

Local snail study

An Interim Recovery Plan has been being prepared by CALM for 26 species of threatened Camaenid land snails in the East Kimberley. The species occur to the north of Kununurra throughout the Ningbing Range, a limestone reef formation that was built up over 350 million years ago, when tropical seas covered the area. One other species has also been found on Lissadell station. Camaenid land snails are believed to have arrived in Australia following the collision of the Australian and South East Asian plates approximately 12 million years ago. The snails identified in the plan are all recognised for what some regard as the ultimate examples of short-range movement. A minimum range of one hectare and a maximum of 560 hectares have been recorded for the snails. They are primarily found among crevices and leaf litter of the limestone, which provide a suitably shaded and humidified environment. The crevices also provide a catchment area for fallen leaves, which the snails feed off. Suitable rainfall, humidity and temperature conditions restrict the active periods of these land-snails to approximately 80 nights each year. For the remainder of the year they are dormant, sealing their shell with a layer of calcified mucus, awaiting suitable conditions.

A close up shot of the snail species found on Lissadell Station South of Lake Argyle. ➡



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Nuke the Neem ignites locals

The Ord Land and Water and the Weed Working Group 'Nuke the Neem' program appears to be galvanizing local residents into action. Many people around town took the opportunity to remove the weed from their yards as a part of the Shire cyclone clean up week in early November. In addition Save Endangered East Kimberley Species (SEEKS) had two clean up mornings in Mirima National Park where in a short time they removed over 500 of the pest trees. Staff from the Department of Agriculture are currently cleaning up the infestation out at the Frank Wise Institute and the Department of Housing and Works will be removing both neem and leucaena from houses as part of routine maintenance when they are vacated. This coming wet season will provide a good opportunity for residents to pull out any seedlings they may have coming up in their yards. With good moisture levels in the soil they will slide out relatively easily. It will take more then a couple of years for the area to be free of these introduced pests. However the quicker we can get rid of the older trees that are providing the major source of seed the easier it will be. It's encouraging to note that even though the trees are spreading into the bush they are largely still within a kilometre of human habitat. This will change significantly if too many of the trees in the bush start to seed and spread further. It may only be a couple of years before the fight against them is lost if no action is taken. Their impact on local trees is already becoming evident with many boabs now becoming grown over by the pest. This will severely restrict their capacity to reseed new boabs and it's conceivable that they will be lost where neem becomes established.

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Kimberley regional NRM plan out for comment

The first draft of the Kimberley Natural Resource Management Plan is now out for community comment up until 16th February 2005. Community comments will then be addressed by the Interim Kimberley NRM Group on 21st February, and from there the Kimberley NRM Plan will head to the Rangelands Coordinating Group to be incorporated in the overarching Rangelands NRM Plan.

To oversee the implementation of the strategy the formation of a Kimberley wide committee has been proposed. The makeup of the committee currently stands at 10 community members supported by a Technical Working Group made up of government agencies.

The community membership would come from –

- One community representative from the ORIA NAP Reference Group.
- One Councillor representative from Local Government.
- Four Indigenous representatives selected by their country, desert, rivers, saltwater and rangelands.
- Four community representatives/industry representatives selected by a panel.

For a copy of the Plan you can contact Gill Holmes, the regional strategist on 0891 681 044

Fire in the Kimberley

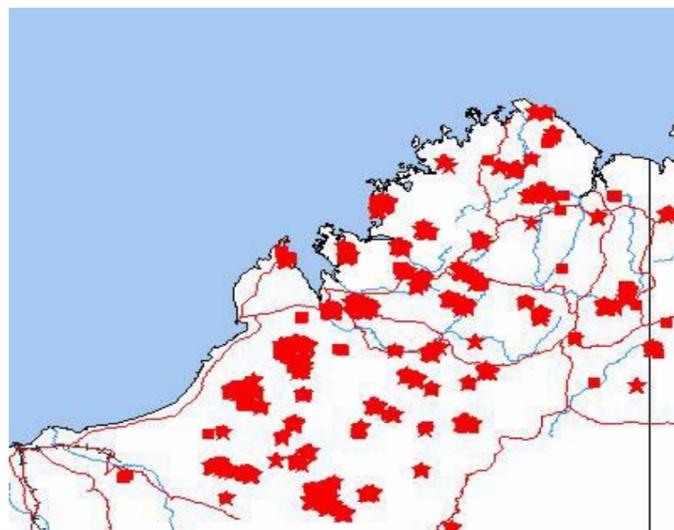
Although at the time of writing we have just received the first rains over large areas of the Kimberley, the threat of fire particularly from lightning strikes is still with us.

