table? Or how they handle thousands of bees without getting thousands of stings? On this web site you can find the answers to these questions and some other great information, including hints and tips on how to become a beekeeper. You will also discover what the costs are, how to build the bee hive, and a lot more.

URL: [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex3946?opendocument](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex3946?opendocument)

[Beekeeping 101](#)

Topic: Bee culture, Beekeeping

Take a course in beekeeping without leaving your computer. A professional entomologist explains the biology of bees, the steps of beekeeping, along with many other bee facts. This article is divided into fifteen topics. Click on a topic link to explore your area of interest, or just scroll down this page to peruse them all. Several topics explore beekeeping essentials, including instructions and necessary equipment. Other topics explore bees in more general terms, including honeybee types and treating a bee sting.

URL: http://www.gabeekeeping.com/beekeeping_101.htm

[BeeCARE](#)

Topic: Bee culture, Beekeeping, Honeybee

The BeeCARE web site provides information and support to both beekeepers and those curious to learn about honeybees, their amazing roles in nature, and how they impact the quality of our daily lives. The Honeybee Encyclopedia has definitions of many words related to raising bees, some illustrated with graphics. The Backyard Beekeeper's Guide is a compilation of information, tips and techniques to introduce you to bees and beekeeping and to make your life as a hobbyist beekeeper a little easier.

URL: <http://www.beecare.com/>

[The Bumblebee Pages](#)

Topic: Bees

Get the buzz on bumblebees here. Read all about their yearly life cycle in a colony. Learn about bumblebee behavior including such topics as foraging, communication, scent marking, flying, and nest searching. How do bumblebees act when they are feeling threatened or angry? Find out how they maintain dominance, too. Discover the economic importance of these insects. Learn about their anatomy and their role in the world of predators, parasites, and symbiotic creatures. View over 19 different species native to the United Kingdom.

URL: <http://www.bumblebee.org/>

[The Yearly Life Cycle of the Bumblebee Colony](#)

Topic: Bees

The yearly life cycle of the bumblebee colony is the main topic of this site. Several subtopics are discussed. The first topic is the start of the colony. Next, learn about female workers being produced and starting to forage. After that, read about unfertilized eggs being laid and worker larva developing into queens. Next, males and new queens emerge. Other subtopics include more than one colony per year and differences between bumblebees and honeybees. Other bumblebee information can be accessed.

URL: <http://www.bumblebee.org/lifecycle.htm>

[Honey Bee](#)

Topic: Honeybee

There are many different types of bees. The Honey Bee is hairy, honey-colored with three black lines around its waist, and has a black stinger. The Honey Bee is in the invertebrate family, which means that it does not have a spinal column. The article here tells you about the

importance of the Honey Bee to plants and humans. You will learn where Honey Bees can be found, and the particular things they like to eat. The next time you are eating and enjoying the taste of honey, think about these hard-working Honey Bees!

URL: http://www.ecokids.ca/pub/eco_info/topics/field_guide/insects/honey_bee.cfm

[Bee Anatomy](#)

Topic: Insects—Anatomy

From PBS.org, this web site is a fascinating combination of technology and information. Students can move their mouse over a drawing of an insect which will allow them to see inner and outer views, as well as different body parts. Click on any area that's highlighted and you can read a description! Learn all about the bee on this web site!

URL: <http://www.pbs.org/wnet/nature/alienempire/multimedia/bee.html>

[Dr. Killer Bee](#)

Topic: Africanized honeybee

"All kids like creepy crawlies. Some of us grow up, and some don't." To learn how to parlay your interest in insects into an interesting career, read this interview with Justin O. Schmidt, research entomologist at the Carl Hayden Bee Research Center in Tucson, Arizona. Schmidt begins the interview by talking about his decision to become an entomologist, and how he became a specialist in killer bees. Explore the subsequent pages of this article to learn more about bees, how killer bees differ from honeybees, and what entomologists are doing to combat killer bees in the United States.

URL: <http://www.pbs.org/saf/1204/features/bees.htm>

[Tales from the Hive: Dances with Bees](#)

Topic: Animal communication

Designed to be a companion site for the NOVA program "Tales from the Hive," this site has incredible Quicktime videos and detailed information about the life of bees and how they communicate. Video clips and descriptions clearly help you learn the different dances bees use for distance, direction, quality and quantity of food supplies, then for fun you get to try your hand at being a bee and figuring out a dance or two for yourself.

URL: <http://www.pbs.org/wgbh/nova/bees/dances.html>

[Africanized "Killer Bee" Pages](#)

Topic: Africanized honeybee

You may have seen pictures of killer bees, but have you ever heard a swarm of them. Listen to a sound clip and find lots of great information on this web site. The first section offers general information about the Africanized honeybee. It includes topics such as what areas killer bees have colonized in America and killer bee stories reported in the media. You can view maps of killer bee distribution throughout America. Related links are provided.

URL: <http://www.stingshield.com/!ahbtitl.htm>

[Africanized Honey Bee](#)

Topic: Africanized honeybee

This site, maintained by the County of San Diego, provides background about the Africanized Honey Bee, which is more prevalent in the southwest United States. The safety page provides information on how to avoid getting stung, and what to do if you do happen to get stung. Tips for homeowners tell how to make your home less attractive to these pests.

