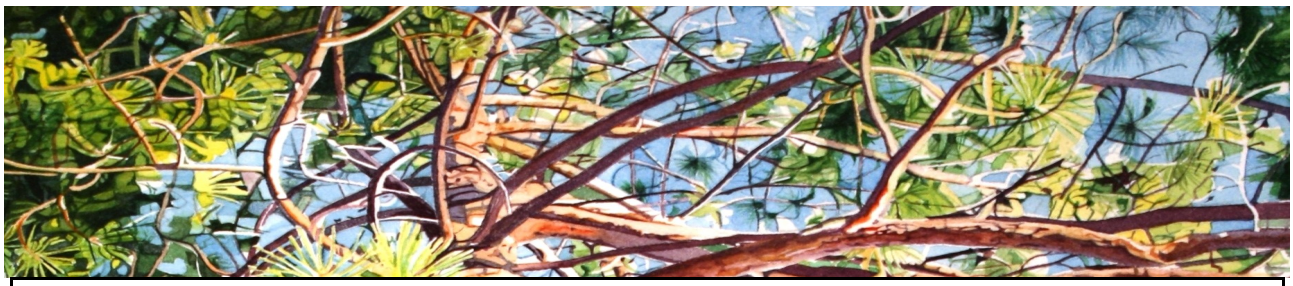

BRANCHING OUT **SPRING 2014**

Insects- What Does Bird Food Look Like?

The first great miracle on this planet is **photosynthesis**, plants snatching molecules of carbon dioxide and water in the presence of sunlight to create glucose, the basic fuel of life.The second great miracle is the **conversion** of tough fibrous plant material into edible high protein food for birds, reptiles, fish, mammals, and amphibians. This is the work of insects. In the larval stage, insects are non-stop feeders that convert 2 kgs of plant material into 1 kg of high quality food, food that supports other creatures higher up in the food chain, including us. In spring, what do most birds feed their hungry hatchlings? **Insects!! But each insect species eats only one or a few specific native plants. If these plants disappear, so do the insects upon which our ecosystem depends. That's why conserving biodiverse native ground covers, trees and understory plants is vital.**

Only 1% of all insect species are pests to humans.

Please join us to learn more about the unique plants and animals in Huron Woods by attending

GUEST SPEAKER EVENTS

Mike Short-Attracting Beneficial Insects to Your Woodland- Sat. May 10th at 1:30- Huron Woods Clubhouse

Native Plant Sale- Haley Hartford- May 24, 9-3p.m. 9939 Old River Road

Brian Lasenby- Nature Photography - Sat. May 31 at 1:30- Huron Woods Clubhouse

Brian Deller- An Archaeological and Geological Tour of Lambton Shores- field trip-June 21st at 1:30 Gather at clubhouse parking lot to travel in 3 to 4 vans

Alistair MacKenzie-Dragon and Damselflies- July 26 at 1:30 at Huron Woods Clubhouse

Brenda Kulon-The Butterfly Whisperer- September 6 at 1:30 at the Huron Woods Clubhouse

Benefit to Humans and the Environment (other than silk production)

Pollination of plants including food crops

Consumption of waste including human, plant and animal waste

Conversion of plant mass- insects convert 2 kg of food to 1 kg of insect mass whereas cattle converts 8 kg of food to 1 kg of body mass

Insects consume low quantities of water as they perform their life processes

Insects are predators and parasites of other insects, keeping their numbers under control eg. the ladybird beetle eats up to 2400 aphids during its lifespan

Dragonflies capture huge numbers of mosquitoes, midges and gnats on the wing.

Parasitic wasp lays eggs on caterpillar-eggs hatch and consume host from inside out

Defense Mechanisms of Insects

Camouflage: Larva and adults adapt by taking on colours and shapes of leaves and twigs of host plants eg stick insects.

Sociability: Insects form caste structures with cooperative work ethics, brood care, division of labour and reproduction eg. ants, bees.

Autonomy: Some insects can shed legs to distract predators eg. Stick insects.

Chemical Defense: Monarch larvae consume milkweed to adopt its poisonous properties.

Mimicry: The Viceroy butterfly has adopted the appearance of the Monarch to gain the same protection from predators.

Lethal Saliva: Assassin bugs and spiders inject saliva into victims, then suck out the body fluids.

Adhesive Secretions: Termites use rubberlike secretions that entangle enemies.

Fecal Shields: Leaf beetles carry fecal matter on their backs to repel predators.

Venom: Wasps, bees and ants use these and histamines too.

Suicide: Some ants forcibly explode, spilling out an entangling substance, trapping enemies.

Mechanical: Chitin exoskeletons and cocoons provide tough barries for enemies.

Produced by The Habitat Stewardship Group of Huron Woods: Ernie Lewis, 238-1345, Josy Britton, 238-6036, Dave McClure, 238-8449, Brian Lasenby, 872-9052, John Nagel, 238-5449 and Sharon Callan, 238-6586 To save the cost of printing and mailing this newsletter, please leave your e-mail address at www.habitatstewardship.ca to receive your copy online.