

Black-throated
Blue Warbler



BIRDS IN FLIGHT

The seasonal, repetitive movements of animals are both spectacular and mysterious. Humpback whales migrate in pods from Alaska to Hawaii and back, caribou follow annual paths to and from the Arctic Ocean, and monarch butterflies travel thousands of miles toward Mexico, California and Florida. Perhaps the most noticed, diverse and spectacular movements are those of migrating birds, who move from seasonally food-poor (parched or frozen) areas to far away but food-rich areas to survive. Their migration routes can be relatively short – even up or down a mountain – or they can require even the smallest of birds to fly thousands of miles.

Most bird species regularly seen in Michigan are migratory, and probably half of our songbird species migrate to the tropics each winter. The species that breed in Michigan do not all winter in the same place; winter destinations range from Mexico and the Bahamas through the Caribbean Islands, Central America and even south to Argentina.

Migration is no trivial matter. The journey can be long: a Swainson's Thrush, hatched on the northern shore of Lake Huron and grown over a summer to its adult weight of just one ounce, may fly the distance to Argentina, alone, in its first fall migration. The even smaller Black-throated Blue Warbler finds its way to the Greater Antilles or Bahamas.

Most migrants seem to be programmed to fly a certain distance in a certain direction and to leave their summer home by using day length to set their departure. An instinctive set of directions defines the "road map" for the songbird.

Twice each year of its life, the songbird prepares for such a journey. It goes on a feeding binge, accumulating fat and increasing its weight by as much as half. This fat will be burned during long, nocturnal migratory flights.

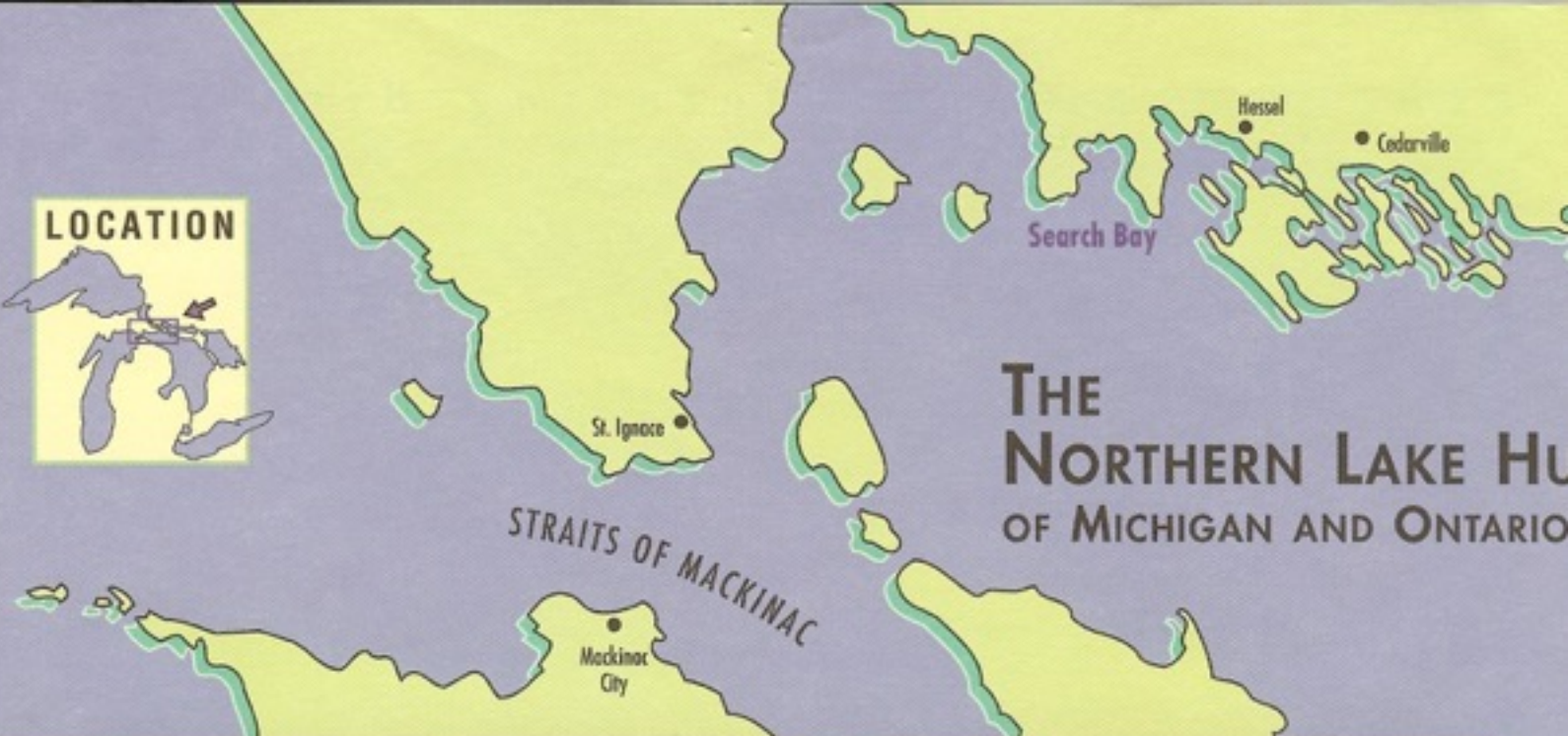
Leaving shortly after sunset each day, our young thrush or warbler navigates using stars, magnetic fields and other cues. Some nights the sky may be full of migrants whose call notes – single, subtle chirps – punctuate the silence. The birds will stop each day to rest and binge, then continue the migration.

