



Pioneer Catchment & Landcare News

August 2011

Olive Hymenachne Hybridisation Confirmed

Since its introduction from South America in the 70s, Olive Hymenachne (*Hymenachne amplexicaulis*) has spread across coastal and sub coastal parts of Queensland, northern NSW and the Northern Territory. It invades shallow water bodies, reproducing vegetatively and through long lived seeds. It was declared a WONS (see overleaf) in 1999.

Australia has a native species of *Hymenachne*, *H. acutigluma*. This can be found in coastal and near coastal parts of QLD from Sarina to Cape York Peninsula and across the Top End of NT. The native species is also known by the common name Hymenachne, particularly in the NT where it is common on flood plains.

Both species are robust, aquatic or semi-aquatic perennial grasses. The two species are readily distinguished by leaf appearance, the leaf of Olive Hymenachne is broad and its base clasps the stem. Leaves of the native species are much narrower. Long hairs, obvious on the lower edges of the leaves of Olive Hymenachne, are absent on the native species.

It has now been confirmed that the two species have crossed and developed a hybrid known as *Hymenachne x calamitosa*, *calamitosa* being the Latin term for destructive, disastrous or ill fated. Early observations suggest the form will be at least as invasive as Olive Hymenachne. Recommendations have been sent to the Australian Weeds Committee for declaration of the hybrid without delay. So far hybridisation has not been found in the Mackay region. If you suspect you may have the hybrid on your property please contact PCL.



Hymenachne hybrid (centre) shown with Olive Hymenachne (left) and the native version (right).
Image: J Clarkeson

Adapted from the Weedshine Newsletters winter edition by John Clarkeson (QP&W). The full report is available at <http://plantnet.rbg Syd.nsw.gov.au/Telopea/results.php>

What's Coming Up?

Gooseponds Weedbuster Session

Join PCL and Weed Ecologist Peter Alden for an informative look at urban weed identification and management. Whether you come for 1 hour, or stay for 3, this will be a good opportunity to identify natives and weedy species, including a hands on demonstration of different ways to deal with the problematic ones. People are invited to bring in their own garden weeds (in sealed bags) for identification.



Thursday 1st September 9am –12pm
Willets Rd Playground

Supplied: Gloves and demonstration equipment

Bring: Drink bottle and sunscreen

The event will be wrapped up with a light lunch.

This event is supported by Mackay Regional Council through the Natural Environment Levy. Contact PCL for further information.

Land for Wildlife Field Trip



PCL is offering a Land for Wildlife field trip to a regional LfW property with a focus on **weed**

management without chemicals. Come and discover what can be achieved without the use of herbicides. The event is open to all landholders with an interest in wildlife conservation.

Blackadder Reptiles Snake Presentation

The cornerstone of this event will be a presentation and live display of a range of venomous and non venomous snakes. This display will help landholders identify snake species, understand their ecology and behaviour and the important role they play in the natural environment.

Saturday 3rd September 9.30AM—2PM

Please phone or email PCL to register your interest in this free event and for further details.

The day will include a light lunch.



This event is supported by Mackay Regional Council through the Natural Environment Levy.

Plant of the Month

Muttonwood *Myrsine variabilis*

Formerly known as *Rapanea variabilis*, Muttonwood is a bushy shrub to small tree with a dense canopy and straight grey-barked trunk. Plants may sucker from the roots if damaged. It is the larval food plant of the White-banded Line-blue butterfly and its fruits are commonly eaten by fruit doves, lorikeets and fig birds.

Leaves: Alternate, leathery textured, variable in shape (*variabilis*); mostly obovate, 3-12 x 1-4cm, rounded or bluntly pointed at the apex and tapering into a short, sometimes purplish, stalk; strongly veined; margins wavy and generally coarsely toothed on young plants. Some teeth may be present on older plants though this is seldom evident in the Mackay area. All members of the *Myrsinaceae* family have oil dots and the distinctive reddish dots of this species can be seen with a x10 hand lens, especially in dried brown leaves.

Flowers/Fruit: Tiny greenish-cream bell shaped flowers clustered along the branches usually with functional male and female flowers on separate plants. Flowering occurs from June to September. Fruits are small globular drupes, 4-5mm in diameter, purplish when mature (November to March), and contain one round 'seed'.

Propagation: Grow from fresh seed that may take months to germinate or tip cuttings.

Habitat: Dry rainforest and littoral forests.

Distribution: Eastern Australia from McIlwraith Range in North Queensland to south coast of NSW. In Mackay, it can be found along the Teal St entrance in Slade Pt Reserve but it is common in beach scrubs throughout this region and occurs well beyond coastal habitats as it is the most widespread Australian species.

