

Project to save horseshoe crab wins green prize in Singapore

SINGAPORE - ITE College West student Eunus Chong had never met a horseshoe crab face to face until a project he started about two years ago made him passionate about protecting the endangered creatures.

As part of a project for the SembCorp Marine Green Wave Environmental Care Competition, Mr Chong, 18, and three of his schoolmates designed and manufactured a "Horseshoe Crab Propagation System", a system of tanks and an incubator for breeding and rearing horseshoe crabs.

And on Thursday (Feb 23), they took home the winning prize in the junior college/ ITE category for their project.

Mr Chong said the project aims to help repopulate horseshoe crab species in the wild, and encourage Singaporeans to learn more about them.

Horseshoe crabs have been around since before the dinosaur era. Despite their name, they are not crabs and only superficially resemble crustaceans. Instead, they are closely related to arachnids - a group that includes spiders and scorpions.

After the "back-breaking work" of fishing the horseshoe crab eggs - smaller than a green bean - from the shoreline at Kranji, the team placed the eggs in an incubator system equipped with an industrial temperature controller, air pumps and oxygen-booster to increase the hatch rate.

After the horseshoe crabs hatched, they were transferred to various tanks, including a hatching tank, nursing tank and display tank. It took them about eight months to design and manufacture the incubator and tank systems.

Mr Chong said the team has already bred "hundreds" of horseshoe crabs in

captivity, and most have been released back into the wild.

He said he soon grew attached to the marine creatures, adding: "Initially, I was afraid to touch them. Their tails were intimidating... Later, it felt as though I was feeding my own child. You have to feed the horseshoe crabs gently, and tend to their needs."

Mr Chong and his teammates have already won \$8,000 and a one-month work attachment with BP Singapore, but said it is still early days for the project. They hope to increase the survival rate of the horseshoe crabs from 20 to at least 50 per cent by making improvements to the system.

A total of 69 teams from primary and secondary schools, junior colleges, ITEs and tertiary institutions received prizes at the Marina Mandarin hotel on Thursday morning.

SembCorp Marine's Green Wave Environmental Care Competition for Schools, now in its 15th year, received 279 project submissions involving more 900 students in 2016.

The competition aims to give students a broader perspective of the environmental challenges faced by Singapore and other countries, by having them showcase practical ideas for environmental sustainability.

Other winning projects involved a "Water Saver" device designed by students from Northland Primary School, and a cellulose aerogel material designed by Hwa Chong Institution students to be more effective at soaking up oil spills.

The competition is organised by Sembcorp Marine, and co-sponsored by BP Shipping and Shell International Eastern Trading Company.

Sembcorp Marine's president and CEO Wong Weng Sun said: "We all agree that the increasingly thoughtful and sophisticated entries we see from each successive Green Wave competition bodes well for Singapore's long-term sustainability management."

Said Minister for Education Ng Chee Meng, who was guest-of-honour at the event: "We want to nurture our young to keep exploring beyond textbooks, and competitions like Green Wave provide them with an opportunity to identify real-life problems, work in teams, undertake research and come up with practical solutions."

He encouraged students to be enterprising, push boundaries, and get out of their comfort zones. Touching on the importance of "informal learning spaces", he urged parents not to focus too much on academic grades.