

COASTAL AND ESTUARINE DOLPHIN PROJECT





VISION

Our coastal and estuarine ecosystems have changed greatly over the last century. Increasing pressures from development and climate change will continue to transform these environments. These changes present significant challenges for the conservation of dolphins within our estuaries and along our coasts.

Our aim is to ensure that dolphins remain vital and functioning parts of our estuarine and coastal ecosystems into the future.

We believe that this goal can be achieved through an integrated program of scientific research, community involvement, and strategic partnerships linking the management efforts of industry, government, and community.

PURPOSE

The Coastal and Estuarine Dolphin Project (CEDP) aims to ensure the long-term conservation of bottlenose dolphins in metropolitan waters of Perth, Western Australia.

CEDP will combine the research expertise of Murdoch University and Curtin University with the support and involvement of corporate, community, and government partners.

CEDP follows the model established by the Southwest Marine Research Program (SWMRP), a partnership project that integrates State/Local Government, industry, and Murdoch University support to operate a long-term dolphin research and conservation project in the southwest of Western Australia.

FOCUS

The initial focus for CEDP is a four-year study of the dolphins inhabiting the Swan Canning Riverpark.

In 2009 six bottlenose dolphins died within the Riverpark, leading to an extensive investigation and raising significant community interest. The investigation revealed the need for a better understanding of the status of dolphins in the Riverpark.

Our study of the Swan Dolphins will implement an integrated research program focusing on three research and management areas:

dolphin health
dolphin ecology
community and conservation





PROJECT AREAS

HEALTH

The investigation into the Swan dolphin deaths emphasised how little we know about the health of dolphins within our estuarine and coastal ecosystems. Such information is vitally important if we are to understand how various human and natural stressors impact on dolphins.

CEDP will continue on-going research into marine mammal pathology. We will conduct post-mortem examinations to gather information on factors affecting dolphin health, including the prevalence of primary and secondary pathogens and human-induced injuries. Tissue archiving will also be undertaken to support contaminants and other analyses.

We will also assess prevalence of tattoo skin disease (TSD) using photo-identification techniques to identify and monitor TSD lesions on known individuals.

ECOLOGY

CEDP will undertake a comprehensive investigation into the population biology and ecosystem linkages of the Swan dolphins. We will determine the current size and composition of the population, assess their residency and ranging patterns, and examine their feeding ecology.

This information will help to identify important habitats and food sources and evaluate potential threats to improve the scientific basis for environmental decision-making and management within the Riverpark.

This research will build on findings from a 2001-2003 study of the Swan dolphins and outcomes of other on-going studies by Murdoch University and Curtin University researchers. In particular, we will link dolphin research with studies examining estuary food webs and fish communities.

COMMUNITY AND CONSERVATION

CEDP will provide on-going support for Dolphin Watch, a community monitoring project run by the Swan River Trust's River Guardians program in collaboration with Murdoch and Curtin. Started in 2009, Dolphin Watch now involves more than 200 community volunteers.

A reduction in entanglement and boat strike injuries is a key objective for CEDP. We will work with community groups and management agencies to encourage better disposal of waste and more responsible fishing and boating practices.



Left to right: (1) Post mortem on one of the dead dolphins; (2) Poxvirus lesions (2008); (3) Entanglement (2009)



HOW CAN YOU HELP?

Become a Dolphin Watch volunteer

Contact the Swan River Trust's River Guardians program on 9278 0900 or at info@swanrivertrust.com.au

SUPPORT THE COASTAL AND ESTUARINE DOLPHIN PROJECT

We are seeking your help to implement this important research. To make a donation to the CEDP please complete a donation form and return it to the Murdoch University Foundation. To enquire about corporate gifts or financial partnerships please contact the Office of Development on 9360 6507 or at cedp@murdoch.edu.au. Donations are fully tax deductible and will be issued with a receipt.

WHAT WILL CEDP ACHIEVE?

Our vision for CEDP is straightforward. We believe that the best future for our dolphins lies with ecosystems that are healthy and resilient and with communities that are actively engaged in the conservation and monitoring of their local dolphin populations.

To achieve this future, CEDP seeks to establish a collaboration of community, industry and government stakeholders to support an integrated program of scientific research and conservation actions. Outcomes of this collaboration will include:

1. **Better Science for Conservation** – improved scientific basis for dolphin conservation within the Swan Canning Riverpark and within other coastal and estuarine ecosystems
2. **Better Community Engagement in Dolphin Conservation** – higher levels of public understanding about the issues affecting dolphin and ecosystem health, and actions to reduce the incidence of entanglements, boat strikes, and other harmful interactions
3. **Better Management** – Greater integration of conservation efforts for dolphins across government, industry, and community stakeholders, including maritime, foreshore, and catchment-based industries; management agencies; recreational boaters and fishers; marinas and yacht clubs; local governments; developers; and recreational and environmental groups.



© John Goldsmith



Dr Carly Holyoake
Senior Research Fellow
(Marine Mammal Health)
Murdoch University



Dr Nahiid Stephens
Associate Lecturer and
Veterinary Pathologist
Murdoch University



Dr Chandra Salgado
Biologist
Curtin University



Dr Lars Bejder
Research Leader
Cetacean Research Unit
Murdoch University



Dr Hugh Finn
Biologist
Murdoch University