Department of Science, Information Technology and Innovation

Weed Spotters' Network Queensland

Bulletin
July 2015

Get ready for National Science Week

Australia's annual celebration of Science, National Science Week, is being held between 15–23 August. Check the National Science Week website to find events and activities being held in your town such as:

Brisbane: The Queensland Herbarium will again be hosting a Café Scientifique evening on 18 August entitled 'Weeds – nipping them in the bud – science and community partnerships that work'. '*The Triffid is a highly invasive, wind dispersed species capable of impacting agricultural production and threatening native species and their habitats. Now for the first time, Triffids have been found escaping from a Gold Coast backyard into local bushland. We ask a biosecurity scientist, a weeds botanist, a Gold Coast City Council pest management officer and a community landcare expert… what happens next?*' and

Gold Coast: The Gold Coast Regional Botanic Gardens 'DIG' day, *Discovery in the gardens*, will be held on Saturday 15 August 9am–2pm. Displays and hands on activities for the whole family will focus on plant science, ecology, biodiversity and weeds.

Further information and booking details for these and more National Science Week events can be found online.

Have your say. Weed spotter survey

We'd like to improve your experiences as a weed spotter and would love your feedback. Please take a few minutes to complete the online member survey. This will help us to ensure that we provide a quality experience for all network members. Thank you.

Upcoming weed spotter training

Stanthorpe: 10 am–12 pm Friday 17 July 2015.
Cairns and Cooktown: late August 2015 (dates to be confirmed)
Please email Melinda.Laidlaw@dsiti.qld.gov.au or phone (07) 3896 9323 if you would like to attend.

Regional coordinator profile: Melinda Laidlaw

Melinda is a senior ecologist at the Queensland Herbarium in Brisbane. She studied Australian Environmental Studies at Griffith University and completed a PhD in rainforest ecology at the University of Queensland in 2010. Since commencing work at the Herbarium in 2005, Melinda has worked on wetland and regional ecosystem mapping in the Gulf of Carpentaria, rangeland vegetation condition assessment, carbon farming and threatened species distribution modelling. Melinda has coordinated the Weed Spotters' Network Queensland since 2013 and is the regional coordinator for Brisbane. Contact Melinda for weeds advice in the Brisbane area: Melinda.Laidlaw@dsiti.qld.gov.au

Queensland Government

Class 1 declared plant: *Hygrophila costata* (hygrophila or Glush weed)


Fig. 1 Photo: DAF

Hygrophila (or Glush weed) is an aggressive Class 1 aquatic weed native to Mexico and Argentina. It is thought to have become naturalised in Queensland after being intentionally planted into wetlands to supply the aquarium or pet trade. Hygrophila grows as an erect, at times robust, perennial herb to 1.5 m along creek banks and in shallow freshwater wetlands (fig. 1). It can grow as an emergent on moist soil, or fully submerged below the water's surface. It has reddish-brown, hairy stems which are square in cross section and opposite, simple leaves (3–18 cm long x 1–5 cm wide) held on a short petiole (leaf stalk). The midrib and veins are prominent and distinctive (fig. 2). During summer, small, white, papery flowers (9–11 mm) are produced in the leaf axils (fig. 2), which then turn brown when mature. These produce fruits of two-valved capsules (14–17 mm) containing 12–18 flattened, round, pale brown seeds less than 1 mm long. Read more about hygrophila in the July 2014 bulletin.


Fig. 2 Photo: DAF

Class 1 declared plants: *Cylindropuntia rosea* and *C. tunicata* (Hudson pear)


