

TASWEEDS

From the prez..

Three interesting speakers and enthusiastic participants saw an end to one year and the dawn of the next at this year's AGM. Attended by approximately 25 people, presentations were made on the hot topics of weeds as food plants (see p 11), hemp and aquatic weed management. All in all a good day and I think, since the society's inception, the closest we've come to a quorum yet. Thanks to all those who helped out.

This edition of the newsletter lists this year's committee members (p2.). A special welcome aboard to the newbies. I'd also like to thank again Ian Macleod, Andrew Bishop and Mat Sherriff who have all left the committee this year. These people played a significant role in the founding of the society and deserve a well earned break and our heart felt appreciation.

Now that the conference is over the executive is looking forward to running a number of interesting activities and providing special opportunities for our members. Keep an eye out for the **Grass Identification Field Day** later on in the year and your free colour **Weed Mapping** booklet in this edition of the newsletter.

As always were more than interested in hearing your ideas on what you would like to receive for your membership. Having made a reasonable profit at the conference we're looking for ways to spend this money to provide maximum benefit for our members. Be sure to drop us a line with your thoughts.

Mark Boersma

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SECRET WEEDIES BUSINESS

Who's What - Tasmanian Weed Society Executive

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Where Would You Like to See Our Funds Go?

The Tasmanian Weed Society's financial position is at present relatively modest due to a small conference profit of approximately \$4000. The question of how to deal with these funds has raised a number of issues that the Executive feels requires input from members. Some of these issues are:

- Should we invest or spend? It is unlikely that interest gained from banking the funds would amount to any useful sum. Are there other suitable investment options? Instead of sitting on this pile of money, it could be spent on providing benefits to members for as long as it lasts.
- If we divest, on what would you like to see the money spent? Some suggestions are;
 - Subsidised publications (eg. The society will seek to subsidise the purchase of "Common Grasses of Tasmania – An Agriculturalist's Guide" for members attending the Grass Identification Field Day (see later)

- Subsidising membership to keep fees as low as possible
- Encouraging emerging weedies through small research grants for honours students
- Travel grants for professional development of members

These are just a few suggestions and I am sure that collectively, we can come up with many more. As you might appreciate, each option and especially ones like the last two listed, will create its own issues (eg. for travel grants, how much should be allocated, what criteria would be used to evaluate an application, who would evaluate, do we specify outputs for each application, do we exclude on ground work as opposed to research). Your thoughts and opinions would be greatly appreciated. Please send your response to the president or the secretary or mention it to an executive member next time you see one. Responses required by **June 30th, 2000** please.

Mark Boersma

MEMBERSHIP FEE REMINDER

Yep, It's that time of the year again (actually, fees were due in March) Anyway, get your money into the Secretary, Chris Barnes at GPO Box 1480, Hobart, 7001 asap please. Let us know at the same time if any of your contact details have changed.

Fee schedule:

Students:	\$5.00
Individuals	\$15.00
Community Groups	\$20.00
Corporate Membership	\$30.00



FEATURES

Erica lusitanica - Hydro Tasmania's Spanish Heath Control Trials

By Anna Barnes

Extensive infestations of Spanish heath (*Erica lusitanica*) covering approximately 10 hectares occur at Gowrie Park in Tasmania's North West. The control trials described below were conducted as part of the Hydro's Mersey-Forth Weed Strategy.

Treatments trialed included spot-spraying with Grazon®, Garlon® and Brush-off®, cut and paint trials with Roundup®, flameweeding and covering plants with weedmatting. Manual control trials and cut and paint treatments were done in April 1999. Chemical control trials were done in June 1999.

Hydro Tasmania sponsored a team of Australian Trust for Conservation Volunteers to assist with the cut and paint trials. Various concentrations of Roundup® were applied to the cut stumps; <10%, %50 and 100%. The undiluted rate was the most effective with approximately 10% regrowth.

The flameweeder showed promising results three months after initial treatment. Both the foliage and stems appeared dead and the plants dislodged easily from the soil. However, by the final assessment the plant's foliage was green and regrowth had occurred from the base of the larger plants.

Smaller plants about 20cm in height were covered with black weedmatting. This proved to be a successful method providing 100% control rate however, it is non-selective.

The effects of the spot-spray applications were evident by the first assessment, three weeks after the initial treatment. Results were similar for all herbicides. Plants were brittle, dislodged easily from the soil and the leaves fell off when the branches were shaken. By three weeks the foliage became brown at the tips with the lower sections of foliage remaining green. By the final assessment, 34 weeks after the initial treatment, the plants had become grey and brittle with green foliage on the tips on some larger plants. Regrowth from the bases had also occurred on the majority of plants.

