EUROPEAN HONEY BEE

(Apis mellifera)

EGG





Egg to adult Males have flat bottoms. Drone V-shaped Brood cells in 21 days. large eyes, and no stinger. bottom Worker •• Pollen sac Pollen cell Capped honey for storage. Uncapped honey contains wet nectar. All worker bees are females. One queen They build comb, forage, bee per hive. make honey, guard the hive Nurse bees She lays eggs. feed the brood. and regulate its climate.

OUEEN

Bees drink nectar and store it in their "honey stomach" while foraging. The nectar is broken down into simple sugars by enzyme activity. Back at the hive, open cells are fanned by constant wing activity to evaporate water. The end product is honey.

What makes good habitat? Having easy access to food, water, cover, and space to support growth and survival.

DRONE

BEES NEED POLLEN AND NECTAR

LARVA

PUPA

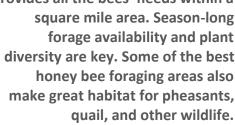
Forager bees, fueled by nectar, bring plant nectar and pollen back the hive for further processing. Protein-rich pollen is deposited in hive cells or in bees' fat bodies. Nectar becomes honey. These energy stores are important for winter survival and hive building. Nurse bees have a pollen-heavy diet to produce a milky substance for young larvae and royal jelly for the queen. Older larvae are fed a fermented mix of pollen and nectar called "bee bread."

FARMS AND FLOWERS PROVIDE BEE HABITAT

WORKER

Honey bees are social insects valued for honey production and pollination services around the world. Most colonies live in managed hives, which are active all year. When spring arrives, bees can range over a mile to find nectar and pollen. Ideal habitat provides all the bees' needs within a

> square mile area. Season-long forage availability and plant diversity are key. Some of the best honey bee foraging areas also make great habitat for pheasants, quail, and other wildlife.





The waggle dance tells other bees the distance and direction to a nectar source.

MILLION IT TAKES A LOT OF FLOWER VISITS TO MAKE ONE POUND OF HONEY.

60K BEES PER HIVE

POPULATION OF A HEALTHY COLONY IN MID-SUMMER.

TOTAL PRODUCTION IN A BEE'S SHORT LIFETIME.

Pheasants Forever is dedicated to the conservation of pheasants, quail and other wildlife through habitat improvements, public awareness, education and land management policies and programs.

TEST YOUR KNOWLEDGE





- 1.) True / False: Honey bees are native to the U.S.
- 2.) True / False: Bees go through complete metamorphosis.
- 3.) True / False: Drones collect nectar for the hive.
- 4.) True / False: Honey bees hibernate in the winter.
- 5.) True / False: Honey bees use movement to communicate.



GOT HABITAT? This busy bee needs flowers to make honey

THE WORLD IS BUZZING WITH BEE BIODIVERSITY

North America is home to over 4,000 native bee species! From metallic green sweat bees to fuzzy yellow bumble bees, they come in a variety of colors, shapes, and sizes. Unlike the hive dwelling honey bee, many native bees are solitary, ground or cavity-nesting, and mostly interested in collecting pollen. Native bees include efficient pollinators that help farmers boost production of alfalfa seed, tomatoes, blueberries, and other crops. Pollen specialists or oligolectic bees collect pollen from just one or a few closely-related plant species. Squash bees, for instance, visit zucchini, squash, and pumpkin flowers. Conservation efforts aim to provide quality habitat with flowers of different colors, shapes, and sizes to meet the diverse needs of honey bees, native bees, and other pollinators.

WE ARE FAMILY, TAXONOMICALLY SPEAKING...









Bumble bees

Carpenter bees

Long-horned bees

Mining bees

Sweat bees

APIDAE

ANDRENIDAE

HALICTIDAE











Yellow-faced bees Plasterer bees

r bees Leaf-cutter bees

ees Mas

Mason bees

Wool-carder bees

COLLETIDAE

MEGACHILIDAE