

North Coast WEED READ

No. 1 | SEP 2006

Newsletter for the NSW North Coast Weeds Advisory Committee

We circulate each March, June, September and December. Please send information to the Secretary in the month before publication.

Now, what's going on in weeds....

WEEDBUSTER WEEK

7-14 October is Weed Buster Week

National Weedbuster Week is designed to increase weed awareness and encourage individuals to participate in weed related activities around the country. This year's theme for the week is "COMMUNITIES COMBATING WEEDS". Following are two displays where you can get your weeds identified or have a chat about control methods:

Lismore Square shopping centre. Mon 9- Fri 13 Richmond Landcare Services, Lismore Council and Far North Coast Weeds are combining their efforts to run a week long manned display. Weed ID, brochures, control methods, native plant alternatives. Phone Bob Jarman 6632 0012

Coffs Harbour Palms Centre. Sat 7 - Sun 15 Coffs Harbour Regional Landcare and Coffs Harbour City Council will combine to present a fresh weeds display of the most common environmental and noxious weeds found in the Coffs Harbour region, Phone 6651 1308.

COURSES, WORKSHOPS, CONFERENCES

Botanica Spring Festival. 1 Oct 2006. Displays by Coffs Harbour Regional Landcare, NPWS and other stallholders. Coffs Harbour Regional Botanic Gardens. Phone 6651 9972.

Revegetation on the Dorrigo Plateau. Training Day. 3 Oct 2006. 9.30am. "Misty Valley" 5687 Waterfall Way. Free. Please contact Bellinger Landcare to register 6655 0588

Workshop- Biodiversity Conservation and Enhancement in Priority HCV Areas through Voluntary Agreements. 7 Oct 2006. 9.30am. Linnaeus site, Broken Head (4km S of Broken Head hall, 300m S of Bundaleer St). Site visit to demonstrate on-ground restoration work, overview of project, restoration plan and implementation of work. Please phone Environmental Training and Employment Inc. (EnviTE) Paul O'Connor to RSVP 6621 9588 or email paulo@envite.org.au

International Landcare Conference. 8-11 Oct 2006. Melbourne. Conference themes are Landscapes, Lifestyles and Livelihoods with speakers coming from Canada, USA, UK, Germany, Uganda, Phillipines and from all over Australia. The program has five concurrent sessions. For a full program and more details visit www.internationallandcareconference2006.com.au

Chemcert course. Full course: 12 + 13 Oct 2006. 9am-4.30pm. Refresher 13 Oct only. Coffs Harbour. Phone EnviTE Julie Reid or Yasmin Kranz 6621 9588

Spring Open Day. 15 Oct 2006. Frog Hollow, sth of Hindmarsh St at Shelly Beach, East Ballina. Weed displays, information, native plants. East Ballina Landcare Ph Helen Beattie 6686 8867

Chemcert Course. 27 Oct + 3 Nov 2006. Lismore. Phone EnviTE Julie Reid or Yasmin Kranz 6621 9588

Upper Richmond Grasses and Groundcovers Workshop. Nov 2006 (tentative date 25). Lilyfield Community Hall, 4505 Murwillumbah Rd, Wadeville. Phone Bob Jarman 6632 0012.

15th NSW Coastal Conference 7-9 November 2006 Novotel Pacific Bay Resort, Coffs Harbour. Conference topics include coastal lakes and waterways, coastal zone management, marine biodiversity. Contact Stefanie Wilson 6650 9800 www.eastcoastconferences.com.au

Chemcert Course. 23 + 24 Nov 2006. Grafton. Phone EnviTE Julie or Yasmin 6621 9588

Northern Rivers Regional Landcare Forum 29-31 March 2007. Grafton. Speakers, field trips, workshops. The proposed theme for the forum is *Landcare Farming - Meeting the Challenge*. The forum also hosts the Northern Rivers region Landcare Awards. Start thinking about someone or some group that you might like to nominate. Phone the Northern Rivers Catchment Management Authority (NRCMA) Kerri Francis 6627 0114 or Lindy Brown 6562 0719

14th Biennial NSW Weeds Conference 2007 24-27th Sep 2007. The conference will focus on a wide range of issues including new and emerging weed threats and new advances in weed technology. University of Wollongong 9368 1200 weeds2007@iceaustralia.com

All communications to the Secretary

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www.northcoastweeds.org.au

W E E D N E W S

New Aquatic Weed Projects

Grafton DPI has received funding for three new Defeating the Weeds Menace aquatic weed projects for Grafton. DPI will employ an Aquatic Weeds Project Officer for 2 years who will work with weed authorities, water authorities, CMAs and community groups to implement aquatic weed early detection programs, identification training and awareness. A second project will undertake a weed risk assessment on aquatic plants and potential weeds being used in the aquarium industry. This will involve a literature review and report with some on-site aquatic weed growth and assessment trials. Thirdly, funds have been received to undertake field assessment trials of the herbicide Carfentrazone treatments on Cabomba and then to develop a best practice manual.

NRCMA projects completed

The North Coast Weeds Advisory Committee received \$40,000 from the CMA for projects in the Integrated Environmental Weed Control Category; Bitou Bush and Coastal Weeds, to be completed by June 2006. Sites were distributed from Evans Head in the north down the coast to Tuckers Rock near Mylestrom in the south. All on-ground works have now been completed, resulting in an area of 97 ha treated (target 35ha) on 57 properties (target 34). Contributions by councils, DEC and landholders boosted the value of the project to \$183,000. The project resulted in increased protection of native ecosystems from the threat of weeds, enhanced habitat quality and enhanced community and land manager awareness and participation in weed management activities.

