

'NO PROOF OF DUGONGS GOING EXTINCT'

Universiti Malaysia Sabah expert says fishermen have seen the mammals off Pulau Mantanani

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THE sightings of dugongs off Sabah's coast and in marine parks several times in recent years put paid to public perception that the marine mammal may have gone extinct in the state's waters.

Marine experts said the almost non-appearance of dugongs, also known as "seacows", did not

mean the species had been wiped out. Nevertheless, one has to be lucky to spot them.

Between 2003 and 2010, Universiti Malaysia Sabah's (UMS) first and most comprehensive studies on dugongs showed that the species tend to inhabit a particular area. The population in Sabah is small, with about 60 individuals.

The purpose of the studies was to investigate the distribution and abundance of dugongs, while highlighting the need for urgent management of seagrass for dugong habitat and feeding ground.

Based on the research, UMS' Borneo Marine Research Institute (BMRI) director Professor Dr Rossita Shapawi said these dugongs usually inhabit the waters off Brunei Bay and Sandakan Bay.

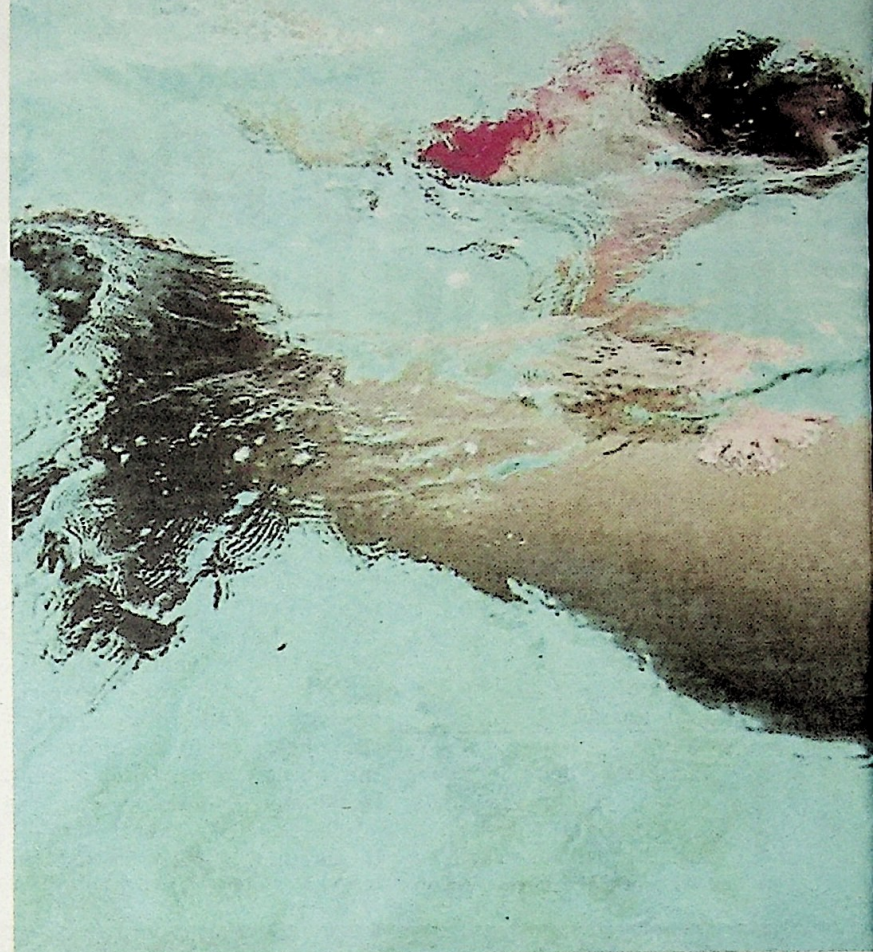
"Other areas, such as Mantanani Island (off Kota Belud), Banggi Island (off Kudat) and several areas in Marudu Bay, have also shown presence of dugongs," she told the *New Straits Times*.

Pulau Mantanani, for example, is known for dugong sightings. Some tour operators have promoted the area as "dugong beach" to lure tourists to the island.

However, because sightings at the island have dwindled to almost none, many assumed they no longer exist.

"There is no proof of dugongs going extinct. Based on anecdotal information, dugongs can still be found in Pulau Mantanani, but sightings are rare with some local fishermen having reported seeing dugongs during the night or early day.

"The presence of dugongs in a



particular area is highly dependent on the availability of food resources, especially seagrass bed. They may occasionally visit an area for feeding, especially when seagrass is abundant in a particular season," said Rossita.

Unfortunately, she said there was no current study of dugongs by UMS researchers on Pulau Mantanani, while noting that sightings of dugongs by local fishermen were common in Brunei Bay, Marudu Bay, Banggi Island, Pitas and in the east coast.

