

# Tiwest Night Stalk



## Overview

**Purpose** – *Tiwest Night Stalk* is an initiative that is not only fun, but collects valuable data about the state of native animals and feral pests for use by scientists and conservation agencies. Students will be raising community awareness of native animals, their habitats and the major threats to their survival.

**Description** – *Tiwest Night Stalk* is a nationwide annual spotlight survey of native and feral animals. During a six week period (1 September to 16 October) surveys are conducted around Australia by schools, community groups and other organisations.

**Available Zoo-based Experiences** – that support the *Tiwest Night Stalk* program include Bush Party, Save A Tree for Me!, Going Going Gone, Unique Australians and Save Our Species.

**Conservation Message** – *Tiwest Night Stalk* is an important initiative, documenting the state of native fauna and the prevalence of introduced species. Over time, the data collected will provide a meaningful scientific resource capable of contributing to future national biodiversity strategies.

## Links to Curriculum

Sc

Science

**Life and Living** – Students understand their own biology and that of other living things, and recognise the interdependence of life.

**Earth and Beyond** – Students understand how the physical environment on Earth and its position in the universe impact on the way we live.

S+E

Society &  
Environment

**Natural and Social Systems** – Students understand that systems provide order to the dynamic natural and social relationships occurring in the world.

**Place and Space** – Students understand that the interaction people have with places in which they live is shaped by the location, patterns and processes associated with natural and built features.

M

Maths

**Chance and Data** – Students use their knowledge of chance and data handling processes in dealing with data and with situations in which uncertainty is involved.

**Measurement** – Students use direct and indirect measurement and estimation skills to describe, compare, evaluate, plan and construct.

V

Values

**Diversity of Species (Environmental Responsibility)** - Each person should recognise a need to preserve native habitats and arrest the extinction of presently surviving native species.

## Enriching your Experience

The Education team at Perth Zoo whole-heartedly supports an approach to conservation education that incorporates cooperative, discovery and student-centred learning, including experiences that are interactive, engaging and fun. We hope to light a spark within children's minds, and ultimately allow them to make informed choices that will make a difference to the world around them.

## Topic Web

Your education experience at Perth Zoo can be a great springboard for exploring a variety of topics within the classroom. You might like to consider the following to enrich your topic.

### Animal Signs

- diggings
- scats
- tracks
- chewed leaves
- nests
- scratch markings
- frog calls
- eye-shine

### Caring for the Environment

- create a native habitat in your school grounds
- link with a wildlife carer to learn first aid for injured and orphaned wildlife
- animal debate: Should we eradicate cats and foxes?
- nest boxes for wildlife

### Survival

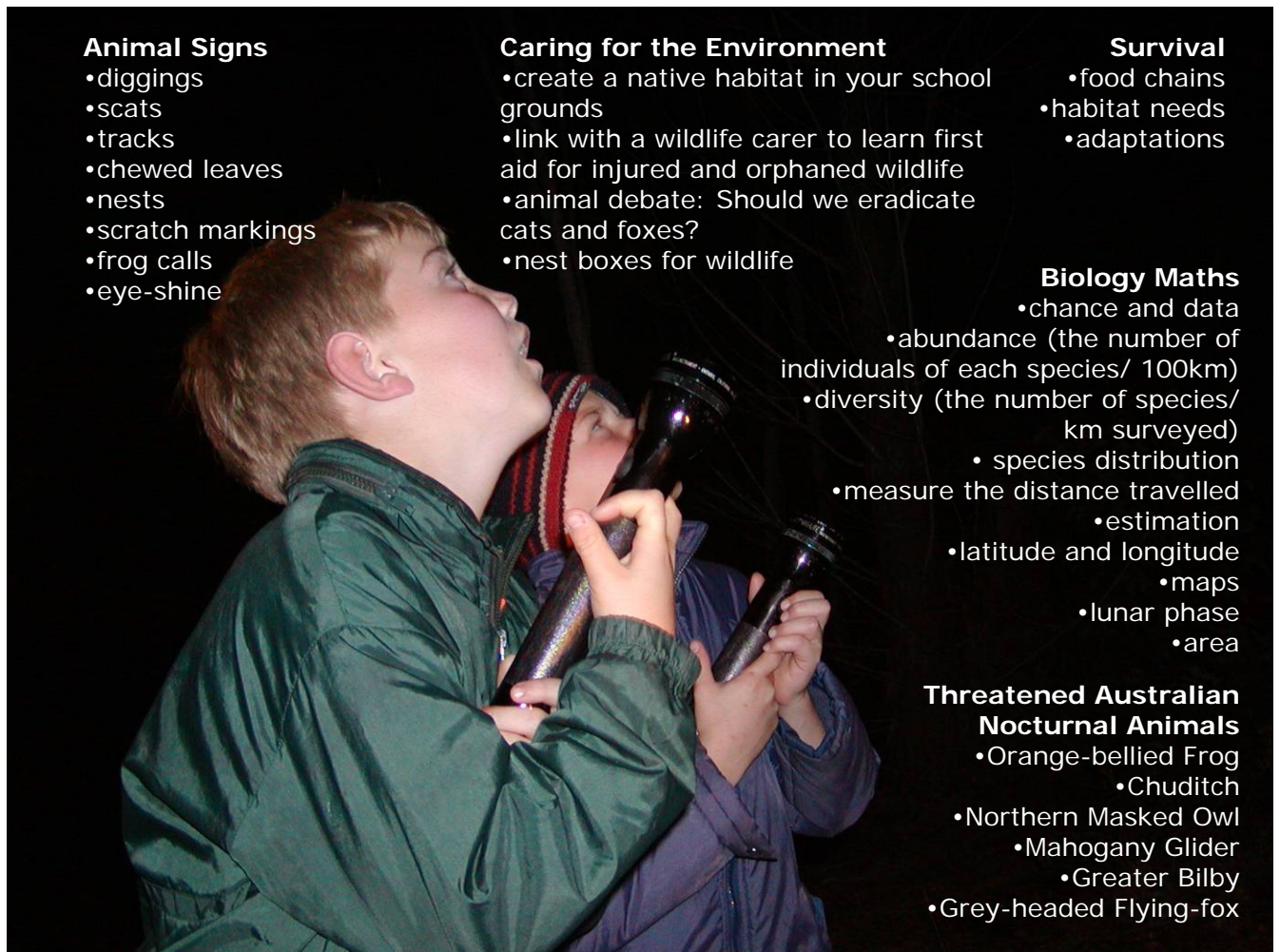
- food chains
- habitat needs
- adaptations