Source: Champion, I. and Alcock, H. (1989) *One Hundred and One Trees of Mackay*, The Mackay Branch of Society for Growing Australian Plants. Jackes, Betsy R. Revision of *Myrsine* (*Myrsinaceae*) in Australia. *Australian Systematic Botany* 18, 399-438 (2005).



Myrsine variabilis in bud at Slade Point Reserve. Image: Veronique Bosson

Weed of the Month

Hymenachne *Hymenachne amplexicaulis*

Also known as Olive Hymenachne to differentiate from its native cousin (*Hymenachne acutigluma*), this aggressive grass was introduced from Venezuela in 1973 to provide ponded pasture for cattle. It subsequently escaped cultivation and was declared a Class 2 and WONS (see right).

Description: A robust, rhizomatous, perennial grass growing to a height of 2.5m. Leaf blades are 10-45cm in length, 3cm wide, and strongly clasp the stem at the base (Fig. 1). Flowers are spike-like, cylindrical, and 20-40cm in length. Each flower head can produce 4000 long lived seeds (>8yrs), which are subsequently dispersed by water and aquatic birds.

The problem: It is an unwanted pest of stream and river banks, irrigation drains, dams and wetlands. It has the ability to restrict water flow, increasing flood occurrence, and can double as a barrier for aquatic and semi-aquatic wildlife. In high value wetlands it not only impacts wildlife, but reduces the aesthetic and recreational qualities of these areas.

Dealing with the problem: In the dry season, success has been achieved with heavy grazing and the use of fire. Herbicidal control remains the most common method although mechanic control should be utilised for small infestations. There are no biological control options for this plant. For advice on appropriate control for your area contact PCL.

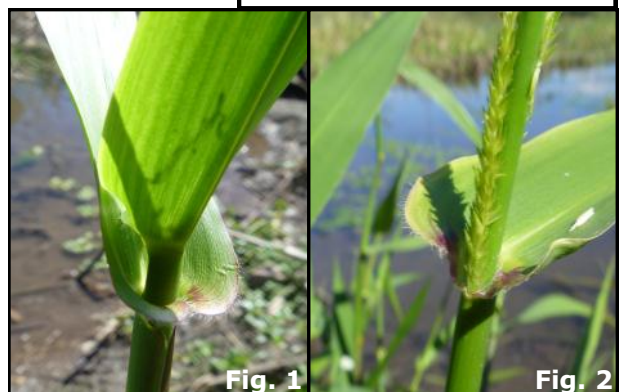
Pioneer Catchment: Although the main flowering period is from May to June, Hymenachne is currently flowering in the Mackay region. It has been spotted throughout the valley and is of particular concern around the Mirani Weir, where established populations will lead to further spread downstream.

Source: *Primary Industries & Fisheries, DEEDI.*

WONS

In 1999, 20 Weeds of National Significance (WONS) were identified by the Australian Government. They were identified by their level of invasiveness, impact, potential for spread, and socio-economic and environmental values.

They are managed by national coordinators and through state and local law, under strategic planning.



Hymenachne amplexicaulis with clasped stems (Fig. 1), and the emerging flower head (Fig. 2). Images: D Milburn

Platypus in the Pioneer Valley

Whether you've been lucky to see a platypus in the wild or not, it's good to have the knowledge that they exist in the Pioneer Valley. Although susceptible to environmental change, these fascinating creatures should be considered an established part of our regional heritage.

Platypus (*Ornithorhynchus anatinus*) are one of two monotremes species (egg-laying mammals) in Australia, the other being the Short-beaked Echidna. They are found in our permanent rivers, streams, and lakes, and a healthy breeding population is an indication of a healthy aquatic environment. Their mainly nocturnal habitat means your best chance at seeing platypus is at dawn or dusk. Although there are recent reports of midday antics occurring in the Pioneer River. They are voracious eaters, consuming 15-30% of their body weight everyday, with a diet consisting of a variety of invertebrates, water insects, worms and mussels. They close their eyes when under water, detecting prey through electrical currents created by moving prey.

Platypus have natural predators including goannas and eagles, however foxes, domestic dogs and cats also prey on platypus. It is important to keep dogs tethered when walking through known habitat areas. Water weeds such as Para Grass (*Urochloa mutica*) and Water Hyacinth (*Eichornia crassipes*) are also problematic and can choke waterways impeding movement of platypus and reducing habitat essential to their prey, such as freshwater yabbies. Increased water sedimentation and water pollution through pesticide and nutrient runoff can impact platypus health.

