21 February 2024

Dear Parents/Carers

**Re: Compulsory Biology Excursion – Calperum Station**

When : Tuesday April 30 – Arrive at Broken Hill High School **7.00am**

 (depart **7.30am**)

Friday 3 May – Return to **4:00pm**

Where : Calperum Station – 10 kilometres north of Renmark

Transport : Two Minibuses driven by Teachers

Cost : $200 – Due by Monday 1 April 2024

\*\*The trip is being subsidised by grants and fundraising of chocolate boxes\*\*

Additional : All meals and snacks will be provided whilst at the camp.

Students will need to provide own drinks and snacks for the bus

trip or bring money to purchase on the way.

Teachers : Miss Emma Camilleri and Miss Chloe Ralph

A booklet contained the full itinerary will be provided once finalised by Calperum Station.

Please return the attached Excursion Consent and Medical Form, including permission for student to travel in the car with Teachers, to the front office.

If you have any questions, please contact the school on 8088 1055.

Yours faithfully





Emma Camilleri Grant Shepherd

Science Teacher Principal

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| **Itinerary****Day 1** | **Tuesday, 30 April** |  |
| **Time** | **Activity** | **Details** |
| 7.00am | Arrive at Broken Hill High School |  |
|  |  |   |
| 7.30am sharp | Depart Broken Hill High School |   |
|   |   |   |
| 12.00 - 1.00pm | Welcome to Calperum & Lunch | About Calperum Station - meet the team, orientation, housekeeping, safety etc |
|   |   |   |
| 1.00 - 1.30pm | Welcome to Country | Transport to Windmill Bend, Indigenous Ranger or Elder |
|   |   |   |
| 1.30 - 4.00pm | Culture Meets Ecology Walk | 5kms walk along Calperum Floodplain and creeks. Guided by Calperum Ecologist and Indigenous Rangers, learn about and visit Indigenous cultural and European heritage sites, discuss ecological factors of Calperum inc environmental watering program, current and past studies. Calperum Saltbush Damper afternoon tea on route.  |
|   |   |   |
| 4.00 - 6.00pm | Free time  | Showers, fire pit, basketball etc |
|   |   |   |
| 6.00 - 7.30pm | Dinner |   |
|   |   |   |
| 7.30 - 8.00pm | Ecology at Calperum & Student Team Challenge | Introduction - Dr Heather Neilly. Ecology at Calperum. A day in the life of an ecologist. The science, the experiments, what we do, why we do it. The Student Challenge - Outline, plan, process and outcomes. |
|   |   |   |
| 7.30 - 9.00pm | Evening activity | Students will conduct a spotlighting transect survey along Ral Ral Creek, searching the trees and ground for Brushtail Possums (Trichosurus vulpecula) using handheld spotlights and torches. It is likely that other nocturnal species will also be found eg. geckos, spiders. All species observed will be identified, with GPS location and a description of habitat recorded on data sheets. |
|   |   |   |
| 9.00 - 10.00pm | Free time, lights out by 10pm | (Unless otherwise requested by teaching staff/student supervisor) |
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| **Day 2** | **Wednesday, 1 May** |  |
| **Time** | **Activity** | **Details** |
|  |  |  |
| 7.30 - 8.30am | Breakfast |   |
|  |  |  |
| 8.30 -10.00am | Science Workshop 1 | Calperum Ecologists: Effective Hypothesis and Experimental Design. Scientific thinking, testing, creation. |
| 10.00-11.00am | Morning Tea and Field Tour | Students will visit an experimental field site on the Calperum floodplain. Calperum ecologists will explain the hypothesis and methodology creation behind the establishment of this experiment, providing a real-life example of the theory they have just been taught. |
| 11.00 - 12.00pm | Science Workshop 2 | Calperum Ecologists: Effective Hypothesis and Experimental Design. Scientific methodologies and field application.  |
|   |   |   |
| 12.00 - 1.00pm | LUNCH |   |
|   |   |   |
| 1.00 - 4.00pm | Wetland Tour | Canoe trip. During the wetland canoe tour, students will be given bird identification material and will observe and record bird sightings. |
| 4.00 - 6.00pm | Challenge Time | Opportunity to work on challenge as well as shower/relax |
|   |   |   |
| 6.00 - 7.30pm | Dinner |   |
|   |   |   |
| 7.30 - 8.30pm | Night Walk/Stargazing | Walk out away from the station buildings and take a break to appreciate the vast night sky. Listen to stories about some commonly known constellations and learn of the rich array of Indigenous stories and practices that are connected to astronomy. |
| 8.30 - 10.00pm | Free time, lights out |   |
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| **Day 3**  | **Thursday, 2 May** |  |
| **Time** | **Activity** | **Details** |
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| 7.00 - 8.00am | Pitfall trapping | Students will check traps at pitfall trapping sites on the Calperum floodplain and learn to handle and identify small reptiles and mammals. |
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| 8.00 - 9.00am | Breakfast |   |
|  |  |  |
| 9.00 - 9.30am | Animal Identification | Show and share any unique animals which were caught pitfall trapping that the opposite group may not have seen as well as look at preserved specimens.  |
| 9.30 - 12.00pm | Activity 1  | Students will learn how to assess the tree condition of Black Box (*Eucalyptus largiflorens*) and Red Gum (*Eucalyptus camaldulensis*) trees on the Calperum floodplain. These trees are adapted to a cycle of flooding and drying and are influenced by the environmental watering that we do on Calperum. We monitor tree condition using the Tree Condition Index, a standard approach used across the Murray-Darling Basin. |
|  |  |  |
| 12.00 - 1.00pm | LUNCH |   |
|  |  |  |
| 1.00 - 4-00pm |  Activity 2  | Students will learn how to assess habitat quality, by evaluating a range of variables including: understorey vegetation cover and diversity, herbivore density, fauna presence, soil condition and tree health. Surveys will be done inside and outside of grazing enclosures and in areas that have been flooded and not flooded, to assess the impact of herbivores and flooding on habitat quality. |
| 4.00 – 4.30pm | On the Ecology Couch | Panel Discussion with Calperum senior ecologists Dr Peter Cale and Dr Heather Neilly - Q & A, student challenge questions, open discussion. Build on past day’s activities, data collection etc |
| 4.30- 6.00pm | Challenge Time | Opportunity to work on Student Team Challenge, then shower/relax etc |
|  |  |  |
| 6.00 - 7.30pm | Dinner | Staff and ecologists to join (last chance to ask questions etc for final challenge presentations) |
|  |  |  |
| 7.30 - 9.00pm | Night Activity - free time | Free night - firepit, music, marshmallows, finalise Challenge presentations etc |
| 9.00 - 10.00pm | Free time, lights out |   |
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| **Day 4** | **Friday, 3 May** |  |
| **Time** | **Activity** | **Details** |
|  |  |  |
| 7.00 - 8.30am | Breakfast | Breakfast, pack bags etc ready for departure |
|   |   |   |
| 8.30 - 11.30am | Student Challenge | Presentation & panel review, group discussion on each presentation, judging and award presentation. (Morning tea at 10.30) |
|   |   |   |
| 11.30 – 12pm | Final farewells |   |
|   |   |   |
| 12.00pm | Depart from Calperum | Packed lunch to be eaten on bus. |
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|  |  |  |
| 4.00pm | Arrive at Broken Hill High School |  |
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 **Permission to Publish Student information.**