Fig. 3 Photo: DAF

Hudson pear is the common name applied to two species of Mexican cactus which have become naturalised in Queensland, *Cylindropuntia rosea* and *C. tunicata*. Both are listed as Class 1 declared species in Queensland and are Weeds of National Significance (WONS). Hudson pear is densely branched and can form a clump 1.5 m tall and 3 m wide (fig. 3). Stem segments are green to grey-green and rope-like to 90 cm in length. They are round in cross section to 4 cm diameter. *C. tunicata* may spread by seed while *C. rosea* is generally considered sterile, however both species readily reproduce vegetatively. Stem segments are easily detached from the parent plant and can take root when in contact with the soil. Spines in both species are long (4.5 cm) and extremely sharp. In *C. rosea*, new spines are enclosed in white to silver papery sheaths and in *C. tunicata* the spine sheaths are pale tan to brown. Spines emerge in clusters of 4 to 8 from cushiony structures (areoles) on the stems. These spines are tough and difficult to remove, able to penetrate boots and even car tyres. *C. rosea* has, as the name suggests, rose-pink to purple flowers which appear in spring and summer and have petal-like (tepal) segments which are approximately 5 cm wide (fig. 4). Yellow egg-shaped fruits (2–4.5 cm long) then appear. *C. tunicata* flowers are yellowish-pink, although it can be difficult finding either species in flower. Read more about Hudson pear in the July 2013 bulletin.


Fig. 4 Photo: Royce Holtkamp

If you think you have seen hygrophila or Hudson pear growing in your region, please contact the Queensland Herbarium on **(07) 3896 9323**, email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on **13 25 23**.

Class 1 declared plants: *Piper aduncum* (spiked pepper)


Fig. 1 Photo: Forrest and Kim Starr

Piper aduncum (spiked pepper) is native to South and Central America. It is the most invasive member of the pepper family (Piperaceae) and has a pantopical range including Hawaii, Indonesia, Fiji, Malaysia, the Solomon Islands, Christmas Island and New Guinea. Spiked pepper has not yet been recorded in Australia and is a Class 1 declared pest plant in Queensland. It is, however, considered to be the most aggressive and invasive terrestrial weed in New Guinea.

Spiked pepper is an aggressive invader able to form pure stands and out-compete native species through competition for light. It is generally found growing in rainforests, plantations and pastures and along waterways and roadsides. Spiked pepper is particularly successful in highly disturbed forests, fallow gardens and along logging roads. It is also able to invade naturally disturbed sites such as tree-fall gaps and disturbed stream banks.

Spiked pepper is a shade tolerant, shrub or small tree growing to 8 m and to 10 cm or more in diameter (fig. 1). At times it can have short stilt roots. Its branches are brittle and aromatic (peppery) when crushed. The branches have swollen, purplish leaf nodes (fig. 2) and have a zigzag appearance (fig. 3). The leaves are alternate, elliptic to lanceolate (12– 20 cm long) with short leaf stalks (petioles). Leaves droop downward from the stem (fig. 3). The upper leaf surfaces feel a little like sandpaper while the undersides pale and softly hairy (fig. 4).


Fig. 2 Photo: www.NatureLoveYou.sg


Fig. 3 Photo: B. Waterhouse (NAQS)

It has a short juvenile period, maturing quickly to flower and produce large quantities of seed each year. The flower spikes are held upright opposite each of the leaves (fig. 3) and are white to pale yellow, turning green when mature. Spiked pepper can flower throughout the year and produces fruits 70–80 days after flowering. The seeds are small (0.7–1.25 mm long), brown to black and compressed. Seeds are often spread by wildlife, particularly birds and bats. Spiked piper can also reproduce vegetatively with cut stems readily able to resprout.

If you think you have seen spiked pepper growing in your region, please contact the Queensland Herbarium on **(07) 3896 9323**, email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on **13 25 23**.


Fig. 4 Photo: www.NatureLoveYou.sg

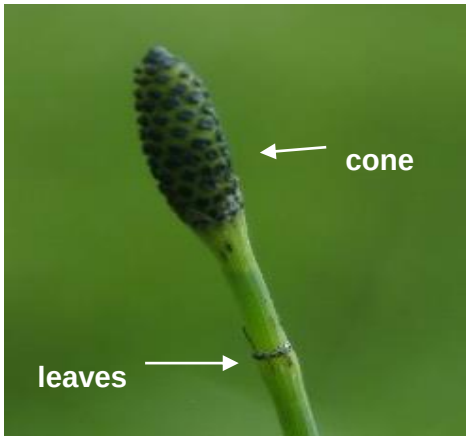
Keep an eye out for these weeds in July…