Weeds Forum

The proceedings of the 2006 North East NSW-South East Qld Weeds Forum is now available on the website of the NSW North Coast Weeds Advisory Committee www.northcoastweeds.org.au Topics included the NSW Noxious Weeds Act, cats claw creeper, salvinia control, Siam weed, telegraph weed, Chilean needle grass, Tecoma, kudzu, honey locust, mysore thorn, Chinese tallow and aquatic weed management .

Environmental Defender's Office (EDO)

An EDO office has opened in Lismore, located at the Northern Rivers Community Legal Centre, to service the Northern Rivers region. The EDO Northern Rivers is staffed by two solicitors Jessica Wood and Sue Higginson, who will provide a range of environmental legal services, including community education workshops and advice clinics, free initial phone legal advice and representation in public interest environmental matters. Priority environmental issues include natural resource management, land clearing, biodiversity conservation and development pressures. For further information or legal advice ring 1300 369 791 or visit the website www.edo.org.au/edonsw

Lantana Splatter Gun

A gas-powered drench gun is gaining recognition as a valuable tool in the control of dense lantana infestations. The gun applies a large droplet stream of herbicide to the weed and squirts of herbicide are made onto the weed approximately every metre. The technique is particularly useful for initial knock down of lantana along tracks or for treating large patches in paddocks. The gas version of the gun can shoot up to 6m and has a narrow stream which allows avoidance of individual native trees. Glyphosate at

a dilution of 9:1 is registered for this application method. There is also a non gas-powered version of the gun.

Impact of Camphor Laurels on aquatic invertebrates

A study of aquatic invertebrates in the Orara Valley, North west of Coffs Harbour, has found that shredder s, an important group of invertebrates that initiate the breakdown of leaf litter in streams, had much lower populations in streams surrounded by a high density of camphor laurels. The result is that camphor infested streams would have a low decomposition rate affecting the whole food chain. The researcher, Judy Davies, is continuing her studies in 2006 with support from Coffs Harbour City Council. Further info: jda33500@bigpond.net.au

Aquatic Weed compost OK

A recent scientific trial was undertaken by DPI with assistance from DEC, the Hawkesbury-Nepean CMA and Bettergrow Pty Ltd, on 70,000 cubic metres of aquatic weeds (Salvinia, Alligator Weed and Brazilian Elodea (*Egeria densa*)) mechanically harvested from the Hawkesbury River. The aim was to evaluate the feasibility of compost-recycling these weeds. The compost had to be heated for long enough at a sufficiently high temperature to kill Alligator Weed, which can continue to grow with residual moisture. After 12-16 weeks, with 4-5 turns using a front end loader or straddle turner, the quality of the compost was comparable to compost made from organic garden material although with lower concentrations of nitrogen, phosphorus and calcium. The concentrations of heavy metals and chemical residues were low. The trial showed that the compost is likely to be useful for re-establishing vegetation, particularly on sites denuded of topsoil. For further info see the factsheet on the DPI website www.dpi.nsw.gov.au

SOME UPCOMING FUNDING

Westpac Operation Backyard

Grants generally up to \$5,000. To be eligible the project must be nominated by a Westpac employee, involve bank staff as volunteers, be supported by the local community and be approved by Landcare Australia. The project must be approved by 30 Sep 2006. Program guidelines can be obtained by emailing: community@westpac.com.au or contact Heather Rapkins 07 3227 2539 hrapkins@westpac.com.au

Bush Recovery Program for Native Vegetation

The most recent round of funding for native vegetation recovery from the CMA closes on the 9th October. This program is for the conservation and enhancement of native vegetation on private, leasehold, Rural Lands Protection Board, Trusts or Local Government lands in the Northern Rivers CMA region. For eligible properties, the program may fund on-ground activities such as weed control using mechanical and/or chemical methods, bush regeneration and activities to control stock including off-stream stock water points. For more information go to www.northern.cma.nsw.gov.au or phone your local CMA office: 6653 0115 (Nambucca), 6653 0122 (Bellingen, Dorrigo plateau), 6653 0112 (Coffs), 6642 0633 (Lower Clarence), 6642 0635 (Mid Clarence), 6627 0123 (Upper Clarence, Richmond), or 6672 5608 (Brunswick Tweed).

Mitre 10 Junior Landcare Grants program

This program provides funds for schools and youth groups across Australia wishing to participate in environmental projects. The program targets major issues relevant to our natural environment including: biodiversity, water and land. Projects may include environmental monitoring programs, waste minimisation or undertaking an environmental field trip. Most project applications will be expected to have a value of around \$500. Next closing date 18 Oct 2006. www.mitre10.com.au or www.juniorlandcare.com

Fish Habitat Grant Program (NSW DPI)

Grants of up to \$30,000 will be available to individuals, community groups, local councils and fishing clubs for the rehabilitation of fish habitat, in both freshwater and saltwater areas. Projects can include riparian and wetland rehabilitation and weed management. Projects need to be matched by in-kind support from the applicant. The next round will close on 27 Oct 2006, applications only accepted by post. Phone Rebecca Lines-Kelly 6626 1319 or visit www.dpi.nsw.gov.au/fisheries and search for "Fish Habitat Grant" for more information.

Australian Government's Community Water Grants

Grants of up to \$50,000 for practical on-ground projects. Open to local government, schools, indigenous organisations and community groups. Projects can include riparian revegetation works to improve water quality. Round 2 has closed. Registrations for information about Round 3 will open very soon on the website www.communitywatergrants.gov.au or ring 1800 780 730

NEW BOOKS, CD-ROMs etc.

HOT OFF THE PRESS!!

