

Supporting the Health of Pollinators: Butterfly Habitat at the Agrico Chemical Company Superfund Site

Site Background and Cleanup

This 35-acre site is located in Pensacola, Florida. It includes an area where agrichemical production took place from 1889 to 1975. EPA placed the site on the Superfund program's National Priorities List in 1989 because of contaminated groundwater, sludge and soil resulting from facility operations.

Cleanup actions by the site's potentially responsible parties (PRPs) included soil removal, solidification, stabilization and capping. Groundwater use is limited and an advisory program provides information on current water conditions. The PRPs conduct site inspections twice each year, and groundwater monitoring is ongoing. Parts of the site are in ecological reuse as pollinator habitat.





Butterfly habitat plants on site before planting.

Creating a Monarch Waystation

Research into establishing pollinator habitat on site and returning the area to ecological use began in early 2015. Working closely with EPA, site PRPs found that several conditions – remedy protectiveness, ground stability, sunlight, openness and availability of water – made the site an ideal location for butterfly habitat. A total of about 12 acres was identified as best suited for the planting of butterfly-friendly plants. The species specifically attract Monarch butterflies, with an overall goal of increasing the Monarch population and sustaining the habitat area.

As Monarch butterflies migrate, they pass through the Pensacola area each year in early October. Habitat planting and preparation began in late 2015, with a focus on establishing a food source waystation for Monarchs. Plantings included high nectar-producing flowers and bushes, as well as milkweed, the only plant where Monarchs will lay their eggs.

What Are Pollinators? Why Are They Important?

A pollinator is an insect or animal that moves pollen within or to another flower, fertilizing the plant. There are about 200,000 species of pollinators, including bees, butterflies, wasps, beetles, birds and bats. Many types of plants, including vegetable and fruit crops, require pollination to bear fruit. Recent declines in pollinator populations – and bees in particular – have raised concerns about the future of food supplies worldwide

Incorporating Monarch-Friendly Vegetation

In total, the habitat area includes more than 1,700 plants – over 230 asters and about 200 each of abelia, coneflower, liatris, cassia and rudbeckia. About 200 buddleia, a shrub also known as the butterfly bush, provide fragrant blooms from spring to fall. The 300 milkweed plants not only host Monarch eggs; they are also the only plant the larvae will feed on. Milkweed sustains the health of Monarch butterflies throughout their entire life cycle. Habitat plants came from Arc Gateway Plant Nursery, a Pensacola organization that employs about 40 adults with developmental disabilities. The nursery helps their workers make a living while also teaching them social, horticultural and customer service skills.

Supporting Remedy Protectiveness

The site's planting with pollinator-friendly vegetation also enhanced the remedy, preventing erosion around the engineered cap. The reuse of the Agrico Chemical Company Superfund site illustrates how federal cleanup sites can support a range of ecological opportunities, including pollinator habitat.



Monarch larva on site.

Monarch pollinating flowers on site.

Supporting Pollinator Health

EPA supports the health of pollinators in many ways. Efforts include:

- Co-chairing the Pollinator Health Task Force and development of a Strategy to Promote the Health of Honey Bees and Other Pollinators (<u>https://www.whitehouse.gov/sites/default/files/microsites/ostp/</u><u>Pollinator%20Health%20Strategy%202015.pdf</u>).
- Issuing guidance on how to minimize risks to pollinator health from pesticides and other chemicals.
- Convening summits and conferences to discuss pollinator health.
- Partnering with pollinator-focused groups such as the Wildlife Habitat Council, the Pollinator Partnership and the Monarch Joint Venture. For more information on EPA's Pollinator Partnership, visit: <u>http://www2.epa.gov/pollinator-protection/partners-pollinator-protection</u>
- Promoting the ecological reuse of Superfund sites and other areas, with technical assistance and incentives for pollinator-friendly reuses.
- Recognizing the efforts of responsible parties and other stakeholders for supporting pollinator health.

For more information on EPA's support of pollinator protection and health, visit: <u>http://www2.epa.gov/pollinator-protection</u>

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