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Feral Herald

Newsletter of the Invasive Species Council, Australia

working to stop further invasions

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Contents

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Views expressed in this newsletter are not always those of the ISC.

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If you have problems printing Acrobat (.pdf) files on inkjet printers, try printing just a few pages at a time.

Those Crazy Ants

ISC has begun its tramp ant campaign (see Feral Herald 13), by publicising one failing in Queensland – a complete lack of surveillance for crazy ants, which are turning up at more locations.

Crazy ants are distinctive long-legged ants that take their name from their jerky movements.

ISC project officer Tim Low approached the Brisbane Courier Mail about the problem, and an item was run on 22 February. Here is an extract:

'Invasive Species Council spokesman Tim Low said yesterday virtually all of the [crazy] ant invasions could be traced to timber supplies from Papua New Guinea or Southeast Asia.

He said it was appalling that no surveillance of timber yards or investigations into their suppliers was being undertaken by the State Government, given the resources being poured into fire ants.'

"These ants don't fly, so they spread more slowly than fire ants and thus are easier to get on top of if you fund the work properly," he said.'

ISC was then approached by Channel 10, which ran a news story that night, in which Tim spoke about the crazy ant problem, and a government pest officer described the government's eradication work.

Tim was later interviewed by the *Northside Chronicle,* a free suburban newspaper distributed to residents in the region of Brisbane where crazy ants have been found.

The Land Protection Branch of the Department of Natural Resources had sought a budget to do crazy ant traceback to timber yards, and to run a crazy ant publicity campaign and hotline, but funding was refused, and only the ongoing eradication of known tramp ant infestations has occurred.

These media items certainly helped publicise the problem, the TV segment showing close-up images and providing a government phone number to report suspicious ants. The *Courier Mail* article also included an image of a crazy ant.

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Tim has nearly completed a large report on tramp ants, which documents the scale of the problem and the policies required. Some of the issues include:

* Tropical fire ants are multiplying on Ashmore Reef, a major seabird rookery, where they threaten nesting seabirds (see **page 5)**.
* Singapore ants are causing millions of dollars in electrical damage in the Northern Territory. They sometimes short-circuit cars, ruin television sets and cause fires.
* Crazy ants are spreading in remote Arnhem Land. They are utilizing the nectaries of wattles as an energy source.

Tramp ants pose a serious threat to all states (except perhaps Tasmania), with climate modelling showing that Sydney, for example, has a suitable climate for red imported fire ants, tropical fire ants and electric ants.

Plans by the Australian Government to expand agriculture in northern Australia in response to climate change highlight the need to ensure that electric ants and the two fire ants do not become entrenched.

New Zealand has a National Invasive Ant Programme but nothing equivalent exists in Australia. The Australian Department of Environment and Heritage last year published a *Threat Abatement Plan To Reduce the Impacts of Tramp Ants on Biodiversity in Australia and its Territories* (see *Feral Herald 13*) but no action has yet been taken to implement it.

ISC will be pursuing this matter.

*See **page 5** for more news on Tramp Ants.*

Revised Threat Abatement Plans

The Australian Department of the Environment and Water Resources has released for public comment revised draft Threat Abatement Plans for feral cats, goats, rabbits and the European red fox.

Public comments about these plans may be submitted to the department up until 29 June.

See: http://www.environment.gov.au/biodiversity/threatened/tap-drafts.html

Biosecurity Mergers

In the last *Feral Herald* we raised concerns about the future of environmental pest work in Queensland now that the Land Protection Branch of the Queensland Department of Natural Resources has been absorbed into the Department of Primary Industries and Fisheries, as a new business group called Biosecurity Queensland.

On 1st March Tim Low was interviewed by ABC radio about the merger. We have been assured by the head of Biosecurity Queensland that environmental pest control will not suffer under the new arrangements and we hope this proves true in the long term.

New South Wales is likely to follow Queensland in establishing a single biosecurity agency, and there too environmental pest work is likely to be absorbed into a unit dominated by agricultural pest experts.