Species	Common name	Watch for in this region	Field attributes to look for
#*Acaciella glauca* (July 2014 bulletin)	redwood	South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Mackay Whitsunday, Torres Strait, Dry Tropics	white ball-shaped flowers, creek lines and dry tropics
Annona glabra (May 2014 bulletin)	pond apple	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait	pale yellow/cream flowers with a red throat
#*Cecropia* spp. (April 2013 bulletin)	Mexican bean tree	South East Queensland, Burnett/Mary, Mackay Whitsunday, Torres Strait, Wet Tropics	large lobed leaves with a pale underside
#*Chromolaena odorata*/ *C. squalida* (May 2013 bulletin)	Siam weed	South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Northern Gulf, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	pale lilac/white flowers, triangular leaves with 3 prominent veins
#*Chrysanthemoides monilifera* subsp. *rotundata* (May 2014 bulletin)	Bitou bush	South East Queensland, Burnett/Mary,	Yellow-flowered shrub, coastal areas
#*Clidemia hirta* (March 2013 bulletin)	Koster's curse	Mackay Whitsunday, Wet Tropics	leaves hairy with teeth, branchlets with long bristly red hairs
#*Cylindropuntia prolifera* (August 2014 bulletin)	coastal cholla	Fitzroy Basin, Desert Channels, Southern Gulf, Dry Tropics, South West Queensland	spines to 2 cm long
#*Cylindropuntia tunicata*/ #*C. rosea* (July 2013 bulletin)	chain-link cactus/ Hudsons pear	Fitzroy Basin, Desert Channels, Southern Gulf, Dry Tropics, South West Queensland	long spreading spines
#*Eichhornia azurea*/ *E. crassipes* (October 2014 bulletin)	water hyacinth	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, floating, purple flowers
Elephantopus mollis (March 2015 bulletin)	tobacco weed	South East Queensland, Burnett/Mary	daisy to 1 m tall, flowers white or pink
#*Equisetum* spp. (July 2013 bulletin) – see below	horsetails	South East Queensland	primitive plant, no flowers, leaves reduced
Heterotheca grandiflora (September 2014 bulletin)	telegraph weed	South East Queensland	daisy to 2 m, flowers yellow
Hymenachne amplexicaulis (June 2013 bulletin)	hymenachne	Desert Channels, Queensland Murray Darling Region, Condamine , South West Queensland	robust grass to 2.5 m, water bodies & drains

Species (cont.)	Common name	Watch for in this region	Field attributes to look for
#*Limnocharis flava* (October 2013 bulletin)	yellow burrhead	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	water bodies & margins, yellow flowers & triangular stems
#*Miconia calvescens* (March 2013 bulletin)	miconia/purple plague	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry tropics	underside of leaves purple
#*Miconia nervosa* (March 2013 bulletin)	miconia	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry tropics	leaves hairy, reddish underside
#*Miconia racemosa* (March 2013 bulletin)	miconia	Wet Tropics	leaves hairy with teeth, branchlets hairless except at nodes
#*Mikania micrantha* (November 2013 bulletin)	mikania vine	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	heart shaped leaf & smothering habit
#*Mimosa pigra* (August 2013 bulletin)	giant sensitive tree	South East Queensland, Burnett/Mary, Cape York, Southern Gulf, Northern Gulf, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	ferny leaves, rose-like thorns, pink ball-shaped flowers
#*Neptunia oleracea*/*N.plena* (June 2013 bulletin)	water mimosa	South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	floating & taking over a water body, ferny leaf
#*Opuntia dejecta*	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
#*Opuntia elata* (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
#*Opuntia elatior* (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
#*Opuntia leucotricha* (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
#*Opuntia microdasys* (June 2014 bulletin)	bunny ears	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	succulent shrub, clustered yellow spines
#*Opuntia sulphurea* (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub

