Flower Power and Conservation

The pollinator crisis

Without pollinators, plants cannot reproduce. In the tropics 90% of plants are dependent on animals or insects for pollination. Some plants rely on only one species of animal or insect for pollination. When that insect or animal goes extinct, there is little hope for the plant.

Recently, conservationists have begun to notice population declines of various important pollinator species around the world, and the plants that they pollinate have begun to show lower fruit production.

Causes: The pollinator crisis is being caused by a number of factors, including habitat destruction, pesticide use and competition with invasive species, like the Africanized honey bees (“killer bees”), which have taken over in much of Central and South America and pushed native pollinators out.¹

Economics: Many economically important plants also depend on pollinators. Many fruits we consume must be pollinated by an insect or animal, like citrus (orange, lime, lemon, grapefruit), coconut, squash, watermelon, avocado, mango, strawberry, apple, and sapodilla, just to name a few – the list could go on. Therefore, a decline in pollinators can cause a decline in crop yields of various plants.

¹ Although Africanized honeybees do pollinate flowers, the native pollinators are more effective at pollinating native plants that they evolved with. Killer bees are not as effective at pollinating some species of plants, and are incapable of pollinating others.
**Habitat fragmentation**

As habitats become fragmented due to development, it becomes harder for pollinators to travel between distant patches of habitat. This means that the plants in patch A cannot share pollen with the plants in patch B (see illustration below), and therefore the patches become genetically isolated and may be forced to inbreed.
What can you do?

- Buy organically grown fruit. Fruit treated with pesticides may not only be bad for you, it is detrimental to pollinators who visit the flowers that have been doused in pesticide! Pesticides do not discriminate between “good” insects and “bad” insects. Therefore, pesticide use is contributing to declines in pollinator populations around the world.

- For a fun way to attract pollinators to your garden or school yard, buy a bee house from a store selling garden supplies and put it in your garden. The bee house is a little block of wood with holes drilled into it that provides a nesting area for solitary bee species. This will attract bees to your garden where they will likely help you out by pollinating some of your garden plants, and you will be doing the bees a favor by giving them a safe nesting site and habitat!