Once again Spanish heath has proven to be a difficult weed to control. Follow-up treatment will be required to determine effective control techniques.

Contact Anna Barnes at Hydro Tasmania Environmental Services for further information on 03 62 30 5725



FLASHBACK - GARDEN ESCAPES.....IN THE 1950s

Just as adolescents frequently behave as though they are the first to discover sex, so too do many of us approach the invasive garden plant problem as though it were entirely new. We'll leave the first one alone but the article below demonstrates that many of the ornamental plants we now recognise as weeds (shock, horror) were in fact recognised as weeds some half a century ago at least. Our weedy history helps explain our weedy present, which in turn will define our weedy future.... What can we use from our legacy of exotic invasions to secure our visions for the future? More next issue..

The author of the article below, T.D. Raphael, was a research horticulturalist with the Tasmanian Department of Agriculture for 42 years. An Irishman with a degree from Cambridge, he was one of the first of many graduates to be brought here to work. Beginning in 1927, T.D. had a hand in all aspects of horticulture from orcharding to berry fruit to vegetables to honey. A special interest of his was gardening, pursued through many contributions including radio and television garden talks, judging numerous gardening competitions and flower shows and the very popular **Gardening in Tasmania** (first published 1972). The article that follows, however, reveals a man who could cast his gaze beyond the garden fence and think objectively of the impacts of plants known otherwise for their beauty and the simple pleasures they brought to those who grew them intentionally. T.D. Raphael, Senior Horticulturalist, retired in 1969. He has since passed on but has left open valuable windows, such as **Tasmanian Garden Escapes**, through which we might peer at and ponder our weedy past.

(Thanks to Graeme Raphael (son of T.D.) for bibliographic detail)

PAPERS AND PROCEEDINGS OF THE ROYAL SOCIETY OF TASMANIA, VOLUME 89
(published in 1955)

Tasmanian Garden Escapes

By

T. D. RAPHAEL

Department of Agriculture, Hobart

Under comparatively mild conditions and with a well distributed rainfall, it is not surprising to find many garden plants, particularly those of British origin, that have found conditions well-suited to their development and increase in Tasmania.

In order to simplify this discussion the following definitions may be of assistance:-

(1) a "garden plant", in its most general sense, is a flower, fruit, vegetable, herb ornamental normally cultivated in Tasmanian gardens for house use or ornamental purposes.

(2) a "garden escape", then, is a garden plant as defined which has found local conditions so favourable that it has spread beyond the bounds of the original

cultivated or enclosed area and proved its ability to compete successfully with native and other flora.

However, it is often difficult to be precise. For example, Poppies, Blue Echium, Chamomile and even Horehound and Scotch Heather may have been introduced and used as garden plants here, but are regarded as wild flowers in Great Britain. Again they might have come in pasture or grain seeds, an origin

which could be presumed to exclude them from the category of a "garden escape". Another query in regard to the use of the term "escape" is the matter of degree-how often and how effectively must a plant escape to place it in the true escape class, and where can the line be drawn? Most of the plants listed could be classed as frequent and definite.

Bearing in mind these considerations, the list which follows, though open to considerable criticism, endeavours to cover the field as it appears at the present time. Most of the "common names" given are of English origin but variations in usage often occur. So far as the Botanical names are concerned a number of specimens may require further checking in regard to species. Under the heading "Observations" reference is first made to frequency and distribution, then the situation or local conditions which it apparently favours, and finally one or two of the districts or locations where the plant has been seen.

