



WM Barbara Spencer  
WP Joe Spencer



**MAY 2023 WEEKLY READER #3**

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**- VOL.5 ISSUE. 20**

**May Birthdays**

- 24 - Marie Sutton
- 25 - Frances Smerinsky
- 26 - Margaret Schooling
- 29 - Pauline Hornsten
- 30 - Evan Kirkpatrick
- 31 - Betty Kinton



Grab a pencil and piece of paper. How many words can you make using the letters in "Honey Bee"?

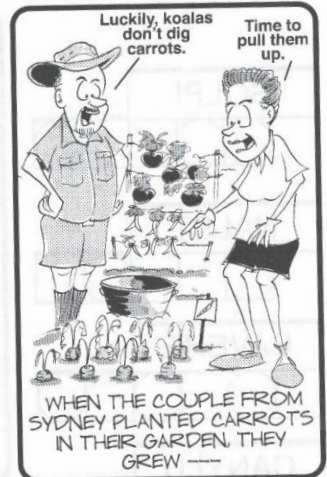
We found 29!



**TMRC Daylight Chapter #1145**  
May 29 - Stated Meeting 1:30 pm

Unscramble these four jumbles, one letter to each square, to form four ordinary words.

BREDY  
 NARKD  
 GUNOLE  
 FOWULE



Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon.

Print answer here

**World Bee Day** is observed annually on May 20. A honey bee (also spelled honeybee) is a flying insect, all native to mainland Afro-Eurasia. After bees spread naturally throughout Africa and Eurasia, humans became responsible for the current distribution of honey bees, introducing multiple subspecies into South America (early 16th century), North America (early 17th century), and Australia (early 19th century).



Honey bees are known for their construction of nests from wax, the large size of their colonies, and surplus production and storage of honey, distinguishing their hives as a prized foraging target of many animals, including honey badgers, bears and human hunter-gatherers. Only eight surviving species of honey bee are recognized.

Colonists brought honey bees from Europe beginning in the 1620s as a source of wax and sugar. Legend has it they were known as "white man's flies" because Native Americans often spotted the insects before the human settlers. With the advent of modern agriculture in the 1930s—when huge farms displaced habitats that housed crop-fertilizing native pollinators—"someone had the idea that you can box up honey bees and move them around the country to pollinate crops. Today, beekeepers contribute to more than \$15 billion of crop production annually. This system has not been sustainable, however. With their hives impacted by pesticides, parasites and diseases such as colony collapse disorder, beekeepers lose more than 40 percent of their colonies each year.

**May:**  
**flower:** Lily of the Valley  
**Birthstone:** emerald  
**Zodiac Signs:** Taurus (April 20 - May 20) - Gemini (May 21 - June 20)

**Honey Bees**

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

**HONEYCOMB**

- DRONE
- FLOWER
- WORKER
- QUEEN
- BUZZ
- HIVE
- BUSY
- COLONY
- NECTAR
- POLLEN
- WAX
- TINY
- FLYING
- EXTRACT

(Bees cont'd)

But the honey bee is hardly at risk of extinction. "There are more honey bees on the planet today than at any time in history. In a 2017 report in Researchers calculated that during three months, honey bees in a typical hive collect the equivalent amount of pollen and nectar as 4 million solitary wild bees. Honey bees are "Brilliant foragers," and can "dominate floral resources and suppress native bee numbers. If you want to help bees, "the most important thing to do is grow a diversity of flowering native plants that bloom throughout all seasons.

North America's native bees, on the other hand, are in trouble—and these insects bear little resemblance to the familiar honey bee. Unlike honey bees, more than 90 percent of our nearly 4,000 native bee species live not with other bees in hives but alone in nests carved into soil, wood or hollow plant stems. Often mistaken for flies, the majority are tiny and do not have queens or produce honey. Without a hive's larvae and food supplies to defend, "native bees almost never sting. "Most people know close to nothing about our continent's native bees."

Other Native bees in peril ....

