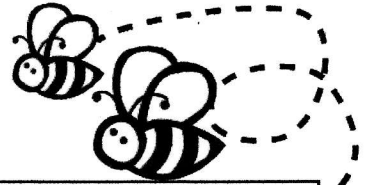


What's all the BUZZZZZZZZ?

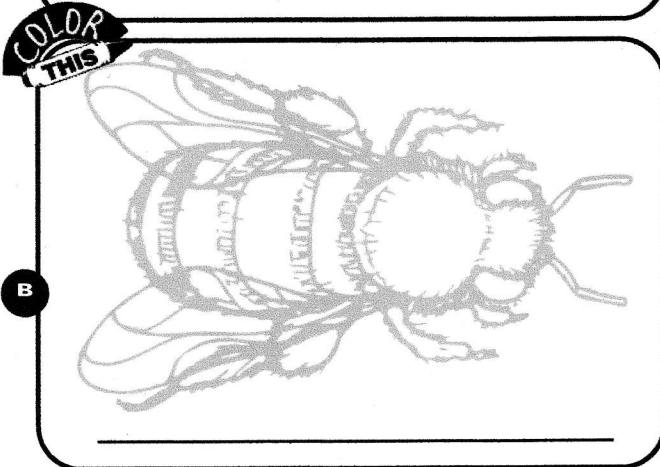
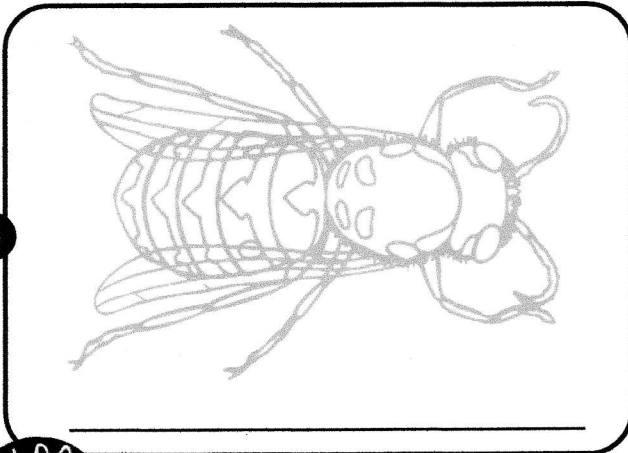
Have you thanked a bee today? After all, 80% of our fruit and vegetable crops are pollinated by bees! They also give us honey to eat and wax for use in candles, polish, make-up and medicine.



How to Tell a Bee from a Yellowjacket.

- Honeybees carry pollen in a basket of stiff hairs on each hind-leg. They are hairy all over, and when they rest, their wings are flat.
- Yellowjackets, a type of wasp, have narrow waists and do not have pollen baskets. When they rest, their wings fold back and look narrower than a bee's wings. Yellowjackets also pollinate plants and eat pests in the garden.

Label and color the honeybee and the yellowjacket.



Bee Math

Solve these math problems to answer the questions:

1. How many bees are in an average hive?
 $10,000 \times \text{number of fingers on 1 hand} = \underline{\hspace{2cm}}$
2. How many miles an hour do bees fly?
 $\text{Number of months in a year} + 3 = \underline{\hspace{2cm}}$
3. How many pounds of honey does a small colony of bees need to store to survive the winter?
 $\text{Number of pennies in a quarter} + 10 = \underline{\hspace{2cm}}$



Prevent Stings!

Honeybees and yellowjackets sting only to defend themselves, NOT to attack. Here are some tips for keeping them from 'bugging' you:

- ★ Don't use scented products like perfume, lotions and soaps that might attract them.
- ★ Don't wear brightly colored clothes.
- ★ Keep food and soda cans covered.
- ★ If bees or yellowjackets come around, hold still and don't frighten them.
- ★ If a bee or yellowjacket lands on you, don't panic and swat at it! Just blow at it gently and it will move.



