Butterflies are one of the most recognizable insects because so many of us are attracted to their beauty and grace. They belong to the insect family Lepidoptera, which also include moths. They also represent a wide range of cultural significance in native American culture, Christianity, and in Mexican culture where monarch butterflies arrive there during the Day of the Dead celebration during their annual migration. In fact, the oldest known butterfly fossils are around 48 million years old.

Attracting these peaceful and delicate pollinators to our yards is quite easy if we follow a few simple steps. First, to attract a wide variety of butterflies, a garden should include an abundance of nectar sources for the adult butterflies as a source for energy and nutrition. In general, plants in the aster, mint and verbena plant families are excellent butterfly attractors. Here locally, plants like tickseed (Coreopsis leavenworthii), blue porterweed (Stachytarpheta jamaicensis), Keys ageratum (Ageratum maritimum), and wild sage (Lantana involucrata) are fantastic butterfly nectar plants. The goal is to have an abundance of floral and nectar sources throughout each season, so diversity is essential. The more plant diversity, that provide flowers and nectar throughout each season, the more butterflies you will be able to attract. Native plants fit this job well because they are adapted to our soil and environmental conditions without any additional needs of water or fertilizer once they are established. They have also co-evolved with the insects here for thousands of years. Adding more nectar plants will help attract butterflies already living near your home. Once you know the butterflies in your area, you can add the necessary food sources.

Any successful butterfly garden needs to also include food sources for the caterpillars called larval host plants. Most butterflies have a very narrow plant host range, meaning they will only feed on one type of plant or very closely related plants; for example, monarch and queen butterflies use a variety of different milkweed species and will differ geographically on native source and commercial availability. What may be a hard concept to grasp as gardeners, is this means, butterfly gardens need to provide habitat for all life stages, including the caterpillars (larva), which will...Continued on page 3
Shelly recently accomplished the following activities:

- Shelly is the South Florida coordinator for the 2020-2023 Greater Amberjack Visioning Program and helped to lead six public greater amberjack listening sessions for anglers, commercial fisheries, researchers, and seafood dealers. After interviewing local stakeholders in the Florida Keys and the Panhandle, Shelly transcribed and summarized their comments, which were compiled into a list of research recommendations to the steering committee. Read more in the media release “Florida Sea Grant leads call to action on Greater Amberjack, public input needed” Link: https://www.flseagrant.org/news/2020/11/22547/

- Shelly is on the communication and outreach teams for the South Atlantic Fishery Management Council and the Gulf Council and she was invited to contribute to the NOAA Fisheries Southeast

For-Hire Electronic Reporting Communications Sessions. These new federal requirements for charterboat captains go into effect on January 4-5, 2021. Headboat captains have already been reporting this information but there are slight changes. For more information, there is a great summary on UF/IFAS Blogs:


Michelle recently accomplished the following activities:

- Michelle was the speaker for the Key West Botanical Society speaker series and spoke to a group of 55 participants about attracting butterflies to yards in the Keys.

- Michelle is the coordinator for the Master Gardener Program. With the completion of the 2020 Master Gardener course, the Master Gardener Volunteer program gained 28 volunteers in 2020. Master Gardener contributed over 1,400 hours of volunteer service this year, even though the pandemic restricted most volunteer activities statewide. This is an economical impact to the county of $35, 500.

- Michelle will be presenting on Florida Friendly Landscaping as part of Key West Garden Clubs monthly meeting. Michelle will present on the 9 Florida Friendly Landscaping principles and teach participants how to get their yards recognized as “Florida Friendly.” This presentation will be held Thursday Jan. 7th via Zoom at 1:30PM. Please call (305)292-4501 to register.

Be sure to “Like” us on Facebook and follow us on Twitter and Instagram!
Alicia Betancourt
UF/IFAS Family and Community Development Agent and Monroe County Extension Director

Alicia recently accomplished the following activities:

- Alicia worked to organize two national Extension conferences under the Joint Council of Extension Professionals, the Public Issues Leadership Conference and the Extension Leadership Conference both to be held in 2021.
- Alicia worked on projects for the Community Voices, Informed Choices Program including training Extension agents, researching capacity building and developing curriculum.
- Alicia worked with municipal partners to plan and organize the Climate Smart Floridians Program being offered in 2021.
- Alicia worked with the City of Key West on the Sea Grant Home Elevation Grant. Climate Adaptation Project to increase financing options for adaptation. **If you are interested in this project, please contact Caroline Horn at Fair Insurance Rates of Monroe**

Continued from page 1

chew and defoliate their host plants. A few stand-out larval host plants in the Keys include: our native corky-stemmed passionvine (*Passiflora suberosa*) which is food for three different butterfly caterpillars, zebra longwing, our state butterfly, gulf fritillary and Julia butterflies; Bahama or privet senna (*Senna mexicana v. chapmanii, Senna ligustrina* respectively) the larval host plant for cloudless sulphur, sleepy orange and the orange-barred sulphur butterflies; and wild lime (*Zanthoxylum fagara*) host plant for the giant and Schaus’ butterflies.

Butterflies also need shelter and water. So, within the additional variety of plants, make sure there is structural diversity as well that provide different sizes, shapes, and layers. Wildflowers, like blanket flower (*gaillardia pulchella*), are fantastic nectar plants, but provide very little shelter. So, add shrubs, small and large trees; for instance, Florida Keys blackbead (*Pithecellobium keyense*), is a larval host plant for the large orange sulphur, cassius blue and the critically endangered Miami blue butterflies, but it’s a large shrub or small tree depending on how its maintained, and provides some shelter for as well. Water is also essential for supplementing additional mineral needs and aiding in thermoregulation. Butterflies will not use fountains or bird baths, but they will use depressions or low areas of the landscape where water is able to puddle.

Finally, if attracting insects is our goal, and butterflies and caterpillars are insects, an insecticide-free environment is needed. Insecticides can be very harmful and even fatal to caterpillars. So, it is important to manage pests sustainably for the protection of beneficial insects and butterflies alike. The added bonus of adding so much plant diversity to our yards is we will also be attracting many other beneficial insects that can provide natural pest management services like lady beetles, lacewings, parasitic wasps, and more. These insects will feed on aphids, mealybugs, scales, and whiteflies, common garden pests. So it’s a win-win!

Making these simple changes to our yards and gardens will ensure a successful butterfly gardening experience and help create a more balanced habitat for all insects.

Be sure to “Like” us on Facebook and follow us on Twitter and Instagram!
This newsletter can be accessed online at: 
http://monroe.ifas.ufl.edu/newsletter.shtml

We’re on the Web at: http://monroe.ifas.ufl.edu

Scan this code to go directly to our UF/IFAS Website for more information!

An Equal Opportunity Institution, UF/IFAS Extension, University of Florida, Institute of Food and Agricultural Sciences, Nick T. Place, dean for UF/IFAS Extension. Single copies of UF/IFAS Extension publications (excluding 4-H and youth publications) are available free to Florida residents from county UF/IFAS Extension offices.