



National Environmental
Research Program

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Predictive models of mobile oceanic predator (MOP) hotspots in Western Australian waters

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Shark attack fears after damaged bathers found off Perth's Cottesloe beach

- Save this story to read later
- Hopes of finding swimmer alive fade after bather's discovery
- Marks "consistent with that a white pointer shark could cause"
- Screams failed to stop girl crossing train tracks

24 comments

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Rescue divers scour Cottesloe Beach for missing Mosman Park man. Picture credit: Richard Posner

DIVERS have found the damaged bathers of a 64-year-old swimmer missing off Cottesloe beach on the ocean floor as hopes of finding the man alive fade.

The missing man is believed to be Bryn Martin, a successful businessman and proponent of a private port in Kwinana, PerthNow reports.

<http://www.news.com.au/national/man-missing-off-cottesloe-beach/story-e6frfkvr-1226163485333>

BY ASHLEE MILLANT
PerthNow
October 11, 2011
12:00PM

RELATED
Authorities hunt killer shark
American diver killed by shark

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Tangled whale off Rottnest tagged ahead of rescue effort

PerthNow May 17, 2011 2:50PM 19 comments



RESCUE: A whale tangled in net lines. Picture: Supplied Source: PerthNow

A SATELLITE tag has been successfully attached to a whale tangled in fishing gear off Rottnest Island, enabling authorities to plan its rescue.

The Department of Environment and Conservation plans to monitor the whale, an 11m humpback, overnight.

If weather conditions have improved tomorrow, the DEC will try to relocate it and free it from the 10m ropes that the whale has wrapped around both pectoral fins and across its back.

Earlier, an electrical storm forced authorities to change tactics in a bid to free the whale, which was spotted by a recreational boater north of Bathurst Light.

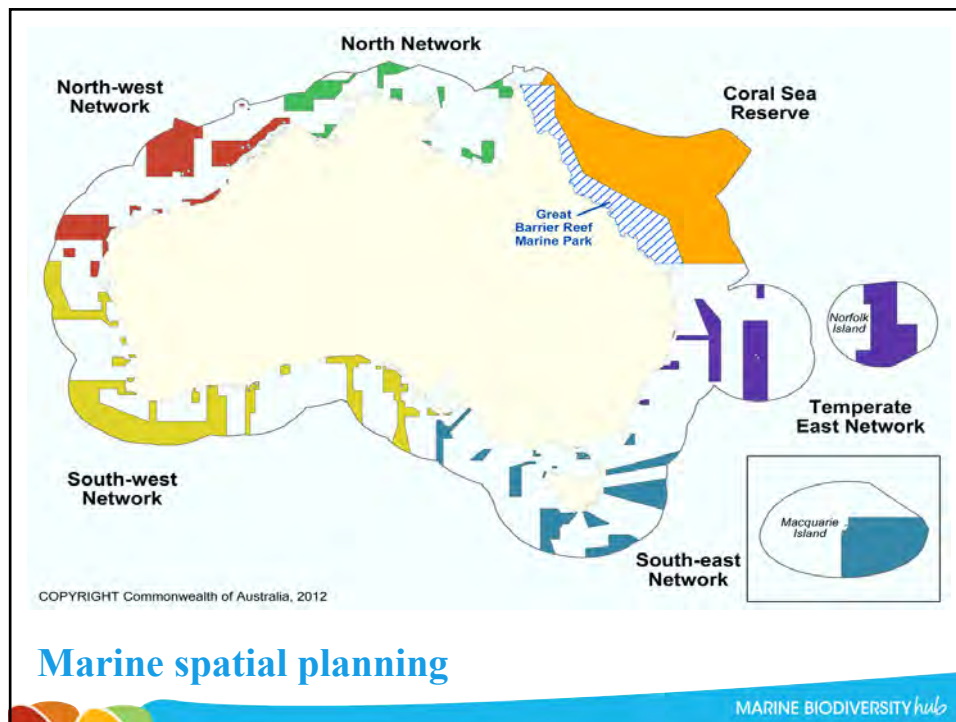
A DEC rescue team had planned to cut the whale free this afternoon but bad weather forced a rethink on how to save the stricken animal.

Whales – predominately humpbacks – began their northern migration from the Antarctic earlier this year with confirmed sightings off Rottnest in March, which is earlier than normal.