Did You know?

To make one pound of honey, honeybees will visit 2 million flowers and travel 55,000 miles — a distance equal to 2 trips around the earth!



Simple Ways to Help Bees

Don't panic if you see a bee swarm

Swarming is a way that bees manage the growth and survival of the colony. Bees in a swarm do not have a hive to defend and are usually non-threatening if not disturbed.

Contact a local beekeeper or beekeeping organization if the swarm is accessible and needs to be relocated.

Plant bee friendly plants in your yard

For optimal nutrition, bees need pollen and nectar sources from a variety of plants that bloom at different times throughout the year. Visit these websites for lists of suitable plants:

- > <http://nature.berkeley.edu/urbanbeegardens/>
- > <http://hemelissagarden.com/plants.html>

Reduce or eliminate pesticide use

Even pesticides that do not kill bees directly can be brought back to the hive, harm developing larvae, and be stored indefinitely in wax comb. If you need advice for non-toxic control methods of unwanted insects, contact your local Master Gardeners.



Great Sunflower Project

Be a part of a fun, informal science project.

Watch & record bees on sunflowers then share your data. For more information, go to:

www.greatsunflower.org



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3 Simple Ways to Help Honey Bees and Other Pollinators:

1. Don't panic if you see a swarm. Swarming is a way that bees manage the colony's growth and survival. Bees in a swarm do not have a hive to defend and are usually non-threatening if not disturbed. Rather than contact an exterminator, contact a local beekeeper or beekeeping organization. If the swarm is accessible, you will likely find a beekeeper willing to collect the swarm for little or no cost.
2. Plant bee friendly plants in your yard. For optimal nutrition, bees need pollen and nectar sources from a variety of plants that bloom at different times throughout the year. Lists of suitable plants can be found on the following sites:
 - o <http://nature.berkeley.edu/urbanbeegardens/>
 - o <http://themelissagarden.com/plants.html>
3. Reduce or eliminate pesticide use. If you need advice for non-toxic control methods of unwanted insects, contact your local Master Gardeners.

For more information on bees and beekeeping, visit a meeting or the website of your local bee association

Marin County Beekeeper Association

<http://marincountybeekeepers.org/>

- Meeting dates and locations are posted on site. (Non members are welcome at meetings.) Questions or swarm info can be posted to beekeepers on the site.
- Yearly dues are \$20. Membership includes meetings, use of club honey extracting equipment, and subscription to the club's online discussion and bee news forum.
- Dues can be paid at a meeting or by sending a check (along with your phone # and email address)
c/o Mary Nordquist, 2072 Hatch Rd.
Novato, CA 94947

- **Alameda County Beekeepers**

<http://alamedacountybeekeepers.vox.com/>

- **Mount Diablo Beekeeper Assn. (Contra Costa County)**
www.diablobees.org
- **San Francisco Beekeeper Assn.**
www.sfbee.org
- **Beekeepers Guild of San Mateo**
www.sanmateobee.org/
- **Santa Clara Valley Beekeepers Guild**
www.beeguild.org/
- **Sonoma County Beekeepers Assn.**
www.sonomabees.org

Some Sources for Beekeeping Supplies

Local:

- 1) **Beekind (Sebastopol)** www.beekind.com

Catalog/internet sources:

- 1) **Dadant** www.dadant.com
- 2) **Mann Lake** www.mannlakeltd.com
- 3) **Brushy Mountain Bee Farm**
www.brushymountainbeefarm.com

Africanized Honey Bees

Information and maps on locations in California:

http://www.cdfa.ca.gov/phpps/pdep/target_pest_disease_profiles/ahb_profile.html

Bee Periodicals:

American Bee Journal

<http://www.dadant.com/journal/>

Bee Culture

<http://www.beeculture.com/>

from the U.C. Apiaries

(free online newsletter)

<http://entomology.ucdavis.edu/faculty/mussen/news.cfm>