SCENE STEALERS

A perfect design, sharks are

Snapper: Researcher Mike Heithaus photographs a young female tiger shark which has just been fitted with a video camera. PICTURES: JOHN MOKRZYCKI

AMERICAN Mike Heithaus says he is privileged to be handling dangerous tiger sharks.

In a unique research project based at Monkey Mia, Shark Bay, he has caught more than 200 so far, fitting 38 with special computer-controlled cameras, called crittercams, used for the first time in the world in a big scientific shark project.

The cameras are fitted to the shark's dorsal fin and film for up to six hours before a special release mechanism allows them to float to the surface to transmit a radio signal so that they can be picked up.

Mr Heithaus, 24, of Ohio, is investigating the behaviour of tiger sharks while studying for his PhD at the Simon Fraser University in Vancouver, Canada.

☐ In Monkey Mia, a unique study of the shark is under way. MICHAEL ZEKULICH reports.

He had previously been involved for three years in Monkey Mia dolphin research with biology Professor Richard Connor of the University of Massachusetts and had seen that many carried massive wounds from shark attacks.

"Some had 5-6 bites on their bodies," he said. So he became interested in how the 700 dolphins identified in the area since 1982 got enough food without being eaten by tiger sharks.

Mr Heithaus said hardly anything was known about tiger sharks in the world.

Now he is trying to find out where the tiger sharks do most of their feeding and where are the most dangerous areas for dolphins.

The dolphins are also under occasional threat in the area from white pointer sharks.

Mr Heithaus started his research in September 1997 and will complete the work within the next 12 months.

The sharks are caught on set lines using a kilogram of salmon for bait. They are then slowly eased alongside the catching boat and the tail roped. Then they are measured, tagged and a small tissue sample taken for DNA analysis.

If necessary, Mr Heithaus turns the sharks upside down. Held that

Easy to handle: A tiger shark floats upside down after having a camera fitted and its hook removed. Leaving the shark upside down for a minute sends them into a trance without any stress for animal or researcher.

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the Rolls-Royce of the ocean

way for up to a minute they go into a type of trance making them easy to handle without stress or danger to the animal or researchers.

"We do not know a lot about it but basically they just freeze up," Mr Heithaus said.

"Even big ones just conk out if you turn them upside down."

Once, one sank to the bottom in about three metres of water and Mr Heithaus dived down to turn it over.

It swam away, ignoring him.

The 2kg cameras are fitted only to sharks which are over three metres and are weight neutral in the water through buoyancy.

Mr Heithaus said the 100 hours of filming so far showed that the sharks basically led more boring lives than most people might think not cruising around looking for something to bite all the time.

"Basically, they seem to be lazy, even timid, waiting for things to fall into their mouths," he said.

"They will often let favoured food swim by without attacking. They are also nervous around people, wanting to take off."

SEA snakes were a major feeding source along with turtles, dugongs, fish and occasionally sea birds as well as dolphins, but no attack had yet been filmed on them.

The sharks were at home in any depth of water bouncing through the various levels like a basketball.

Even big sharks will go into relatively shallow water, where most of the prey groups are found.

"I was a bit nervous at first imagining teeth, tails and water flying everywhere when we first went to handle them," Mr Heithaus said.

"Now I have come to admire and respect them. They are very beautiful and graceful, having a slow sweeping cruising action. I have been in the water after we have released a couple to see their behaviour and they are fantastic to watch.

"I have not felt in danger. They have been implicated in attacks with people but it is amazing how rare the attacks are considering how widespread they are.

"We have seen in our work how big sharks can be very shy.

"They are large predatory lethal animals and deserve respect like lions and bears.

"More people are killed in the US each year by slipping in their bathtubs, from elephants, lightning strikes and bee stings or just driving to the beach, than through shark attacks that always attract major media coverage."

Mr Heithaus whose initial degree in animal behaviour and ecology from the Oberlin College near Cleveland, said the worst injuries he had sustained were abrasions and red raw skin on his arms from the sharks sand paper-like skin.

So far, at least 17 sharks had been caught twice and one three times, showing how quickly the holes in their jaws from the hooks which had been cut off and removed, healed up.

Every one caught had moved away from Monkey Mia feeding again 30 minutes later and showing no signs of aggression.

Mr Heithaus said the effect sharks were having in their environment had led to an explosion of shark studies around the world.

"They are just amazing animals which become more intriguing the more you know about them," he said.

National Geographic which provided the crittercams for the project, will release a film on tiger sharks early next year. Most of the filming has been done at Shark Bay during the research work.

In the interests of science: A young tiger shark is fitted with a video camera known as a crittercam, allowing researchers to study the shark's behaviour and feeding habits for the first time.

The evidence: Mike Heithaus retrieves a crittercam from Shark Bay.

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