These areas, she added, had thriving seagrass beds and fewer human activities.

Rossita said accelerating loss of seagrass bed was considered the most important factor behind the dwindling dugong population in Sabah and Malaysia in general.

"Dugongs feed exclusively on seagrass, especially young shoots and roots. Excessive sedimentation due to uncontrolled anthropogenic activities mainly of coastal development will smother seagrass bed.

"This results in the disappearance of habitat and food for dugongs. Other factors, such as accidental catch by fishermen and use of destructive fishing methods, also contribute to the direct mortality of dugongs, as well as the loss of food resources."

BMRI researcher and senior lecturer Dr John Madin said the institute was monitoring the presence of dugongs in Sabah waters, including in Brunei Bay, based on available public reports on either live sightings, stranded

or dead specimens.

"More studies have to be conducted on dugongs in Sabah waters, with particular focus on the restoration of seagrass areas. This is important to ensure that dugong habitats are maintained and well preserved," he said.

FACTS ABOUT DUGONG

Madin said dugongs were gentle mammals and prefer to travel with companions, especially their close family which comprises at least three to five members.

He said they were usually not seen to be in close contact (with humans) but rather at a distance, adding that these mammals were active during the day.

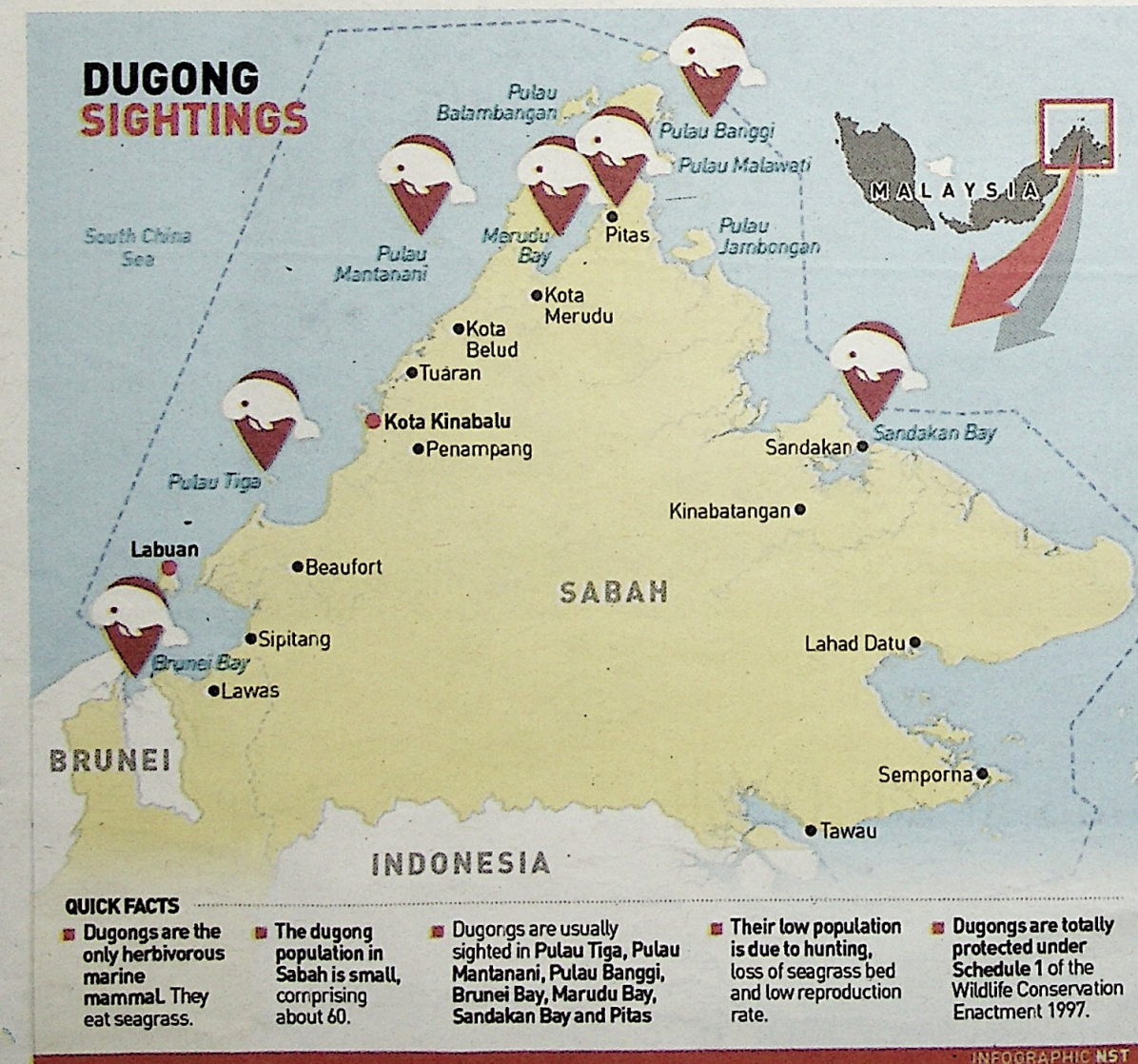
"However, they have reportedly been seen moving at night or in the early morning, especially during their feeding trips.

