

Attracting Native Pollinators

by Heather Bryant, Extension Educator, Agricultural Resources

Today, Pam Gilbert from the Grafton County Conservation District, Donna Doel, a soil conservationist with NRCS, the Natural Resources Conservation Service and I ran a workshop on attracting native pollinators. The topic has been gaining visibility over the last few years, so the participants came in with a great deal of prior knowledge and some very good, but difficult questions.

The bees have been making the news due to a problem called Colony Collapse Disorder (CCD). CCD has caused entire honey bee colonies to die, in fact according to the Xerces Society, an organization whose mission is to be the Audubon Society of insects, in 2006-07 some beekeepers lost up to 45% of their hives. A more normal yearly loss rate is 15%. Researchers are not certain what causes these losses, but possible explanations include disease, poor diet, insecticides, or a combination of one or more of these factors. In addition to the problems facing honey bees, native and feral bee populations have also suffered declines over the last half century. Again the causes are not precisely known, but it is likely due to disease and loss of habitat. Of course, the problem for us humans comes because approximately 35% of the world's food crops, worth an estimated \$217 billion, rely on pollination.

In response to this the 2008 farm bill contains provisions to support protection and development of pollinator habitat. For farmers and landowners, this means that there are funding and educational programs available to help them attract native pollinators to their properties for conservation or agricultural purposes. In practice, attracting pollinators can be complex, but the basic theory is fairly straightforward. First you learn what lives on your property, then you assess and adapt your land management practices to minimize harm to them, and finally you provide them with food and shelter. With approximately 4000 species of native bees in North America it is perhaps not as easy as it sounds, but there are some simple things all of us can do to try to protect pollinators on our property.

First take pains to use the least amount of pesticide necessary to accomplish whatever your management objective. This is because insecticides can kill pollinators, or interfere with their ability to navigate. Herbicides can also damage the pollinators and of course they can kill important food resources. Next you can attempt to provide the pollinators with a variety of food items throughout the year. This means planning out your gardens so that there are as many different plants flowering as possible, and that they flower over the entire season. Choosing plants whose flowers are in a range of colors and shapes will also help, as will choosing native plants wherever possible. You can also adjust your mowing schedule so that you do not mow your entire property i.e. cut down all the flowers, at once. Mowing no more than 1/4 to 1/3 of the property or an individual field at any one time will ensure a more robust food source for the pollinators. Finally you can attempt to provide the pollinators with nesting sites. Some nest in the ground, so you need only leave a few patches of bare ground around the yard, preferably areas where nothing wants to grow anyway, i.e. well drained, slightly sandy or salty areas.

This information and a great deal more, including more pollinator conservation strategies, is available through the Xerces society (<http://www.xerces.org/>), the Natural Resources Conservation Service (<http://www.plant-materials.nrcs.usda.gov/technical/pollinators.html>) and the National Agroforestry Center (<http://www.unl.edu/nac/agroforestrynotes.htm>).

The University of New Hampshire Cooperative Extension is an equal opportunity educator and employer. University of New Hampshire, U.S. Department of Agriculture and N.H. counties cooperating.