Species (cont.)	Common name	Watch for in this region	Field attributes to look for
Pistia stratiotes (November 2014 bulletin)	water lettuce	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, resembles a small open lettuce
Pueraria montana var. lobata (February 2015 bulletin)	kudzu	South East Queensland, Burnett/Mary	vine with fragrant purple-pink flowers
Salvinia molesta (November 2013 bulletin)	salvinia	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, leaves with water repellent hairs
Senecio madagascariensis (August 2014 bulletin)	fireweed	Wet Tropics	daisy to 60 cm, flowers yellow
#*Senegalia insuavis* (April 2014 bulletin)	pennata wattle or cha-om	Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, South East Queensland, Burnett/Mary	pink ball-shaped flowers, prickles along stems
#*Senegalia rugata* (April 2015 bulletin)	soap pod	Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics	pink ball-shaped flowers, prickles along stems
Solanum viarum (April 2013 bulletin)	tropical soda apple	Burnett/Mary, Fitzroy Basin, Northern Gulf, Mackay Whitsunday, Dry Tropics	variegated cherry tomato, thorny leaves, look in sale yards, abattoirs
#*Vachellia karroo* (May 2013 bulletin)	karroo thorn	South East Queensland, Fitzroy Basin, Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	long, white, paired thorns

Class 1 declared plant



Class 1 declared plants: *Equisetum* spp. (horsetails)

Horsetails are primitive non-flowering plants that can reach 0.1–1.2 m in height. The photo-synthetic stems are ridged, have a segmented, bamboo-like appearance and can break apart at the nodes. Horsetails produce two different types of stems. Branched sterile stems are perennial, green and hollow. Annual fertile stems are unbranched, brown and produce cones (left). (Photos: B. Waterhouse)

If you think you have seen horsetails growing in your region, please contact the Queensland Herbarium on **(07) 3896 9323**, email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on **13 25 23**.

Notifications – June 2015

Finding and **reporting** emerging weeds which could cause serious environmental, social and economic impacts across Queensland is a critical role of our network. **Putting them on the map** also means we can track their spread and the effectiveness of control measures across the landscape and through time.

If you see a plant in your region which raises your suspicions, please collect it and bring it to the attention of your regional coordinator and/or the Queensland Herbarium. You can find a full list of the declared plants of Queensland on the Biosecurity Queensland website. (**WONS**=Weed of National Significance)

1. **Class 2 weed/WONS** *Andropogon gayanus* Kunth (gamba grass) from Bowling Green Bay National Park. Leigh Benson, NPSR.

2. **Class 2 weed/WONS** *Cryptostegia grandiflora* R.Br. (rubber vine) from Rinyurru National Park. Keith McDonald, Weed Spotters' Network Queensland.

3. **Class 2 weed/WONS** *Cylindropuntia fulgida* var. *mamillata* (Schott ex Engl.) Backeb. (coral cactus) from Eulo. Daniel McCudden, Biosecurity Queensland.

4. **Class 2 weed/WONS** *Cylindropuntia fulgida* var. *mamillata* (Schott ex Engl.) Backeb. (coral cactus) from Yowah. Daniel McCudden, Biosecurity Queensland.

5. **Class 2 weed/WONS** *Cylindropuntia spinosior* (Engelm.) F.M.Knuth (Schott ex Engl.) Backeb. (walking stick cactus) from Yowah. Daniel McCudden, Biosecurity Queensland.

6. **Class 2 weed** *Harrisia pomanensis* (Weber) Britton & Rose (harrisia cactus) from Jandowie. Craig Hunter, Biosecurity Queensland.

7. **Class 1 weed/WONS** *Opuntia elata* Link & Otto ex Salm-Dyck (Riverina pear) from Eulo. Daniel McCudden, Biosecurity Queensland.

8. **Class 1 weed/WONS** *Opuntia elata* Link & Otto ex Salm-Dyck (Riverina pear) from Yowah. Daniel McCudden, Biosecurity Queensland.

9. **Class 1 weed/WONS** *Opuntia microdasys* (Lehm.) Pfeiff. (bunny ears cactus) from Yowah. Daniel McCudden, Biosecurity Queensland.

10. **Class 1 weed/WONS** *Opuntia sulphurea* Gillies ex Salm-Dyck (prickly pear) from Wallumbilla. Craig Hunter, Biosecurity Queensland.