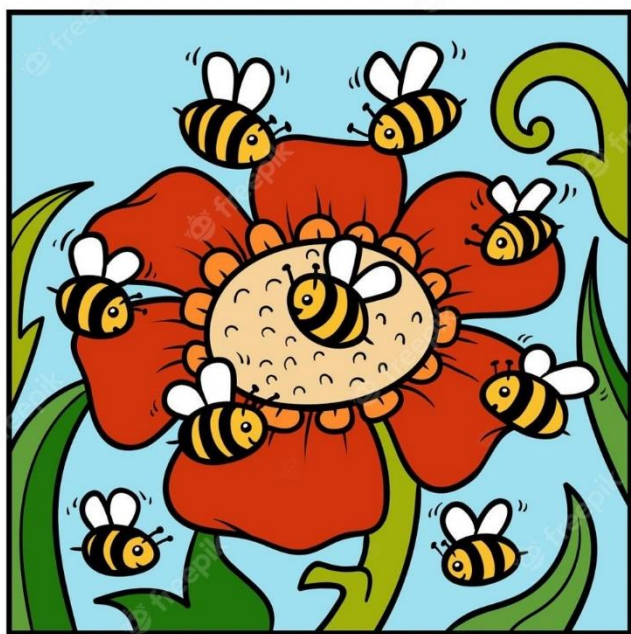
Of particular concern: bumble bees, which are better studied than most natives because they are commercially valuable pollinators of crops such as tomatoes. According to a 2015 analysis, 28 percent of North America's 47 bumble bee species "face some level of extinction risk."

The culprits behind native bee declines include pesticides, disease, habitat loss and climate change. But scientists say competition with honeybees may also play a role.

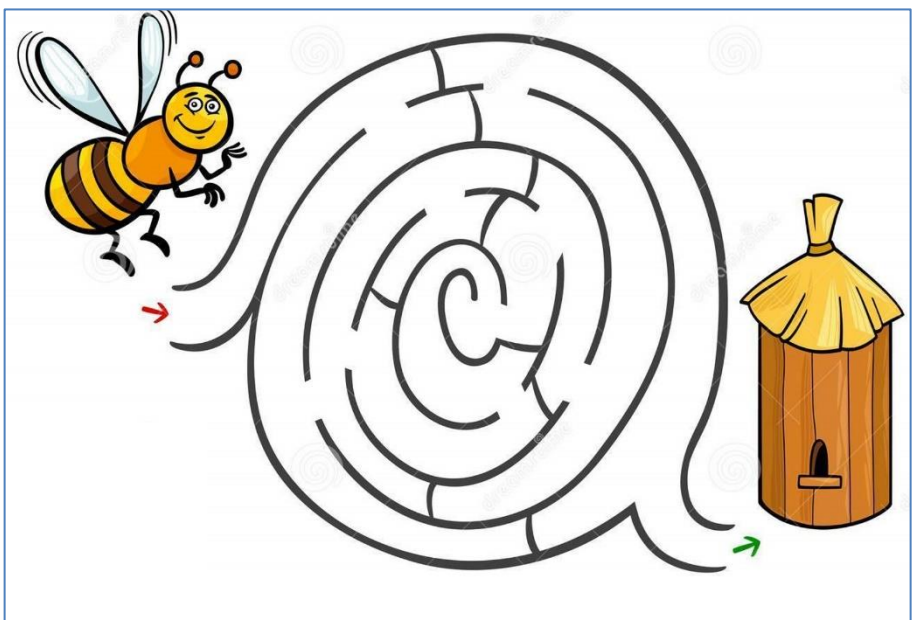
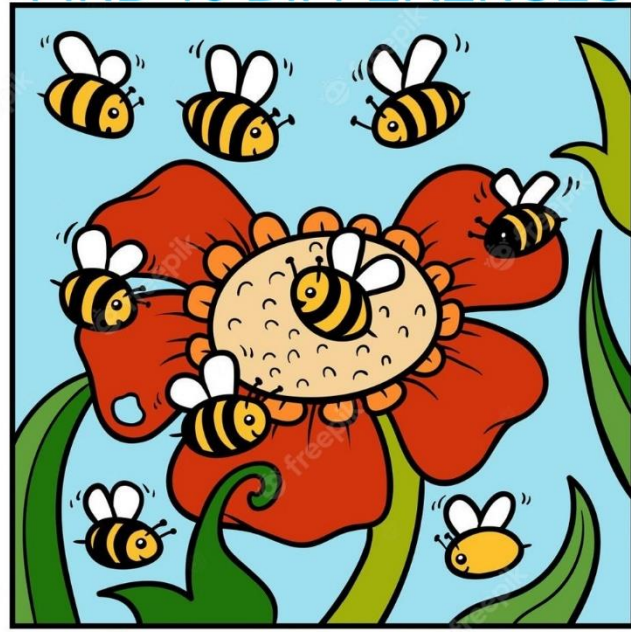