Finally, our thrush or warbler reaches the tropics for the winter. As in the summers up north, many migrants return to the same site each year, while others wander more widely. At the end of migration, then, many of the birds must learn or learn again to adapt to a new environment and its new range of foods, predators, competitors and even new societies of birds.

It's no wonder migration is a stressful time for those birds who undertake the journey.



LOCATION



THE NORTHERN LAKE HURON OF MICHIGAN AND ONTARIO

THE GREAT LAKES AND MIGRATORY BIRDS

The Great Lakes present formidable barriers to migrating landbirds. Winds and weather can send the birds into the water. Ships on the lakes may host the lucky migrants that land on board to wait out a storm.

Migrating birds will "pile up" on a shoreline, feeding, resting, and waiting for weather and wind conditions

favorable to a crossing. Incredible numbers of birds can be seen on Great Lakes shorelines at migration times, just as at

other large-water barriers such as the Atlantic Ocean or Gulf of Mexico. Birders from around the world visit the Great Lakes shorelines to see the songbird migration spectacle, which also includes spectacular raptor and waterbird flights. Point Pelee and Long Point, Ontario, Whitefish Point, Michigan, Hawk Ridge, Minnesota, and Cedar Grove, Wisconsin



are only a few spots where birders and migrants meet in large numbers at barriers' edges.

The Great Lakes provide safe haven to some migrating waterbirds, like the Common Loon, and Red-necked Grebe; if these birds alight due to weather conditions, they can only become airborne again from the water. Flying over water provides them the security of being able to start up again.



Yet, for songbirds, the same Great Lakes are a hostile barrier. Migrating songbirds truly seek only to get to the other side; flying over vast water provides them no security or benefit. Once across, the shoreline's combination of immediate shelter and available food is welcome and essential. A shoreline like that of northern Lake Huron provides biologically diverse resting places – beaches, marshes and forests – for a wide variety of species.