The Department of Education may publish or disclose information about your child/ward for the purposes of event promotion and sharing results. This information may include your child’s/ward’s name, age and school. It may also include information collected during this event such as photographs, live streaming, sound, and visual recordings of your child/ward.

The communications in which you child’s/ward’s information may be published or disclosed include but are not limited to:

* The event program and results
* Public websites of the Department of Education including the School Sport Unit website
* The Department of Education intranet (staff only), blogs, and wikis
* Department of Education publications including the school newsletter, annual school magazine and school report, promotional material published in print and electronically.
* The Department of Education, School Sport Unit and school social media accounts on networks such as YouTube, Facebook and Twitter
* Local and metropolitan newspapers and magazines and other media outlets

Parents should be aware that when information is published on public websites and social media channels it can be linked to by third parties and may be discoverable online for a number of years, if not permanently. Search engines may also cache or retain copies of published information.

**Parental Acknowledgment and Consent**

* I have read the information provided and I hereby consent to my child/ward participating in this event.
* I acknowledge that this event/activity is required to be held in accordance with any current NSW Health COVID-19 Public Health Orders and the NSW Department of Education’s policies and procedures. I acknowledge and accept that there is a risk that my child/ward may be exposed to COVID-19 whilst attending and participating at this event/ I confirm that my child will not attend if displaying symptoms of illness, and/or if directed to isolate under public health orders.
* I acknowledge that my child/ward will be under the duty of care of the supervising teacher during the event.
* I acknowledge that if my child/ward seriously contravenes behavioural expectation, they may be immediately excluded from the team. Should this eventuate, I accept full responsibility for my child/ward upon notification of their exclusion by the team manager including the cost return transport and accommodation.
* In the event of any accident or illness, I authorise the obtaining, on my behalf, of an ambulance and any such medical assistance that my child/ward may require. I accept full responsibility of expenses incurred.

 **PLEASE READ, TICK AND SIGN FOR ACKNOWLEDGEMENT AND PERMISSION TO ATTEND**

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| Year 11 Biology Trip – Calperum Station | **Date:** : April 30 – May 3 |
| Teachers: Ms Camilleri and Ms Ralph |

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| **Student code of Conduct (student to complete)**I (name) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ agree to abide by all the rules of the events and to obey all requests given to me. I realise that good behaviour will enable me to take part in future events. Misbehaviour has serious consequences.STUDENT SIGNATURE: DATE: |
|  | **I have completed the medical information section.** |
|  | **Permission to Publish Yes o No o**I have read the attached Permission to publish and Parental Acknowledgement and Consent information.For the Department to publish and disclose information about my child/ward in publicly accessible communications. This permission remains effective until I advise otherwise.I understand that if I have not given permission to publish, my child’s/ward’s name will not appear in event programs and results. |
|  | **Concussion Clearance**I acknowledge that if my child/ward sustains a concussion, or experiences any concussion symptoms, in the 14-day period prior to the event commencing, I am required to report this to team officials. I further acknowledge that, should this occur, my child/ward will only be permitted to participate in the event if a medical clearance is provided. |
|  | I affirm that, to the best of my knowledge, my child has no medical condition or injury that places them at risk in participating in this sport activity. |
|  | All medication that my child will/might require has been declared and will be packed and correctly labelled.  |
| **I consent to my child attending the Year 11 Biology Trip – Calperum Station.Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature:****Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  |

**Medical Conditions**

List medical conditions or illnesses (include asthma, diabetes, epilepsy, allergies, etc). Outline the treatment for each.

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Outline special dietary needs including possible reaction to inappropriate diet.

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