

Notes by David Oldacre on talk by Fiona Reid to Halton MG – April 2nd 2014

My notes on a most interesting talk by Fiona Reid local naturalist, author, illustrator & wildlife tour guide whose talk was on the subject of “Stalking the Night Garden”. She is a Departmental Associate in Mammalogy at the Center for Biodiversity and Conservation Biology at the Royal Ontario Museum, in Toronto, Canada. Fiona is also President of Halton/North Peel Naturalist Club in Georgetown, Ontario. Her website is at <http://www.fionareid.ca/>

Fiona lives in a rather beautiful cottage style house in Speyside which is a small community halfway between Milton and Acton to the west of Hwy 25. Her house is in the woods, and her talk was illustrated by about 100 slides of close up photos of night visitors to the flowers and plants in her garden. The main topics included in her talk were:

- Night flowering plants for moon garden
- Wild life visiting the garden at night
- Moths – unappreciated and overlooked pollinators
- Moths which are often found nectaring
- Top ten non native plants which attract moths
- Top ten native plants which attract moths and insects
- Predators visiting the garden which prey on other garden visitors
- Herbivores which visit the garden
- Surprising happenings in the garden
- Some statistics on number of species which visit common types of trees in Canada and the USA

Night flowering plants for moon garden

Hellebore

Red Trillium erectum

Nicotama Moonflower – Four o'clock - Datura

attracts Northern Crab Spider and hologram Moth

Moon flower - *Ipamea alba*

Rustic Sphinx (photo taken at a Texas ranch) which showed a Praying Mantis predator lurking below the plant

Four o'clock (or Marvel of Peru) *Mirabilis jalapa*

Jimson weed - *Datura stramonium*

Flowers come out at night – attracts earwigs

White Datura - *Datura inoxia*

Bird House Gourd - *Lagenaria siceraria* (Calabash or Bottle Gourd)

Night- scented stock - *Matthiola longipetala*

Small but strongly scented

Night-glowing phlox - *Zaluzianskya rubrostellata*

Small but strongly scented

Wild life visiting the garden at night

- Nectar feeders
- Predators
- Herbivores
- Moths
- Spiders, frogs,
- Caterpillars
- Non feeding adults – more moths, mayflies, crane flies

Moths – unappreciated and overlooked pollinators

- Incredibly diverse and colourful
- Beneficial as adults

- Poorly known

To attract - Set oil on bark, or put out lights, plant a moth garden

Moths which are often found nectaring

- Plume Moths
- Grass-veneer – Family *Geometridae*
- Sphinx Moths
- Litter moths, owlets, underwings - Family *Eribidae*
- Loops, Sallows, Pinions, Darts – Family *Noctuoidea*

Top ten non-native plants which attract moths

- Purple Coneflower
- Buddleia
- Sedum – Autumn Joy
- Bee balm
- Veronica
- Phlox
- Blue Sage
- *Deutzia gracilis*
- Bachelor's Buttons
- Cosmos

Top Native plants which attract moths

- Mountain mints
- Joe-Pye weed (*Eutrochium*)
- White Snakeroot
- Spirea Alba (Narrow leafed meadow sweet) – not the pink varieties of Spire which attract nothing!
- Rudbeckia (Green headed cone flower)
- Liatris – Blazing Star
- *Vernonia*
- *Solidago (Canadensis)*
- Clematis (Virgins bower) - *Clematis virginiana*
- Swamp Milkweed - *Asclepias incarnata*
- Heliopsis and Helianthus
- Coriander (Cilantro) - *Coriandrum sativum*

Predators visiting the garden at night

- Red backed salamander
- Grey tree Frog – amazing photo of one in the green phase
- Common Toad – wet *Ageratum*
- Wood Frog
- Spring Peepers – about 1” long – hunt moths and usually skulk on plants which attract moths
- Ambush bug – lurks around plants with good nectars

- Flower crab spider
- Northern crab spider
- Praying Mantis
- Lacewing – on Vipers Bugloss

Herbivores

- Katydid
- Grasshoppers
- Beetles
- Broad nosed weevils
- Leaf hoppers – suck on plant juices
- Green stink bugs
- Caterpillars
- Sawfly bugs
- Slugs and snails
- Earwigs

