

Declared Local Pests

Local Law No. 3 (Community and Environmental Management) 2011

A pest is any animal or plant that has an adverse economic, environmental or social impact on a particular place. Pest plants and pest animals affect the lives of all Queenslanders. They degrade our natural resources, damage precious remnant vegetation, compromise biodiversity and interfere with human health and recreation.

The *Land Protection (Pest and Stock Route Management) Act 2002* and the *Land Protection (Pest and Stock Route Management) Regulation 2003* provide legislative measures for the management of specific pest plants and pest animals which pose a threat throughout the State.

Under Local Law No.3 (Community and Environmental Management) 2011, specific plants have been declared as local pests due to the potential for them to negatively impact on local environment. Controls including the prohibition of sale or propagation of the plants and an ability of the Council by notice to the landowner to control the pest plants on the land are contained within the Local Law.

Some pest plants cover the entire area while others are specific to Fraser Island to further protect the world heritage site from invasive plants.

Applicable part of local government's area	Declared local pest
Entire Fraser Coast Region	Noogoora burr (<i>Xanthium occidentale</i> , syn. <i>X. pungens</i>) Bathurst burr (<i>Xanthium spinosum</i>) Star burr (<i>Acanthospermum hispidum</i>) Saffron thistle (<i>Cathamus lanatus</i>) Thorn apple (<i>Datura spp.</i> including <i>D. ferox</i> , <i>D. metel</i> , <i>D. inoxia</i> , <i>D. stramonium</i> , <i>D. leichhardtii</i>) Grader grass (<i>Themeda quadrivalis</i>) Mother of millions/resurrection/live-leaf (<i>Bryophyllum pinnatum</i> , <i>B. fedtschenkoi</i>)
Fraser Island	Easter cassia (<i>Senna pendula</i> var. <i>glabrata</i>) Coastal morning glory (<i>Ipomea cairica</i>) Sisal hemp (<i>Agave sisalana</i>) Mother-in-law's tongue (<i>Sanseveria trifasciata</i> var. <i>trifasciata</i>) Glory lily (<i>Gloriosa superba</i>) Umbrella tree (<i>Schefflera actinophylla</i>) Ochna/mickey mouse (<i>Ochna serrulata</i>)

To obtain information about plants that are declared under the *Land Protection (Pest and Stock Route Management) Act 2002*, or that have been identified as significant weeds in Queensland, please refer to the following link: <http://www.dpi.qld.gov.au>

Entire Fraser Coast Region

Noogoora Burr (*Xanthium occidentale*, syn. *X. pungens*)



Flowers/Seedhead: Flowers are inconspicuous—both male and female occurring in leaf axils towards the end of the branches. Flowers develop into hard, woody, spiny burrs, 1.2cm to 2 cm long, with numerous hooked spines.

Description: This plant is an erect, annual herb that can grow up to 2.5 m high. It has blotched purple stems. Leaves are dark green on the upper surface, similar in shape to grape leaves, 15 cm in diameter and roughly textured with minute bristles.

Dispersal: Spread by seed in burrs. Burrs are spread attached to animals, clothing and bags. Burrs float and are moved by water.

Control: As this plant is an annual, infestations will be reduced if seeding can be prevented. Cultivation, hand pulling or application of a registered herbicide on isolated plants is effective if performed before flowering or burr formation.

See DPI's Noogoora Burr Fact Sheet for further information:
http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Noogoora-Burr-PP17.pdf



Bathurst Burr (*Xanthium spinosum*)

Flowers/Seedhead: Flowers are creamy green and small, developing into straw-coloured burrs, 1 cm to 1.5 cm long, with numerous yellow hooked spines. Each burr contains two seeds.

Description: Bathurst burr is an erect, multi-branched annual herb, growing up to 1 m high (but usually 30–60 cm). Leaves are dark green on the upper surface, a paler green on the under surface, up to 7 cm long and usually three-lobed.

