



THE SECRET LIFE OF SEALS: A SEAL'S EYE VIEW OF LIFE UNDER THE OCEAN

Image: John White

Above ground there have been spy-cams, stump-cams and even helmet-cams. Now Australian fur seals will take camcorders under the Southern Ocean to give scientists an unprecedented view of life underwater.

Researchers from Deakin University's School of Life and Environmental Sciences hope the digital video recorders will reveal in detail how these creatures hunt and capture their prey.

With the use of high-resolution global positioning system (GPS) tracking technology, the research team will also obtain real-time information about the location of the seals' sea-floor habitats.

"It's a quantum leap," says chief investigator Dr John Arnould. "It's going to revolutionise the way we look at how these animals live in their habitats and how they hunt."

The scientists will measure how much energy the fur seals use to catch their prey, which includes fish, squid and octopus. They will also match foraging success with particular habitats and individual characteristics of seals such as age and size.

Knowledge of how the seals use their habitat will provide researchers with a greater understanding of how the animals may cope with environmental changes, including climate change.

Of particular concern is the impact a changing climate may have on ocean currents and marine productivity in regions where fur seal populations overlap with commercial fishing.

Researchers say data from the study, conducted in collaboration with the National Geographic Society who developed the camera which they call Crittercam, may inform the development of better wildlife management and conservation policies.

Australian fur seals are found primarily in Bass Strait, with total numbers estimated at 92 000. Males can weigh up to 300 kilograms, but the researchers are only attaching cameras to females, which weigh on average about 76 kilograms.

A pilot study was conducted this year, and the main research project – at the breeding colony on Kanowna Island in the Bass Strait – will begin in May 2009.

'The National Geographic Society and Deakin are using seal-mounted cameras to understand how climate change might affect Australian fur seals.'



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