

Tablelands Biosecurity Plan 2019–2024

Tablelands Pest Management Advisory Committee V2.0



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Version Control

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1. Report Purpose and Structure

The Tablelands is renowned for its high agricultural output and exceptional native plant and animal species. Protection of both the environment and rural communities is a high priority.

The Tablelands Biosecurity Plan 2019–2024 (the Plan) is guided by the *Biosecurity Act 2014* (the Act) and is based on a review of the Tablelands Regional Council (TRC) Pest Plan 2014–2018¹. Its purpose is to safeguard the region's economy, environment, agricultural and tourism industries from pests and diseases².

The plan contains an overview of the Act and obligations for pest plant and animal management, a summary of biosecurity plant and animal pest species based on local operational and community priorities, restricted matter categories of the Act, other state and national criteria and the Far North Queensland Regional Organisation of Councils (FNQROC) pest management risk analysis framework³, and action plans for species-specific control recommendations.

The plan was formed by the Tablelands Pest Management Advisory Committee (TPMAC) with representatives from community groups, and local and State government⁴, and reflects community expectations with agreed action plans for twenty plant and five animal pest species. The document also acknowledges that pest management impacts the entire community and provides an operational framework that applies to all groups, interests and land uses (Figure 1). The Plan outlines areas of pest management responsibilities for individuals, agencies and organisations, and provides landholders with strategic direction and mechanisms to enable them to set priorities for pest management on their property.

TPMAC works cooperatively to meet their biosecurity obligations, and monitors and evaluates its success by:

- increasing community awareness of weeds and pest animals
- developing priorities for the strategic investment of resources
- working across all land tenures to target priority species and areas
- promoting effective methods for prevention and control
- ensuring those who are dealing with invasive biosecurity matter are meeting their general biosecurity obligation (section 3.1.3).

The role of TPMAC is to:

- develop, monitor control actions and review a biosecurity plan for invasive biosecurity matter for all land tenures in the local government area.
- prioritise weed and pest animals (invasive biosecurity matter and locally declared pest species) and develop specific obligations tailored to ensure pests are managed to a standard that is accepted by the community
- ensure all stakeholders formally acknowledge and implement their roles and responsibilities in relation to the Plan.

¹ <https://www.trc.qld.gov.au/download/local-area-pest-management-plan-2014-2018/>

² <https://www.legislation.qld.gov.au/view/pdf/2017-03-30/act-2014-007> Part 2

³ <http://www.fngroc.qld.gov.au/files/media/original/003/d7a/a59/809/Framework.pdf>

⁴Including representatives from the Bush Heritage Australia, Department of Agriculture and Fisheries, Department of Environment and Science (Private protected area partnerships and QNPWS), Eacham Landcare, Ergon Energy, Far North Queensland Regional Organisation of Councils, Johnstone River Catchment Management Association, Malanda Beef Plan Group, Malanda Landcare, Tablelands Regional Council, Trees for Evelyn and South Atherton Tablelands, Tree Kangaroo and Mammal Group, Terrain NRM.

2. Introduction

The Tablelands and surrounding environs have some of the best agricultural land in Queensland, coupled with the most intact savannah woodlands⁵, the oldest tropical rainforests on Earth⁶ and some of the richest biodiversity in Australia with endemic and threatened ecological communities and species⁷.

The region is an agricultural and primary industry food bowl within a natural environment of World Heritage values. It is home to 25,541 people⁸ with 67.23% of the landscape under broad-acre and agricultural production, 22.62% under conservation and 9.75% residential. Agricultural industries are the highest employer (16.4%)⁹.

Spanning 1,138,217ha, the Tablelands region covers seven watersheds including a significant portion of the Barron, Herbert and Johnstone rivers¹⁰. The region is recognised as a crucial network of natural corridors linking the Eucalypt dominant Einasleigh Uplands of the west, to the Wet Tropics sclerophyll and rainforest of the Great Dividing Range in the east¹¹. The Tablelands region has a highly variable climate and average wet season rainfall of 1157mm, with dry season rainfall of 534 mm¹². Typical weather of savanna environments is experienced inland, with a hot (30–35°C), humid, monsoonal wet season from December to April and average rainfall of 805mm. The April–November dry season has cooler temperatures but little rain (averaging 75mm)¹³.

2.1 Values this biosecurity plan seeks to protect and sustain

When we have an understanding of what is important, we can then identify how key values may be impacted by invasive plants and animals. The risk assessment process used for invasive species in this biosecurity plan considers the likelihood and extent of the impact/s a biosecurity issue might present on four broad categories of values.



Conservation and biodiversity assets and values that represent the natural environment. They can range from landscapes and features, such as our national parks and reserves, through to remnant or restored patches of forest or even individual trees. These assets might contain or support rare plants, animals and communities or may simply provide important places for natural processes to take place.

⁵ http://www.northernaustralia.gov.au/sites/prod.office-northern-australia.gov.au/files/files/Chapter_04-Terrestrial_ecosystems.pdf

⁶ <http://www.wettropicsplan.org.au/content/download/788/6563/version/3/file/Terrain-WQIP-combined.pdf>

⁷ <https://www.wettropics.gov.au/>

⁸ <https://profile.id.com.au/tablelands>

⁹ <https://economy.id.com.au/tablelands/Employment-census>

¹⁰ <https://terrainrm.maps.arcgis.com/apps/MapSeries/index.html?appid=636c8deb3b00483c9c51be43e8846038>

¹¹ http://www.wettropics.gov.au/site/user-assets/docs/WT_planning_boundaries.pdf

¹² The Atherton–Evelyn Tablelands' average annual rainfall ranges from 4376mm (Topaz) to 1032mm (Walkamin).

¹³ <https://www.daf.qld.gov.au/business-priorities/environment/ag-land-audit/agricultural-climate-risk-information/far-north#>



Agriculture and industry assets represent primary production and the economy. These assets may include highly modified or intensive production systems, through to relatively natural systems used in the rangelands. An industry such as honey production may use both native forests and intensive agricultural systems. Other industries might be based in urban or industrial systems.

Water resource assets represent natural and artificial waterways and can include storage systems such as lakes, dams and impoundments through to natural water courses and wetlands. Water resources and assets can be valuable in their own right as natural environments, or may have value for water supply, recreation or economic benefit such as fisheries.



Community and residential assets are places important to people — where they live, work or play on a daily basis. These may include densely settled urban community areas and environments, through to areas around homesteads and houses in rural areas. Most community and residential assets also include natural or semi-natural areas and habitats by way of gardens, urban bushland or waterway reserves.

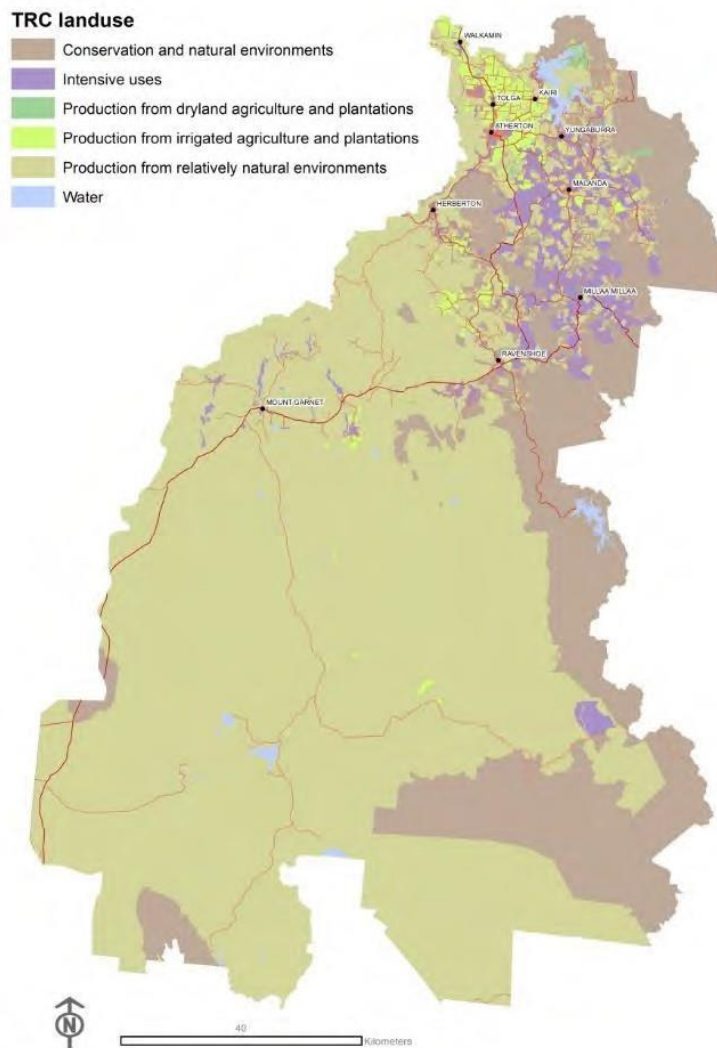


Figure 1: Land use in the Tablelands Regional Council area.

3. An Overview of the *Biosecurity Act 2014*


3.1 The Act

In accordance with Section 53 of the Act, TRC must develop and make publicly available its biosecurity plan, outlining priorities for managing invasive species.

The Act provides guidance on the management of non-native flora and fauna species and uses the term 'biosecurity matter' to describe all non-human living things. Biosecurity matter is further divided into prohibited matter and restricted matter.

3.1.1 Prohibited matter

Prohibited matter refers to matter not currently established in Queensland, but has the potential for detrimental impact on human health, social amenity, the economy and natural environment.



Prohibited matter is listed in Schedule 1 of the Act¹⁴ and includes parasites, viruses, and aquatic and animal diseases. It is illegal to deal with prohibited matter within Queensland and anyone becoming aware of prohibited matter should report it immediately to the Department of Agriculture and Fisheries on 13 23 25 or daf.qld.gov.au.

It is the responsibility of all Queenslanders, as well as visitors from interstate and overseas, to be aware and take steps to prevent prohibited matter from entering our state. Everyone is expected to know about prohibited matter that exists in their environment, or as part of a business or hobby¹⁵. For example:

- Producers should be aware, and a vet is expected to know, of symptoms of exotic diseases such as bluetongue, foot-and-mouth disease and highly-pathogenic avian influenza.
- People bringing fruit and vegetables into the state will need to ensure they don't introduce carriers of prohibited matter.
- A citrus farmer will be expected to know about citrus canker.

3.1.2 Restricted matter

Restricted matter is biosecurity matter that is present in Queensland and is likely to have a detrimental impact. There are specific actions that are required to limit restricted matter's impact by reducing, controlling or containing it.

Plant and animal species in the TRC Biosecurity Plan 2019–2023 refer to seven restricted matter categories.

- Category 1 must be reported to a Queensland Government inspector within 24 hours.
- Category 2 must be reported to a Queensland Government inspector or a local government authorised officer.
- Category 3 must not be distributed. This means it must not be released into the environment unless the distribution or disposal is authorised by a regulation or under a permit.
- Category 4 must not be moved.
- Category 5 must not be possessed or kept unless it is under a permit issued in accordance with the Act or another act.
- Category 6 must not be fed except for the purpose of preparing for or undertaking a control program.
- Category 7 must be destroyed and disposed of as soon as practicable in accordance with Queensland Government requirements.

See daf.qld.gov.au for a detailed list of restricted invasive plants in Queensland.

3.1.3 General biosecurity obligation

The success of this Plan depends on the general biosecurity obligation of individuals, industry and government to be proactive in preventing, managing and addressing biosecurity risks that relate to them.

The general biosecurity obligation¹⁶ requires management responses to be matched to the level of harm or risk posed, and enables risks to be prioritised and responses customised to suit local conditions. This includes taking all reasonable and practical measures to manage invasive species and to prevent spread to neighbouring properties by taking proactive steps to prevent incursions or incidents.

¹⁴ <https://www.legislation.qld.gov.au/view/pdf/2017-03-30/act-2014-007>

¹⁵ <https://www.daf.qld.gov.au/business-priorities/biosecurity/about-biosecurity/biosecurity-act-2014/biosecurity-matter/prohibited-matter>

¹⁶ Section 23, *Biosecurity Act 2014* <https://www.legislation.qld.gov.au/view/pdf/2017-03-30/act-2014-007>

3.1.4 Reducing biosecurity risks

Typically biosecurity risks can be reduced by managing pests (such as weeds and pest animals) and diseases that may have negative impacts on neighbouring properties. This includes:

- carefully examining animals before transporting them to ensure they are not carrying pests or diseases that could affect agricultural industries
- spelling animals for a minimum of seven days when moving from infested areas to allow seed to pass
- closely inspecting pot plants and potting mix before transporting them to ensure they aren't carrying pest ants or weeds.

3.1.5 Meeting general biosecurity obligations

The minimum actions required to satisfy the obligations of pest plant and animal management are to:

- provide and maintain access for pest control programs
- participate in baiting and trapping programs
- reduce priority weeds
- develop a property pest management plan and when required, a farm biosecurity plan
- prevent the spread of declared weeds by focusing on watercourses, roadways and property boundaries.

More specific actions are listed in Table 1.

3.1.6 Farm biosecurity plans

A farm biosecurity plan forms an agreement outlining the responsibilities and actions of all parties in regard to the survey, control and containment of pest plants and animals.

These plans assist landholders to:

- demonstrate their general biosecurity obligation is being met
- set and achieve goals through a series of actions
- manage pests effectively and efficiently
- ensure best practice control methods are being employed
- support funding applications for pest management.

3.1.7 Non-compliance with general biosecurity obligation

Not complying with a general biosecurity obligation is as an offence under the Act.

A Biosecurity Queensland or TRC Land Protection Officer can issue a biosecurity order requiring specific action to be taken within a reasonable timeframe. This formal compliance action ensures an individual, business or other organisation improves the way they manage biosecurity risks.

4. Priority Plant and Animal Pest Species in the TRC Region

Pest plant and animal species in the TRC region (Table 2) have been prioritised by TPMAC based on local operational and community priorities, restricted matter categories of the Act and other state and national criteria. The plant pest species are also listed by a FNQROC risk management system¹⁷ (Appendix 1) and species-specific action plans (Section 5 and Appendix 2).

¹⁷ <http://www.fnqroc.qld.gov.au/files/media/original/003/d7a/a59/809/Framework.pdf>

Table 1: Specific actions landholders can take to satisfy general biosecurity obligations.

Sector	General biosecurity obligations	Actions
Primary producers: horticulture	<ul style="list-style-type: none"> • Be aware of the priority risks to your industry and local government area. • Report new or suspected pests to your industry contact, TRC or Biosecurity Queensland. 	<ul style="list-style-type: none"> • Survey for pest weeds/animals during routine maintenance. • Maintain vehicle/machinery hygiene protocols. • Use appropriate control methods¹⁸ • Erect property and site-specific signs. • Rotate crops and plant cover crops. • Participate in baiting and trapping programs • Manage weeds on watercourses and roadways.
Primary producers: grazing	<ul style="list-style-type: none"> • Don't move soil or machinery that has biosecurity risks such as weed seeds or dirt. • Prevent the spread of declared weeds on and off your property by controlling, prior to the flowering period, in high risk areas (watercourses/ roadways/ boundaries). 	<ul style="list-style-type: none"> • Conduct boundary/risk area checks. • Survey for weeds/animals during routine maintenance • Maintain vehicle/machinery hygiene protocols. • Use appropriate control methods • Participate in baiting and trapping programs • Erect property and site-specific signs. • Conduct chopper rolling, slashing, boom or aerial spraying. • Develop a property pest management plan and/or a farm biosecurity plan. • Install pest-appropriate fencing.
Landholders: fruit production	<ul style="list-style-type: none"> • Reduce TRC priority weeds on your property. • Monitor and record the presence of and damage caused by feral animals on your property. 	<ul style="list-style-type: none"> • Conduct crop/risk area checks. • Survey for weeds/animals during routine maintenance. • Ensure equipment leaving or entering properties is clean of contaminants. • Use appropriate control methods • Erect property and site-specific signs. • Provide/maintain access for programs. • Provide groundcover management. • Develop a property pest management plan and/or farm biosecurity plan. • Install pest-appropriate fencing. • Participate in baiting and trapping programs. • Reduce priority weeds.
Nursery industry and plant sellers	<ul style="list-style-type: none"> • Participate in coordinated feral animal control programs. • Provide/maintain access for management programs. 	<ul style="list-style-type: none"> • Research information on new stock lines before introduction. • Report unusual plants and animals. • Prevent sale of state, local and problem pest plants. • Manually remove pest weeds and bag seed heads. • Erect property and site-specific signs.
Landholders: rural residential, lifestyle and urban residential	<ul style="list-style-type: none"> • Participate in coordinated feral animal control programs. • Provide/maintain access for management programs. 	<ul style="list-style-type: none"> • Report unusual plants and animals. • Responsibly dispose of green waste. • Select suitable garden plants. • Cooperate with and participate in local area pest and weed management programs. • Report recurrence of priority pest and weeds after control efforts. • Participate in baiting and trapping programs • Develop property pest management plan and/or a farm biosecurity plan. • Install pest-appropriate fencing. • Reduce priority weeds .

¹⁸ This could include: spot spraying; manual removal, bagging seed heads, and use fire or other control methods to reduce infestations.

Table 2: TRC pest plants 2019–2024 including National, state and local control priorities¹⁹.

TRC biosecurity action plan		Locally declared TRC Local Laws	Environmental weed	
Common name	Scientific name	National significance	Biosecurity Act category	Locally declared and environmental weeds
Aleman Grass	<i>Echinochloa polystachya</i>			
Bellyache Bush	<i>Jatropha gossypifolia</i>	WONS	3	
Buddleia	<i>Buddleia davidii</i>			
Broad-leaved Privet	<i>Ligustrum lucidum</i>		3	
Cabomba	<i>Cabomba caroliniana</i>	WONS	3	
Camphor Laurel	<i>Cinnamomum camphora</i>		3	
Candy Leaf	<i>Stevia ovata</i>		3	
Cats Claw Creeper	<i>Dolichandra unguis-cati</i>	WONS	3	
Cestrum	<i>Cestrum parqui</i>			
Chinese Privet	<i>Ligustrum sinense</i>		3	
Coffee	<i>Coffea arabica</i>			
Coral Bush	<i>Ardisia crenata</i>			
Coral Tree	<i>Erythrina x sykesii</i>			
Crofton Weed	<i>Ageratina adenophora</i>			
Fireweed	<i>Senecio madagascariensis</i>		3	
Gamba Grass	<i>Andropogon gayanus</i>		3	
Grader Grass	<i>Themeda quadrivalvis</i>			
Giant Bramble	<i>Rubus alceifolius</i>			
Giant Rats Tail Grass	<i>Sporobolus species</i>		3	
Giant Sensitive Plant	<i>Mimosa invisa</i>		3	
Guava species	Guava species			
Himalayan Magnolia	<i>Magnolia champaca</i>			
Hymenachne	<i>Hymenachne amplexicaulis</i>	WONS	3	
Japanese Sunflower	<i>Tithonia diversifolia</i>			
Lantana	<i>Lantana camara</i>	WONS	3	
Leucaena species	Leucaena species			
Lions Tail	<i>Leonotis nepetifolia</i>			
Madeira Vine	<i>Andredera cordifolia</i>	WONS	3	
Miconia species	Miconia species	NFTWEP	2, 3, 4, 5	
Navua Sedge	<i>Cyperus aromaticus</i>			
Parthenium	<i>Parthenium hysterophorus</i>	WONS	3	
Prickly Acacia	<i>Vachellia nilotica</i>	WONS	3	
Rubber Vine	<i>Cryptostegia grandiflora</i>	WONS	3	
Salvinia	<i>Salvinia molesta</i>	WONS	3	
Siam	<i>Chromolaena odorata</i>		3	
Sicklepod	<i>Senna obtusifolia</i>		3	
Singapore Daisy	<i>Sphagneticola trilobata</i>		3	
Thatch Grass	<i>Hyparrhenia rufa</i>			
Turbina Vine	<i>Turbina corymbosa</i>			
Thunbergia species	Thunbergia species		3	
Tobacco Weed	<i>Elephantopus mollis</i>		3	
Water Hyacinth	<i>Eichornia crassipes</i>	WONS	3	
Water Lettuce	<i>Pistia stratiotes</i>		3	

¹⁹ WONS- Weeds of National significance; NTWEP-National Tropical Weed Eradication Program.

4.1.1 Alert species

Pest plant and animal alert species in Table 3a and 3b have been found in North Queensland local government areas but not yet been discovered in the TRC region despite suitable habitats.

[Department of Agriculture and Forestry](#) has detailed species information. The community has a responsibility to be vigilant and report these pests to TRC on 1300 362 242, info@trc.qld.gov.au or at a customer service centre.

Table 3a: Pest plant species that may be found in the TRC region.




















Photo	Common name	Scientific name	Vicinity	Likely source and mode of spread
	Amazonian Frogbit	<i>Limnobium laeviatum</i>	Mareeba and Cairns	Aquariums and water plants
	Bunny Ears Cactus	<i>Opuntia microdasys</i> , <i>O. leucotricha</i> , <i>O. rufida</i>	Mareeba and Cairns	Nursery and ornamental gardens
	Bog Moss	<i>Mayaca fluviatilis</i>	Cassowary Coast	Aquariums and water plants
	Brillantaisia	<i>Brillantaisia lamium</i>	Douglas, Cairns and Cassowary Coast	Machinery, vehicles, livestock and potted plants
	Cha-om or Pennata wattle	<i>Senegalia insuavis</i>	Whitsunday Regional Council	Private gardens
	Hiptage	<i>Hiptage bengalhensis</i>	Douglas Shire	Ornamental gardens and wind
	Kosters' Curse	<i>Clidemia hirta</i>	Mareeba and Cassowary Coast	Ornamental gardens and birds
	Limnocharis	<i>Limnocharis flava</i>	Cairns, Cassowary Coast and Townsville	Aquariums and water plants
	Madras Thorn	<i>Pithecellobium dulce</i>	Cairns and Cassowary Coast	Ornamental gardens
	Mexican Bean tree	<i>Cecropia species</i>	Douglas, Cairns, Cassowary Coast	Ornamental gardens, birds and flying-foxes
	Mimosa	<i>Mimosa pigra</i>	Northern Territory and Mackay	Boats and fishing gear
	Water Mimosa	<i>Neptunia oleracea</i> and <i>N. plena</i>	South-east QLD	Private gardens and flood events
	Sagittaria	<i>Sagittaria platyphylla</i>	Townsville, Mackay and South-east Queensland	Aquariums and water plants

Table 3b: Pest animal species that may be found in the TRC region.

Photo	Common name	Scientific name	Vicinity	Likely source and mode of spread
	Asian Spiny Toad	<i>Bufo melanostictus</i>	Cairns	Transport via plane or sea
	American Corn Snake	<i>Pantherophis guttatus</i>	Cairns	Pet trade
	Electric Ants	<i>Wasmannia auropunctata</i>	Mareeba , Cairns, Cassowary Coast and Douglas	Machinery, potted plants, garden and building material, and green waste
	Fox	<i>Vulpes vulpes</i>	Mt. Fox, Hinchinbrook	Natural migration
	Red-eared Slider Turtle	<i>Trachemys scripta elegans</i>	South-east Queensland (eradicated)	Aquariums and pet trade
	Yellow Crazy Ants	<i>Anoplolepis gracillipes</i>	Mareeba, Cairns and Townsville	Machinery, potted plants, garden and building material, and green waste

4.1.2 Pest animal species

Priority feral animals (Table 4) are managed by strategic trapping, baiting, biological control and shooting programs.

TRC biosecurity action plan		Other feral animals
Common name	Scientific name	Biosecurity Act Category
Asian Honey Bee	<i>Apis cerana javana</i>	1
Cane Toad	<i>Rhinella marina</i>	-
Eastern Gambusia	<i>Gambusia holbrooki</i>	3, 5, 6, 7
Feral Cat	<i>Felis catus</i>	3, 4, 6
Feral Pig	<i>Sus scrofa</i>	3, 4, 6
Indian Myna	<i>Acridotheres tristis</i>	-
Rabbit	<i>Oryctolagus cuniculus</i>	3, 4, 5, 6
Rusa Deer	<i>Cervus timorensis</i>	3, 4, 6
Tilapia	<i>Oreochromis mossambicus & Tilapia mariae</i>	3, 5, 6, 7
Wild Dog	<i>Canis familiaris</i>	3, 4, 5, 6

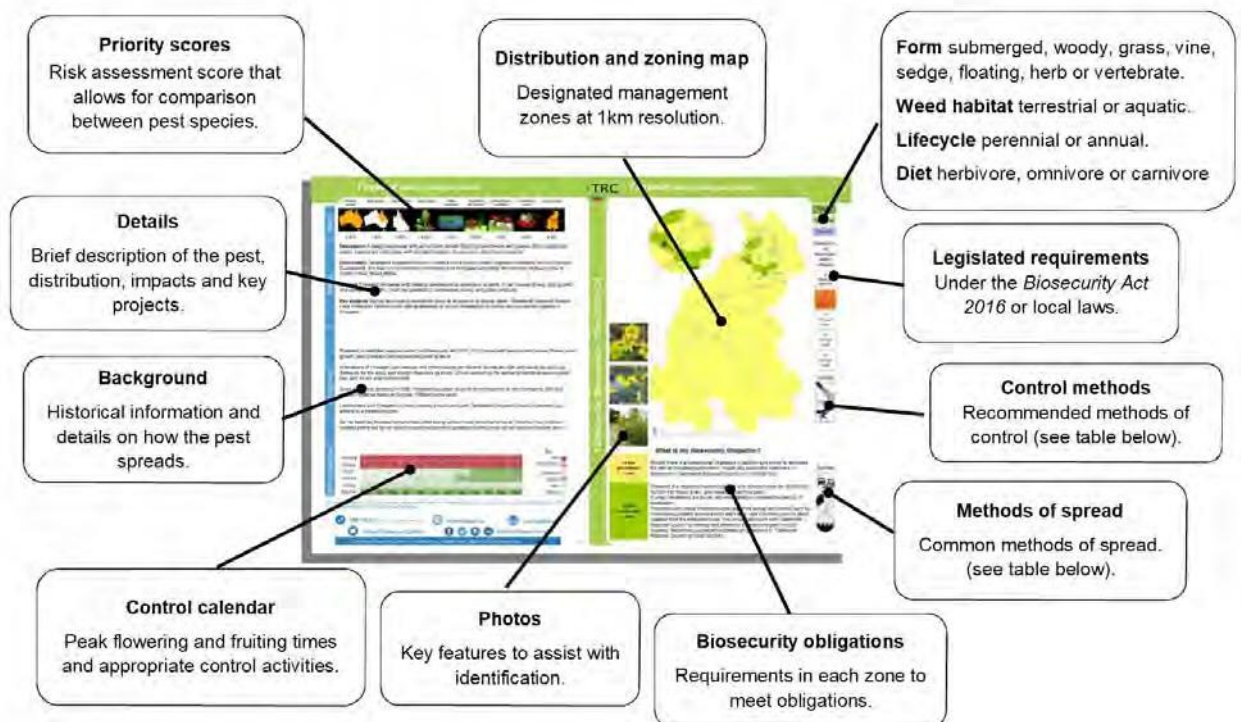
5. Action Plans for Control of Priority Plant Pest and Animal Species

Action plans have been developed for priority pest plant and animals that occur in the Tablelands region. The plans detail control requirements and general biosecurity obligations (Appendix 3), and outline management objectives and zones based on:














- the biology and distribution of the pest plant and animal
- strategic control actions
- coordination of pest management activities.

5.1.1 Outline of the information in biosecurity action plans and control methods.

There are numerous methods to control pests and also ways by which each pest species can be spread. These are summarised in icons on each action plan and are detailed below.



Key to control methods in the biosecurity action plans

	Frill or stem injection	Herbicide can be applied to woody weeds and trees via cuts or frills made close to the ground around the trunk or stem. This approach is best used when the dead plant can be left standing.
	Basal bark	Herbicide can be applied to woody weeds or vines with a low pressure spray (usually including diesel or synthetic oil) to the lower stem. This method is not suited for use near or in waterways.
	Cut stump	Many vines, trees and woody weeds can be controlled by applying herbicide to the freshly-cut stem. The application is made quickly with a dabber or spray before the plants vascular tissue closes over.
	Chop or grub	Many weeds can be selectively managed by grubbing or chopping. This approach is useful for reducing the competition from weeds while native vegetation or desirable plants re-establish.
	Drill/stem injection	Herbicide can be applied as a measured dose into evenly-spaced, downward-facing holes drilled near the base of each stem.
	Best practice grazing	Appropriately managing stocking rates will ensure a suitable ground cover that can compete with weeds. Grazing can also knock down weeds prior to control.
	Hand removal	Many weeds can be removed manually, particularly when they are at a seedling stage. Hand weeding is very selective and results in minimal disturbance.
	Foliar spray	Most weeds can be controlled at various life stages by applying herbicide. Spray applicators can be low or high pressure and are suited to covering larger areas or dense infestations.
	Biocontrol	The release of carefully-selected natural pests or diseases can control or interrupt reproduction. Biocontrol is most effective when integrated with other control methods.
	Slashing	Slashing can reduce the growth or reproduction of many weeds and is particularly useful before other control actions. Timing is critical in order to prevent the spread of seeds or fragments.
	Mechanical removal	Large scale infestations may require mechanical removal or control.
	Fire	A well planned fire can reduce or stimulate dormant seeds and control living plants. It is most suited to fire adapted vegetation types.
	Exclusion fencing	Fencing can be used manage grazing pressure or access to reduce weed or disease spread.

