# **Feral Herald**

Newsletter of the Invasive Species Council, Australia

working to stop further invasions

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

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#### Printing Feral Herald

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

# New Director for Invasive Species Council

ISC now has a new paid director. We are very fortunate to have Jason Doyle, a very experienced environmental advocate, in the new position.

As flagged last *Feral Herald*, the ISC has received funding from Perpetual Trustees, and private donor Mr. Danny Mathews, to employ a part time campaigner to work exclusively on invasive species issues.

According to ISC President, Dr Barry Traill, "This is an important step forward for the ISC. Having a dedicated worker will greatly increase our effectiveness in dealing with the plethora of invasive species issues in Australia today."

Jason started work in early August and is quickly getting across the complexity of invasive issues.

"Jason's initial work will focus on increasing the public profile of invasive species issues - especially the problem of new species still coming into Australia. This is fundamental to getting public, government and industry support for the improvements needed on invasive species work," said Dr Traill.

"Jason will also be tracking the WRA 'Permitted List' issue. We need to make absolutely sure that the Federal Government delivers on its promise to reduce the list of plant species automatically allowed into Australia without risk assessment," he said.

Jason will work from an office in the Green Building, at 60 Leicester St, Carlton (on the edge of the Melbourne CBD), operating from a desk at the Victorian National Parks Association.

Dr Traill added, "*Feral Herald* readers can also help. Jason would love to hear from ISC members and supporters about opportunities to publicise the invasives issue in general, or to assist with media coverage on particular invasives problems."

"Please note though - Jason is currently only on two days a week, so at this stage his time is limited and he will have to pick and choose which invasives issues he can engage on," said Dr Traill.

Jason can be contacted at <u>director@invasives.org.au</u>, or 03 9341 6508. He currently works Mondays and Thursdays.

## **Collared doves**

During the first half of 2005, two applications were made to the federal Department of Environment and Heritage (DEH) to amend the live import list, to include the collared dove as a household pet. The ISC has objected to each of these applications.

Collared doves have proved very invasive in Europe, having spread from Turkey right across to the British Isles during the previous century. They are sometimes a pest around farms and granaries. The collared dove is believed to be the parent species from which the barbary dove was derived.

The barbary dove has become an invasive species in China, Korea, the US, Japan and Australia. There is presently a population of barbary doves, newly established, in Alice Springs, and another newly established population around Adelaide. There are also indications of a small feral population of collared doves on the northern outskirts of Brisbane.

Collared doves are closely related to spotted doves and senegal doves (both species of *Streptopelia*) both of which have established large feral populations in Australia. Doves in genus *Streptopelia* appear to be far more likely than most birds to establish feral populations, and the collared dove, if given the chance, could do so in Australia. For this reason, its importation should not be allowed.

Collared doves are already available through the aviary trade in Australia, but their placement on the permitted import list will only increase their numbers in the trade, and increase the risk of new feral populations forming.

### Annual General Meeting 2005

6.30pm - Wednesday 7 September 2005 Space 39 Level 2, 39 Little Collins Street, Melbourne

Speaker: Professor Roger Cousens The University of Melbourne 'Early Phases of Weed Invasion: Is the sleeper weed concept a myth?; When should we cease an eradication campaign?; When should we stop range expansions of native species (are we ready for climate change)?

\* Come along and meet our new Director \* 2005 Froggatt Award announced Remember to renew your membership before (or at) the AGM!

ISC members are invited to nominate for the Committee. Further Details and Nomination Forms have been mailed to all members.

Professor Cousens has an international reputation for work on the ecology of weeds and competition with crops. He has co-authored a number of books, including *Population Dynamics of Weeds*, and *Western Weeds: A Guide to the Weeds of Western Australia*.

Professor Cousens is currently writing a book on dispersal in plants and researching on weed dispersal and spatial patterns.

Professor Cousens is based at the Burnley Campus of the University of Melbourne. He has formerly worked at LaTrobe University, Agriculture WA (including two years on the Australian Weeds Committee), Sydney University and Long Ashton Research Station in the United Kingdom.

## Join the *Invasive Action* email Network...

Coming out of the recent Invasive Species Forum held in Melbourne, is a new *Invasive Action* email Network.