Salvinia control manual: management and control options for salvinia in Australia. 2006. By Elissa Van Oosterhout. Published by NSW DPI, Orange, NSW.

Weeds in the media 2006

This booklet includes the proceedings of a short seminar program for nursery and landscape industry leaders and specialist media personnel on issues concerning invasive garden plants. Topics include current and future research, the role of the media, state and federal laws, lists and regulatory frameworks and national policy directions. This document can be downloaded from www.weeds.crc.org.au

Using herbicides on lantana: a guide to best management practices 2006

This booklet was produced as parts of the Weeds of National Significance (WoNS) program. Topics include application methods, safety and legislation, developing a lantana control plan, calculating the volume of herbicide and selecting the most appropriate herbicide. For copies contact the Dept Natural Resources, Mines and Water Qld landcentre_warehouse@nrmm.qld.gov.au or phone (07) 3896 3224

Native plant or weed: pick the difference. 2006

By Ann Loughran. This publication has photographs of a diversity of native plants and their weedy look-a-likes. A must for any land carers or bush regenerators library! Order form at www.agric.nsw.gov.au or ring 1800 025 520

Impact of weeds on threatened biodiversity in New South Wales. August 2006. This publication, by Aaron Coutts-Smith and Paul Downey, compiles and summarises weed threats to threatened biodiversity, both animal and plant species. Can be downloaded from www.weeds.crc.org.au



Croftons Weed
(one of the most commonly identified weed threats to threatened biodiversity in NSW)

*Photo:
Sutherland
Shire Council*

Bureau of Meteorology, Australian Government

Useful website for accessing the latest weather forecasts and warnings. Could be used to assist planning of weed spraying programs. This site has information on the northern rivers region, including forecasts for Cape Byron, Lismore, Grafton and Coffs Harbour. www.bom.gov.au

Economic impact assessment of Australian biological weed control 2006.

This report, by AR Page and KL Lacey, examines the return on investment of the Australian weed biological control (biocontrol) effort. The study was funded by the Weeds CRC and includes an overview of methodology and findings and a detailed cost benefit analysis (CBA) of biocontrol projects. This report can be downloaded from www.weeds.crc.org.au

The Plants of the Forest Floor. 2006.

By Penny Watsford and Margaret Elliott. A guide to small native plants of subtropical eastern Australia which includes a CD rom with over 150 colour photos. Any profits from the sale will be used for Local Landcare projects Available from Nullum Publications, PO Box 1152, Murwillumbah 2484 or email nullumbooks@optusnet.com.au

New Factsheets from DPI

DPI has recently released two new factsheets on weeds; one on the aquatic weed Water Lettuce and the other on preparing compost from aquatic weeds removed from waterways. Both can be downloaded from the website www.dpi.nsw.gov.au

A Field Manual for surveying and mapping nationally significant weeds 2006.

Bureau of Rural Sciences, Canberra. The Weeds of National Significance (WoNS) Field Manual explains procedures to ensure national consistency in data collection for accurate and consistent information about infestation and spread. The field guide can be downloaded from www.weeds.org.au/natsig.htm

Rainforest Trees and Shrubs - a field guide to their identification. 2006.

By Gwen Harden, Bill McDonald and John Williams. This books covers rainforest plants in eastern Australia from Rockhampton in Qld down to Victoria. Available from the Southern Cross University Co-op Bookshop. www.coop-bookshop.com.au

- WEED WARNING -
WATER LETTUCE

Pistia stratiotes



*Source: Brian Worboys,
Maitland City Council*

Water Lettuce is a free floating aquatic plant that was introduced from Asia and has commonly been used as an aquarium or water garden specimen. This plant has become a serious weed due to its ability to rapidly form dense mats on still or slow-moving fresh-water such as farm dams, reservoirs, lakes, rivers and creeks. This species can restrict water flow, reduce light penetration, reduce oxygen levels and create a haven for mosquitoes. While not established in NSW, outbreaks have been detected throughout the north coast including in the Tweed River catchment, in the Richmond River catchment and at Macksville, Taree and Maitland.

Each Water Lettuce plant can grow up to 30cm wide. Mother and daughter plants are attached by stolons up to 60cm long. The leaves are ribbed and form a rosette, resembling a lettuce. The roots are feathery and up to 80cm long. Flowers are green and inconspicuous.

This plant is thought to have spread mainly by dumping from aquariums or fish ponds. Water Lettuce can grow from broken pieces and consequently can also spread by entanglement in eel traps and boats. Seeds can float downstream. The new Noxious Weeds Act has listed Water Lettuce as a Class 1 weed, consequently throughout all of NSW it must be eradicated and all sites kept free of the plant. Small infestations of Water Lettuce can be controlled by physical removal. Herbicide may be necessary to control large infestations but contact your local weed authority before applying herbicide over water. Two weevil species have been introduced for biological control and they have exerted good effect in some areas.

**Tweed, Byron, Ballina, Lismore, Kyogle
& Richmond Valley LGA (Far North
Coast Weeds area) update**

Inspectorial Activities

This quarter a total of 1,910 inspections were performed with 27% (515) of properties identified as having insufficient control programs in place. Forty-one percent (211) of these properties had Groundsel Bush present with 61% (1165) of properties identified as having no noxious weeds present or were meeting the weeds control class requirements.

Council's annual aerial inspection for Groundsel Bush and aquatic weeds was undertaken this quarter. Two days of inspections were undertaken over all of the Far North Coast Weeds constituent council areas. GPS coordinates are currently undergoing conversion to WeedMap for on-ground truing of identified weed populations.