**Pesticide**

Pesticides can be used to control anything from ants to Wild Dogs, especially over large areas. There are strict use and permitting requirements for many pesticides.

**Trapping**

Trapping, while labour intensive, is widely used for Feral Pigs but can also be used to control Wild Dogs, Feral Cats and Feral Deer.

**Shooting**

Shooting or hunting can be used to control individual animals. It is generally less effective than other control strategies, but can complement trapping and baiting.

Key to modes of spread in the biosecurity action plans**Droppings**

Many plants use animals to spread their seed. Seeds are eaten along with the flesh of the fruit and are dispersed in droppings long distances from the source.

**Illegal dumping**

Deliberate or accidental spread of many plants can occur when green waste is not disposed of responsibly. Areas of bushland, creeks and farmland often suffer impacts from dumped garden plants.

**Machinery & vehicles**

Machinery and vehicles, including tractors, four-wheel drives, trailers, and motorbikes, can move pest plants and animals great distances.

**People, equipment & animals**

Some seeds attach to camping equipment, gardening tools, animals and people, and can be transported long distances.

**Stock, raw materials & produce**

Raw materials and produce including hay, animal feed, seed mixes and even livestock can contain or carry weed seed or other biosecurity risks like invasive ants, pathogens or diseases.

**Vegetative**

Many plants spread from cuttings and fragments.

**Water**

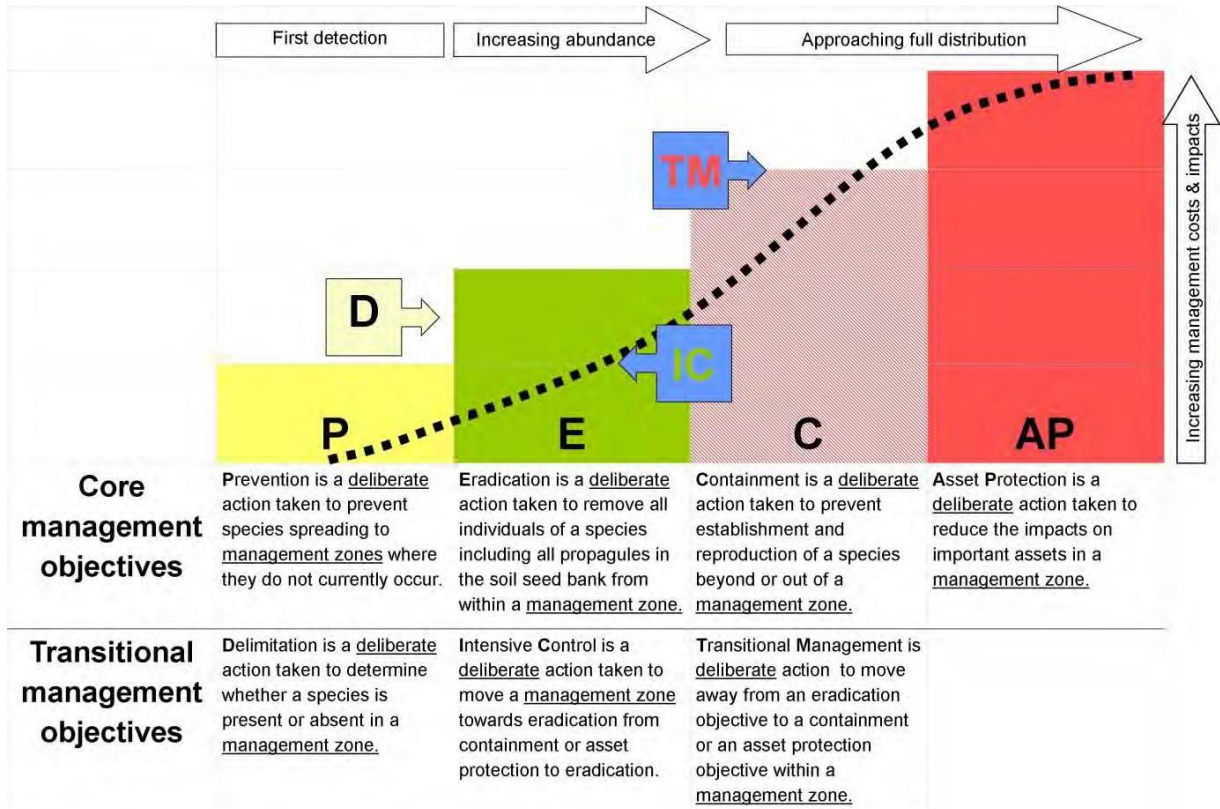
Many aquatic plants rely entirely on water to spread their seeds. Others have seeds or fragments that float for long distances on regular flows and flood events.

**Wind**

Many lightweight seeds have attachments for wind dispersal. These seeds can also attach to vehicles and clothing.

5.1.2 Action plan management zones and control methods.

The action plans use catchment-based management zones to identify control actions for each priority pest plant and animal. These zones are based on the pest management concept of the invasion curve (below) and describe how management options and strategies change as a biosecurity issue becomes more abundant over time. At each stage of the curve, as the area occupied by the pest increases, the impact and resources required to respond and manage the pest also increase.

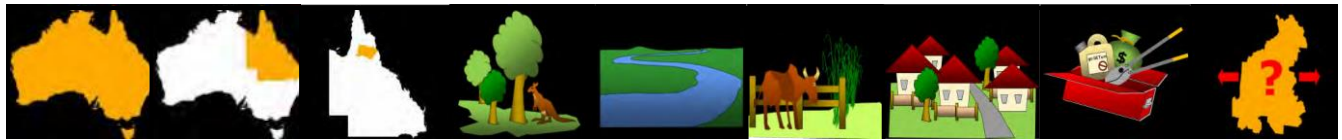


Prevention and early intervention are the most cost-effective actions. When these actions are not successful, consideration must be given to the most strategic management approaches to reduce local impacts and potential spread to new areas.



Bellyache Bush *Jatropha gossypifolia*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



2.5/5 1.5/5 4.0/5 5.0/5 5.0/5 5.0/5 3.0/5 5.0/5 5.0/5

Priority

Details

Description A squat, thick stemmed shrub 2.4–4m tall. Seedlings are single stemmed with deeply divided purple leaves. Mature leaves are brighter green with up to five lobes and coarse, dark brown hairs on the margins. Small, red flowers are followed by green, fleshy pods. Bellyache Bush is sometimes confused with Castor Oil Plant, which is taller and has seven to nine lobes that are pointed rather than rounded (see photos below).

Distribution An isolated infestation is present on Return Creek, upstream of Mount Garnet.

Impacts Bellyache Bush fruits are poisonous to humans and livestock. When eaten they can cause gastroenteritis and sometimes death. Infestations of Bellyache Bush can form a dense, impenetrable understorey that has a devastating impact on rangeland river systems and pastures.

Key projects Tablelands Regional Council continues to work with Department of Natural Resources, Mines and Energy to monitor outbreaks on unallocated State land and with Mareeba Shire Council at Emu Creek, the Upper Walsh River and the top of the Staaten River catchment, south of Highbury Station.

Background

Bellyache Bush is a weed of national significance. It outcompetes native vegetation, reduces pasture growth and has taken over extensive sections of river frontage, reducing biodiversity and increasing mustering costs. Bellyache Bush fruits are poisonous and can lead to death of some animals. In times of severe drought many stock deaths have been reported. All parts of the plant are poisonous to humans. Bellyache Bush has a relatively long seed life and requires ongoing monitoring and control to prevent new seed production.

During the dry season plants are often leafless and can be difficult to detect. Seedlings are short, with asparagus-like stems that are not easy to see amongst other vegetation. Frequent checking of known locations is an essential strategy to locate all plants before they reproduce.

Bellyache Bush can spread along watercourses, and by cattle, machinery and raw materials from infested areas. Landholders downstream of the Return Creek (Mt. Garnet) infestation should be on the lookout and report new or established infestations.

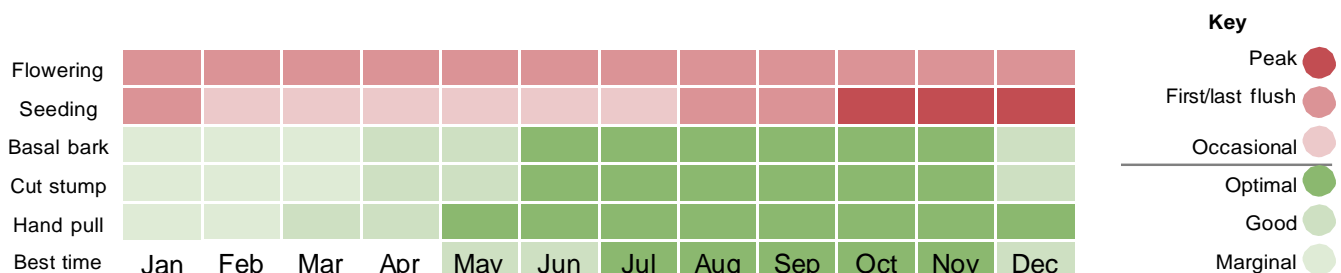


Castor Oil Plant leaf.



Bellyache Bush leaf.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

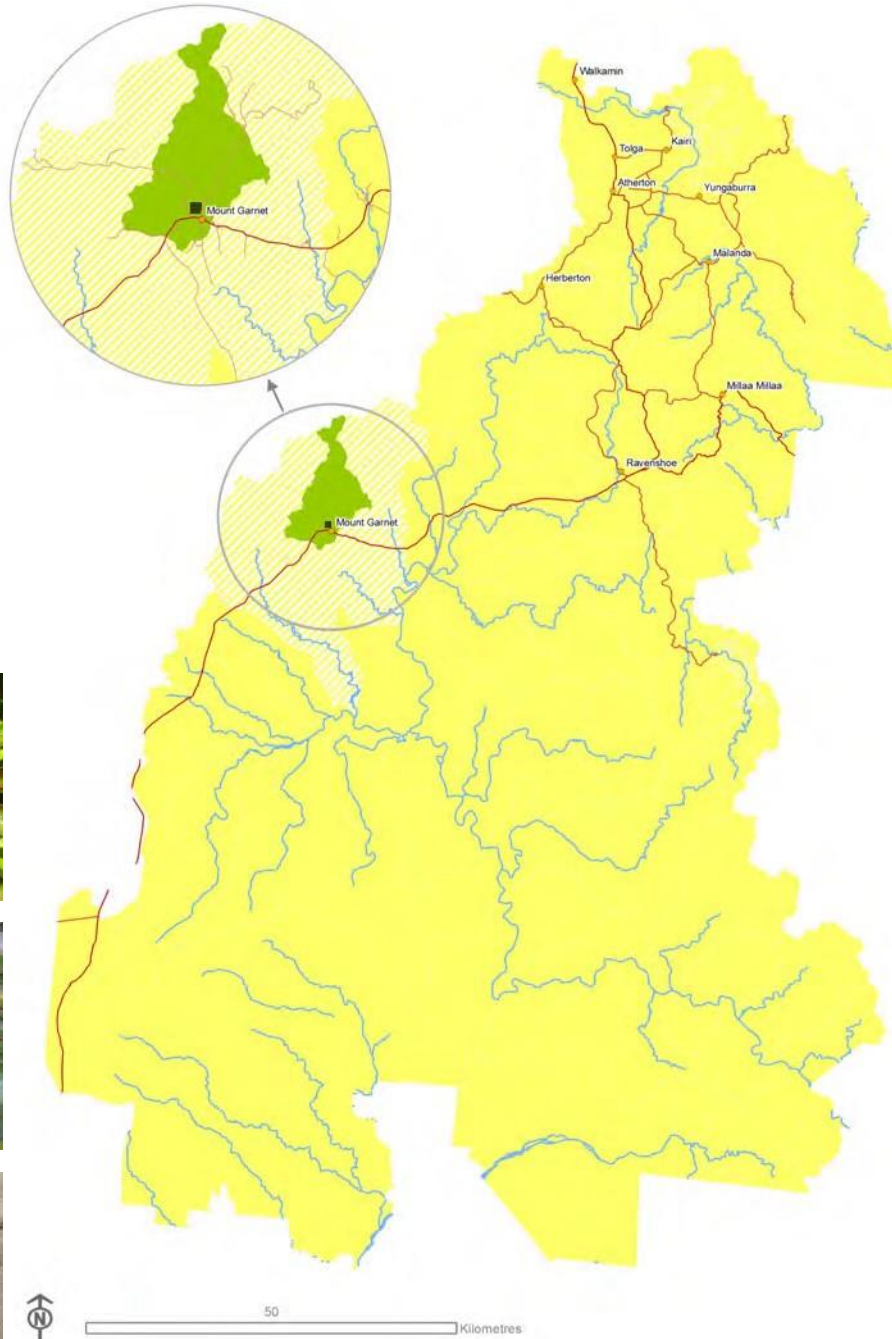
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Tablelands Regional Council

Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



In the delimitation zone
In the prevention zone
In the eradication zone

What is my biosecurity obligation?

In the delimitation zone
Report any suspected outbreaks or detections to Tablelands Regional Council (TRC) on 1300 362 242.

In the prevention zone
Bellyache Bush is a restricted invasive plant under the *Biosecurity Act 2014*. It is an offence to move, share, give away or sell this plant and to move or sell contaminated produce or soil. Spell stock for at least seven days prior to movement. Ensure machinery and vehicles moving from infested areas are free from plant material and soil. Report any suspected outbreaks or detections to TRC on 1300 362 242.

In the eradication zone
If your property has an active infestation you can assist the survey and control team by maintaining property access, and not moving soil or plant material from the infestation area. You should also work with TRC to develop and adhere to a biosecurity plan for your property. Reduce risk and spread by managing plants adjoining property accesses and boundaries. Ensure all plants are controlled prior to flowering to prevent more seed from entering the system. Report any suspected outbreaks and detections to TRC on 1300 362 242.

- Herb
- Terrestrial
- Perennial

Biosecurity Act Restricted matter category

- 2 Must be reported
- 3 Do not distribute
- 4 Do not move
- 5 Do not keep
- 6 Do not feed

Control



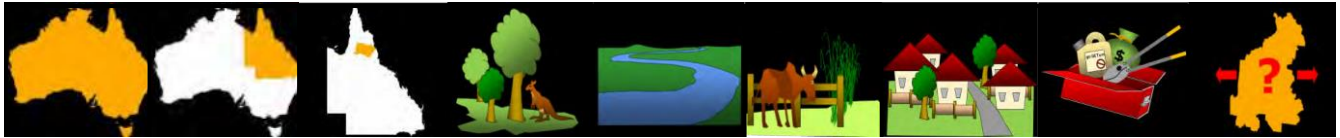
Spread



Cabomba *Cabomba caroliniana*)

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent

Priority



2.5/5 1.5/5 3.0/5 5.0/5 5.0/5 3.0/5 3.0/5 3.0/5 5.0/5

Details

Description Cabomba is an anchored, submerged aquatic plant. Its leaves are distinctly fan shaped which collapse when removed from water. Small white flowers form on the water surface on short stalks. Cabomba looks similar to several native species with which it can easily be confused, however it is much more competitive.

Distribution While it is likely to be more widespread, the current known distribution is isolated to several small waterways and dams on private properties in Kairi and Malanda.

Impacts Cabomba chokes waterways, irrigation infrastructure and impoundments and, once established, is very difficult to remove. It outcompetes native aquatic plants and disrupts or displaces aquatic fauna,

Key projects Intensive control of known incursions. Wider awareness required to detect new infestations.

Background

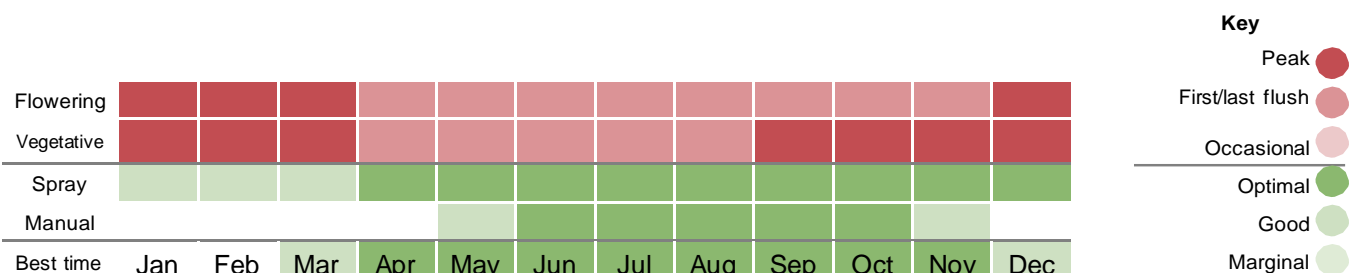
Cabomba is a weed of national significance and can be transported on boats, watercraft and trailers from infested waterways. It can rehydrate and shoot from stem sections even when it appears fully dehydrated. Watercraft, trailers and recreational gear must be thoroughly cleaned prior to leaving infested areas. Introductions are also often to home aquariums and the release of aquarium fish and plants into waterways .

Cabomba is known from several locations upstream of Tinaroo Dam. A wider search in catchments above the dam is required to identify source populations and isolated outbreaks.

Current efforts to remove Cabomba from water ways and private dams is underway. There a range of control tools for although, due to the difficulty of managing submerged weeds, an integrated approach is most effective.

The Cabomba control manual, developed by Weeds of National Significance, is the most useful resource to guide how to design a control program. The manual is available at [dpi,nsw.gov.au](http://dpi.nsw.gov.au). Biocontrol and more effective herbicide options are currently in development.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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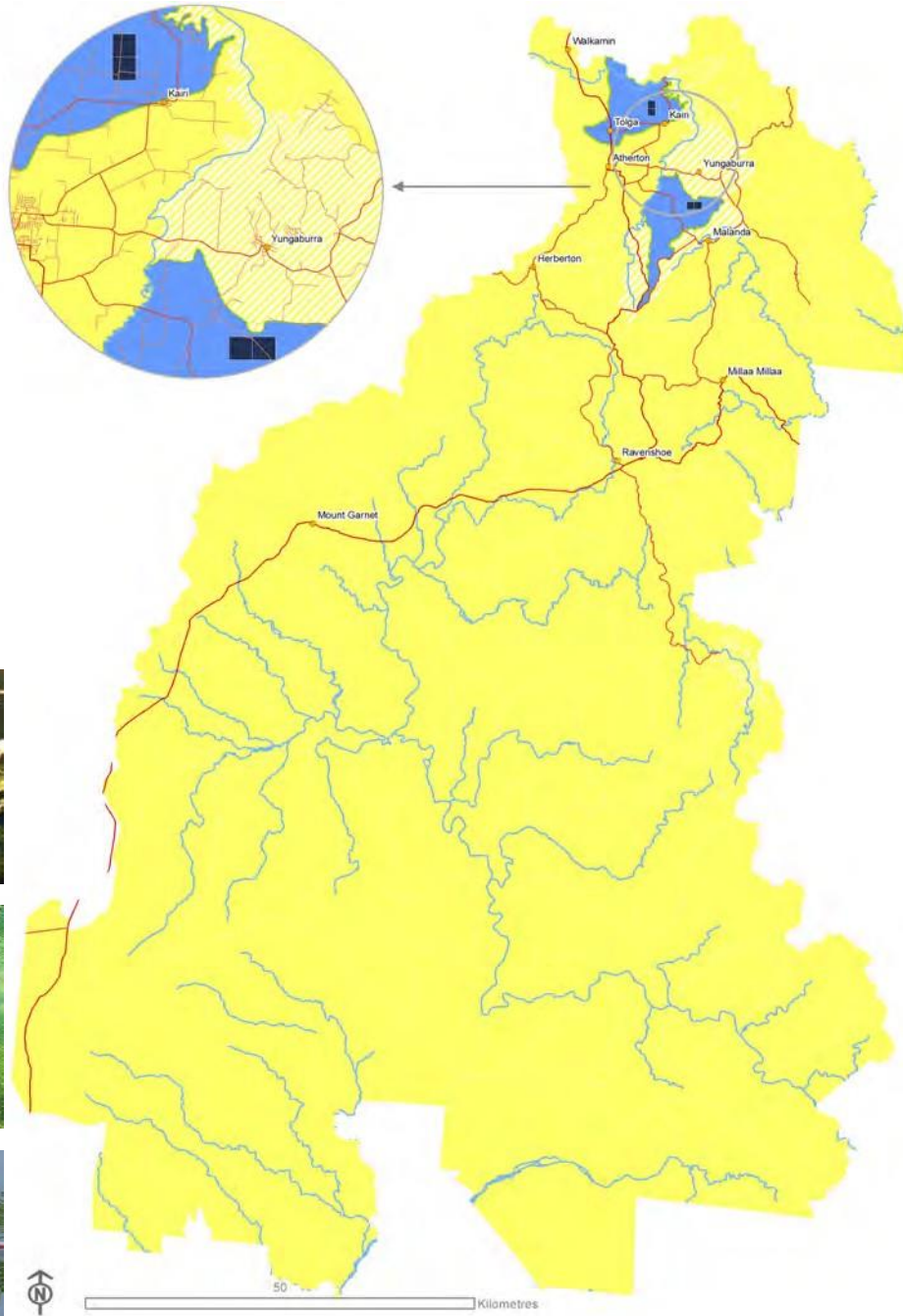
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In the delimitation zone
In the prevention zone
In the intensive control zone

What is my biosecurity obligation?

Cabomba is often detected when the small, white flowers break the water's surface. This is an easy way to separate it from native water plants. Report suspected outbreaks or detections to Tablelands Regional Council (TRC) on 1300 362 242.

As a restricted invasive plant under the *Biosecurity Act 2014*, this plant must not be kept, moved, given away sold or released into the environment without a permit. Ensure water plants are sourced from a reliable supplier and weed free area. Do not dispose of aquarium plants or fish into waterways. Report any suspected outbreaks or detections to TRC on 1300 362 242.

Minimise risk of spread by limiting contact with, and works in, drains and pondage that contain Cabomba. Control plants during the dry season when water is not flowing and access is easier. Do not move contaminated aquarium plants, soil or machinery. If you have an active infestation on your property you can assist TRC by: maintaining property access points and tracks; not moving soil or plant material from the infestation area; working with TRC to develop and adhere to a biosecurity plan for your property.

Submerged

Aquatic

Perennial

Biosecurity Act
Restricted
matter
category

2
Must be
reported

3
Do not
distribute

4
Do not
move

5
Do not
keep

6
Do not
feed

Control



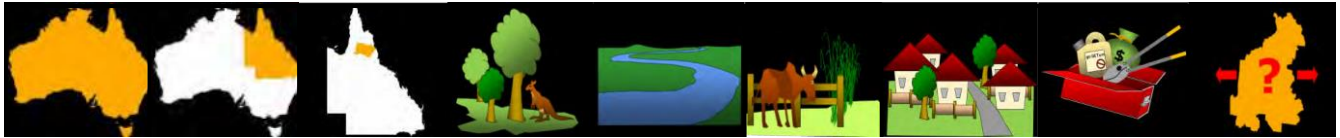
Spread



Candy Leaf *Stevia ovata*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent

Priority



0.0/5 1.5/5 0.05/5 4.0/5 3.0/5 4.0/5 4.0/5 3.0/5 3.0/5

Details

Description Candy Leaf is a multi-stemmed perennial daisy that grows to 80cm and has sweet-scented, toothed leaves and compact white flowers on arching stems. The stems become woody with age and have a furry appearance that darkens to a reddish colour at the base.

Distribution Candy Leaf has formed dense stands scattered along powerline easements and watercourses in the Vine, Blunder Creeks and Mount Ronald areas in Ravenshoe, and extends into adjacent forest and rangelands. Isolated outbreaks have also occurred at Herberton, Tumoulin and Mount Elliot.

Impacts The dense stands can outcompete rangeland pastures and invade both disturbed and intact vegetation and riparian zones. Plants die back and can re-shoot with multiple stems and seed after the first substantial rains. Stevia can also reproduce vegetatively from stem sections in contact with soil.

Key projects Targeted control of outliers of the known infestation prior to flowering and liaison with Ergon Energy during operations on easements.

Background

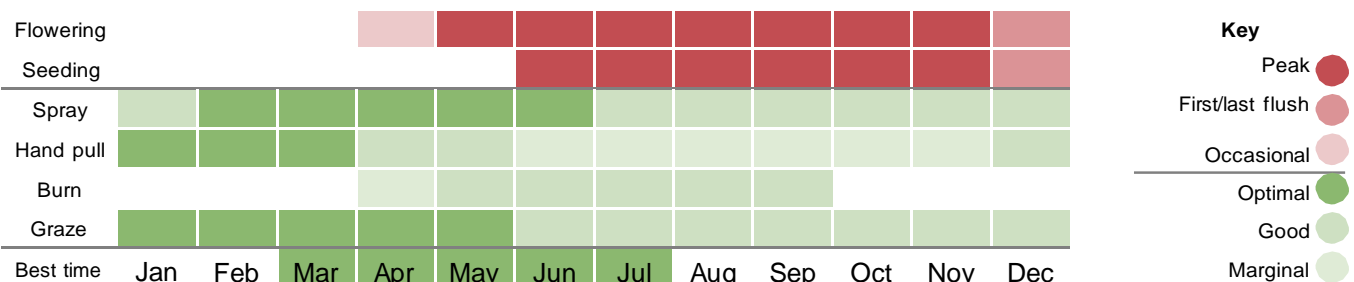
It is not clear when or how Candy Leaf arrived in Australia however its initial spread has often been associated with power easements and roadsides. Keeping an eye out for its conspicuous white flowers during May and June will assist to identify any new outbreaks.

Candy Leaf forms a thick underground taproot that enables it to recover from dry periods, fire and physical damage. It has a short seed life and is not very effective at wind dispersal so most seedlings establish near the parent plant. Long distance dispersal is reliant on movement attached to stock or vehicles or in water.

Known infestations are under an intensive control program that may transition to eradication in the future.

A management plan for Candy Leaf is available at trc.qld.gov.au.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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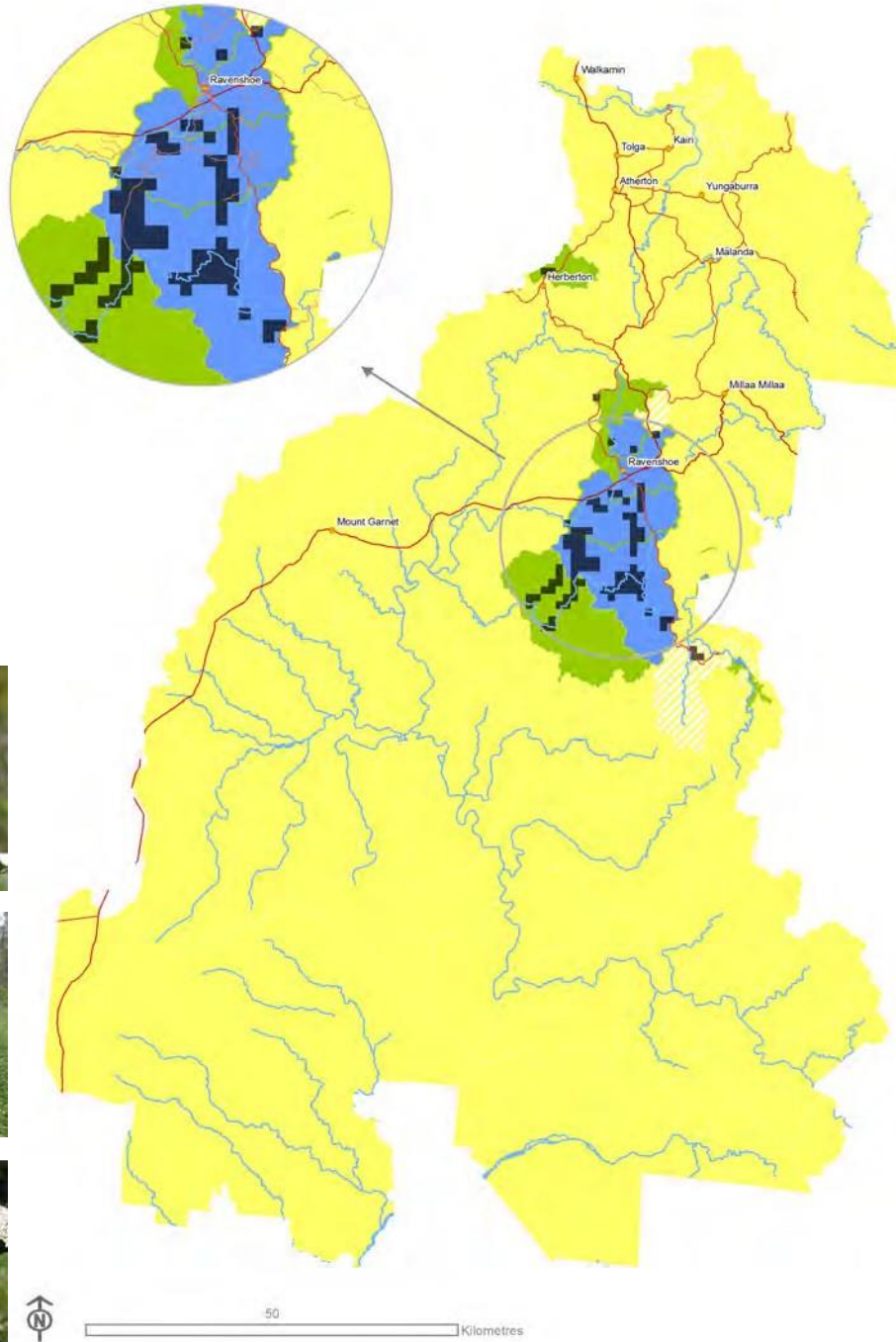
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Woody

Terrestrial

Perennial

Biosecurity Act
Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control



Spread



In the delimitation zone
In the prevention zone
In the eradication zone
In the intensive control zone

What is my biosecurity obligation?

