



*Photo Credit: Dr. Douglas Tallamy, University of Delaware*

How many caterpillars does it take to feed a nest of chickadees? Depending on how many birds are in the nest, the parents can feed them up to 500 caterpillars a day. Dr. Douglas Tallamy, Professor of Entomology at the University of Delaware, was the keynote speaker at the Liberty Hyde Bailey's Fall Conference at South Haven High School. Dr. Tallamy used chickadees and caterpillars to illustrate a food web that helps sustain the environment on a local level.

## **The Sustainability of Liberty Hyde Bailey**

By Nancy Albright

The Liberty Hyde Bailey Museum held its first Fall Conference at South Haven High School in September to help bring Liberty Hyde Bailey's horticultural work – begun more than 100 years ago – into the 21<sup>st</sup> century.

According to LHBM Chair Anne Long, "We're here to celebrate the foundational work created by Liberty Hyde Bailey in the late 19<sup>th</sup> and 20<sup>th</sup> century and how it has evolved into a vibrant focus of action today."

Keynote speaker Dr. Douglas Tallamy, College of Agriculture & Natural Resources at the University of Delaware – Professor of Entomology, environmentalist, conservationist, preservationist and author of more than 80 books on these subjects – spoke to a crowd of 160-plus environmental enthusiasts at the conference to drive home the importance of not only preserving our natural environment, but restoring it to ultimately sustain human life.

Put simply, if we don't preserve our environment, we as human beings are at risk of extinction. Think of it this way: Every creature in the ecosystem feeds on plants; if there is no plant life there is no insect life, wildlife or human life.

Animals have specialized relationships with plants. For example, an estimated 96.4 % of monarch butterflies, which are classified as insects, have disappeared from the upper Midwest since 1976. Monarchs lay their eggs on milkweed and caterpillars eat butterfly eggs. The destruction of milkweed ultimately extinguishes a vital source of nutrition for caterpillars that rely on milkweed for sustenance and growth.

Animals also have specialized relationships with insects. Have you noticed a decline in recent years of those pretty cardinals and blue jays that once graced the trees in your yard? There is a scientific reason for this, which can be traced to human action.

Sure, you have birdfeeders in your backyard that you diligently fill with seeds to help sustain birdlife, but did you know that many birds rely on seeds for only 50% of their diet? Insects make up the other 50%.

Young Carolina chickadees feed on caterpillars almost exclusively. Depending on how many birds are in the nest, the parents can feed them up to 500 caterpillars a day. Caterpillars live in trees. Native trees, like the Wild Oak, sustain 19 different species which can produce over 400 caterpillars. Invasive trees, like the Bradford Pear brought into the U.S. from other countries, have proven an unsustainable habitat for caterpillars as the tree only sustains one species.

Another practice which destroys insects is the presence of too much grass, much of which is coaxed to grow with fertilizers and pesticides that not only kill insects, but contaminate soil and water. A safer route is to decide how much grass you need in your yard for recreation and plant ground cover in other areas, which doesn't require harmful chemicals and requires little maintenance. 85.6% of land in the United States west of the Mississippi River is privately owned and Dr. Tallamy stressed that it is essential for private property owners to practice land stewardship of this type to help preserve our natural resources.

Take it a step further and visit the National Wildlife Federation's Native Plant Finder at [www.nwf.org/nativeplantfinder](http://www.nwf.org/nativeplantfinder) and [www.audobon.org/plantsforbirds](http://www.audobon.org/plantsforbirds) to learn which native trees and plants to cultivate in your area.