In association with NSW Department of Primary Industries staff, a survey was undertaken for Alligator Weed, Water Hyacinth, Water Lettuce and Groundsel Bush in the Wilson and Richmond Rivers. While scattered pockets of Water Hyacinth, Green Cestrum and Groundsel Bush were identified downstream of the Ballina Street Bridge in Lismore no other noxious weeds were reported with inspections completed to Pimlico Island and Coraki.

**Northern Rivers Catchment Management Authority
Contracts**

- Brunswick (Wilson's Creek) and Limpinwood - Kudzu controls completed
- Camphor Laurel Replacement Project due September 2006
- Bitou Bush and Coastal Weed Control I - Completed
- Bitou Bush and Coastal Weed Control II due August 2006

Noxious Weed Status

Class One

After a mild start to Winter, Water Lettuce infestations continue to require regular monitoring for growth or germination of seedlings in the county. Management Plans are currently in development for the known infestations in the Tweed and Richmond Valley areas.

Inspections carried out in Tweed Shire revealed a new infestation at Piggabean in a large dam. Council's Chief Weeds Officer and Noxious Weed Inspector completed a property inspection of the only known infestation of Hymenachne south-west of Casino. Due to the size of the infestation the landholder requires assistance in managing the infestation.

Class Two

Inspections continued to identify growth at the Casino Alligator Weed infestation, however the area infested has been reduced by 40%. Regrowth was also consistent with that at the Byron Creek and Wilson River with a reoccurrence of Alligator Weed after three (3) years in a previously treated residential property outside of Byron Bay. Hygrophilia is widespread through the county district with consideration in the declassification of this weed to a Class 4 due to the extent of area already infested and the high costs of control.

Class Three

Property inspections identified infestations of the following noxious weeds:

- *Mysore Thorn* – Lismore Council
- *Salvinia* – Tweed, Byron, Ballina and Richmond Valley Councils
- *Kudzu* – Byron, Tweed and Ballina Councils
- *Groundsel* – Tweed, Byron, Ballina Kyogle, Lismore and Richmond Valley Councils
- *Green Cestrum* – Lismore Richmond Valley and Kyogle
- *Giant Rat's Tail Grass* – Kyogle
- *Yellow Bells* – Kyogle, Lismore, Ballina, Byron and Tweed
- *Broad Leaf Pepper Tree* – Kyogle, Tweed, Byron and Ballina
- *Bitou Bush* – Tweed, Ballina, Richmond Valley

Class Four

Red and Creeping Lantana infestations continue to be mapped with extensive infestations of Creeping Lantana in urban areas. Inspections identified properties in Kyogle and Richmond Valley with insufficient control programs for Red Lantana. Council currently has its Camphor Laurel Strategy on public exhibition, this document will be recognised by Council as its Local Control Plan for Camphor Laurel under the amended NSW Noxious Weeds ACT. Water Hyacinth infestations continue to be identified and mapped in the Richmond Catchment. *Salvinia* and Water Hyacinth control has been undertaken by Richmond River County Council with Northern Rivers Catchment Management Authority funding of a lagoon outside of Coraki. Control has emphasised mechanical removal in an attempt to reduce biomass in the event of flood events with over 300,000m³ of material removed.

Control Works

Council's spray crews spent the majority of their time controlling Alligator Weed (807 hours). Control programs were also conducted for Water Lettuce, Broad Leaf Pepper Tree, *Celtis*, Groundsel Bush, Green Cestrum, *Salvinia*, Bitou Bush, Camphor Laurel and Red Lantana. Contractors and Council crews completed Vacant Crown Land control works for Bitou Bush, Groundsel Bush and Broad Leaf Pepper Trees in Ballina, Byron and Tweed Council

First Quarter 2006-07

- Ground truthing of Aerial inspection data,
- Inspections for Rhus Tree in the Lismore, Tweed and Byron Shire Areas,
- Completion of Evans Head NRCMA Bitou Bush and Coastal Weeds projects,
- Control of Water Lettuce infestations in Richmond Valley and Tweed Council areas,
- NSW DPI funding reports due
- Inspections for Aquatic weeds, Honey Locust, Kudzu and Chinese Tallow
- Vacant Crown Land applications and reporting due

DEC NPWS NORTHERN RIVERS REGION

Bush Regeneration training

- A number of DEC Field and Ranger staff recently completed a Certificate II in Conservation & Land Management with EnviTE in Lismore. An additional course commenced on 1/8/06 to be completed by 8 November for field and ranger staff.

- WEED WARNING -

FIREWEED

Senecio madagascariensis



Photo source: J Dellow, NSW DPI Factsheet

The most common species of fireweed in coastal NSW is *S. madagascariensis*, a plant native to south-eastern Africa. Fireweed grows from 10-50cm high, forming a low, heavily branched, perennial bush. Leaves are generally bright green with serrated, entire or lobed margins. Although plants flower throughout the year, peak time is April to September. Each plant can have up to 200 flowers. Flowers are small, yellow and daisy-like, 1-2cm in diameter with 13 petals. Each flower produces between 100-150 seeds, therefore a single large plant can produce up to 30,000 seeds with high viability. The light fluffy seeds are easily spread by wind, but can also be spread in hay, on clothing and vehicles and by livestock.

Fireweed is a serious weed of coastal pastures in NSW, distributed as far south as Bega to south-east Qld. This species is also found on the Northern and Southern Tablelands. Fireweed contains alkaloids that produce liver damage in livestock, particularly cattle and horses. Hay or silage contaminated with fireweed can be toxic. Although livestock will mostly avoid eating fireweed, they will consume it when other food is short, when the infestation of young plants is so heavy that they cannot avoid them, or when a paddock with thick fireweed is slashed and then grazed immediately after.