Report any suspected outbreaks or detections to Tablelands Regional Council (TRC) on 1300 362 242.

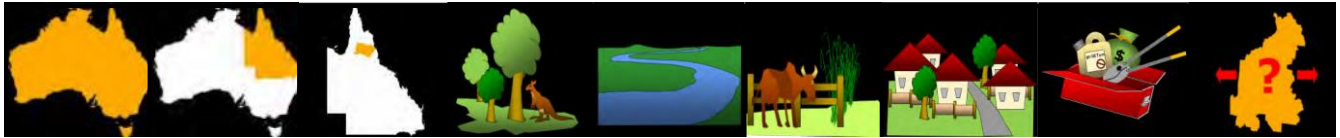
Candy Leaf is a restricted invasive plant. It is an offence under the *Biosecurity Act 2014* to move, share, give away or sell this plant. Ensure machinery, vehicles and stock moving from infested areas are free from plant material and soil.

Seek advice prior to working in the vicinity of known infestations. Properties with active infestations can assist the survey and control team by: maintaining property access and tracks; not moving soil and plant material from the infestation area; working with TRC to develop and adhere to a biosecurity plan for your property. Report suspected outbreaks/detections to TRC on 1300 362 242.

Enact control operations prior to the May peak flowering period. Ensure best practice weed hygiene measures are in place to reduce. Maintain buffers along high risk areas such as roads, watercourses and boundaries to limit spread within and off properties.

Fireweed *Senecio madagascariensis*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



2.5/5 1.5/5 5.0/5 4.0/5 3.0/5 5.0/5 3.0/5 4.0/5 4.0/5

Priority

Details

Description A daisy-like annual herb up to 50cm tall with bright yellow flowers and sparse, often downturned petals. Leaves are dark green with serrated margins. An annual or short-lived perennial.

Distribution Tablelands Regional Council currently has the only known Fireweed infestation north of Gympie, Queensland. It is found on properties in Wondecla and Wongabel and along the Kennedy Highway around Gentle Annie, Millaa Millaa.

Impacts Fireweed competes with pasture species and is poisonous to stock. It can cause illness, slow growth and sometimes death. It has the potential to contaminate honey and pollen products.

Key projects Survey and control operations occur at all sites on a regular basis. Tablelands Regional Council Land Protection Officers work with landholders at known infestations to control and prevent the spread of Fireweed.

Background

Fireweed is a restricted species under the *Biosecurity Act 2014*. It competes with pasture and causes illness, slow growth, poor condition and sometimes death in stock.

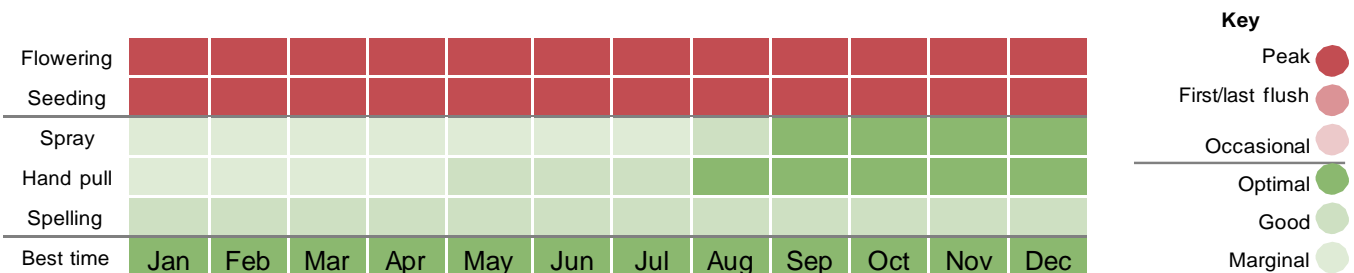
Infestations of Fireweed can produce one million seeds per hectare. Seeds are light and easily carried long distances by the wind, and shorter distances by stock. Of real concern is the spread of seeds in pasture seed, hay, turf, mulch and hydro-mulch.

Since it was first detected in 2008, Fireweed has been found in three locations on the Tablelands, the next closest incidence being at Gympie, 1500km to the south.

Landholders with Fireweed on their property should work with Tablelands Regional Council to develop and adhere to a biosecurity plan.

Do not slash as fireweed remains toxic after being cut and more attractive to stock. Chip out, bag and burn isolated plants but do not leave chipped-out plants in paddocks as they may still set seed and poison stock.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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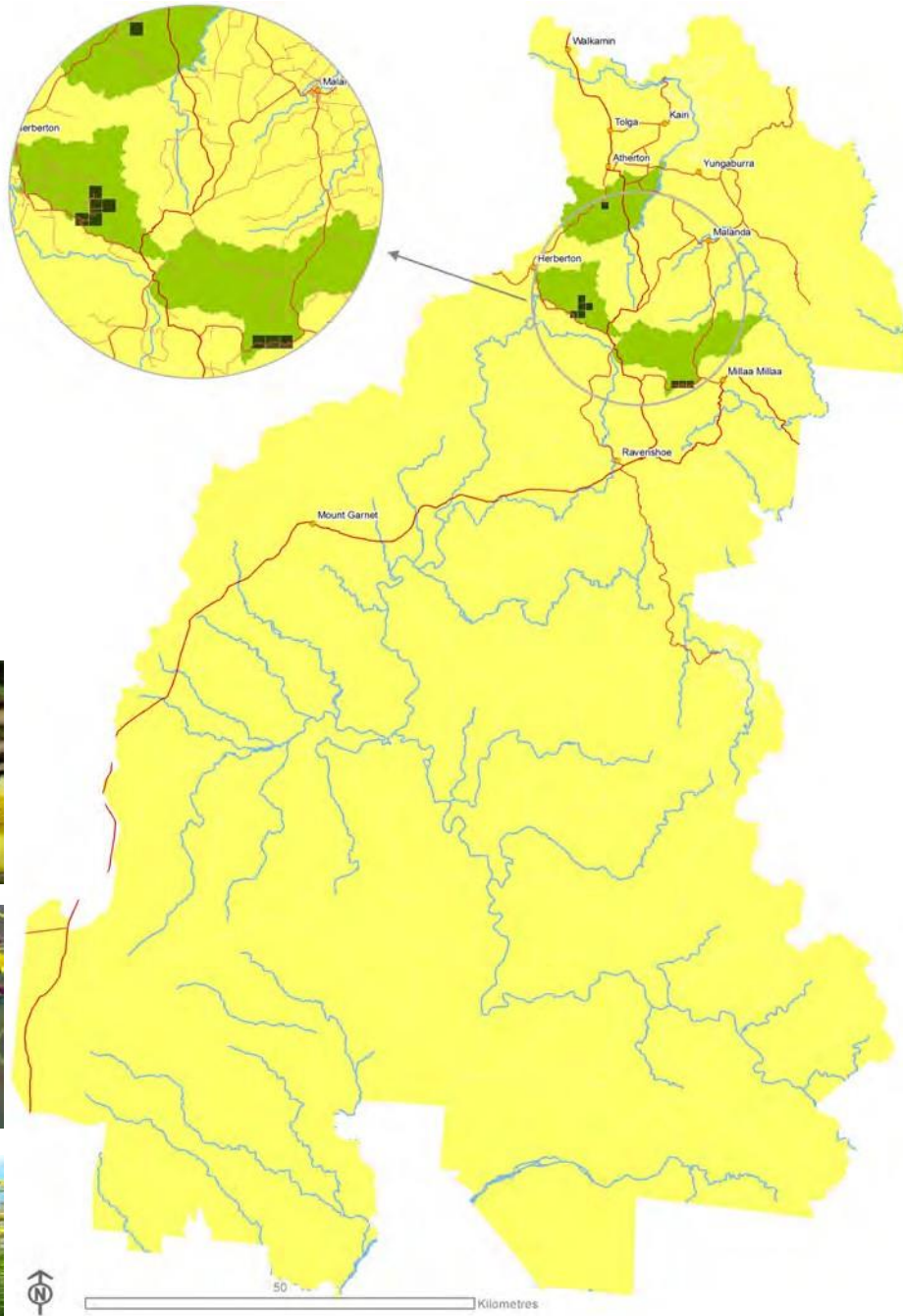
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What is my biosecurity obligation?

In the prevention zone

Ensure there is a dense cover of pasture in autumn and winter to decrease the rate of Fireweed germination. Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

In the eradication zone

Fireweed is a restricted invasive plant. It is an offence under the *Biosecurity Act 2014* to move, share, give away and sell this plant. If small infestations are found, act immediately to increase the chance of eradication.

Properties with active infestations can assist the survey and control team by maintaining property access points and tracks, and not moving soil or plant material from the infestation area. You should also work with Tablelands Regional Council to develop and adhere to a biosecurity plan for your property. Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

Herb

Terrestrial

Annual

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control

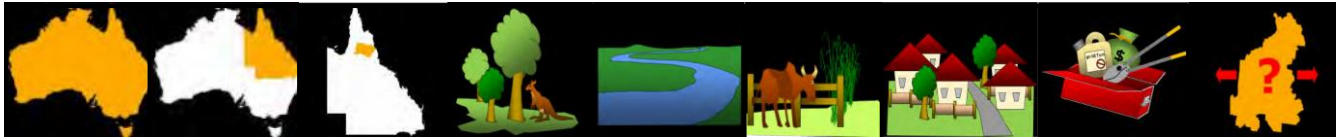


Spread



Gamba Grass *Andropogon gayanus*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



2.5/5 1.5/5 3.0/5 5.0/5 4.0/5 4.0/5 4.0/5 4.0/5 5.0/5

Priority

Details

Description A robust, upright perennial grass that grows to 4m with distinctive plumed seed heads. Gamba Grass forms thick and strong tussocks that remain upright even when fully cured in the dry season.

Distribution Gamba Grass is currently restricted to isolated infestations at Rocky Creek, Walkamin, Innot Hot Springs and Kirrama regions. A major infestation exists to the north in the Hann Tableland, Mareeba Shire. More surveys are required to determine the distribution of Gamba Grass in the western and southern parts of the Tablelands.

Impacts Gamba Grass was planted as tropical pasture but has escaped from intensively managed grazing systems. It outcompetes native pastures and fuels intense fires. Late season Gamba Grass fires are very difficult to manage and pose a significant threat to life and property.

Key projects An active Gamba Grass management plan is in place across Far North Queensland and Cape York Peninsula. An industry code of practice for containment of retained plantings has been drafted and can assist graziers manage risk of spread from planted sources. An active roadside monitoring and control

Background

Up until its declaration as an invasive weed, Gamba Grass was highly promoted as a tropical pasture grass. Wider delimitation in the western rangelands of the region are required to establish if there has been any spread from historically-planted sources.

Containment of planted sources and maintenance of buffers on access roads can reduce the spread and impact of Gamba Grass. Ensuring adequate stocking rates at the right times of year can prevent seeding and rank growth in retained plantings.

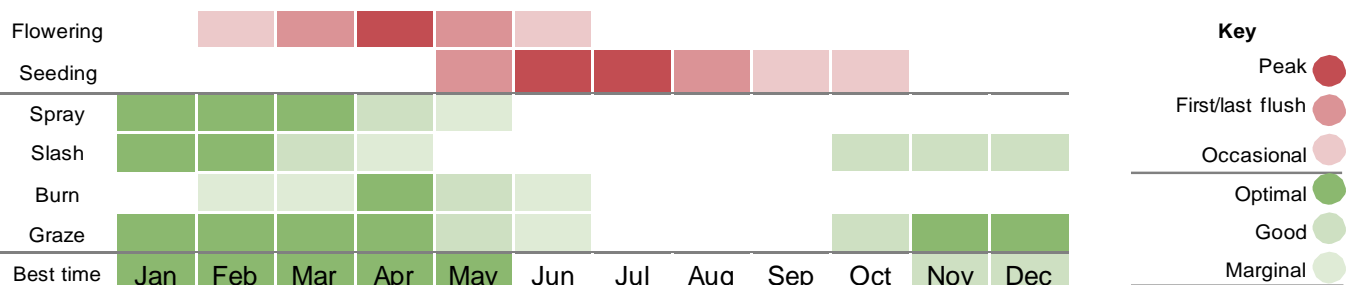
Gamba Grass is Weed of National Significance and a restricted invasive plant under the *Biosecurity Act 2014*. It is an offence to move, share, give away or sell this plant.

Do not sell cart, introduce or transport contaminated hay or silage.

Ensuring vehicles, machinery and raw materials including hay are from a clean source will assist to reduce the risk of accidental introduction and spread of Gamba Grass.

A management plan for Gamba Grass is available at trc.qld.gov.au.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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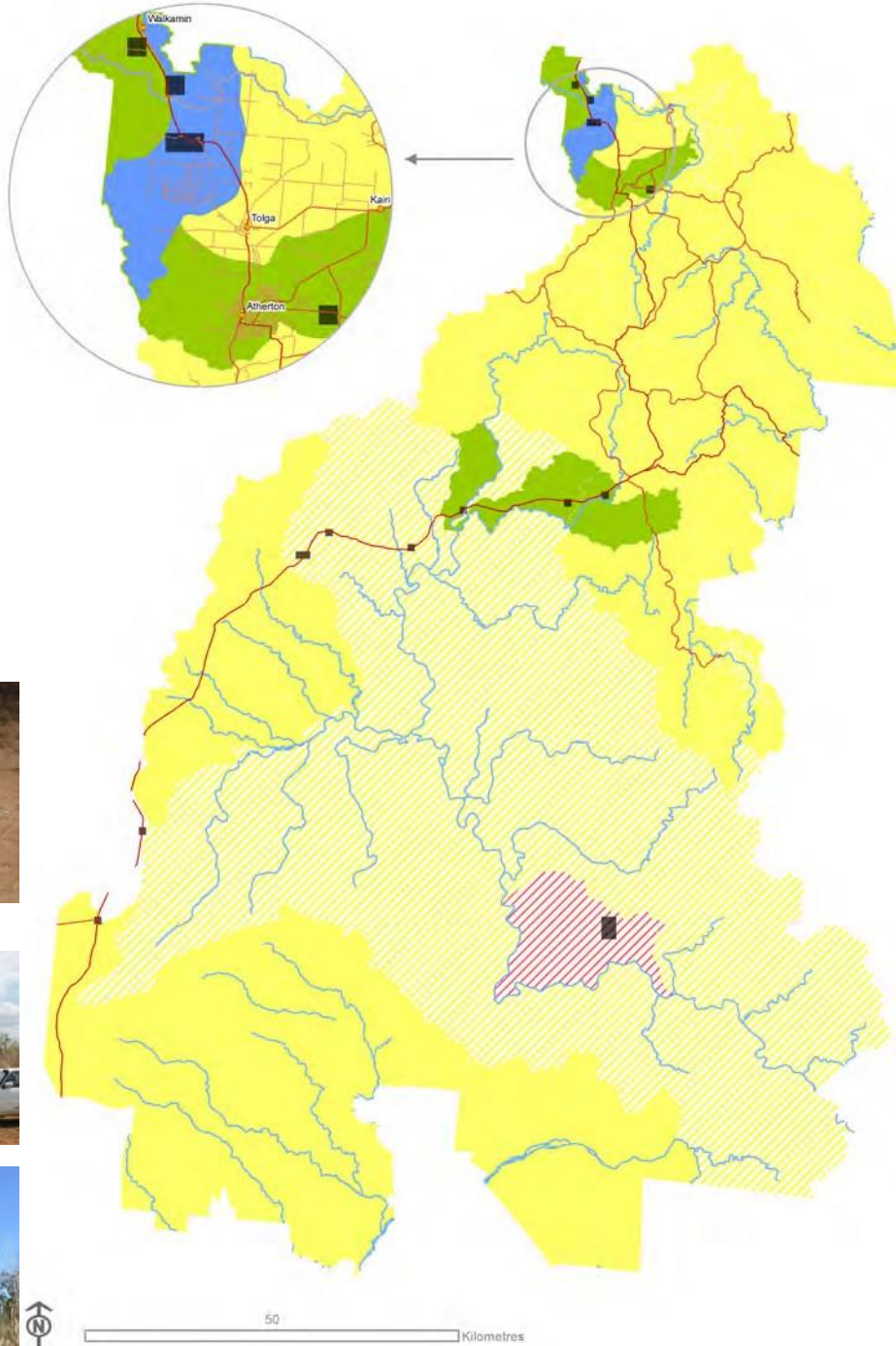
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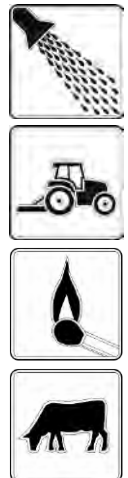


- Grass
- Terrestrial
- Perennial

Biosecurity Act
Restricted matter category

- 2
Must be reported
- 3
Do not distribute
- 4
Do not move
- 5
Do not keep
- 6
Do not feed

Control



Spread



What is my biosecurity obligation?

In the delimitation zone
In the prevention zone
In the eradication zone
In the intensive control zone
In the containment zone

In the delimitation zone
Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

In the prevention zone
Ensure machinery and vehicles moving from the infested areas are free from plant material and soil. Do not sell, cart, introduce or transport contaminated hay or silage.

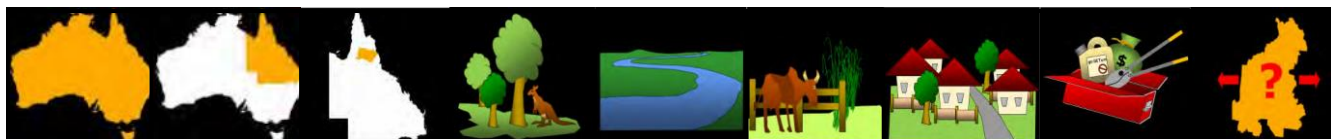
In the eradication zone
Ensure best practice weed hygiene measures are implemented to reduce risk of spread elsewhere. Assist in annual survey operations and control isolated plants before they seed. Do not sell, cart, introduce or transport contaminated hay or silage.

In the intensive control zone
Ensure best practice weed hygiene measures are implemented to reduce risk of spread to new locations. Maintain weed free areas.

In the containment zone
Contain planted sources and maintain buffers on access roads to reduce the spread and impact. Ensuring adequate stocking rates at the right times of year can prevent seeding and rank growth in retained plantings. Develop a containment strategy with local landholders.

Giant Sensitive Plant *Mimosa invisa*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 3.0/5 3.0/5 3.0/5 3.0/5 2.0/5 3.0/5 5.0/5

Priority

Details

Description Giant Sensitive Plant is a shrubby or sprawling annual but behaves as a perennial vine in certain years. Bright green leaves grow off the stem at four angles, usually with a line of sharp, hooked prickles and fern-like leaves that close up at night and when disturbed. Flowers are small, pale pink fluffy balls about 1.2cm across. Numerous pods are clustered, each about 2.5cm long and 6mm wide when ripe. Clothed with small prickles, these later break into four or five one-seeded pieces.

Distribution This plant is known from one location on the Palmerston Highway but is common in high rainfall areas of coastal North Queensland from Ingham to Cooktown.

Impacts Giant Sensitive Plant chokes grasslands, cane and other crops causing loss of crop and pasture production.

Key projects Although plants have not been found recently in the Tablelands Regional Council area, regular and ongoing monitoring is paramount to success. Biological control has had limited affect.

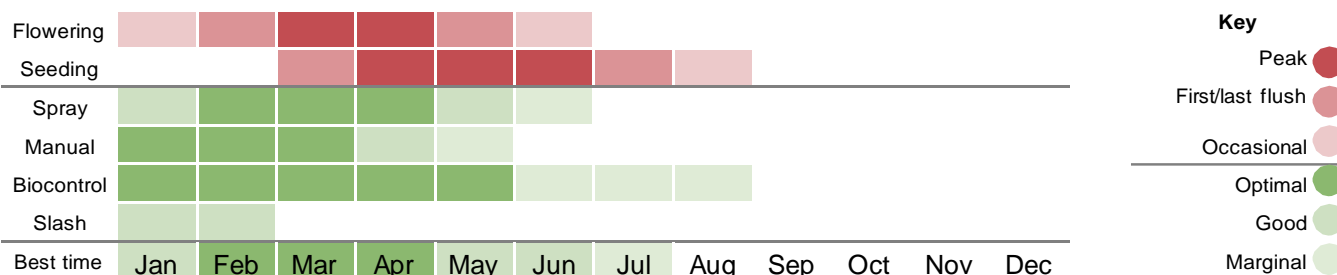
Background

Giant Sensitive Plant is native to Brazil. It was found in a borrow pit in the Little Beatrice area on the Palmerston Highway in 2008 and has naturalised in the high rainfall areas of coastal North Queensland, from Ingham to Cooktown, and around Mackay. Sand pits in the Cassowary Coast Regional Council area have been quarantined and records of all sand/gravel movement from these areas must be kept by carriers.

Giant Sensitive Plant usually flowers and seeds from April through to the end of June, but in years when there has been minimal cold weather, plants will seed from April through to December. Seeds are viable for up to 50 years. Seeds are transported by running water, vehicles, machinery, stock and contaminated earth. Tablelands Regional Council continues to be vigilant and monitor for other outbreaks, particularly at borrow pits and spoil dump sites.

Common Sensitive Plant (*Mimosa pudica*) is similar to Giant Sensitive Plant except for its low sprawling form and growth size between 15-45cm high.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.



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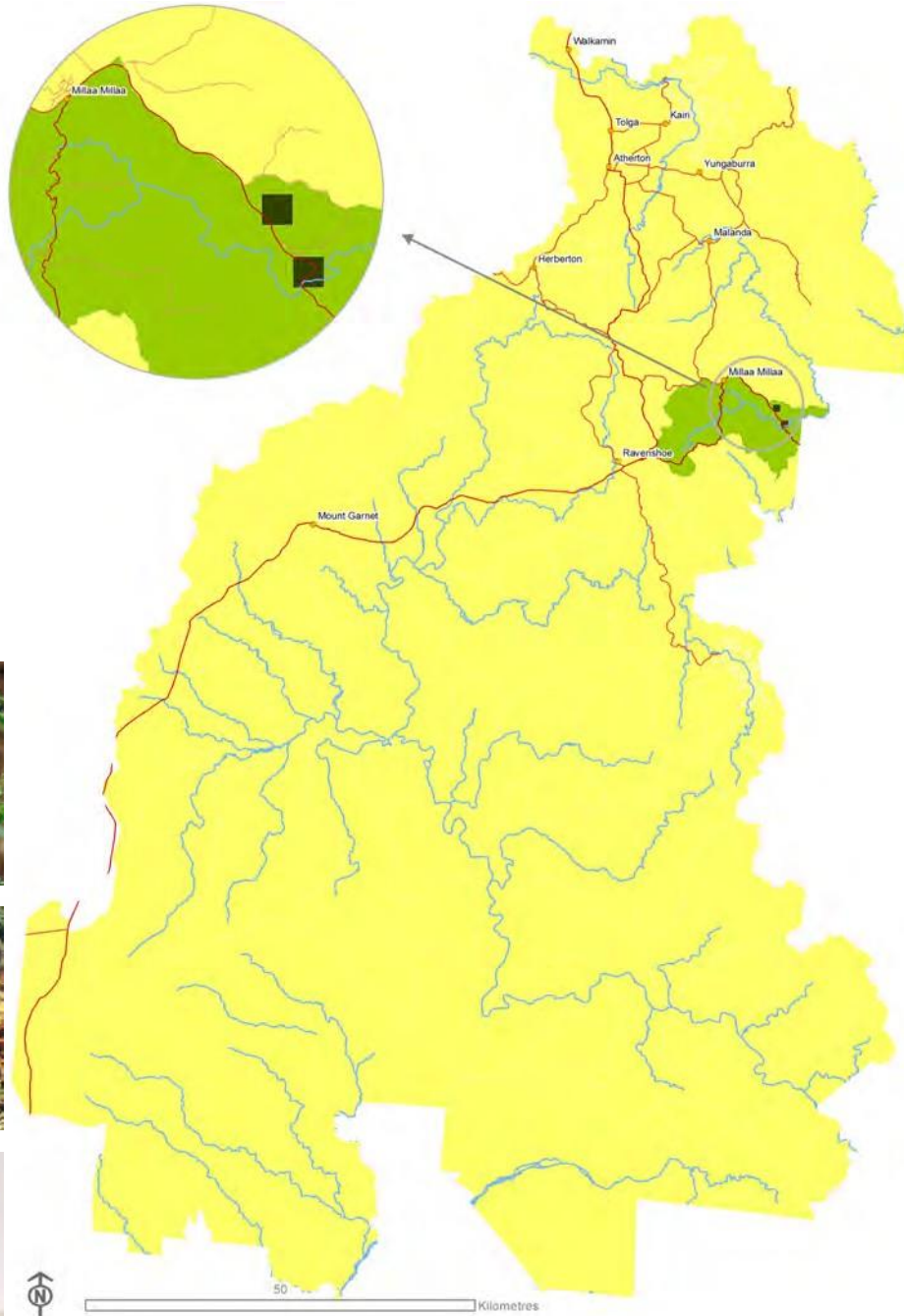


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Tablelands Regional Council

Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



Woody

Terrestrial

Annual

Biosecurity Act
Restricted
matter
category

2
Must be
reported

3
Do not
distribute

4
Do not
move

5
Do not
keep

6
Do not
feed

Control



Spread

What is my biosecurity obligation?

**In the
prevention
zone**

**In the
eradication
zone**

Giant Sensitive Plant is a restricted invasive plant. It is an offence under the *Biosecurity Act 2014* to move, share, give away and sell this plant. If you have an active infestation on your property you can assist the survey and control team by maintaining property access and tracks, and not moving soil or plant material from the infestation area. Ensure any machinery and vehicles moving from the infested areas are free from plant material and soil. Source agricultural and raw materials from a reliable supplier and weed free area.

As seeds are viable for up to 50 years, monthly monitoring of known infestations is crucial.

Lions Tail *Leonotis nepetifolia*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 0.0/5 1.0/.05 3.0/5 4.0/5 3.0/5 3.0/5 5.0/5 5.0/5

Priority

Details

Description Lions Tail is an erect, sparsely branched annual herb up to 2m tall with four angled stems, opposite leaves and distinctive orange flowers. The dead seed heads remain visible well into the dry season.

Distribution Discovered on the Tablelands in 2014, localised infestations occur at Millstream, Ravenshoe and Innot Hot Springs.

Impacts A weed of environment and production, Lions Tail outcompetes native grasses and pastures. It can form dense stands in native pasture and disturbed sites.

Key projects An ongoing management program removes known infestations.

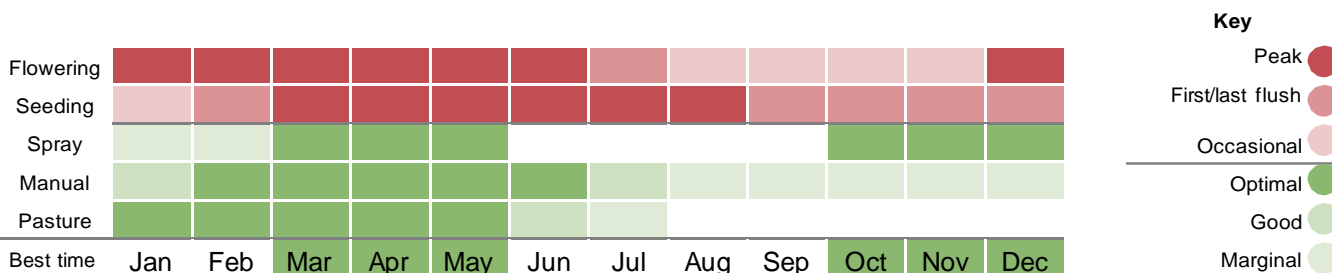
Background

Lions Tail can form dense stands in open savannah, grasslands and along watercourses. Careful follow up after disturbance, such as earthworks, fire or heavy grazing, will limit the establishment of dense infestations and spread to new areas.

Restricting stock movement to and from infested areas and maintaining weed hygiene practises regarding the movement and wash down of machinery is essential to reduce spread to new locations.

