



Operation Pollinator in Agricultural Landscapes:

POSITIVE ACTION FOR POLLINATORS

What is Operation Pollinator?

Operation Pollinator, a global Syngenta program, supports the development of pollinator habitats in a variety of landscapes, including farmland. By devoting non-crop portions of the farm — such as field borders, hedgerows, buffer strips and marginal cropland — to pollinator habitat, farmers and landowners can help provide forage and food for native bees, honey bees, butterflies and other beneficial insects, while augmenting biodiversity and environmental benefits.

Operation Pollinator restores pollinators in agricultural, golf and other landscapes by creating essential habitats with region-specific seed mixtures. The program incorporates practical conservation practices that directly address pollination needs at a local level. Based on scientific research and participants' experience, Operation Pollinator has demonstrated how to successfully establish and manage habitats in key landscapes and boost populations of pollinators and other beneficial insects.

What are the benefits of pollinating insects?

Pollinating insects are critical to sustain yields and crop quality; in fact, more than 100 food crops depend on pollination services. As an ever-growing population becomes more dependent on efficient food production, maintaining healthy pollinator populations is increasingly important.

An abundance of pollinating insects is a visible indicator of healthy ecosystems. Managing habitats for bees and other pollinators significantly increases biodiversity and brings about real environmental benefits. At Syngenta, we are deeply committed to enhancing biodiversity globally; helping biodiversity flourish is one of the six commitments comprising

The Good Growth Plan, Syngenta's global sustainability initiative. Since its launch in 2013, our biodiversity efforts have benefited more than 13.5 million acres of farmland.



FARMER AND LAND MANAGER BENEFITS

Not only does Operation Pollinator provide solutions for restoring vital pollinator populations, but with careful site planning and management, it can also play an important role in reducing soil erosion, helping protect valuable water resources, and creating habitats for small mammals and farmland birds.

Through Operation Pollinator, farmers and the agricultural community are seeing firsthand how sustainable agriculture and science-based solutions can work together to preserve the environment.

WHERE DO I BEGIN?

Syngenta has developed a **Quick Guide** (www.syngenta-us.com/beehealth/operation-pollinator-quick-guide.pdf), which details important considerations for:

- Site Selection
- Seed Mixture Selection
- Site Establishment
- Site Maintenance

Initial results can be seen within three to six months after establishment of an Operation Pollinator site. Within 12 to 18 months, wildflowers and vegetation will be fully established.

WILDFLOWER SELECTION

Applewood Seed Company in Arvada, Colorado (www.applewoodseed.com), supplies custom wildflower mixes for Operation Pollinator sites. Wildflower mixes are selected based on the geography and climate, and multiple mixes can be used to help ensure flowering during different seasons — providing a continuous food and forage source. The summer-flowering mixes can attract up to 40 different bee species during a season.

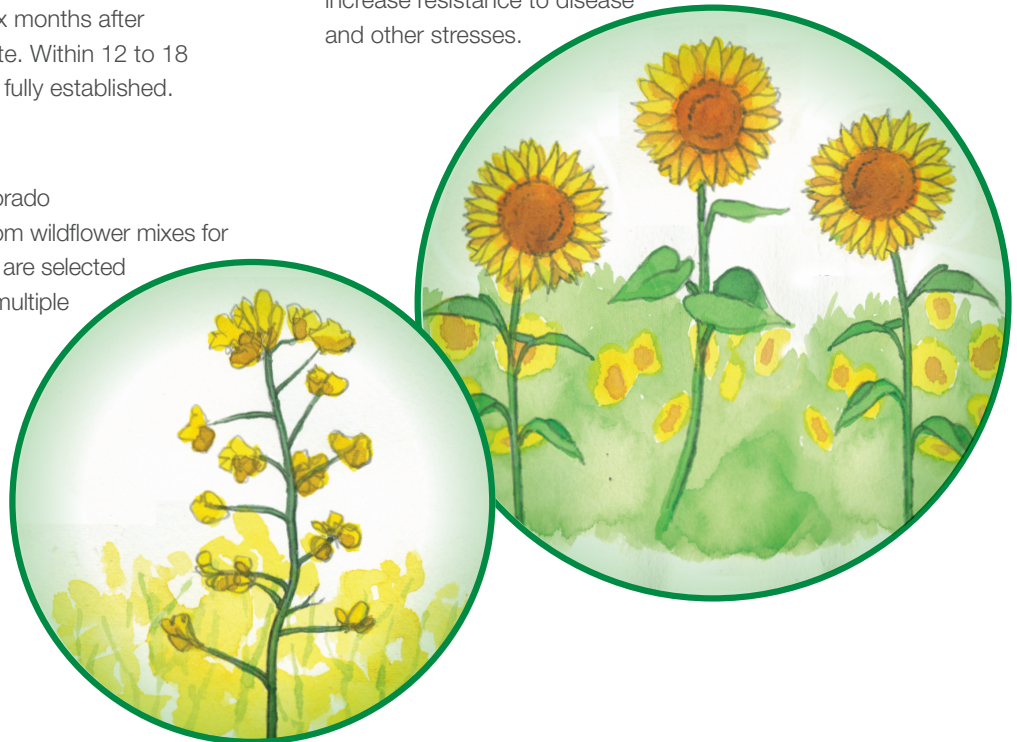
Making a difference through collaboration

OPERATION POLLINATOR NETWORK

Syngenta collaborates with an extensive network of farmers, land managers, NGOs and government agencies. These trusted relationships allow us to pursue practical solutions that can benefit pollinators and farmers. We work with ecology and entomology experts at leading U.S. universities, such as University of California-Davis, Michigan State University and University of Florida, as well as other partners, such as Delta F.A.R.M. and Trees Forever, among others.

YOUR ROLE IN POLLINATOR HEALTH

Research shows establishing native plant gardens with a variety of wildflowers has a big effect on pollinator health. In addition to creating habitats on your farm, you can create your own pollinator-friendly garden or window box using native plants. Sponsoring local projects to plant wildflowers on road sides, in parks and other bare areas can provide pollinators greater access to diverse pollen throughout the summer and increase resistance to disease and other stresses.



OperationPollinator
Multifunctional Landscapes

syngenta®