Fireweed is listed as a Class 4 Weed in the Nambucca, Coffs Harbour and Bellingen LGAs, which means that the growth and the spread of the plant must be controlled according to measures specified in the management plan published by the local authority. An integrated approach can be used for control including not overgrazing, use of goats (20 times more tolerant to alkaloids than cattle), pasture improvement with fertiliser application at appropriate times. Isolated plants can be hand-pulled (place in bag and burn) or spot-sprayed. For larger infestations, weed wiping with selective herbicides can be effective. A vigorous permanent pasture provides the best control.

External funding sought

* DEC recently applied for funding from the CMA to fund the following bush regeneration/weed control proposals:

- Arakwal NP with the Co-Management Committee applied for \$50,000 to undertake bush regeneration including bitou control with the Park
- Ukerebagh NR with support from the Tweed-Byron Aboriginal Land Council applied for \$50,000 to undertake weed control in the NR to follow-up and expand on previous works particularly on Ukerebagh Island
- Partnership project with the Big Scrub Rainforest Landcare Group sponsored by EnviTE Lismore with DEC to undertake bush regeneration in the Big Scrub Rainforest Remnant Reserves including those managed by DEC and privately managed remnants. The DEC remnants include Andrew Johnston Big Scrub Nature Reserve (NR), Davis Scrub NR, Victoria Park NR, Wilson NR, Boatharbour NR and the Big Scrub Flora Reserve.

Planning

- DEC Northern Rivers Region (NRR) has been preparing reserve/park site specific management plans as required under the approved Bitou Bush Threat Abatement Plan. These include Tweed Estuary Islands NR, Ukerebagh NR including Tweed Heads Historic site, Cudgen NR, Wooyung NR, Billinudgel NR, Tyagarah NR, Brunswick Heads NR, Cape Byron SCA, Broken Head NR, Arakwal NP, Richmond River NR, Broadwater NP and Bundjalung NP.
- NRR participated in a REACH based planning project with Landcare Groups of Terania Creek including the headwaters in Nightcap NP funded by the NRCMA.

Weed Control Programs

- On-ground works are ongoing in Bundjalung NP for the control of Bitou bush in cooperation with the Dept of Defence and North Coast Region. Follow-up Glory Lily Control has also commenced in the northern part of the park.
- Regeneration works were completed on Ukerebagh Island as per the funding provided by NRCMA/NEWAC to control bitou. It is anticipated that future funding applications will be successful to further such works.
- Regeneration works were completed at Nightcap NP as part of ongoing World Heritage work. This work focused on the Terania Creek subcatchment including Protestors Falls. It is hoped that further funding may be available for continuing works.
- Lantana control continues in Border Ranges NP as part of the field study site for the National Lantana Working Group
- Numerous threatened species protection projects continue for *Rapanea* at Mallanganee NP, Mitchell's Rainforest snail at Stott's Island NR, *Diploglottis campbelli* and the Giant Fern.
- Bush Regeneration programs in various parks and reserves finished at the end of the financial year coinciding with the completion of temporary employment of field officers (bush regeneration) to assist. Similar coaching will occur in the Region for the 06/07 financial year to facilitate regeneration works in various parks and reserves.

Clarence Update

Co-ordination

North Coast Weed Advisory Committee activities: the 5th Weed Forum held at Tweed Heads was well attended and received in good favour. Recommendations for the next one include:

- a) July-August would be a better time as autumn is too busy.
- b) The Qld Weed Conference is scheduled for June next year on the Gold Coast so perhaps the Weed Forum should be postponed until the following year?

Reece Luxton has been working with Meri Oakwood as the NCWAC Acting Project Manager and developing up the Project Officer position.

Advice was given to various areas on our mapping systems for property inspections; information was provided to Sunwater in Brisbane and Townsville, Robert Ferguson in Temora and David Bubb from NEWA. Simplicity and flexibility of the system was promoted, along with use of PDA in the field.

CMA projects

CMA 3. Work continued on the Cunglebung Creek Mysore thorn. The Clarence Moonflower project was completed however further infestations have been identified on Susan Island. The Bitou Bush and Coastal Weeds work (Part C) is still underway.

CMA 4. The projects were completed and a final report was submitted to the Acting Project Manager

The Lantana Weeds of National Significance (WoNS) program, looking at Adaptive Management trials, has continued in the Upper Copmanhurst area, with additional slashing and mulching work with specialised equipment. Herbicide trials are still being assessed, with results available at the next meeting. *Acanophora* has been confirmed on a non-release site at Harwood Island, infesting fiddlewood trees. Another population was also found at Yamba, with supporting populations on lantana nearby.

Meetings attended included:

On behalf of NCWAC:

- NSW Invasive Species Strategy workshop in Sydney (NSW DPI) on behalf of NCWAC
- Development of contract for Project Officer (Planning) with NR CMA
- Bitou TAG meeting with DEC Bitou TAP staff and NR CMA – Coffs Harbour

On behalf of Clarence Valley Council:

- Interview with Clive Sefton, Project Officer, Performance Measurement project, NSW DPI
- Clarence Valley Landcare/Dunecare Liaison Group
- Development of Riparian Strategy for CVC area (internal)
- Development of Coastal Vegetation Rehabilitation Strategy for CVC area
- DEC (EPA) workshop on Mandatory Pesticide Notification – Coffs Harbour
- EnviTE conference - Ballina

Extension/publicity included:

- Media releases – Coastal weeds

- Weed identification for landholders as required

Inspectorial

New inspections have been undertaken throughout the Southgate, Ramornie and Mororo areas.

A high number of these properties had infestations of Lantana, providing an opportunity to communicate the requirements under the Class 4 category. Re-inspections on properties were conducted on Groundsel bush and Camphor laurel as required.



