

Bird Migration

Time to Fly South

As the weather turns colder, do you sometimes wish you could just fly away to somewhere warm and sunny? That's exactly what many species of birds do every fall.



You may have noticed waterfowl, such as geese, ducks and cranes, flying overhead in large groups. Did you notice which direction they were going?

Birds that fly south for the winter are called **migratory birds**. This week, The Mini Page talks with an expert at the Smithsonian National Zoological Park to find out more about migrating birds.

Into the tropics

Migrating birds in the Western Hemisphere that **breed**, or have babies, north of the Tropic of Cancer, and spend the winters south of that latitude, are called **neotropical** migratory birds. **Latitudes** are

imaginary lines going around the Earth parallel to the equator.



The whooping crane is one of the species that migrate south for the winter.

About 200 species of birds are included in the neotropical migratory bird category. Most are songbirds, such as warblers and thrushes. Also included are:

- raptors, such as hawks
- shorebirds, such as sandpipers
- waterfowl, such as teal



The Tropic of Cancer is a line 23.5 degrees north of the equator. The Tropic of Capricorn is 23.5 degrees south of the equator. The area in between them is known as the tropics.

Long-distance travel

Some migrating birds fly amazing distances on their seasonal journeys. Those that spend the summer in the south of North America don't have as far to go — maybe only 300 miles or so.

But birds that summer in the northern United States and Canada might travel as far as 10,000 miles! Most of them fly during the night and rest and feed during the day. At night, temperatures are cooler and the air is calmer.

The blackpoll warbler is a real air warrior. This bird spends its summers

in Alaska and Canada. When it's time to move south, the warbler first heads east, toward



Blackpoll warbler

New England and the eastern coast of Canada. Then it flies south over the Atlantic Ocean toward South America. Its migration of up to 2,500 miles includes about 90 hours over water without stops for rest or food!

Packing Their Bags

The Swainson's hawk flies up to 7.500 miles during its migration from the western U.S. and Canada to Brazil and Argentina.



Looking for food

We may think that birds are trying to avoid the cold weather when they migrate. In fact, they're moving to areas with more food.

Many neotropical migratory birds eat insects, which are a great source of the protein they need when raising their young. During the summer in the U.S. and Canada, where the birds breed, there are many insects. But when the weather turns cold, this food source disappears. The birds must then fly south to find the food they need until it's time to return the following spring.

How do they know?

Birds fall into two types of migrants.

Some birds are **obligate migrants**. This means they are genetically programmed to migrate — they are obligated to fly south.

Others are **facultative migrants**. This means they migrate only if the weather makes it hard for them to find food.

For instance, vou mav see Canada geese all

vear long. migrate if necessary,



Canada geese don't They would always migrate. But they do fly in formation along their journey.

but in many areas they find plenty to eat in fields where crops have been harvested or in city parks.

With either type of migrant, food is the main reason for their journey.



After breeding, a ruby-throated hummingbird weighs about the same as one penny. But before it flies south for some 24 hours over the Gulf of Mexico, it doubles its weight.

Bulking up

Before they leave for their winter homes, birds' behavior changes. "They transform into superbirds," an expert said.

This transformation begins with putting on a lot of fat. Fat is used for energy during the long trip. Their pectoral, or chest, muscles become larger. They eat more fruit. Some species will flock together or fly in formation to make the journey easier.

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Ready Resources



The Mini Page provides ideas for websites, books or other resources that will help you learn more about this week's topics.

On the Web:

- bit.lv/1rzhipS
- bit.ly/1BelI57
- ebird.org

At the library:

- "Look Up! Bird-Watching in Your Own Backyard" by Annette LeBlanc Cate
- "How Do Birds Find Their Way?" by Roma Gans
- "Feathered Travelers" by Mary Deinlein

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Divel Mierreti

Words that remind us of migrating birds are hidden in the block below. Some words are hidden backward or diagonally, and some letters are used twice. See if you can find: BIRD, CANCER, CAPRICORN, EQUATOR, FACULTATIVE, FAT, FLOCK, FLY, FOOD, FORMATION, MIGRATION, NEOTROPICAL, OBLIGATE, PENINSULA, REST, SOUTH, STOP, SUMMER, TROPIC, WATERFOWL, WINTER.

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Goodsport's Supersport



Three men have dominated professional tennis for more than a decade. Since 2003, Novak Djokovic, Rafael Nadal and Roger Federer have combined to win 38 Grand Slam singles titles (Australian Open, French Open, Wimbledon or

the U.S. Open). At least one of the three advanced to every Grand Slam final since 2005 — until this year, that is. Kei (Keye) Nishikori of Japan defeated the top-seeded Djokovic (JO-ko-vitch) in the semifinals of the U.S. Open

to become the first player from Asia ever to reach a men's Grand Slam final. Although he ultimately lost in straight sets to Marin Cilic, Kei's performance boosted his world ranking to No. 8 — the first top-10 ranking in his career.