Ongoing mapping of infestations will help to identify key assets at risk and identify priority management zones.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

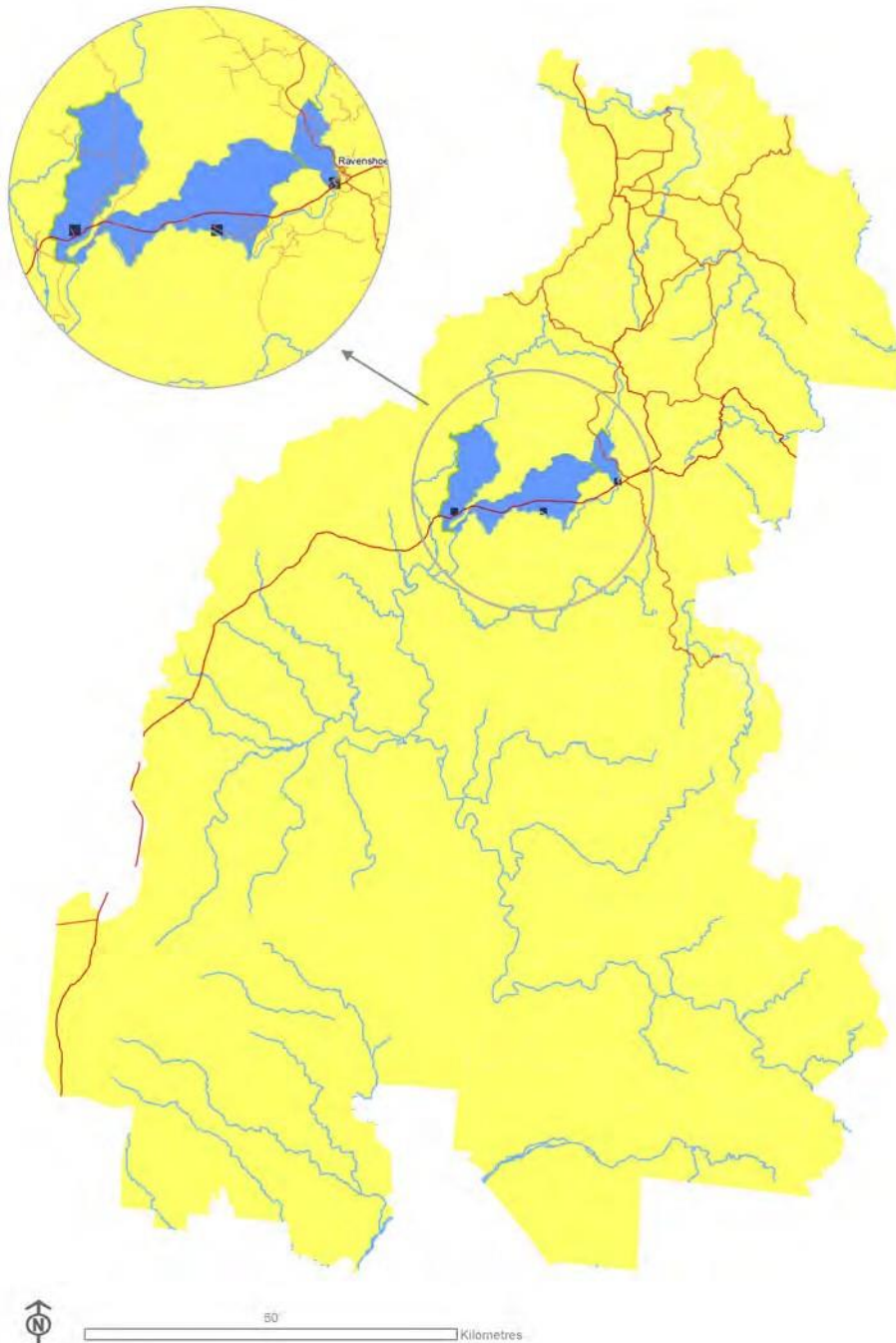
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Tablelands Regional Council

Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



Herb

Terrestrial

Annual

Biosecurity Act Restricted matter category

2 Must be reported

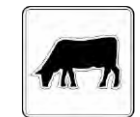
3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control



What is my biosecurity obligation?

In the delimitation zone

Report locations and new detections to Tablelands Regional Council on 1300 362 242.

In the prevention zone

Lions Tail is not a prohibited or restricted invasive plant however everyone has a general biosecurity obligation to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.

In the intensive control zone

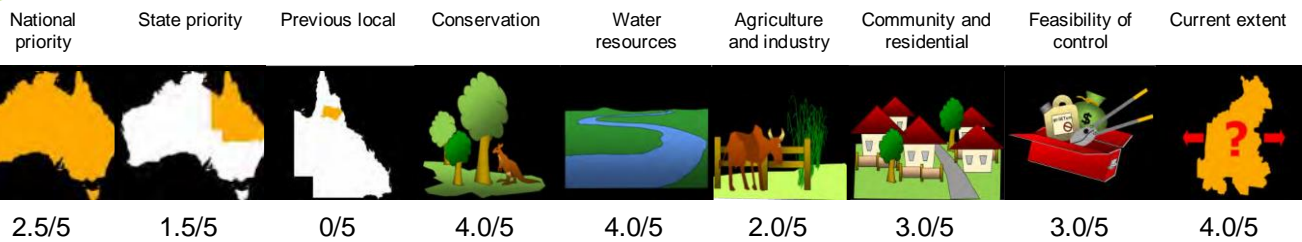
Ensure best practice weed hygiene measures are in place to reduce risk of spread to new locations. Maintain weed free areas. Identify high value assets and protect them from impacts where possible. Spell stock for at least seven days prior to moving from infested areas.

Spread



Madeira Vine *Anredera cordifolia*

Priority



Details

Description Madeira Vine has fleshy, waxy, green, heart-shaped leaves about 4–5cm in length. Clusters of warty, light brown, aerial tubers are produced along the length of the stem and underground tubers up to 20cm diameter can grow and at depths of up to 1m. Creamy flower spikes are produced from December to April.

Distribution On the Atherton Tablelands Madeira Vine is found in a variety of locations, usually in association with ornamental gardens .

Impacts Madeira Vine produces large numbers of subterranean and aerial reproductive tubers that persist and make effective management difficult. This is demonstrated by tubers still sprouting after 10 years of intensive spraying.

Key projects Funding for biological control has been unsuccessful. Madeira Vine is managed in areas where it threatens environmental assets

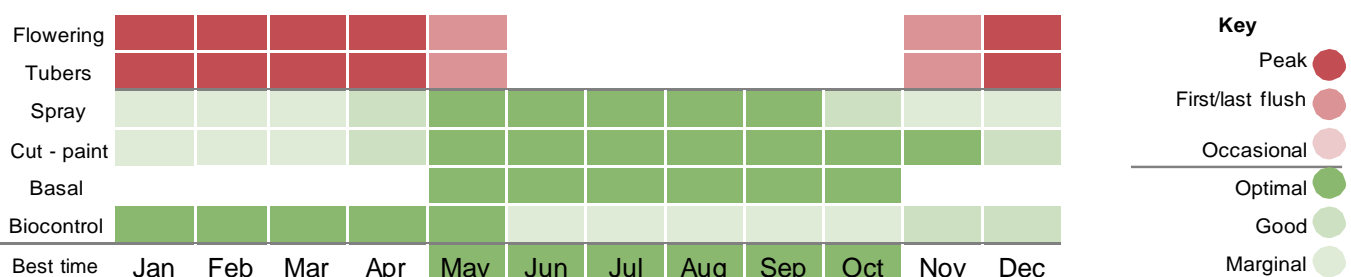
Background

Madeira Vine is a weed of national significance and has been described as a transformer species, which blankets and smothers trees, shrubs and understory species. It can grow up to 1m/week and causes canopy collapse of mature native trees.

Successful management of Madeira Vine requires exhaustion of the tuber bank. Tubers can remain viable for up to 15 years and are easily spread through poor green waste management and gravity and water movement.

Management needs to be carefully considered and include a commitment to regular, long-term follow-up control. The disturbance caused by control work stimulates particularly vigorous vine growth and, if management isn't carried out appropriately, may lead to greater problem

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

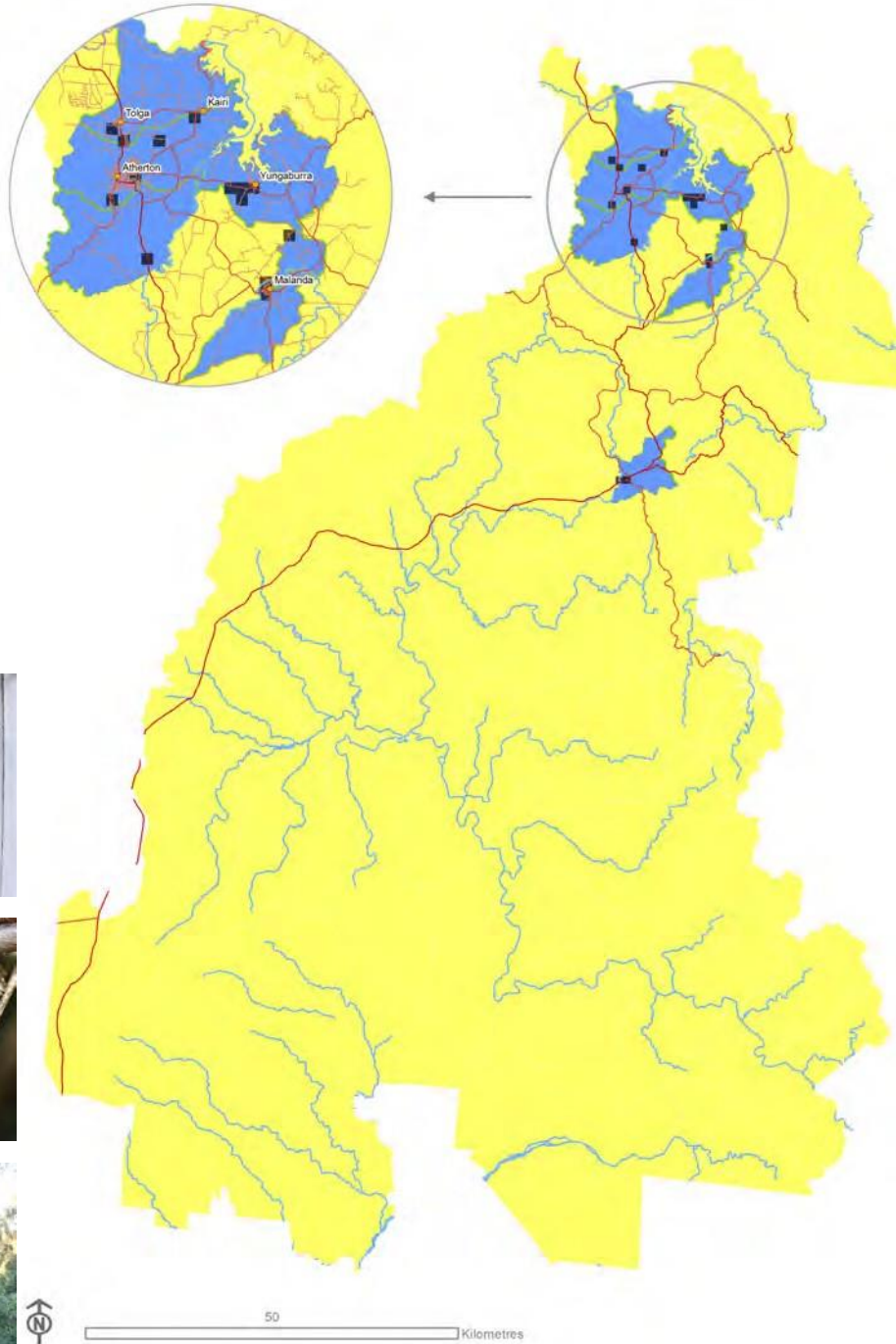
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50 Kilometres

What is my biosecurity obligation?

In the delimitation zone
In the prevention zone
In the intensive control zone

Report locations and new detections to Tablelands Regional Council on 1300 362 242.

Madeira Vine is a restricted invasive plant. It is an offence under the *Biosecurity Act 2014* to move, share, give away and sell this plant. If you have an active infestation on your property you can assist the survey and control team by maintaining property access and tracks, and not moving soil or plant material from the infestation area. Ensure machinery and vehicles moving from the infested areas are free from plant material and soil. Source agricultural and raw materials from a reliable supplier and a weed free area.

Work strategically, protecting the better quality native vegetation first. Control isolated plants and sparse populations, and prioritise isolated infestations on high ground or at the top of catchments.

- Vine
- Terrestrial
- Perennial

Biosecurity Act Restricted matter category

- 2 Must be reported
- 3 Do not distribute
- 4 Do not move
- 5 Do not keep
- 6 Do not feed

Control

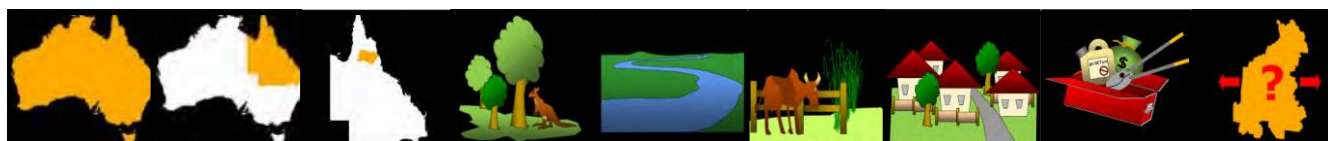


Spread



Miconia *Miconia calvescens*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



5.0/5 2.5/5 0.05/5 5.0/5 4.0/5 3.0/5 4.0/5 5.0/5 5.0/5

Priority

Details

Description A tree up to 15m tall with large leaves up to 70cm long. The underside of the leaves is a distinct iridescent purple. Miconia produces clusters of small, white flowers followed by red/purple berries.

Distribution Miconia was first detected in the Tablelands region in 2004 where it was introduced as a garden plant in a range of locations. It is known only in the Upper Beatrice, Dirran, Millaa Millaa and Mungalli areas.

Impacts Miconia can produce thousands of berries every year that are attractive to birds and spread long distances. It can form dense thickets in rainforest, potentially replacing native plants and affecting agricultural landscapes and wildlife populations.

Key projects Miconia is a target of the National Tropical Weeds Eradication Program led by Biosecurity Queensland. All plants should be immediately reported to Biosecurity Queensland on 13 25 23. Biannual surveys are conducted to monitor all known infestations and to ensure new outbreaks are identified.

Background

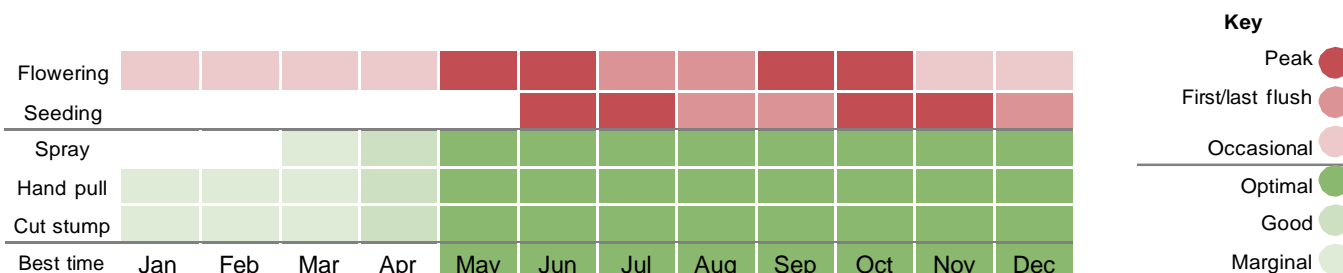
Miconia is a serious weed in Tahiti and Hawaii, where it forms dense thickets in rainforests and displaces native flora and fauna. Miconia was initially brought into Australia via botanic gardens, and was sold in some nurseries and markets between 1978 and the mid-1990s. Dispersal to new locations has been mainly via cultivation (gardeners and plant collectors). Fruit-eating birds are the primary mechanism of dispersal into surrounding forests and gardens. Miconia is very shallow rooted and has also been known to cause landslides.

A community education and awareness program is an important part of the eradication program. Managing the risk of spread to new areas through hygiene protocols for impacted nurseries and growers plays an important role in preventing new infestations. Hygiene protocols are also in place for survey and control operations.

A national eradication program is underway and is targeting survey, control and monitoring of all known infestations. Bi-annual surveys are conducted to monitor known infestations, ensure new outbreaks are identified and plants do not produce seed.

Birds can disperse the small seeds many hundreds of metres and the seeds can remain viable for at least 16 years. Areas where mature plants have occurred need to remain undisturbed.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.



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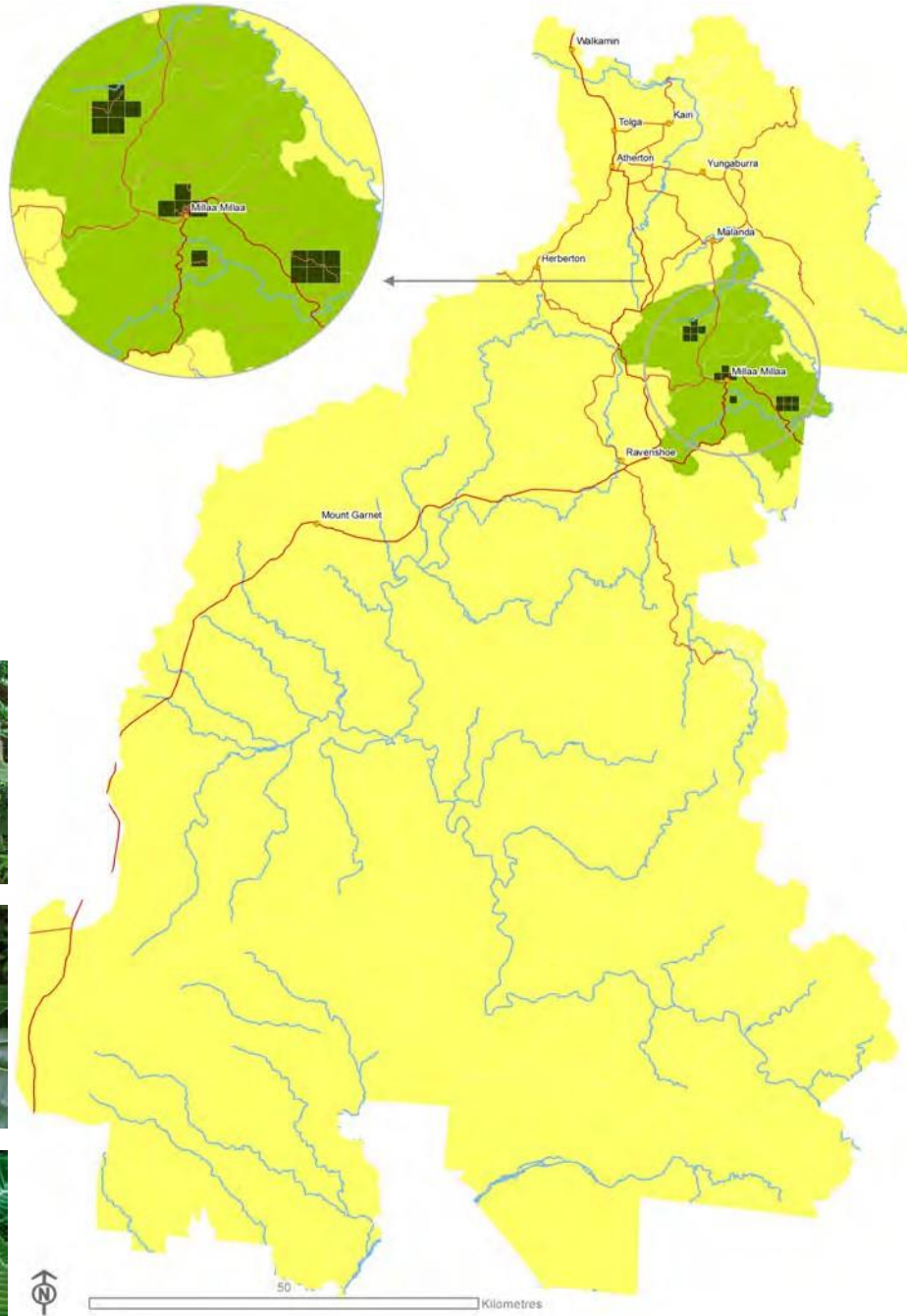


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Woody

Terrestrial

Perennial

Biosecurity Act
Restricted
matter
category

2
Must be
reported

3
Do not
distribute

4
Do not
move

5
Do not
keep

6
Do not
feed

Control



Spread



What is my biosecurity obligation?

In the prevention zone

Miconia is the target of the National, cost-shared Tropical Weeds Eradication Program and its control locally is a high priority.

Landholders are required to immediately report suspected infestations to Biosecurity Queensland on 13 25 23. Refer to the biosecurity programs of the Tropical Weed Eradication Program for more information.

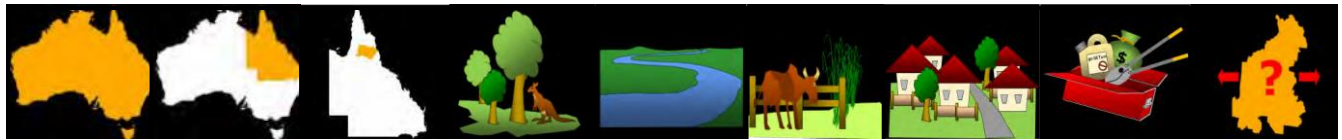
In the eradication zone

If you have an active infestation on your property you can assist the survey and control team by maintaining property access, and ensuring you do not move soil or plant material from the infestation area.

Landholders are required to immediately report suspected infestations to Biosecurity Queensland on 13 25 23. Refer to the biosecurity programs of the Tropical Weed Eradication Program for more information.

Navua Sedge *Cyperus aromaticus*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 5.0/5 3.0/5 3.0/5 4.0/5 2.0/5 3.0/5 3.0/5

Priority

Description A grass-like perennial sedge that grows to 70cm high and has a distinctive, button shaped flower with three large and three small, narrow, glossy green leaves. When stressed the plant turns light yellow. The leaves have a distinctive aroma when crushed.

Distribution Navua Sedge is a widespread weed in many areas of the Barron and Johnstone catchments. It occurs as dense infestations or scattered plants in pastures and along roadsides and water courses in the wetter areas of the Tablelands. It is also widespread in the coastal areas of the Wet Tropics.

Impacts Navua Sedge is a very effective coloniser as it grows from seed and underground shoots and has high seed production and viability. It outcompetes pasture species, can displace native vegetation, is difficult to selectively control and can significantly decrease productivity.

Key projects Tablelands Regional Council has committed significant resources to control and prevent the spread of Navua Sedge on roadsides and provided a landholder assistance program in 2016–17. Malanda Beef Plan Group holds landholder field days and provides information to landholders on identification and

Navua Sedge forms dense stands that can smother many tropical pasture species. It is extremely aggressive, competes strongly for nutrients, light and moisture, and is unpalatable to cattle.

Spread occurs through the normal extension of the rhizome system, by seed and by dispersal of viable rhizome fragments during cultivation. Seed can be dispersed by passing through the digestive system of animals and birds, and also by being transported in mud on hooves, pelts, footwear and machinery.

Navua Sedge spreads readily on vehicles and machinery making the management of roadsides and traffic areas important in preventing it spreading to adjoining paddocks and properties. Spelling pastures and careful stock management will also assist reducing the spread

Integrated control in grazing areas including pasture management, herbicide control and weed hygiene activities will assist to keep pasture healthy. Spot spraying isolated outbreaks as they occur and prior to slashing or grazing will assist to prevent development and spread of seed.

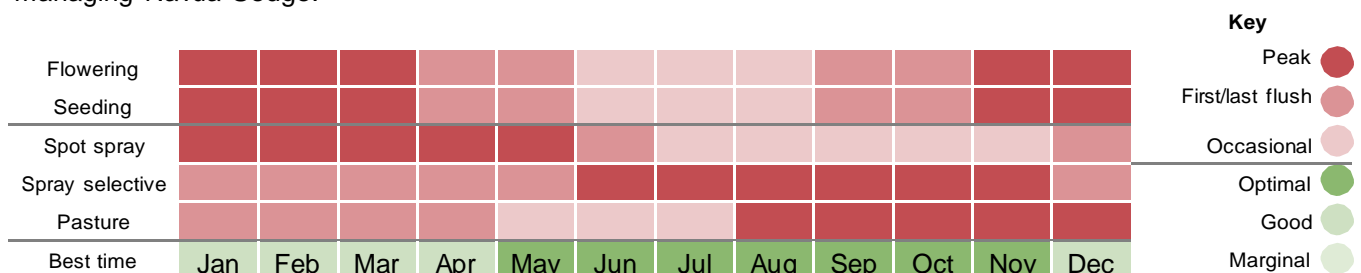
A series of Tablelands Regional Council roadside vehicle washdown facilities have been constructed and farm biosecurity signs are available from Tablelands Regional Council. Making use of weed hygiene facilities and establishing hygiene points within or between properties will assist to reduce the risk of spread to clean areas.

There are a range of ongoing research programs investigating herbicide and biocontrol options to assist in managing Navua Sedge.

Details

Background

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

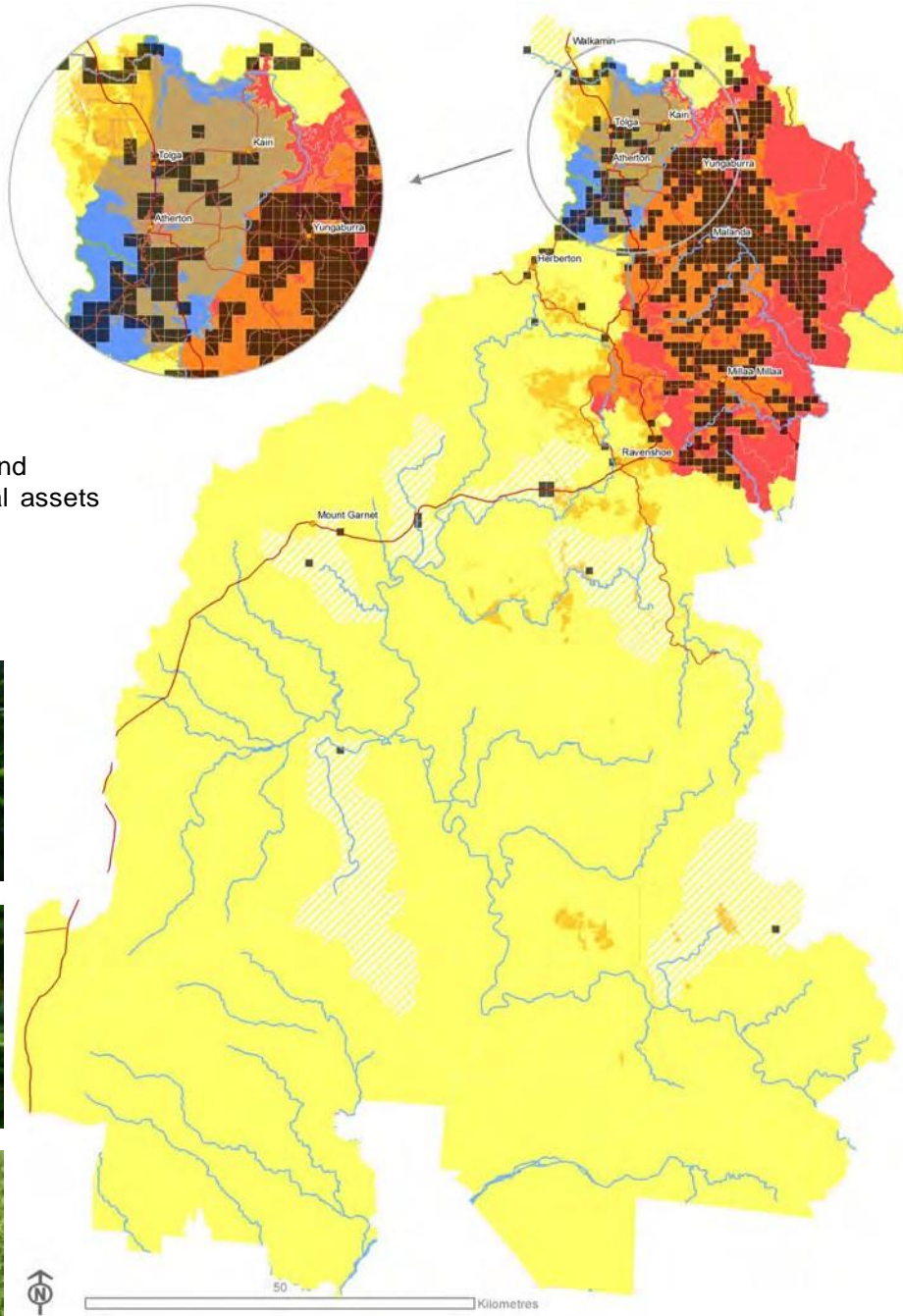
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Tablelands Regional Council

Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



Grazing and agricultural assets



In the delimitation zone	Record locations and report detections in new locations in western districts to Tablelands Regional Council on 1300 362 242.
In the prevention zone	Ensure machinery and vehicles moving from infested areas are free from plant material and soil. Make sure materials and produce are sourced from a weed free area.
In the intensive control zone	Spot spray isolated plants and control isolated infestations. Avoid infested areas. Inspect and clean machinery and vehicles before arriving on or moving from your property.
In the asset protection zone	Prioritise survey and control of Navua Sedge where there are isolated outbreaks and protect high value pasture and production areas. Maintain buffers on access roads and boundaries to reduce the risk of spread. Ensure best practice weed hygiene measures and spell stock in clean holding areas prior to movement or sale.