Dispersal: The hooked spines of Bathurst burr will readily attach to the fur or wool of animals and other fibrous material (such as clothing), making burrs easy to disperse. Burrs are also able to float and can spread along watercourses.

Bathurst burr usually germinates during late spring to early summer, produces burrs in February and dies in early winter. However, some seeds can germinate out of season and mature plants can be found at any time of the year.

Of the two seeds present in each burr, only one will germinate in a single season. The other seed will remain dormant for two or three years (sometimes longer).

Control: Control methods include cultivation, which is effective in the seedling stage, or spraying with suitable herbicides. Spraying is most effective on young plants and should occur before any burrs form, to prevent seeding. Once removed, establishing competitive healthy pastures or crops will help stop the weed re-establishing.

See DPI's Bathurst Burr Fact Sheet for further information:

http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Bathurst-Burr-PP5.pdf



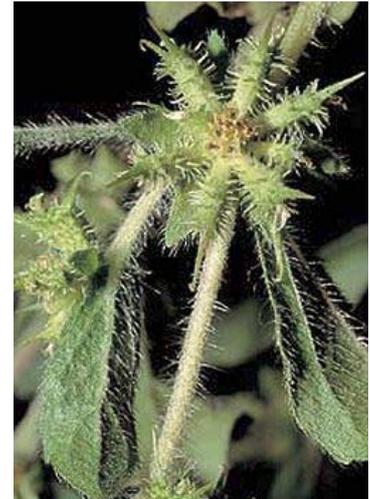
Star Burr (*Acanthospermum hispidum*)

Flowers/Seedhead: Small flowers (florets) white to pale yellow in solitary heads in leaf axils and forks of stem, outer bracts around heads 3 to 5 mm long. Flowers summer and autumn.

Description: Annual erect herb to 90 cm high. Stems with multi-celled stiff hairs. Leaves opposite, ovate to elliptic, hairy, leaf margins toothed or lobed to almost entire; leaf stalk absent. Fruiting heads a group of 5 to 10 'seeds' in a star-like burr, each 'seed' wedge-shaped, 4 to 7 mm long, hairless.

Dispersal: Hooked burrs are readily dispersed by animals and may also float long distances. Burrs are also a forage contaminant.

Control: Control methods include cultivation, which is effective in the seedling stage, or spraying with suitable herbicides. Spraying is most effective on young plants and should occur before any burrs form, to prevent seeding. Once removed, establishing competitive healthy pastures or crops will help stop the weed re-establishing.



Saffron Thistle (*Cathamus lanatus*)



Flowers/Seedhead: Flowers: In solitary heads to 2 cm wide surrounded by spiny bracts (involucral bracts) to 5 cm long. Heads made up of small flowers (florets) to 3 cm long. Flowers late spring to autumn.

Description: Erect annual thistle to 1 m (rarely to 1.5 m) high. Stems ribbed, branched above, hairless to downy. Leaves variable; basal leaves in a rosette, lanceolate, initially with few lobes but older leaves more dissected, to 20 cm long and to 5 cm wide; stem leaves to 11 cm long and to 5 cm wide, usually hairless but some plants with hairy leaves, base stem-clasping and not on a leaf stalk. Seeds ovoid, grey-brown.

Dispersal: Spread by seed. Matures with cereal crops and seed is harvested with the grain. Dry seeds tangle in wool.

Control: Seedlings emerging can be destroyed by shallow cultivation or spraying. Improved perennial or native pastures will prevent establishment, as saffron thistle is a poor competitor. If annual treatments are performed and seeding is reduced, germination will be reduced.



See DPI's Saffron Thistle Fact Sheet for further information:

http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Saffron-Thistle-PP14.pdf

Thorn Apple (*Datura* spp. including *D. ferox*, *D. metel*, *D. innoxia*, *D. stramonium*, *D. leichhardtii*)

Flowers/Seedhead: White to lavender trumpet-shaped and 5-lobed, surrounded at base by sepals 3 cm to 5.5 cm long. Flowers summer.

