



## Pollinator Paradise at the Dickinson County Nature Center

"Dreams do come true."

That's what donor Delores Maser has to say about the Pollinator Paradise addition to the Dickinson County Nature Center, which opened in November 2019.

The issue of declining pollinator populations is an international one. Since the 1990s, monarch butterfly populations have decreased more than 80 percent in the eastern U.S. and 99.4 percent in coastal California, according to the Xerces Society, due to loss of milkweed breeding habitat, pesticide use, logging and development degrading overwintering sites in Mexico. Bee populations have also suffered, with a 58 percent decline in honeybee populations in the past 60 years, the rusty-patched bumblebee being placed on the endangered species list and native bee species declining and even disappearing.

Dwindling pollinator populations has an immediate impact on humans, because one in three bites of food that we take is due to pollinators. Examples of crops that are pollinated include apples, squash and almonds. Without the assistance of pollinators, most plants cannot produce fruit and seeds. In the U.S., pollination by honeybees directly or indirectly contributed to more than \$19 billion worth of crops in 2010. Pollination by other insect pollinators contributed to nearly \$10 billion worth of crops in 2010.

Dickinson County Conservation has been a leader in the world of pollinators, working on and publicizing these issues, since the early 2000s, when a small garden shed --- called the Butterfly House --- was constructed in Kenue Park in Okoboji. In 2006, the first Butterfly Festival was held there as fundraising was continuing for construction of the Dickinson County Nature Center, which opened in 2010. The Butterfly Festival has continued to grow and now is known as Dee's Bee & Butterfly Festival --- drawing in more than 900 participants in 2019 --- to increase awareness of the importance of pollinators and the issues surrounding them.

In 2017, Maser came to staff with the idea to turn the popular Butterfly House, which was only open during summers, into a year-round educational building. It was decided that it would be most cost-effective, efficient and accessible if it became a new addition to the Dickinson County Nature Center called Pollinator Paradise.

Pollinator Paradise is an innovative way to discuss pollinator issues. Many organizations are planting pollinator gardens and housing small exhibits on pollinators, and the U.S. Fish & Wildlife Service is donating seeds to counties along Interstate 35 to help promote forbs and grasses to improve pollinator habitat. However, Pollinator Paradise is the first educational center in Iowa to fully focus on this massive issue of declining pollinators. Thanks to the creativity of the exhibit designers, fabricators and staff, Pollinator Paradise goes beyond the typical ways of addressing these issues and allows people to interact with and immerse themselves in these issues through the different exhibits.



Amazing Apples features a life-size apple orchard where kids can dress up as mason bees or honeybees to collect faux pollen balls, launch them onto the stigmas of apple blossoms and watch as they move from tree to tree with the help of bees. The goal of this exhibit is to increase understanding of pollination and to educate families that pollinators are needed for some of their favorite foods, like apples.

In the Fantastical Food Truck, kids play the role of cook in making meals that wouldn't have all their ingredients without pollination. They learn that one in every three bites of food that we take is due to pollinators.

The Magic Monarchs exhibit features an area for people to create their own symmetrical butterfly using colorful blocks and a mirror as well as information about the monarch life cycle, monarch migration and other important facts about butterflies and pollinators. The nature center also has a seasonal butterfly enclosure where people can see the live life cycle of a butterfly, from egg to caterpillar to chrysalis to adult, during the summer season.



Build a Pollinator allows visitors to invent the optimal insect for pollinating using three-dimensional body parts from real-world pollinators. This area helps visitors learn about pollinator body parts, which make these creatures proficient at their jobs.

Save the Pollinators is a digital, touchscreen game that lets people of all ages create effective pollination plots to better understand the important roles insects play in our planet's ecosystem. They select the type and amount of pollinator-friendly, or unfriendly, plants for a plot and watch how those choices impact the population of pollinators around them. Visitors can then take their lists home to plant pollinator plots in their

own backyards.

The human-sized honeycomb lets kids climb through actual honeycomb to pretend they are honeybees, creating a bond between them and these important creatures. They can also view a live indoor beehive to learn about the honeybee life cycle and overcome any fears they might have of bees.

The goal for these exhibits is to truly experience why pollinators are important and then to go home, make changes and become advocates for our precious pollinator resources.

It took two years to raise funds for this completely donor-funded addition to the Dickinson County Nature Center, not costing county taxpayers anything beyond operations and staff time. The grand opening for Pollinator Paradise was held in November 2019. It has been a project that proves the value of



perseverance. Although it took only two years of a capital campaign, it has been a project that has truly been in the works since the first Butterfly House was constructed in the early 2000s. The dream to reach people about pollinator issues has grown and become even more timely and has proven that passion for an issue can bring about success and change.

Pollinator Paradise is a true partnership among Dickinson County Conservation, the Conservation Foundation of Dickinson County --- which raised the funds for the project, the Maser Family Foundation and the Sherwood Foundation --- which contributed significant funding toward the construction portion of the project. The conservation board also has a partnership with the Blank Park Zoo's Plant.Grow.Fly. pollinator program and works with Dickinson County Secondary Roads to replant ditch clean-outs with natives plantings that encourage pollinator population growth. The conservation board also has a large volunteer program with more than 50 active volunteers that is growing to take on the challenge of expanding visitor numbers, exhibit maintenance and butterfly care that also comes with the addition of Pollinator Paradise.

Pollinator Paradise has already increased visitorship to the Dickinson County Nature Center. Visitor tallies have gone up 37 percent November 2019-February 2020 compared to that four-month span in 2018-19. That means that the Dickinson County Nature Center has reached more than 4,000 people messages about pollinators in only four months. The nature center had more than 20,000 visitors in 2019. Those statistics are incredibly important for community outreach. Plus, visitor comments show that they are not only enjoying the interactive exhibits, but they are also learning. Adults have commented that they didn't know that mason bees existed let alone that they are native and better pollinators than honeybees. Kids are learning that some of their favorite foods wouldn't be possible without pollinators, like the tomato soup, fajitas and smoothies that they make in the Fantastical Food Truck.

Pollinator Paradise has garnered regional and state attention in the media, and people involved in other conservation-related organizations throughout the country who have visited have taken inspiration from the interactive exhibits inside. Conservation organizations can replicate the ideas behind Pollinator Paradise by creating their own interactive exhibits to take pollinator education to the next level of creativity and interactivity.

Dickinson County Conservation has been a leader in pollinator education for decades, from the Butterfly House to Dee's Bee & Butterfly Festival to classroom and public programming to pollinator plantings. Pollinator Paradise has been an innovative way to bring the message of dwindling pollinator populations and how humans have to make changes to bring back these important creatures by going beyond the typical and into a new world of interactive, hands-on activities that create lasting memories and bonds between people and pollinators. Rather than reaching a few people at a time through pollinator programs or plantings, we are reaching thousands. Pollinator Paradise has increased the efficiency of spreading the message of the importance of pollinators and how we can make a difference. It truly is Excellence in Action.

Please indicate nomination type: Individual  Program

Name of individual/program: Pollinator Paradise County or affiliate: Dickinson County Conservation

Name of nominator: Kiley Roth Title: Community Relations Coordinator

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