



ICONIC SPECIES MONITORING PROGRAM REPORT 2010 *Derby District High School*



Establishing Monitoring in the West Kimberley

Throughout the 2010 school year staff and students at Derby District High School have been assisting Danielle Taylor and Barbara Sing with the trialing of suitable sites for an ongoing Iconic Species Monitoring Program.

Whilst it is acknowledged that there is some time before cane toads reach as far south as Derby it is hoped, that by conducting regular monitoring of species known to be under threat from cane toads in the East Kimberley, a useful longitudinal database can be established and maintained by KTB for the West Kimberley region.

In preparation for the launch of the Derby Bush Rangers Cadet Unit being offered to DDHS students as an option from Term 1, 2011 five potential monitoring sites were flagged and trailed in Term 2 and 3 of 2010. (*Term 4 monitoring pending*)

Monitoring Site Locations

Sites were selected on the basis of diversity of ecosystems, proximity to the school and accessibility throughout the seasons.

Site 1 - Munkayarra Wetland

The Munkayarra Wetland (Duck Swamp) is located 20km south of Derby on the Derby-Broome Road. The site has rich biodiversity of flora and fauna, especially bird species, supported by a permanent fresh water body that varies in size throughout the seasons. Macro-invertebrate and water quality data is also being collected at this site as well as observation regarding the impact of heavy hoofed animals (horse and cattle). Easy access makes this site ideal for the program and the trials at this site have already produced some promising data in relation to iconic species.

Site 2 – Aristida Grass Savanah

The Aristida Grassland, located 1km south of Derby town centre on Rowan Street, borders the marsh of King Sound. This site has dense gravel sediment with a combination of *Aristida contorta*, short grasses and some natural woody coverage. Proximity to the school campus, easy access throughout seasons and data evidencing medium to small invertebrates and high insect biodiversity have made this site suitable despite some salinity and soil erosion issues.

Site 3 – Joon Joo Botanical Trail

The Joon Joo Botanical Trail is located 10 kms from the centre of Derby at the junction of the Derby-Broome and Worsley Roads. This site is part of a three kilometer walking trail that has interpretive signage providing information about the plants and animals of the Wanganut Land System, how they were used by the Nyikina people and the interactions of plants, animals and insects throughout the cycles of the seasons. Known species at the site include butterflies and dragonflies, fifty species of birds, Agile wallabies (*Macropus agilis*), reptiles including the Olive Python, King Brown snakes and Gould's Monitor or goanna.

The site also has over seventy species of endemic plants and while the Joon Joo Trail is inclined to be sandy in the dry season and a bit boggy in places in the wet season it is easily accessible throughout both. Its closeness to town makes it a site that can be monitored with regularity.

Site 4 – DDHS Campus

Although mostly fenced, the grounds of Derby's District High School are reasonably large and frequented by a myriad of native fauna. The trials have shown that by incorporating the DDHS Campus in the chosen monitoring sites students across year groups 2 – 10, including those with special needs, will be able to learn the skills needed for correctly tracking and monitoring species as well as the importance of accurate data collection. Several sites around the school grounds have been chosen for this purpose although final data from DDHS Campus will be collated as one site.

Site 5 – The Gully

The site known as The Gully lays approximately 2.5km out onto the King Sound marsh, south of Derby town centre. Initial monitoring trials at this site produced some promising data however with seasonal changes and large tidal variances the site has been deemed too difficult to access with regularity and will therefore not be used in the Iconic Species Monitoring Program for 2011.

Derby Bush Ranger Unit

To help ensure the quality and accuracy of data collected in the Iconic Species Monitoring Program community partnerships with species specialists have been established. These community members will play an integral role within the Derby Bush Ranger Unit by providing ongoing training for Cadets in species identification and mentoring in the field.

The benefits of incorporating the Iconic Species Monitoring Program into the required outcomes for the Derby Bush Ranger Unit is three-fold;

1. It provides the monitoring program with an ongoing base of Cadets to conduct the collection of longitudinal data.
2. It ensures that tracking and monitoring field trips are timetabled into the school program and supervised by Unit Leaders.
3. It assists well-trained graduate Bush Ranger Cadets with career pathway opportunities within the field of NRM.

Monitoring Techniques and Frequency

Given the diversity of the ecosystems chosen appropriate efforts have been made over the course of the trial to establish the most suitable tracking and monitoring techniques at each of the sites.

It is envisaged that monitoring of the 4 selected sites, conducted by Bush Ranger Cadets along with their Unit Leaders, should occur once each school term throughout 2011 and beyond and that data collected will be forwarded through to KTB to be collated by the end of each term.

Data Collection and Collation

The iconic species monitored in the trials have been drawn from the 'What's In Your Backyard?' program and formatted into DDHS Iconic Species Monitoring data collection sheets to be taken into the field along with the species ID cards.

Final formatting of these field documents is yet to be decided upon and it would be useful to know how this information is to be used in the short term by KTB. Once this has been established draft copies can be sent through to KTB to confirm ease of data collation is ensured.

Acknowledgements

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THANK YOU