What is my biosecurity obligation?

Record locations and report detections in new locations in western districts to Tablelands Regional Council on 1300 362 242.

Ensure machinery and vehicles moving from infested areas are free from plant material and soil. Make sure materials and produce are sourced from a weed free area.

Spot spray isolated plants and control isolated infestations. Avoid infested areas. Inspect and clean machinery and vehicles before arriving on or moving from your property.

Prioritise survey and control of Navua Sedge where there are isolated outbreaks and protect high value pasture and production areas. Maintain buffers on access roads and boundaries to reduce the risk of spread. Ensure best practice weed hygiene measures and spell stock in clean holding areas prior to movement or sale.

- Sedge
- Terrestrial
- Perennial

Local laws apply

- Must not breed
- Must not propagate
- Must not introduce
- Must not sell or supply
- Must not provide harbour

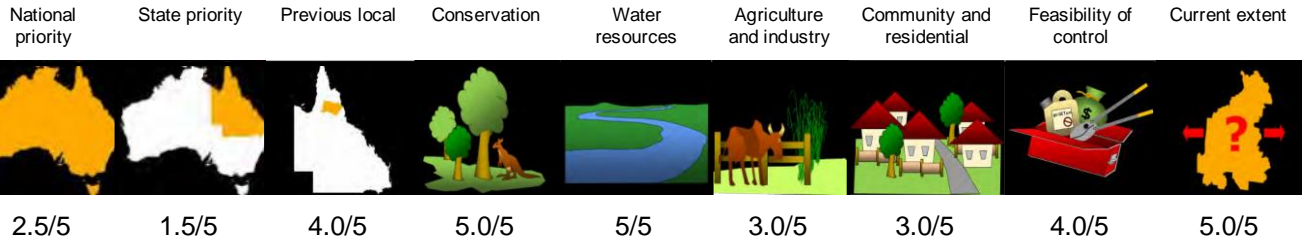
Control



Spread



Olive Hymenachne *Hymenachne amplexicaulis*



Priority

Details

Description A robust, upright, perennial aquatic grass that grows to 2m and has distinctive stem-clasping leaves. Olive Hymenachne can form dense infestations in wetlands and waterways growing in water up to 1.2m deep. The flowers are formed on cylindrical spikes. The stems contain an air filled pith which aids in flotation.

Distribution Limited to several sites in the southern Tablelands region and potentially in multiple sites across the central and western parts of the region.

Impacts Olive Hymenachne locks drainage systems and waterways and readily invades and outcompetes native plants in wetlands and waterways. It prevents fish passage and breeding opportunity for key recreational species and can block irrigation channels and damage infrastructure.

Key projects Targeted eradication projects are being conducted in outlier infestations, and landholder -led impact reduction programs within cane drainage and wetlands.

Background

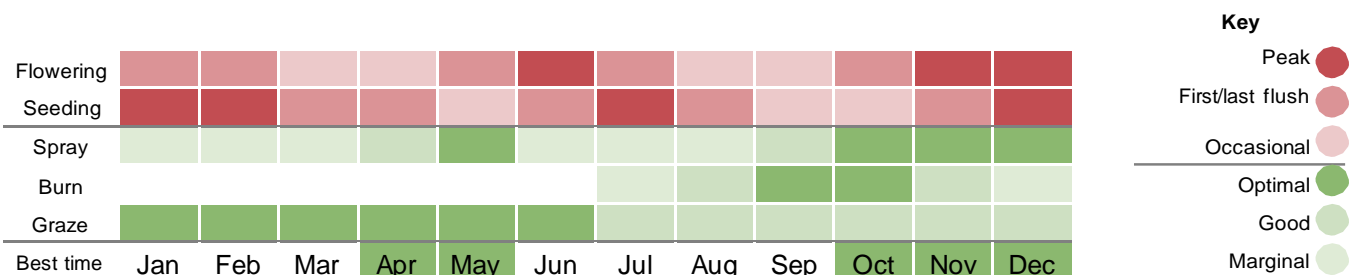
Olive Hymenachne is a weed of national significance. Its seed can be spread via vehicles, machinery, stock and potentially waterbirds. Waterways, wetlands and dams should be monitored during the growing season to detect new outbreaks. Spelling stock for seven days prior to moving them onto or off your property will allow time for seed to pass through the gut or fall from fur and feet.

Cleaning boats and watercraft prior to moving between regions, particularly in lowland rivers of the Wet Tropics where Olive Hymenachne can be abundant, will help to reduce the risk of spread to new locations. Targeted management is required to prevent spread and establishment from adjoining regions and historically planted sources.

Up until its declaration as an invasive weed, Olive Hymenachne was widely promoted as a wet pasture grass. Wider delimitation in western rangelands is required to establish any spread from historically -planted sources.

Detailed management information is available at environment.gov.au.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

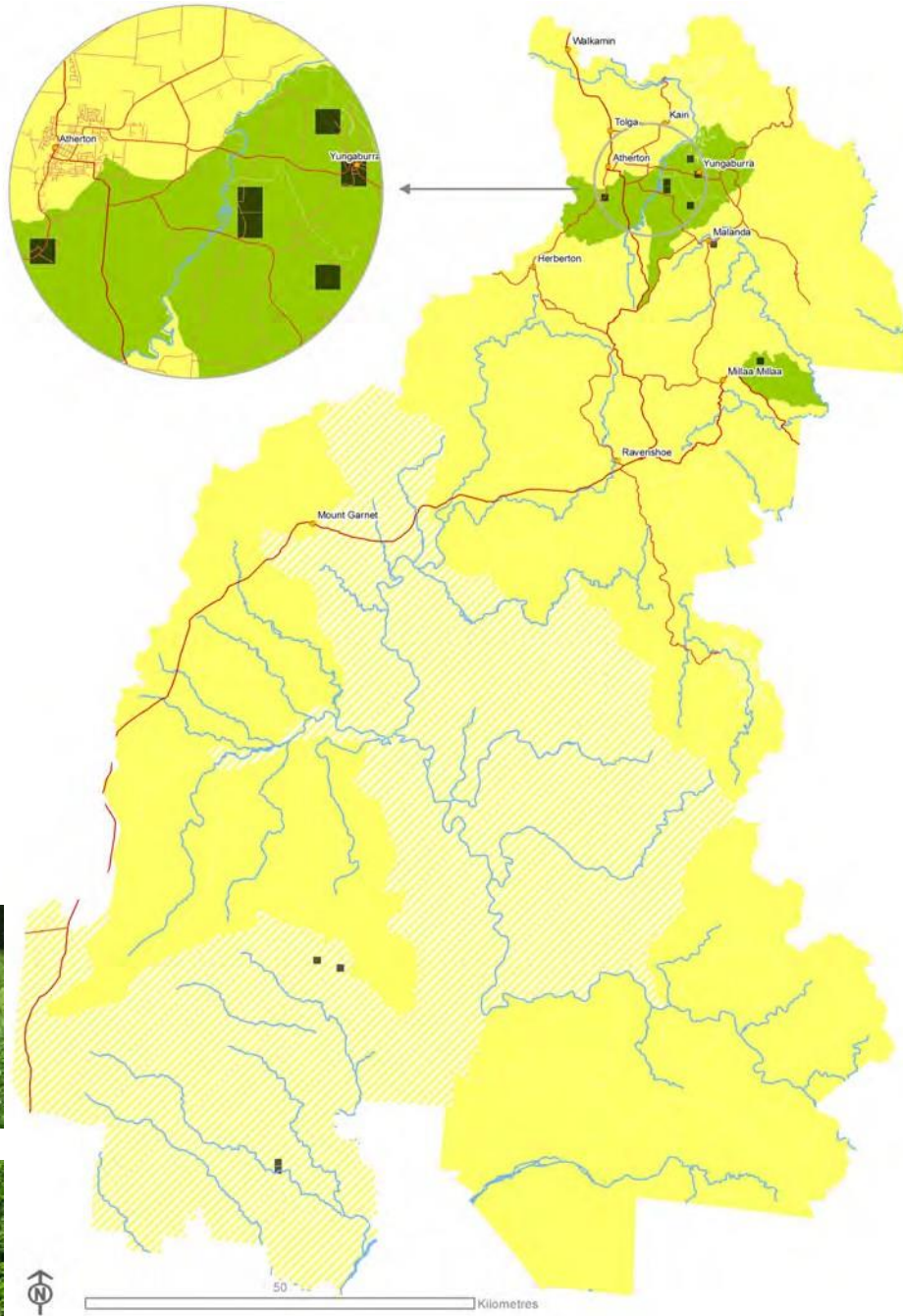
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Tablelands Regional Council

Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



In the delimitation zone

In the prevention zone

In the eradication zone

What is my biosecurity obligation?

Report any suspected outbreaks or detections to Tablelands Regional Council (TRC) on 1300 362 242.

Olive Hymenachne is a restricted invasive plant under the *Biosecurity Act 2014*. It is an offence to move, share, give away and sell this plant. If you have an active infestation on your property, ensure machinery and vehicles moving from the infested areas are free from plant material and soil. Spell stock for seven days prior to transportation.

Ensure best practice weed hygiene measures are in place to reduce spread. Maintain weed free areas. Identify high value assets and protect them from impacts where possible. Clean all watercraft prior to moving between regions, particularly lowland rivers of the Wet Tropics where Olive Hymenachne can be abundant. Report any suspected outbreaks or detections to TRC on 1300 362 242.

Grass

Aquatic

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control

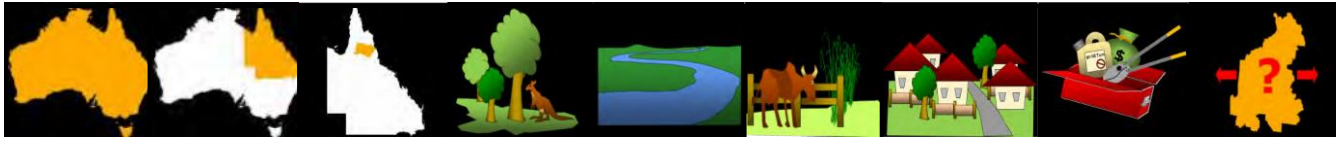


Spread



Parthenium *Parthenium hysterophorus*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



2.5/5 1.5/5 5.0/5 4.0/5 3.0/5 4.0/5 3.0/5 4.0/5 4.0/5

Priority

Details

Description Parthenium is an annual herb with a deep tap root and erect stem that becomes woody with age. As it matures, the plant develops many branches in its top half and may eventually reach a height of 2m.

Distribution Localised infestations on the southern Tablelands. Heavier infestations in neighbouring region in the Upper Herbert and Burdekin Rivers. Introduction is often associated with poultry feed or contaminated machinery from outside the region.

Impacts Parthenium is a weed of crops and grasslands causing loss of crop and pasture production. In susceptible people it can cause severe allergic reactions including hay fever and dermatitis.

Key projects: An ongoing treatment and surveillance program is underway at known roadside infestations.

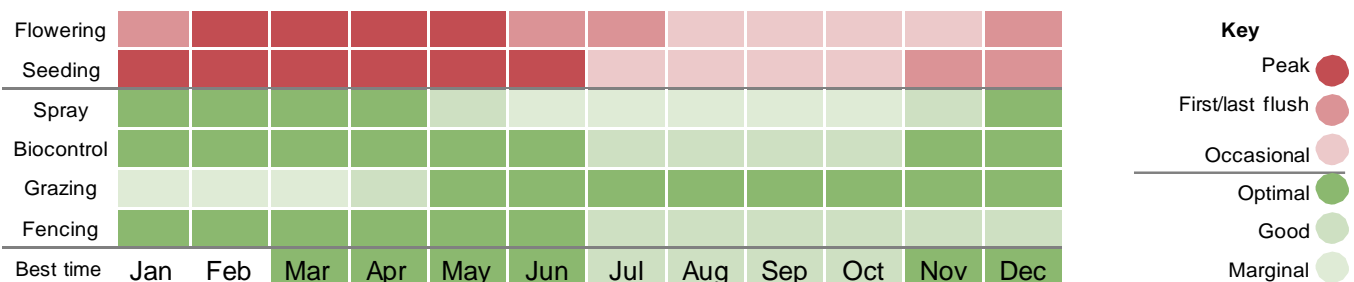
Background

Parthenium is a weed of national significance and a restricted invasive plant under the *Biosecurity Act 2014*. It is common in central Queensland, particularly in the black soil downs districts.

Ensuring imported vehicles and machinery is free from weed seed and soil will assist to reduce the chance of accidental introduction. When purchasing or selling stock or moving animals between properties spelling in a holding paddock for at least seven days will help reduce the risk of spread to new locations.

Parthenium is often spread as a contaminant in stock and poultry feed. Keep a close watch on areas where feed has been spread. Ensure your supplier can confirm the product is free from weed seed and not from a known infested area.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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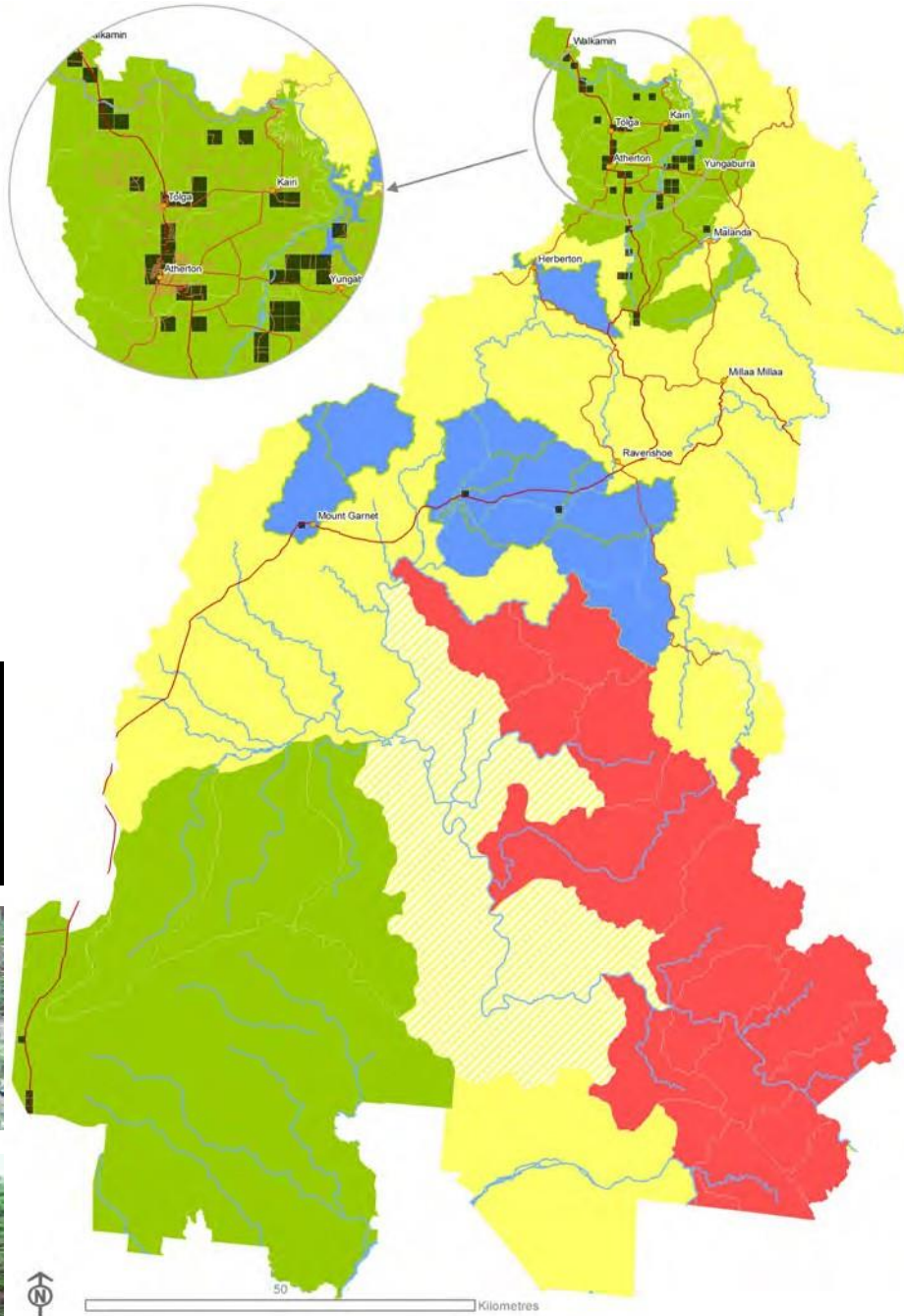
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In the delimitation zone
In the prevention zone
In the eradication zone
In the intensive control zone
In the asset protection zone

What is my biosecurity obligation?

In the delimitation zone
Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

In the prevention zone
Parthenium is a restricted invasive plant under the *Biosecurity Act 2014*. It is an offence to move, share, give away and sell this plant. Ensure any machinery, vehicles or stock feed moving from infested areas are free from plant material, seed and soil. Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

In the eradication zone
Ensure best practice weed hygiene measures are in place to reduce the risk of spread. Maintain weed free areas. If you have an active infestation on your property you can assist the survey and control team by maintaining property access points and tracks, and not moving soil or plant material from the infestation area.

In the intensive control zone
Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

In the asset protection zone
Control outbreaks in areas where they pose a high risk of spread from your property or where important assets are likely to be impacted.

Herb

Terrestrial

Annual

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control

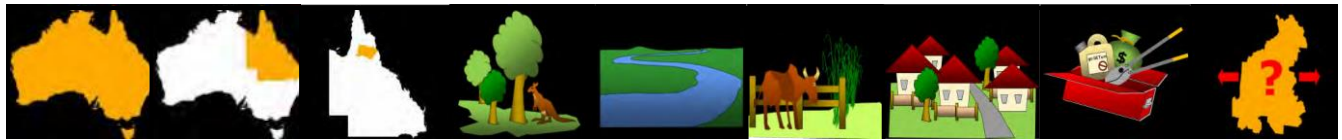


Spread



Salvinia *Salvinia molesta*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



2.5/5 1.5/5 3.0/05 5.0/5 5.0/5 3.0/5 4.0/5 2.0/5 3.0/5

Priority

Details

Description A floating fern with small, coarsely hairy oval leaves that repel water. As the plant matures, it turns from bright green to brown and bunches into tight rafts. Salvinia does not produce seeds or spores but reproduces and spreads by division.

Distribution Salvinia is widespread and common in most disturbed creek systems in the Barron, Johnstone and Millstream catchments. Salvinia often chokes farm dams and waterways in the summer growing period. It prefers still water and may be seen floating downstream when it is dislodged from backwaters or flushed during floods.

Impacts In ideal conditions a Salvinia plant can double its size in 24hr. It floats on still or slow-moving water and can grow rapidly to cover the entire water surface with a thick mat of vegetation. The mat shades submerged plant life and restricts oxygen exchange, impacting fish and other aquatic organisms.

Key projects Periodic release of biocontrol weevils and spraying of dense infestations in landholders' dams, water supplies and intakes. Protection of regional environmental assets such as Lake Barrine are conducted

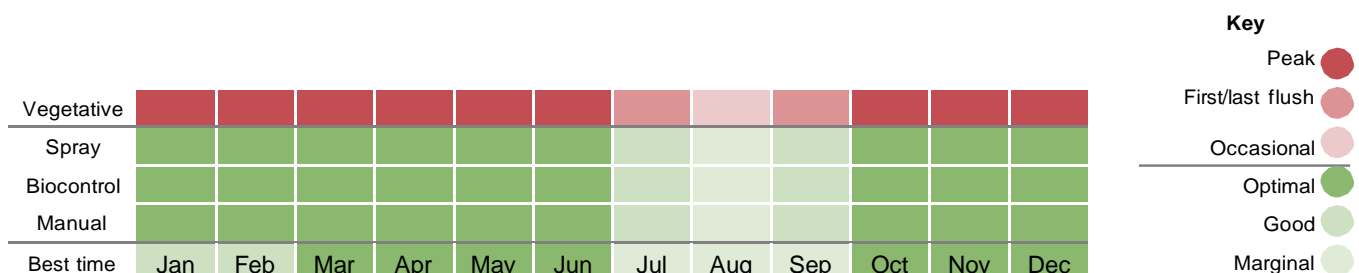
Background

Salvinia is a weed of national significance. It grows in freshwater creeks and wetlands, but may also be found in water features and aquariums. Salvinia is most likely moved by people in association with aquariums or watercraft but may also spread on floodwaters.

Salvinia does not produce seeds or spores but spreads by division of existing plants. It can be challenging to control in waterways so focusing on preventing it establishing in new areas is an important part of reducing its impact on the region.

The Salvinia weevil biocontrol agent is an effective management tool in dense infestations as it assists to keep infestations at a manageable threshold. Weevil activity slows down during the cooler months.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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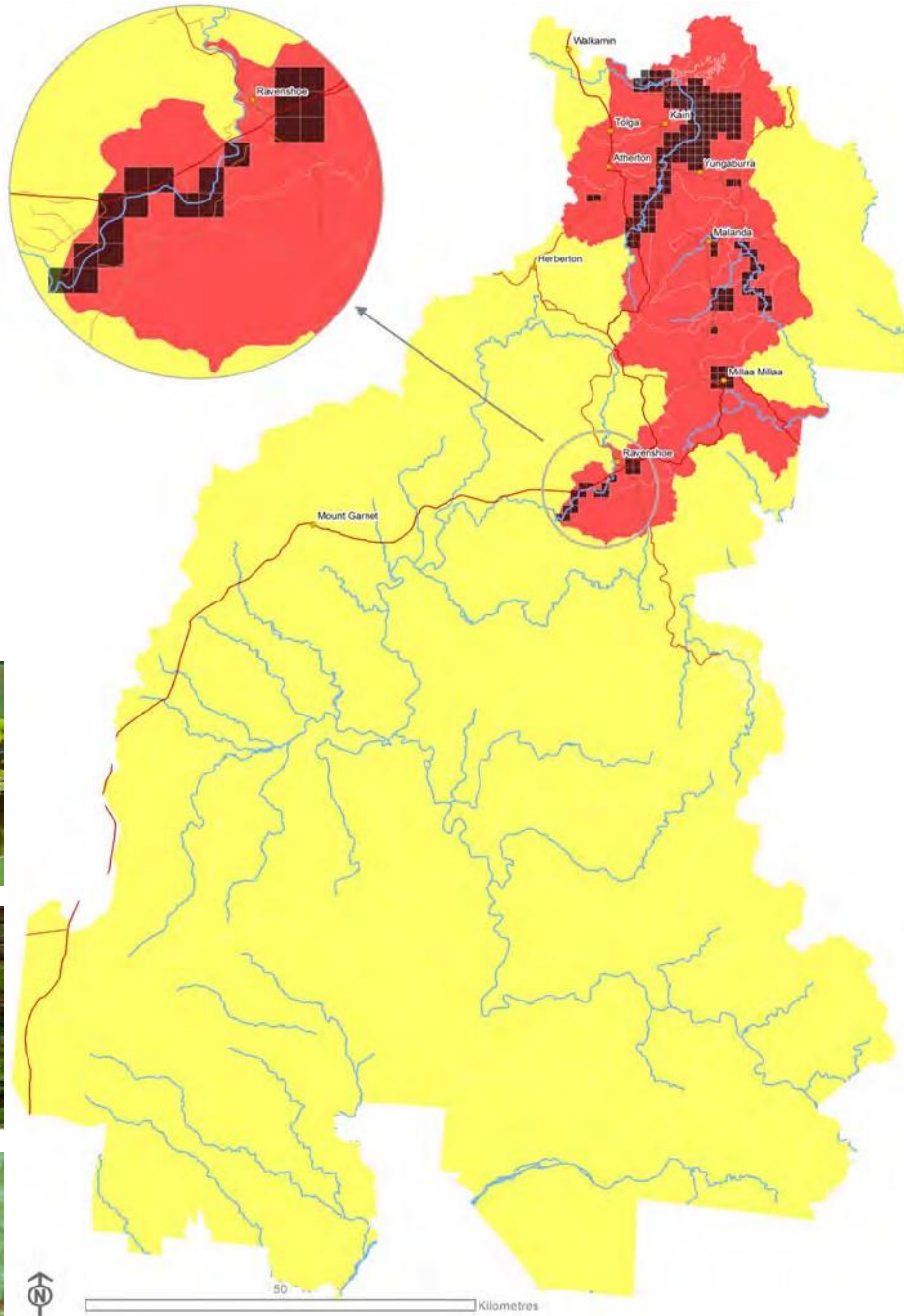
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Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



In the prevention zone

In the asset protection zone

What is my biosecurity obligation?

Salvinia is a restricted invasive plant under the *Biosecurity Act 2014*. It must not be kept, moved, given away sold or released into the environment without a permit. You should also work with Tablelands Regional Council to develop and adhere to a biosecurity plan for your property.

Ensure wetland and pond plants are sourced from a reliable supplier and from a weed free area. Do not dispose aquarium plants or fish into waterways. Do not introduce Salvinia into ornamental ponds or water features.

Targeted control at priority environmental and visitor assets and ongoing release of the Salvinia weevil biocontrol agent are the primary means to reduce impacts.

- Floating
- Aquatic
- Perennial

Biosecurity Act Restricted matter category

- 2**
Must be reported
- 3**
Do not distribute
- 4**
Do not move
- 5**
Do not keep
- 6**
Do not feed

Control

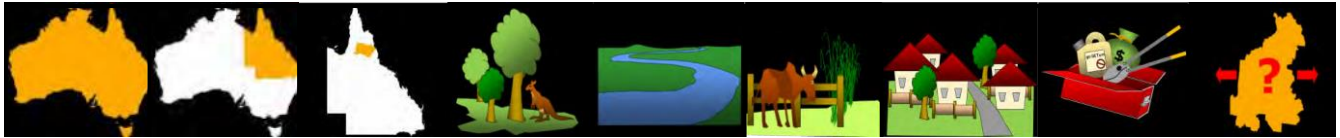


Spread



Siam *Chromolaena odorata*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 0.05/5 4.0/5 4.0/5 3.0/5 4.0/5 3.0/5 3.0/5

Priority

Details

Description A scrambling woody shrub to 3m (and higher as a scrambling climber) with distinctive forked leaf venation and purple flush on new leaves. Clusters of white flowers in May to June and October. Distinguished from other weeds Bluetop, Praxelis and Billy Goat Weed which are shorter and have mauve to purple flowers.

Distribution Siam is widespread but localised in the Upper Herbert area from Ravenshoe to Blencoe Station.

Impacts Siam can form dense thickets and outcompete native species and pasture in both disturbed and undisturbed areas. Siam prefers richer soils in alluvial and riparian zones but will grow in almost any environment in the wet or dry tropics.

Key projects Detailed survey and surveillance is required to ensure Siam has not established in the south-west of the region. Siam remains a long term eradication target for the Tablelands Regional Council and surveillance operations to maintain the current level of control and limit spread will be continued.

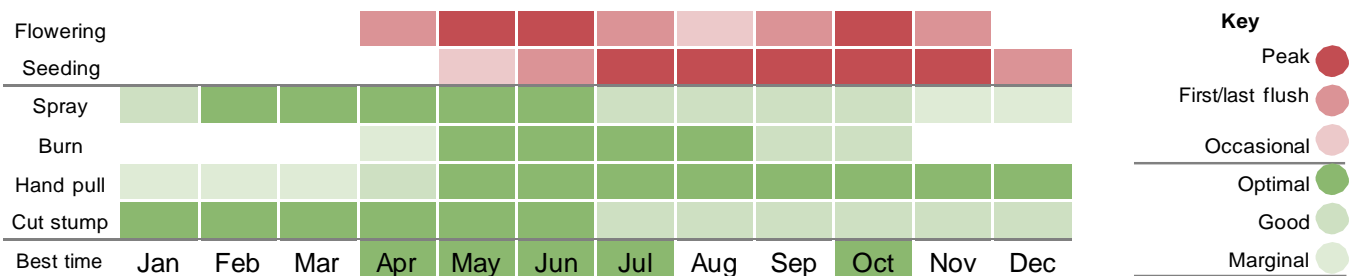
Background

Siam is considered one of the world's most invasive weeds. It has the potential to spread across northern Australia and along the eastern and western coastlines.

Siam is likely to have arrived with contaminated stock, produce, vehicles or machinery from adjoining infested areas. It is very important to ensure weed hygiene measures are in place and materials/produce are sourced from a clean site.