While the concept of establishing a single biosecurity unit in each state is a good one, their domination by agricultural experts raises two concerns. One is that environmental work will suffer at times when budgets are tight, and the other is that environmental staff absorbed into agencies dominated by agricultural experts will find the new culture alienating and will seek employment elsewhere, resulting in a drain of expertise.

Join the ISC...

Keep informed, and lend your weight to our important campaigning efforts on Invasive Species.

See the **membership form** at the back of this newsletter.

In this issue...

This issue again focuses on Tramp Ants, currently a major campaign for the ISC. Tim Low highlights the concerns over the lack of surveillance of Crazy Ants in Queensland. (**page 1**)

Page 2 has an update on the merger of Biosecurity management functions in Queensland.

On page 3, Tim Low calls on all ISC members to inform themselves and pressure the Tasmanian Government over rabbit control on Macquarie Island.

Page 4 has articles on the need for timely action on the small but growing camel problem in NSW; and outlining the ISC objection to the proposal to import the Asian predatory fish, Arowana.

Elsewhere, we return to the Tramp Ants issue, with a report on the study of ants and other insects in shipping containers; and the spread of Tropical Fire Ants on Western Australia's Ashmore Reef. (**page 5**)

On **page 6,** we introduce Rock Snot - the latest freshwater threat to south east Australia.

On **page 7,** Allan Gillander reports from north Queensland on the spread of Christmas Vine (Turbina) following Cyclone Larry.

The views expressed in this newsletter are not necessarily those of the Invasive Species Council.

Opinion

Rabbits on Macquarie Island

by Tim Low

ISC has been liaising with WWF over its campaign to persuade the Tasmanian and federal governments to eradicate the 100,000 rabbits that are ruining Macquarie Island. The federal government has offered to pay half the $24 million cost of removing the rabbits and black rats, but the Tasmanian Government has refused to offer a cent, even though it is responsible for managing the island.

I visited Macquarie Island a few years ago and was appalled by the rabbit damage I saw. It is far worse now, with hillsides collapsing onto penguin colonies and albatross breeding sites facing ruin.

Subantarctic islands are among the rarest ecosystems in the world, and for an affluent nation like Australia to allow a subantarctic system to collapse shows that nothing on earth is safe.

The Tasmanian Government's behaviour is contemptuous. This is the worst dereliction of duty on invasive species by a government that I can recall, one that puts Australia's international credibility on the line. Explorer Douglas Mawson, who campaigned to have the island made a sanctuary long ago, must be turning in his grave.

It is now too late to act before winter sets in, and the island will be even worse by next spring when the next opportunity to act arises.

Please visit the WWF website and voice your complaint to the Tasmanian Government.

www.wwf.org.au/macquarie

ISC President, Barry Traill is on leave.

Weeds after the Tsunami

In the wake of the tsunami that struck southern Asia in 2006, weeds are invading. In coastal districts of Sri Lanka, prickly pear cactus *(Opuntia dillennii),* mesquite *(Prosopis juliflora),* lantana *(Lantana camara)* and Siam weed *(Chromolaena odorata)* are spreading in coastal scrublands, mangroves and within seashore vegetation.

The cactus in particular is threatening the nesting habitats of five species of threatened marine turtle. The IUCN has initiated a control program targeting prickly pear and mesquite.

- from *Global Invasive Species Program News,* January 2007 (www.gisp.org)

Camels in NSW

Camel numbers keep rising in Outback Australia as concerns grow about their environmental and economic impacts. But most urban Australians do not realise that camels are damaging feral animals.

In March, the *Sydney Morning Herald* ran an article about the growing camel problem, reporting that they *'compete with livestock such as cattle for pasture and water, overgraze rare plants, damage fences, invade Aboriginal settlements and may out-compete some native mammal species'.*

The Herald invited readers to post a blog on their website in reply to the following questions: *'Would you favour camel culling? Or do you lean towards letting them have a free run?'*

On 18 March ISC posted the following reply:

