



Education Booklet

Excursions & Field Trips 2012

*Welcome to our
'Marine World'*

*Education Research
Conservation*



Our Mission

To be a self sustaining community organisation recognised internationally as a leader in the provision of ecologically sensitive dolphin and marine interactive experience through its conservation, research and education programs.

The Dolphin Discovery Centre is a not-for-profit 'Community Centre' supported by:

- *Coastcare Australia*
- *Marine Education Society of Australia*
- *Department of Environment and Conservation*
- *Department of Fisheries*
- *Marine Discovery Centre Network Australia*
- *Scitech*
- *South West Development Commission*



THE DOLPHIN DISCOVERY CENTRE HAS WORKED IN CONSULTATION WITH THE WESTERN AUSTRALIAN DEPARTMENT OF EDUCATION AND TRAINING TO DEVELOP THE EDUCATION SERVICES OUTLINED IN THIS BOOKLET.

At the Dolphin Discovery Centre we provide curriculum-focused educational activities and field based learning in marine and environmental studies.

Located two hours south of Perth on the foreshore of Koombana Bay in Bunbury, the Centre is surrounded by a diverse range of marine and coastal habitats including the Indian Ocean, Koombana Bay, the Leschenault Estuary, the Leschenault Inlet, and the white mangrove colony. Each habitat represents a unique natural resource and offers an ideal opportunity for learning.

Our programs provide your students with hands-on experiences in a safe and exciting learning environment.

Please share this booklet with your colleagues.



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1. TO MAKE A BOOKING

Telephone: (08) 9791 3088
Fax: (08) 9791 3420
Email: education@dolphindiscovery.com.au
Postal Address: PO Box 1178, Bunbury, WA 6231

Please have the following details available when you call:

- *List of possible dates for your visit.*
- *The tour you have chosen from this booklet.*
- *Your estimated arrival and departure times.*
- *The number of students, teachers and assistants that will be visiting (note: minimum number of students is 15 per tour).*
- *School and teachers contact details (Inc. fax and email address)*
- *ABN Number and Purchase Order Number.*

On confirmation of your booking we will forward:

- *Evacuation and emergency documentation.*
- *Working with Children clearance.*
- *Insurance certificate of currency including marine insurance (if boat tour is booked).*
- *Activity sheets (if requested).*
- *Invoice for day of tour.*
- *Booking Terms and Conditions.*



Water Based Excursions

Please note that all excursions at the Centre are Non Water Based Excursions (with the exception of the boat tours). Should dolphins visit the Interaction Zone the students will observe and record the dolphin's visit and behaviour from the shoreline. For students to enter the water, please arrange for your school to complete a WBE Form and supply the essential staff with the required water safety certificates (Bronze Medallion).



2. COST OF ACTIVITIES

Activity	Title	Year Level	Duration (inc. 15 min break)	Cost p/student
1.	<i>See Under the Sea</i>	<i>Kindy - Year 2</i>	<i>90 mins</i>	<i>\$ 7.50</i>
2.	<i>What's in the Mud?</i>	<i>Kindy - Year 2</i>	<i>90 mins</i>	<i>\$ 7.50</i>
3.	<i>The Sea and Me</i>	<i>Year 3-6</i>	<i>90 mins</i>	<i>\$ 7.50</i>
4.	<i>Mangroves Are From Mars</i>	<i>Year 3-6</i>	<i>90 mins</i>	<i>\$ 7.50</i>
5.	<i>Dolphin Dynamics</i>	<i>Year 7-9</i>	<i>90 mins</i>	<i>\$ 7.50</i>
6.	<i>Mud, Mangroves and the Millennium</i>	<i>Year 7-9</i>	<i>90 mins</i>	<i>\$ 7.50</i>
7.	<i>The Marine World</i>	<i>Year 10 +</i>	<i>90 mins</i>	<i>\$7.50</i>
8.	<i>Fisheries Science</i>	<i>Year 10+</i>	<i>120 mins</i>	<i>\$10.00</i>
9.	<i>Bring the Sea to Me (Incursion Program)</i>	<i>All Ages</i>	<i>60-90 min</i>	<i>\$7.50</i>
10.	<i>Boats, Biology and the Bay</i>	<i>Year 5 +</i>	<i>60 min</i>	<i>\$28.00</i>
11.	<i>School Professional Development Visit</i>	<i>Teachers</i>	<i>60-120 min</i>	<i>Group Rate</i>
12.	<i>Adopt A Dolphin Package</i>	<i>All Years</i>	<i>na</i>	<i>\$ 60.00</i>

- ***Please note out Terms and Conditions regarding teachers and assistants. Whilst there is no charge for the nominated teacher/s of the visiting class, only 1 assistant for every 10 students will be free of charge. Also note that all passengers participating in activity 9 will be charged the full rate and a group rate applies for Activity 11.***

3. EXCURSIONS / ACTIVITIES

A. Early Childhood

Pre Primary, Kindergarten, Years 1 and 2.