ANNUALS AND PERENNIALS

Common Name	Botanical Name	Family	Observations
Alyssum	<i>Lobularia maritima</i> (L.) Desv.	Cruciferae	Road cuttings, rocky banks, e.g., Austins Ferry, &c.
Convolvulus	<i>Calystegia sepium</i> (L.) Roem. et Schult.	Convolvulaceae	Scattered, e.g., suburban
Daisy Bush (yellow)	<i>Euryops abrotanifolius</i> D.C.	Compositae	Scattered and frequent Channel areas
Daisy (rock)	<i>Felicia erigeroides</i> D.C.	Compositae	Scattered, suburban
Eschscholtzia	<i>E. californica</i> Cham.	Papaveraceae	Occasional on good soils, Kingston
Forget-me-not	<i>Myosotis sylvatica</i> Ehrh.	Boraginaceae	Scattered and frequent: creek beds, &c., N.W. and Fingal
-	<i>Myosotis arvensis</i> (L.) Hill	Boraginaceae	Roadsides, Eaglehawk Neck
-	<i>Myosotis palustris</i> L.	Boraginaceae	Roadsides, National Park
Foxglove	<i>Digitalis purpurea</i> L.	Scrophulariaceae	Scattered and frequent, Pyengana, Wyena, &c.
Honesty	<i>Lunaria annua</i> L. (Syn. <i>Lunaria biennis</i> Moench)	Cruciferae	Occasional, roadsides, Kingston and suburban
Lupin	<i>Lupinus arboreus</i> L.	Leguminosae	Scattered and extensive: Seven Mile Beach, Bridport
Linaria	<i>L. bipartita</i> Wild	Scrophulariaceae	Occasional, sands, coastal and suburban
Marigold (Pot.)	<i>Calendula officinalis</i> L.	Compositae	Scattered, suburban
Musk	<i>Mimulus moschatus</i> Doug.	Scrophulariaceae	Scattered, ditches, Nat. Park, Lilydale.
Mullein	<i>Verbascum thapsus</i> L.	Scrophulariaceae	Scattered and extensive, Sorell, &c
-	<i>Verbascum virgatum</i> Stokes	Scrophulariaceae	Frequent, roadsides, Bushy Park
Mignonette (Dyer's Rocket)	<i>Reseda luteola</i> L.	Resedaceae	Scattered and extensive: Sorell, Sandfly, &c.
Oxalis (pink)	<i>O. latifolia</i> H.B. et K.	Geraniaceae	Scattered and extensive: suburban
Oxalis (Soursob) (large yellow)	<i>O. cernua</i> Thunb.	Geraniaceae	Scattered, suburban
Blue Echium (Patersons Curse)	<i>E. plantagineum</i> L.	Boraginaceae	Scattered, North East and Tamar
Blue Echium (Vipers Bugloss)	<i>E. vulgare</i> L.	Boraginaceae	Scattered, North East and Tamar
Poppy	<i>Papaver somniferum</i> L.	Papaveraceae	Scattered, general, e.g., Sassafras and North West
Scabious	<i>S. atropurpurea</i> L.	Dipsacaceae	Scattered, roadsides and suburban
Valerian (spur)	<i>Centranthus ruber</i> (L.) D.C.	Valerianaceae	Scattered, extensive, general, banks and cuttings, Kingston, suburban
Winter Heliotrope	<i>Petasites fragrans</i> (Vill.) C. Presl.	Compositae	Scattered and suburban

SHRUBS

Common Name	Botanical Name	Family	Observations
Broom (Canary)	<i>Cytisus monopessulanus</i> L.	Leguminosae	General and extensive, Kingston, Scottsdale, &c.

Broom (Common)	<i>Cytisus scoparius</i> Link	Leguminosae	General and extensive, Kingston, Scottsdale, &c.
Hypericum (Rose of Sharon)	<i>H. calycinum</i> L.	Guttiferae	General roadsides, Bruny Is., North and North West
Hypericum (Tutsan) L.	<i>H. androseum</i>	Guttiferae	General roadsides, Bruny Is., North and North West
Fuchsia	<i>F. magellanica</i> Lam.	Onagraceae	Occasional, e.g., Oyster Cove, West Coast and Coastal
Heath	<i>Erica lusitanica</i> Rud.	Ericaceae	General and extensive, Huon, Lilydale, &c.
Heather (Scotch)	<i>Calluna vulgaris</i> (L.) Hull	Ericaceae	Occasional on acid sands Kingston, Bruny Is.
Periwinkle	<i>Vinca major</i> L.	Apocynaceae	Scattered and general, roadsides, Cressy West Tamar
Tree Lucerne	<i>Cytisus proliferus</i> L.	Leguminosae	Scattered, roads, suburban
<i>Four other shrubs might qualify in this section-</i>			
Barberry	<i>Berberis vulgaris</i> L.	Berberidaceae	Frequent southern districts, Sorell
Hawthorn	<i>Crataegus monogyna</i> Jacq.	Rosaceae	General, e.g., Cressy and Lake River
Laurel	<i>Laurus nobilis</i> L.	Lauraceae	Occasional, e.g., Tamar
Sweet Briar	<i>Rosa rubiginosa</i> L.	Rosaceae	General and extensive, Brighton, Conara
African Boxthorn	<i>Lycium ferocissimum</i> Miers	Solanaceae	Originally planted as shelter hedges and ornamental in exposed situations, has also spread, particularly in the central districts, Tunbridge, &c.

BULBS AND CORMS

The following plants, though multiplying in most instances mainly by bulbs or corms, have succeeded doubtless mainly by mechanical distribution, in establishing themselves firmly in many localities.