This is an opportunity to join in regular communication with others interested in invasives campaigning.

See the ISC web site home page for a link. Note: Other invasives email information services were described in *Feral Herald* 7.

#### Supporting ISC's campaigns

If you belong to an environmental organisation, ask them to consider formally supporting the Invasive Species Council's 'Priorities for Advocacy'.

The formal support of other environmental organisations can add a lot of weight to the ISC's campaigns, such as our recent campaign to close the door on weed imports.

A web page to facilitate letters of support is on our website: <u>http://www.invasives.org.au/about/supportletters.htm</u>

#### In this issue...

This issue marks the start of a new era for the ISC, and indeed for invasive species campaigning in Australia.

The hiring of a paid ISC Director, means a dedicated campaigner to work exclusively on invasive species issues, albeit part time at this stage. (page 1)

Also in this issue, Tim Low reports on the National *Hymenachne* Management Group, of which ISC is now a member.

Although management of this giant aquatic grass has thus far been unsatisfactory, ISC is now in a position to monitor the management strategy, and hopefully ensure adequate action is taken. (page 5)

Those ISC members in a position to help, should take note of the national survey to establish the full extent of Siam Weed (*Chromolaena odorata*) within Australia. (page 4)

Tim Low also discusses the need to consider the problem of exotic pests, when considering the impacts of global climate change. (page 6)

Elsewhere in this issue, we have the usual timely warnings of some imminent threats - applications to import Collared Doves, (page 2) and the arrival in North Queensland of Tiger Mosquitos. (page 6)

Finally, all members should take note of our Annual General Meeting in early September. For those who haven't made it along before, this is a great chance to have a drink and a chat with others concerned with invasives issues. (page 2)

## From the President...

On behalf of all ISC members, I'd like to welcome aboard Jason Doyle as ISC's new paid Director.

We are especially fortunate in attracting Jason, a very experienced environmental advocate. Jason is from country Victoria and trained as a founder of the excellent regional organisation, the Goulburn Valley Environment Group.

This involved dealing with the usual array of invasive species issues facing a country area. Jason then took a paid position as the Box-Ironbark campaigner for the Victorian National Parks Association, leading a very successful campaign to protect the threatened woodlands of central Victoria.

Jason has particular skills in gaining media coverage on issues, and in campaign strategy.

ISC is very grateful to the Victorian National Parks Association for providing the excellent and inexpensive space for Jason to work from. The advantage of being in an environment with numerous other environmental organisations will be invaluable to Jason and the ISC.

Also, a special thank you to ISC Membership Secretary, Kate Blood, who is passing the spreadsheet on.

As a founding councillor, Kate has done a wonderful job setting up our initial membership system and doing the vital but often tedious task of maintaining our membership lists and details.

To Victorian and National weed watchers, Kate is well known for her crucial day job with the Department of Natural Resources and Environment, working to prevent weed incursions.

Thanks Kate and may your future bring many successful interventions stopping more weeds.

I'd also like to thank Mimi Pohl for stepping in as Membership Secretary in the interim, pending our upcoming annual elections.

Barry Traill President

## 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.

## Hunt on for Siam Weed

A major national survey of one of the world's most invasive tropical weeds is set to start with nationwide backing.

The Department of Natural Resources and Mines (NR&M), with the support of other state governments and the Australian Department of Agriculture, Fisheries and Forestry, will coordinate a new pest plant survey to establish the full extent of Siam Weed (*Chromolaena odorata*) within Australia.

Siam Weed infestations are currently known to exist in the Tully, Townsville and Thuringowa areas of north Queensland. At present these infestations are being controlled with an aim to eradication.

Survey coordinator, NR&M Principal Project Officer, Frank Fox, said Siam Weed had the potential to spread into northern New South Wales, up the entire Queensland coast through Cape York, across to the Northern Territory and north west of Western Australia and down along most of the west coast of Australia.

Mr Fox said the national survey was essential to justifying ongoing vital national and interstate funding for the eradication program.

"The weed is a native of Central America and is now a serious pest weed through many tropical and subtropical countries, including Australia's neighbours Papua New Guinea and East Timor," he said.