### Biology Maths

- chance and data
- abundance (the number of individuals of each species/ 100km)
- diversity (the number of species/ km surveyed)
- species distribution
- measure the distance travelled
  - estimation
- latitude and longitude
  - maps
  - lunar phase
  - area

### Threatened Australian Nocturnal Animals

- Orange-bellied Frog
  - Chuditch
- Northern Masked Owl
  - Mahogany Glider
  - Greater Bilby
- Grey-headed Flying-fox



Photograph by Brad Kruger/Perth Zoo



## Before, During and After...

### Before You Go On a Night Stalk

It would be useful to consider the following topics to set the scene before going on a *Tiwest Night Stalk*.

Learning the Lingo - Learn the meanings of the following words: nocturnal, diurnal, crepuscular, bioluminescence, echolocation, biodiversity, eye shine, threatened species, native, introduced species, feral, pest and stray.

SENSE – ational - Nocturnal animals rely heavily on their senses to survive in a night-time world. Explore the five human senses. Have students research what would happen if they did not have two eyes, or a sense of smell, or hearing. Then ask them to write a story explaining the consequences of losing one of their senses.

Making sense of it - Blindfold students and hold up a variety objects in front of them (objects that make a noise, objects that smell, objects that can create a breeze eg paper fan). Ask them to judge the distance the objects are away from them. What other senses could they use to determine the distance?

Tree-huggers - Discover the importance of sight and touch by playing 'Tree-Huggers'. Played in pairs, one student is blind-folded and lead to a tree by their partner. The blind-folded students must then find their tree once their blindfold is removed.

Unique Australians - Research Australian animals that have specialised sensory adaptations for a nocturnal way of life, or live in unique habitats such as caves, deepwater or soil.

Do a Daytime Stalk - Inspect your chosen site during the day to ensure accessibility and to assess potential hazards or safety risks. Make a note of details about the area that may be difficult to see at night. Ensure that you have prior permission of landowners to cross or enter property if necessary. Before your stalk you may want to get your class looking for 'animal signs' that will indicate what animals are in the area, see TOPIC WEB.

### Stalk the Night Away!

Go spotlighting with your students and participate in *Tiwest Night Stalk*. It's easy and your students will love it.

Your survey can be conducted on any night between 1 September and 16 October. You may decide to survey your area for one night only, or for two or three consecutive nights. Conduct your survey on a night of fine weather, and little moonlight for best results.

You will need a spotlight or torch, a pair of binoculars, a map of the area, your *Tiwest Night Stalk* Spotter's Log and any useful reference to help you identify the animals you see. Make sure you dress for the outdoors and only leave your footprints behind. You can download your *Tiwest Night Stalk* Spotter's Log from the website [www.perthzoo.wa.gov.au/nightstalk](http://www.perthzoo.wa.gov.au/nightstalk)

Be sure to send in your results to Perth Zoo by 30 November.

