



The provision of supplementary heat for hand-raised harbour seal pups (*Phoca vitulina*)

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Background

- Hundreds of stranded harbour seal pups (*Phoca vitulina*) are brought to wildlife rescue centres every summer.
- Pups are often in poor body condition and have difficulty maintaining body temperature.

Objectives

To examine if:

- 1) pups would position themselves close to an available heat source.
- 2) pups provided with supplementary heat would have better survival rates than those without.

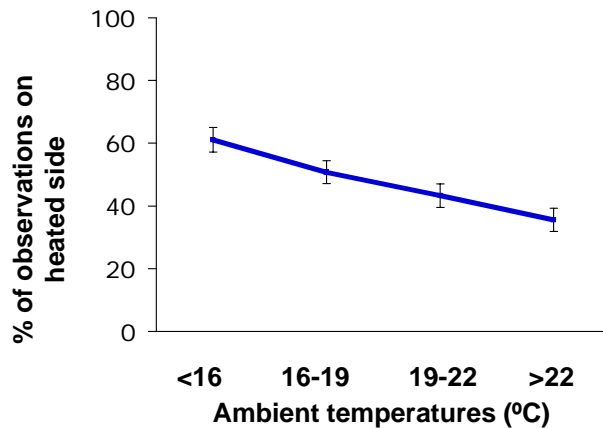


Methods

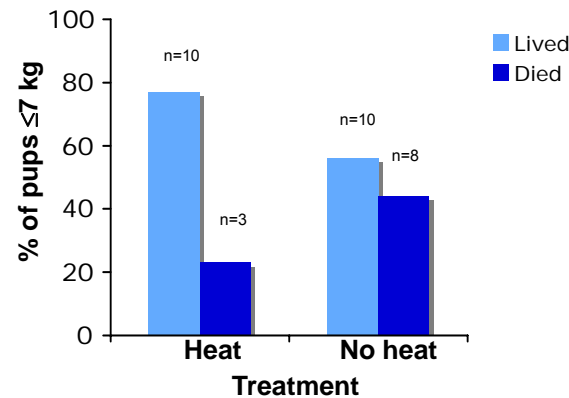
- In 2008, pups < 9 kg, with body condition score ≤ 2 (thin to emaciated) and < 7 days of age were assigned to heat (n=25) or no-heat (n=42) treatments.
- Heat lamps were positioned at one end of enclosures to create a thermal gradient.
- Pups received supplementary heat for 21 days.
- Daily observations of pup position in relation to heat were recorded.



How often were pups on the heated side?



Did heat affect mortality rates?



- Pups were significantly attracted to heat under cool conditions.
- Heat-seeking declined as ambient temperature increased.
- There was no effect of heat on mortality rate for animals > 7 kg.
- There was a trend ($p < 0.1$) for better survival for small pups (≤ 7 kg) when provided with heat.

Conclusion

- **Pups in poor body condition being reared for release prefer, and may benefit from, access to supplementary heat. This heat-seeking behaviour is especially prevalent at cool ambient temperatures (<16°C).**