Fire is one of the biggest threats to the environment and production in the Kimberley along with weeds and drought. Fire however is also used as a land management tool to 'break-up' the country into a 'patchwork' of available fuel. This limits the extent of late dry season fires and provides diversity in vegetation for native animals and stock.

Cool burns that are ignited after the end of the wet tend to trickle around and generally go out in the evening. However, fires that occur from August on are fuelled by dry grass, and often fanned by seasonal winds. These fires can be very destructive killing vegetation and burning extensive areas of country. This leaves native animals with nowhere to live, and pastoralists with no stock feed.

Currently the Kimberley Regional Fire Management Project (KRFMP) is working with land managers to assist with the development of better fire management practices.

For more information on this project contact Tricia Handasyde at the KRFMP on 91693 779 or stop in at the KRFMP office (10 Coolibah Drive) and have a look at some of the 'tools' available to assist with informing fire management decisions.



Fires that have been burning in the past 24hrs (28th Oct 2004)



Local landholders get stuck into a pile of neem and leucaena prior to the Shire cyclone clean up. (insert: a close look at the neem's foliage)



A local boab rapidly being choked out by several young neem trees



Some of the people who attended a recent NRM meeting in Kununurra



Season's greetings



The board members and staff of Ord Land and Water would like to take this opportunity to wish all the community a very Merry Christmas and Happy New Year. In particular those we have had the pleasure of working with on various projects in this past year. The Ord Land and Water office will be manned over the holiday period but only for two days per week.

Local LCDC meets

The Halls Creek – East Kimberley LCDC had its first meeting for a little while at Springvale Station in September. The meeting was held on the back of a NLIS workshop that was demonstrating to pastoralists the new means to maintain traceability of livestock from the paddock to the meatworks. Mike Shaw from Spring Creek was elected as the new chair with Danny Waser from Kachana remaining in the role of secretary. The offer of some executive support by Ord Land and Water was also accepted by the group.

Two likely projects came out of the meeting, the first being the development of an information pamphlet to be distributed across the Kimberley giving visitors information on the pastoral activities and potential threats such as fire and the spread of weeds.

The second project will be the holding of a series of Land Management Courses in the East Kimberley aimed at station workers. The course would focus on pasture management, weed control, nutrition and planning. Delivering the courses will be achieved through the Department of Agriculture in WA and the Department Primary Industry in the NT.



Jack Nixon from the Department demonstrating the new ear tag technology at the NLIS workshop held prior to the LCDC meeting

Endosulfan management on farm improves

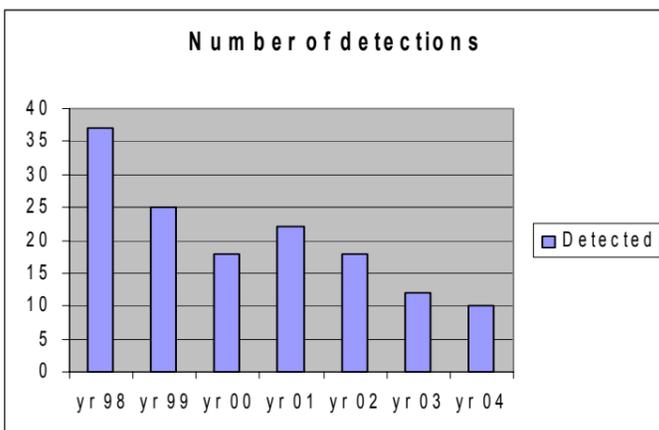
As a result of the 1997 fish kill in the Dunham River a water quality monitoring program was established for both the Dunham and Ord rivers and the irrigation area's drains and channels. The intent of the program is to monitor levels of pesticides and nutrients present in the water and is jointly operated by the Ord Irrigation Cooperative and the Department of Environment.

