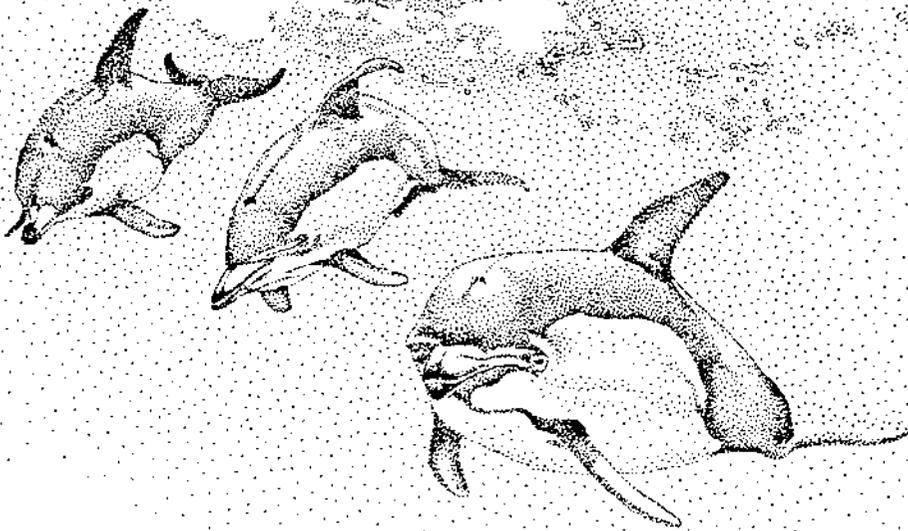


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**The behaviour and vocalisations  
of common dolphins *Delphinus delphis*  
at Marineland, Napier,  
New Zealand**



Liz Grant 2000

**Deborah Jane Kyngdon**

**2000**

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A thesis presented  
in  
partial fulfilment  
of  
the requirements for the degree  
of  
Master of Science  
in  
Zoology  
at  
Massey University

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**Deborah Jane Kyngdon**

**2000**

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## THESIS ABSTRACT

Three female common dolphins *Delphinus delphis* at Marineland, Napier were studied from November 1998, through to October 1999. The first step was to construct an ethogram. Following that, I examined the behavioural and vocal responses of the dolphins to the Swim-with-Dolphin (SWD) programme.

An ethogram was constructed for common dolphin behaviour by collating notes and video footage. The ethogram consists of 16 categories of behaviour that were subdivided into different aspects of those behaviours. Each behaviour is described and some are illustrated. The effect of the SWD programme was assessed by monitoring changes in the dolphins use of a refuge area, changes in six behavioural categories (Aggressive, Touch, Other, Abrupt, Submissive and Play), and changes in surfacing frequency and location before, during and after SWD sessions. There was a significant increase in refuge area use during a SWD session, but this returned to pre-swim levels immediately afterwards. There were small changes in behaviour during SWD sessions, with an increase in Other and Touch behaviours. These changes are not like the documented stress response of bottlenose dolphins *Tursiops truncatus* which include an increase in aggression. During sessions with swimmers the frequency of surfacing increased slightly and a greater percentage of surfacing occurred in the refuge area. The difference in the proportion of five types of dolphin vocalisations (Whistles, Clicks, Chirps, Squeaks and Whines) before, during and after SWD sessions was not significant. There was a slight increase in the frequency of all calls during SWD sessions. The behaviour that occurred during 521 vocalisations was also analyzed. Clicks were commonly heard when the dolphins were approaching people, another dolphin or the bell. Chirps indicated the departure of one dolphin from the other.

The common dolphins at Marineland show no significant behaviours indicative of distress in response to the SWD programme. The behaviour changes that occurred were not associated with a distress response and the changes in vocalisations were not significant.

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Financial support from the Massey University Graduate Research Fund, enabled me to complete my statistical analysis and improve Chapter two significantly by including professional dolphin sketches. The Ecology Development Fund allowed me to travel to Sydney and present a talk at the ASSAB (Australasian Society for the Study in Animal Behaviour) conference, in April 2000.

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---

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