

# Attention: Biology Coordinator

Year 12

## Maintaining the Balance 2010

### The Search for Better Health

is available at Taronga Western Plains Zoo, Dubbo Education Centre during the period

Tuesday 9<sup>th</sup> November      Wednesday 10<sup>th</sup> November  
Thursday 11<sup>th</sup> November

Sessions run from 10:00am to 3:00pm

### Please nominate a Date!

Date	School	No. Students Attending

**RSVP: Friday 15<sup>th</sup> October 2010**

Bookings will be confirmed via email on Tuesday 2<sup>nd</sup> November 2010

Attending Teacher Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

School Address: \_\_\_\_\_

Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_

**The cost of the day will be \$18.00 per student. School will be invoiced.**

### Booking Changes or Cancellations:

- ✿ If the number of students booked decreases significantly (by 5 students or more) within four weeks of your booked Study Day, the school will be invoiced for the total number of students booked. We reserve the right to cancel days/sessions not fully filled.

**Further enquiries contact Education Centre on 6881 1433 or 6881 1459.**

## ‘Maintaining the Balance / The Search for Better Health’

	<b>Students Learn To</b>	<b>Students</b>
<b>1. Most organisms are active in a limited temperature range</b>	<ul style="list-style-type: none"> <li>• identify the broad range of temperatures over which life is found compared with the narrow limits for individual species</li> <li>• compare responses of named Australian ectothermic and endothermic organisms to changes in the ambient temperature and explain how these responses assist temperature regulation</li> <li>• identify some responses of plants to temperature change</li> </ul>	<ul style="list-style-type: none"> <li>• analyse information from secondary sources to describe adaptations and responses that have occurred in Australian organisms to assist temperature regulation</li> </ul>
<b>2. Plants and animals transport dissolved nutrients and gases in a fluid medium</b>	<ul style="list-style-type: none"> <li>• describe current theories about processes responsible for the movement of materials through plants in xylem and phloem tissue</li> </ul>	<ul style="list-style-type: none"> <li>• analyse information from secondary sources to identify current technologies that allow measurement of oxygen saturation and carbon dioxide concentrations in blood and describe and explain the conditions under which these technologies are used</li> </ul>
<b>3. Plants and animals regulate the concentration of gases, water and waste products of metabolism in cells and in interstitial fluid</b>	<ul style="list-style-type: none"> <li>• describe adaptations of a range of terrestrial Australian plants that assist in minimising water loss</li> </ul>	<ul style="list-style-type: none"> <li>• use available evidence to explain the relationship between the conservation of water and the production and excretion of concentrated nitrogenous wastes in a range of Australian insects and terrestrial mammals.</li> <li>• perform a first-hand investigation to gather information about structures in plants that assist in the conservation of water</li> </ul>
<b>4. Increased understanding has led to the development of a wide range of strategies to prevent and control disease</b>	<ul style="list-style-type: none"> <li>• discuss the role of quarantine in preventing the spread of disease and plants and animals into Australia or across regions of Australia</li> </ul>	<ul style="list-style-type: none"> <li>• perform an investigation to examine plant shoots and leaves and gather first-hand information of evidence of pathogens and insect pests</li> <li>• gather and process information and use available evidence to discuss the changing methods of dealing with plant and animal diseases, including the shift in emphasis from treatment and control to management or prevention of disease</li> </ul>