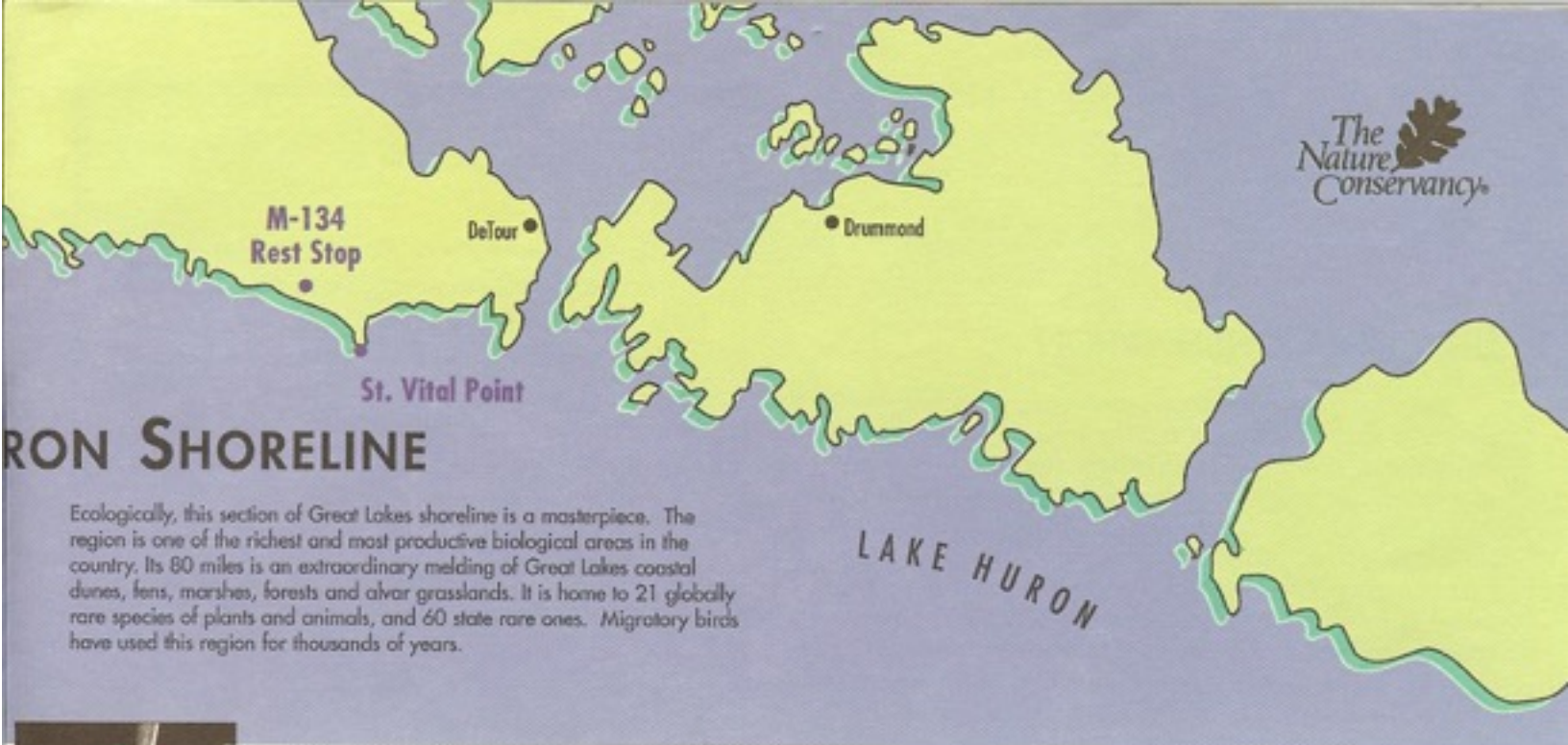
The Great Lakes, and not just the shoreline, provide a key resource to migrating songbirds: food. During spring, some migrants that feed only on insects arrive before leaves have opened. Caterpillars, a favorite food of many migrating warblers, have yet to appear; they need leaves. But, emerging from the Great Lakes, at least along the northern shore of Lake

TRANS-CONTINENTAL

BIRD MIGRATION ROUTES

(GENERALIZED)





HURON SHORELINE

Ecologically, this section of Great Lakes shoreline is a masterpiece. The region is one of the richest and most productive biological areas in the country. Its 80 miles is an extraordinary melding of Great Lakes coastal dunes, fens, marshes, forests and alvar grasslands. It is home to 21 globally rare species of plants and animals, and 60 state rare ones. Migratory birds have used this region for thousands of years.



Huron, are hordes of small non-biting flies called midges. The water-bred midges congregate in huge numbers on trees and shrubs near the coastline. Tired warblers, upon landing, are treated to a feast. Here they feed intensively and fatten up. The midges off the lake are vital to the warblers because there is

little other food available.

It's different in autumn. Peak southward migration begins when the leaves are still out; caterpillars and other large insects feed on the leaves where warblers and other sharp-eyed migrants devour them. The tiny, less filling midges are largely ignored. Thus, in fall the migrating birds stop over for a "fat insect" feast in leaf-laden trees and are not so concentrated along the midge-rich coastline as in spring.