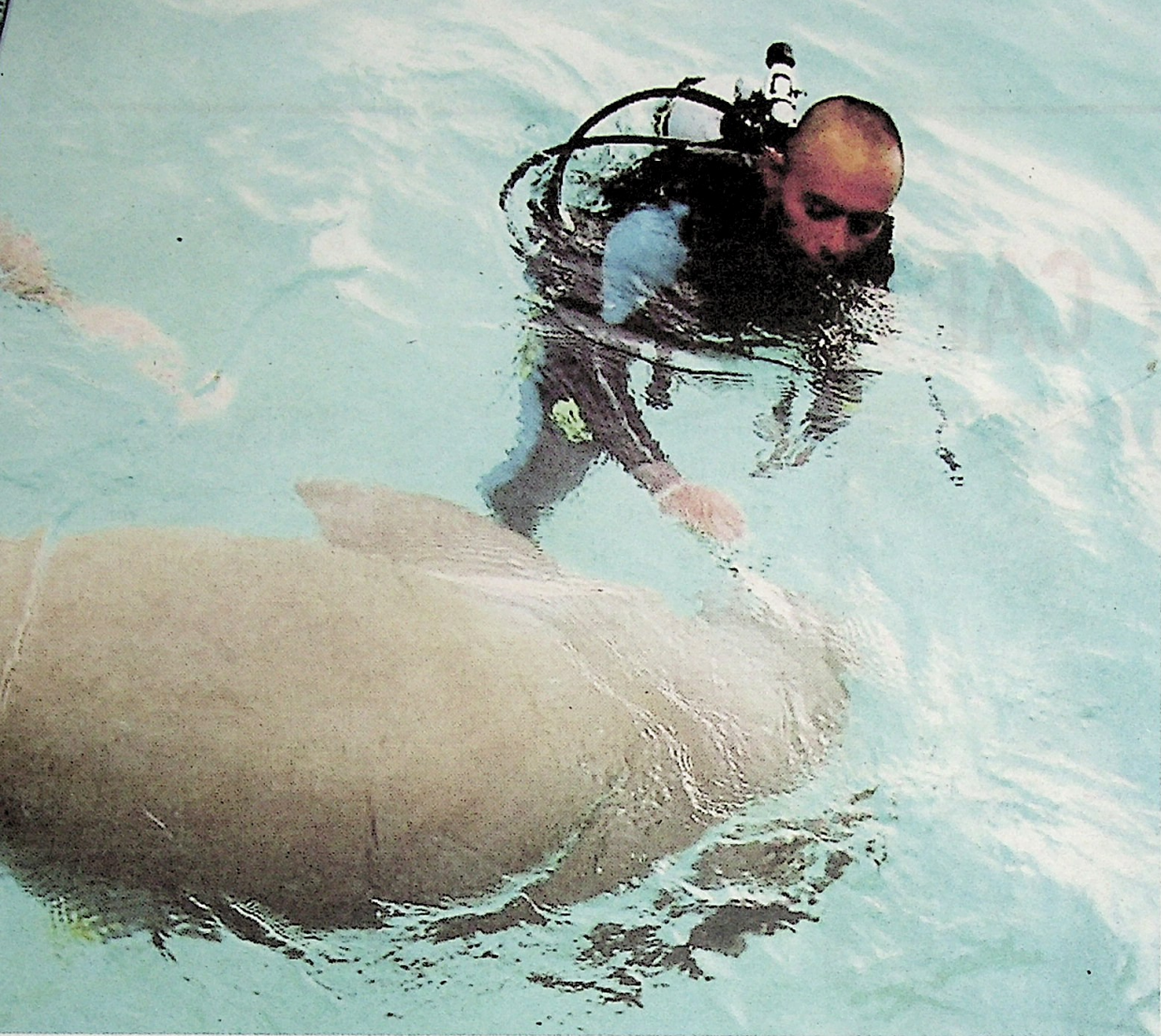
"To our knowledge, in Malaysia there are few cases where dugongs have approached humans underwater.

"In such cases, the animal should be allowed to go. Do not approach them for safety reasons. While dugongs look gentle, they may turn aggressive in unknown situations, especially during their mating season," he said on the do's and don'ts when encountering a dugong.

The low reproduction rate of dugongs, Madin said, was among the factors leading to their low population.