> "Goats are as appealing as camels when you only have a few of them wandering around, but Australia made the mistake of allowing goats to become a major feral pest, and we are fast heading in the same direction with camels.
>
> They are already a big problem in the central deserts where they foul and deplete waterholes, smash through fences, and eat rare plants. In Rudall River National Park, waterholes up to 50 metres long have been left bubbling with eutrophication from camel urine and excrement.
>
> A camel can drink 200 litres of water in 3 minutes, which means a lot less water in the desert for rare native wildlife. The desert quandong has been listed as a vulnerable plant in the NT, largely because camels eat it.
>
> Harvesting for meat is not the answer because most camels occur in extremely remote areas and the costs of transportation are prohibitive. Culling the small population in NSW now will be much less cruel than allowing them to multiply and having farmers culling thousands and thousands in the future when they start smashing down their fences and draining farm dams."

See http://blogs.smh.com.au/science/archives/2007/03/post_5.html

Objecting to Arowana

ISC has objected to a proposal to allow the importation of Asian Arowana (Scleropages formosus) into Australia.

Arowana are large predatory fish growing nearly a metre long. They cannot be kept with smaller fish because they eat them.

ISC is concerned about the prospect of such fish being released into the wild in the northern half of Australia, where water temperatures are suitable. If a fish owner wanted to maintain a mixed tank, an Arowana would become a problem, and the owner might choose to release it into a stream. Release of Arowana into the wild has already occurred on Christmas Island.

The large size and predatory habits of these fish would make them especially unwelcome in Australian waterbodies. Queensland has a number of threatened aquatic species (Mary River Cod, Mary River Turtle, etc.) listed under the Environmental Protection and Biodiversity Conservation Act that could suffer serious predation from Arowana.

In any event, Arowana need not be imported because native Saratoga (*Scleropages* species) are available as alternatives.

Tilapia for the Murray?

> 'National weeds expert Tim Low, from the Invasive Species Council, says Premier Peter Beattie's sally into the old Bradfield Scheme, in which eastern fall waters are turned inland, has more than the odd problem. One issue that might alarm southerners just a tad would be the introduction of tilapia fish into the Murray-Darling.'

- From the Brisbane *Courier Mail,* 24 February 2007

Ants and Other Insects in Shipping Containers

In 1996 a study was conducted of empty shipping containers from overseas stored at container parks in Brisbane. All of the containers had passed through customs and quarantine.

In 3000 containers investigated, 7861 insects, spiders and other invertebrates were found. Many more organisms were left behind because it was not practical to collect all the small dead insects found in some containers.

Insects were found in 39 per cent of the containers, and 19 per cent of the insects were alive. More than 14 species of ant were recorded, including one fire ant, plus 65 unidentified live ants. Three scorpions and three centipedes were also found as well as many serious timber or agricultural pests.

Each year about 800,000 containers enter Australia, which means that the number of containers investigated during the study represents little more than two days' worth of container traffic into Australia. The number of insects recorded greatly underestimated the real number of insects that travel on ships because it did not consider:

i) all the insects that had left the containers after their arrival in Australia, either because they were removed with the products or had already escaped,
ii) insects travelling in tine holes or otherwise on the outside of containers,
iii) insects travelling freely on ships.

The authors of the study conceded that they were *'likely to have encountered only a small fraction of the range of insect species that are associated with containers.'*

They concluded:

> *'There is a need to shift the onus for pest risk management onto commercial operators. Interception of pests by quarantine inspectors on high volume commodities cannot be expected to act as a significant barrier to pest establishment, where the proportion of exotics detected can only ever be a small fraction of those imported.'*

From: Stanaway *et. al.* (2001) Pest risk assessment of insects in sea cargo containers. *Australian Journal of Entomology* 40: 180-192.

Ants on Ashmore Reef

Ashmore Reef, a nature reserve about halfway between Timor and Western Australia, is one of Australia's more important seabird Islands.

It supports the second largest colony of common noddies in Australia, one of Australia's five largest colonies of bridled terns, and Western Australia's largest breeding colony of sooty terns. Up to 50,000 seabirds use the islands, of which 16 species breed there. Turtles nest there as well.

Tropical fire ants were first noted on two of the islands (Middle and West islands) in 1992. They soon spread to the third island. The ants probably arrived on Indonesian fishing vessels.

