

Dance Language of Honey Bees:



The Waggle Dance

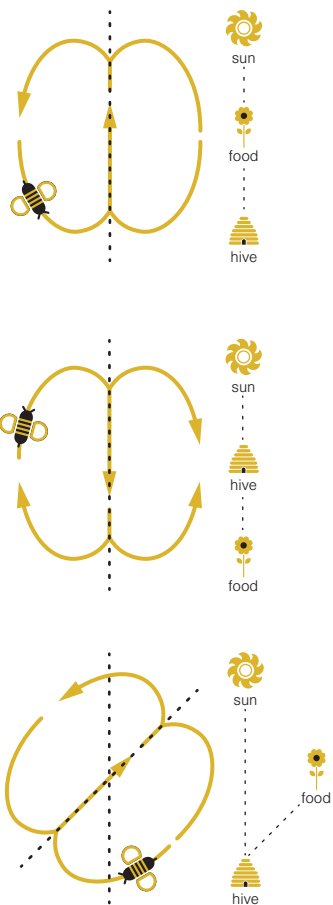


How do bees talk to each other? When a bee finds nectar in flowers, one way it leads its hive mates to this source is through movement. The dance moves and speed depend on the quality, quantity, and location of this newfound source.

While bees will dance in circles and use scent to lead other bees to resources close to the hive, they perform more elaborate figure-eight movements when the food source is farther away. Known as the **Waggle Dance**, this communication pattern was discovered by Austrian entomologist Karl von Frisch, who won a Nobel Prize for his work.

Dance Moves

The diagrams below show movements a bee might make depending on the resource size and location. Notice how each of these considers the location of the sun and the hive.



Waggle Facts

The waggle part of a bee dance communicates two pieces of information to other members of the hive:

1. **Direction from the sun.** Up means face the sun. Down means fly away from the sun. Right or left means fly at that angle toward the sun.
2. **Distance from the hive.** The bee communicates how far the resource is from the hive by how fast or slow it moves, in addition to how long the waggle line is. Faster, shorter dancing lines show that the resource is closer; slower, longer waggles mean farther away.



Do the Dance!

Learn the dance moves to a bee dance that makes a figure eight, with a waggle in the middle.

1. Walk forward and waggle back and forth.
 2. Stop! Turn right.
 3. Circle around to your starting position.
 4. Walk forward and waggle back and forth.
 5. Stop! Turn left.
 6. Circle around to your starting position.
 7. Repeat steps 1–7.
- Now you can waggle!*

Help the Bee Return to the Hive and Communicate

The bee is returning to the hive to perform a waggle dance! Complete its flight home by filling in the hexagons. Which dance would you do to show its path?