He said conflict of interest with humans over the use of the same resources, such as marine environment, was a critical factor in their low population.





Try Scuba Sdn Bhd owner Rudy Mattahari and a tourist interacting with a dugong in waters off Pulau Mantanani. PIX COURTESY OF RUDY MATTAHARI

"This included overexploitation of natural resources by humans for various purposes leading to habitat destruction, limited food resources and nursery ground, especially for dugongs to raise their calves.

"Male dugongs usually sexually mature at about nine to 10 years, the females usually at three years.

"The duration of oestrus (state of receptivity to mating in females), being likely to be prolonged and possibly induced (i.e. suitable habitat and food availability) leads to relatively low reproduction rates.

"The estimated gestation period for dugongs is about 13.9 months. Most single calves are born during a particular time of year, but it usually coincides with food abundance (seagrass). Their lactation period can last at least 1.5 years, but a calf remains close to its mother for up to two years," he said.

Noting that dugongs were large in size, John said these mammals were long-lived animals with maximum estimated life spans of between 70 and 75 years.

They could spend around 49 per cent on their daily activity time on feeding and could eat up

to 10 to 15 per cent of their body weight in vegetation daily.

"Some favourite food of the dugong includes *Halophila sp.* and *Zostera sp.* (types of seagrass), which are seasonally abundant in Sabah waters."

The dugong is a totally protected species under Schedule 1 of the Wildlife Conservation Enactment 1997, which puts this marine mammal in the same totally protected category with pangolins, Sumatran rhinoceros, orang utans, sun bears, proboscis monkeys, clouded leopards, green turtles and hawksbill turtles.



Rudy Mattahari playing with Nicky in waters off Pulau Mantanani in 2007.

Nicky, the friendly dugong

KOTA KINABALU: Nowadays, one needs luck to spot dugongs in the wild, let alone play and swim with them. Their sightings are rarely, if at all, reported.

But two years ago, a group of tourists had Lady Luck on their side when they came across a dugong swimming beside their boat.

The tourists, who were guests of the Try Scuba Sdn Bhd dive company, were headed towards Pulau Kalampunian Damit and Pulau Besar Kalampunian when the dugong made a surprise appearance.

"I've not seen a dugong for a long time after my first encounter with one at Pulau Mantanani between 2005 and 2007. So, to see it after over 10 years and in an area you least expect it, is remarkable," said company owner Rudy Mattahari, 51.

"The sighting occurred in late February 2017. Two months later, it was sighted in a seagrass bed area, which is a little further from a fishing village. Usually, my staff would inform me if they see one but last year, there were zero sightings."

The islands are two of three islands within the protected Tiga Island Park off Kuala Penyu. The other island is Pulau Tiga.

Prior to his encounter, Mattahari, who has 28 years' experience in scuba diving, said a dugong was also sighted near Pulau Tiga in late January 2017.

"We don't know whether it was the same dugong, but it goes to show that the waters off Pulau Tiga is potentially rich with seagrass. It was an amazing encounter because most of the people have never seen a dugong in the area. It brings back memories of when I was working with a dive company on Pulau Mantanani off Kota Belud, several years ago. There was a friendly male dugong and it always swam or waited near the jetty to greet us."

Between 2005 and 2007, Mat-

tahari formed a bond with the dugong, which he called Nicky. He said Nicky was so friendly that resort guests and islanders could easily approach it, play with it, and take photos.

"Whenever I guided divers, Nicky would wait at the jetty and wanted to join us. It responded to me each time I made a sound and signalled at it. There were several occasions where it dove alongside us. It never disturbed or caused harm to anyone. Once, after resurfacing from a dive, Nicky cheekily hugged a diver from behind. She did not realise it because she had a dive tank. We laughed and photos were taken. She was one lucky diver and I hope they still keep the pictures as remembrance."

He said Nicky got his name from a Japanese couple, adding that it had scars on one of its pectoral fins as a result of being hit by a boat engine.

Mantanani islanders, who are mostly Bajau Ubian, treated it as their pet and would protect it from fishermen not from the island, he added.

"They never tried to catch it or kill it. However, after I left Pulau Mantanani, Nicky went missing. Villagers said they saw Nicky several times before it disappeared. I suspected it was caught by outsiders. Dugongs are easy to catch as they tend to rest under vessels," said Mattahari, adding that islanders, particularly the Bajau would hunt dugongs for their meat.

"At Pulau Mantanani, you can't see them in the wild anymore. I did come across a Facebook post in 2017 about a dead dugong washed ashore on an island village off Kota Belud. This means they can still be found there."

He hoped researchers would do more studies on dugongs in Sabah waters, especially with the latest sightings at Pulau Tiga, to further protect the animal.



Johor Marine Parks Department officers examining a dugong carcass in Mersing in 2017. FILE PIC