Siam Weed is thought to have arrived in Australia with the movement of heavy equipment, freight or contaminated pasture seed. It is easily spread via people, machinery and animals. Agricultural and horticultural production, forestry plantations and World Heritage Sites are potentially at risk.

"Siam Weed has an extremely fast growth rate and is a prolific seed producer. The plant is toxic to stock and has been known to degrade agricultural lands in southeast Asia to the extent that this land has now been abandoned," Frank Fox said.

"While Siam Weed tends to grow more abundantly along watercourses it has also been found growing on granite hillsides," he said

"It is an erect or sprawling shrub, forming dense



tangled thickets up to 6m high when growing in the open or up to 20m as a climbing vine. Its leaves are almost triangular with a distinctive 'pitchfork' threevein pattern and it can emit a pungent odour when crushed.

"Siam Weed's flowers range from white to a pink mauve and occur in clusters of dense tasselled heads similar in appearance to blue top and Billy goat weed. Flowering occurs predominantly in the May to July period and occasionally in the September to October months in suitable climate and soil conditions.

"As winter months are a major flowering time it is important for people to be on the look out for this weed," he said

Mr Fox said the basis of the survey was to establish the extent and size of infestations within Australia in order to take the necessary steps to control this highly invasive species.

He said NR&M would join forces with landholders, bushwalkers, naturalists and others concerned about the environment.

"Our department will undertake ground survey work in the hunt for Siam Weed but the extra assistance will be crucial in helping search properties and watercourses for Siam Weed," Mr Fox said.

If you think you have Siam Weed on your property or suspect you have seen it in any location, please report by calling toll free 1800 084 881 or report on line at www.weeds.org.au

continued on page 5

## ISC Joins Hymenachne Management Group

The pasture grass hymenachne is notorious as the plant that made its way onto Australia's list of 20 worst weeds (Weeds of National Significance) only 11 years after it was released onto the market as a pasture grass in Queensland.

*Hymenachne* is a giant aquatic grass grown in dams in northern Australia as a source of dry season feed for cattle.

It is readily transported by water, birds or people into rivers and lagoons, where it forms dense infestations, sometimes many hectares in area.

Open lagoons decorated with waterlilies, providing habitat for ducks and grebes, are converted into thickets of dense grass. *Hymenachne* also invades irrigation channels on sugar cane farms.

Because *hymenachne* has been declared a Weed of National Significance (WONS), a *hymenachne* strategy has been prepared as part of the National Weed Strategy, and federal funding is available for its containment. But management of the *hymenachne* problem has never been satisfactory.

After its declaration as a WONS in 1999, the director of Parks and Wildlife in the Northern Territory twice wrote to the Northern Territory Department of Primary Industry (DPIF) offering to remove the small areas under cultivation in the NT. Had action been taken at that time, *hymenachne* could have been eradicated from the NT.

But DPIF never replied to those letters, and *hymenachne* is now totally out of control. Large infestations can be seen on the floodplain south of Darwin. And because *hymenachne* is under cultivation on the boundary of Kakadu National Park, infestations have been recorded well inside the Park. *Hymenachne* poses a grave threat to the magnificent wetlands of Kakadu.



The management strategies for most WONS have been up and running for years, but nothing much has happened on behalf of *hymenachne*. The National *Hymenachne* Management Group, which is overseeing its control, has met only twice.

Any management goals that the group can set today have to be more limited than would have been the case had the group begun operating as early as the management groups for those WONS which have a greater economic (rather than environmental) impact, such as prickly acacia, parkinsonia, rubber vine, and so on.

In the five years since it became a WONS, the *hymenachne* 'horse' has well and truly bolted.

At the last National *Hymenachne* Management Group meeting, held in Darwin in April, the Invasive Species Council, represented by Tim Low, became a member. DPIF and a farmer who grows *hymenachne* are also members.

One major goal of the group will be to stop *hymenachne* from spreading into the wetlands of Cape York Peninsula.

Tim Low

#### Hunt is on for Siam Weed

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Further identification materials can be viewed online at <u>www.nrm.qld.gov.au/pests</u> and <u>www.weeds.org.au</u>

Photo images are available from Brett Davis and Sarah Funkhouser.