11. **Class 2 weed/WONS** *Prosopis glandulosa* Torr. var. *glandulosa* (honey mesquite) from Miles. Craig Hunter, Biosecurity Queensland.

Your regional coordinators

Regional coordinators are your local weed experts and are able to answer your questions about training, specimen preparation and weed identification in your area. Give them a call!

Brisbane and WSNQ coordinator
Melinda Laidlaw
Queensland Herbarium
(07) 3896 9323
Melinda.Laidlaw@dsiti.qld.gov.au

Bundaberg
Paul Garland
DAF, Biosecurity Queensland
(07) 4131 5821
Paul.Garland@daf.qld.gov.au

Cairns and Tablelands
Stephen McKenna
Commonwealth Department of Agriculture
(07) 4241 7836
Stephen.McKenna@agriculture.gov.au

Cape York
Gerry Turpin
Australian Tropical Herbarium
(07) 4042 1809
Gerry.Turpin@dsiti.qld.gov.au

Charleville
Daniel McCudden
DAF, Biosecurity Queensland
(07) 4654 4200, 0418 735 941
Daniel.McCudden@daf.qld.gov.au

Cloncurry, Mt Isa & Gulf Catchments
Nathan Morgan
DAF, Biosecurity Queensland
(07) 4742 1311, 0409 493 234
Nathan.Morgan@daf.qld.gov.au

Dalby, Darling Downs & Maranoa
Craig Hunter
DAF, Biosecurity Queensland
(07) 4669 0828, 0428 584 908
Craig.Hunter@daf.qld.gov.au

Darling Downs and Qld Murray-Darling Basin
Sandy Robertson
QMDC
0428 710 690
Sandyr@qmdc.org.au

Emerald & Central Highlands
Bernie Claussen
CHRRUP
(07) 4982 2996, 0409 522 297
Bernie@chrrup.org.au

Fraser Coast
Juliet Musgrave
Fraser Coast Regional Council
(07) 4197 4350, 0409 891 072
Juliet.Musgrave@frasercoast.qld.gov.au

Fraser Coast
Col Zemek
Fraser Coast Regional Council
(07) 4197 4304, 0427 125 338
Col.Zemek@frasercoast.qld.gov.au

Gladstone
Lindsay Boyd
Gladstone Regional Council
(07) 4970 0700, 0408 774 181
LindsayB@gladstonerc.qld.gov.au

Gold Coast
Kate Heffernan
Friends of the Gold Coast
Regional Botanic Gardens
0404 853 043
Kate.Heffernan6@bigpond.com

Granite Belt and Border Rivers
John Conroy
DAF, Biosecurity Queensland
(07) 4671 6706, 0429 475 385
John.Conroy@daf.qld.gov.au

Gympie and Sunshine Coast
Ernie Rider
Gympie & District Landcare Group
(07) 5483 8866, 0468 312 345
theejs.rider@gmail.com

Longreach & Desert Channels
Helen Cross
Desert Channels
(07) 4652 7829
Helen.Cross@dcq.org.au

Mackay
Lalith Gunasekera
DAF, Biosecurity Queensland
(07) 4967 0602
Lalith.Gunasekera@daf.qld.gov.au

Mareeba and Northern Goldfields
Scott Middleton
DAF, Biosecurity Queensland
(07) 4048 4728, 0488 423 539
Scott.Middleton@daf.qld.gov.au

Rockhampton
Peter MacCallum
Rockhampton Regional Council
(07) 4931 5497; 0407 957 694
Peter.Maccallum@rrc.qld.gov.au

Roma
Graham Hardwick
0427 123 943
Graham.Hardwick@skymesh.com.au

Toowoomba
Kym Campbell
Condamine Alliance
(07) 4620 0138 , 0409 768 191
Kym.Campbell@condaminealliance.com.au

Townsville
Nanette Hooker
James Cook University
0439 410 772
Nanette.Hooker@jcu.edu.au

Weed Spotters' Network Queensland is a joint project between the Queensland Herbarium, the Department of Agriculture and Fisheries and local governments with funding support from the Land Protection Fund