

Section 2: Types of Turtles

Check: **References in Section 1**

Freshwater Turtles

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For newspaper articles about:

- Red-eared Slider Turtle
- Poachers in Perth metro lakes
- City of Cockburn turtle study at Bibra Lake
- Need for fox cull
- Citizen scientists - turtle spotters needed

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Turtle Watch: Community Contribution to Environmental Impact Assessment



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In 2005, community members of an independent primary school in the Perth metropolitan area of Western Australia expressed concern about evident threats to the local turtles living in nearby wetlands. Early investigation suggested that road deaths and a lack of suitable nesting sites were impacting on the turtle population. To examine the issue further, and with the aim to improve the turtles' local habitat, the school successfully applied for a Community Conservation Grant. The subsequent project involved close collaboration between the school, the Department of Environment and Conservation (DEC), the local council and other organisations.



Project Purpose

To trial the provision of a suitable, safe nesting site in the Hedsman Lake Regional Park for the Oblong Turtle, *Chelodina oblonga*, to achieve the following.

- Collection of turtle watch data for future environmental impact assessment and management action.
- Community contribution and collaboration between the school, government partners and other stakeholders.
- Promotion of connectivity to nature in the local neighbourhood through active, hands-on participation by school and community members.
- Promotion of student and community interest in science with a focus on 'whole systems thinking', that is, establishing interrelationships between issues impacting on the wetlands and understanding phenomena as an integrated whole.

Project Program

The project was undertaken over a two year period, March 2006 – February 2008. The site was located on the north-eastern side of Hedsman Lake in a comparatively flat, open, rectangular (50m x 25m) area about 30m from the water (Figure 1). It was a 10 minute walk from the school. Students, community members and/or staff from the school conducted the following weekly activities.

- Monitor conditions at the site and in the surrounding area.
- Meet stakeholders to discuss developments and arrange the control of weed species.
- Make observations at the site of: pollution; preferred nesting places (Figure 2); and the characteristic shape of predated nests (Figure 3).
- Record observations and developments such as the number of predated turtle nests found.
- Participate in night stalks to seek data on the predator/s.
- Discuss findings, make and implement recommendations to improve outcomes for the turtles.

Results

The turtles used the provided site for nesting, but it was not safe as all the observed nests were predated (Figures 2–4).

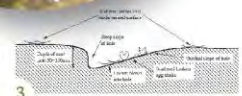
Turtle Watch Data – During the study period 31 predated turtle nests were found in the trial site, with another 4 predated nests located in the nearby vicinity. No live hatchlings were observed at the site, however 9 were seen in the surrounding area (Figures 5 & 6). Recommendations related to the importance of weed control, predator control, pollution control and ongoing turtle population monitoring.

Community Contribution – Collaboration between stakeholders was timely and effective throughout the project. An efficient, cooperative, close working partnership between DEC staff and the school was a vital feature. Students, staff and other community members were involved in hands-on activities at the site. Other collaboration included officers from the Natural History Museum of Western Australia, the City of Stirling and the Hedsman Lake Wildlife Centre. Continued collaboration was recommended.

Connectivity to Nature – Enhanced student and community connectivity to the Hedsman Lake environs, as shown by improved knowledge, skills, behaviours and values related to the lake ecosystem. Further opportunities for participation were recommended.

Interest in Science – Enhanced student and community interest and knowledge about the life cycle of the turtle and wetlands environment. Participants displayed improved understandings about the interrelationships between all components of the ecosystem and wider governance and eco-service systems involved in its management. Student motivation and focus were high, with examples of enhanced care for the wetlands and positive environmental behaviours transferred to other contexts. Ongoing science experiences in real-life settings were recommended.

Lessons Learnt – Need more: integration of environmental projects into cross-curricula school programming; and funding for consultant support and project management.



Conclusions

A suitable nesting site for the Oblong Turtle was provided, however the site was not safe due to predation. The school and local community made a valuable contribution to the project by working cooperatively with government agencies on this real-life issue of environmental concern. Evidence was obtained and recommendations made to support the decision-making processes related to environmental impact assessment and management of the Park.



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Marine Turtles

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