

## Noise, pollution, entertainment threaten turtles on Serangan Island

Serangan Island, a small island previously separated from mainland Bali by a narrow strait, now has become a peninsular connected with Bali by a broad land bridge.

Some two decades ago, it was easy to cross the narrow strait of 7 kilometers by traditional boat. It took only 20 minutes to arrive on Serangan's white sandy beaches from Sesetan village. Passengers for the crossing could get a clear view over the lush green mangrove forest along Bali's southern coastline.

The land bridge that obstructs the water current, however, has caused some ecological damage to the environment, as is obvious from the sickly plant growth in the brackish water. It takes 40 minutes to travel over the bridge and another 30 minutes to traverse the meandering roads to get to the turtle hatchery on the eastern beach of Serangan, which faces the Indian Ocean.

The land bridge obviously has helped to facilitate the arrival of tourists who are mad about yachting, diving and speed-boat racing. There are hotels, inns and eateries that cater to the tourists' daily needs. After a trip under the scorching Bali sun, my taxi driver dropped me off in front of an impressive split gate at the 1-hectare turtle conservation site managed by the Forestry Conservation office in Denpasar.

There is a large statue of a turtle at the entrance to the turtle farm. It is very encouraging to see a number of improvements on the turtle farm as well as the better care extended to the turtles, which are kept in six water tanks under a protective roof to shield the young turtles from the heat of Bali's sun. The six tanks are decorated with blue porcelain tiles and have running water.

Three young students were busy cleaning the tanks to ensure that the young turtles enjoy a healthy environment. Students from Udayana University, the animal husbandry faculty at the Bogor Agriculture University and the Jakarta Academy for Marine Biology rotate on one-month academic stints at the farm.

One of the students, Yolita Anja, is from Lithuania. She had volunteered to do some social work in an Asian country after completing her studies in economic engineering. She chose to volunteer for two-months in Bali in order to give her an insight into the way of life on the island and because the people are well-known for their friendliness and hospitality. So far, she is enjoying life in Serangan and Denpasar.

Yolita's fellow students, Siti Andayani and Sri Rejeki, have been assigned by their respective academies to gain knowledge about the turtles' habits and life cycles. It is wonderful that the turtle conservation project and the Education Agency in Denpasar have joined forces for the preservation of the endangered species. Serangan, previously dubbed Turtle Island, has long been known as the nesting ground of several turtle species including the *Caretta-caretta*, *Lepidochelys*, *Demochelys coriacea*, *Chelonia mydas* and *Eretmochelys imbricata*.

During their nesting period between June and September, and after roaming the deep sea currents of the Indian Ocean the turtles beach on the pristine white beaches of Serangan. An adult turtle weighing between 125 and 250 kilograms lumbers awkwardly up the beach while breathing heavily. It takes the creature one hour to cover a distance of some 10 to 25 meters from the waterline to lay its eggs. Consequently, it is precisely during the nesting period that turtles become easy prey for their major predator: humans.

Egg poachers lurk in wait for the turtles in the darkness of the night. After robbing the eggs, the poachers turn the animal on its back, which kills it, and then sells the turtle for its meat or carapace. These wanton acts of killing continue despite the fact that the Bali administration has issued Decree No. 7/1999 and Act No. 5/1999, which declare turtles to be an endangered species, strictly prohibiting the capture, killing or dealing of any part of the animal.

But the three students assigned to the turtle farm explained that it was hard to dissuade locals from stealing the eggs from the nesting ground as they needed the cash to meet their daily needs. To strengthen the conservation program, the turtle project has decided to buy the eggs collected by poachers. Every two weeks, the project buys around 200 eggs costing between Rp 2,000 (20 US cents) and Rp 3,000 per egg. They said that buying the eggs was possibly the most viable option in their attempts to save the turtle from extinction.

Once bought, the eggs are placed in an enclosed hatching ground facing the open sea. The hatching ground, which measures between 1 and 3 meters, has 30 nests with between 90 and 150 eggs at any one time laid out at intervals. After the eggs hatch, the tiny and delicate baby turtles, which are only 5 centimeters in length, are placed in the tanks for a month until they grow to around 20 cm. Most are then released into the sea, but the project retains some of them in the tanks for a longer period for academic purposes.

Some of the turtles kept here have reached three years of age, and the six tanks have a total of 15 young turtles that require daily care and food. The students, who carry out these daily tasks, explain that they feed the turtles seaweed and small lemuru fish.

In contrast to their openness about the laws in place to protect the turtles, the students remain tight-lipped, however, about the noise, pollution and disturbances from the entertainment outlets at tourist spots along the beaches of Serangan.

Before tourist developments sprang up on Serangan, or Turtle, Island, the area was isolated and sparsely inhabited. The quietude that envelops its coast makes it a favorite nesting ground for turtles but the sensitive and timid creatures, if they sense danger, hear the noise coming from entertainment establishments or are blinded by the headlights of passing cars, will immediately return to the sea and their newly laid eggs end up on the sea bottom. This kind of occurrence most definitely does not aid the efforts to preserve the endangered species.