Source: Sainty & Associates

Inspection Tally

Quarter 4 – April to June 2006; 723 inspections and 242 reinspections

(444 clean, 357 weeds found, 161 clearance, 3 Sec 18 notice, 0 Sec 20 notice)

Total for year – 3324 inspections (10% increase from last year) – 62474 ha inspected
34 % of properties inspected had weeds, 66% inspected were clean

Operational

Clarence Valley Council (CVC) is pleased to announce the appointment of Nathan Ferrie as Weed Control Operator, filling a long term casual position. The organisational structure is now complete following lateral transfers, although likely to be reviewed in next twelve months. Also a new spray truck has been operational for 2 months and well worth the investment. This truck follows the style used by Coffs Harbour Council.

CVC is continuing projects under CMA3 Integrated Environmental Weed Strategy; Cunglebung Creek Mysore Thorn \$12000 (continuing), Clarence Bitou Bush \$12500 (started), and Clarence moonflower \$5000 (completed). We completed the actions under CMA 4 project for Priority Coastal Weeds by June 2006.

Alligator Weed – nil
Bitou Bush – as per local management plan – 20 days
Blackberry – nil
Broad Leaf Pepper Tree – nil
Camphor laurel – roadside control - 2 days
Celtis – nil
Croftons weed – nil
Green Cestrum – nil
Giant Parramatta Grass – check contractor work

undertaken in the Hernani-Tyringham-Nymboida areas – 4 days
Groundsel bush – roadside infestations as required – 4 days
RFL – nil
Privet – roadsides infestations controlled in the Coldstream area – 4 days
Salvinia and Water Hyacinth – follow up in Alamy Creek – 1 day
Tecoma – roadside infestation controlled in the Rushforth and Waterview Heights area – 1 day
Coastal weeds – contract work was carried out by John Hall on VCL areas and further work conducted by the Bush Regeneration team based in Maclean - achieved works on Bitou bush and Asparagus fern in strategic sites in Minnie Waters, Brooms Head, Yamba and Iluka. The project for engaging and upskilling Indigenous people in NRM is to be reduced with a team of 5 Bush Regeneration Officers to be retained. The Noxious Weeds Office has secured one position from the group to assist with control operations until October. Training in Bush Regeneration skills available to our staff will also conclude in September.

Private works

- Bitou control for DEC (NPWS) Bundjalung NP
- Bindii and broadleaf control in Council – Open Spaces and Reserves
- Eatonsville Reserve – control of lantana and cats claw creeper

Coming up...

Regional Weeds Advisory Committee workshop – Tocal College – 18, 19 September 2006 (NCWAC reps required)
Employment of Project Officer – Weed Planning

DEC NPWS CLARENCE VALLEY

Weed Control Programs

- Extensive bitou bush control programs have been carried out in Yuraygir and Bundjalung NP. Aerial boom and spot sprays have been used at Iluka, Ten Mile Beach, between Shelley Headland and Lake Arragan, north Sandon, south Sandon and Station Creek; along with ground spraying which will continue for next 2 months.
- Bush Regeneration contractors working in Iluka Nature Reserve, Woody Head and Diggers Camp and Susan Island have been targeting a variety of weeds.
- NRCMA funded works has occurred at Clarence Estuary Nature Reserve

Planning

NCR has been preparing reserve/park specific site specific management plans as required under the approved Bitou Bush Threat Abatement Plan for priority sites at South Sandon, Diggers Camp, Middle Bluff and Iluka NR.

NSW DPI - GRAFTON WEEDS UNIT

The **Salvinia weevil** breeding facility at Grafton will be at full capacity this spring/summer. Weeds officers who expect to need weevils this season should let Phil Stephenson or Rod Ensby know in advance how many sites they are likely to conduct releases. For weeds officers that have obtained weevils from the Grafton facility could they please fill out a site description form and return to NSW DPI at Grafton. This information is critical for evaluating both the field performance of the weevils and the facility itself.

The **Salvinia control manual** has been finalised and will be launched at the Australian Weeds Conference in Adelaide during September. Following the launch, the manual will be extensively promoted and circulated. For the **alligator weed manual**, literature is being reviewed, in order to have a technical reference group review the current knowledge and agree on areas that have dissent. The technical reference group will then be asked to help identify strengths and gaps in the current knowledge base. Current research may be able to contribute to some of the knowledge gaps. The technical reference group will then help develop management strategies for different alligator weed situations, and these will be reviewed more widely. Case studies are being collected from people with direct experience in alligator weed situations (Rod Ensbey and Iain Jamieson to write a draft for the Richmond infestation). A case study template has been developed if anyone is interested in contributing a case study. Hopefully an alligator weed management manual will be in print by this time next year.

The **lantana rust** is continuing to show promise at a number of sites. Recent inspections indicated that 35 sites have shown some form of establishment. Grafton DPI currently has good supplies of the rust available for when climatic conditions improve. Ideally for rust releases, pink lantana plants should be growing well, in semi-shaded moist locations, with releases undertaken during or before light rainfall. For supplies of the rust or site selection details please call Phil Stephenson on 66401649. If you would like to participate in the program, please contact Terry Schmitzer at Greater Taree City Council for membership subscription.

The useful **Noxious and Environmental Weed Control Handbook** is currently being updated and revised. If you have any suggestions for improvements or know of organisations that may wish to advertised in the handbook please contact the author. The revised version should be available in early 2007.

Stakeholders were invited to develop a **NSW Invasive Species Strategy** in Sydney last week. There will be a series of 3 workshops to develop a draft strategy that will then be widely circulated during 2006 for consultation. Keep an eye for the consultation draft for your valuable input!