Riparian vegetation plays an important role in the platypus lifecycle from breeding to feeding. It is important for land managers fringing potential habitat to protect their riparian vegetation, and increase its existence where possible through revegetation projects and appropriate weed control. If you would like assistance, or to get involved in riparian rehabilitation please contact the PCL office. For those who haven't seen a platypus before, there's no better time than the present!

Source: *Land for Wildlife Notes A5*



**Platypus in Eungella National Park.
Image: About Australia**

Would you like a Qualification in Conservation and Land Management?

The Australian Agricultural College (AAC) has set up a new office in Mackay to offer training and qualifications within our local region. One way to get a qualification without going to Uni or TAFE is through the Recognition of Prior Learning (RPL) process. It is all about recognising the skills that you already have and obtaining a qualification in less time and at a reduced cost!

If you have been actively involved in conservation and land management projects over a number of years whether as a volunteer, through your workplace or on your own land, you should make your experience count and receive a qualification. Available qualifications in Conservation and Land Management through the Agricultural College include Certificate III, IV, Diploma or Advanced Diploma in Conservation and Land Management

It is not difficult to use the RPL process through the Agricultural College. To achieve one of the above qualifications, you will need to show you are competent in 8-15 units of the 57 available. Examples of some units are:

- Monitoring biodiversity
- Obtain and manage sponsorship
- Record and document community history
- Lead work teams
- Produce maps for land management purposes

Palmina Bonaventura from the Agricultural College in Mackay is encouraging locals to get a qualification this year while there is government funding available to significantly subsidise the cost. To find out more about the AAC, phone Palmina on 4944 2618.

If you are interested in learning about other training courses or training providers around the region, please contact PCL to find out more.



Recognition of Prior Learning is now on offer in Mackay. Image: Australian Agricultural College.

Who's who in Pioneer Catchment & Landcare?

Management Committee

Chair Margaret Lane (Society for Growing Australian Plants—Mackay Branch)

Deputy Chair Dave Hunter

Treasurer Wendy Eiteneuer

Secretary (Non voting) Hayley Glover

Committee Members
Cr. Wendy Cameron (Mackay Regional Council)

Irene Champion

Joan Fitzsimmons (Mackay Conservation Group)

Bruce Milles

Dianne Williams (Australian Forest Growers)

Cr. Ross Walker (Mackay Regional Council)

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Project Officer Dallas Milburn

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Newsletter Hayley Glover, Dallas Milburn

Upcoming Events August

Thursday 4 from 8pm—SGAP Monthly Meeting. Guest presentation *A Northern Territory Experience—Plants and Wildlife* by *Grant Patterson*. Mackay Gem and Craft Society Hall, Leisure Court. Visitors welcome.

Saturday 6, 8am—Working Bee at Morag McNichol Reserve. Contact Jim McNichol on 4942 8802 for details.

Saturday 6, Sunday 7, Monday 8, 8am—Healthy Soils workshop with RCS in Sarina, Mackay & Proserpine. Contact PCL to register, 4944 1979.

Sunday 7, 630am—MACBOCA trip to Wetlands Walkabout, Keeleys Rd. Meet at Keeleys Rd, Andergrove. Contact 49522964 or 0403172455 for further details.

September

Thursday 1, 9am-12pm—Goosepense Weedbuster Session. Meet at Willets Rd Playground, bring weeds (in sealed plastic bags) for identification. Contact PCL for more information.

Thursday 1 from 8pm—SGAP Monthly Meeting. *Spring Show and Tell*. Mackay Gem and Craft Society Hall, Leisure Court. Visitors welcome.

Saturday 3, 9.30—2pm—LFW field trip. Weed management without chemicals and snake identification presentation. Contact PCL to register.

Saturday 3, 8am—Working Bee at Morag McNichol Reserve. Contact Jim McNichol on 4942 8802 for details.

Sunday 4, 630am—MACBOCA trip to St Lawrence Wetlands. Meet at Tourist Information Centre, Nebo Rd. Contact 49522964 or 49540937 for further details.

Sunday 11, 9am-2pm—Landcare Day in the Gardens. "Kids make a difference... in your backyard" and SGAP plant sale. Mackay Regional Botanic Gardens. Contact PCL for further details.

Supported by:



CARING
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OUR
COUNTRY

2011 Queensland Landcare Conference

20 - 23 September, AYR

Generations of Guardians



Standard registrations close 31st August for this years conference focusing on the generations of guardians responsible for land and culture stewardship across the state. For further details visit the Landcare Qld website: www.landcare.org.au/CONFERENCE



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