Common Name	Botanical Name	Family	Observations
Daffodil	<i>Narcissus Pseudo-Narcissus</i> L.	Amaryllidaceae	Frequent and general fields and ditches, Channel, Tamar
Ixia	<i>I. maculata</i> L.	Iridaceae	Scattered, mainly suburban, Tarroona
Watsonia	<i>W. meriana</i> Mill var. <i>iridifolia</i> Ker-Gawl.	Iridaceae	Scattered, Huon, Gordon, Mt. Direction, East Tamar

FRUITS

Common Name	Botanical Name	Family	Observations
Blackberry	<i>Rubus</i> spp.	Rosaceae	General and extensive, hedges and waterways
Cherry (Kentish)	<i>Prunus cerasus</i> L.	Rosaceae	Scattered and amongst hedges, &c., Huon and foothills, East Coast
Cherry Plums	<i>Prunus cerasifera</i> Ehrh.	Rosaceae	Scattered and amongst hedges, &c., Huon and foothills, East Coast
Plums	<i>Prunus domestica</i> L.	Rosaceae	Scattered and amongst hedges, &c., Huon and foothills, East Coast
Apple (seedling)	<i>Pyrus malus</i>	Rosaceae	Scattered, hedgerows, &c., Scottsdale, Channel, Huon

VEGETABLES AND HERBS

Common Name	Botanical Name	Family	Observations
Chicory	<i>Cichorium intybus</i> L.	Compositae	Scattered, roadways and embankments, e.g., Claremont
Chamomile	<i>Anthemis nobilis</i> L.	Compositae	Scattered, mainly suburban
Salsify	<i>Tragopogon porrifolius</i> L.	Compositae	Scattered, mainly suburban
Water Cress	<i>Nasturtium officinale</i> R.Br.	Cruciferae	Scattered and general, creek beds, e.g.,

Mint	<i>Mentha piperita</i> L.	Labiateae	Bridgenorth Scattered and general, ditches, Sheffield
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TREES

Common Name	Botanical Name	Family	Observations
Elm (corky bark)	<i>Ulmus thomasi</i> Sarg.	Ulmaceae	Scattered, Kingston, Perth, &c.
Pine	<i>Pinus radiata</i> Don.	Coniferae	Scattered and general, Longley, Tunnel Hill
Willow (weeping)	<i>Salix babylonica</i> L.	Salicinae	Scattered and general, rivers and waterways
Willow (white x crack)	<i>S. alba</i> x <i>fragilis</i>	Salicinae	Scattered and general rivers and waterways.
The following trees have been noticed occasionally, mostly as isolated trees or groups of two or three -			
Ash	<i>Fraxinus excelsior</i> L.	Oleaceae	Scattered and suburban
Sycamore	<i>Acer pseudoplatanus</i> L.	Sapindaceae	Scattered and suburban
Birch	<i>Betula alba</i> L.	Cupuliferae	Scattered and suburban

ACKNOWLEDGMENTS

It is desired to acknowledge the assistance of Dr. W. M. Curtis, University of Tasmania, in checking the list detailed; to Mr. H. A. Turner late of the Tasmanian Department of Agriculture and Dr. D. Martin for helpful information regarding Northern districts, and others from whom specimens and information have been received from time to time.

REFERENCES

Identification and nomenclature has been based on the following works:-

- "Flora of the British Isles" Clapham , Tutin, and Warburg.
 - "Manual of Cultivated Plants" L.H. Bailey.
 - "Wayside and Woodland Blossoms" Edward Step.
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New Weed Mapping Guidelines are Here!

The latest edition of the Tasmanian Weed Mapping Guidelines, Edition 3, is finally released. Find a free copy included with the newsletter.

The new edition has received a substantial facelift, with the major changes being:

- a new tutorial for calculating AMG coordinates
- a new section on handling weed mapping data using computer software
- a totally revised, quicker to use data collection sheet, which mirrors the emerging State weeds database structure (see article following)

An additional 'goodie' has also been thrown in for TWS members. The clear plastic strip with a map grid and other information printed on it is a *Roma*. It was designed by yours truly for anyone using 1:25000 topographic maps. By placing the grid on the left of the Roma over the grids on the map, you can quickly and accurately calculate the easting and northing coordinates. When used in conjunction with the new explanation in the Guidelines for calculating eastings and northings, I think you'll find this a marvellous, yet simple tool to speed up your work and improve accuracy.

A few other useful bits of information are also printed on the Roma, including the DPIWE's web site address and freecall phone number and a handy compass (plus some shameless advertising of the TWS and WeedPlan).