Biologists who visited the island in 2006 found that the ants were killing common noddy chicks. They did not visit during the bridled tern breeding season, but expressed concerns about the impact of the ants on these terns, especially if the ants keep multiplying. A related species, red imported fire ants, have caused complete nestling failure on some seabird islands.

The green turtles that nest on the island may also be at risk. In the United States, fire ants often attack and kill hatching turtles. The impact of fire ants on turtles on Ashmore Reef has not been investigated.

In a recently finalized report for the Federal Government, the biologists expressed 'serious concern' about the presence of the ants on the island, recommending they be either eradicated or controlled, depending on which was more practical and economical.

Rock Snot

The latest threat to south-eastern Australia is rock snot. Also called didymo (Didymosphenia geminata), it is a freshwater diatom whose massive blooms disrupt freshwater systems, eliminating habitat for fish, invertebrates and water plants. It can also irritate the eyes of bathers.

Originally from the cold waters of northern Europe and North America, didymo began acting invasively in the 1980s. It invades sunlit streams, rivers and lakes, attaching to rocks, logs and submerged plants, forming a thick brown or yellow-brown layer that feels like wet cotton wool (spongy or scratchy, not slimy, despite its name). Old dried mats looks like wet toilet paper.

Rock snot has been spreading to warmer areas in the northern hemisphere and in 2004 it was detected in New Zealand, causing grave concern there. Biosecurity New Zealand launched an extensive public awareness campaign to encourage river users to clean their equipment after visiting affected waterways.

There are real fears about this pest reaching wetlands in south-eastern Australia, especially Tasmania. It can

be transported on fishing gear, canoes or boots. For further information, see:

http://www.issg.org/database/species/ecology.asp?si=775&fr=1&sts

http://www.biosecurity.govt.nz/pests-diseases/plants/didymo/

http://en.wikipedia.org/wiki/Didymosphenia_geminata

Quarantine on Mars

The prospect of contaminating Earth with micro-organisms from Mars or the Moon, and the reverse risk, has long been an issue for NASA, according to an article in the latest issue of *Wildlife Australia* magazine (44[1]) by Mark Rigby.

Spacecraft sent to the red planet over the decades have been sterilized to limit the possibility of introducing microorganisms. The latest concern is that when soil and rock samples from Mars are finally brought to earth, something alive will lurk among them.

Notes Mark:

> 'Just in case Martian soil samples do harbour some form of life, virtually foolproof handling procedures and secure facilities will have to be in place for the protection of terrestrial life and, conversely to prevent contamination of the valuable Martian samples. Although highly unlikely, a Martian bug more virulent than Ebola would be a disaster.'

For more details see www.wildlife.org.au

Bali Banteng and Rabbits

Tim Low was interviewed on Radio National on 22 April about Bali Banteng and rabbits.

See: http://www.abc.net.au/rn/nationalinterest/

An article about Bali Banteng will appear in the next issue.

Turbina Goes Wild in North Queensland

by Alan Gillanders

Christmas Vine, or Turbina corymbosa, *a large, woody vine with heart shaped leaves, was introduced to Australia for its attractive white flowers and perhaps for its psychotropic properties.*

The plant has been identified as the Aztec visionary intoxicant oliliuhqui. It is claimed that priests who ate oliliuhqui could receive messages from the supernatural and experienced terrifying hallucinations. The main component in the seeds is d-lysergic acid amide, also called ergine.

The great danger associated with the use of hallucinogens without medical supervision is the possible occurrence of a 'bad trip', i.e. the development of severe confusional and anxiety states which may lead to suicide, or permanent psychic trauma.

Turbina has been growing around the north western edge of the Curtain Figtree National Park and nearby remnants for some years and is also a weed in the Kuranda area of north Queensland. It had been spreading slowly, overgrowing saplings and forming a dense edge to the rainforest.

Browsing by Lumholtz's Tree-kangaroos, Copper Brushtail Possums and Green Ringtail Possums helped to keep it in check. Seedling recruitment in the rainforest is very low even though light levels in Mabi Forest are higher than many rainforests.