Height: 5-10 Age: 24 Hometown: Shimane, Japan

Kei, who began playing tennis at age 5, moved to Florida with his family when he was 14 to attend a tennis academy. After first playing at the junior level, Kei turned pro at age 17.



You'll need:

• 1 1/2 sticks unsalted butter, softened

• 1 cup packed brown sugar

- 2 eggs • 3/4 cup white sugar
 - 1 teaspoon vanilla extract
 - 2 cups flour
 - 1/2 teaspoon salt
- 1 cup white chocolate chips

• 1 teaspoon baking soda

• 1 cup dark chocolate chips

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What to do:

- 1. Place butter in a large bowl; allow to soften for 2 hours at room temperature.
- 2. After butter is soft, add the two sugars gradually, beating until light and fluffy.
- 3. Add the eggs one at a time, mixing well after each one.
- 4. Add the vanilla extract and mix well.
- 5. In a separate bowl, stir together the flour, salt and baking soda.
- 6. Gradually add flour mixture to butter mixture, stirring and blending each time.
- 7. Stir in dark chocolate and white chocolate chips.
- 8. Drop by teaspoonfuls on a nonstick cookie sheet. Bake at 300 degrees for 15 to 20 minutes until cookies are light brown.

You will need an adult's help with this recipe.

Meet Jim Caviezel



Jim Caviezel (ka-VEE-zel) stars as coach Bob Ladouceur in the movie "When the Game Stands Tall." a true story about a high school football team. He has appeared in other movies, including "Pay It Forward" and "Frequency." He has also acted in many TV shows, such as "Murder She Wrote" and "The Wonder Years." Jim, 46, grew up in Mount Vernon,

Washington. He was a basketball star in high school. In college he suffered a foot injury and had to stop playing basketball. He switched his love to acting and began appearing in plays in Seattle. from The Mini Page © 2014 Universal Uclic

TM Mighty

Funny's Mini Jokes

All the following jokes have something in common. Can you guess the common theme or category?

Bailey: Why do birds fly south every year? Bradlev: It's too far to walk!



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Bess: What has eight legs and can fly long distances? **Beth:** Four swallows!



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Along the Way

As birds migrate, they stop along the way to eat and rest. Older birds remember where they've stopped before and may go back. Some species of young birds may have to find the way during their first migration on their own. Others may follow adult birds.

Dangers

Birds may be **vulnerable**, or open to harm, during their migration. For example, after a whole night of flying, a tired bird may alight in a backyard, only to be spotted by a house cat. Some cats hunt and kill birds.

In large cities, tall lighted buildings can confuse birds flying at night. They can fly into the buildings, or the lights can make them disoriented so that they keeping flying until they're exhausted and fall to the ground.

Birds also can fly into power lines or, when flying low, they can collide with moving cars. Even wind turbines can be a hazard for migrating birds.

Where can we see them?

Birds are everywhere! Pay attention to the skies and to birds' behavior, and you may be able to tell that they're migrating.

You may live close to one or more natural stopover points — sort of like rest stops for birds.

Look through your newspaper for articles about migrating birds stopping over near you.



Hawk Mountain in Pennsylvania is a favorite stopover spot for raptors such as ospreys (above), vultures, eagles and hawks.

Favorite spots to stop

Along both coasts, birds typically stop at **peninsulas**, or pieces of land sticking out into the ocean. Some migrants also follow mountain chains, such as the Appalachian Mountains. Bald eagles and snow geese gather at Squaw Creek National Wildlife Refuge in northern

Missouri. On the West Coast, birds congregate at Monterey Bay, California.



Wilson's phalarope

There, the autumn tides stir up many helpful nutrients in the water.

The Great Salt Lake in Utah draws many shorebirds and waterfowl as they migrate south. About 500,000 Wilson's phalaropes stop there.

Even city parks can be attractive for birds resting along the way.

Watch out for birds

How can you observe birds migrating for the winter?

• Contact local birding clubs. Birdwatchers enjoy sharing information about species and behavior, especially with younger bird lovers.



Are you a bird-watcher? Share your hobby with family and friends.

• Do you have a pen pal or relative in a state or country south of you? Mention birds you're seeing in your area. Your pen pal may see the same birds after they've flown south.

• Record your bird sightings on ebird.org. This website, run by the Cornell Lab of Ornithology and Audubon, allows birders to keep track of the species they've seen and follow other watchers' observations.

The Mini Page thanks Mary Deinlein, bird conservation/education specialist, Migratory Bird Center, Smithsonian Conservation Biology Institute in Washington, D.C., for help with this issue.

Next week, The Mini Page learns all about our favorite October fruit: pumpkins!

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