



Riverwood Plantation Pollinator Outdoor Classroom

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SITUATION

The decline of pollinators has scientists concerned about resulting crop pollination deficits, diminishing native biodiversity, and national and global food scarcity. In America, many species of insect, bird, and mammal contribute to pollination of food plants. Over the last decade, widespread media attention has been given to the decline in honeybee populations due to their prominence in pollination efforts for food production and economic impact, but all pollinators populations are in danger. The five causes of pollinator decline identified by the National Park Service are habitat loss, non-native species, pesticide use, climate change, and parasites and diseases (National Park Service, 2021).

In 2014, President Obama wrote a memorandum that called for increased federal action towards protecting pollinator species. The resulting federal plan developed by the Pollinator Health Task Force in 2015 addresses includes action steps:

- 1) Conduct research to understand, prevent, and recover from pollinator losses
- 2) Expand public education programs and outreach
- 3) Increase and improve pollinator habitat
- 4) Develop public-private partnerships across all these activities

As a result of the federal pollinator health plan, each individual state was tasked with developing a customized strategy with recommendations on improving pollinator health in their area (Environmental Protection Agency). The Georgia plan, titled Protecting Georgia's Pollinators, was developed by the University of Georgia Department of Entomology and the Georgia Department of Agriculture in 2016 (Griffin, 2016). For both federal and state programs, education opportunities on pollinators is a critical component of protecting pollinator species.

OBJECTIVES

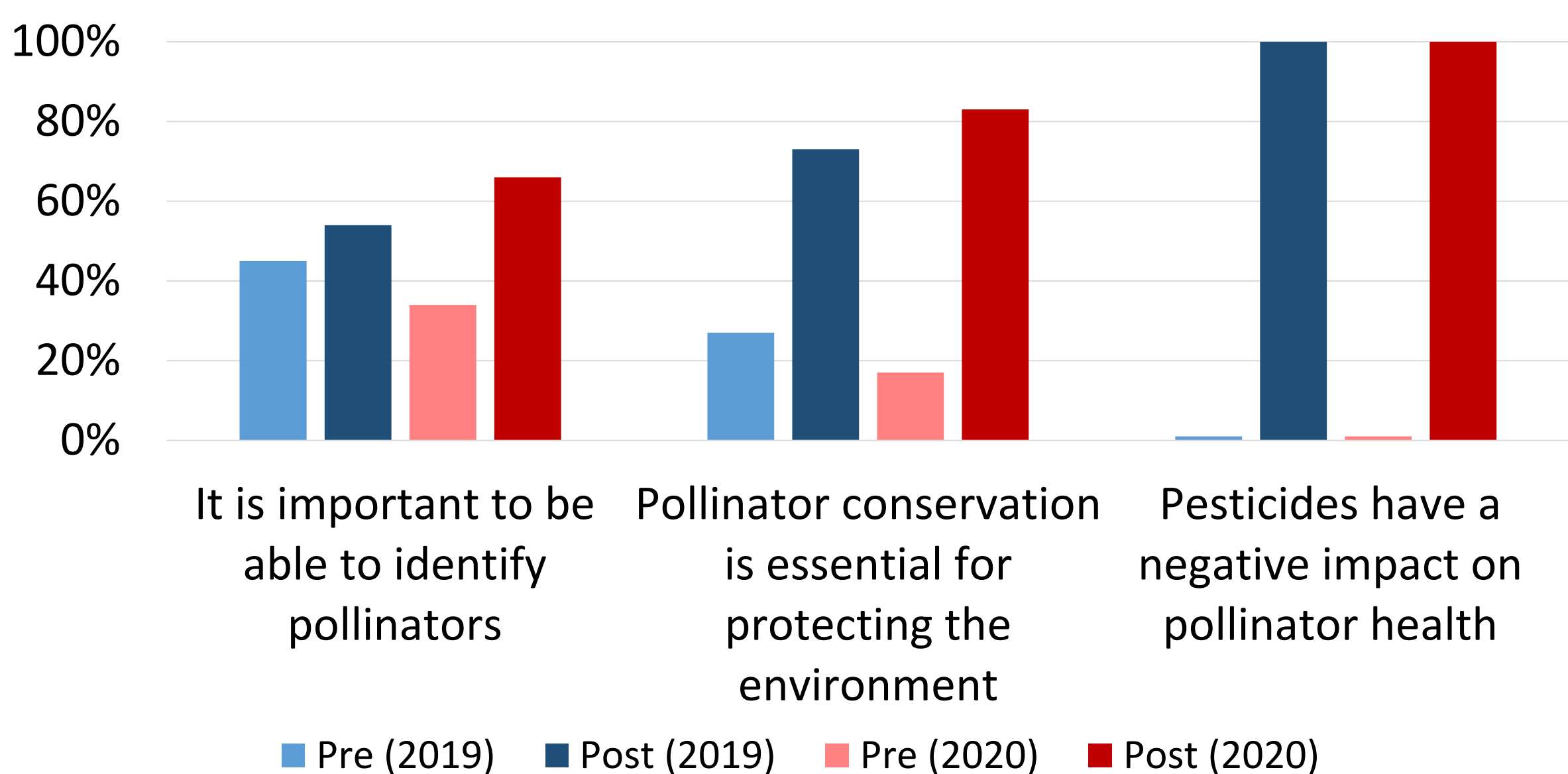
- Design and install pollinator garden and outdoor classroom in the Riverwood neighborhood
- Host hands-on programs to increase participant knowledge of pollinators and encourage adoption of Pollinator Protection Practices