Siam has a peak flowering period in May–June with another, less vigorous flowering in October. It is spread by wind, water, machinery and vehicles and seed is confirmed to remain viable in the soil for at least seven years.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

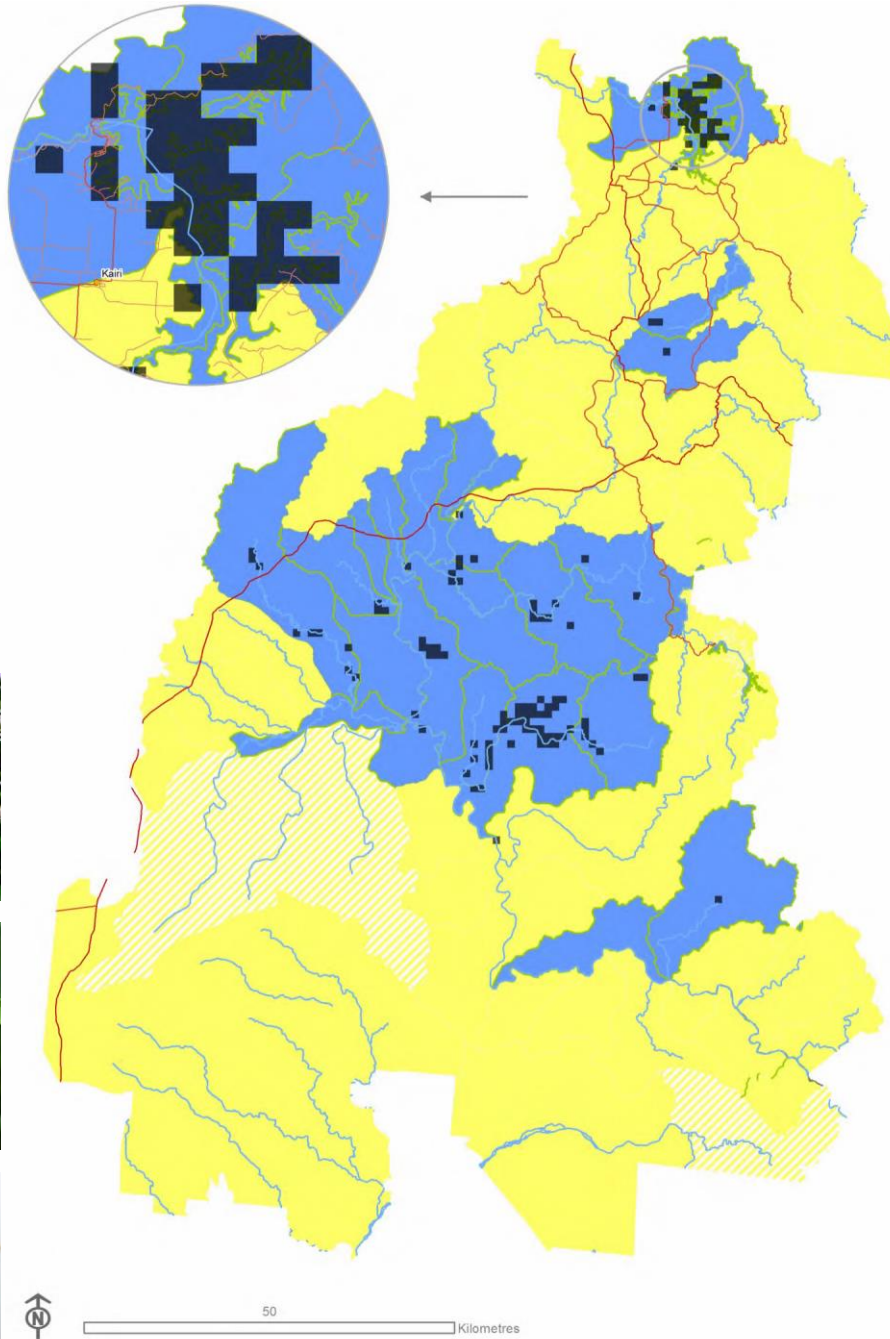
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In the delimitation zone
In the prevention zone
In the intensive control zone

What is my biosecurity obligation?

Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

It is an offence under the *Biosecurity Act 2014* to move, share, give away and sell this plant. Ensure machinery and vehicles moving from the infested areas are free from plant material and soil. Source agricultural and raw materials from a weed free area and a reliable supplier. Do not disturb or remove soil and plant material from known infestations, even if no plants are visible.

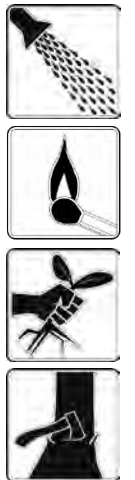
Seek advice prior to working in the vicinity of known infestations. Control plants along waterways and roadsides from the top of the catchment down. Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242. Ensure best practice weed hygiene measures are in place to reduce risk of spread. If you have an active infestation on your property you can assist the survey and control team by maintaining property access and tracks, and not moving soil or plant material from the infestation area.

- Woody
- Terrestrial
- Perennial

Biosecurity Act Restricted matter category

- 2 Must be reported
- 3 Do not distribute
- 4 Do not move
- 5 Do not keep
- 6 Do not feed

Control



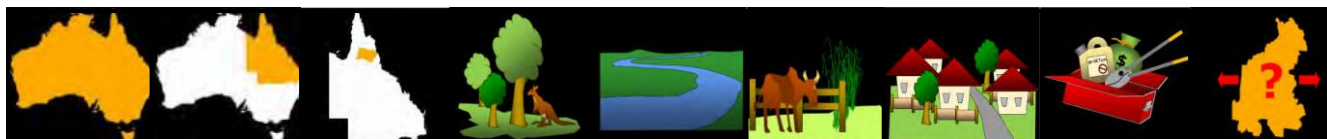
Spread



Sicklepod *Senna obtusifolia*

Priority

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 5.0/5 3.0/5 3.0/5 4.0/5 2.0/5 3.0/5 4.0/5

Details

Description Sicklepod is a vigorously growing, very competitive woody shrub that grows to 2m tall and up to 1m wide. It has yellow flowers and long, curved seed pods. Normally an annual, though plants that have been slashed or survived chemical application often reshoot and continue to grow another year

Distribution Sicklepod has restricted in distribution.

Impacts Sicklepod can completely dominate pastures. It becomes a major weed of crops within two or three seasons and will invade natural areas, especially following disturbance. Sicklepod often becomes abundant in road corridors and fallowed or vacant land.

Key projects Priority is given to managing roadside infestations to reduce further spread. Best practise management of pastures and spelling infested areas while control takes place is a crucial to success.

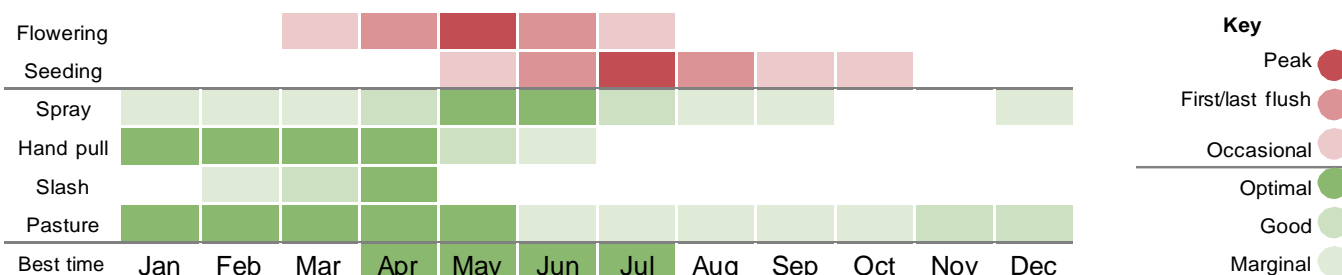
Background

Senna species are weedy in many tropical countries around the world and are thought to be native to America. Although Sicklepod is widespread within the region, there are still localities where it does not occur.

Sicklepod is often spread in contaminated raw materials and produce with flooding and other natural disasters assisting spread to new locations. Machinery, vehicle and stock hygiene practices will help stop the spread to new areas. Spelling stock in holding paddocks for at least seven days will ensure any ingested seed is passed prior to moving to new areas.

Sicklepod should be managed as a weed of pasture and sensitive environmental areas. Mapping infestations will help to identify key assets at risk and manage the impact.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.



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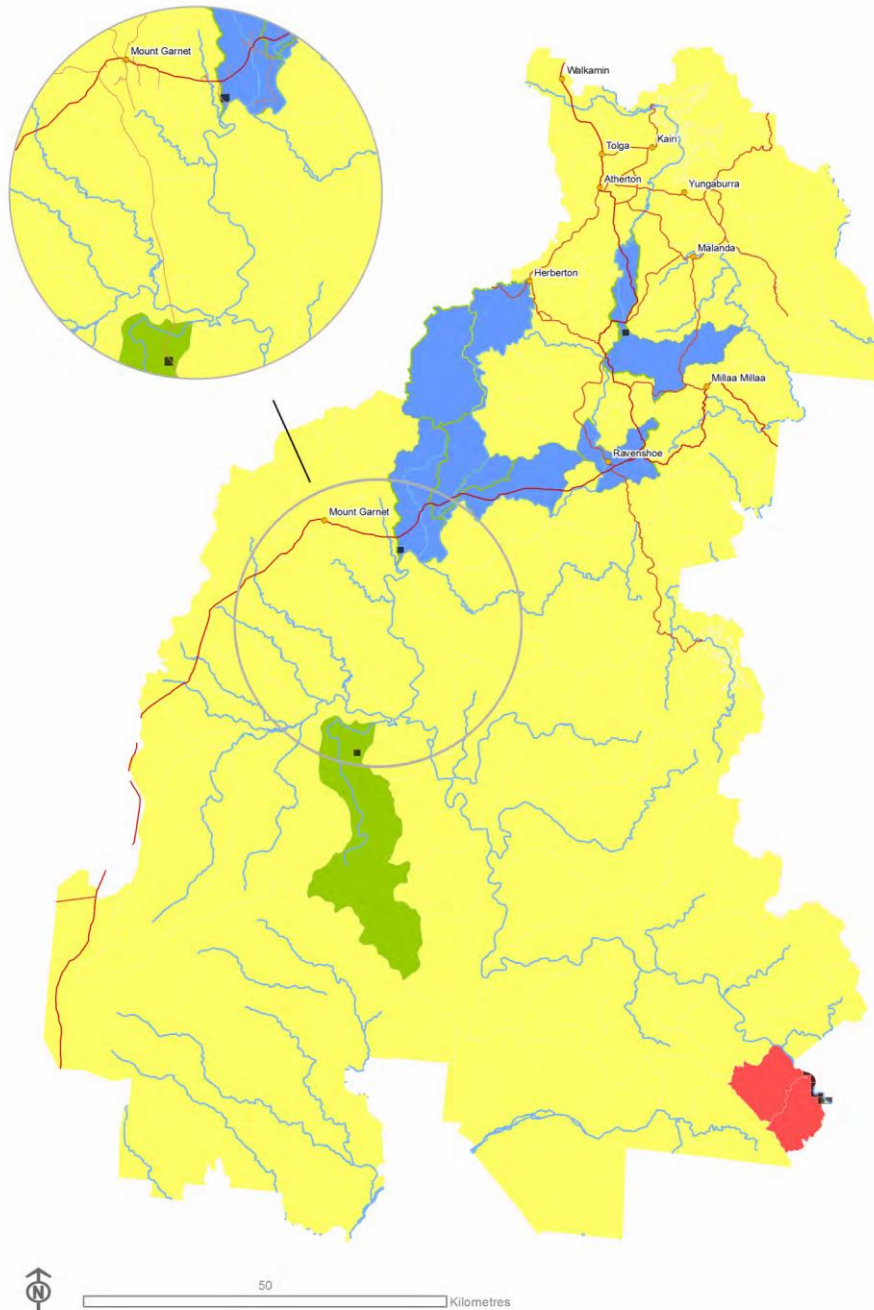


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What is my biosecurity obligation?

In the prevention zone
In the eradication zone
In the intensive control zone
In the asset protection zone

Sicklepod is a restricted invasive plants. It is an offence under the *Biosecurity Act 2014* to move, share, give away and sell this plant. Ensure machinery and vehicles moving from the infested areas are free from plant material and soil. Source agricultural and raw materials from a weed free area and a reliable supplier. Report any suspected outbreaks/detections to Tablelands Regional Council on 1300 362 242.

Control and map strategic infestation along Gunnawarra Road, Mount Garnet. Ongoing control is a high priority as seed can remain viable for up to 10 years. Report any suspected outbreaks/detections to Tablelands Regional Council on 1300 362 242.

Conduct survey and control prior to seed production each year. Do not move soil or plant material from the infestation area.

Ensure best practice weed hygiene measures are in place to reduce risk of spread to new locations. Maintain weed free areas. Identify high value assets and protect them from impacts. Spell stock for at least seven days prior to moving from infested areas.

Woody

Terrestrial

Annual

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control



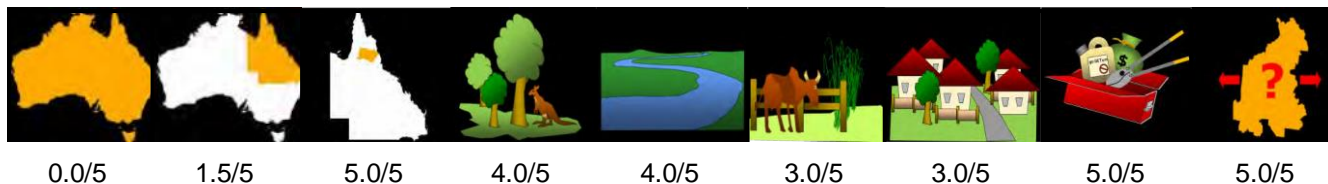
Spread



Thunbergia *Thunbergia grandiflora*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent

Priority



Details

Description A rapidly growing vine that forms significant underground tubers and climbs and smothers vegetation. The lavender-blue, purple or mauve trumpet-shaped flowers are identical but the leaves may vary from choko-like to oval in shape, with a narrow pointed tip.

Distribution Several isolated outbreaks near Malanda, Wondecla, Gentle Annie and the Old Cairns Track.

Impacts This plant climbs and smothers vegetation, killing and often pulling down mature trees with its weight. It does significant damage in riparian areas and forest edges where it can outcompete most plants.

Key projects All known locations of Thunbergia on the Tablelands region are subject to control efforts.

Background

The separate species of *T. laurifolia* and *T. grandiflora* have been merged into a single species.

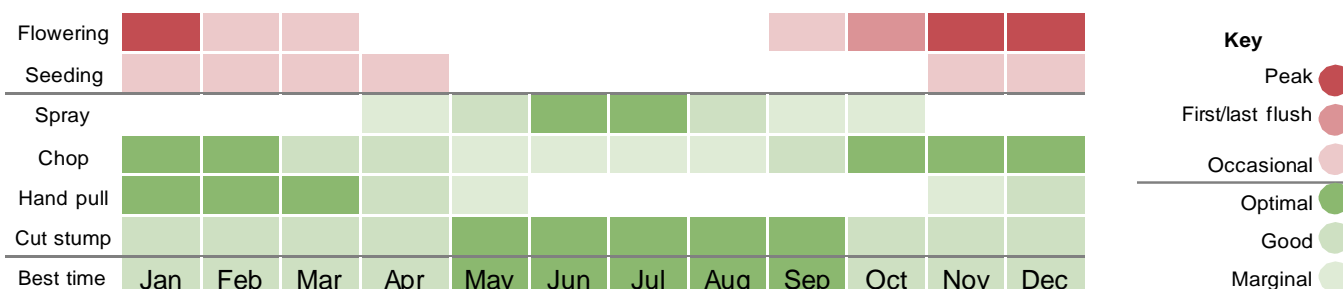
Thunbergia vine is mainly spread through the sharing of plants between gardeners. It may also be spread during floods, cyclones, or during clean-up work after these events.

Ensure best practice weed hygiene measures are in place to reduce the risk of spread to new locations. Make sure vehicles and machinery are clean before arriving and commencing work.

If you have an active infestation on your property you can assist the survey and control team by maintaining property access points and tracks, and not moving soil and plant material from the infestation area.

Targeted treatment of upstream properties is the most effective way to manage Thunbergia on a catchment scale. Repeat treatments are required to ensure underground tubers do not re-establish.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.



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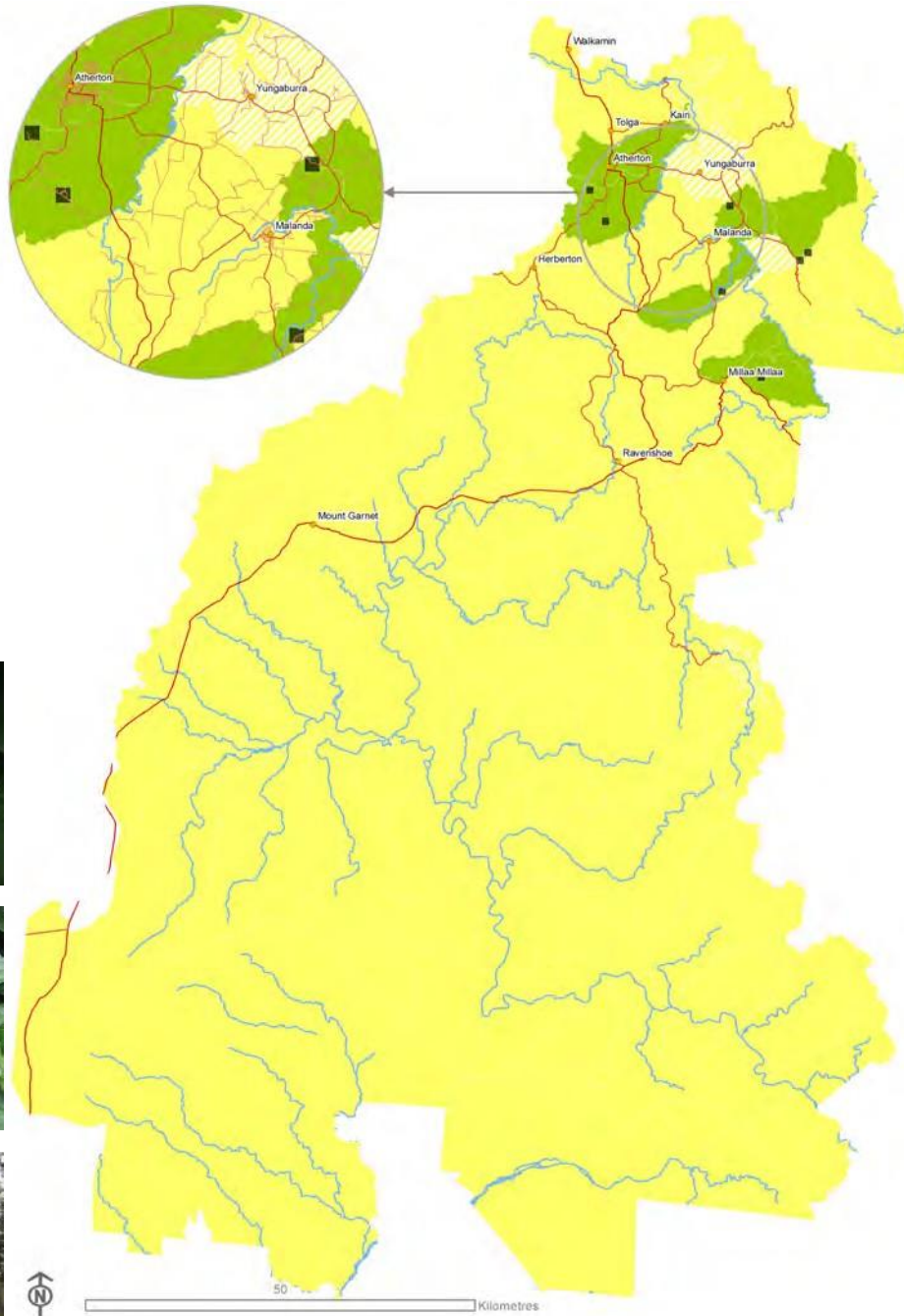


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In the delimitation zone
In the prevention zone
In the eradication zone

What is my biosecurity obligation?

A wider search in catchments above Tinaroo Dam is required to identify source populations and isolated outbreaks. Report any detections for suspected vines with lavender-blue, purple or mauve flowers or Tablelands Regional Council on 1300 362 242.

Thunbergia is a restricted invasive plants. It is an offence under the *Biosecurity Act 2014* to move, share, give away or sell this plant. Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

Seek advice prior to working in the vicinity of known infestations. If you have an active infestation on your property you can assist the survey and control team by maintaining property access points and tracks, and not moving soil and plant material from the infestation area.

If Thunbergia is present on your property, make sure your green waste does not contain live plant material and is not disposed of in areas where the plant is likely to establish. Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242.

Vine

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

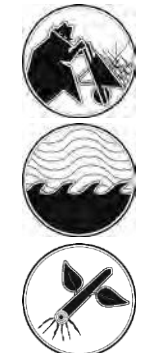
5 Do not keep

6 Do not feed

Control

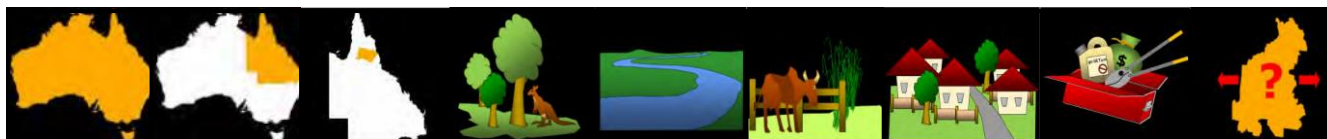


Spread



Turbina Vine *Turbina corymbosa*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 0.0/5 1.0/5 4.0/5 4.0/5 3.0/5 4.0/5 4.0/5 3.0/5

Priority

Details

Description Turbina Vine can form vine towers (20m+) over native vegetation with thick (30cm), rope-like stems. Stems of new growth are smooth, green, cylindrical and hairless while older stems are thicker, pale grey and roughly cylindrical. Leaves are oval and heart-shaped at the base with a pointed tip, 3–10cm long. Turbina Vine has sprays of fragrant, white, bell-shaped flowers. The fruit is a papery beaked capsule 80mm–1cm long and full of brown, hairy seeds.

Distribution Turbina Vine is found along the entire length of the Barron River below Tinaroo Dam. On the Atherton Tablelands it is concentrated around rainforest margins in the north of the region.

Impacts Invasion of rainforest areas, displacing native vines and shrubs. Dried fruits and seeds float readily in water and have a high level of dormancy.

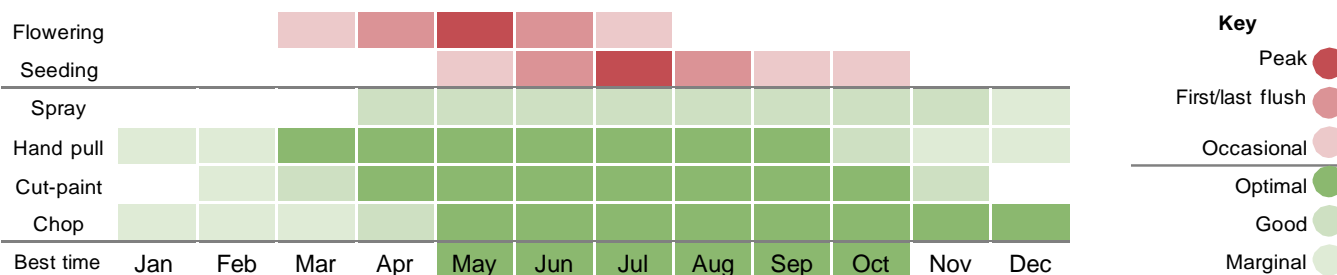
Key projects Control program's have centred on Mabi forest (Type 5b and critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999*) and rainforest margins at Barney Springs, largely through support from external funding.

Background

Turbina Vine is scrambling vine that can totally blanket vegetation. Originally from tropical America and now naturalized in North East Queensland. It can grow from near sea level to 750 m in rain forest regrowth and in lowland and upland rain forest.

The effects of Cyclones Larry and Yasi contributed to the proliferation of Turbina Vine in rainforest margins and on riverbanks on the Atherton Tablelands.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.



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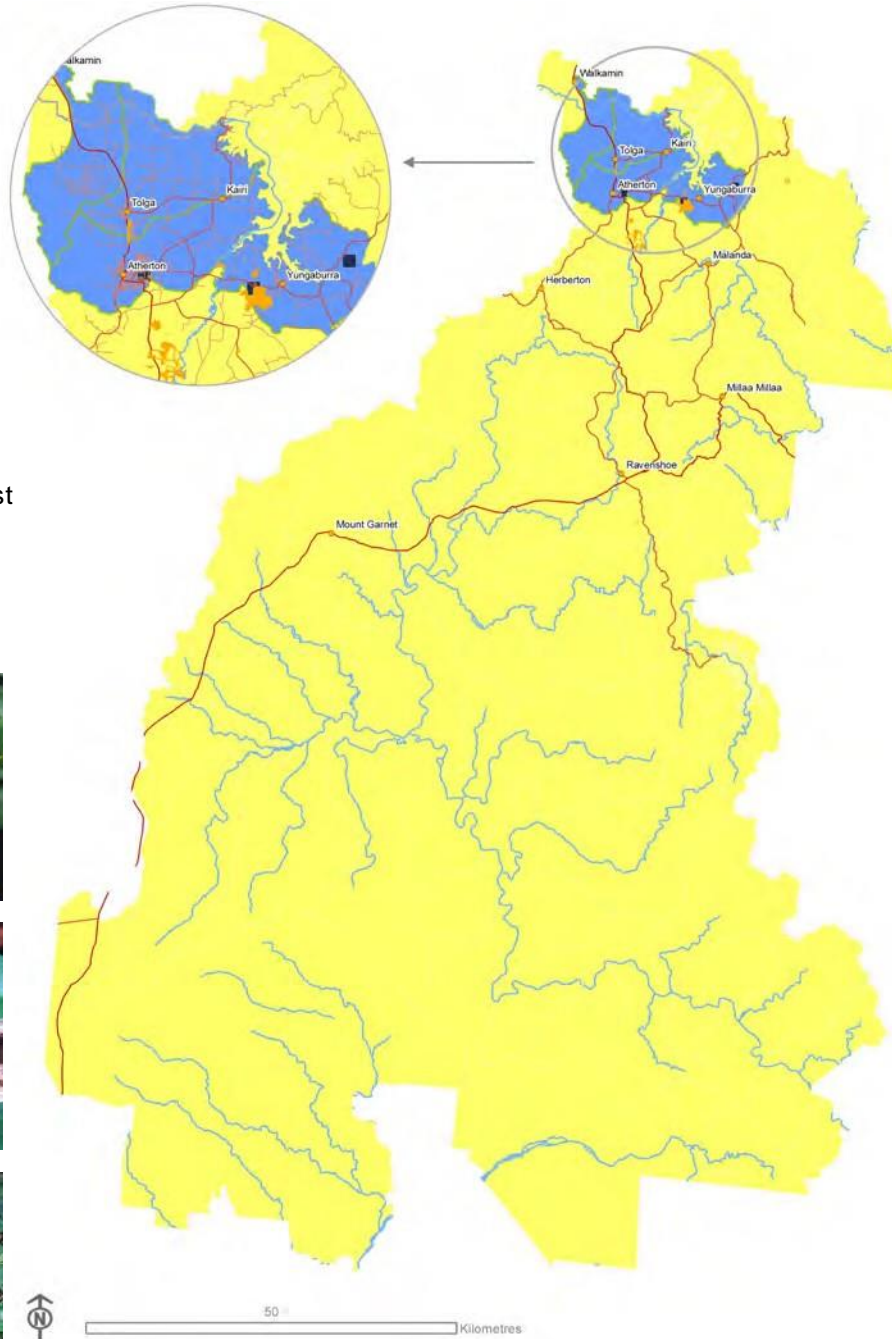


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Mabi forest



What is my biosecurity obligation?

- In the prevention zone**
- In the intensive control zone**

Turbina Vine is not a prohibited or restricted invasive plant however everyone has a general biosecurity obligation to take reasonable and practical steps to minimise the risks associated with its control.

Priority is given to managing Mabi forest, high value riverine habitat and roadside infestations to reduce further spread.

- Vine
- Terrestrial
- Perennial

Local laws apply

- Must not breed
- Must not propagate
- Must not introduce
- Must not sell or supply
- Must not provide harbour

Control

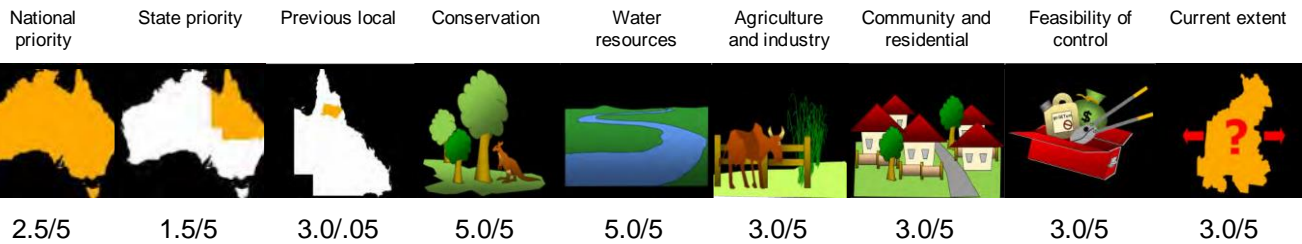


Spread



Water Hyacinth *Eichhornia crassipes*

Priority



Details

Description A free floating aquatic herb with glossy, spoon-shaped leaves and distinctive purple/lilac flowers. Water Hyacinth forms dense blankets over waterways and wetlands. It is distinguished from native hyacinth which has white flowers and pointed, spear-shaped leaves (see photos below).

Distribution Currently only known in Tinaroo Dam but presumed to be established upstream.

Impacts Water Hyacinth floats on still or slow-moving water and can grow rapidly to cover the entire surface of a water body. The thick mat of vegetation shades out submerged plant life and reduces oxygen exchange, making the water unsuitable for fish and other animals.

