

Did you know that in New Jersey
wild pollinators
contribute \$33.5 million
each year to farm revenues
for blueberries, soybeans, tomatoes,
watermelons, cantaloupes, bell peppers,
cucumbers, apples, peaches
and squash?¹



Wildflowers © JuliaGregory_Flickr



It's true. Wild pollinators like bumblebees, sweat bees and squash bees play a key role in the agricultural production and long-term profitability of our state's

farms. Many farmers have come to rely on managed honey bees for fertilization tasks, but studies show these populations have been declining since the 1940s—making each growing season riskier.

A diversified approach to pollinating—one that includes wild insects in addition to managed honey bees—can minimize risk, maximize crop yields and help provide farmers with a steady level of net income. The good news is that with some simple enhancements to your farm, you can reap the benefits from wild pollinators.

¹ All crop production data in this marketing brochure is based upon USDA NASS data from New Jersey, where crop prices, yields, and acreage are averaged from 2007-2011 and adjusted to 2011 prices in USD.



Tomato © HDragon_Flickr

For more information about the agricultural benefits of wild pollinators in New Jersey, visit www.nature.org/njpollinators or contact njpollinators@tnc.org.

For information about planting pollinator habitat on your farm, visit the Natural Resources Conservation Service at <http://www.nj.nrcs.usda.gov/technical/biology/pollinators.html>.

The Nature Conservancy 
Protecting nature. Preserving life.®

Cover photos: Farmer © Gigi Elmes; Farmmarket © Natalie Maynor

The Nature Conservancy 
Protecting nature. Preserving life.®



Wild Pollinators
Nature's Crop Insurance 





Peppers © JoMorcom_Flickr

Wild pollinators work for free, but they need some help to do their job.

To be effective at pollinating, wild bees need habitat and food, both of which are becoming harder for them to find. New Jersey has been losing more than 12,000 acres of wildlife habitat per year since 1986; agricultural land, wetlands, and forests have decreased by 10% over a recent 20-year span.

So how can you help wild bees—and your agricultural revenues—thrive?

Protect existing wild pollinator habitat, if you have it.

That field corner of wildflowers you were unsure about? Keep it natural for the sake of the bees, which will be healthier and more numerous, and for the sake of your crop yield, which will be more robust.

Plant a pollinator strip. In many areas of New Jersey, wild pollinator habitat is degraded to the point that farmers may already be losing revenues due to lower yields. Find room for wild pollinator habitat to increase crop yields, increase crop quality and insure against future losses as pollinator habitat further disappears.

Investing in wild pollinator habitat as part of your risk management strategy

To ensure maximum benefits for your crop production, include a ratio of one acre of pollinator habitat to every 24 acres of cropland. Evaluate your property for the best possible configuration of planted fields and pollinator areas, and think outside the box—pollinator habitat can be established easily on underutilized or underperforming parcels, such as:

- Backyards
- Poor quality fields
- Hedgerows
- Areas between fields

If you do not have any vacant land, consider retiring $\frac{1}{2}$ to 1 acre of crop land. Ideally, switch out a low value crop. However, it can still be profitable to retire a small amount of land devoted to a crop with a high responsiveness to pollination, like squash, due to the yield boost from wild pollinators. Gross revenues from squash production increase by \$262/acre *even after subtracting the cost of implementation.*

If you simply do not have any underutilized areas and cannot spare planted land, consider collaborating with a neighbor. Select an area that benefits crop production for both of you, and share in the planting, maintenance and benefits of the pollinator habitat.

Farmmarket © Macomb Paynes



Farmer © Kendal Miller

Why you should welcome wild pollinators on your farm

Crop	Portion of gross revenues (\$/acre) due to wild pollinators
Squash	\$3,301
Tomatoes	\$1,907
Blueberries	\$1,076
Apples	\$1,046
Peaches	\$563
Bell Peppers	\$513
Watermelons	\$447
Cucumbers	\$403
Cantaloupes	\$255
Soybeans	\$18

Consider investing in pollinator habitat on your farm as a form of crop insurance to *maintain current levels of net income.* Table 1 shows the value that wild pollinators in New Jersey already contribute to production. In New Jersey, it is highly unlikely for agricultural land to be adjacent to such high quality wild pollinator habitat that no additional

benefits would be seen from planting pollinator areas on your property. However, even if immediate yield benefits were minimal, there is still a compelling reason to dedicate some farm space to pollinators.

Remember that New Jersey has been losing thousands of open space acres annually. There is no guarantee any existing pollinator habitat will still be around ten years from now, or even next year. Dedicating areas to wild pollinators as part of your farm's long term plan will minimize risk and potential income fluctuations associated with changing conditions beyond your property's borders.