



# The Auspice

Pelee Island Bird Observatory

Species at Risk Edition

Fall 2010

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And a sincere thank-you to our many individual donors, to our friends and supporters, to our partners and PIBO's hard-working volunteers!!

## Species at Risk in Schools by Simon Valdez, PIBO SAR Intern



In Canada there are a total of 534 Species at Risk, and 30% of these (163) occur in the Carolinian forest. This forest type is restricted to southernmost Ontario, covering less than 1% of Canada's total surface.

Why are there so many Species at Risk in such a small area?

Thanks to warm weather and a long growing season, Essex County has an extremely high level of biodiversity. Many species such as the Prickly Pear Cactus (*Opuntia humifusa*) and the Small-mouth Salamander (*Ambystoma texanum*) occur nowhere else in Canada – both species are nationally 'at risk'. However, with a long history of human settlement in the region, Essex County also has one of the highest deforestation rates in Ontario, with only 7.5% of its natural habitat remaining. High biodiversity confined to tiny forest remnants results in many species being at risk of severe population declines.

With this in mind, and with a mission to convey this important message to students on the mainland, PIBO presented a series of in-class presentations in October to Essex County high schools. The focus was to reinforce their science curriculum with real cases of Species at Risk in Essex County.

Now, as every high school teacher would agree, getting the attention of 14 and 17 year

olds can be quite a challenge. While we were not sure what to expect, or how the students would react, we set out on this cycle of presentations ... and we were in for a very pleasant surprise!

The teachers were very supportive of our efforts and went out of their way to gather several classes for the presentations, which allowed us to maximize the number of students we visited per school. Thanks to this collaborative effort we were able to reach over 550 students between grades 9 and 12!

And the response was terrific. In order to assess how familiar they were with environmental issues, I asked them to define terms such as extinction, endangered, and bioaccumulation. The answers they provided were very accurate and, since they were already familiar with the concepts, it was easy to find correlations with real cases from the region and Pelee Island.

In addition to our in-class visits, we were also pleased to receive two school groups to the Island. It was a perfect complement to the in-class presentations for students from Cardinal Carter High School in Leamington and the Harrow District High School (pictured above.) We were also very glad to receive the kids from the Pelee Island Elementary School, and it was especially rewarding to see their reaction when they got to see birds in the hand. Awe from nature is something every young mind can experience given the opportunity, and we were happy to provide that opportunity. In this edition of the Auspice we will cover some of the subjects we related to the students.

-- Special thanks to the Ministry of Natural Resources Species at Risk Stewardship Fund for providing funding for these school visits and Simon's position with PIBO --



## Species at Risk Case Studies

Every species at risk has a different story. Here are three examples we used in classrooms to illustrate the issues surrounding Species at Risk in Essex County.

### Bald Eagle (Special Concern)

When asked if they have seen one, the students would often narrate with excitement if they had. It's a majestic sight for birders and non-birders alike. Many were surprised to know that they almost didn't get a chance to see this species since, less than 40 years ago, the eagle was on the brink of extinction, mostly due to bio-magnification of DDT in the food chain. Fortunately, the population increased dramatically after DDT was banned in the 70's and, with some luck, it might one day be removed from the Species at Risk list entirely.

### Prothonotary Warbler (Endangered)

This forest species has a stable core-population in the Southern United States. In the north, however, including Canada's tiny eastern breeding population, their numbers have experienced steady, long-term declines. Nationally, the eastern race of the Prothonotary is found only in southern-most Ontario, with a population in any given year of less than 20 pairs concentrated at about five sites, which is a dramatic decline from historic figures of up to 10 locations and 100 pairs. This year Pelee Island supported two of only six nesting pairs in all of Ontario!

### Passenger Pigeon (Extinct)

It came as news to most of the students that a bird from their hometown was already extinct. The Passenger Pigeon (for which Pigeon Bay is named) went from being the most abundant bird in North America in the 19<sup>th</sup> century, to extinction in the early 20<sup>th</sup> century due to over-hunting and habitat destruction. The last wild confirmed record was in 1900, while the last individual died in captivity in the Cincinnati Zoo in 1914.



## Helping Songbirds



Most migratory bird populations have decreased by more than 50% in the last 40 years. "Why do you think these population declines are occurring?", I asked the students, who once again proved themselves very well-learned. Pollution and habitat destruction were among the most common answers, which is absolutely right.