Other speakers at the conference were; Botanist Dr. Tyler Bassett of the Michigan Natural Features Inventory; MSU Extension Educator Beth Clawson; Joel Clifton, Agronomist/Soil Scientist at Morgan Composting; Artist and Honeybee Keeper Ladislav Hanka; Michael Hoag, Director and Manager at Lillie House Permaculture; Steve Keto, Natural Areas and Preserve Manager at WMU; MSU Extension Educator Mark Longstroth; Curator of the MSU 4-H Children's Gardens Dr. Norm Lownds; Author and Notre Dame Environmental Researcher Tom Springer; MSU Extension Educator Mark Thomas; Jeanne Hawkins, President of Michigan Herb Associates; WMU Senior Biology student Louis Mitchell who works in the Natural Areas and Preserves; and hobby farmers James Jastifer MD, Board Certified Orthopedic Surgeon and his ten year-old son Ethan.

The conference kicked off with a self-guided Agri-Farm Tour of ten local farms on Friday afternoon, including Pleasant Hill Farm in Fennville, Birdsong Farm in Bangor, and the Khema Studio on Fernwood Farm, also in Fennville. The tour was organized by LHBM Secretary Dan Williamson. The event also hosted a panel discussion with Reverend Jeffrey Dick, Bailey Museum Director Emeritus John Stempien and a host of others.

When asked how the conference came to be LHBM Chair Anne Long explained, "When Zadie Jackson became the administrator at the museum we spent many hours brainstorming about how to bring Dr. Bailey into the forefront in the 21st century. We knew the Budding Naturalists program was a successful way to keep Dr. Bailey's 1903 publication *Nature Study* resonating with children because it was all based upon discovery, but enlightenment for adults was more difficult. We decided that a conference would be the best format. Thanks to Joan Hiddema who chaired an Ad Hoc Committee that began last February and has spent the last eight months planning the conference. It was a huge risk and even larger undertaking, but what a success!"

“We had a fantastic day for the first Liberty Hyde Bailey Museum Conference,” said LHBM Treasurer Joan Hiddema. “People came from as far away as Battle Creek, Grand Rapids, South Bend, Lansing and Illinois: over 160 attendees! Including the volunteers and vendors I’m sure there were more than 200 people in the newly renovated South Haven High School. What a wonderful venue for a conference. The cafeteria is so spacious and comfortable, we had enough space for food and vendors and registration. There was plenty of room for people to sit and talk and eat during the breaks and we received so many compliments on the high school.”

Dr. Tallamy said, “Anne Long was wonderful to work with and my experience with this conference was entirely positive.”

It is the sincere hope of the Liberty Hyde Bailey to raise awareness that each one of us can learn to take small steps toward preserving, restoring and cultivating the environment in which we live. If humans cannot eat they cannot put thought into the sustainability of the planet.

The Liberty Hyde Bailey wishes to thank the South Haven Garden Club and South Haven Public Schools for providing food for the conference. Many of the vegetables were grown by SHPS. LHB Administrator Zadie Jackson said, “The high school has been an absolute joy to work with – from food service to technology to facilities – to help us produce this event.”

South Haven High School Principal Jerry Sardina told the audience that the conference was an example of building bridges between SHPS and the community. South Haven Public Schools encourages students to recognize the importance of conservation and the preservation of earth’s natural resources. “We are helping students explore how they can take care of the world around us, especially since we live right next to the second largest Great Lake, and the Liberty Hyde Bailey Museum is a valuable resource for us.”

Vendors included Blue Horizon Nursery & Gardens, Ladislav Hanka, the Historical Association of South Haven, Kazoo Books, Mark’s Memories, Michigan Garden Clubs District III, Michigan Herb Associates, MSU Extension Services, Morgan Composting, the South Haven Garden Club, the South Haven Visitors Bureau, the Van Buren Conservation District, the Southwest Michigan Land Conservancy, the WMU Biology Club and the Liberty Hyde Bailey Museum and their wonderful volunteers.

The conference was organized in conjunction with the South Haven Garden Club, South Haven Public Schools, the South Haven Community Foundation, Michigan Garden Clubs District III, the South Haven Visitors Bureau, Albemarle, Meijer, and Dr. Bob Hiddema, who asked the Fenn Valley Winery to donate the money he earned this summer playing his guitar at the vineyard.

Visit [www.libertyhydebailey.org](http://www.libertyhydebailey.org) for more information.