As most of you would be aware, **bitou leaf roller moth**, **Tortrix sp.** has been extensively released on the NSW north Coast since 2001 and has successfully established at a number of sites. This process was aided by funds received under a previous NHT funded project (Creating community ownership for the establishment and redistribution of the bitou bush moth, *Tortrix sp.*).

We are now looking to further engage community groups such as Coastcare and Dunecare in the rearing and redistribution of this biological control agent. *Tortrix sp.* will be reared by technical staff based at NSW DPI's Grafton ARAS facility and provided to community groups as starter cultures. NSW DPI will also provide advice about augmenting agent populations already present in the field.

In addition, we are now aiming to involve **Alyssa Schembri**, our recently appointed NSW Weed Warriors Coordinator, in the project in an effort to gain active participation from schools. It would be greatly appreciated

if any Weeds Officers interested in the Weed Warriors concept could contact us and possibly also check with schools in their regions for any interest. Further details on **Weed Warriors** are available on the CRC for Australian Weed Management's web site www.weeds.crc.org.au or the Weed Warriors web site www.weedwarriors.net.au, Support from CMA's and regional weed management groups may be sought to assist with the above process.

Coffs Harbour Update

Inspectorial

Inspections have been carried out throughout the City but prioritising Crofton Weed in the Korora, Bruxner Park and Boambee areas. Increased urbanisation of the urban fringe and funding from the Steep Lands Committee have helped reduced the impact of this weed but isolated patches still exist, particularly in old banana plantations.

Urban inspections have also been conducted focusing primarily on Chinese Celtis, Broad Leaf Pepper Tree and Tecoma.

A draft Pesticide Notification Plan has been completed.

Coastal Weeds

The Bitou Bush control programme is well underway. Most dunal areas between Arrawarra and Sapphire have been sprayed with Brushoff at 6g/100 l. Cooperation with DEC field staff has ensured that all priority sites will be sprayed in the Coffs Coast Regional Park.

Coffs Harbour City Council staff assisted DEC with the aerial spraying of headlands throughout the Regional Park.

Follow up inspections of several once heavily infested areas have revealed the re-establishment of many native species all giving good ground cover and restricting the germination of bitou bush. Overall results are excellent.

A further NRCMA funded project for the control of priority coastal weeds has been completed with the contractor focusing on Glory Lilly and Bitou Bush in the State Park.

Crofton Weed

A spray programme is being carried out in all Council reserves and road verges. Infestations on Council land are now only light and scattered. Several notices have been issued for the removal of this weed on private land.

Roadside Camphor Laurels

This programme is funded by Council's Environmental Levy and commenced in the Bonville area. Twenty-eight large trees have been removed after a consultation period with relevant neighbours. A letter has been received from DEC supporting Council's decision to remove roadside Camphor Laurels in Williams Road Bonville, which is close to Bongil Bongil National Park. Funding is provided for the continuation of this programme in 2006-07.

Kudzu

Results from trial injection of Vigilant into tubers at the Bruxner Park site will be looked at with some interest in spring. Unfortunately there is no funding available for the continuation of this project. A further infestation has been found on private land in Nana Glen that will prove difficult to control.

Fireweed

Small isolated patches of Fireweed on road verges have been either hand pulled or sprayed.

Giant Parramatta Grass

A roadside control programme is about to commence prioritising roads leading to Eastern Dorrigo and adjacent to properties where Giant Parramatta Grass infestations are minimal or being brought under control.

A Pasture Weed Information Night was held at Coramba on 15 June 2006. Guest speakers were Dr Brian Sindel from UNE Armidale who spoke on Fireweed and NSW DPI district Agronomist Tac Campbell who gave a presentation on Giant Parramatta Grass. Approximately 40 people attended this evening.

Future Plans

- o A restructure within Council has taken place and Weed Services is now part of City Services and will operate under an Executive Manager and a yet to be appointed Assistant Manager. Both previous Director and Manager resigned in May and will not be replaced. At this stage nothing will change operationally and we will still work from the existing location.
- o Environmental and noxious weed trees are being removed more regularly focusing on Broad Leaf Pepper Tree, Chinese Celtis, Umbrella Tree and Camphor Laurel
- o Bindii spraying in caravan parks, playgrounds and reserves will commence soon

The rural roadside Camphor Laurel programme will continue.

Forests NSW will continue their annual Groundsel bush control program in Barcoongere State Forest, targeting main arterial roads and external boundaries.

In the past three months, **DEC** has carried out extensive bush regeneration in Coffs Coast Regional Park targeting pasture grasses, senna, lantana, bitou bush, ochra and garden escapes. Bush regeneration has also occurred at Bindarri NP and Bongil Bongil NP. Aerial bitou bush control has been carried out at Moonee Beach Nature Reserve and Coffs Coast Regional Park (13 headlands and 3 beaches aerial sprayed). On-ground Bitou Bush control occurred in Bongil Bongil NP. DEC, with assistance from NRCMA, employed Aboriginal trainee bush regenerators to work in high priority locations in Coffs Coast RP. Over the next three months, DEC will target Giant Parramatta Grass in Bongil Bongil NP, Ulidarra NP and Bindarri NP. DEC also plans to carry out control of grasses and lantana on Muttonbird Island NR and extensive bush regeneration in Coffs Coast RP, Bongil Bongil NP, Moonee Beach NR, Sherwood NR and South Solitary Island NR. Future plans include producing site plans for implementation of bitou TAP for Look-at-me-now Headland, Dammerals Headland, Diggers Head and Bare Bluff. DEC also intends to produce weed control calendars (incl best management practices) for Toormina depot, to distribute the Moonee Beach NR and Coffs Coast RP Coastal Weeds Strategy and local management plans, and to produce basic weed action plans for Bindarri NP and South Solitary Island NR.