URL: http://www.co.san-diego.ca.us/cnty/cntydepts/landuse/agri/ahb_info.html

[Africanized Honey Bees Information Sheets](#)

Topic: Africanized honeybee

This site is chock full of facts about Africanized and European Honey Bees. A series of 30 information sheets covers topics from What Bees Eat and Honey Bee Senses to Pheromones and Beekeeping. Also included are topics about how honeybees affect other parts of nature through pollination, and even honeybee haiku.

URL: <http://ag.arizona.edu/pubs/insects/ahb/inflist.html>

[Some Bees Clean Up Well - Without the Soap](#)

Topic: Honeybee, Insects—Behavior

A honeybee is a pretty clean creature! The United States Department of Agricultural Research Service explains how certain honeybees clean themselves to fight off disease. Find out about a little mite that invades the honeybee's airways and see how the honeybee defends itself against this mite. Learn about studies done by scientists that look at how different bees clean themselves. See how the scientists did their experiments and find out what they discovered. There are some honeybee photos at this site.

URL: <http://www.ars.usda.gov/is/kids/insects/story15/>

[Plight of the Honeybee](#)

Topic: Bee culture, Beekeeping, Honeybee

This "Weekly Reader" article explores this problem of the disappearing honeybee. In twenty-four states, tens of thousands of honeybees have vanished. Learn why this mystery affects not only honey, but many other crops of food as well, from almonds to cucumbers. While learning about this mysterious problem, you can also explore a slide show of beekeepers in action. A map of states affected by the honeybee problem is also included, along with an animated look at a beehive and a fun word search game.

URL: <http://weeklyreader.com/featurezone/bees/>

[Bees Wiped Out by Cascade of Deadly Events](#)

Topic: Beehives

A deadly and treacherous mite has created devastation for more than half of the beehives in several North American regions. As the mites feed on the bees, they leave their insect host vulnerable to a deforming virus. Resistant to pesticides, the Varroa destructor mite seems unstoppable as it feeds on European honeybees and their larvae. Find out how Chinese honeybees deal with the parasite and how scientists have attempted to understand and solve the problem of the collapse of beehive colonies.

URL: http://www.livescience.com/animals/050517_bee_mite.html

[Bee Virus Discovery Shows Fast-Track to the Heart of Biology](#)

Topic: Beehives, Microbial genetics

DNA sequencing was used in solving the mystery of colony collapse disorder in bees. By analyzing all the microorganisms in a sample, gene sequencing indicated that a particular virus was present in most of the infected colonies. Current research using DNA technology and genetic sequencing seeks to solve the problems of antibiotic-resistant bacteria, antiviral-resistant viruses like HIV, and even obesity. Learn how genetic technologies are being used to study microbes from extreme environments. Discover the amazing diversity of microbes in soil and seawater.

URL: http://whyfiles.org/267bee_virus/

[How 10,000 Bees Decide Where to Go When They Fly the Coop - Decision Making to Rival Any Department Committee](#)

Topic: Group decision making, Honeybee

How do 10,000 bees decide what site is right for their new home? Log on to this web site and read how a Cornell biologist describes the group decision making process executed by bees. He is quoted as saying that the way 10,000 bees decide on their next home is a process

"complicated enough to rival the dealings of any department committee." Visit this interesting web page and read about this complex group decision making model.

URL: <http://www.news.cornell.edu/stories/April06/swarm.quorum.ssl.html>

[Honey and Honeybees: The Incredible Story](#)

Topic: Honey, Honeybee

You probably know that honey comes from bees. People may enjoy eating honey, but why do bees make honey? Bees take the nectar from flowers and convert it into honey. "Nectar and honey provide the energy for the bees' flight muscles and for heating the hive during the winter period." But, that's not all. You can learn more about honey by reading this interesting article and looking at the colorful pictures on this page.

URL: <http://www.honey.com/consumers/kids/beefacts.asp>

[Honeybee Communication](#)

Topic: Honeybee

You might think that honeybees are not very complicated insects. But, after you read this interesting article you may change your mind. Honeybees really communicate with each other! There are three kinds of bees in a beehive: one queen, a few drones, and thousands of worker bees. One of the jobs of the worker bees, the "scouts", is to find food. You will learn how these remarkable insects communicate with each other and what the messages really mean.

URL: <http://www.pugetsoundbees.org/beedance.htm>

[Anatomy of a Hive](#)

Topic: Beehives

To keep a bee hive running efficiently and effectively, each and every bee in the colony must do very specific and important jobs. This well-organized site allows you to examine the way that the hive is constructed and lets you see how each type of bee does its job. You can find out all about the hive and its residents, or pick out individual types of bees, like the queen, drones, or workers and find out how they communicate with each other, build the nests, and defend the colony.