In early spring the bumble bee queen, emerges from hibernation to establish her nest and build a new colony. There are around 250 bumble bee species in the world, with 49 found in the United States. But, fewer and fewer of these bees may appear each spring.

A bumblebee (or bumble bee, bumble-bee, or humble-bee) is any of over 250 species in the genus *Bombus*, one of the bee families. They are found primarily in higher altitudes or latitudes in the Northern Hemisphere, although they are also found in South America. European bumblebees have also been introduced to New Zealand and Tasmania. Female bumblebees can sting repeatedly, but generally ignore humans and other animals.



FIND 10 DIFFERENCES



Most bumblebees are social insects that form colonies with a single queen. The colonies are smaller than those of honeybees, growing to as few as 50 individuals in a nest.

Bumblebees have round bodies covered in soft hair making them appear and feel fuzzy.

Like their relatives the honeybees, bumblebees feed on nectar, using their long hairy tongues to lap up the liquid; the proboscis is folded under the head during flight. Bumblebees gather nectar to add to the stores in the nest, and pollen to feed their young. They forage using color and spatial relationships to identify flowers to feed from. Bumblebees are important agricultural pollinators, so their decline in Europe, North America, and Asia is a cause for concern.

Bumblebees are larger, broader and stouter-bodied than honeybees. Bumblebees have fewer stripes (or none), and usually have part of the body covered in black fur, while honeybees have many stripes including several grey stripes on the abdomen. Sizes are very variable even within species; the largest British species, *B. terrestris*, has queens up to 22 mm (0.9 in) long, males up to 16 mm (0.6 in) long, and workers between 11 and 17 mm (0.4–0.7 in) long. The largest bumblebee species in the world is *B. dahlbomii* of Chile, up to about 40 mm (1.6 in) long, and described as "flying mice".



#### Communication and social learning

Bumblebees do not have ears, and it is not known whether or how well they can hear. However, they are sensitive to the vibrations made by sound travelling through wood or other materials.

Bumblebees do not exhibit the "bee dances" used by honeybees to tell other workers the locations of food sources. Instead, when they return from a successful foraging expedition, they run excitedly around in the nest for several minutes before going out to forage once more. These bees may be offering some form of communication based on the buzzing sounds made by their wings, which may stimulate other bees to start foraging. Another stimulant to foraging activity is the level of food reserves in the colony. Bees monitor the amount of honey in the honeypots, and when little is left or when high-quality food is added, they are more likely to go out to forage.

Bumblebees form colonies of between 50 and 400 individuals, but colonies have been documented as small as ~20 individuals and as large as 1700. These nests are small compared to honeybee hives, which hold about 50,000 bees. Many species nest underground, choosing old rodent burrows or sheltered places, and avoiding places that receive direct sunlight that could result in overheating. Other species make nests above ground, whether in thick grass or in holes in trees. A bumblebee nest is not organized into hexagonal combs like that of a honeybee; the cells are instead clustered together untidily. Nests in temperate regions last only for a single season and do not survive the winter.

Queen and worker bumblebees can sting. Unlike in honeybees, a bumblebee's stinger lacks barbs, so the bee can sting repeatedly without leaving the stinger in the wound and thereby injuring itself. Bumblebee species are not normally aggressive, but may sting in defense of their nest, or if harmed.

The sting is painful to humans, and not medically significant in most cases, although it may trigger an allergic reaction in susceptible individuals.

Bumblebees are important pollinators of both crops and wildflowers. Because bumblebees do not overwinter the entire colony, they do not stockpile honey, and therefore are not useful as honey producers. Bumblebees are increasingly cultured for agricultural use as pollinators, among other reasons because they can pollinate plants such as tomato in greenhouses by buzz pollination whereas other pollinators cannot.