Just a few of the tropical-migratory songbirds which make use of the northern Lake Huron shoreline: (from far left to right) American Redstart, Magnolia Warbler, Scarlet Tanager, Solitary Vireo, and Northern Parula Warbler. (All photos by Betty Cottrille.)



BIRD WATCHING SITES NORTHERN LAKE HURON SHORELINE

Some of the best places to watch migrating birds in the Great Lakes area are along shorelines. And the northern Lake Huron shoreline is one of several excellent spots. Springtime is particularly rich in the sounds and sights of migrating bird life. Early birds arrive in the Lower Peninsula as early as February, and continue moving northward through the state until early or mid-June. Fall migration begins in July, and finally winds down in November. Best bets for birding along the Northern Lake Huron Shoreline include:

Search Bay

At the end of Search Bay Road (USFS Road #3436) about 7 miles east of I-75 off of M-134. This part of Hiawatha National Forest is great for songbirds in April and May. Look for Sandhill Cranes or kettles of raptors in September; small flocks of warblers, vireos, chickadees and nuthatches move quickly through the balsam fir, white cedar and white birch.

St. Vital Point

Large flocks of warblers can be seen in the parking lot near the DeTour campground in May, late August and September. The Cranberry Lake flooding area immediately to the north is excellent for seeing a variety of warblers, thrushes, and kinglets. Look for a scattering of shorebirds, especially yellowlegs, in both spring or fall near mudflats. Ducks may be common at times. This area is part of Lake Superior State Forest.

M-134 Rest Stop near M-48

Operated by the Michigan Department of Transportation, this rest stop provides a perfect shoreline view to spot mixed flocks of warblers, vireos and flycatchers. Gulls and cormorants are common offshore. Raptors steadily stream westward during September.

Remember: Walking in such a way so you don't scare birds is the right idea. Not moving your body is perhaps the best way to see birds as close as they'll let you. Birds notice movement extremely well, so by limiting your arm, leg, or body motions the chances are better that birds will feel more comfortable near you. Also, by not scaring birds you help assure others may see them, and so the birds will continue to return for years to come.

BIRD LIFE CONSERVATION

The conservation lesson taught by migration patterns is clear. The stretches of coast that we treasure for their views and inspiration are important biological assets. As stopover sites for migratory landbirds, they provide the first shelter and also the spring food supply. The birds' early food supply is also an important food source, in larvae stage underwater, to Lake Huron's yellow perch, an important sports fish. The tiny midge is an unsuspected, important ecological connection between land and water, and helps sharpen our conservation focus for the birds who summer here and winter in South America, for fish protection, and protection of other globally rare species and plant communities clustered along our beautiful and ecologically complex Great Lakes coastlines.



Swainson's Thrush

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The
Nature
Conservancy

SONGBIRD STUDIES

During the summers of '93 and '94, Nature Conservancy scientists undertook a study unlike any other. Their central question was: how important is the northern Lake Huron shoreline's ecosystem to migrating and breeding birds, and which areas are the most important? While considerable research has been done on breeding and wintering habitat, little research has focused on songbird migration stopover sites in the Great Lakes.

The results were eye-opening. In springtime, northbound birds crossing Lake Huron refueled themselves near the Great Lake's shores. The reason: nearshore waters yield masses of flying insects — midges, mostly — providing a movable feast for the birds. Because the shallows warmed quickly, insects hatched and became the food to "refuel" the birds.

Scientists had predicted otherwise. They anticipated birds would search for leafed-out trees inland, and fewer birds would be along the shoreline where trees are slower to leaf-out.

The Conservancy's study showed that if we wish to help the birds during migration, we must protect the shoreline. The northern Lake Huron study is but one step in learning about the bird life of the Great Lakes.

Science teaches us that the webs of life are complex and deeply inter-related. The Nature Conservancy and its partners in this study — Central Michigan University, the Michigan DNR, the U.S. Forest Service, the National Fish and Wildlife Foundation, and the National Biological Service — all played significant roles in this project and are committed to understanding and preserving these complex interrelationships for today and tomorrow.



MDG