## The Roadside Flower Parade

The roadsides of the Kawarthas are bright with myriad flowers from late June through mid-October. Anticipating and then watching the different species come into bloom is yet another way to become more aware of the continuity of seasonal progression. Every year the parade of flowers follows the same order as one species gives way to the next as the dominant source of colour.

The majority of roadside denizens are non-native perennials. In other words, they are not part of our indigenous vegetation but arrived here during the period of European settlement. Of the 2600 or so vascular plants that grow wild in Ontario, about 700 are non-native, also called exotics or aliens. Some were brought as garden plants to remind the early settlers of home. Others were brought for food, as forage for animals and even for medicinal purposes. A large number of species also arrived as stowaways. When vessels were sailing light, they used to carry large amounts of earth as ballast. This earth, of course, was full of the seeds of foreign plants. Upon arriving at port, much of the ballast was shoveled out of the ship and dumped in the closest suitable location. The seeds then germinated and the plants began to spread inland, especially along roads and railway lines. Unfortunately, the insects that would keep these plants in check in their lands of origin did not make the journey to North America. In addition, as settlers altered the landscape by building roads, farms, pastures, cities, lawns and gardens, they inadvertently created ideal growing conditions for the new arrivals. These altered landscapes contain far fewer well-established native species that might keep the spread of the aliens under control.

Non-native invaders tend to share a number of characteristics which help to explain their present-day abundance. They grow and mature rapidly, produce prolific amounts of seed, have highly successful seed dispersal and germination, can usually out-compete native species and tend to have very few insect pests. However, love them or hate them, these bullies of the plant world are here to stay. Fortunately, many do have redeeming qualities such as the beauty of their flowers and their attractiveness to birds and insects.

The annual fanfare of roadside flowers begins in early June when mustards and buttercups come into bloom. By mid-month, dame's rocket, bird's-foot trefoil and ox-eye daisy are the dominate species. Daisies and trefoil continue to prevail through early July, accompanied by an assortment of other plants including purple vetch, blueweed, orange hawkweed, chicory, spreading dogbane, common milkweed and Philadelphia fleabane. Towards the middle of July, white sweet clover is usually the predominant species along with good representation from Queen Anne's lace, black-eyed Susan, yarrow and various types of cinquefoils and St. John's-worts. By the end of July, Queen Anne's lace will have completely taken over as the sovereign of the roadsides. Among other late July notables, watch for bouncing bet, smooth hawk's-beard, evening primrose, mullein, fireweed, various thistles and the first goldenrod. Goldenrods become the dominate plants by late August, giving way to a profusion of different asters by late September. Both of these last two groups are native to the Kawarthas.

Of all the roadside plants blooming in early July, my favorite has to be the common milkweed. A native species, milkweeds attract numerous species of butterflies. It is also the only plant that monarch caterpillars will eat. The air is fragrant right now with the sweet scent of its flowers, a smell that signals summer's arrival. For the milkweed, however, the purpose of the fragrance is to attract insects and then to trick them into pollinating the flowers, a scheme that

sometimes proves deadly. As butterflies and bees walk over the flowers searching for the abundant nectar, their feet get trapped in little slits. As they struggle to free themselves, they inadvertently extract two pollinia, attached together like a saddlebag. Pollinia are small packets containing pollen. With luck, the pollinia will be transferred to the sticky stigma of another milkweed's flower, and the pollen grains will fertilize the flower. If the insect is not strong enough, however, its feet can actually remain stuck inside the slits. It is not uncommon to see dead insects on milkweed flowers that have met their demise in this manner. Judging by the relatively small number of seed pods that appear on milkweeds in late summer, it would seem that this complicated pollination mechanism is less than efficient. On the other hand, milkweed seems to be thriving.

The black-eyed Susan, too, is a North American native, but didn't arrive in Ontario until about 1830. It was originally a plant of the western prairies that appears to have spread eastward as forests were cut down and the land cultivated. The centre of each blossom contains dark disk flowers which are surrounded by yellow ray flowers. While the disk flowers are true flowers containing both male and female parts, the ray flowers are completely sterile and serve only to attract pollinators, a job they do quite well.

The ox-eye daisy is probably the most familiar roadside wildflower. Growing in impressive abundance, this Eurasian exotic truly seems to invite picking, if only to find out whether he or she does indeed love you. The petal-plucking is all the more fun because the number of petals fluctuates from one plant to the next. Unlike the black-eyed Susan, each white petal is a fertile ray flower with a tiny female stigma at its base. Hundreds of yellow florets, each with male and female parts, make up the centre of the daisy.

White sweet clover is another non-native species that deserves some special attention. Growing up to four feet tall, the fragrant, tiny white flowers are found in long clusters at the top of the stem. This is obviously quite different from the ball-like floral arrangement we normally think of with clovers. Sweet clovers were once used on dairy farms for pasturage and hay. However, they have now been largely replaced by alfalfa. Being rich in nectar, they are a favorite of honey bees and other insects such as skipper butterflies. Sweet clover is sometimes planted near domestic hives for honey production.

## What to watch for this week:

Starlings will soon begin to flock up and roost in huge, noisy swarms. The birds are particularly loud in the evenings when they move to roosting sites, often in city shade trees. The make their presence known by their clamourous calls and frequent flights from one tree to the next.

Drew Monkman is a local naturalist, teacher and author of *Nature's Year in the Kawarthas*.