

DEC Cane Toad Report

In early 2005 the cane toad front line was identified as being in the vicinity of the Victoria River Roadhouse. Since then toads have moved westward and have been found as far west as the Baines system and south along the Buchanan Highway at Jasper Gorge and at Victoria River Downs Station.

The majority of toads being trapped and caught by hand is in an area between the Victoria River Roadhouse and Auvergne Station. Now that the dry season is well under way much of the water from the wet has gone and it has been possible to get in to more areas to carry out surveillance and control of toads.

To date around 35000 toads have been caught by the Department of Environment and Conservation (DEC) Cane Toad Team and the Kimberley Toadbusters. DEC and the Toadbusters regularly coordinate their field activities to compliment each others trapping and capture programs. DEC is also working with Stop The Toad Foundation in an effort to put as much pressure as possible on the cane toad front to delay the movement of toads into Western Australia. In an effort to push the cane toad front line back towards the east, a major control program will be undertaken on Auvergne Station from late September to the end of October. Stop The Toad Foundation is coordinating this effort.

There are a number of ideas currently under investigation; these include acoustic recording devices, trap design, detector dogs, fencing, calling devices and the ongoing search for a biological control. DEC will take delivery of its detector dog Nifty, in the early weeks of September. She has been trained to identify cane toad presence and will be used in the field and at the WA/NT border checkpoint to assist in preventing toads hitch hiking in vehicles into WA.

DEC cane toad activities for the dry season are underway. Surveillance has been carried out across most of Auvergne Station and the DEC teams have moved on to Bullo River Station to carry out surveillance there. The DEC teams will be conducting both ground and aerial surveillance to identify toad refuges around permanent water bodies. A review of the State Government's Cane Toad Initiative has been implemented and the results of the review will be open for public comment when finalised. The results of the review will be used in developing strategies to be implemented in the continuing fight against the cane toad invasion.



An immature cane toad.

The Ord Irrigation Area an Important Bird Area

The irrigation area currently provides an ideal habitat for both the Star Finch and the Yellow-rumped Mannikin. Based on the rarity of these birds in other areas of Australia Birds Australia is proposing to name the irrigation area an 'Important Bird Area' Important Bird Areas are sites which meet global criteria indicating that they are of international importance for bird conservation. This is a non-government designation that carries no constraints or responsibilities with it.



Star finch

Star Finches are only found in tropical Australia and have almost disappeared from Queensland while Yellow-rumped Mannikins only occur in the Kimberley and Top End but are rare outside the Ord. The irrigation area also supports important numbers of Bustards (bush turkeys) and migrant pratincoles. This is a good example of agriculture being compatible with wildlife conservation.

Birds Australia will document the conservation value of the area on a database and consult with local organisations before designating it as an Important Bird Area.

Neem Trees gone from Cave Springs

Pacific Seeds who farm much of the irrigated land out at Cave Springs recently had all the neem trees around their farmhouse either cut down or poisoned.

This work was an extremely significant event in terms of controlling the pest plant locally. The satellite infestation that covered both bush and farmland measured just over 100 hectares now has had all its seed bearing trees destroyed. All that remains is to control any seedlings missed in the initial control work done by OLW earlier this year.

OLW would like to acknowledge the work done by Pacific Seeds in removing the trees prior to seeding later in the season as it has made the trees total eradication in the area a real possibility.

In other neem control work OLW has started work on Lake Kununurra between Crossing Falls and Spillway Creek. A further 70 hectares has been controlled at the end of August. This area appears to be the southern extent of neems locally.



Removing trees from the property

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New irrigation trial for the ORIA



A sorghum crop growing in the trial area, note the lack of tail drain. No irrigation water empties into the drains with this system

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Testing flat bed irrigation

On farm water efficiency is an important component of the OLW Management Plan with a goal seeking a 65% annual average water use efficiency across all farms.

Although many farms are now approaching that level of efficiency Oasis Farms with support from the Ord Irrigation Co-operative and the National Action Plan for Salinity and Water Quality have altered 80 hectares of traditional furrow irrigated land to a level furrow system.

The system relies on flat beds and furrows to distribute a precise amount of water onto the cropped area. The main difference between this and the normal system is that all the water flowing into the paddock stays there to be used by the crop rather than a percentage running off farm as tailwater.

Potentially this system has the ability to both save water and reduce the risk of nutrients and pesticides leaving the farm in tailwater. However the system is not without some downsides. Careful attention must be made to crop selection and watering schedules as some crops grown in the ORIA are very susceptible to water stress and will suffer if water stays in the furrows for any length of time.

Initially the trial area has been planted with several different crop types to see how they react to the new watering system.

Busy time on the Ord

Tourists are not the only people that have been moving through Kununurra during the last few weeks. August has been a busy time for everyone working on projects funded by the National Action Plan for Salinity and Water Quality in the Ord Catchment. There have been visits from three different teams of researchers to investigate some of the natural resource management issues of the Ord.

Scientists from CSIRO's Land and Water Unit based in Perth have been operating in the Irrigation Area gathering information on groundwater and its interaction with the drainage system. This information will contribute to a better understanding of how to manage salinity should it become a problem.

Another CSIRO team have been camped on the Lower Ord taking a range of water and sediment samples aimed at identifying the impact of different river flows and sediment loads on the Lower Ord. This information is important in understanding the impacts of upstream activities on the river.

Finally a small team from Charles Darwin University will be trialling a new method to assess the health of river banks and vegetation right along the Ord River and both lakes. The aim of this project is to develop an easy to use 'rapid assessment' tool to monitor the health of the riverbanks and vegetation.

