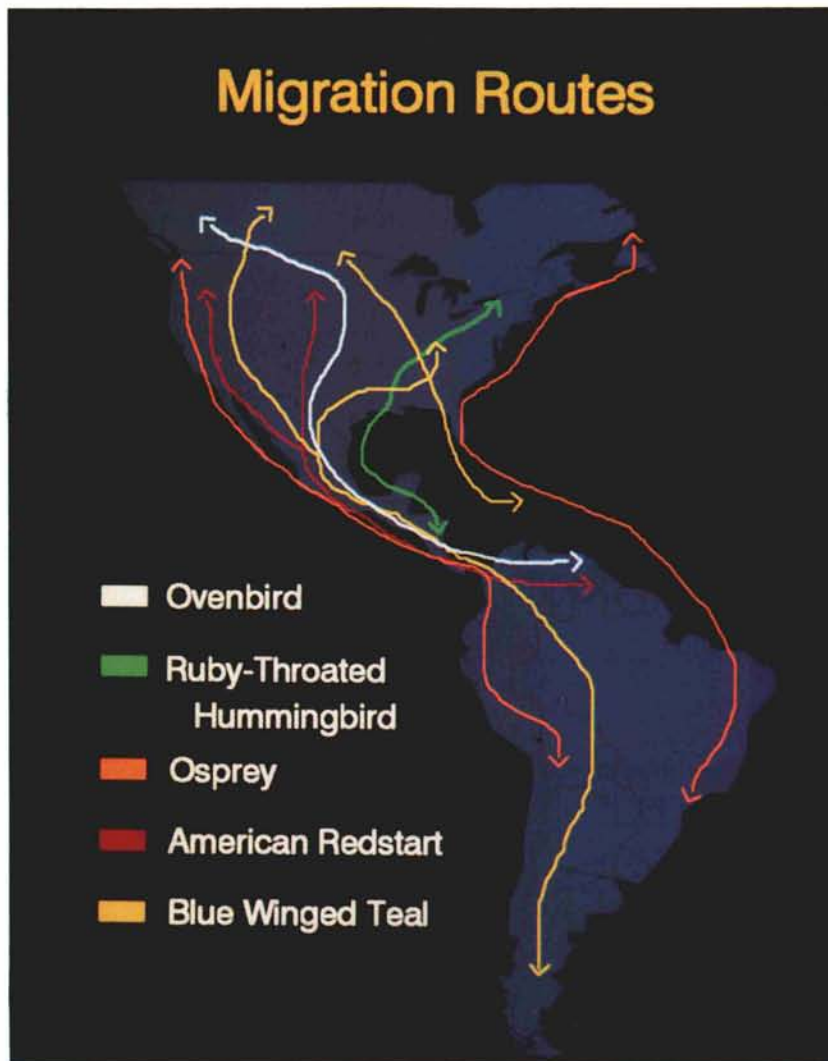


MIGRATION: Where Have All The Birds Gone?

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Migration routes vary between species. These complex and rigorous journeys can be more than 15,000 miles long.

WINTER IS A TIME when many golfers pack up and migrate south in search of better playing conditions, but they are not the only ones. Another two-legged species also leaves cold northern climates each year seeking a milder winter season.

Where do the birds go during the winter? Each species has special needs that must be met for its wintering grounds, so birds have flown to many different southern locations. A large population of birds takes flight each year for a grueling journey from the

northern United States to wintering grounds south of the border. This group of long-distance travelers, the neotropical migrants, represents approximately one quarter of all United States birds. Neotropical migrants include many of our songbirds, some of which migrate more than 15,000 miles. It is unimaginable that these brightly colored creatures, full of song and only a few grams in weight, are able to make annual trips of great distance, complexity, and rigor, only to return north each year, often to the same tree or bush. Unfortunately, many birds return to

their breeding grounds to find that the habitat has been altered or completely eliminated.

Habitat is the single most important need of migrating birds. The energy required for migration is substantial. Without suitable habitat in which to make stopovers, birds cannot forage, rest, and avoid predation.

For many years, protection efforts have focused on protecting breeding and nesting habitat, but this is not enough. This strategy helps with only one third of the birds' needs. Habitat in the tropics, where northern birds spend the winter, represents an important need for another third of the birds' life. Habitat protection efforts also have been focused in this area. What is left and what has been largely overlooked in our protection strategy is the importance of habitat *during* migration.

Golf courses can play a vital role in protecting and enhancing habitat for migrating birds. Golf courses located within migration route areas have the greatest opportunity to provide life-sustaining food, cover, and rest for migrating bird species.

Although migration is often thought of as an autumn or spring event, migration spans the calendar. For example, an observer in the northern part of the United States may note an almost unbroken southward procession of birds from midsummer to early winter. Some fall migrants are still traveling south while early spring migrants can be observed returning north through the same locality. For many species, it is believed that the migratory urge is triggered by day-length.

Shore birds and wading birds are tireless fliers with rapid wing beats and take migration pathways over the Atlantic Ocean and the Gulf of Mexico en route to South America. Most land birds and birds of prey migrate over land, though a few exceptions, like the black pole warbler, take to the sea. The tiny ruby-throated hummingbird crosses the Gulf of Mexico at 50 mph, en route to Central America, flying at night and for 10-hour stretches. Traditional flyways (Atlantic, Mississippi, Central, and Pacific) used by waterfowl generally are not used by other groups of birds.

Migration involves complex, crisscrossing migration routes, varying from species to species. Be on the lookout throughout the calendar year to identify species which make their migration journey in your area. Contact your local Audubon Society or the Audubon Society of New York State to obtain more information about habitat requirements for the bird species you observe on the golf course. By following through with some habitat enhancement work on your course, you can help these feathered travelers survive their grueling migration journey.