CONCEPT EAZA HUSBANDRY GUIDELINES FOR THE PACIFIC WALRUS *(Odobenus rosmarus divergens)*

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INTRODUCTION

PACIFIC WALRUS IN-SITU:

Status:
- Uncertain population numbers / dynamics *(Speckman, et al., 2010)*
- Data deficient *(IUCN, 2008)*

Threats:
- Reduce of sea-ice habitat *(Jay, et al., 2011)*
- Low reproductive rate *(Fay, 1985)*

PACIFIC WALRUS EX-SITU:
- Small captive population size *(ISIS, 2012; pers. comm. van Elk, 2012)*
- Low reproductive succes *(Muraco, et al. 2011)*

GOAL

To gather information on the Pacific walrus biology and best practise of husbandry and management, to set-up a concept Husbandry guidelines for the Pacific walrus based on the EAZA Husbandry guideline format 2010, and assign this concept to the Marine Mammal TAG.

METHODS

CONCEPT HUSBANDRY GUIDELINES:

Section I. Biology and field data:
- Literature review on the biological characteristics of the walrus in-situ

Section II. Management and husbandry in captivity:
- Literature review on the Pacific walrus ex-situ
- Questionnaire survey on 6 expert's opinions

RESULTS

The optimal husbandry and management conditions for the Pacific walrus ex-situ:

Biology and field data of the walrus in-situ:
- Taxonomy
- Morphology
- Physiology
- Longevity
- Conservation status
- Diet and feeding behaviour

- Enclosure
- Feeding
- Social structure
- Breeding
- Behavioural enrichment
- Handling
- Veterinary
- Specific problems
- Recommended research

Figure 2.Whiskers of captive walruses should be stimulated by using enrichment objects. *(Whiskers on, 2012)*

Figure 1. Walrus with calf. Walruses in-situ have a low reproductive succes. *(Rosing, 2007)*

DISCUSSION

Literature is limited on:

In-situ
- Walrus specific behaviour in the wild
- Population numbers and trends
- Physiology of the walrus

Ex-situ
- Breedings problems
- Enclosure design

Main subjects of discussion are:
- Optimal social group structure of captive walruses
- Considerations for health and welfare of captive walruses

RECOMMENDATIONS

Future research should focus on:
- Methods to stimulate foraging behaviour (development of enrichment objects)
- Reproduction of walruses in captivity
- The effects of the differences in activity patterns between ex-situ and in-situ on captive walruses
- Enclosure design (in relation to medical problems)

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