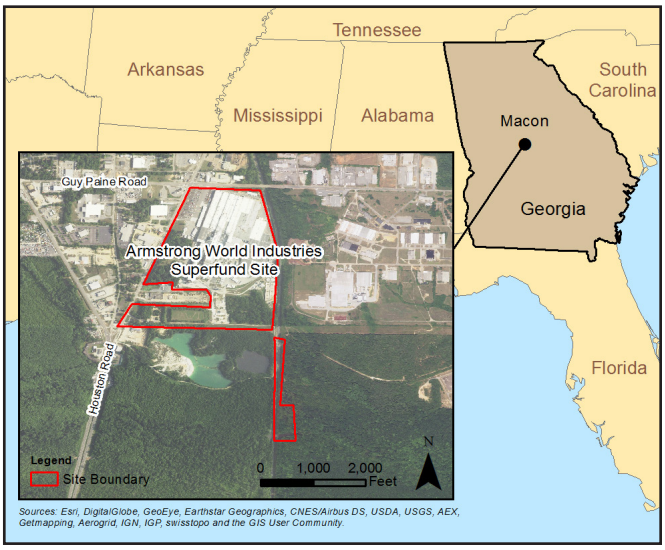
EPA
United States
Environmental Protection
Agency

Supporting the Health of Pollinators:

Ecological Reuse and the Armstrong World Industries Superfund Site

Site Background and Cleanup

The 130-acre Armstrong World Industries Superfund site is located in Macon, Georgia. Since 1948, Armstrong World Industries (Armstrong), the potentially responsible party (PRP), has manufactured acoustic ceiling tiles on site. Early facility operations contaminated soil, sediments and surrounding surface waters. EPA placed the area on the Superfund program's National Priorities List (NPL) in 2011. Cleanup activities included capping of two site landfills. EPA is currently evaluating cleanup options for a third landfill and site surface waters.



The Armstrong World Industries Superfund site is located in Macon, Georgia.

Ecological Reuse Supports On-Site Operations

Capping of one of the landfills, the Wastewater Treatment Plant (WWTP) landfill, began in 2011 and finished in April 2016. As the cleanup wrapped up, Armstrong focused on potential reuse options for the capped area. After discussions with environmental contractor Ramboll Environ, Armstrong selected a pollinator meadow for 4 acres of the capped area in December 2015.

Located next to the manufacturing plant, the Armstrong Macon Meadow provides Armstrong employees with a natural area to visit and enjoy. Trails link through the meadow, while benches provide opportunities for conversation and contemplation. Environmental signage provides opportunities for Armstrong employees to learn more about pollinators and the habitat benefits provided by the meadow.

Welcome board highlighting the features of the Armstrong Macon Meadow.

Ecological revitalization at the site will restore native habitat for wildlife, migratory birds and pollinators. A once-unused area is now a beneficial green space.

Establishing Native Plants and Trees

The 4-acre meadow is home to about 50 species of plants and wildflowers, including milkweed, coneflowers, coreopsis and clover. The meadow includes a bee garden, a general butterfly garden, a hummingbird garden and a Monarch Butterfly garden. Each garden is planted with a tailored seed mixture that is hardy (drought resistant) and native to the area. The meadow is expected to reach full maturity by the spring of 2017.

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.

Providing Pollinator Habitat

Returning a site to ecological use restores valuable habitat for pollinators. In addition to pollen and nectar, the habitat provides pollinators with the space they need to thrive. The native vegetation on site attracts a variety of pollinator species, including bees, wasps, butterflies and birds. Crimson Clover, for instance, attracts Digger bees, a bee species native to the region.

Using native plants and flowers as part of the ecological reuse of Superfund sites such as the Armstrong World Industries site restores ecosystems, provides a haven for pollinators and supports their long-term health. Many Superfund sites are well suited to support a range of ecological reuses, including pollinator habitats.

Aerial view of the Armstrong Macon Meadow. (Source: Armstrong World Industries)

Walking paths throughout the meadow enable visitors to experience each of the four pollinator gardens. (Source: Armstrong World Industries)

Additional Benefits

The pollinator meadow and gardens also provide several additional benefits. The meadow is a sustainable, cost-effective alternative to mowing the cap several times a year, thereby reducing carbon emissions. Native vegetation also conserves resources with the use of less water and fertilizer, while effectively preventing erosion of the engineered cap's soil cover.

What Is EPA Doing to Protect Pollinators?

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

- Co-chairing the interagency Pollinator Health Task Force and development of a *Strategy to Promote the Health of Honey Bees and Other Pollinators* (https://www.whitehouse.gov/sites/default/files/microsites/ostp/Pollinator%20Health%20Strategy%202015.pdf).
- 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: https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Blog/PPAP_2016.pdf.
- Promoting the ecological reuse of Superfund sites and other areas, with special assistance and incentives for pollinator-friendly reuses.
- Recognizing the efforts of responsible parties and other stakeholders for supporting pollinator health.

For more information on pollinator protection and health, visit https://www.epa.gov/pollinator-protection.

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