The package of Guidelines booklet, Datasheet and Roma equip you with just about everything you need to undertake a weed mapping project. Add some 1:25000 maps, some willing volunteers and some not so willing weeds and you are well on your way.

Additional copies of the Datasheet and Roma are available free of charge (no requests for 100 at a time please!) and the Guidelines

booklet for \$10, which covers the cost of printing.

Stephen Welsh.

Co-ordinator,

Tasmanian Weed Mapping Network.

Development of a State Weeds Database

What's missing in this picture: Australia's leading weed mapping system, ready access to computers for most of Tasmania's Community Groups, Government Agencies and Private Organisations, and heaps of data of weed infestations already collected and still being collected by these groups?

Answer: Somewhere to safely store all this information and a way to share it with others.

Solution: RETICLE - A Tasmanian Weeds Database.

The idea of a statewide weeds database has been mooted many times in the past. Whilst it sounded simple enough, actually building such a database was fraught with problems. For instance, many of the existing data sources were not compatible with each other. Additionally substantial resources, both money and computer expertise, would be required to produce a database capable of storing and transferring all the information whilst remain simple to use.

After several informal discussions, a meeting was held at Swansea in March to develop guidelines of how the database could and should work and who should be involved. Represented at this meeting were DPIWE, East Coast Regional Weed Strategy, Tamar Valley Weed Strategy, Forestry Tasmania and Glamorgan / Spring Bay Council. From this meeting yours truly received the 'short straw' and took on the role of facilitating development of the database.

Discussions have so far been held with various computing experts and a scoping document has been distributed amongst key stakeholders to

assess their level of interest and involvement in the database. Whilst much work remains to be done before the database goes live for use, here is the proposed structure and mode of operation, to whet your appetite.

A network of databases will be developed and managed by DPIWE. These databases will use the TWMN Weed Mapping Datasheet as the standard data fields. Existing data held by stakeholders, such as Parks and Wildlife and Community Weed Management Groups, will be uploaded to the network of databases on a 'closest fit' basis. What this means is that many of the fields of information used in the TWMN Datasheet have not been used for previously collected data, so obviously there will initially be many 'blanks'. As most groups undertaking weed mapping now use the TWMN Datasheet, this problem will disappear over time.

Participating organisations (stakeholders) will access the databases via the internet, with a logon / password required. Once logged on, users will be able to download information from other stakeholders to supplement information they already have. The group will also be able to upload their own information to the benefit of other stakeholders.

Each stakeholder can then manipulate this wealth of information in what ever manner they wish. It is likely the majority of stakeholders will use GIS software as most either own this already or can access it through a local Council.

This sharing of information amongst all stakeholders will allow us to build up a very comprehensive database of weed locations throughout Tasmania. For the first time we will be able to accurately assess the distribution of individual species and thus target the most effective and cost efficient deployment of on-ground resources in weed control.

Let's take a real world situation to explore this a little further.

The Tamar Valley Weed Strategy is undertaking a comprehensive mapping project of private land in the West Tamar area. This information is recorded onto aerial photographs of each property and accompanying datasheets. TVWS then transfers this information to its own GIS.

Next, TVWS will be able to log on to the Reticle databases, and transfer this valuable data to the Reticle database for others to access. In return, TVWS will be able to download any weed mapping data of the West Tamar region collected by other groups, for instance roadsides (captured by Transport Division and local Council and crown land (DPIWE). TVWS can then combine this new data with their own, and build up a complete picture of weeds in the West Tamar area covering private and public lands, without having to go out and map all the roadsides and crown land as well.

Whilst much work remains to be done, things are moving along very positively at the moment, with strong support from many of the key stakeholders. Concerns over privacy of information and ownership of data have arisen, and will be fully addressed before the database is operable.

Keep your eye on *Tasweeds* for further updates on this exciting project.

Stephen Welsh.

Co-ordinator,

Tasmanian Weed Mapping Network.

(Oh, and why the funny RETICLE name I hear most of you asking? Well the word Reticle is a Latin description of the network of veins that comprise the transport systems of plants. It was adopted for this project as it, like veins in a plant, is a network of good things, and as the database is all about plants, it seems sensible (to me anyway) to adapt a word which hails from the plant kingdom. Simple, really...)

**GET YOUR TEETH INTO THIS!
EDIBLE WEEDS**

From the seminar given by Bruce French at the 2000 Tasmanian Weed Society AGM

Bruce French, BAgSc, author and principal director of Food Plants International shared elements of his fascinating personal journey at the 2000 AGM.