ACTIVITY 1

Title: *See Under the Sea*
Key Learning Area: *Science*
Other Learning Areas: *Mathematics, the Arts*
Duration: *90 minutes*

This program provides students with experiences of exploration and investigation. They will have a lot of fun learning more about marine animals and will be introduced to the importance of looking after our environment to protect the animals they see and feel during the excursion. Students will:

- Explore and observe the aquaria using the interpretative displays and hands-on activities.*
- Learn more about marine animals through games, discussions, digital animation, cinema and role play activities:*
- Participate in sand sculpturing and other beach activities (weather dependent).*
- Participate in beach treasure hunts for natural and processed materials on the shoreline.*

ACTIVITY 2

Title: *What's in the Mud*
Key Learning Areas: *Science, Society and Environment*
Duration: *90 minutes*



This program allows students to discover mangrove habitats and what animals live within them. They will also gain an appreciation for protecting areas so that the animals and plants they see on the excursion can survive. They will:

- See, feel and smell the mangrove habitat from the boardwalk.*
- Investigate the life forms (hands-on) within the mud.*
- Identify other animals found within or near the mangroves.*
- Discuss how and why the mangroves are protected.*

Please note that the mangroves activity involves teacher / assistant participation to ensure a safe and CLEAN learning environment.

B. School Year 3-6

ACTIVITY 3

Title: *The Sea and Me*
Key Learning Areas: *Science, Society and Environment.*
Other Learning Areas: *The Arts, Mathematics*
Duration: *90 minutes*

This program investigates and interprets information about cetaceans and other living organisms under the sea. Not only will students learn more about marine animals, but also understand and recognise the need to act responsibly in relation to coastal environments. They will:

- Explore a variety of marine animals and habitats found in the aquarium room.*
- Develop an understanding of dolphins and other marine life through games, discussions, digital animation, cinema and role play activities.*
- Learn more about endangered species through the Loggerhead Turtle rehabilitation project (seasonal).*
- Develop skills in art by creating sand sculptures of marine animals and in the measuring of whales and dolphins (weather dependent).*



ACTIVITY 4

Title: *Mangroves Are From Mars*
Key Learning Areas: *Science, Society and Environment*
Duration: *90 minutes*

During this program students will discover mangrove habitats and what animals live within them. The importance of protected areas and the need to preserve natural areas will also be introduced. They will:

- Study the miracle of the mangroves and the critical role they play within the entire local marine eco-system.
- Observe the animals and plants that live within the mangrove system and why they are found there.
- Participate in a hands-on catch and release activity to collect and identify animals that live within the mangrove environment.
- Evaluate the impact of the City of Bunbury on the local mangrove environment, the importance of conservation areas and identify ways to protect the mangrove habitat.

C. School Year 7-9

ACTIVITY 5

Title: *Dolphin Dynamics*
Key Learning Areas: *Science, Society and Environment*
Duration: *90 minutes*

This program studies the life of dolphins and their relationship with our local urban environment. The students will also grasp the concept of conservation by learning more about the protection of marine animals and strategies for their management. Students will:

- *Explore the relationship between marine animals and their respective habitats through aquarium displays, touch pools and preserved specimen activities.*
- *Develop an understanding of dolphins and other marine life through games, discussions, digital animation and cinema (activity sheets are available).*
- *Assist with the Endangered Loggerhead Turtle display through feeding, weighing and measuring the turtles (seasonal).*

ACTIVITY 6

Title: *Mangroves and the Millennium*
Key Learning Areas: *Science, Society and the Environment*
Duration: *90 minutes*

Students will investigate and explore the composition of the mangroves and identify the miracle adaptations they have made to survive in



such a harsh environment. They will also identify the importance of the mangroves for other animals and plants and address the many issues and conflicts they face due to the close proximity of an urban and industrial environment.