With monitoring now in its seventh year some interesting and encouraging results are starting to take shape.

As seen by the accompanying graph farmers have been successful in significantly reducing the runoff of endosulfan into the river.

Endosulfan is extremely toxic to fish although less toxic to other animals. A reminder of its impacts was made evident in August with an incident of the chemical moving into the river.

In an effort to ensure that there is no repeat of pesticide induced fish kills farmers will be sitting down with other stakeholders to review and improve on the local protocols that have largely been responsible for these reductions.



Graph showing total number detections for years 1998 to 2004

NAP projects on show

Farmers were given an update on the NAP Improved water Management Program projects recently. In a bus tour of the project sites those attending saw how water quality sampling was carried out, the dewatering bores and instruments in the field taking water efficiency measurements.

Later CSIRO scientists and local project managers updated the group with progress reports.

The NAP projects were all pulled together by a local partnership group made of various government, industry and community organisations. One of the blue prints the group works with are the targets set for water quality, water efficiency and ground water set in the Ord Land And Water Management Plan.



OIC Environmental Officer Anna Price explaining her water sampling equipment

Pesticide Project

CSIRO scientists Danni Oliver and Rai Kookana recently conducted the last of the scheduled on farm experiments designed to reduce the off farm movement of pesticides on farms in the ORIA. This trial looked to see if polyacrylamide (PAM) injected into an irrigation would reduce atrazine run off from an existing sugarcane crop.

In addition, the experiment also looked to see if the use of PAM with an irrigation could increase the movement of the pesticide further into the soil profile and potentially affect ground water quality.

As a further part of the project Danni and Rai demonstrated the use of a 'quick check' method of testing for pesticides to staff members of Ord Land and Water, the Ord Irrigation Cooperative and the Department of Agriculture. Called an ELISA test kit the relatively simple procedure can have test samples analysed in one hour.

Although the procedure is not as sensitive as other laboratory methods that are normally used for pesticide testing it can be used easily as a cheap and quick means of screening samples for the presence of a target chemical.

The project is due to be completed in June 2005 with guidelines for local chemical usage identified and distributed.

Farmers as end user of the guidelines have had a major part in the project in terms of funding and trial design.



Danni Oliver (second left) demonstrates the ELISA kit to DAWA and OIC staff members.

Cane toad group formed.

A local working group has been formed to deal with the issues arising from the movement of cane toads towards Western Australia. Made from a mixture of government and community organisations the group functions are to –

1. Identify current cane toad impact research and strategy development across Australia's north.
 2. Help to identify the knowledge gaps and expected impacts of toads on the East Kimberley.
 3. Develop a plan to deal with the first arrivals.
 4. Disseminate cane toad information to the community.
- Provide a consistent and accurate source of cane toad information.

Where are the toads?

As of the late dry season the main population of toads is between Katherine and the Victoria River Bridge and Roadhouse. However as they are quite happy to hitch a lift on a vehicle there are always those who are able to get ahead of the main pack. Confirmed reports of these travelling toads have come from 5km east of the Vic River Bridge and Roadhouse, approximately 100km east of Timber Creek in March 2004 and they have also been sighted at Skull Creek approximately 50km east of Timber Creek.

Other unconfirmed sightings have come from as close as the West Baines bridge. This wet season will help establish the extent of their westward movement.

Many of us are still a bit unsure of how to distinguish cane toads from our native frogs, here are five easy methods to determine if it's a toad or not –

1. Tips of fingers with discs (or suckers): Not a cane toad.
2. No ear drum visible: Not a cane toad.
3. Fingers have webbing: Not a cane toad.
4. No obvious gland or large lump behind head on the shoulder area: Not a cane toad.
5. Eyes smooth with no prominent ridge or brow: Not a cane toad.



A cane toad from the Walker River area in the Northern Territory



An immature cane toad can look quite different from an adult

All cane toad photos courtesy of Frog Watch North