Bellingen Shire Update

Noxious Weed Administration

Council adopted the recommendation from the Environmental Levy Committee meeting and funded three weed management projects. These projects were:

1. Roadside Camphor Laurel Removal - \$35K per year for 3 years
2. Dangars Falls Antarctic Beech cool temperate rainforest - \$10K per year for 3 years
3. Urunga Lagoon project - \$25K per year for 3 years

Noxious Weeds Education & Training

Weed Identification Field Day

The Vegetation Officer attended and spoke on weed identification and management strategies to participants in a weed field day co-organised by NSW Primary Industries (Agriculture).

Pesticide Notification Workshop

Councils Vegetation Officer attended a workshop outlining the requirements of the forthcoming implementation of the pesticide notification regulation. Public authorities including local councils will need to prepare plans to inform people before using pesticides outdoors by February 1 2007. The steps Council is required to take are as follows:

1. Prepare draft
2. Advertise for community consultation
3. Consider community input
4. Finalise draft and have adopted by Council
5. Gazette final document
6. Publish on website

Noxious and Environmental Weeds Program of Works

Completed Works – Lantana, Camphor Laurel and groundsel bush program completed in the period.

Coastal weed program and grant funding to be reviewed and continued.

Weed Dragon Trials implemented on Kalang Rd.

Planned Works - Giant Parramatta grass policy drawn up for control of large infestations on the plateau.

Splatter gun trials planned for sections of Darkwood & Kalang Rd

DEC, in the past three months, has carried out mistflower and black willow control in New England NP, Sunday Creek and Upper Bellinger River. Lantana control has occurred in Guy Fawkes River NP and Chaelundi NP. Privet control has occurred in Dorrigo NP, Deervale NR and Nymboi-Binderay NR. Over the next three months, DEC will carry out Giant Parramatta Grass control in Bellinger River NP, Guy Fawkes River NP, Chaelundi NP and New England NP. Extensive bush regeneration will also be carried out in Dorrigo NP. DEC plans to produce weed calendars (incl. best management practices) for the Dorrigo plateau and Ebor depots.

Nambucca Shire Update

Inspectorial activities

Property inspections have continued this quarter throughout the Nambucca Shire area. The principal weed problems included Broad Leaf Pepper Trees, Giant Rats Tail Grass and Groundsel Bush.

The townships of Nambucca Heads, Scotts Head, Macksville, Valla Beach and Bowraville were inspected for any Noxious Weeds growing within urban properties.

Low rainfall early in the quarter and cooler climatic conditions has restricted the growth of many weed species. This also reduces the effectiveness of control programs by landowners / occupiers throughout this time of the year.

Total number of inspections	414
Total number of properties with weeds present	120
Number of letters requiring control	24
Section 18-Notice to control	6
Section 20 - Enforced control	1

Completed works

Camphor Laurel infestations have been controlled on roadside reserves between Macksville and Bowraville, and in the South Arm area, with high success. A broad scale Bitou Bush control program has been implemented in this quarter with all infestations in the Nambucca, Hyland Park and Valla Beach areas treated by hand spraying. The coastal fringe in Scotts Head has also been treated from the South Headland to Fosters Beach, with lands north of Fosters Beach requiring treatment. (A dispute on ownership of this land is preventing a control program from being implemented within this land).

A vine weed program funded by the CMA in the upper Taylors Arm area (on private lands) was completed, with mixed results. More funding has been secured by the CMA to follow up this control on this sensitive Riparian Zone. An infestation of Angels Trumpet (*Datura candida*) was also located in this same area, which will be controlled in the coming months. Australian Rail Track Corporation has conducted a clearing program within its lands and has also controlled infestations of Groundsel Bush (Eungai and South Macksville) and Kudzu (Wirrimbi).

Forests NSW have released *Salvinia* weevil at two locations in Nambucca State Forest, these are being monitored. *Lantana* rust has been released at a site in Viewmont State Forest; to date, it appears to be successful.

Noxious Weeds Education & Training

Dunecare groups were approached in the Valla Beach and Scotts Head areas to inform them of Council's weed control activities in the effort to effectively coordinate control programs. Some plant identification was also performed on Noxious Weeds, Environmental Weeds and coastal plants. Tim Woodward participated in Legal Training for Weed Inspectors Stage I and II.

Future Plans

- * Review local noxious weed management plans.
- * Ongoing control of Camphor Laurels on roadside and other reserves.
- * Privet control on all roadside reserves.

- * *Lantana* control on Council reserves.
- * Follow up control of *Mysore Thorn* infestations in the Bowraville area.



Photo: Mysore thorn

DEC, in the past three months, has carried out bush regeneration targeting a variety of weeds in Yariabinni NP, Ngambaa NR, Valla NR and Jagun NR. On-ground Bitou Bush control has occurred in Valla NR and Jagun NR. Over the next three months DEC will carry out Giant Parramatta Grass control in Ngambaa NR, Dungirr NP, Gumbayngirr SCA and Juugawaarri NR. Broad leaf paspalum will be controlled in Bollanolla, Dungirr and Little Wonder. Extensive bush regeneration will occur in Yarriabini NP and Ngambaa NR. DEC plans to produce a weed control calendar for Bowraville depot.

The information contained in this Newsletter is based on knowledge and understanding at the time of writing / compiling (28 September 2006). However, because of advances in knowledge, readers are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer from the NCWAC or appropriate member organization or the user's independent adviser. When using herbicides always read and follow the label and ensure that the herbicide is registered or there is an appropriate permit for the intended use.