More specifically, migratory birds require good habitat at three different locations to complete their year-round cycle: breeding grounds (North America), wintering grounds (Central and South America) and at stopover sites in between where they can feed during migration. Habitat destruction at stopover sites reduces food available for birds during migration, which has a negative effect on their health, meaning fewer will make it to their wintering grounds.

Two major bird migration routes meet in Essex County, which means that millions of birds pass through the region each spring and fall. With such a small fraction of the natural habitat remaining, conservation, and the creation of new habitat, becomes crucial not only for the sake Species at Risk, but for all migratory bird species. This is even more relevant when you consider that of the 34 bird species at risk in Ontario, 30 of them are migratory, and all 30 pass through Essex County on migration!

For these reasons, it was very encouraging to witness a fantastic project led by Mrs. Nancy Abati, a teacher from Riverside High School in Windsor. The school's ecology club is redesigning the high school's 'green' spaces using only native plants, effectively creating 'stepping stones' of habitat that can help birds during migration, as well as providing students with a wonderful outdoor classroom. Way to go Riverside High School!



## Fall Migration Report 2010



After a productive summer of research and a brief break in July, PIBO staff and volunteers launched the autumn migration coverage season on August 1<sup>st</sup>. The first ten days of the month were hot and dry, with dawn temperatures reaching 27° C. In keeping with the time of year, migration activity was generally light and most of the birds recorded were local breeders and young of the year. But despite the balmy conditions, there was some active diurnal migration towards the middle of the month, with a steady stream of kingbirds, swallows, waxwings, bobolinks, red-wings, and orioles, observed flying south from the tip.

An Eastern Red Bat was captured in the nets on August 6<sup>th</sup>, which is just the second PIBO record for this migratory species. In all, just three bats have been netted in eight years – 2 Eastern Red and one Silver-haired Bat.

It was a generally quiet start to September as warm weather continued to dominate in the region, but a strong cold front moved through on the evening of the 4<sup>th</sup>. A large backlog of birds appeared the next morning and PIBO staff and volunteers were kept busy both on the census and in the netting area. In all, 130 birds of 25 species were captured and 63 species were recorded during the official count period. A total of 19 warbler species was tallied on the day, and five season 'firsts' were noted.

While Double-crested Cormorants and a variety of gull species were active at the tip this Fall, including 14,000 cormorants recorded on September 15<sup>th</sup>, it was a quiet time for shorebirds this Fall, with just small numbers of Black-bellied Plovers, Sanderlings, and a few 'peeps' noted in August and early-September.

Hawk migration was more in evidence after mid-September and small groups of Sharp-shins were noted on the census along with a station-high of 10 Bald Eagles loafing at the tip on the 14<sup>th</sup>. *Catharus* thrushes dominated on the passerine front, with 368 individuals of four species (Veery, Swainson's, Gray-cheeked and Hermit) captured from September 11<sup>th</sup> – 20<sup>th</sup>.

Migration activity at Fish Point was up-and-down during the final ten days of September as a result of some rainy weather and yet more unseasonably warm temperatures and south winds. The first banded Scarlet Tanager of the fall was captured along with the first Northern Juncos of the season. Golden-crowned Kinglets were numerous on the 29<sup>th</sup>, with 129 birds counted, along with 48 Ruby-crowns, 20 Brown Creepers, 17 Winter Wrens.

Migrants continued to move through the area in good numbers in early October – 14 warbler species were noted – along with more typical October migrants including both kinglet species, Brown Creepers, lots of Hermit Thrushes, and a nice variety of sparrows. It was fairly active on the 6<sup>th</sup> and 7<sup>th</sup>, with 200 kinglets recorded on the former day, followed by the first Northern Saw-whet Owl of the fall banded on the 7<sup>th</sup>. A Red Phalarope recorded on census was an official first-record for the station. It was generally a quiet October compared to previous Octobers. Powerful gale force winds from the southwest persisted through the latter part of the month and migration practically ground to a halt.

More than 700 American Crows were observed flying off the point during the census on November 1<sup>st</sup> and a somewhat late Nashville Warbler was seen. An unprecedented diversity and abundance of sparrows was noted as well, with the following ten species recorded at Fish Point: American Tree, Field, Vesper, Savanna, White-throated, Eastern White-crowned, Fox, Song, Swamp, and Northern Junco. Two species were noted later in the day including a few Chipping Sparrows and a surprisingly high-profile Le Conte's Sparrow just up the road from the PIBO cottage.

In all, 192 species were recorded at Fish Point this Fall during PIBO's official count period and 2765 birds of seventy-two species were banded in 3783 net-hours, for an average catch-rate of 0.73 birds/net-hour.

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