Macquarie Marshes (Marra) Excursion

Suitable for: Stage 6 Geography, Earth and Environment & Biology

This is an excursion to help supplement the content and practical skills in your study of Geography, Biology or Earth and Environmental Science in the Preliminary and HSC courses. The activities that may be planned will help you:

- Develop your understanding of the environment of the Macquarie Marshes,
- Develop skills of fieldwork methods including water testing, transect construction and plant identification
- Identify different areas within the marshes to enable you to observe different land uses and impacts of human activity
- View management strategies within the Marshes
- Evaluate management of the Marshes in terms of ecological sustainability.

One-night accommodation is generally at Willie Retreat on "Willie Station" via Warren: Phone 68244361, Mrs Myra Tollhurst is the owner/operator

Students are expected to be respectful of all staff and presenters at all times and to treat the accommodation at "Willie Retreat" and its owner Mrs Tollhurst with great respect also. We are very lucky to have accommodation in this remote area and Mrs Tollhurst maintains this herself. She is a very active but elderly person. If students do not comply with these rules then parents will be contacted to come and collect their student and the school will be charged for any damage to the facilities (Schools may pass this on to the students' families).

The students home school teachers are expected to supervise students in their use of facilities at all times.

Various studies in the field within the Macquarie Marshes on two consecutive days:

- Generally, will be arranged by your school staff (Wambangalang EEC can assist in providing contact numbers for various agencies).
- Wambangalang EEC provides:
 - Stg6 Student workbook: Local ecosystems/Ecosystems at Risk
 - o Macquarie Marshes booklet relating to PPT
 - o Kayaks, PFDs & paddles for up to 20 participants including staff
 - o Test equipment if required please ask
 - o A PowerPoint presentation if required on the first evening
 - (please note: Teachers are welcome to run additional teaching activities in the evening such as talks/debates. Wambangalang staff do not do this as they are generally very tired from leading day one activities)
- Further activities you can arrange may be guided or assisted by:
 - Staff at Tiger Bay Wetland Centre (Constructed wetlands next to the sewerage treatment plant), Warren. Warren Shire Council
 Phone: 02 6847 6600, coordinates for carpark: 31°41′40.82″S, 147°50′33.16″E
 Email: council@warren.nsw.gov.au
 - o officers of National Parks and Wildlife: Contact: Nicola Brookhouse 68434000 at Barradine/Pilliga NPWS Office, nicola.brookhouse@environment.nsw.gov.au
 - o Resident landholders (You may have your own contacts)

- Burrima Block: Contact: Kerrie Duncan, Sustainable Soils PH: 68473367
- Staff of Wambangalang Environmental Education Centre.
- Accommodation as mentioned previously

A Suggested itinerary:

DAY ONE:

????am Depart Depart your school by bus, travelling via Warren.

9.00 Meet at Caltex Service Station, Warren

9:30am Windows on the Wetlands Tiger Bay Wetlands, Warren
10.30am Marebone Weir – look at river regulation & water testing

11.30am Visit a Station: an mixed farm perspective.

1.00am Arrive Willie Station – lunch and set up at accommodation

2.00am Commence fieldwork, which may include canoeing depending on conditions.

5.30pm Return to accommodation for dinner and overnight stay.

Evening activities as organised by you: guests with individual and group activities.

DAY TWO:

7.30am Depart Willie Retreat for continued fieldwork

- Burrima Block
- National Parks North Marsh

????pm Depart for return journey to your school

You may require students to complete workbook activities each day and participate in the full range of activities which will include independent and group, written and oral activities.

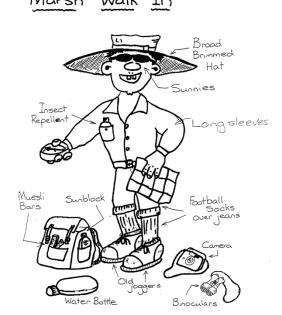
The cost of this excursion will be set by the school after arranging all activities

What to bring:

The following items are essential.

- A refillable water bottle.
- Clothes for the two days of field work. Long-sleeved shirts and long trousers are essential for prevention of insect bites. (This should include old clothes that may get wet and muddy, casual clothes for evening activities and a warm jumper.)

 Marsh Walk In
- Enclosed shoes suitable for walking
- A pair of old joggers suitable for walking through the Marshes
- Footwear suitable for wearing around the accommodation area
- Sleeping bag and pillow
- Bath towel and personal toiletry items
- Sunscreen, insect repellent, hat and sunglasses
- Wet weather gear
- Plastic bags for storage of wet and /or muddy clothes and shoes
- A small amount of money (Opportunity for small purchases of travel treats will only be available in



Warren when we stop to refuel on the forward and return journey)

• Pens, pencils, ruler and a clip board to hold field notes.

Please do not bring:

- Camera photos will be made available upon request.
- MP3 players or other devices as these may be easily lost or immersed in water.
- Singlet tops as these are inappropriate due to risk of sunburn and insect bites.

Please note that mobile phone reception will be very limited due to the location of the area we will be visiting and schools/presenters will take no responsibility for lost/damaged/immersed items.

We look forward to having you attend as this trip supports the study of the Macquarie Marshes as a wetland environment and as an ecosystem at risk as part of the syllabus.

Please note that the area of Macquarie Marshes is an area affected by a mosquito-borne virus. You will need to monitor this situation and take the necessary precautions as advised by the Health Department. *These precautions include use of DEET insect repellents, long full coverage of clothing i.e. long sleeves and trousers and not being outdoors at dawn and dusk*. If this situation worsens, it may be necessary to cancel at short notice. Schools need to advise students of these conditions.

Australian Curriculum Outcomes

BIO11/12-1 & EES11/12-1 develops and evaluates questions and hypotheses for scientific investigation

BIO11/12-3 & EES11/12-3 conducts investigations to collect valid and reliable primary and secondary data and information

BIO11/12-5 & EES11/12-5 analyses and evaluates primary and secondary data and information

BIO11/12-7 & EES11/12-7 communicates scientific understanding using suitable language and terminology for a specific audience or purpose

BIO11-10 describes biological diversity by explaining the relationships between a range of organisms in terms of specialisation for selected habitats and evolution of species

EES11-11 describes human impact on the Earth in relation to hydrological processes, geological processes and biological changes

EES12-15 describes and assesses renewable and non-renewable Earth resources and how their extraction, use, consumption and disposal affect the Earth's systems