Surprises in the Garden

- Moths
- Aphids honeydew
- Male mosquitoes – these go to about 20 species of plants and shrubs, but do not appear to be good pollinators
- Some statistics on number of species which visit common types of trees in Canada and the USA

Some statistics on number of species which visit common types of trees in Canada and the USA

In this section of the talk, Fiona presented several tables which showed how many species were dependent upon various trees in Canada and in the USA. For example, overall the white birch, maple and basswood came out on top, able to host almost 300 species of moths, but I could not find the tables which she presented in this last phase of her talk. The only one I could find on the Net which related to trees of the UK was at the website:

http://www.countrysideinfo.co.uk/woodland_manage/tree_value.htm

So I have sent a note to Fiona about this.

Overview of the talk by the presenter:

Fiona Reid Naturalist/Author/Illustrator & Wildlife Tour Guide www.fionareid.ca

Topic: Stalking the Night Garden

Fiona Reid is a biologist as well as an accomplished field-guide author, illustrator, and painter. She is president of the Halton/North Peel Naturalist Club and her current research takes her into the world of moths.

Fifteen years ago I moved into a rural house on the Niagara Escarpment and planted a garden for butterflies and hummingbirds. The hummingbirds came, but the butterfly show was disappointing – living in the woods meant too much shade for those sun-lovers. In the last three years, and especially with the advent of the Peterson Field Guide to Moths, I discovered that my flowerbeds were brilliant for nectaring moths and a wide range of nocturnal creatures – predators and herbivores in addition to the nectar feeders. As a mammalogist with a love of bats, being out at night and studying furry night-fliers seems completely rational to me!

I decided to focus on the night garden, testing every plant I could lay my hands on that is reputed to attract butterflies, and prowling other wildlife gardens (mostly with permission) to see what I could find and learn about moths and other nocturnal visitors. This talk will describe the best native (and some non-native) plants for pollinators, some night-flowering plants that are deliciously scented and a mecca for moths, and will go on to describe the creatures you are likely to find when you stalk your garden in the wee hours, armed with flashlight and camera.

The study of the over 11,000 species of moths in North America has been largely taxonomic. Typically, people set up powerful lights and paint sugar bait on trees, attracting moths to these sources rather than visiting moths in their natural haunts. Multitudes of images of moths are limited to resting postures, except for the few diurnal species and a handful of dusk-flying sphinx moths. My images probably represent the only available in-flight, actively nectaring pictures available of numerous beautiful species (see Hologram moth below). Nocturnal pollinators as a whole are underappreciated. I have seen the humble male mosquito pollinating over 20 plant species in my garden, a fact that would surprise many naturalists.

My talk concludes with a discussion of the following: importance of planting host plants to provide food for caterpillars and thus for birds and bats; reasons to use native plants; adding a small pond; throw away the spray; and be a bit messy. If just a few more home gardeners followed these principles we could help our native wildlife enormously.

Notes on the talk in the Halton MG Meeting minutes of April 2nd 2014

Presentation: Fiona Reid, Naturalist/Author/Illustrator & Wildlife Tour Guide presented “Stalking the Night Garden. Ms. Reid listed flowers for the night garden – hellebores, nicotiana, moon flower, Four O’Clock, Jimson Weed (datura) bird house gourds, evening scented stock and night flowering phlox. She described the wildlife in the night garden – nectar feeders, predators, herbivores and adult form feeders. Ms. Reid reviewed the many types of moths often found nectaring in the night garden. Top plants for pollinators are mountain mints, Joe Pye weed, eupatorium, spirea alba, redbeckia, liatris, vernonia (Iron weed), clematis, asclepias, helopsis and coriander. We were shown a range of predators of the night garden including salamanders, grey tree frogs, common toads, wood frogs, spring peepers, ambush bugs, flower crab spiders, praying mantises and lace wings. Herbivores included katydids, grasshoppers, earwigs, weevils, leafhoppers and green stink bugs. We, as gardeners, can be a good host to these creatures, add a back yard pond and put away our sprays. We looked at data on host trees for moths. Overall the white birch, maple and basswood came out on top, able to host almost 300 species of moths.

Fiona’s web site is www.fionareid.ca