

On August 1st at Mooney's Pond Interpretive Centre, Stuart Tingley, a renowned New Brunswick Naturalist, provided a slide presentation on dragonflies, damselflies, and butterflies of the Atlantic Region. This was followed by a field trip to O'Keefe's Lake.

The following are some excerpts from Stu's lecture.

Dragonflies are a relatively unexplored area of natural history using many of the same skills as bird watching. For instance, Paul Burnelle, a Nova Scotia expert, recently discovered a new species on the St. Croix River which is almost entirely nocturnal. This broad tail shadow dragon is called Michael after his son. The male has distinctive mustard coloured eyes and the female has darker eyes.

Stu pointed out the differences between dragonflies and damselflies. Dragonflies when they perch hold their wings horizontal while damselflies hold their wings vertical. The dragonfly's head is made up almost of two large eyes. The damselfly has smaller eyes and they are located to the side of the head. The damselfly also has a more slender abdomen and it spends less time flying.

The dragonfly and damselfly body each consist of three parts, a head, thorax, and abdomen made up of ten segments. The male produces sperm at the end of his abdomen and in mating he latches onto the female by her neck. The tip of his abdomen fits only the groove in the neck of the same species. They mate in flight in a wheel position. The female may drop her eggs into water or on a stem of grass at the edge of a pond. The dragonfly's larvae is larger than the damselfly's larva. The dragonfly emerges from the back of the larval shell. The newly emerged soft bodied adult is a generalist.

Damselflies consist of three major families, namely, the broad winged, narrow winged, and spread winged damselflies. The dragonflies consist of four families, the darners, the club tails, the emeralds, and the skimmers.

The darners are a big group often found patrolling on logging roads. They're even migratory. We saw several Variable Darners during the field trip. The Club Tail is found on rocks in rivers. It has a club shaped tail and their eyes do not touch. The dragonhunter, a club tail, is the largest dragonfly and it eats other dragonflies. The Emerald family has a racket shaped tail. It is characterized by bright green eyes. It has a hairy thorax, an adaptation to a colder climate. The Beaverpond Basket Tail is an example of a type of emerald.

The largest group is the skimmers. They have a brilliant white face and mainly sit around. The species in the slides that we saw emerging was a skimmer, the Hudsonian Whiteface. The Elfin Skimmer, the smallest dragonfly is rare and found only in bogs.

Finally we had some slides of butterflies: the common yellow butterfly the sulphurs, swallowtail, copper, Red Admiral, and the skipper which has a large fat body. Stu pointed out the difference between the mimic viceroy and the monarch butterfly with the viceroy having a black line across its hind wing.

During the field trip, the first official sighting of a Lake Emerald on Prince Edward Island was made by Jean Marc Cormier and Jacob Harding. Stu was surprised to see the Little Bluet at O'Keefe's Lake. The following **dragonflies and damselflies** species were seen that day: Common Spreadwing, Emerald Spreadwing, Sedge Sprite, Hagen's Bluet, Little Bluet, Marsh Bluet, Cherry-faced Meadowhawk, Saffron-faced Meadowhawk, Red-waisted Whiteface, Crimson-ringed Whiteface, Lake Emerald, Racket-tailed Emerald, Chalk-fronted Corporal, Common Whitetail, Four-spotted Skimmer, Shadow Darner, Eastern Forktail, Canada Darner, Variable Darner, and Lance-tipped Darner. In addition, the following **butterflies** were seen: cabbage white, common