lifeliving

www.peterboroughexaminer.com

Editor **JIM HENDRY** life@peterboroughexaminer.com 743-4196 ext. 242

Fast flyers, many monarchs

A grab bag of facts and observations from the natural world

This week, I'd like to propose a kind of "grab bag" of short news articles on nature and the environment that I hope readers will find interesting.

A WINDOW INTO SONGBIRD MIGRATION

A York University researcher, Bridget Stutchbury, has tracked the migration of 14 wood thrushes and 20 purple martins by outfitting them with tiny, dime-sized geolocator "backpacks" – a world first. The geolocators have revealed that the birds fly south three times faster than expected.

Drew Monkman
OUR CHANGING SEASONS

This is the first time songbirds have been tracked day by day for their entire migratory trip. When the birds were recaptured after their round-trip migration and the geolocators removed, the data indicated they could fly up to 500 km per day. Previous studies estimated only 150 km of flight per day. It also showed that the birds' overall migration rate was two to six times faster in spring than in fall. A purple martin could therefore leave the Amazon Basin of Brazil on April 12 and be back to Central Ontario before the end of the month. The researchers were amazed that the birds could return so quickly.

"When the birds were recaptured after their round-trip migration and the geolocators removed, the data indicated they could fly up to 500 km per day. Previous studies estimated only 150 km of flight per day."

Researchers also found that prolonged stopovers were common during fall migration. For example, the wood thrushes spent one to two weeks in the southeastern United States in late October, before crossing the Gulf of Mexico. The study also revealed that wood thrushes from a single breeding population – in this case, birds from Pennsylvania - did not scatter over their tropical wintering grounds but wintered in a narrow band in eastern Honduras and Nicaragua.

Being able to track birds to their wintering grounds will be very useful for conservation programs, especially in terms of predicting the impact on a given species by tropical habitat loss and climate change. Songbirds throughout the world have been declining steadily for decades. Wood thrushes, still a fairly common species in the Kawarthas, have declined by 30% since the 1966. As Ms. Stutchbury said, "Until now, our hands have been tied in many ways, because we didn't know where the birds were going. They would just disappear and then come back in the spring. It's wonderful to now have a window into their journey."

PLENTIFUL SISKINS

If you have been feeding the birds this winter, you have almost certainly noticed the abundance of pine siskins. In fact, siskins figured in the top ten most common birds recorded across North America in the Great Backyard Bird Count held in February. More than a quarter of a million siskins were recorded at feeders throughout Canada and the United States. At Ontario feeders, they were the second most abundant bird, surpassed only by common redpolls. Redpolls, however, did not show up in large numbers locally this winter.

KARL EGRESSY photos

The Monarch butterfly (top photo) appears to have made a comeback during the winter at its sanctuary in the mountains of Mexico. Migration numbers locally were low last fall but larger numbers were reported in Mexico and the winter die-off rate was low. Large numbers of pine siskins (above) at birdfeeders this winter are attributed to scarcity of cones on spruce trees in the boreal forest, which caused siskins to look south for food.

The massive arrival of pine siskins was actually predicted last fall when biologists noted the scarcity of cones on the spruce trees of the boreal forest but the relative abundance of cones further south. The preferred wild food of siskins is conifer seeds, particularly those of spruce. Given the lack of food in the boreal forest where the siskins breed, the birds had to choose between starving our heading southward. If you want to attract pine siskins to your feeder, be sure to put out niger seed or a special finch mix containing niger seed. The huge spruce cone crop has also attracted unprecedented numbers of white-winged crossbills to the Kawarthas this winter, although most now appear to have moved on. Crossbills usually do not come to feeders.

A GOOD WINTER FOR MONARCHS

Last fall, people across eastern North America reported very low monarch butterfly numbers during fall migration. Monarchs were scarce during the summer breeding season, too. That was certainly the case here in the Kawarthas. However, this year's overwintering population in the mountains west of Mexico City was not as small as predicted. In fact, it was slightly larger than last year's. The area covered by butterflies was 4.61 hectares last year and 5.06 hectares this year. Monarchs spend the winter in a handful of tiny patches of Oyamel fir forest, most only several acres in size, high up in the mountains west of Mexico City. They literally blanket the trees by the millions. Here they find everything they need for winter survival: cool, but not freezing temperatures, moisture in the form of fog and clouds, and thick forests to protect them from damaging wind and storms. The monarchs are dormant for most of the winter but will take short flights on warm days. The condition of the monarchs at the overwintering colonies was exceptionally good this winter, too. The number of tattered and worn monarchs relative to those in excellent to near perfect condition was small. According to at least one report I read, overwintering mortality appears to have been minimal.

These overwintering colonies have now broken up and the monarchs are heading north. Monarchs were seen in Austin, Texas on March 6th which is right on schedule for the earliest monarchs to be reported inland from the coast in Texas. It is also consistent with the earliest departures from the colonies which usually occur sometime in the last week of February. These monarchs will lay eggs on milkweed as they move northward. Before they die, they will have once again recolonized the southern U.S. with a new generation of these beautiful butterflies. It is these individuals, the offspring of those who journeyed south in the fall, that arrive back in the Kawarthas in early June.

COLD WINTER DOESN'T MEAN NO CLIMATE CHANGE

January and early February may have seemed very cold but global land and ocean temperatures were higher than any year in the 20th century, writes Chris Goodall from Carbon Commentary. The U.S. Government's National Climatic Data Center (NCDC) has just released its temperature figures for January. The month was unusually cold in the UK and in parts of the United States and Canada. Understandably, some people have hypothesized that the winter of 2008/2009 was particularly cold globally. Counter-evidence, such as the record-breaking highs in the state of Victoria in Australia was ignored appears to have been ignored.

However, the NCDC figures suggest that January was actually the 7th warmest on record. In other words, January 2009 continued a run of several decades in which January temperatures were higher than the long-run global average. Although January seemed very cold to North Americans and many Europeans, for the world as a whole the land and ocean temperature was higher than any year in the entire twentieth century, although some years in the 1940s came close. Part of the problem may be that we are simply starting to lose touch with what winters used to be like. These high global temperatures occurred during a year in which La Niña conditions (cool water) dominated in the Pacific Ocean. Had this been an El Niño year when Pacific Ocean temperatures are higher, we would have likely had even warmer records.

PROTECTION AGAINST WINDOW KILLS

An eighth grader in Ottawa, Charlie Sobcov, may have found a more effective way of preventing window collisions by birds. He has invented a plastic, falcon-shaped decal that is all but invisible to humans but totally visible to birds. The colour is ultraviolet, beyond the range of colours visible to the human eye. The decal can therefore be placed right in the middle of a window pane without obstructing anyone's view. However, for the birds, it's as if there's a big stop sign staring them in the face. When Sobcov learned that bird populations are decreasing around the world and that part of the reason is window collisions, he decided he had to do something. Approximately 500 million birds a year in Mexico, the U.S. and Canada are dying as a result of crashing into windows. The windows of skyscrapers such as those of downtown Toronto are particularly dangerous.

So far, Sobcov's initial tests with the decal are looking promising. He now has 40 volunteers who are doing further window testing. He says he may consider marketing his new invention if it continues to prove effective.

Drew Monkman is a Peterborough teacher and author of Nature's Year in the Kawarthas. He can be reached at dmonkman1@cogeco.ca. Visit his website and see past columns at www.drewmonkman.com.

Karl Egressy is a Guelph nature photographer. To see more of his work and to contact him, go to www.kegressy.com.