## Conclusion:

The dolphins at Kolmården are mainly affiliative and calm. Interactions were most prominent between mother and calf pairs.



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**Linköping University** 



Photo credit: Sunna Edberg, Kolmården & Sabina Birgersson Personality assessment and interactions in eight captive bottlenose dolphins (Tursiops truncatus)



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# Aim of the study

To investigate the personality and interactions in eight captive bottlenose dolphins (*Tursiops truncatus*) at Kolmården Wildlife Park, Sweden.



# Five personality factors

Personality traits can be divided into five factors. The factors may contain both positive and negative traits that are opposite to each other but related.

### Openness to experience

- (+) Curious, creative
- (--) Not exploratory

#### Conscientiousness

- (+) Cautious, alert
- (--) Lazy, unreliable

#### Extraversion

- (+) Playful, active
- (--) Timid, quiet

### Agreeableness

- (+) Friendly, cooperative
- (--) Inflexible, selfish

### Neuroticism

- (+) Aggressive, threatening
- (--) Relaxed, calm

# Main findings

The dolphins expressed behaviours mainly indicating affiliation (Agreeableness (+)) and calmness (Neuroticism (--)). Other observations show that the dolphins also expressed curiosity, playfulness and, although very rare, some threatening behaviour. Five dolphins were mainly affiliative, two were mainly swimming calmly by themselves and one did not significantly differ between the two. Dolphin mothers with calves were observed to interact the most.



## Discussion

When investigating personality it is important to take both the personality profiles based on the Five-factor model as well as the ways the dolphins interact into consideration to get the best assessment.

Knowledge about animal personality provides researchers with a better insight in the species studied and their needs. It can be a helpful tool in aspects such as zoo management, environmental enrichment, future conservation, in trainers and veterinarians work, etc.

















## Methods

Each dolphin was filmed in a total of two hours. Personality assessment was based on behavioural codings. Behaviours were interpreted according to the Five-factor model and statistical analyses were carried out based on the total duration in seconds behaviours in each factor were performed.