It began with an encounter with Prickly Pear flavoured ice-cream whilst in Rome, whereupon Bruce began to find his agricultural training too narrow in its perspective. An emerging interest in the value of species not included in conventional agriculture became a professional passion after time spent at an agricultural college in Papua New Guinea. Here, students were invited to give feedback on the food crop production courses Bruce taught. Their responses included concerns that they were not learning enough about PNG foods and agricultural practices, and that the heavily Australian emphasis in the course content was to their disadvantage. Bruce listened and knowing very little about PNG food plants at the time, set about finding out. He asked students to do food garden surveys in a nearby village. The 650 different varieties of banana identified in that single area set him on a new learning curve.

Part of Bruce's subsequent investigations into the food value of plants considered non conventional in many western agricultural circles, include many species we commonly regard as weeds. *Solanum nigrum*, the blackberry nightshade, is considered sufficiently poisonous to cause Tasmanian peas to be rejected by canneries. However, this same plant and its relatives such as *S. nodiflorum* are cultivated and consumed in countries all over the world. The amaranths likewise are an eye-opener. Here, and in many developed countries, they are considered extremely undesirable crop weeds. However, Bruce has found at least 40 different Amaranth species are consumed all around the tropics. They are one of the first edible plants to appear in a new season's garden and, being highly

nutritious, are a godsend to people in much need of iron and protein in their diets. And so it is for many other plants we consider weeds.

In support of this, Bruce refers to Duke's book of edible weeds. This author reveals that over half of the plants that appear on Holmes' "World's Worst Weeds" list are identified as being edible. Duke has also documented 100 edible plants in the east and of these, 73% are listed as weeds by the Weed Science Society of America.

Bruce contends that if our definition of weeds becomes too loose and includes almost any plant that simply grows well naturally, then we run the risk of ignoring the food potential of species that could provide some very real solutions to the problem of feeding people around the world adequately. In PNG, for example, the Guava, *Psidium guajava*, was on the noxious plant list for many years because it grew so vigorously. It has three times the Vitamin C content of citrus fruits. At the same time, the PNG Agriculture Department had full time researchers trying to figure out the citrus crop production problems that naturally arise when trying to grow sub tropical species in tropical to equatorial climes. None of the citrus was for export (PNG's spectacular fruit fly diversity sees to that) – rather it was thought, probably as a result of listening to western experts, that citrus was the best source of Vit C. The guava "weed" was ignored by scientists for too long. Interestingly though not surprisingly, PNG children have always eaten guavas voraciously.

For those of you wanting to know more about this important topic, or about the objectives of Food Plants International, Bruce French can be contacted at bfrench@vision.net.au

Weed Seed Predators

Opportunistic invertebrates that feed on weed seeds may be the most significant broad spectrum natural biological weed control affecting weed populations. Ants are important predators in

Victoria. Agriculture Victoria studies at Rutherglen have shown that they prefer wild radish and annual ryegrass over canola and clover seeds and bury the seeds in their nests, preventing germination. Experiments in Canadian fields infested with Barnyard Grass and fat hen show that ground dwelling invertebrates accounted for 80 to 90% of seed consumed. Predation was highest in no-till and mouldboard ploughed environments. Cultivation in general reduces soil invertebrate predator populations. Beneficial arthropods should be conserved and management strategies that augment their natural populations should be encouraged.

Sources

Cromar, H.E., Murphy, S.D. and Swanton, C.J. (1999), Influence of tillage and crop residue on post dispersal predation of weed seeds. *Weed Science* 47(2), 184–194.

Ants new weapon to combat weeds. *Wangaratta Chronicle* 17 May 1999, p9.

From: Under Control No. 12, April 2000

Contributed by Mark Boersma

Evil Weevils

Killing crop pests is a high tech business. The weevils that lay their eggs in cotton bolls are a particularly costly nuisance and have inspired some bizarre technologies.

To decide whether to spray cotton fields, for example, researchers have bugged cotton bolls with microphones to listen for larvae inside as they wriggle and munch away (New Scientist, 11 June 1994, p5). And farmers now place traps laced with boll weevil pheromone around cotton fields to keep the blighters off the crop.

Monsanto's latest weapon is a variety of genetically modified cotton that is resistant to its pesticide, Roundup. But even this most modern of solutions has its Achilles heel. In years when they don't plant cotton, some American farmers grow soybean that is also resistant to Roundup. In these fields, cotton seeds planted by the previous year's crop grow like weeds. And there are no weevil traps, so when farmers plant cotton again, the weevils are ready to make a comeback.

It just goes to show. Nature, like a child in a tantrum, always wants the last word.

