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FUN AND GAMES



# *The Wild World of* **Birding**

Using Ratios



June Kikuchi

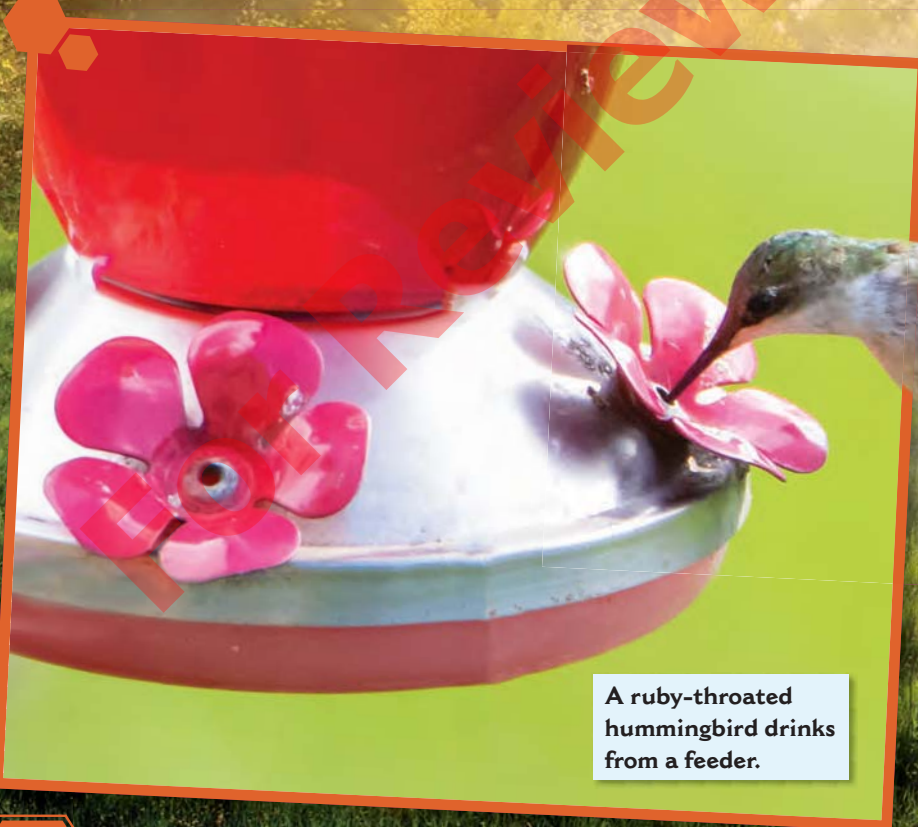
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# Bird as a Verb

What is birding? To *bird* simply means to watch birds in the wild, and the people who bird are called *birders*. Some people are casual birders. They put out hummingbird feeders in the summer to attract those buzzing aerial acrobats. Or they have seed feeders for finches, quail, and sparrows.

Other people are more serious about birding. They keep lists of the birds they have seen and continually add to them. They are the ones who notice when warblers return to North America in the spring. Many birders travel to see as many birds as they can.



A ruby-throated hummingbird drinks from a feeder.

How popular is birding? According to the U.S. Fish and Wildlife Survey, more than 86 million people in the United States watch wildlife. Of this number, over 45 million people watch only birds. That's almost equal to the number of people who live in Spain!

Birding is popular because it's easy to do and anyone can join in the fun! No special equipment is required, although most birders use binoculars and a field guide. In no time at all, beginners will want to do their part to help birds and protect their habitats. That's why birders are also called naturalists, environmentalists, and preservationists.

Do you have a sense of adventure and a love of the outdoors and nature? Then birding may be for you!

## LET'S EXPLORE MATH

About 45,000,000 of the 86,000,000 people who watch wildlife only watch birds.

1. What is the simplified ratio of people who only watch birds to people who watch wildlife?
2. How can you tell whether the percent of wildlife watchers who only watch birds is greater or less than 50%?



pileated woodpecker

# Some Twists and Lists

People can watch birds anywhere—in cities, in the country, by the water, and in the mountains. Birding is a year-round hobby. There are more birds to see in the spring and summer, when many birds return to the United States to **breed**. But fall and winter are exciting times to bird too. During the fall, birders can see large numbers of migrating birds, including large hawks that soar in the air. And there are plenty of hearty **species** that stay throughout cold winters.

Black-capped chickadees stay throughout the winter.



Once people start to notice birds, they likely will want to identify which species they are seeing. That's when **things** get more challenging and more fun. The Cornell Lab of **Ornithology** is part of Cornell University in New York, and its goal is to **study** birds. According to the lab, there are six key characteristics to identifying birds—size, shape, color pattern, behavior, **field marks**, and habitat. If people take note of these six things, they will have a **good** chance of identifying the bird in front of them.

Sounds easy, right? **Wrong!** Male and female birds often look different from **each other**. Males are usually more colorful than females. To **complicate** things further, some males have bright, colorful **plumage** during the **breeding** season and duller, drabber feathering during the **rest** of the year.



Northern cardinal females have brown plumage, while males have red plumage.



Cattle egrets have golden feathers on their heads during breeding season, but they are entirely white when not breeding.



To help identify birds, most birders use a field guide, which can be a book, website, or app. A field guide lists a bird's information accompanied by a photo or illustration to compare colors and markings. A range map shows where the bird is found. And a short description of the bird's behavior and call can help in identification. Apps and websites sometimes include a sound clip of a bird's call, so birders can identify it by ear.



## LET'S EXPLORE MATH

Garrett's hummingbird feeder holds 40 ounces of sugar water. The sugar water recipe calls for 8 ounces of sugar and 32 ounces of water.

| Part | Whole |
|------|-------|
|      | 10    |
| 8    | 40    |
|      | 100   |

1. What percent of the sugar water is sugar? Use the rate table to solve.
2. Write the percent of sugar in the sugar water as a fraction and decimal.
3. What percent of the sugar water is water? Explain your reasoning.
4. Write the percent of water in the sugar water as a fraction and a decimal.



## Start at Home

So, how and where do birders get started? Many people begin at home and identify the birds they see in their backyards or in their neighborhoods.

Birders often **lure** birds to their yards (or porches or balconies) by planting flowers that birds feed on. Hummingbirds like nectar-producing plants, such as bee balm and honeysuckle. Seed-eating cardinals, chickadees, and goldfinches like coneflowers or black-eyed Susans. Many birds also eat berries.

Birders who don't have **green thumbs** can still offer food to birds. They can put out a seed feeder or a hummingbird feeder filled with **sugar water**. Like all animals, birds need water. Whether it is a simple pan of water or an elaborate birdbath, both will provide birds with water for drinking and bathing.

Once you're all set up, it's time to identify birds! Is that raspberry-colored bird a house finch or a purple finch?

purple finch



house finch