Students will:

- Study the miracle of the mangroves and evaluate the role they play in the overall health of the entire local marine eco-system (activity sheets available).*
- Observe the animals that live within the mangrove system and create a food chain link for each.*
- Participate in a hands-on catch and release activity to collect and identify animals that live within the mangrove environment.*
- Use their knowledge to discuss the importance of conservation areas and identify ways to protect the mangrove habitat.*

D. SCHOOL YEAR 10-12

ACTIVITY 7

Title: *The Marine World*
Key Learning Areas: *Science, Society and Environment, English and Mathematics*
Duration: *90 minutes*

This program will take a closer look at the adaptations and specialization marine animals have made to live in the Marine World. They will also gain a solid understanding of the threats facing our marine life and what can be done to manage both the threats and the animals themselves. Students will:

- Develop an understanding of dolphins and other marine life through games, discussions, digital animation and cinema.*
- Participate in the weighing, feeding and measuring of endangered Loggerhead Turtles as part of the Centre's turtle rehabilitation program (seasonal).*
- Complete a worksheet (optional) on the specializations and adaptations exhibited by the marine life found in aquariums on site at the DDC.*



ACTIVITY 8

Title: *Fisheries Science*
Key Learning Areas: *Science, English and Mathematics*
Duration: *120 minutes*

This program will provide a hands-on dissection activity designed to create an awareness of the biology and ecology of bony fishes and how it relates to fisheries management. Students will:

- Dissect and identify the internal features of a bony fish.*
- Determine the key features of their anatomy that allow them to survive underwater.*
- Remove and examine the fish ear bones (otoliths).*

- Complete a worksheet on fish ageing strategies that assist in the management of key fish stocks found in Western Australia.

E. Incursion Programs

ACTIVITY 9

Title: *Bring the Sea to Me*
Key Learning Area: *Science*
Other Learning Areas: *Mathematics, the Arts*
Duration: *60-90 minutes*

This program provides students with experiences of exploration and investigation within their own classroom. They will have a lot of fun learning more about marine animals and will be introduced to the importance of looking after our environment to protect the animals they see and feel during the excursion. Students will:

- *Learn more about dolphins and other marine animals through games, discussions, DVD presentations and role play activities.*
- *Inspect the biology and ecology of various living invertebrates found within the mobile touch tank.*
- *Explore the anatomy of a variety of marine vertebrates and invertebrates using models and preserved displays.*

F. Boat Based Activity (School Year 5+)

ACTIVITY 10

Title: *Boats, Biology and the Bay**
Key Learning Areas: *Environmental Science and Mathematics*
Duration: *60 minutes (weather dependent)*

Students will gain a better understanding of the Koombana Bay environment inclusive of human activities and the potential impacts they impose. This boat based tour will also introduce dolphin research strategies and how the

information is used for conservation purposes. The students will:

- Collect, record and collate data on the dolphin, the weather conditions and boating activity during the trip.
- Observe dolphins in their natural environment.
- Learn more about Koombana Bay as a working Port Facility and how the local waterways have been modified over the past 150 years to accommodate for it.
- Identify the risks to the local environment and what can be done to promote its future sustainability.

*** Life jackets will be supplied for all students on request.*

G. Other Activities

ACTIVITY 11

Title: School Staff Information Visit

Would you like further information?

If you require further information for your staff, our Education Officer is available to attend one of your PD days or staff meetings to give a presentation and answer all of your questions.

ACTIVITY 12

Title: School Professional Development Workshops

The Dolphin Discovery Centre provides a comprehensive range of opportunities for professional development programs to be conducted by all schools for their staff.

During the workshops or courses, the schools will have access to the facilities of the Theatre at the Centre as well as a guided tour of the discovery room, mangroves or boat tours.

Morning teas or lunches can be pre-ordered from our cafe.

ACTIVITY 13

Title: Adopt a Dolphin Program

Aim: *Creating community awareness within our schools.*

This “Adopt a Dolphin” package provides the class with an opportunity to support and contribute to the conservation of dolphins and their environment. Included in the package:

- *Dolphin information booklet.*
- *Certificate of Adoption.*
- *Profile of the “adopted” dolphin.*

We invite you to join us on an education excursion or field trip and look forward to seeing you and your students at the Dolphin Discovery Centre.

