Each fall millions of birds make long journeys from summer nesting grounds to lower-latitude wintering grounds. The birds that survive migrate back again each spring. Although some birds of prey remain in one area year-round, most North American hawks, falcons, eagles, ospreys, and harriers migrate when the seasons change.

**Why Do Birds of Prey Migrate?**

When the days get shorter and temperatures get cooler, many of the animals eaten by raptors hibernate, migrate, burrow underground, or die. Raptors move to find enough food to eat during the winter. Raptors return north every spring when small mammals, amphibians, reptiles, insects, and birds reappear and can be hunted as food for their young.

**The Magic of Migration**

When migrating, birds of prey tend to follow certain routes, or “flyways.” Flyways often follow geographic features, such as mountain chains, rivers, or coastlines. These features may aid the raptors in navigation. The raptors that fly past New York City are following the Appalachian flyway. These birds come from the northeastern United States and eastern Canada. Broad-winged hawks, ospreys, and peregrine falcons spend their winters in Central and South America. Red-tailed hawks and bald eagles generally spend their winters in the southern United States.

Special wind currents also provide opportunities for soaring, which help the birds power their flight. Updrafts are created when the brisk autumn winds hit ridges and are deflected upward. These winds provide a cushion of air on which the birds soar. Taking advantage of these updrafts, hawks flap their wings less and save energy on their long journeys.

Another condition hawks take advantage of is a thermal. The air over clearings, plowed fields, and south-facing mountain slopes is heated by the sun more rapidly than the air over heavily wooded areas. The warmed air rises, and a thermal is created. Raptors seek this rising air, soaring higher and higher until they glide off in the direction of their migration. Again they save energy by not having to flap their wings.

**Osprey**
- Large, eagle-sized raptor
- Long, slender wings
- Often holds wings in a crooked “M” shape
Hawk Mountain Sanctuary was established in 1934 as the world’s first sanctuary for raptors. Each autumn, 16 species of raptors follow ridges of the central Appalachian Mountains as they fly south. This makes Hawk Mountain a great place to see migrating raptors.

People used to believe that killing predators was a good thing. They thought that if they shot raptors there would be more songbirds, game animals, and farm animals. Since then, we have learned that predators are important parts of our ecosystems.

Rosalie Edge, a conservationist from New York, decided to stop the people who were shooting migrating raptors from high points along the Kittatinny Ridge in Pennsylvania. She bought the land that is now Hawk Mountain Sanctuary. She hired Maurice Broun to take care of the land and to stop the shooting. In late September Maurice went to the North Lookout and began counting migrating raptors. Soon people started hunting the skies with binoculars instead of guns. Today Hawk Mountain continues to count, study, and teach people about raptors. Each year more than 70,000 visitors from around the world come to the Sanctuary to watch migrating raptors.

**American Kestrel**
- Small and colorful
- Double mustache marks on side of head
- Long, sickle-shaped wings
- Fluttery in flight

**Peregrine Falcon**
- Dark mustache mark on side of head
- Long, tapered wings
- Flies with steady, fluid wingbeats

**Red-tailed Hawk**
- Long, broad wings
- Light underwings with dark patagial markings and wrist commas
- Many have a dark belly band

**Sharp-shinned Hawk**
- Square-tipped tail
- Head does not stick out much since leading edge of the wings usually pushes forward of elbow

To learn more about Hawk Mountain Sanctuary, raptors, and raptor migration go to www.hawkmountain.org.
What Makes Hawks So Special?

My name is Alysyn Reinhardt and I am 11 years old. I love nature. Nature reminds me of the colors green and blue (my favorite colors). I thought that writing an article on hawks would be a lot of fun and I was right.

I like hawks because there are so many different kinds. Many people think that hawks only live in deserts, but there are some in New York City too!

Colors of hawks vary. They can be gray, brown, red, and in some instances they are black. Their wing spans range from 43 to 56 inches! That's bigger than me!

I love the way hawks fly. When they fly, they soar like a kite. It enables them to drop slowly to pick up their prey. They have great vision to see their prey with. Their vision is better then humans!

Smaller hawks mostly eat beetles or worms. Bigger hawks mostly eat rodents and other birds. Sometimes once a hawk eats its meal, its crop bulges. A crop is a part of the hawk's body between its mouth and stomach. If their crop gets bigger that means they've stored food that will gradually be released into the stomach. Sometimes they won't have to eat for two days after that happens!

Hawks are strong creatures, which can live for about 20 years. Some of their young don't get to live that long, though, because of pollution or predators. That's why I like hawks and it's why I try not to litter! –AR

Our Thanks To:

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Alysyn Reinhardt entered Sacred Heart School in Queens in September 2005. She believes that you should always follow your dreams.

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Look It Up

- Alysyn researched her article on the website http://www.arcytech.org/java/population/facts_hawks.html.

Go With A Grownup

- If you know someone with a car you can make a weekend trip to Hawk Mountain Sanctuary. The fall migration happens at the same time as fall foliage season, so you’ll probably need a motel reservation! HMS is in Kempton, Pennsylvania; 610-756-6961.
- In New York City you can see the fall hawk migration from high points in Van Cortlandt Park (The Bronx), Inwood Hill Park (Manhattan) and from the Belvedere in Central Park. For more exact information call 311 and ask for the Urban Park Rangers or check the NYC website at www.nyc.gov/parks.
- Floyd Bennett Field (Brooklyn) in Gateway National Recreation Area has open fields where you can see hawks. Call 718-338-3799 or visit the National Park Service website at www.nps.gov/gate.