## Attracting Pollinators to Your Garden – October 1, 2014

Our guest speaker in October was **Marilyn Light**. Marilyn was born and raised in Montreal where she studied agriculture and microbiology at McGill University. As a scientist, Marilyn loves to experiment with new plants. She grows herbs, vegetables, garlic, annuals and perennials and just about anything else that can be raised from seeds. Marilyn also grows and hybridizes daylilies and tropical orchids.



One of her orchid hybrids, named for her mother, Evelyn Light, who stimulated her interest in orchids, is pictured on a Canadian stamp. Marilyn is editor of the Orchid Conservation News and chairs the North American Region Committee of the Orchid Specialist Group/Species Survival Commission. She is a member of the Canadian Committee, World Conservation Union (IUCN). Marilyn's talk was not about orchids or other plants but about another of her interests namely "Attracting Pollinators to Your Garden".

Marilyn began her talk by stating that pollinators are all about plants. She used a slide to list the needs of pollinators, gardeners and plants; pollinators requiring food, a place to shelter or rest, a place to reproduce, not too much competition and consistency over seasons and years. Gardeners benefit with food to harvest, a happy space, a learning environment, a "bio-logical" garden and low cost maintenance. The plants benefit by producing seeds. But not all pollinators require the same foods. Bees and wasps, for example, require both pollen and nectar as food, while flies and beetles look for pollen and ants and hummingbirds are after nectar. In all cases they assist with pollinating the plants due to the juxtaposition of the pollen and nectar in the flower.

Attracting specific pollinators to your garden can be assisted with the choice and diversity of plant material you provide and the season in which it is available. A gardener wanting to attract the greatest diversity of insect pollinators will plan a spring through fall buffet to include bulbs, shrubs, annuals and perennials, small fruits and vegetables. For example, Marilyn noted that butterflies are particularly attracted by white flowers, while hummingbirds favour red; scarlet runner beans are a particular favourite for hummingbirds.

Ensuring pollen and nectar are available from spring through to autumn is one way to encourage pollinators to remain in your area. Spring crocuses are a good early pollen source as (continued) are blossoms on flowering cherry trees. Butterflies overwinter as pupa and emerge in the spring. Apple blossom and peonies also attract pollinators early, especially bumble bees. For hummingbirds Marilyn suggested putting out a feeder early in the spring that will attract them and keep them in the area. Later in the season red flowers in the garden will help to keep them around.

In summer there are lots of flowers for the pollinators and other insects, such as aphids, also provide food that attracts pollinators to the garden. In the autumn Marilyn noted that asters and garlic chives especially attract bees. Winter is also important for the pollinators. They need to find homes to overwinter; rock walls, unturned compost, holes in logs all provide shelter. Holes in logs particularly attract solitary bees.

Marilyn illustrated her talk with many slides of bees and other pollinators. She also answered a number of questions. One question in particular had a lot of attention; the lack of pollination of squash plants. Evidently some squash and cucumber are parthenocarpic which means they do not need pollinators. Parthenocarpy - literally meaning virgin fruit - is the natural or artificially induced production of fruit without fertilization of ovules. The fruit is therefore seedless.

However, regular squash plants (as well as pumpkin and zucchini) produce male and female flowers. If there are no bees or other insects around one can pollinate the female flowers by using a small paint brush or a cotton swab to transfer pollen from the male flower (long narrow stalk) to the female flower (the one with the swollen ovary below the petals).



NOTE: Reading on the Internet one can also remove the petals from a male flower use the anther as a brush to transfer pollen to the female stigma.

We learned a great deal about pollinators from Marilyn and hopefully will appreciate and tolerate many more insects in our gardens knowing that they are doing a very useful job!