Then came Larry. Cyclone Larry hit north Queensland on 20th March 2006. The edge where Turbina was established took the brunt of the winds. Trees were felled, lost their crowns or at least most of their leaves.

Potential threats to the national park identified after the cyclone were fire and weed invasion. A year of consistent rainfall mitigated any threat of fire and led to the rapid breakdown of much of the fallen material.

Numerous weeds germinated in the light gaps. In order of prevalence they were Turbina, cherry tomatoes, wild tobacco, northern nightshade, Ageratum and Brazilian Nightshade. The Curtain Fig survived the storm almost intact.

Two weeks after the cyclone the leaves on fallen branches were no longer palatable to the possums and tree-kangaroos. Few trees had produced new growth which could be browsed. The main source of nourishment for them was *Turbina*. This led me to comment to a parks ranger that the removal of this weed was a bit like St Augustine's prayer for chastity, "not just yet!"

Since then regrowth has continued apace but the Turbina has also grown, and with reduced browsing pressure has overgrown many small trees and formed an impenetrable barrier in light gaps.

Tim Curran and his students from the School for Field Studies found that,

> *"Turbina had higher specific leaf area (which is indicative of higher relative growth rate) than three native vine species* (Celastrus subspicata, Smilax australis, *and* Calamus australis), *suggesting that Turbina has inherent traits which allow it to out-compete native species (even wait-a-whiles) under high light conditions."*

Queensland Parks and Wildlife Service are currently drawing up plans for the removal or at least control of this nasty weed.

Alan Gillanders is a natural history guide on the Atherton Tablelands. If he has a speciality it is the nocturnal mammals mentioned in the text. He is also an Education Resource Officer for the local natural resource management group.

In Geelong

In an address to the Corangamite Landcare Forum on 30 March, ISC Project Officer Tim Low discussed ISC campaigning, making the obvious point that governments will do more about pests if community organizations raise their concerns though the media. ISC got a weed (Cecropia) out of Queensland (see *Feral Herald 1:9*) with much less effort than it takes to get most weeds out of a single property.

Invasive Species Council Membership application form

ABN 27101522829

Name _____

Address _____

_____ Postcode _____

Phone (h) _____ (w) _____

email _____

Work or voluntary position(s) (if relevant) _____

_____

Affiliations _____

Membership rates:

(all prices are GST inclusive)

❑ Regular	$22
❑ Concession	$11
❑ Group/Institution	$55

I would also like to make a donation [1] _____
(does not include GST)

Total: **_$_____**

Is this a ❑ new membership or a ❑ renewal?

* Donations of $2.00 or more are tax deductible.

[1] Representing a donation to the Invasive Species Council Fund - a public fund listed on the Register Of Environmental Organisations under item 6.1.1 of subsection 30-55(1) of the *Income Tax Assessment Act 1997*.

Thank you for joining us. Please send this form and a cheque to:

Invasive Species Council
PO Box 166, Fairfield, Vic. 3078.

Cheques and Money Orders should be made out to the 'Invasive Species Council Inc'.
Sorry we do not have credit card facilities at this stage.

The Invasive Species Council

Invasive species are a growing problem all over the world, and Australia, an isolated island state with a unique fauna and flora, is especially vulnerable. Over the years incredible harm has been done by such pests as foxes, rabbits, toads, carp, prickly pear, blackberries, rubber vine and the tree-killing disease phytophthora. At last count, Australia had 2,700 weed species and more than 200 marine invaders.

Even though the impacts are immense and ongoing, invasive species aren't being tackled seriously. An alarming number of invasive species are still coming in, staying, and spreading in Australia.

The Invasive Species Council is an independent, non-government organisation set up to campaign and advocate to stop further invasions, and to contain invading species already present. If you care about the threat posed to Australia by exotic invaders, please join the ISC. We believe we are the first group in the world created *solely* to lobby against invasive species of all kinds.

We want stronger laws on invasives, tighter quarantine controls, regular monitoring of harbours for marine invaders, and Rapid Response Teams to eliminate new invaders. Join us to help make these a reality.

campaigning **raising awareness** **convincing our governments to act**