

# Filling the survey gaps in remote areas

The Petermann region remains one of the least surveyed areas of the Northern Territory for fauna and consequently, there is little data on the presence, abundance or location of significant wildlife populations.

The CLC is considering the establishment of an Indigenous Protected Area (IPA) for the Petermann and Katiti Aboriginal Land Trusts and that's given traditional owners important opportunities to fill in some of these knowledge gaps.

An IPA planning trip last year, involving Kaltukatjara Rangers and senior traditional owners, found previously unknown populations of two animal species that are vulnerable to extinction – the Mulgara and the Great Desert Skink.

The first of three follow-up fauna surveys planned for 2009 was completed in June. The focus of these surveys is to collect baseline data on

the distribution and abundance of threatened species to help the development of a management plan. The first survey was a collaborative effort between the Kaltukatjara Rangers, prospective women rangers, senior traditional owners from Docker River and Mutijulu, CLC staff, an environmental consultant and volunteer biologists.

The rangers surveyed fauna (using Elliot traps and pitfall lines), water quality testing, fire management, plant identification and recorded indigenous ecological knowledge. Eight mammal species were recorded during the survey including two threatened species - the mulgara and black-footed rock wallaby.

The trip proved to be very successful given the inclement weather which resulted in the abandonment of a bush camp in the middle of the night and a day spent digging vehicles out of mud.

A DVD is being produced about the trip for distribution to everyone involved.



Rangers and traditional owners (above) have helped survey the remote Peterman region in Central Australia where threatened species have been found (right).



## Wulaign Rangers working with CSIRO and Bushfires NT

The Wulaign Rangers are from Lajamanu and work together with the Traditional Owners of the Northern Tanami IPA (Indigenous Protected Area) to look after country.

They are working with CSIRO and Bushfires NT on a project that looks at burning and measuring shrubs, trees, spinifex, smoke and fire. The project team is doing this to learn about global warming and to develop the ranger's skills. This story is about this project.

Aiden and Dylan said: "We set up the



Wulaign Rangers use a vacuum cleaner to survey the affects of a burn off near Lajamanu.

transect with a 100m tape and a picket at both ends. This was the first site our ranger group surveyed and it was along the Duck Ponds road". The rangers surveyed three different sites in the IPA. They did this survey to measure and record the amount and height of trees, shrubs, spinifex and litter before and after fire.

After surveying a site, the rangers burnt the area. Jefferson and Steven described how at one site they split into two teams, "Dylan, Jefferson, Steven, Jane and Gina went north and Edmund, Grant and Jocelyn went south. We used fire-torches to light the spinifex".

This burning was done so the rangers could go back to each transect and find out how much grass and trees burnt, how hot the fire was and work out the weight of the smoke.

Dylan said fires were lit "to see how much spinifex and shrubs burnt to make the smoke. The smoke was small, but as the fire burnt it got bigger".

The rangers explained that scientists think there is too much smoke coming out of factories, cars, planes, trains and helicopters. This helps warm the earth by putting too much carbon dioxide and other gases in the air. Fires are part of this story, and this project is trying to find out how our fire management can help.

After each fire the rangers counted the

trees, shrubs and leaf litter that was burnt, vacuumed up ashes and weighed them, and measured the height the fire went up the trees. The rangers also walked 25 steps and made a quadrat to see what was burnt or not burnt in that quadrat.

After the field trips the rangers used the data recording sheet to make the same pattern with coins that they saw in the bush. Aiden and Edmond discussed how they coloured the coins to show spinifex, non-spinifex, litter and bare ground. After making the straight line with the coins, they put the coins in piles according to colour and stacked them up to show the shape of the graph. The graphs show how much spinifex, ground and litter was at the survey sites and how much was burnt.

Scientists will use the information collected to better understand how country in the Tanami burns and if a bigger fire and greenhouse gas abatement project is possible in the Tanami. The scientists on this project praised the rangers for their data collection and said they'll contribute strongly to research in the future.

This story was written by the Wulaign Rangers (Jefferson Lewis, Dylan Gordon, Aiden Kelly, Edmond Kelly, Titus White, Steven Robertson) with Jane Walker (Northern Tanami IPA Coordinator), Miles Holmes (Anthropologist) and Jocelyn Davies (CSIRO).