<http://www.perthnow.com.au/news/western-australia/whale-rescue-underway-off-rottnest/story-e6fr13u-1226057683704>

User-wildlife conflicts

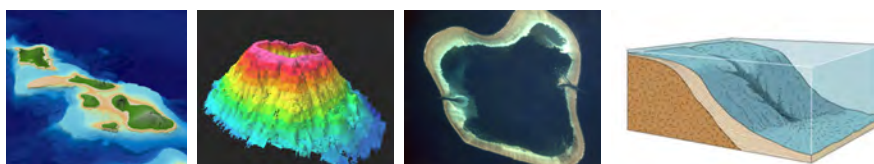
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- **Heterogeneous** distribution of animals



- Aggregations into **'hotspot'** areas
- Association with **topography**





Mobile oceanic predators

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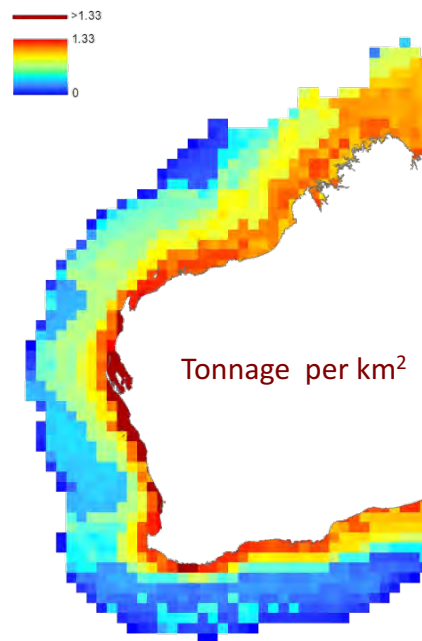
Diversity

Teleosts & elasmobranchs

MOP hotspots

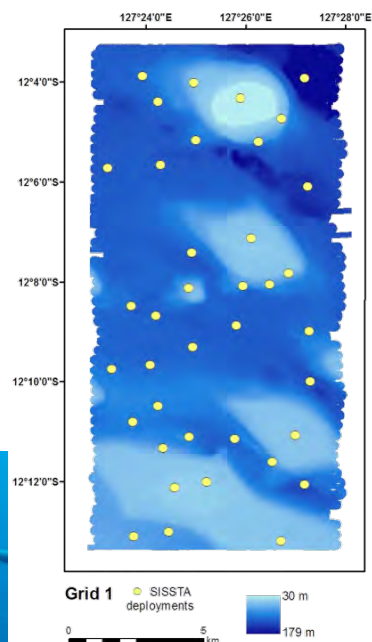
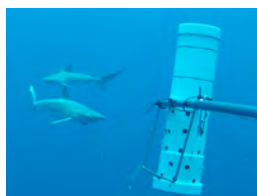
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- **NERP Theme 3**
National ecosystems knowledge
- Fisheries data as a surrogate for marine biodiversity
- Canyon systems and other KEFs
- 1997-2006, 964 grid cells spanning entire WA EEZ

