

# West Kimberley Coast Haven for Inshore Dolphins

Written by Kandy Curran, Saturday 06 July 2013



An Australian snubfin dolphin being pushed out of the water by another at Cygnet Bay.  
Image: Christy Harrington

Almost everyone has a unique dolphin story to regale if they spend time on the coast of the Dampier Peninsula where inshore dolphins regularly cavort.

However until recently, there has been little scientific research to identify the species, numbers and biology of the inshore dolphins that inhabit the Kimberley coast. Moreover, are dolphin populations at risk from issues such water pollution and human impacts, particularly around the more populous Broome?

Fortunately change is afoot, with dolphins now under scientific scrutiny along the isolated coast. A catalyst for increased cetacean research has been the establishment of the Kimberley Marine Research Station (KMRS) on the tip of the Dampier Peninsula in 2010, by third generation pearler James Brown.

“A pearl farm is basically a marine research centre that focuses on one industry, all I did was open ours up to the science community,” he says.

“As a young marine biologist fresh out of James Cook it used to frustrate me that so little research work was being done in the Kimberley, but over time I realised that access was the key.”

The first researcher to study inshore dolphins at KMRS, is PhD student Alex Brown from the Murdoch University Cetacean Research Unit in Perth.

“Very little is known about inshore dolphins on the Kimberley coast,” Alex Brown says.

“My project is addressing the lack of baseline information on dolphins and how they might be influenced by pressure from coastal development across the Kimberley coast.

“I am gathering data on their abundance, distribution and genetic connectivity.”

Sighting dolphins in the Cambridge Gulf off the coast of Wyndham in the East Kimberley proved difficult, as waters are muddy and home to large numbers of estuarine crocodiles. Fortunately, Cygnet Bay in the West Kimberley has revealed populations of three species: snubfin, humpback and Indo-Pacific bottlenose dolphins.

In order to quantify their numbers, cetacean researchers need to be skilled photographers, with specialised cameras the most common method for individual photo-identification of

dolphins. Indeed, Alex has identified more than 50 snubfins from unique marks on their dorsal fins and captured extraordinary photographs of these intriguing animals.

With dolphins excellent swimmers, and Roebuck Bay frequented by snubfin dolphins, one question that Alex has been keen to discover, is whether the two populations are genetically connected.

“Preliminary data indicates there is limited genetic connectivity between the two populations, suggesting they should probably be managed as separate populations,” Mr Brown says.

While his research has not focused on feeding behaviours, he has noted that humpback dolphins often feed around shallow reefs close to shore in groups of three to four. Snubfins are often more sociable in groups of up to 12, and typically feed in deeper water with a muddy seabed.

Mr Brown says communities living on the Dampier Peninsula and Broome, need to be mindful of runoff and rubbish entering coastal waters.

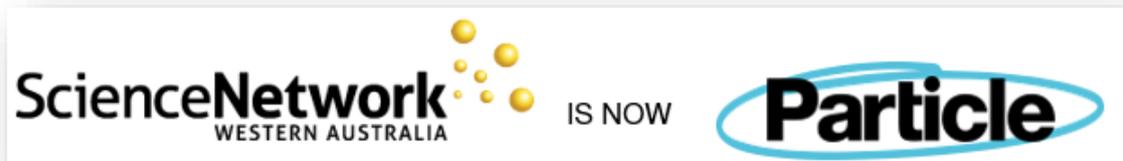
“Coastal dolphins face many threats, such as boat disturbance, fishing net entanglement, and loss of habitat through coastal development,” he says.

“Water quality is also an important issue. Pollutants in the water column can first enter plankton and seagrasses, then progress up the food chain as they are consumed by larger animals such as fish, squid and crustaceans.

“Dolphins, at the top of the food chain, then get an accumulation of the contaminants in their organs and blubber. In some cases this has been shown to inhibit their reproduction and immune system.”

There are simple measures everyone can take to reduce polluted runoff, such as planting natives that don't require fertiliser, keeping garden waste out of stormwater drains, trapping rainwater by digging saucer depressions around plants and mulching regularly.

This is a community contribution by Kandy Curran of the Roebuck Bay Working Group.



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