Description: Annual herb to 1.5 m high. Leaves 8 cm to 36 cm long, ovate to rhombic, margins deeply lobed, lobe margins coarsely toothed to undulate. Capsule ovoid, 2 cm to 4.5 cm long. Hairless or sparsely hairy stems; erect spiny capsule, with over 100 spines of variable length, on a straight stalk; seeds black or grey, pitted, 2.5 mm to 4.5 mm long.

Dispersal: Spread by seed, particularly by water and as a contaminant in produce.

Control: Control can be achieved by repeated cultivations or applications of a registered herbicide. It is a long-term exercise as the plant's seeds can remain viable for more than 30 years.



Grader Grass (*Themeda quadrivalis*)

Flowers/Seedhead: Seedhead to 1.3 m long. Flowers mostly summer.

Description: Grader grass is an erect tufted grass that grows to more than 2 m in height. As the plant matures it turns a distinctive orange-red or golden colour. It has robust, cane-like stems with long complex seed heads. The height and robustness of grader grass plants is rain fall and fertility dependent. Typically land managers could expect to see grader grass plants growing to 1 m to 1.5 m in an average wet season.

Dispersal: Spread by movement of seed by animals, in mud, by graders and in contaminated seed.

Control: Any management strategy for annual weeds must suppress seedling establishment and stop seeding to minimise repeated seed input into the system. Management practices that expose soil, such as overgrazing, burning, soil disturbance, short slashing or using non-specific herbicides should be minimised.

See DPI's Grader Grass Management Guide for further information:
http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Research-Grader-Grass-Management-Guide.pdf



Mother of Millions/Resurrection/Live-leaf (*Bryophyllum pinnatum*, *B. fedtschenkoi*)



Flowers/Seedhead: The bell-shaped (i.e. tubular), drooping, flowers (up to 7 cm long) are arranged in branched clusters at the tips of the stems. Each flower is borne on a stalk 10 mm to 25 mm long. They have prominent, inflated, yellowish-green or pale green coloured sepals (25 mm to 55 mm long) that are partially fused into a tube and streaked with pink or reddish coloured blotches. The yellowish-green to dark red coloured petals (3 cm to 6 cm long) are also partially fused into a tube that divides into four petal lobes near the tip. Flowers are produced mainly during winter and spring.

The fruit are papery and membranous (about 15 mm long), with four slender compartments. They generally remain enclosed within the old flower parts and contain numerous minute, slender, brownish-coloured seeds (less than 1 mm long).

Description: The upright stems are fleshy (i.e. succulent) and hairless. The leaves are also fleshy and are either simple or compound. They are oppositely arranged, flattened, and the number of leaflets present varies from one near the base of the stems to three or five higher up the stems. These leaves (5 cm to 25 cm long and 2 cm to 12.5 cm wide) are green or yellowish-green in colour, hairless, and are borne on stalks 2 cm to 10 cm long. The leaflets are oval or narrowly oval in shape with rounded tips and, when more than one leaflet is present, the end leaflet is usually significantly larger than the others.

Dispersal: This plant reproduces by seed and also produces plantlets along the edges of its leaves. Its fleshy leaves are capable of taking root and developing into new plants after being broken off the main plant or being dumped in garden waste.

Control: The best approach is usually to combine different methods. Control may include chemical, mechanical, fire and biological methods combined with land management changes. The control methods you choose should suit the specific weed and your particular situation.

See DPI's Mother-of-Millions Fact Sheet for further information:
http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Mother-Millions-PP33.pdf

Fraser Island

Easter Cassia (*Senna pendula* var. *glabrata*)

Flowers/Seedhead: Flowers about 2 cm long. Stamens seven, staminodes three. Stamens consist of the following: 2 long anthers on long filaments, one long anther on a short filament and four shorter anthers on short filaments.

