## NEWSFROM THE UNIVERSITY OF TASMANIA, AUSTRALIA

## Media Release

Chiefs of Staff, News Directors

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## Unique new insights into the life of Southern Elephant Seals

Modern tracking technology and international collaboration have given IMAS researchers and their colleagues from eight countries unprecedented new insights into the life, behaviour and distribution of southern elephant seals.

The major six-year circumpolar study tracked 287 seals from eight sites across the Southern Ocean, from Macquarie Island south of Australia to sub-Antarctic islands, such as South Georgia and the Kerguelen Islands.

Bephant seals spend more than 10-months of the year foraging at sea before returning to their breeding sites, and the researchers recorded individuals diving for up to 94-minutes to depths of 2389 metres, with the longest migration route reaching distances of 5482 kilometres.

The study, which was part of the international Polar Year Marine Mammals Exploring the Oceans Pole to Pole (MEOP), found the overall southern elephant seal population had increased slightly to some 750 000 since the last review in 2005.

But a long-term decline in the Macquarie Island elephant seal population has continued, correlating with an increase in sea ice which prevents seals from accessing productive foraging areas.

The lead author, IMAS Professor Mark Hindell, said the study had been enabled by the development of miniaturised, satellite-linked tracking equipment which recorded information about ocean conditions at the same time as seal behaviour.

For the first time, biologists can now monitor oceanographic conditions simultaneously with animal behaviour, giving an integrated picture of the physical structure of the ocean and how it affects elephant seal activity.

Bephant seals dive almost continuously while at sea and therefore provide valuable high-resolution information on the ocean attributes of the water column, such as temperature and salinity, wherever they travel.

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