From *New Scientist*, April 15, 2000, p 3.
Contributed by Mark Boersma

(Ed's note: One could argue that Nature, unlike a child in a tantrum, ought not be continually ignored)

Weedbuster Week



Calling all Tasweedies! October will be upon us before we know, so how about organising your **Weedbuster Week** event or activity now. It's a great chance to spread the word on weeds and to get some well deserved public recognition of the things you do all year to combat the problem.

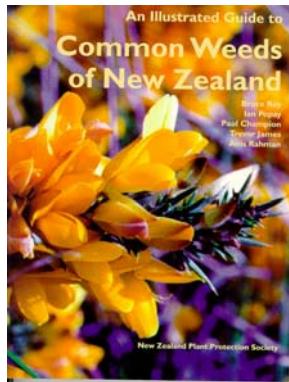
This year's theme is **Early Intervention**, focussing on actions and strategies that stop small weed problems from blowing out.

Think about what you and your group might do - a weed pull or something else hands on, a field day, a display, a debate, what about something that's never been done before.

For a big incentive we have the **ATCV** to thank. Along with Weedbusters Tasmania (the group that coordinates the campaign here), ATCV has agreed to provide prizes of an ATCV team for 5 days to **three** lucky groups whose registration forms are drawn out of a box! Think of the boost this could give to your local community environment group/school. Think of the backbreak saved! So fill out the registration form and other information also available on the Weed Section web site at www.dpiwe.tas.gov.au (select "Land and Water")

Any enquiries about participating in Weedbuster Week to :

Cindy Hanson
Coordinator, Weedbusters Tasmania
Email: Cindy.Hanson@dpiwe.tas.gov.au
Phone(03) 63 365414

REGULARS**Weedy****Reads.....**

An Illustrated Guide to Common Weeds of New Zealand

(Bruce Roy, Ian Popay, Paul Champion, Trevor James, and Anis Rahman)
Published by New Zealand Plant Protection Society
ISBN 0-473-05296-2

How useful are weed identification/information books from other countries to Tasmanian weedies? In the case of this publication, very useful. Obviously there are climatic and geographic similarities between parts of New Zealand and Tasmania that ensure some similar weed problems. Where there are differences, the text provides excellent overviews on weeds that perhaps could naturalise here and that we need to be forever on alert.

Written by a group of esteemed weedies in New Zealand, the book is printed in full colour and the photographs of weeds are of high quality making them very useful in assisting in identification. The authors state in their introduction that the book targets a wide audience range and it does this very well avoiding a dry heavy text on plants but providing something far more practical than a picture book. Of particular interest is an eight page guide to flower colour and size that groups weeds by their flowers.

The plant descriptions are succinct and descriptive and ordered alphabetically by family names. The layout of photographs and descriptions is easy to read and visually attractive. The entries are indexed both by botanical names and common names.

Andrew Bishop
Devonport

Training Opportunities....

It is a book I refer to quite regularly and that persuades me to recommend it as a 'must have' reference for any keen weedy.

New Publications.....

(Members,

If you become aware of any new texts, articles, videos or other resources that you think would be useful to Tassie Weedies, let us know and we'll include them here)

Title: Community Weed Management in Tasmania: "A Guide to Developing and Implementing a Community Weed Management Strategy"

Author: Andrew Bishop

Publisher: Department of Primary Industries, Water and Environment

Description: An initiative of WeedPlan and the Tasmanian Weed Management Committee, this publication outlines, explores and describes the community weed management phenomenon. Not only does it define Community Weed Management (CWM) in the context of its evolution in Tasmania, it provides snapshots of some successful CWM projects and provides proven guidelines for developing a CWM strategy. Details on sources of CWM support and funding are provided, as are valuable references and relevant web addresses to assist community weed managers. With sections on implementation, monitoring, evaluation, and helpful hints and case studies provided by experienced community weed managers in Tasmania, this publication for the first time in Australia provides a practical manual to guide established and new community weed managers alike in their approach to strategic regional weed management projects.

Release Date: Hardcopy June 2000, Electronic Mid 2001

Cost: (Hardcopy) : \$12.00

GIS and GPS for Weed Mapping

Two spatial techniques, Global Positioning Systems (GPS) and Geographic Information Systems (GIS) are becoming valuable tools for weed management

in terms of locating, mapping and analysing areas of weed infestation at a range of scales.

This course is designed to demystify the technology to those involved in weed and vegetation management. The course was developed by Eleanor Bruce of the University of Tasmania and DPIWE Weed Section's Christian Goninan. The dates for the course have yet to be set but an August – October, 2000 timeframe is anticipated.

If you are interested in participating, contact Cindy Hanson (63 365414) for details regarding course content and costs.

Grass Identification Field Day

Here's your chance to get down in the grass with an expert!

