New ‘living fossil’ program at refuge highlights role of species

The J.N. "Ding' Darling National Wildlife Refuge is offering a new program on horseshoe crabs.

Held every Tuesday at 11 a.m. in the Visitor & Education Center, the 30-minute program covers why this "living fossil" is not a "true crab" and its importance to migrating shorebirds and the medical field. Free of charge and family friendly, the program kicked off in January and will run up through April 8.

"The goal of the program is to express the importance of the horseshoe crab," volunteer Patty Wettstein, the presenter for the program, said.

She explained that horseshoe crabs are present year-round at the refuge and are especially visible during the new moons and full moons, which are times when the invertebrate species spawns.

As arachnids, they are more closely related to spiders and scorpions than crabs.

Using a PowerPoint presentation and educational tools, including a life-like model of a female horseshoe crab, Wettstein goes over a range of subjects, including its anatomy and role in history.

"They were used as fertilizer, as bait," she said.

Ancestors of horseshoe crabs date back 445 million years ago, according to some experts.

"They're ability to be able to adapt and survive," Wettstein said. "They are older than dinosaurs."

Their eggs serve as a food source for certain types of migrating birds.

In the medical field, the species' blood is harvested and used for bacterial contamination testing. Wettstein explained that the blood - which is blue in color - can detect and trap bacterial toxins, so it is used to ensure that medical products are not contaminated, thus saving patients from infection.

"Everything that goes into our body has been tested by the blood of horseshoe crabs," she said.

Last year, Wettstein and her husband, Jack, participated in a horseshoe crab

course one weekend at a wetlands institute in New Jersey. They brought back what they learned to jumpstart the program.

"We wanted to bring it back because we knew horseshoe crabs were here," she said.

One of the educational tools for the program that the refuge staff is excited to utilize is the model, developed by the Ecological Research & Development Group in Delaware. The world's first museum-grade model of a female horseshoe crab, it shows the species' exterior surfaces complete in detail.

The top of the model separates from the bottom of it to reveal the internal organs - colored for easier identification - egg distribution and circulatory system, providing a view never before available.

"It greatly enhances the program," Wettstein said. "It has added so much to it."

The refuge was able to acquire the tool through a donation by a donor.

On Jan. 30, Sharon and Elwood Leonard sat in on the horseshoe crab program. Visiting from Wisconsin, the couple explained that they had seen the species while touring the refuge.

"We've seen a lot of horseshoe crabs," she said.

"We thought it would be fun to learn a little bit more," Sharon Leonard added.

Elwood Leonard agreed.

"We've seen these things in the water," he said. "It'd be interesting to know a little more about them."

His wife was intrigued by the species' role in the medical field.

"The reason they take the blood," she said.

Asked about the response to the program, Wettstein said visitors are excited.

"A lot of visitors don't know about the medical aspect," she said.

For more information, call 239-472-1100 or visit www.fws.gov/refuge/jn_ding_darling.

The J.N. "Ding' Darling National Wildlife Refuge is at 1 Wildlife Drive, Sanibel.