



Snubfin dolphins in Roebuck Bay. 230212.

Picture: Kandy Curran

Bay is a special place to research snubfin dolphins

ROEBUCK Bay is a special place for all of us, beautiful, ever-changing, rich and bio-diverse.

It is also a special place for our endemic Australian snubfin dolphins.

The bay is one of only a couple of known locations in Australia where snubfins are the most abundant dolphin species.

In most of the shallow, turbid, nearshore, tropical environments they inhabit, they are outnumbered by the Indo-Pacific humpback dolphin or the inshore bottlenose dolphin.

This makes Roebuck Bay a special place for research, the

on the bay

Dr Deb Thiele

perfect place to investigate and eventually understand the mysteries of this little known species life history.

This is the first article in a series about the marine wildlife and dolphin studies being conducted in the bay, methods and equipment used, what we've learned, and where and when individual snubfin dolphins have been spotted.

We will also have regular competitions to name individual dolphins.

Long-term life history research is based on individual animals and over time yields an in-depth understanding of breeding success, survival rates, birth rates, longevity, social structure and relationships, kinship structure of populations; the scale and timing of movements of animals and much more.

All are critical to understanding population ecology and evolutionary biology, including population dynamics (whether populations are stable, increasing or decreasing).

One of the most important tools (aside from the boat) is individual photo-identification.

Photo ID has been used since the 1970s when humpback whale researchers found they identify most whales from unique markings and colouration.

We try to photograph all snubfins in groups we encounter.

To identify individual snubfin dolphins we need to photograph the animal's whole surfacing sequence, both

sides of the body and tail flukes so we have the best chance of matching or "recapturing" them.

This allows us to track changes in the "marks" (scratches from other dolphins, shark bites, cuts and unusual colour patches) on the body, dorsal fin or tail flukes.

We use digital SLR cameras with a long (300-400mm) zoom lens set for fast frames.

So, after each full survey of the bay we know which dolphins were there, who they were with, what they were doing, the key to understanding dolphin social relationships in the bay.

This species can be difficult to photograph depending on their behaviour at the time.

Snubfins tend to stay low in the water when surfacing and are very adept at disappearing altogether, no matter how many experienced spotters are on board.

The best time to photograph is when they are socialising.

■ **Dr Deb Thiele is a marine wildlife ecology researcher.**



The snubfin dolphin.

Picture: Deb Thiele