

**THE BEHAVIOURAL RESPONSE OF LACTATING WEDDELL SEALS (*LEPTONYCHOTES WEDDELLII*) TO PEDESTRIAN APPROACHES: IMPLICATIONS FOR MANAGEMENT**

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Although guidelines exist for approaches to Weddell seals (*Leptonychotes weddellii*) in Antarctica, there has been no scientific assessment of the effectiveness of these guidelines in minimising disturbance to the seals. This study examined the immediate behavioural response of lactating Weddell seals to approaches on foot, and the factors affecting the seals' response. Using proportional odds regression models we developed contour maps which showed that the separation distance at which the cows responded was dependent upon the approach type (a single person or group of people), the distance a cow was from the water, the distance she was from a conspecific, and whether her pup was exposed (*i.e.* whether the pup was between the approachers and the cow). In all but one scenario, the proximity of the cow to a conspecific was important in determining the stage of approach that people could reach before seals responded. The proximity of water in affecting seal responses was also inconsistent, but results nonetheless indicated that distance to water can influence Weddell seal response. The influence on response (of the cow) of the position of the pup is not obvious and therefore does not allow specific 'pup exposure' oriented guidelines to be developed. The relative importance of these factors indicated that the seals perceived pedestrians to be a threat, but that the level of threat was low. These associations have implications for the development of management guidelines and can therefore be incorporated into visitor guidelines in order to increase their effectiveness and sensitivity.