Your students will be contributing to conservation and will also have a night to remember!



## Before, During and After...

### Back at School

In addition to the ideas from the Topic Web on page 2, you might like to explore the following suggestions to make your program an 'enriching' experience.

Immersion – Provide as many practical, hands-on experiences for your students as possible.

Fun with Fauna - Carry out further fauna surveys of your area. Find out about other non-invasive biological survey methods such as sand pads (which record footprints of an animal) binoculars, GPS, and camera traps.

Nestboxes for Wildlife - Some native wildlife nest in hollow trees and logs. Sadly, many of these homes are being lost due to habitat destruction. If you discover on your *Tiwest Night Stalk* that you have hollow-using animals in your area, you may wish to follow the lead of many local Western Australian primary schools and build nestboxes for the native wildlife. You can also refer to the Nest Boxes for Native Animals page under the Animals and Plants section of the Perth Zoo website.

Playground Planting - Planting native habitat in your school grounds is a rewarding and enjoyable initiative that becomes an 'outdoor classroom' and can be integrated into all learning areas. Using local native plants will provide food and habitat for many local native animal species. Refer to the Fauna-friendly Garden downloadable resource sheets located in the Animal and Plants section of the Perth Zoo website

Light source - Nocturnal animals live in a world of darkness. Humans are diurnal and need sunlight. However, get your students to investigate the health effects to humans of too much light as well as not enough light.

Classification Capers - What living things were found on your *Tiwest Night Stalk* and how could they be grouped?

Chance and Data – Get your students to consider the many methods of biological data collection. Get your students to classify, sequence, display and interpret data collected from their spotlighting survey. Your students can also predict their results and make comparisons with previous year's results.

Represent Spatial Ideas – Get your students to follow a map to the survey site or represent their survey area using directional language, scale, coordinates and proximity of a location.



## Resources and Support

### Press

*The West Australian* ED! 'When the Sun Goes Down: The creatures that come out at night' Tuesday July 25, 2006 8pp.

### Books

Cheng, C 1990, *Eyespy Book of Night Creatures*, Scholastic Australia, Lisarow.

Dale, K 2001, *Eyes in the Dark*, Hachette Livre Australia, Sydney.

Morris, J 2003, *Australian Owls, Frogmouths and Nightjars*, Greater Glider Productions, Maleny.

Morris, J 2003, *Australian Bats*, Greater Glider Productions, Maleny.

Spurling, M 2001, *Bilby Moon*, Kane/Miller Book Publishers, La Jolla.

Suess, Dr. 1971, *The Lorax*, Random House Inc., New York.

### Online

Perth Zoo 2008, Perth, viewed 1 July 2008 <[www.perthzoo.wa.gov.au/nightstalk](http://www.perthzoo.wa.gov.au/nightstalk)>.

Visit the *Tiwest Night Stalk* website to download your Spotter's Log and get step-by-step instructions on running your own *Tiwest Night Stalk*. It includes a marsupial gallery to help identify some of the native animals you may see, as well as previous year's results. There is also a fun spotlighting game where you use your own 'torch' to search through the night-time bush for some of Australia's marsupials.

Department of Environment and Conservation 2008, Perth, viewed 1 July 2008 <[www.naturebase.net](http://www.naturebase.net)>.

This site has many great resources including species information. Follow the Community links to the Eco Education program designed to foster awareness, appreciation and understanding of the natural environment and its relation to traditional Aboriginal culture.

Google Earth 2008, Mountain View, viewed 1 July 2008 <[www.earth.google.com](http://www.earth.google.com)>.

Why not conduct a digital reconnaissance survey of your *Tiwest Night Stalk* site? Use satellite imagery, maps, terrain and 3D buildings to put the world's geographic information at your fingertips.

National Geographic 2008, Washington, viewed 1 July 2008

<[www.nationalgeographic.com/earthpulse/rainforest/index\\_flash-feature.html](http://www.nationalgeographic.com/earthpulse/rainforest/index_flash-feature.html)>.

Compare nocturnal Australian animals with those found in Borneo. Using your mouse as a spotlight, find out more information about the nocturnal animals of this amazing part of the world.

Out of the Blue 2006, Mosca, viewed 1 July 2008

<[www.nps.gov/archive/grsa/resources/curriculum/elem/lesson08.htm](http://www.nps.gov/archive/grsa/resources/curriculum/elem/lesson08.htm)>.

Visit this website and download the instructions on how to play this game which teaches students about some of the dangers of being a nocturnal animal.

