'NALA'

Nala has been observed in Hervey Bay on 10 occasions over a period of 18 years from 1992 to 2009.

She was first observed with calf in 1992, then again with a calf in the years 1996/98/99, 2002/03/06/09. In 1997 and 2008, Nala was observed in Hervey Bay without a calf.

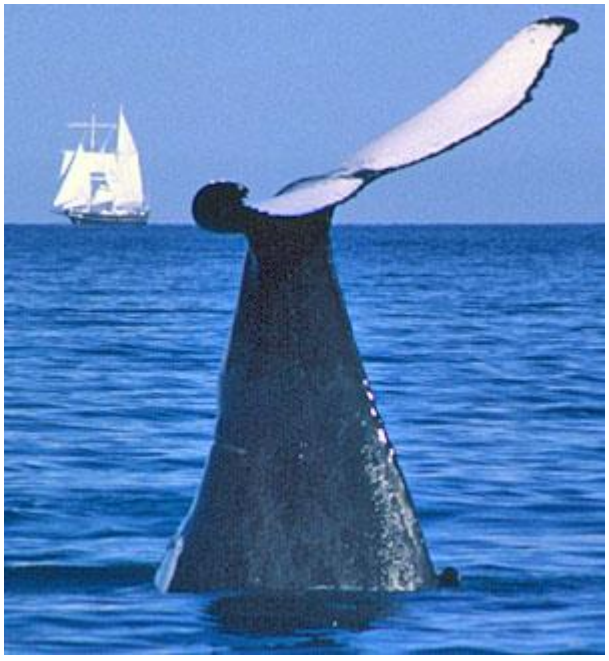
The history of Nala really began in 1996. It was in that year that she was given her mnemonic name **Nala**, by students from Byron Bay who joined the Expedition as part of a Kids On The Ocean(KOTO) youth project group.

They decided to name her after a character from the *Lion King* movie and consequently they named her 1996 calf**Simba**. Since then her calves have continued to be named after *Lion King* characters: Pumba in 1998; Rafiki in 1999; Mufasa in 2002; Timone in 2003 and Zazu in 2006.

(Click photo to enlarge)

Nala's underside fluke has a distinctive black centre which has not changed during the eighteen years we have been observing her.

The above photo was taken in 1997 when Nala was in Hervey Bay without a calf. A Comparison of this photo with Nala'a fluke photograph below taken in 2006 when she was with her calf **Zazu** shows how the underside fluke patterns have remained the same



(Click photo to enlarge)

The above photo of Nala was also taken in 1997. During this observation Nala was extending her fluke well above the surface between breaths. She was with an escort who was staying submerged below her for 33 minutes at a time. This behaviour continued throughout the day.

Below left: Nala in 1996 teaching Simba how to tail-lob. **Below centre:** Simba circles around Nala in the tail-up position between feeding sessions. **Below right:** Mothers and calves spend most of thier time resting and feeding. Often after a long feeding session calves will

When 'Nala' was first sighted in 1996 she was with her calf Simba and was extending her fluke well above the surface of the water with her underbelly upturned just below the surface. Simba circled around 'Nala's fluke stem and submerged for one to two minutes at a time, to take in milk (Centre Photo below).

Humpback calves do not suckle from the mother's teats. The mother pumps the thick fat rich milk onto the extended tongue of the calf. It is an efficient method of feeding that would conserve the energy of the calf, as well as safe-guarding against any wastage.

There have only been a few humpback whale mothers, observed in Hervey Bay, who adopt the novel tail-up method of feeding. Nala on average remains in the fluke-up position for 8 to 11 minutes at a time during which time her calf may surface three times.

The distinctiveness of her tail-fluke patterns means that the whale-watching fleet skippers and crews easily recognise her and let us know when she turns up in Hervey Bay.

In 1995 a television documentery Angels of the Sea was produced and shown on channel seven. Footage taken in 1992 of a mother involved in fluke-up feeding was used in the film.

While reviewing the 1992 documentary footage in late 1996, Trish recognised that the fluke-up feeder was in fact Nala thus extending her life history information. We have also seen a photograph of her taken in the Great barrier Reef in 1988. She was fully grown at the time so likely she is around thirty years old

burst into active play. Here Simba demonmstrates his prowess at breaching.

The variable patterns of black and white pigmentation on the underside flukes of humpback whales together with the unique serrations of the trailing edge are like fingerprints. As well the shape of the dorsal fin and markings on the lateral body contribute to being able to identify and keep track of indiviual humpback whale using photography.

It has been estimated that using all the available patterns and shapes more than 90% of individual humpback whales can be recognised and tracked as individuals. Over the nearly two decades we have been observing Nala her fluke markings and body shapes and patterns have remained constant. Compare the photograph of Nala's underside fluke **(below left)**and her left side dorsal **(below right)** with photgraphs of her fluke and dorsal taken in other years.

(Click photo to enlarge)

During 2003, Nala and her calf Timone were sighted on six different occasions between the 25th September and the 16th October. Such multiple sightings help us gain insight into the social interactions occuring amongst humpback whales in Hervey Bay.

On two of the six sightings Nala was alone with Timone. On the third sighting Nala and Timone were being accompanied by a known escort Ulysses. On the next sighting Nala and Timone were in the companying of another mother, Glastonbury with her calf, and Ulysses was also part of the group. Finally a few days later Nala and Timone were again sighted with Ulysses and during the observation the three of them associated with a well known mother, ruby and her calf.

Observing, photgraphing and recording these complex interactions is a vital focus of the long term study of the social behaviour of humpack whale in Hervey Bay.

(Click photo to enlarge)

Above left: Timone shows off his distinctive underside fluke while Nala rests. **Above centre:** Nala keeps timone on her right side while Ulysses is pectoral slapping on her right. **Above right:** Timone revels in breaching

Below left: A full body forward breach demonstrates Timone is fit and ready for his first voyage to their Antarctic feeding grounds. **Below centre:** Because Timone has such a distinctive underside fluke there is a probability that we can resight him at some future tme. **Below right:** Timone decides to study us as we study him!

(Click photo to enlarge)

From: The Oceania Project – the story of Hervey Bay's iconic whale Nala

http://www.oceania.org.au/whales/nala/nala.html