New Board member for OLW

OLW has recently co-opted a new Board Member for a 12 month period. Suzi Janke who was working for the Ord Irrigation Cooperative as an environmental officer but more recently began work with one of the larger farms helping trial new farming techniques joins eight other community Board Members.

Suzi grew up on the family farm just out of Capella in Central Queensland and after completing school worked towards completing a Bachelor of Applied Science degree in agronomy at the University of Queensland, Gatton. As part of that degree Suzi spent four months in Texas working in the cotton extension program at Texas A&M University. Prior to that Suzi mainly worked in agronomy / farm consultancy firms primarily in cotton and cereal crop production. Suzi first came to Kununurra for three weeks last March before going to America and on her return moved here permanently in August. Her hobbies include water skiing, playing sport and exploring the Kimberley.



Suzie with the new OLW neem machine

Community neem workshops

Ord Land and Water has recently held a couple of workshops to show people how they can safely kill neem trees on their property and adjacent bushland. The workshops were held for the community members of Crossing Falls and Whimbrel Rd and Pardalote Close. Both days were well attended with participants taking a keen interest in the methods on show.

The most popular method of killing neems centred on either pulling the plant out of the ground by hand or shovel when they're young or using the herbicide Round-up® on the larger plants.

Pulling the plants is much easier when the soil is moist as the tap root does need a bit of pressure to pull it out intact so the wet season would be an ideal time to do this work. When using Round-up® on the larger trees two methods were demonstrated, cutting down the tree and then painting the stump with chemical or drilling into the stump with a portable hand drill and injecting the chemical with an applicator gun or syringe. With both of these methods the timing of the application was critical. The chemical needed to be applied as soon as possible after drilling or sawing before the stump had a chance to seal itself off.



OLW Board Member Liz Kirkby gives Bronwyn Herbert and ABC listeners some tips on neem control

Sustainable Farm Management Systems

The Department of Agriculture is currently working on a National Action Plan for Salinity and Water Quality project to demonstrate management concepts that focus on further improving the water quality moving off-farm. There are two components to the project looking at permanent planting beds and advanced fertigation through trickle irrigation.

The permanent bed component will demonstrate ways to minimise sediment moving off farms and the use of herbicides for weed control. A wet season sorghum cover crop was planted to protect the soil from rain events; this significantly reduced the amount of sediment coming off field during the wet season compared to a field that was bare fallow.

The cover crop also stopped the beds from slumping allowing dry season crop to be planted into the sorghum trash without disturbing the soil structure. The trash also acts as a weed suppression mat reducing the need for herbicides and provides a source of organic matter that locks up applied pesticides that are sprayed further decreasing their chances of leaving the farm.

The aim of the advanced fertigation component is to prove and encourage the adoption of this particular method of irrigation for horticulture crops. Trickle irrigation is being used in the irrigation area with some success, and the fertigation trials aim to fine tune those existing methods with the introduction of some innovative improvements.



A pumpkin plant growing up through the residual sorghum cover crop planted to protect the soil over the wet.



Cattle congregating at a watering point

Kimberley Cattle

A new information pamphlet has just hit the Visitor and Tourist Centres throughout the Kimberley.

Put together by the East Kimberley – Halls Creek LCDC and OLW with support from the other Kimberley LCDCs the PGA and Australia's Northwest, the pamphlet provides some good information for visitors about the pastoral industry in the Kimberley.

It features background information on the industries current production and export status, the land and pasture, seasons and some of the conservation initiatives currently being undertaken on pastoral leases.

Other messages in the pamphlet aimed directly at visitors to the Kimberley and locals alike includes information on weeds, the impacts of fire, station track access, stock movement and perhaps one of the bigger issues that visitors have to deal with, rubbish.

LCDC members recognised that with visitor numbers to the Kimberley increasing so too would impacts on the cattle industry and rangeland environment. Part of the pamphlet focuses on how visitors can assist in protecting the environment and pastoral industry.

Vegetation plan for Lake Kununurra

Kimberley TAFE has recently won the contract to develop a Vegetation Management Plan for Lake Kununurra between the racecourse and the dam including Lily Creek. It is part of a National Action Plan for Salinity and Water Quality project jointly developed by OLW, the Shire and the Department of Water.

Due to be completed in late 2006 the plan will identify the environmental values of the lake, give people a better understanding of the area's ecological assets and threats and determine management strategies.

Information from the Foreshore Development Plan process will feed into the Vegetation Plan to ensure that the consultative work done by that committee to date is not limited to a single plan.

It is expected that funding to implement components of the management plan will come from a variety of sources including the current Lake Kununurra project that is dealing with a number of issues including salvinia and other weeds on parts of the Lake.



The entrance to Emu Creek showing different native vegetation types of the lake. From the spinifex perched on the rocky ground, to the eucalypts species of the flatter areas and finally the cumbungi and pandanus situated on the water's edge

A nail in the coffin of salvinia

The ongoing saga of salvinia in Lily Creek has recently taken a turn for the better. The main infestation that had been isolated behind a bunded wall finally met its fate when the Shire buried it under close to a metre of soil. This infestation was mixed in with a patch of cumbungi and was proving to be particularly hard to permanently eradicate. A decision was made to end the threat and fill in the bunded area. The area will now be rehabilitated with local native plants to restore the foreshore to its original state. This only leaves a much smaller and more easily managed area next to a drain. OLW and the Shire will continue to monitor this area.

Filling in the area infested with salvinia