Key projects An eradication program is being carried out by SunWater and Tablelands Regional Council at Tinaroo Dam.

Background

Water Hyacinth is a weed of national significance that is often introduced into the environment from water features, ponds and aquariums. It grows from seed and by division of mature plants and may also be spread in contaminated soil from water features.

Water Hyacinth was detected in Lake Tinaroo in 2018. It is possible there is an upstream source but it has not been located. A wider search is being conducted to systematically identify the source population/s or any isolated outbreaks.

Keeping an eye out for unusual or new aquatic plants on your property may assist in locating other infestations and protecting priority environmental and visitor assets.

Joint management activities and community education efforts at Tinaroo Dam with SunWater and the Department of Environment and Science are in place.

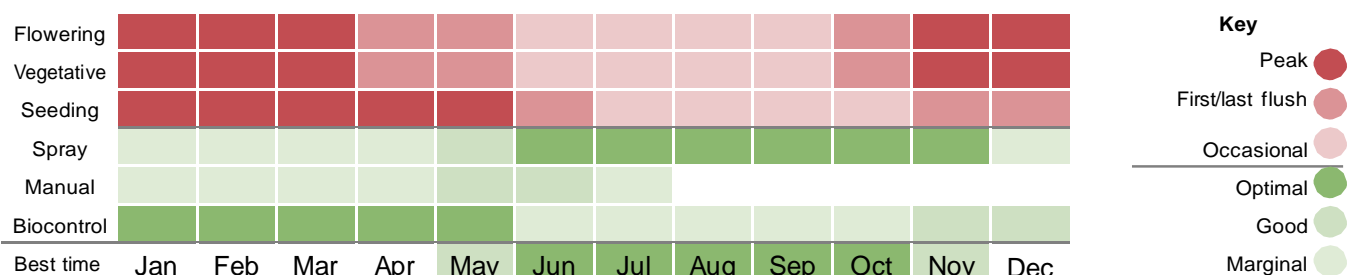


Native Blue Hyacinth.



Pest plant Water Hyacinth.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

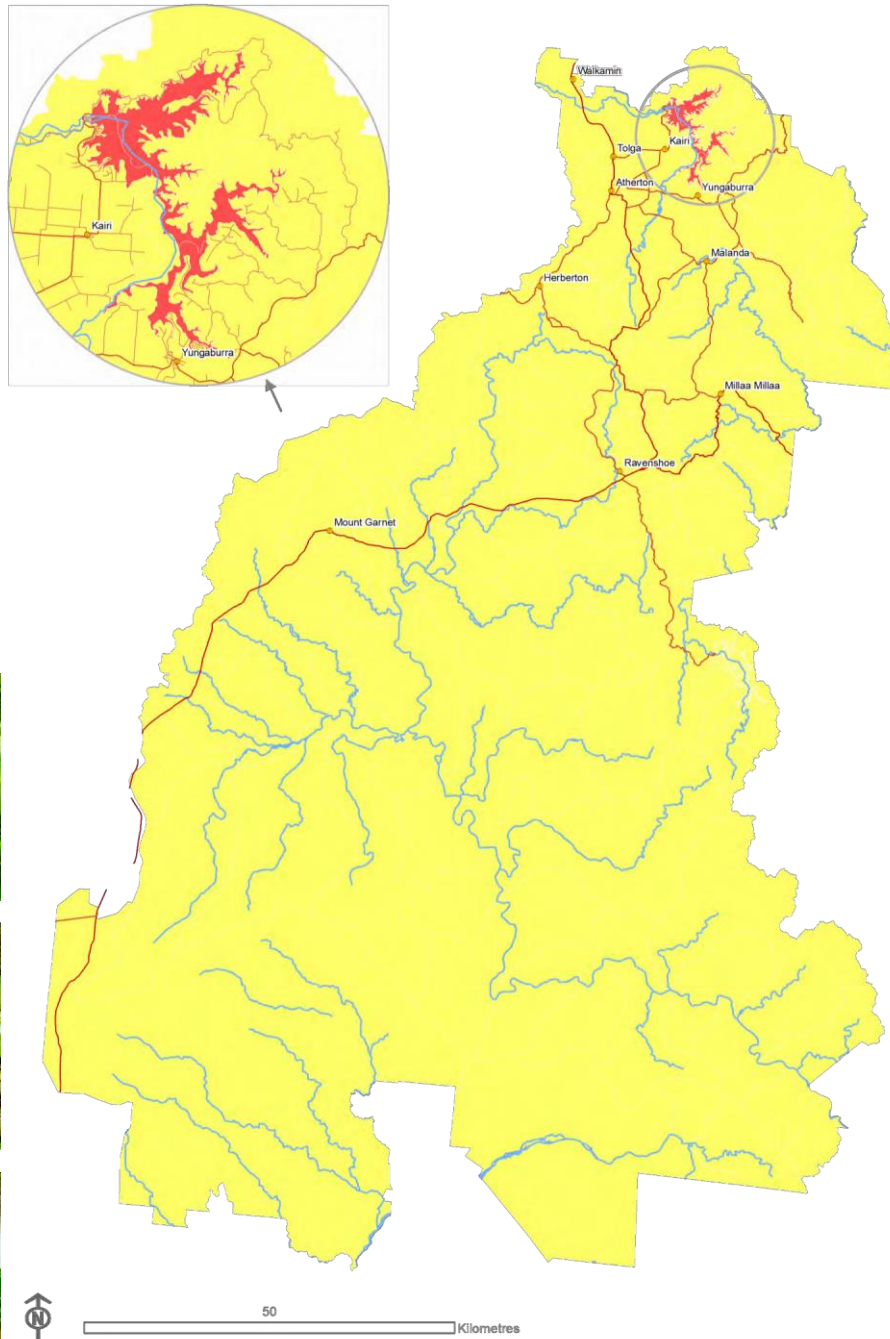
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- Floating
- Aquatic
- Perennial

Biosecurity Act Restricted matter category

- 2
Must be reported
- 3
Do not distribute
- 4
Do not move
- 5
Do not keep
- 6
Do not feed

Control



Spread



What is my biosecurity obligation?

In the prevention zone

Report any suspected outbreaks or detections to Tablelands Regional Council (TRC) on 1300 362 242. It is an offence under the *Biosecurity Act 2014* to move, share, give away or sell this plant. Ensure wetland and pond plants are sourced from a reliable supplier and are from a weed free area. Do not dump aquarium plants or fish into waterways. Water Hyacinth is a restricted invasive plant. It is an offence under the *Biosecurity Act 2014* to move, share, give away or sell this plant. Report any suspected outbreaks or detections to TRC on 1300 362 242.

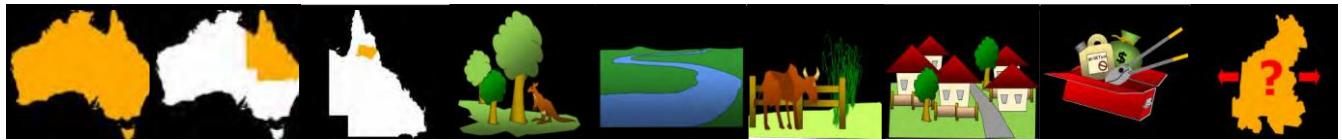
In the asset protection zone

Ensure boats, trailers, machinery and vehicles moving from infested areas are free from plant material and soil. Source wetland and pond plants from a reliable supplier and from a weed free area.

A combination of mechanical, biological and herbicide methods are the best strategy in managing Water Hyacinth. Programs to remove Water Hyacinth from Tinaroo Dam are being conducted and surveillance is being undertaken in upstream areas.

Water Lettuce *Pistia stratiotes*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 3.0/.05 5.0/5 5.0/5 3.0/5 3.0/5 3.0/5 3.0/5

Priority

Details

Description A free-floating aquatic weed with small, green flowers that resembles an open head of lettuce. Leaves are spongy, light green and water repellent. Water Lettuce reproduces from seeds or division.

Distribution Water Lettuce was discovered in Tinaroo Dam in 2018 and it is presumably also in the Upper Bar-ron catchment.

Impacts Water Lettuce floats on still or slow-moving water and can rapidly grow to cover the entire water surface with a thick mat of vegetation. This shades out submerged plant life, impedes oxygen exchange, impacts fish and other aquatic organisms and provides breeding opportunities for mosquitoes.

Key projects Joint control operations at Tinaroo Dam began with Sunwater and Tablelands Regional Council in 2018. Systematic top down management upstream of Tinaroo Dam will be required to reduce the impacts.

Background

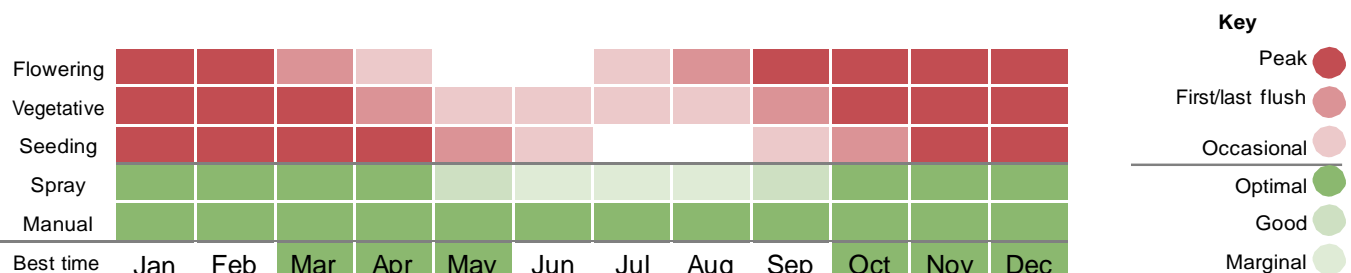
Water Lettuce is a free-floating aquatic weed found in tropical countries although its country of origin is not known. Water Lettuce was introduced to Australia as an aquarium and water-garden plant and rapidly forms dense infestations that cover the surface of entire rivers, dams and irrigation channels. This affects water flow, damages native ecosystems and impedes recreational use of water bodies.

Ensure sources of water plants like water lily are weed free and do not empty aquariums into waterways or im-poundments.

Water Lettuce reproduces by seed and by division from runners and a top of catchment down approach is needed to systematically remove it from Tinaroo Dam and other waterways.

Water Lettuce is spread by flood water so control operations will focus on areas at risk following major weather events.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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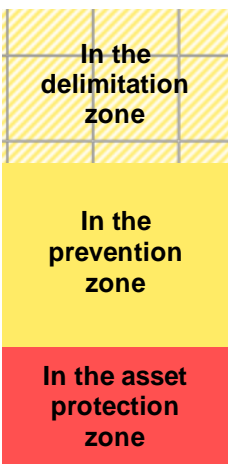
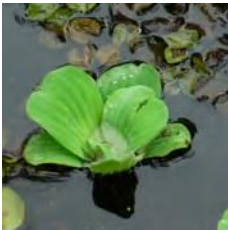
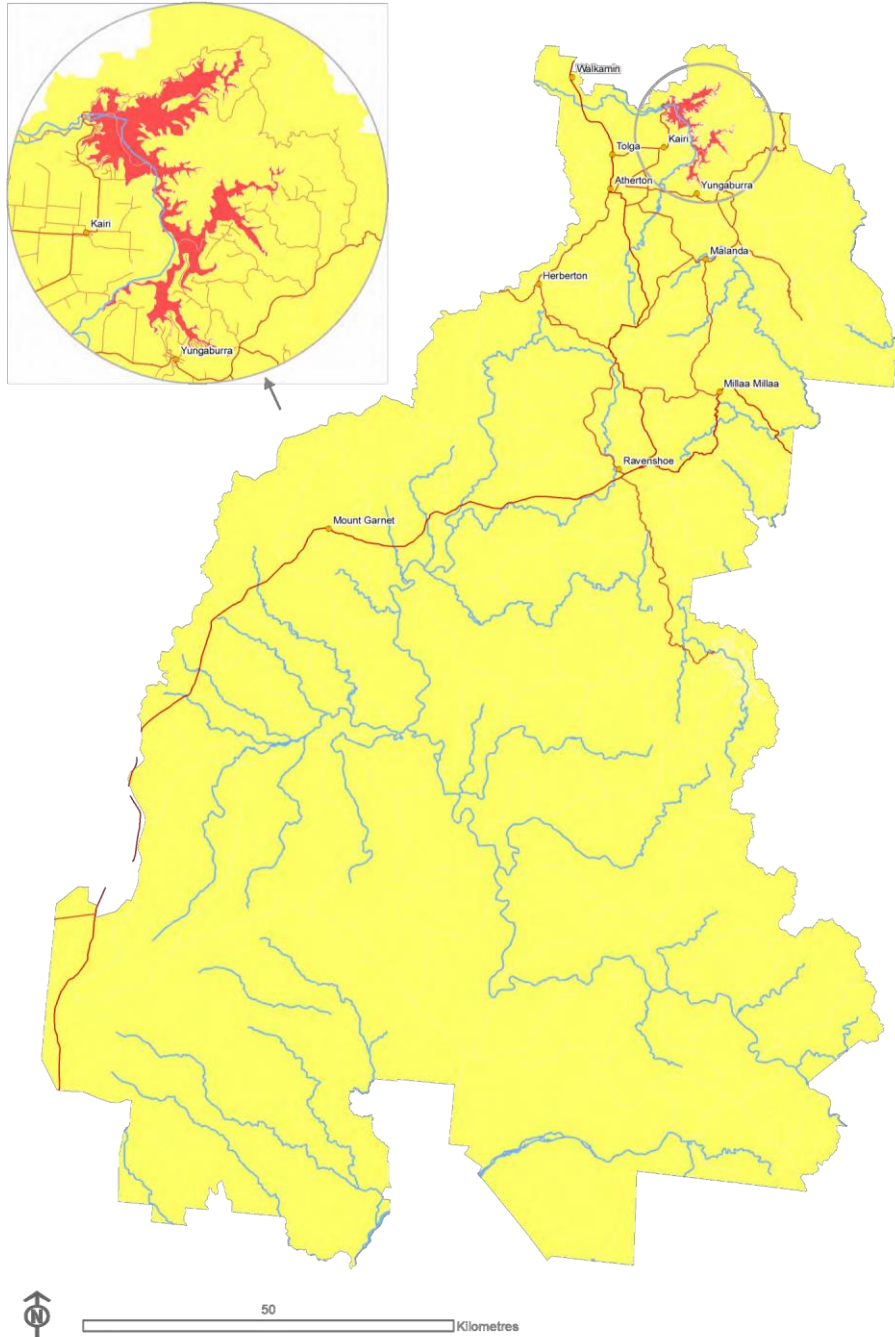
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What is my biosecurity obligation?

A high priority is to identify how far upstream this infestation occurs and to prevent it entering the Walsh River catchment, west of the Great Dividing Range. Report any suspected outbreaks/detections to Tablelands Regional Council (TRC) on 1300 362 242.

Water Lettuce is a restricted invasive plant. It is an offence under the *Biosecurity Act 2014* to move, share, give away and sell this plant. Ensure aquatic plants for aquariums and water features are sourced from a reliable supplier and are weed free. Make sure watercraft, trailers, machinery and vehicles moving from the infested areas are free from plant material and soil.

Control plants at priority environmental and visitor assets. Assist the survey and control team and management programs by maintaining property access and tracks, and by not moving plant material from the infestation area.

Floating

Aquatic

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control

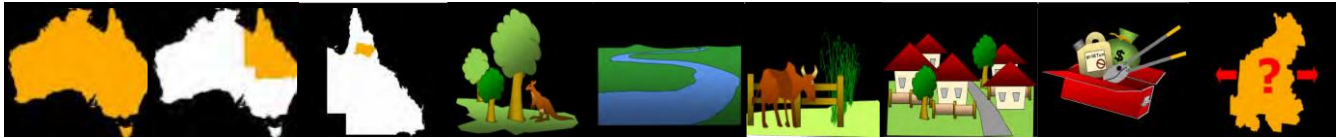


Spread



Weedy Sporobolus Grasses *Sporobolus* spp.

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 4.0/5 4.0/5 4.0/5 5.0/5 3.0/5 2.0/5 3.0/5

Priority

Details

Description A group of robust, upright perennial grasses that grow from 60cm to 1.7m tall, the most familiar being Giant Rats Tail Grass (GRT). Flower spikes are about 40cm long and transform from a distinctive dark 'rats tail' shape to an open pyramid when mature. Leaves are narrow and tough and can be rasp like to touch.

Distribution Weedy Sporobolus Grasses are scattered across most of the Tablelands where they prefer a drier savannah climate. Multiple species and similarities to native *Sporobolus* can make identification difficult so the precise distribution in the Tablelands region remains uncertain.

Impacts The larger *Sporobolus* species can drastically outcompete desirable pastures. They are unpalatable to stock, cause major problems in overgrazed and disturbed systems, and invades creek lines and woodlands in drier savannah environments.

Key projects Remove Weedy Sporobolus Grasses from roads and areas of intensive stock fed production to prevent further spread. Individual properties should ensure best practice weed hygiene measures are in place to reduce risk of spread and actively manage fence lines and access tracks.

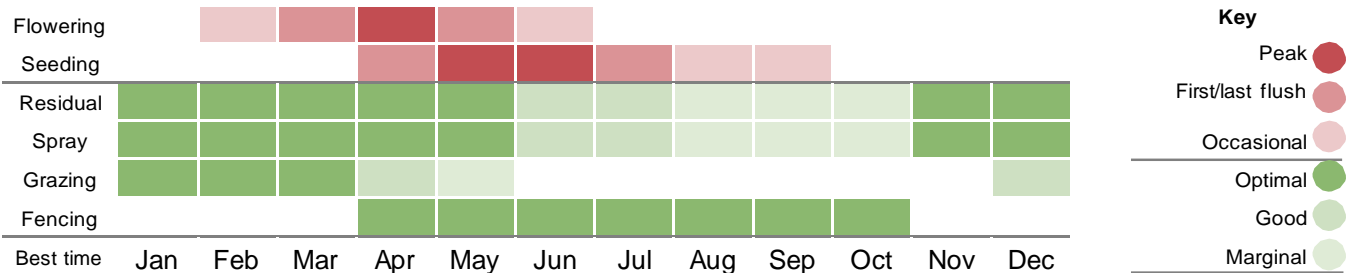
Background

Weedy Sporobolus Grasses were originally introduced as contaminants in pasture seed and have now adapted well to large areas of eastern Australia.

They have low palatability when mature, are difficult to control, can affect cattle health and productivity, outcompete desirable pasture grasses and cause significant degradation of natural areas.

Weedy Sporobolus Grasses are spread via vehicles, machinery, stock and contaminated hay. Sourcing hay and raw materials from clean sources will help to prevent accidental introduction. Monitoring roadsides and tracks during the growing season will assist in detecting new outbreaks before they establish. Spelling stock in holding paddocks prior to movement will also reduce spread into new areas.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

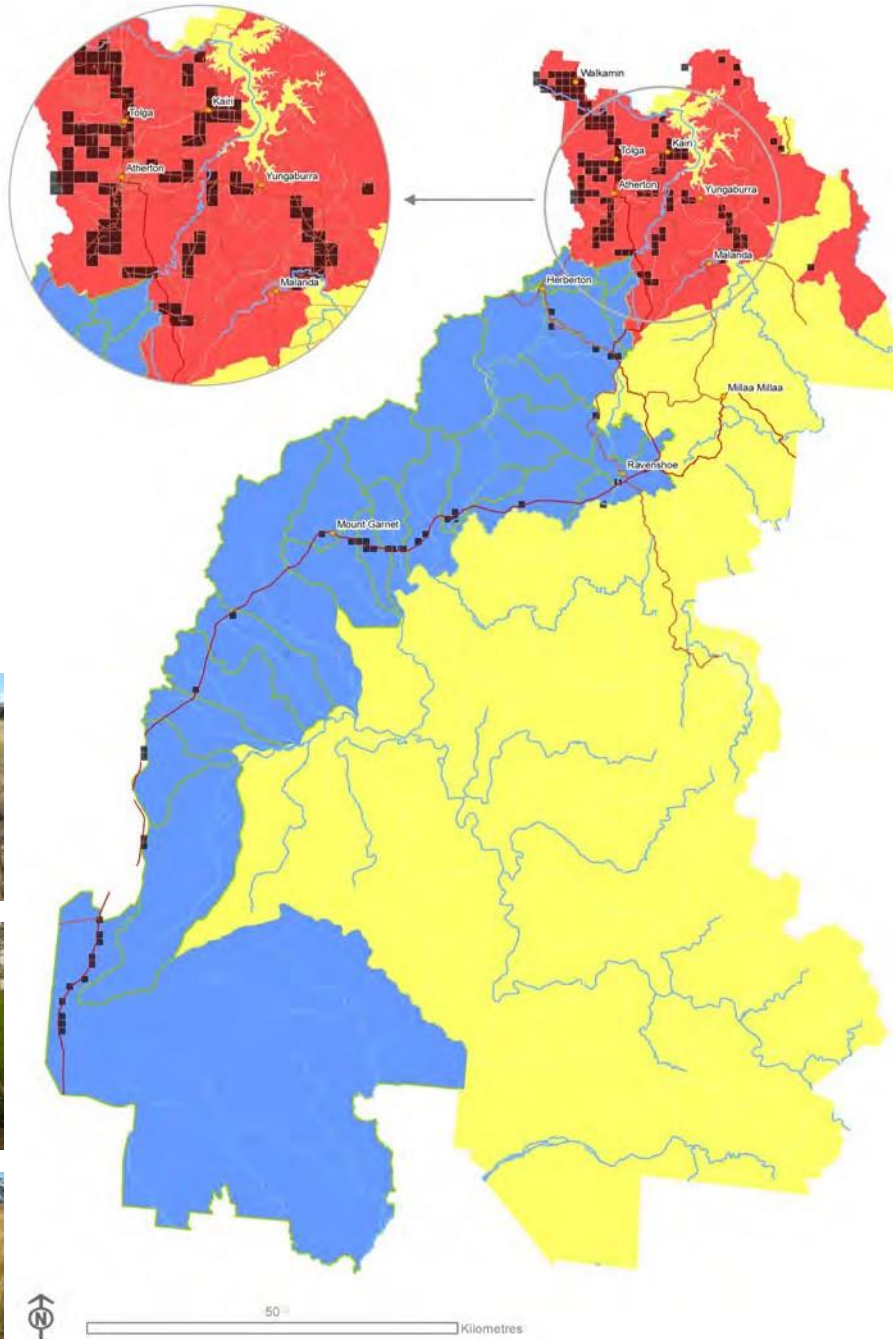
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What is my biosecurity obligation?

In the prevention zone
In the intensive control zone
In the asset protection zone

Weedy Sporobolus Grasses are restricted invasive plants. It is an offence under the *Biosecurity Act 2014* to move, share, give away and sell this plant. Source agricultural and raw materials from a weed free area and a reliable supplier.

Remove Weedy Sporobolus Grasses from roads and areas of intensive stock feed production to prevent further spread. Report any suspected outbreaks or detections to Tablelands Regional Council on 1300 362 242. Seek advice prior to works in vicinity of known locations. Control plants along waterways and roadsides from the top of the catchment down. Assist management programs by allowing access and maintaining healthy rangelands.

Maintaining healthy pasture and groundcover will assist in the management of Weedy Sporobolus Grasses. Restricting stock and machinery movement to and from infested areas is essential to reduce spread. Ensure machinery or vehicles moving from the infested areas are free from plant material and soil.

Grass

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control



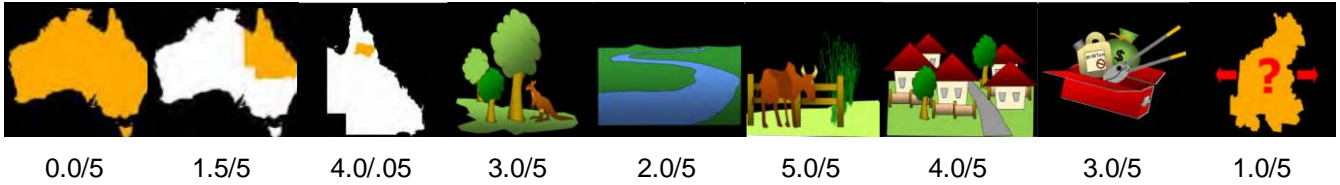
Spread



Feral Cat *Felis catus*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent

Priority



Details

Description Feral Cats are derived from domestic cats and have a long history of naturalisation in Australia. They are similar in appearance to domestic cats but are generally larger in size particularly around the head and shoulders. Feral Cat fur is generally short and a range of colours. Males weigh up to 6kg and females up to 4kg. They are usually most active at night.

Distribution Feral Cats are present in all areas of mainland Australia and many islands.

Impacts Feral Cats eat small to medium prey including birds, reptiles, amphibians, mammals, fish and insects. They compete directly with native carnivores and carry toxoplasmosis, which is harmful to marsupials. Feral Cats scavenge around urban areas and may prey on domestic pets and poultry. They are potential carriers of the rabies virus if it were to enter Australia.

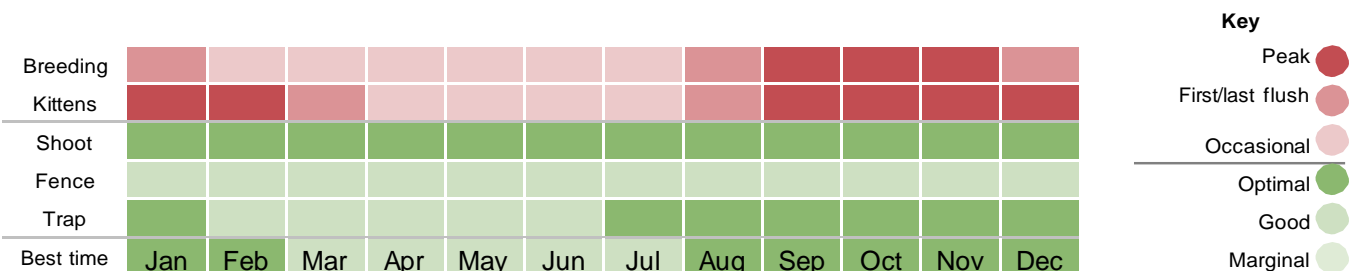
Key projects Feral Cats are usually not managed on a landscape scale but are targeted in species recovery programs and protection of key environmental assets. No coordinated management programs are active

Background

Despite a lack of coordinated management, other options for control can be applied at a local level including shooting, trapping (cage and leg hold traps), restricting access to food sources and responsible domestic cat ownership (including desexing and keeping cats confined). Integrated management using a number of these methods is recommended.

Feral Cats pose a threat to all native wildlife and particular attention is required in areas where key biodiversity assets occur. Feral Cats can capture prey up to 3kg in size but more commonly hunt small mammals, reptiles and birds. Feral Cats have been implicated in the extinction of several Australian mammal species and are present across over 99% of Australia.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

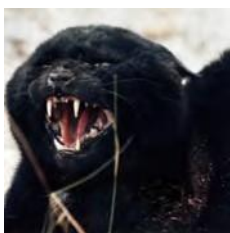
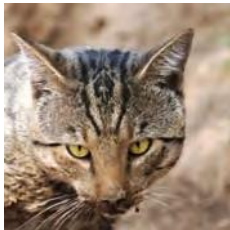
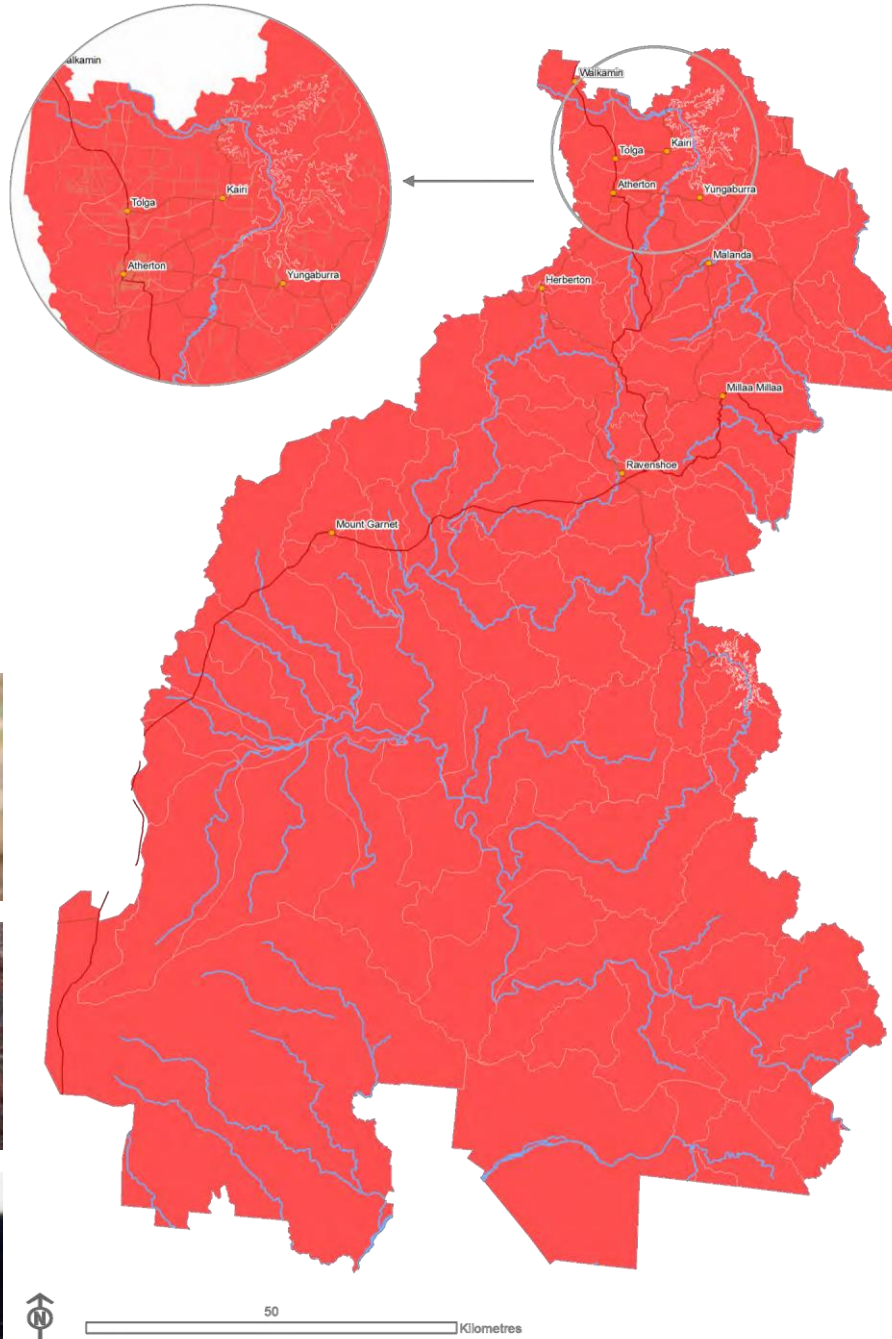
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Tablelands Regional Council

Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



Vertebrate

Carnivore

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control



What is my biosecurity obligation?

