

RESEARCH UPDATES

STORY of A PAIR OF BROWN BANDED BAMBOO SHARK and 6 EGG CASES

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A pair of resident Brown banded Bamboo sharks (Scientific name: *Chiloscyllium punctatum*) in the Aquarium and Museum of Universiti Malaysia Sabah (AMUMS) has stirred up an excitement among aquarium and BMRI staff after six egg cases were discovered within their rectangular confinement by their caretaker Joy Budi Sumardi Paiman. Unlike the typical shark, this species is bottom-dwelling, their teeth short and blunt, and their diet consists of invertebrates and small fishes.

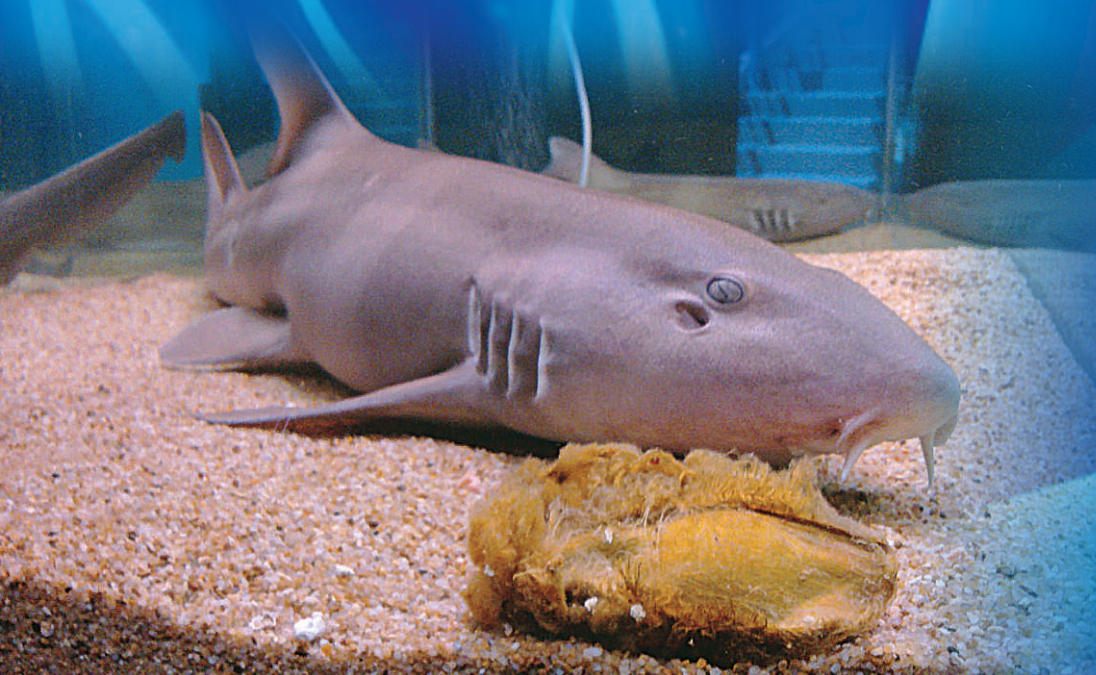
It is noted that the egg cases were not laid all at once, but three times over a period of just over two weeks, earlier this year (2012). Each time two egg cases were laid, the first two on 17th January, next was on 25th January and the last two on 30th January. Although none of the egg-laying process was observed (this is a nocturnal species, which means that they are active at night and sleep during the day), Mr. Joy noted that the female was acting in an aggressive behavior (than usual) for three weeks before the appearance of the first two egg cases.

The egg cases, also known as 'Mermaid's purse', are tough, each one containing a single fertilized egg. The Brown banded Bamboo shark egg case is golden in colour, and richly covered by golden, silky mass of tendrils which is intended for attaching to solid substrates; its shape oval with the central part thickened - this is where the developing embryo lies.

Interestingly, both parents have since been observed to occasionally swim close to the egg cases, almost as if sniffing at them. This is an interesting observation since such a behavior- guarding of the eggs - may be a form of parental care. Studies have shown that parental care after egg laying is absent among the chondrichthyans (sharks and rays), except in one species, the Port Jackson shark (*Heterodontus portusjacksoni*), a species which is found only in the southern waters of Australia.

The soon-to-be parents have both been residents of AMUMS since 2010, the male since 25th Feb, and the female since 30th Nov 2010. Both were caught from the coral reef vicinity of Sepanggar Island, adjacent the university campus. Their sizes are presently 150 cm total length (male) and 120 cm total length (female). Males and females are known to mature at 67-72 cm total length, with a hatching size of 13-18 cm total length.

Elsewhere, it has been recorded that in captivity, hatching of this species occurs between 90 and 153 days afterward. For now, the egg cases will be left in the same tank as the parents, but a mesh net has been put in place to minimize their movement in the tank, and to aid observation of their development. Watch this space for an update of the pups after they hatched!



the male swimming by the egg cases