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

*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](#).

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

*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 (tepals) 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](#).

If you think you have seen *hygrophila* or *Hudson pear* growing in your region, please contact the Queensland Herbarium on [07 3896 9323](tel:0738969323), email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on [13 25 23](tel:132523).
Class 1 declared plants: *Piper aduncum* (spiked pepper)

*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 pantropical 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).

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.
Keep an eye out for these weeds in July…

<table>
<thead>
<tr>
<th>Species</th>
<th>Common name</th>
<th>Watch for in this region</th>
<th>Field attributes to look for</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acaciella glauca</strong> (July 2014 bulletin)</td>
<td>redwood</td>
<td>South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Mackay Whitsunday, Torres Strait, Dry Tropics</td>
<td>white ball-shaped flowers, creek lines and dry tropics</td>
</tr>
<tr>
<td><strong>Annona glabra</strong> (May 2014 bulletin)</td>
<td>pond apple</td>
<td>South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait</td>
<td>pale yellow/cream flowers with a red throat</td>
</tr>
<tr>
<td><strong>Cecropia spp.</strong> (April 2013 bulletin)</td>
<td>Mexican bean tree</td>
<td>South East Queensland, Burnett/Mary, Mackay Whitsunday, Torres Strait, Wet Tropics</td>
<td>large lobed leaves with a pale underside</td>
</tr>
<tr>
<td><strong>Chromolaena odorata/ C. squalida</strong> (May 2013 bulletin)</td>
<td>Siam weed</td>
<td>South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Northern Gulf, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics</td>
<td>pale lilac/white flowers, triangular leaves with 3 prominent veins</td>
</tr>
<tr>
<td><strong>Chrysanthemoides monilifera subsp. rotundata</strong> (May 2014 bulletin)</td>
<td>Bitou bush</td>
<td>South East Queensland, Burnett/Mary, Mackay Whitsunday, Wet Tropics</td>
<td>Yellow-flowered shrub, coastal areas</td>
</tr>
<tr>
<td><strong>Clidemia hirta</strong> (March 2013 bulletin)</td>
<td>Koster’s curse</td>
<td>Mackay Whitsunday, Wet Tropics</td>
<td>leaves hairy with teeth, branchlets with long bristly red hairs</td>
</tr>
<tr>
<td><strong>Cylindropuntia prolifera</strong> (August 2014 bulletin)</td>
<td>coastal cholla</td>
<td>Fitzroy Basin, Desert Channels, Southern Gulf, Dry Tropics, South West Queensland</td>
<td>spines to 2 cm long</td>
</tr>
<tr>
<td><strong>Cylindropuntia tunicata/ C. rosea</strong> (July 2013 bulletin)</td>
<td>chain-link cactus/ Hudsons pear</td>
<td>Fitzroy Basin, Desert Channels, Southern Gulf, Dry Tropics, South West Queensland</td>
<td>long spreading spines</td>
</tr>
<tr>
<td><strong>Eichhornia azurea/ E. crassipes</strong> (October 2014 bulletin)</td>
<td>water hyacinth</td>
<td>Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland</td>
<td>water bodies, floating, purple flowers</td>
</tr>
<tr>
<td><strong>Elephantopus mollis</strong> (March 2015 bulletin)</td>
<td>tobacco weed</td>
<td>South East Queensland, Burnett/Mary</td>
<td>daisy to 1 m tall, flowers white or pink</td>
</tr>
<tr>
<td><strong>Equisetum spp.</strong> (July 2013 bulletin) – see below</td>
<td>horsetails</td>
<td>South East Queensland</td>
<td>primitive plant, no flowers, leaves reduced</td>
</tr>
<tr>
<td><strong>Heterotheca grandiflora</strong> (September 2014 bulletin)</td>
<td>telegraph weed</td>
<td>South East Queensland</td>
<td>daisy to 2 m, flowers yellow</td>
</tr>
<tr>
<td><strong>Hymenachne amplexicaulis</strong> (June 2013 bulletin)</td>
<td>hymenachne</td>
<td>Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland</td>
<td>robust grass to 2.5 m, water bodies &amp; drains</td>
</tr>
<tr>
<td>Species (cont.)</td>
<td>Common name</td>
<td>Watch for in this region</td>
<td>Field attributes to look for</td>
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</tbody>
</table>
| *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, Fitzroy Basin, 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, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics | floating & taking over a water body, ferny leaf |
| *Opuntia dejecta*  
(June 2014 bulletin) | 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 |
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<tr>
<td><em>Pistia stratiotes</em></td>
<td>water lettuce</td>
<td>Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland</td>
<td>water bodies, resembles a small open lettuce</td>
</tr>
<tr>
<td>(November 2014 bulletin)</td>
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<tr>
<td><em>Pueraria montana var. lobata</em></td>
<td>kudzu</td>
<td>South East Queensland, Burnett/Mary</td>
<td>vine with fragrant purple-pink flowers</td>
</tr>
<tr>
<td>(February 2015 bulletin)</td>
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<tr>
<td><em>Salvinia molesta</em></td>
<td>salvinia</td>
<td>Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland</td>
<td>water bodies, leaves with water repellent hairs</td>
</tr>
<tr>
<td>(November 2013 bulletin)</td>
<td></td>
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</tr>
<tr>
<td><em>Senecio madagascariensis</em></td>
<td>fireweed</td>
<td>Wet Tropics</td>
<td>daisy to 60 cm, flowers yellow</td>
</tr>
<tr>
<td>(August 2014 bulletin)</td>
<td></td>
<td></td>
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<tr>
<td><strong># Senegalia insuavis</strong></td>
<td>pennata wattle or cha-om</td>
<td>Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, South East Queensland, Burnett/Mary</td>
<td>pink ball-shaped flowers, prickles along stems</td>
</tr>
<tr>
<td>(April 2014 bulletin)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong># Senegalia rugata</strong></td>
<td>soap pod</td>
<td>Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics</td>
<td>pink ball-shaped flowers, prickles along stems</td>
</tr>
<tr>
<td>(April 2015 bulletin)</td>
<td></td>
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</tr>
<tr>
<td><em>Solanum viarum</em></td>
<td>tropical soda apple</td>
<td>Burnett/Mary, Fitzroy Basin, Northern Gulf, Mackay Whitsunday, Dry Tropics</td>
<td>variegated cherry tomato, thorny leaves, look in sale yards, abattoirs</td>
</tr>
<tr>
<td>(April 2013 bulletin)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong># Vachellia karroo</strong></td>
<td>karroo thorn</td>
<td>South East Queensland, Fitzroy Basin, Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland</td>
<td>long, white, paired thorns</td>
</tr>
<tr>
<td>(May 2013 bulletin)</td>
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</tbody>
</table>

* Class 1 declared plant

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

Horsetails are primitive non-flowering plants that can reach 0.1–1.2 m in height. The photosynthetic 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.


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.


10. Class 1 weed/WONS *Opuntia sulphurea* Gillies ex Salm-Dyck (prickly pear) from Wallumbilla. 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!

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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.