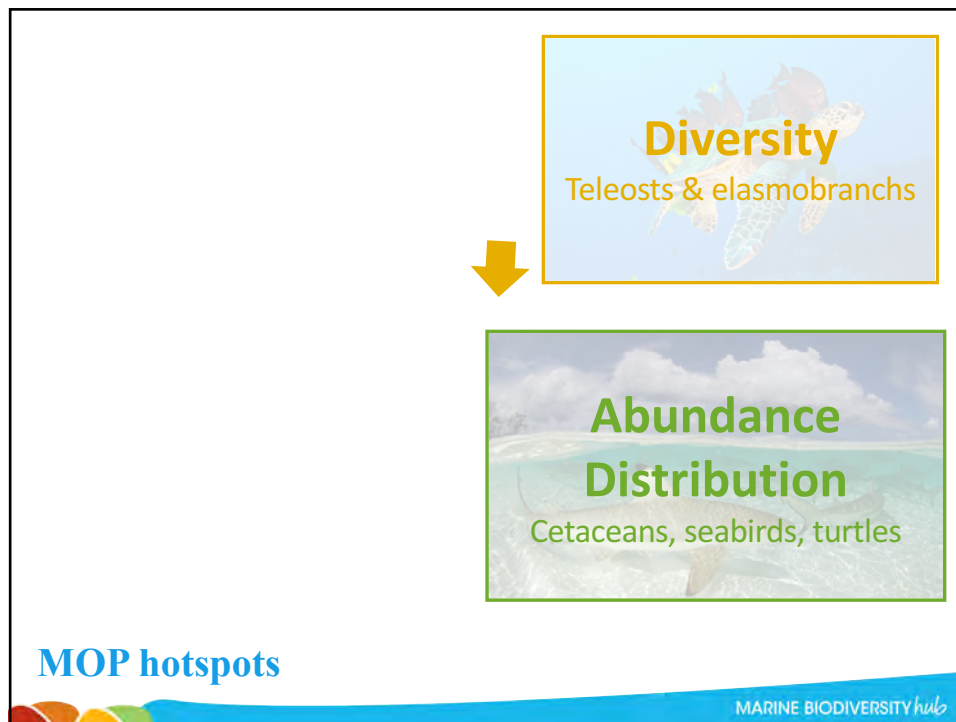


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- **NERP Theme 4**
Regional biodiversity discovery
- SISSTAs = mid-water baited cameras
- 117 stations – GRTS design
- 760 hours footage



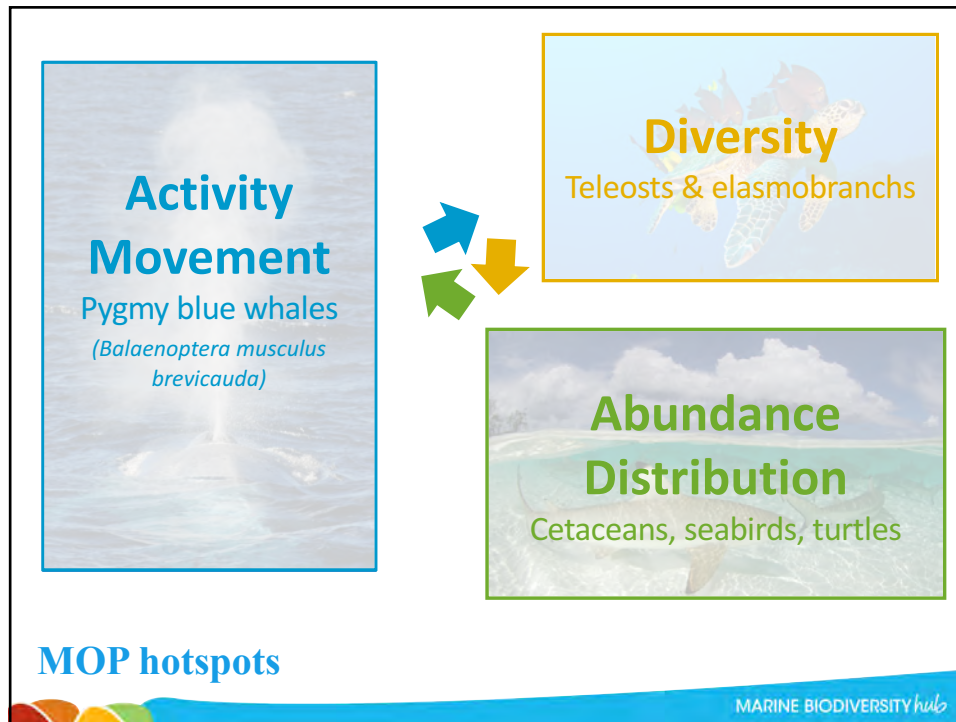
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© Centre for Whale Research (WA) Ltd.

- Vessel-based **line transects**
- **Distance sampling** protocols
- **Browse Basin - Scott Reef to Browse Island**
- Prey field measurements

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- Centre for Whale Research (WA) Inc. (CWR)
- Australian Antarctic Division (AAD)
- **Multi-year Perth Canyon satellite tagging programme**
- **5 years, n=19 individuals**

The map shows the coastline of Western Australia, with the study area highlighted in blue. The map includes latitude and longitude coordinates: 110°E, 120°E, 130°E, 0°S, 10°S, 20°S, and 30°S. The text "WESTERN AUSTRALIA" is centered on the landmass.

At the bottom right, the "MARINE BIODIVERSITY hub" logo is visible.



- MOPs **susceptible to extirpation**
- Increasing **anthropogenic pressures**
- MOPs = **ecological + economic value**
- Sea **space planning** and **ocean use management**

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