Dr Peter Lane from the University of Tasmania has agreed to give the low down on how to tell a awn from auricle, an *Elymus* from a *Lolium*. (and that's a *Bromus*!) The field day will be held in the north of the state in spring. As a bonus, participants will be able to obtain Tas. Weed Soc. subsidised copies of Peter's book, *An Agriculturalist's Guide to the Grasses of Tasmania*.

Check out the next Tasweeds for details.

Weed Alert Network News....

Do you.....

- Have reasonable botanical skills?
- Spend a good amount of time in the field?

RICE GRASS TEAM REPORTS IN.....

The guys have been very busy... Here's a summary of some of their recent exploits.

- Have an interest in preventing new weed problems in Tasmania?

Then consider yourself invited to join Tasmania's Weed Alert Network (WAN). The WAN is a strategy in post barrier preventative weed management whose focus is pest plants recently established in the state and those that are likely to enter at some stage. WAN members are provided with basic training and materials which allow them to identify target plants. Sightings of suspicious plants, made in the course of members day to day activities, are channeled along a streamlined pathway that involves DPIWE's Regional Weed Management Officers, the Tasmanian Herbarium, the Weed Alert Taskforce and the state's Weed Incursion Response Group. The Weed Alert Network is a critical component of preventative, strategic weed management in Tasmania. Thus far, members have been primed to be on the lookout for:

Fringed Dodder (*Cuscuta suaveolens*)
Spiny Amaranth (*Amaranthus spinosus*)
Needle Burr (*Amaranthus albus*)
Lagarosiphon (*Lagarosiphon major*)
Three Flowered Nightshade (*Solanum triflorum*)
Chilean Needle Grass (*Nassella neesiana*)
Alligator Weed (*Alternanthera philoxeroides*)
Kochia (*Bassia scoparia*)
Nut Grass (*Cyperus rotundus*)

Visit the Weed section website at www.dpiwe.tas.gov.au (select "Land and Water") for more information on these plants

If you are interested in becoming involved in the Weed Alert Network contact:

Cindy Hanson
Cindy.Hanson@dpiwe.tas.gov.au

Phone (03) 63 365414

The Rice Grass Management Team completed stages of their first season of rice control work. Favourable weather throughout December, January and February allowed the Management Team to treat all infestations in Bridport, Little Swanport estuary, Derwent River and St Helens. Preliminary field assessments indicate that control efforts have been successful. A thorough



assessment of treatment effectiveness will be conducted in October/November 2000.

Area-Based Management Plans

Area-Based Management Plans have successfully been implemented in Little Swanport, and Bridport. Management plans are currently being developed for Port Sorell and Smithton. The plans will be outlined and discussed in public meetings involving community, industry and government. Meetings for Port Sorell and Smithton are expected to occur in May/June. A draft Area-Based Management Plan for Port Sorell can be found on our web site (see below for address).

Environmental Monitoring Programs

The rice grass environmental monitoring program has been designed to investigate the impacts of rice grass and control efforts on the estuarine environment. In accordance with the Rice Grass Management Strategy the environmental monitoring program is progressing to the next stage with monitoring and additional research intended for new areas.

Raising Awareness in the Community

In the past decade Smithton residents have quite literally been living with rice grass in their back yards. Smithton High School teacher Mark Franks has encouraged secondary high students to be more aware of their environment in and around Smithton by "Adopting a Patch". Students will examine the environmental impacts of weeds, including aquatic weeds such as rice grass, highlighting the invasive nature of weeds and associated impacts to the region.

To read the full newsletter visit the Rice Grass Team's page on the DPIWE website at www.dpiwe.tas.gov.au, or, contact Doug Summers on (03) 62336138

Dean Zeven, diligent Weeds Officer with the Burnie City Council and Upper Natone Landcare Group, has landed a position as an Environmental Officer with DPIWE, to be based in Ulverstone.

Christian Goninon is on holidays until August. Southern DPIWE weeds enquiries to be directed to Mark Boersma and Stephen Welsh please.

Got Something to Say??

Yes, of course we'd like to hear from you!

Contact the Tasweeds Editors:

Chris Moore

Email: Chris.Moore@launceston.tas.gov.au

Phone: 63 233610

or

Cindy Hanson

Email: Cindy.Hanson@dpiwe.tas.gov.au

Phone: 63 365414



Members on the Move:

Andrew Bishop is taking up the position of Team Leader of Clean Products in the Vegetables Branch of DPIWE's Food, Agriculture and Fisheries Division. Andrew has played a pivotal role in the progress of weed management in Tasmania, at all levels. He will be sorely missed but his energy, creativity, empathy and leadership will be long remembered.