For further information contact: Frank Fox, Principal Project Officer 0409 989 603 Brett Davis, Senior Project Officer (Communication) 07 3405 5531 or 0422 802 296 Sarah Funkhouser, Project Officer (Communication) 07 4799 7013

### **Global Warming and Pests**

Exotic invaders were considered at a workshop on climate change held in Canberra in June.

Under climate change scenarios, ecologists hope that plants and animals threatened by global warming will relocate southwards or shift to higher altitudes. A temperature rise of one degree would be countered by a shift southwards of 125 kilometres.

However, exotic pests may disrupt the necessary ecological succession. It is well known that alien invaders often do best when habitats are disturbed and native species are placed under stress. Weeds often invade *en masse* when, for example, native vegetation is damaged by fires, cyclones or bulldozers.

Under climate change scenarios, ecologists hope that one plant community, placed under stress by global warming, would be replaced by another plant community better suited to the new conditions.

However, weeds may subvert this process by replacing the original vegetation. African pasture grasses are likely to replace native grasslands, and weedy trees such as camphor laurel will replace rainforest.

Climate change scenarios predict more damaging floods and cyclones, changed fire regimes, and higher  $CO^2$ levels. All of these changes will facilitate invasion by weeds and pest animals.

Ecologists need to understand the mechanisms by which weeds are likely to invade, to better minimise their impacts. This point was emphasised at the workshop.

Climate change is one of the most pressing issues of our times, and it cannot be considered without also taking into account the problem of exotic pests, another of our most pressing problems.

ISC councillor Tim Low attended the workshop, although he was not representing the ISC.

## Flies Ousted From Antarctica

Antarctica is often thought to be a pristine wilderness when in fact it has been colonised by many introduced organisms.

Of the four species of higher plant that grow on the continent (all of them on the Antarctic Peninsula), two are exotic grasses introduced from Europe.

Other invaders include bacteria from toilet wastes found inside marine organisms living around Antarctic stations, foreign fungi, and the northern hemisphere spider crab (*Hyas araneus*).

Antarctica is at grave risk of further invasions given global warming and the boom in Antarctic tourism.

It is thus gratifying that Australia has succeeded in eradicating an alien fly from the continent. Mushroom gnats had become established around the waste treatment plant at Casey Station, in Australian Antarctic Territory, after arriving some years ago on fresh food. Repeated doses of fumigation appear to have eliminated the tiny insects.

Australia applies very strict quarantine rules at its bases, although breaches sometimes occur. Antarctic expeditioneers are not allowed to carry chicken or egg sandwiches outside for fear of transmitting bird diseases to penguins. Signs inside the canteens reinforce this message.

## **Tiger Mosquito**

One of world's major disease-carrying mosquitoes, the Asian tiger mosquito, has turned up in north Queensland.

The mosquitoes have been detected on 10 islands in Torres Strait and are likely to reach the mainland soon. They can tolerate cool temperatures and have the potential to spread down the east coast as far as Melbourne.

Asian tiger mosquitoes carry dengue fever, Japanese encephalitis and other dangerous diseases. Dengue fever caused a human death in Torres Strait last year – the first in a hundred years. There are other mosquitoes in Australia that can transmit dengue, but none that tolerates such cool temperatures.

Asian tiger mosquitoes have previously invaded Queensland and the Northern Territory but were eradicated in 1958.

Invasive Species Cour ABN 27101522829	ncil Membership application form	
Name		
Address		
	Postcode	
Phone (h)	(w)	
email		
Work or voluntary position(s) (if relevant)		
Membership rates: (all prices are GST inclusive)		
Regular	\$22	
Concession	\$11	
Group/Institution	\$55	
I would also like to make a donation <sup>1</sup> (does not include GST)		
Total:	_\$	
Is this a $\Box$ new membership or a $\Box$ renew	val?	
* Donations of \$2.00 or more are tax deductible. <sup>1</sup> Representing a donation to the Invasive Species Council Fund - the Invasive Species Council Fund is a public fund listed on the Register Of Environmental Organisations under item 6.1.1 of subsection 30-55(1) of the <i>Income Tax Assessment Act 1997</i> .		
<b>Thank you for joining us. Please send this form and a cheque to:</b> Invasive Species Council PO Box 571 Collins St West, Vic. 8007.		
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 a new, 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.