

# **PROJECT AIMS**

Key to successful conservation is the need to identify:

- Current cetacean population size and characteristics
- Significant habitats and how cetaceans use them
- Disturbances and human impacts in these habitats
- Implications for cetacean livelihood
- Measures required to reduce human impacts

### WHO ARE WE?

The Southwest Whale Ecology Study (SouWEST) is a newly established collaborative science program which integrates the research expertise of Western Whale Research (WWR), the Centre for Marine Science and Technology (CMST at Curtin University), and the community outreach experience of the Dunsborough Coast and Land Care (D-CALC) group.

#### SouWEST aims to:

- Ensure the **long-term conservation** of whales and their critical habitats in Southwestern Australia.
- Improve the **scientific foundation** for environmental management and species protection in the region.
- Build on scientific and community observations made during the past 15 years, by applying innovative scientific approaches and advanced statistical modeling methods.

**Collaborating bodies** 





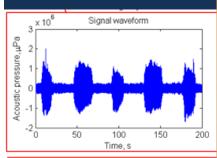


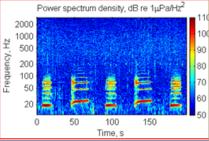






**Humpback whale in Geographe Bay** 

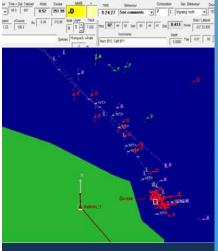




Spectrogram showing blue whale calls in Geographe Bay



Boat based photo-identification, genetics and behavioural sampling in Geographe Bay



Behavioural monitoring and tracking of resting cow-calf in relation to the approach of a vessel

### SouWEST vision

Iconic cetacean species, such as the humpback, blue, southern right, and minke whales are listed internationally as high priority species for conservation due to their vulnerable/endangered status. These whales use Southwestern Australia for migrating, resting, and/or calving each year. Not only does this area provide key habitat for whales of a variety of species, but it is one of very few locations in the world where the largest of these animals, the blue whale, migrates within hundreds of meters of the coast.

Because of the region's aesthetic beauty, lush forests, and unique and high marine biodiversity, the Southwest has become increasingly attractive for developers and for what is already a booming tourism industry. While the area is currently relatively pristine, it is **experiencing increasing human pressures** with the rapidly growing population. We endeavour to secure the long-term future of these whales by improving the scientific foundation for conservation management and species protection within the region.

## **Ecology & Conservation**

To obtain a broad understanding of whale behaviour in critical resting areas and migratory corridors, SouWEST integrates multiple platforms including: land-based monitoring and theodolite tracking, boat-based behavioural, genetics and photo-identification surveys, and passive acoustic recording of cetacean song and vocalizations. These observations represent a powerful tool for obtaining a broad understanding of whale migratory behaviour in

critical resting areas, as well as the social contexts of these behaviours.

## **Community Engagement**

SouWEST will engage with the general public, community groups, and government departments to promote involvement and communicate research outcomes.

Dunsborough Coast and Landcare (D-CALC), a volunteer community group, is a key member of SouWEST. Established over ten years ago, and initially formed in response to coastal erosion and development on the Dunsborough foreshore, D-CALC has worked with WWR on a research project monitoring humpback and blue whales near Cape Naturaliste over the past 5 years. Through community engagement such



Land based theodolite tracking of whales resting in Geographe Bay

as D-CALC, a broad education and awareness campaign is possible.

## Target outcomes

The primary outcome of the program is **to improve the scientific foundation for conservation, management and species protection** within the region. The collection of relevant data will enable the quantification of the absolute abundance of whales, the characterisation of their key activities within crucial habitats, and the identification of any potential threats. By encouraging community engagement and working with management agencies, we will **promote awareness** of the significance of marine species biodiversity and habitats in the southwest and **disseminate information** required for conservation management.

#### **Contact SouWEST**

Volunteer community contact:

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