Description: A shrub up to 5 m tall but more often seen to 3 m to 4 m. Its leaves grow in an alternate pattern with 3-6 pairs of leaflets. Easter Cassias can be easily seen around Easter when it produces masses of bright yellow flowers. Flowering is followed by hundreds of slender brown seed pods up to 13 cm long.

Dispersal: Each seed pod contains 5 to 10 seeds which are carried by wind and water.

Control: Small individual plants can be removed by hand pulling, particularly in moist soil. Take care to remove the roots and consider applying mulch to discourage regrowth. Larger individuals may be dug out with a mattock or similar garden tool. Once again, the whole crown must be removed for the achievement of long term control. This approach may be deemed too labour intensive for more established individual plants or for larger infestations. This plant can be controlled with herbicides.



See DPI's Easter Cassia Fact Sheet for further information:

http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Easter-Cassia-PP79.pdf

Coastal Morning Glory (*Ipomea cairica*)



Flowers/Seedhead: Its funnel-shaped flowers are lavender in colour, with a deeper coloured throat. Flowers most of year.

Description: Perennial herb with twining and trailing stems. Roots tuberous and plant rooting at nodes. Plants hairless. Leaves round in outline, 3 cm to 10 cm long and wide, leaf stalk 2 cm to 6 cm long. Inflorescence axillaries, 1 to 3 flowered. Capsule almost globe-shaped, 9 mm to 12 mm wide, with 2 chambers, splitting into 4 valves, contains up to 4 seeds. Seeds dark brown to black, 5 mm to 6 mm long, flattened ovoid, hairy with pale brown long hairs on outer ridges.

Dispersal: Spread by seed and locally by spreading stems.

Control: Climbing growth of individual plants may be physically removed using a brush hook or similar tool. Take care to dig out and remove the crown and roots of the plant to prevent regrowth. Larger infestations may require the use of herbicides.

See DPI's Coastal Morning Glory Fact Sheet for further information:

http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Mile-A-Minute-Coastal-Morning-Glory-PP87.pdf

Sisal Hemp (*Agave sisalana*)

Flowers: It has yellowish clusters of flowers on a long central stem which can grow to over 5 m.

Description: This tough succulent consists of a rosette of sword-shaped leaves to about 2 m tall. The edges of the leaf are often rough and are spine tipped.

Dispersal: This species is only known from cultivation, but it is thought to have originated in Mexico.

Control: Hand pulling is recommended when the plant is small but once it approaches maturity it requires mechanical or chemical control.



Mother in Law's Tongue (*Sanseveria trifasciata* var. *trifasciata*)



Flowers/Seedhead: Small, cream to green, tubular flowers are carried on a spike.

Description: Upright succulent herb or forb that grows to 60 cm. From the fleshy rhizome emerge stiff, lance-shaped leaves, 0.6 m to 1.2 m long, which are dark green with a mottling of grey-green and yellow throughout.

Dispersal: Spread by seed and stolons.

Control: Carefully dig out isolated plants and small infestations, making sure that all fragments of the substantial rhizome system are removed. This requires persistent effort and very regular monitoring of the site and removal of any new growth and its rhizome. To prevent reshooting, all plant pieces should be put into strong bags and removed. Treat larger infestations with herbicide.

See DPI's Mother-in-Laws Tongue Fact Sheet for further information:

http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Mother-in-Laws-Tongue-PP116.pdf