URL: <http://www.pbs.org/wgbh/nova/bees/hive.html>

[Honeybee Encyclopedia](#)

Topic: Pheromones

Included with a lot of information about honeybees is this section that explains the chemical substance called pheromones. The honeybee uses different pheromones to communicate with the colony. The Queen honeybee secretes pheromones to communicate the need to support brood production, the queen's health, and preparing to swarm. The worker bee or the guard bee secretes pheromones that alert other bees to conditions of danger. Enjoy an actual photo of a Queen honeybee that secretes pheromones to control the colony's activities.

URL:

<http://www.beecare.com/indexDynFrames.htm?http://www.beecare.com/Encyclopedia/Encyclopedia%20P.htm&1>

[Africanized Honeybees in Arizona](#)

Topic: Africanized honeybee, Honeybee, Insects—Behavior

Did you know that honeybees only sting as a means of defense? This web site from the United States Department of Agriculture has information about Africanized honeybees. Some information is general, and some is specific to Arizona. Background information explains why honeybees are important. Find out the four major ways the Africanized honeybee's behavior is different from the European honeybee's behavior. Learn safety precautions so you can avoid being stung, and find out what to do if these bees attack you. You can also learn how to prevent bees from colonizing on your property.

URL: <http://gears.tucson.ars.ag.gov/ahb/index.html>

[National Pest Management Association Inc.](#)

Topic: Pest control, Pests—Control

The National Pest Management Association, Inc. offers this Web site for consumers. You can either do a Keyword search for a pest or select from the list provided. Some common pests included in the list are: Ants, Cockroaches, Flies, Rodents, Spiders, and Termites. Under the category Stinging/Biting, you will find Bed Bugs, Carpenter Bees, Mosquitoes, Ticks and more. What do you do if you are being chased by a colony of African ("Killer") Bees? Run in a zigzag pattern and seek shelter in a car or house!

URL: <http://www.pestworld.com/Pest-Guide>

[New Pollinators Buzzing with Potential](#)

Topic: Pollinators

News and events from the United States Department of Agriculture has good news about possible pollinators. This article begins by discussing the job of the honey bee as a pollinator of cranberry plants. You will understand why pollinating a cranberry bog is a huge task! Learn about research being conducted at the Agricultural Research Service to discover new pollinators for not just cranberries but for other crops as well. There is additional information about bees at the Agricultural Research Service.

URL: <http://www.ars.usda.gov/is/AR/archive/may00/buzz0500.htm>

[Dangerous Insects](#)

Topic: Dangerous animals

The deadliest creature on earth is the anopheles mosquito. It spreads 270 million cases of malaria each year. Almost 3 million people die from malaria each year. Not all species of mosquitoes carry malaria. Mosquitoes can also carry yellow fever, encephalitis, and elephantiasis. The tsetse fly spreads a parasite that causes sleeping sickness, which affects the central nervous system and can cause coma or death. "Killer bees" were created trying to breed a better honeybee. These aggressive bees escaped and have killed 1000 people.

URL: <http://www.teachervision.fen.com/spot/insects1.html>

[How Plants and Flowers Grow](#)

Topic: Growth (Plants), Plant introduction, Plants—Growth

Striking, enticing photographs of various plants greet the user upon arriving at this site. The photos are accompanied by paragraphs on the topics: plants and flowers, wind pollination, insect pollination, seeds, and bulbs. The paragraphs contain very rudimentary, easy-to-understand information. Additional links to books on flowers, sites on flowers, sea plants, and the bee are offered. In pursuing these links, one discovers that the only presently active ones are the ones on sea plants and the bee. This would be a good site for students to begin their investigation on plant growth

URL: <http://www.kidport.com/RefLib/Science/HowPlantsGrow/HowPlantsGrow.htm>

[What is Honey?](#)

Topic: Honey

Bees can travel as far as 55,000 miles, just to collect enough nectar to make one pound of honey! In the United States alone, there are more than 300 different kinds of honey! This Web site, provided by the National Honey Board, is a great place to learn all about honey. Questions that will be answered on this site include: What is Honey? How is it Manufactured? What forms of honey are available? and, What is Pollination?

URL: <http://www.honey.com/consumers/honeyinfo/general.asp>

[Honeybee Hive](#)

Topic: Beehives, Honey, Honeybee

This web site is the on line companion to the PBS program "Nature: Alien Empire - Enter the Hive." Information about the bees and the beehive is presented through text, sound and graphics via Flash Animation technology. Topics covered include pollination, the storage of honey, the development of larvae and the structure of the hive.

URL: <http://www.pbs.org/wnet/nature/alienempire/multimedia/hive.html>

[BugInfo.com](http://www.buginfo.com)

Topic: Insect pests, Insect pests--Control, Pest control, Pests—Control

You will find information on many different bug topics here. Choose a category from the Index: Insects and Spiders around our Homes, Pests in the Landscape and Garden, Birds, Rodents and other Vertebrates, and Pest Control Materials and Methods. "Select a Pest" from a list of over twenty options to learn more about ants, bees, gnats, grubs, lice, moles, mosquitoes, wasps, weasels, and more. There are pests listed here that you probably never even knew existed! Have you ever heard of an insect pest called a "sharpshooter"?

URL: <http://www.buginfo.com/>