REFERENCES

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3. Obama, Barack, Presidential Memorandum -- Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators, June 20, 2014, <https://obamawhitehouse.archives.gov/the-press-office/2014/06/20/presidential-memorandum-creating-federal-strategy-promote-health-honey-b>
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Figure 1: Knowledge Change of Program Participants



2019 Activities:

- Hosted over 35 families for the UGA Great Pollinator Count
- Designated as Certified Monarch Watch Waystation
- Hosted five educational programs with 56 attendees

2020 Activities:

- Hosted over 20 families for UGA Great Pollinator Count
- Designated as Certified Monarch Watch Waystation
- Hosted three educational programs with 21 attendees*

*Due to COVID-19 restrictions, in 2020, the garden has only been able to provided 3 educational opportunities reaching 21 attendees(12 adults and 9 youths). Two scheduled events, April Shower Program and May Flowers Program, were canceled due to COVID-19.



METHODS

Riverwood Plantation is a community consisting of 3,000 acres and 1,500 homes that highlights nature and a strong sense of community. Locating the garden centrally in the community was key to successful educational efforts on the importance of pollinators, beneficial insects, and proper plant selection.

In May of 2019, the Riverwood Home Owners Association, Georgia Power, and Columbia County Extension began clearing the proposed garden, a 4,500 square foot space located between residential developments and adjacent to Greenbrier schools. Once cleared, Master Gardener Extension Volunteers added plants donated from local business and supplies procured with grant funding from Monarch Watch, Augusta Area Master Gardeners, Plant America, and Georgia Association of Conservation Districts.

Plant selections were made by referring to publications produced by UGA extension and the Xerces Society. Criteria used for plant selection included their native range, time of year for flowering, growth pattern, and preferred pollinator species.

To allow for continuing communication, Master Gardener Project Leader, Kelly Dzurny, created a Facebook page to ensure community partners were kept up-to-date on educational opportunities related to the pollinator garden.

Evaluation

All educational programs were evaluated using voluntary pre- and post- program surveys. Participants were asked to agree or disagree with the following statements prior to and after the program:

- 1) It is important to be able to identify pollinators
 - 2) Pollinator conservation is essential for protecting the environment
 - 3) Pesticides have a negative impact on pollinator health.
- Data from the evaluations can be reviewed in Figure 1.