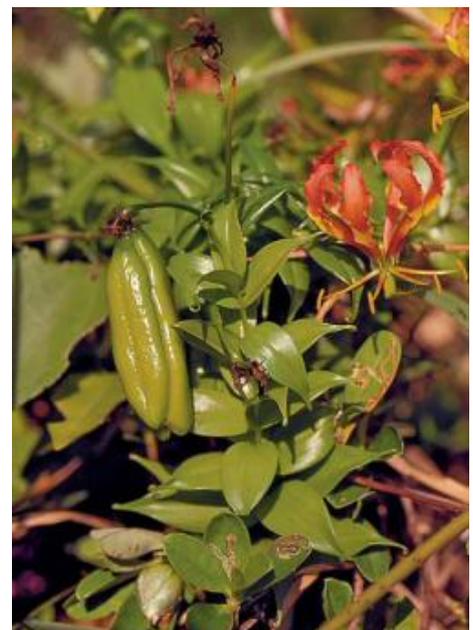
Glory Lily (*Gloriosa superba*)

Flowers/Seedhead: 4 cm to 7 cm wide, on stalks to about 15 cm long, petals and sepals recurved, undulate to about 7 cm long, 7 mm to 15 mm wide, orange or reddish with yellow base. Flowers late spring to autumn.

Description: Spreading, sometimes climbing, perennial with a robust rhizome and stems to about 3 m long. Leaves glossy, ovate, 6 cm to 20 cm long, 2 cm to 4 cm wide. Fruit fleshy oblong, to about 6 cm long. Seeds many, egg-shaped, red, to about 4 mm wide.

Dispersal: This plant produces viable seed which either spreads nearby or becomes more widespread with the assistance of birds. It also has underground tubers and is spread through the dumping of soil and garden waste.

Control: Carefully dig out isolated plants and small infestations, making sure that all fragments of the substantial rhizome system are removed. This requires persistent effort and very regular monitoring of the site and removal of any new growth and its rhizome. To prevent reshooting, all plant pieces should be put into strong bags and removed. Treat larger infestations with herbicide.



Umbrella Tree (*Schefflera actinophylla*)



Flowers/Seedhead: It produces a spike of red flowers, which mature into seeds that are readily distributed by fruit eating birds.

Description: This fast-growing, evergreen tree reaches heights of 15 m growing easily in shady areas, as well as in sunlight. Leaves are compound with stalks up to 40 cm long.

Dispersal: Spread by birds, particularly through native bushland.

Control: A combined approach of different control methods including cut stumping, basal barking and stem injections is most effective.

See DPI's Umbrella Tree Fact Sheet for further information:

http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Umbrella-Plant-PP96.pdf

Ochna/Mickey Mouse (*Ochna serrulata*)

Flowers/Seedhead: Flowers are bright yellow with five petals. These petals fall off, leaving five sepals which turn scarlet red when the fruits appear. Fruits are initially green, turning glossy black in summer.

Description: This weed grows as a small, erect shrub up to about 1.5 m tall. It is a woody shrub, and has an angled tap root that is easily broken when hand pulled. Leaves are up to 5 cm long, narrow and glossy with serrated margins. New growth usually has a bronze tinge.

Dispersal: Spread mainly by bird-dispersed seeds.

Control: For young seedlings hand pulling is generally the most successful method of control. Take care not to break the tap root. Larger individuals may need to be grubbed out with a mattock.

See DPI's Ochna or Mickey Mouse Plant Fact Sheet for further information:

http://www.dpi.qld.gov.au/documents/Biosecurity_EnvironmentalPests/IPA-Ochna-Mickey-Mouse-PP89.pdf



General Information

Herbicide control

Before using any herbicide, always read the label carefully. All herbicides must be applied strictly in accordance with the directions on the label. *Note: Some herbicides should only be applied by people trained in the use of agricultural chemicals.*

Disposal method

Never dispose of declared pests into local bushland or waterways. Place in a plastic garbage bag, seal well and put into the general waste bin. **Do not place in the green waste section of the landfill or attempt to compost for reuse in the garden.**

Sources and References

Information and photos primarily sourced from the Department of Primary Industries and Fisheries.

Further information:

- Department of Primary Industries and Fisheries: www.dpi.qld.gov.au
- Weeds Australia: www.weeds.org.au
- Weeds to whack: www.saveourwaterwaysnow.com.au