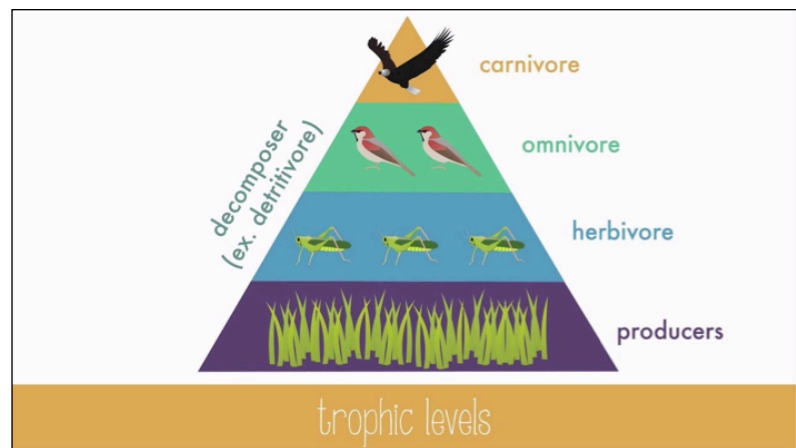


The Big Role Insects Play in the Food Web

By Ross Brink, Minnesota Green Corps Member at Crow Wing SWCD
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Many of us in Central Minnesota are proud of our properties. Whether we're gardeners, farmers, or lakeshore owners, our land sustains us as we watch our living handiwork grow. But our land also plays another role: it's a place for birds, small mammals, and reptiles to live and grow. As the human population increases there becomes less room for wildlife, which makes our living landscapes more important to preserving and sustaining Minnesotan organismal diversity.



Living things rely on plants, either directly or indirectly, for food. Plants are the primary producers in the food web—the source of all energy—the first trophic level. Animals, including insects, are the consumers in the food web. Animals get their energy by eating the producers (plants) or other animals. The problem is most insects are extremely specialized; they're able to feed on just a couple native plants. And not all native plants are equally adapted to feeding insects. Oak trees and black cherry trees, for example, host more than 400 of species of insects through the year.



Now when a yard is full of non-native plants (like our manicured lawns) insects simply don't recognize those non-native plants as food. Minnesota's insects (generally) evolved to eat only a few types of plants, and it takes them thousands of years to adapt to a new food source. These insects are, in turn, a major source of food for Minnesota's birds and other wildlife.

In fact, 96 percent of songbirds raise their young by stuffing them full of high-protein insects and spiders, so most yards, even with plenty of bird feeders, offer little to sustain birds. Even though

seeds are a nutritious winter staple, insects are best for feeding growing fledglings. A single pair of chickadees must find 6,000 to 9,000 caterpillars to raise one clutch of young, so properties filled with non-native plants don't have the insect population to sustain as many birds, and it's not just birds that rely on native insects. Frogs, bats, foxes, bears, and snakes all rely on insects, even if they don't consume insects themselves.



For more information reach out to the Crow Wing Soil and Water Conservation District at info@cswcd.org or call 218-828-6197

For more information you can also visit:
<https://abcbirds.org/blog/insect-freefall/>
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