2018 Soil Stewardship Week
April 29 – May 6

The Importance of Pollinators to Soil and Water Conservation in Texas

When someone brings up "the birds and the bees," the first thing that comes to mind is probably not soil and water conservation. Perhaps it should be, as these little creatures play a considerable role in sustaining healthy ecosystems. The birds and the bees (butterflies, bats, beetles, moths, and even small mammals) are pollinators, which are vital for agriculture, our food supply, and the preservation of our natural resources. Many Texas farmers, ranchers, foresters, and urbanites recognize the importance of these insects and ani-mals, and are attempting to regenerate pollinator populations by implementing voluntary conservation prac-tices on private and public lands. First impressions about "the birds and the bees" will probably never change, but conservationists are working hard to change people's opinions about pollinators.

What is pollination, and why is it so important for agriculture and conservation? The process begins when pollinators visit flowers in search of food in the form of pollen or nectar. A pollinator will come in contact with the flower's reproductive parts and deposit pollen from a another flower. The plant then uses the pollen to produce a fruit or seed. According to the U.S. Fish & Wildlife Service, up to 80% of all plant species are pollinated, and 3/4 of all the world's most common food crops require insect pollination. Some studies even suggest that one out of every three bites of food that we eat exists because of pollinators.

Unfortunately, pollinator populations have been declining in the United States for several years, primarily due to loss of habitat. Thankfully there are many landowners in Texas that want pollinators on their prop-erty, and for good reasons. To begin with, pollinators are essential for productive agricultural ecosystems, such as row crop production and agro-forestry, and they ensure the production of fruit and seeds in many crops, grasses, and timber. Likewise, pollinators play a significant role in natural rangeland ecosystems by helping to keep plant communities healthy and reproducing, which in turn prevents soil erosion, improves water quality, and provides food and cover for native wildlife.

Soil and Water Conservation Districts (SWCDs) in Texas are assisting producers to achieve their goal of re-generating pollinator populations by developing voluntary conservation plans. These conservation plans in-clude the implementation of conservation practices that have the dual benefit of protecting natural resources and providing pollinator habitat. Such voluntary practices include riparian buffers, planting native grasses and wildflowers, cover crops, and prescribed grazing.

While there are many that might say you can't eat a butterfly or bumblebee, the truth is that pollinators are indeed vital for food and fiber production in Texas and the United States. Without healthy and productive rangeland, cropland, and forests, our pollinators will fail, production agriculture will fail, and our society will ultimately fail. Whether you're a farmer, a rancher, or just want to plant an urban flower garden, it is up to you to decide how to run your operation. We need pollinators, but we also need good stewards of our lands that protect and preserve the natural resources of Texas.