In the asset protection zone

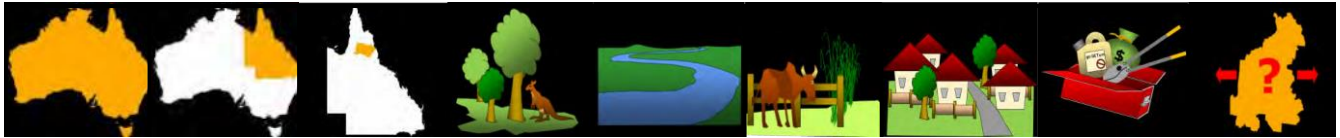
Feral Cats are restricted matter under the *Biosecurity Act 2014*. They must not be moved, fed, given away, sold, or released into the environment without a permit. This includes releasing or dumping of domestic cats. The definition of a feral cat includes Bengal cat hybrids derived from *Prionailurus bengalensis* x *Felis catus*.

Any other species of cat is prohibited in Queensland and must be reported within 24 hours to Biosecurity Queensland on 13 25 23.

Domestic cats are managed in accordance with Tablelands Regional Council Local Laws.

Feral Pig *Sus scrofa*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 2.0/5 5.0/5 5.0/5 4.0/5 3.0/5 2.0/5 1.0/5

Priority

Details

Description Feral Pigs are usually black but can also be buff or spotted black and white. They are generally nocturnal and camp in thick cover during the day. In Far North Queensland the average home range is around 8km². Feral Pigs breed year round and often produce two weaned litters every 12 months.

Distribution Common and widespread in a variety of habitats on the southern Tablelands.

Impacts Feral Pigs damage crops, stock, property and the natural environment. They transmit diseases, including Panama disease, Japanese encephalitis, leptospirosis, brucellosis, melioidosis and foot-and-mouth disease.

Key projects Council works with landholders to address problems across neighbouring properties and tenures. Loan traps are available on request.

Background

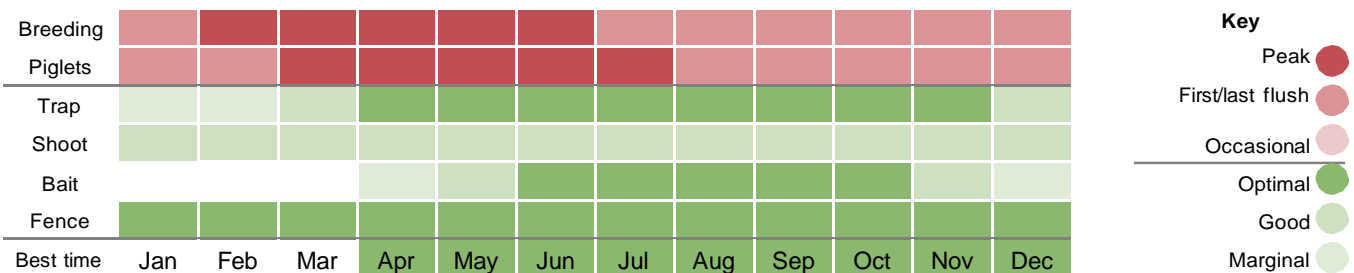
Feral Pigs can transport various weeds, diseases and pests and their foraging sites create ideal conditions for the establishment of weeds. The availability and quality of food and water are the main factors influencing Feral Pig distribution.

Feral Pigs in the tropics tend to have a significantly larger home range size in the dry season compared to the wet season. They are intelligent, opportunistic omnivores with a rapid breeding cycle that makes them difficult to control.

Feral Pigs numbers in Queensland are estimated at 3–6 million, with the majority in northern Queensland. Evidence suggests that at least 70% of the population needs to be removed or the mob will rapidly replenish to numbers that were present before the control program commenced.

Feral Pigs have a negative effect on world heritage-listed natural areas, protected land, threatened species and ecosystems, parklands, reserves, essential infrastructure, drainage systems, wetlands, farmland, private, rural and peri urban land and other areas.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

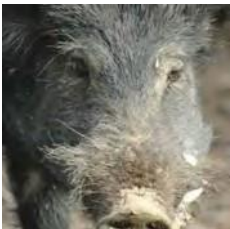
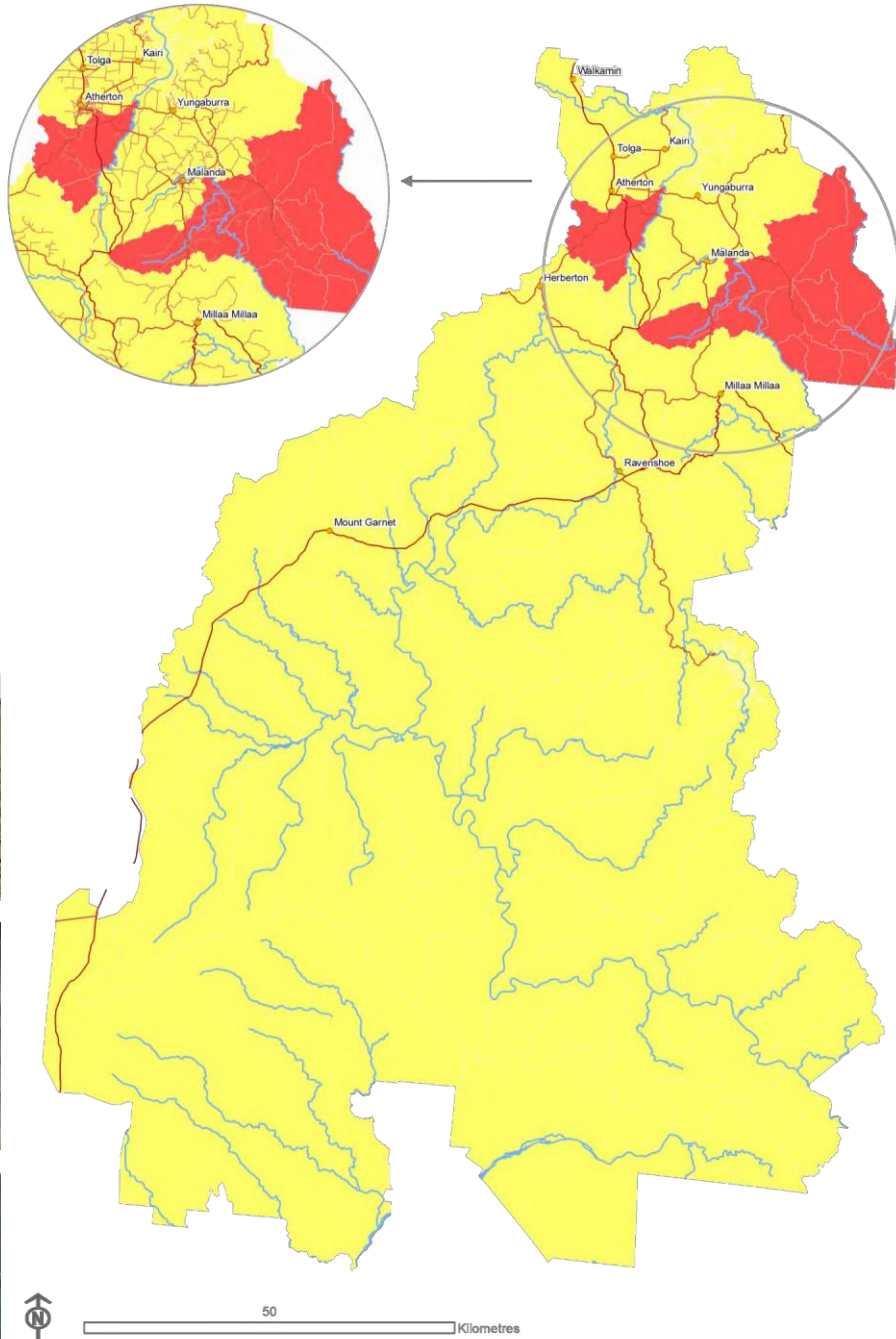
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Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



Vertebrate

Omnivore

Biosecurity Act
Restricted matter
category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control



What is my biosecurity obligation?

In the asset protection zone

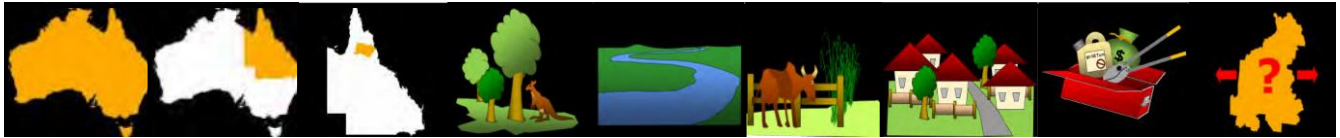
Feral Pigs are a restricted invasive animal under the *Biosecurity Act 2014*. They must not be moved, fed, given away, sold or released into the environment without a permit.

Feral Pigs can be managed through strategic baiting and trapping programs. A collaborative neighbour trapping program is the most successful technique to manage Feral Pig numbers over broad areas.

Small crops and house gardens can be protected by exclusion fencing, with mesh fencing being the most effective.

Rabbit *Oryctolagus cuniculus*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 2.0/05 4.0/5 4.0/5 3.0/5 3.0/5 1.0/5 3.0/5

Priority

Details

Description Rabbits are around 34–45cm in length and usually grey/brown with a pale underbelly. Other colours include piebald, black and ginger. Rabbits have long ears (10 cm) and weigh around 1–2.1kg.

Distribution Localised populations occur in Walkamin, Tolga, Atherton, Tinaroo Dam, Lake Barrine, Lake Eacham, Malanda and Millaa Millaa.

Impacts Rabbits can impact small crops and cause destruction of native vegetation, which may lead to erosion. They compete with native animals for food and shelter affect both the quantity and quality of pasture.

Key projects Strategic use of the K4 virus and baiting with Pindone is applied on occasion.

Background

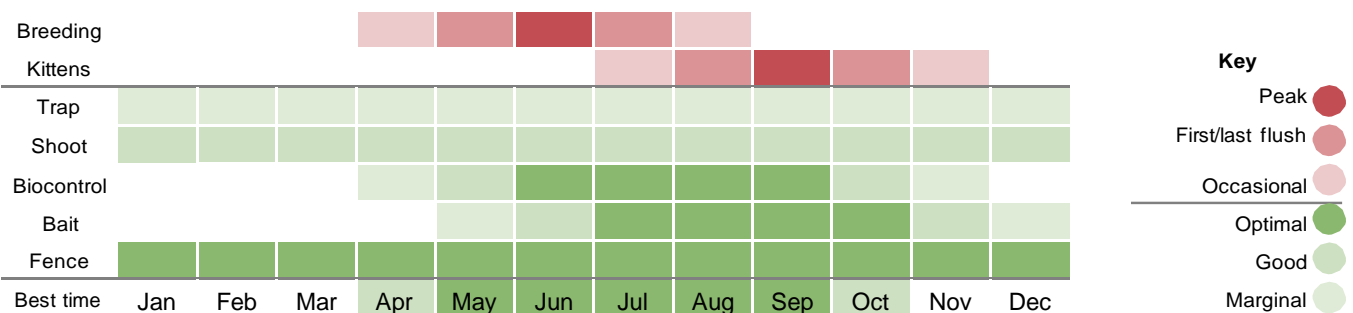
Brought to Australia for sporting purposes in 1788, Rabbits have successfully spread from isolated populations to become one of the most widely-distributed mammals in Australia.

Rabbits are found in high numbers in the southern third of Queensland with isolated populations found in the remainder of the state. Even when low in numbers they can cause significant damage to crops and native flora at the seedling stage.

Impacts on production contribute to grazing pressure and reduced crop production. Environmental impacts include degradation of water from overgrazing, direct competition with native animals for food and space, and changes to population dynamics of predator species.

A range of control methods are available for Rabbits. The preferred method is based primarily on Rabbit numbers and an understanding of their behaviour, social structure, habitats and food preferences.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

1300 362 242 (24hr Customer Service)

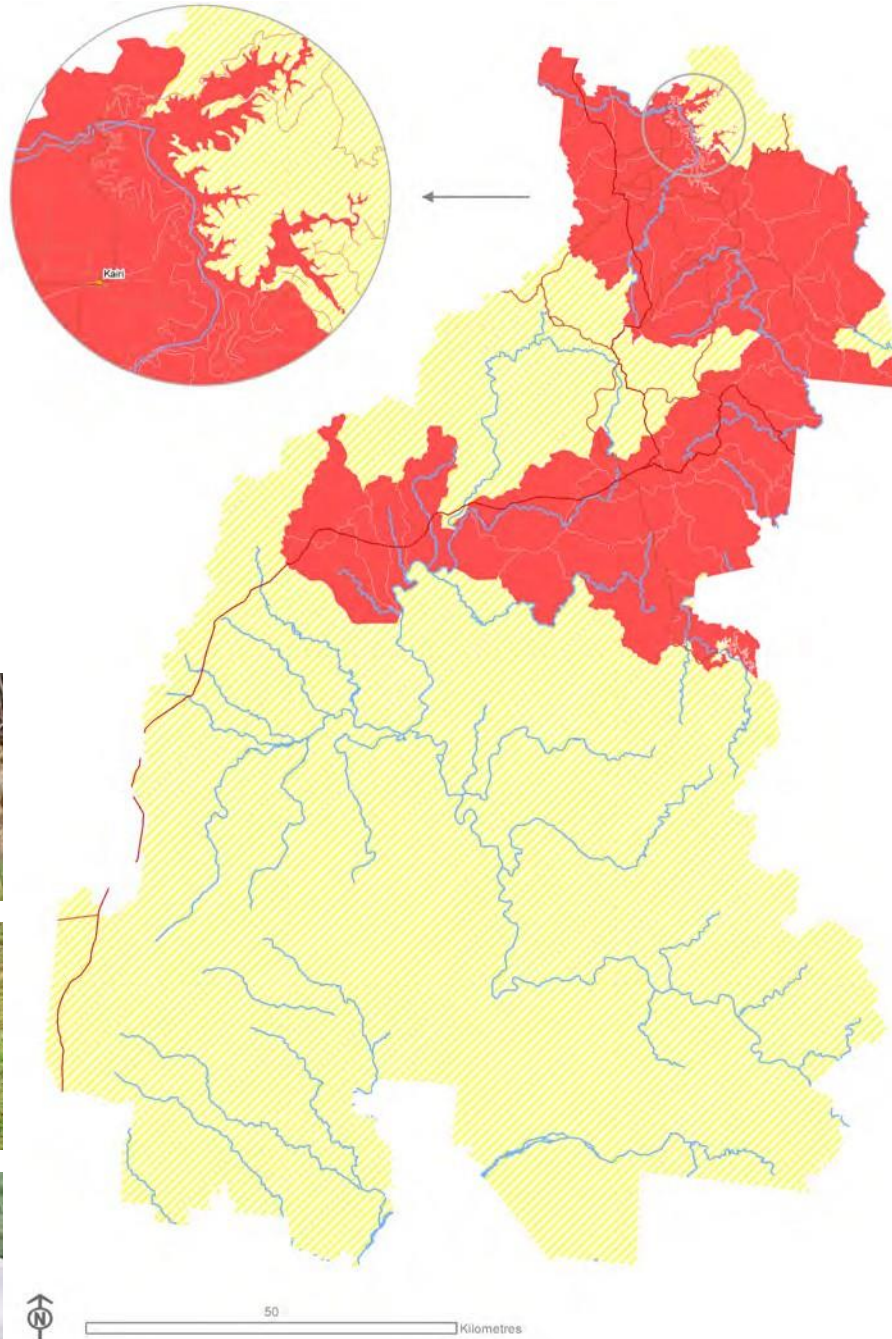
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What is my biosecurity obligation?

In the asset protection zone

Rabbits are a restricted invasive animal under the *Biosecurity Act 2014*. They must not be moved, fed, given away, sold, or released into the environment without a permit.

Control during the breeding season with biological control, trapping, shooting and baits is most effective.

Vertebrate

Herbivore

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

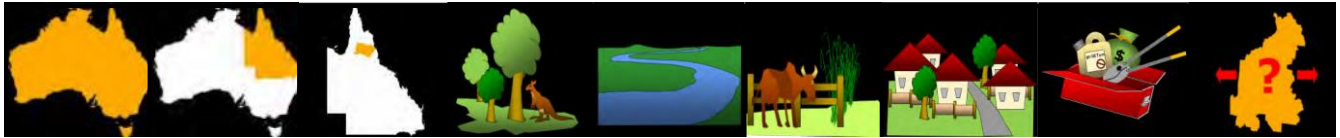
6
Do not feed

Control



Rusa Deer *Cervus timorensis*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent



0.0/5 1.5/5 2.0/05 3.0/5 3.0/5 3.0/5 3.0/5 3.0/5 3.0/5

Priority

Details

Description Rusa Deer have a grey-yellow-red-brown coat, which is darker brown on their hindquarters and thighs. Their body hair is coarse and stags develop a mane during winter. Stags stand up to 1.1m and weigh about 120kg. Hinds are around 95cm tall and weigh up to 80kg. Stags have three tined antlers with the beams forming a characteristic lyre shape.

Distribution Individual Rusa Deer have been reported west of Atherton, north of Kairi and north of Mareeba. They prefer grassy plains bordered by dense brush or woodlands where they can retire during the day. Rusa Deer are preferential grazers of grass, but also browse depending on season and availability of food. They are a tropical species so much of coastal Queensland and adjacent areas are suitable habitat.

Impacts Feral deer in Australia cause damage to a wide variety of agricultural crops, pastures and forestry plantations. Other impacts include damage to fences, spreading of weeds and fouling of waterholes.

Key projects The presence of Rusa Deer in the Tablelands Regional Council area is an emerging issue.

Background

Indonesian Rusa Deer were introduced to the Torres Strait in 1912. In recent years populations have been established by translocations around Townsville, Rockhampton and southern Queensland.

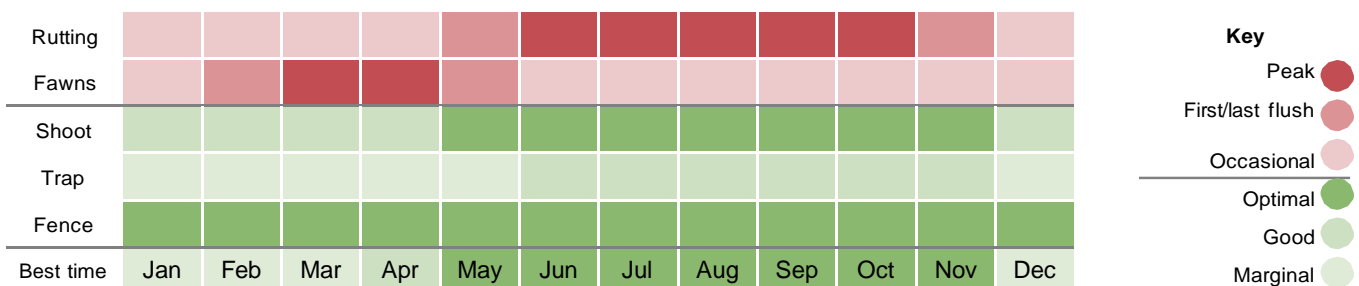
Apart from impacts resulting in loss of agricultural production, Rusa Deer also damage native vegetation by browsing and trampling understorey and seedling plants, and ring-barking young trees. When feral deer density is high, a significantly lower diversity and abundance of plant species is evident.

Feral deer are susceptible to exotic livestock diseases including foot-and-mouth, rinderpest, vesicular stomatitis, rabies and blue tongue. Unchecked, wild herds could play a major role in the spread of infection and act as a reservoir of disease.

Rusa Deer have established in both rural and periurban areas of Queensland and may damage parks, residential gardens and fences in outer urban areas. Where close to major roads, wandering deer represent a serious traffic hazard.

Detailed exclusion fencing details can be found at daf.qld.gov.au.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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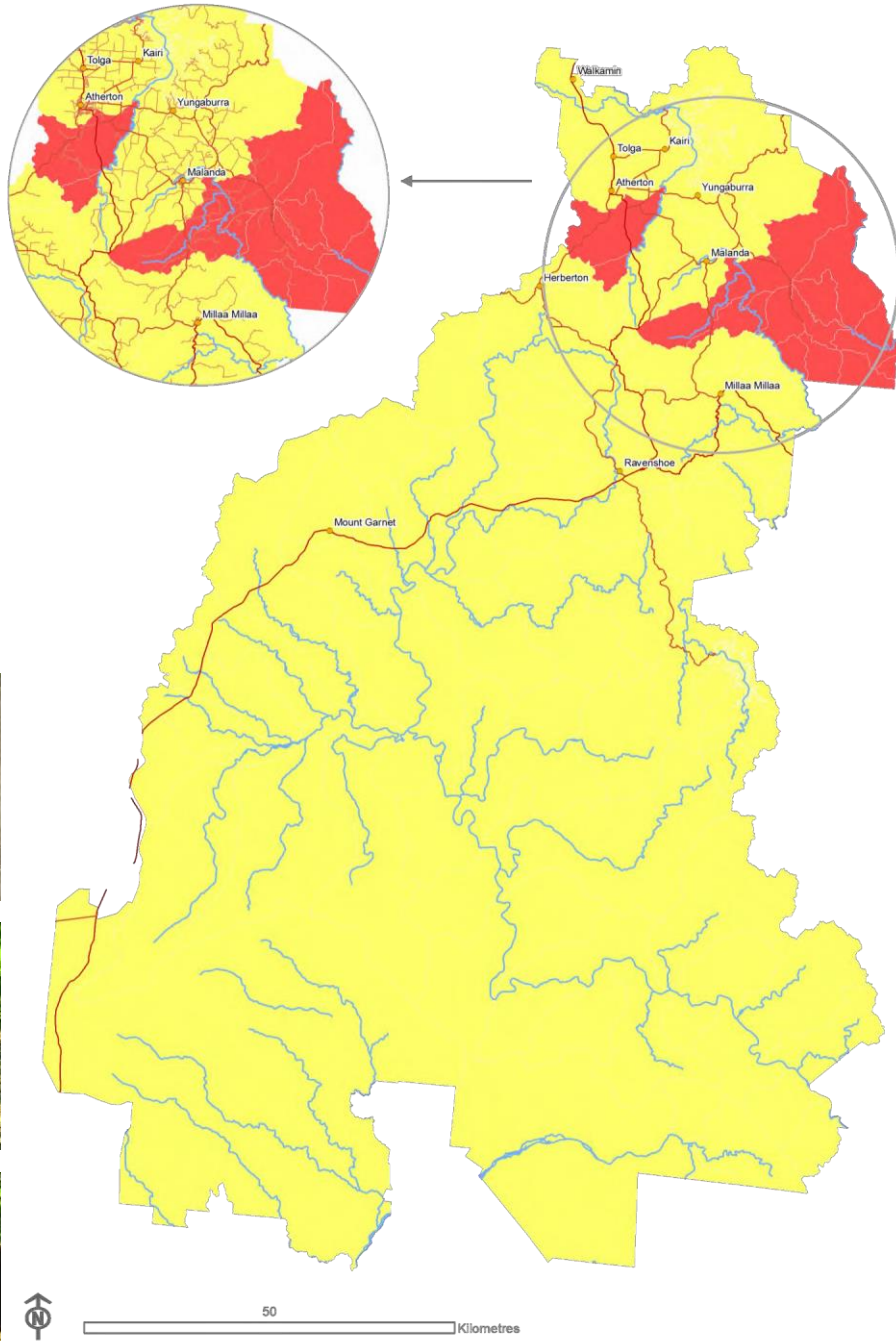
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Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



Vertebrate

Herbivore

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control



What is my biosecurity obligation?

In the prevention zone

Deer contained within a deer-proof fence (such as on farms or in game parks) are not considered a restricted invasive pests. Any deer not within a deer-proof fence is considered feral or wild and subject to control.

In the asset protection zone

Rusa Deer are a restricted invasive animal under the *Biosecurity Act 2014*. They must not be moved, fed, given away, sold, or released into the environment without a permit.

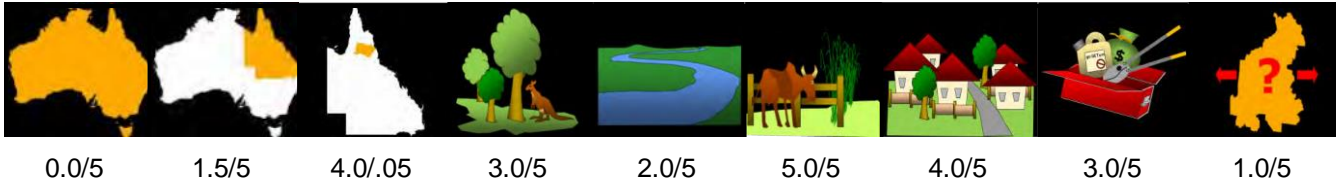
Rusa Deer are a restricted invasive animal under the *Biosecurity Act 2014*. They must not be moved, fed, given away, sold, or released into the environment without a permit.

While a variety of control methods are available, the management of feral deer is best achieved collaboratively with all stakeholders.

Wild Dog *Canis familiaris*

National priority State priority Previous local Conservation Water resources Agriculture and industry Community and residential Feasibility of control Current extent

Priority



Details

Description Wild Dogs include dingoes, wild domestic dogs and hybrids. A Wild Dog in a national park is considered a dingo and is a protected animal under the *Nature Conservation Act 1992*.

Distribution Wild Dogs are widespread in both the agricultural and natural landscape and can exist on the outskirts of towns and within urban areas.

Impacts Wild Dogs can cause stock losses in calving season and often carry parasites and pathogens. Near towns they can cause nuisance and impact on domestic animals.

Key projects An annual coordinated baiting and control program is in place to assist graziers manage Wild Dog populations.

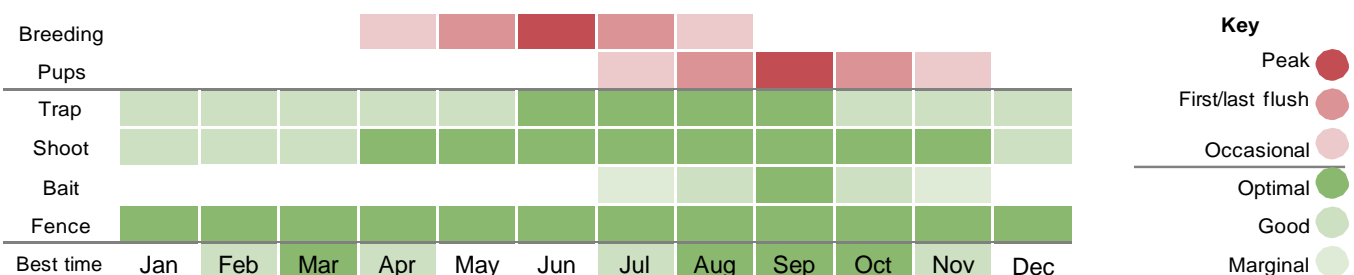
Background

Wild Dogs have defined home territories but are able to cover large distances when moving to new areas.

In urban and settled areas Tablelands Regional Council will respond to individual issues as they arise on a case-by-case basis. While Wild Dogs are generally not aggressive to people, they may display threatening behaviour in urban areas such as attacking domestic dogs, scavenging and stalking.

Successful Wild Dog control is based on ongoing and collaborative effort over a large area. Wild Dogs follow an annual, seasonal cycle as they transition from breeding to birthing and dispersal. Management strategies are most effective when control programs target mature dogs before they have a chance to breed, juvenile dogs before they disperse and migrating dogs.

Control calendar



For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Tablelands Biosecurity Plan available at trc.qld.gov.au and customer service centres.

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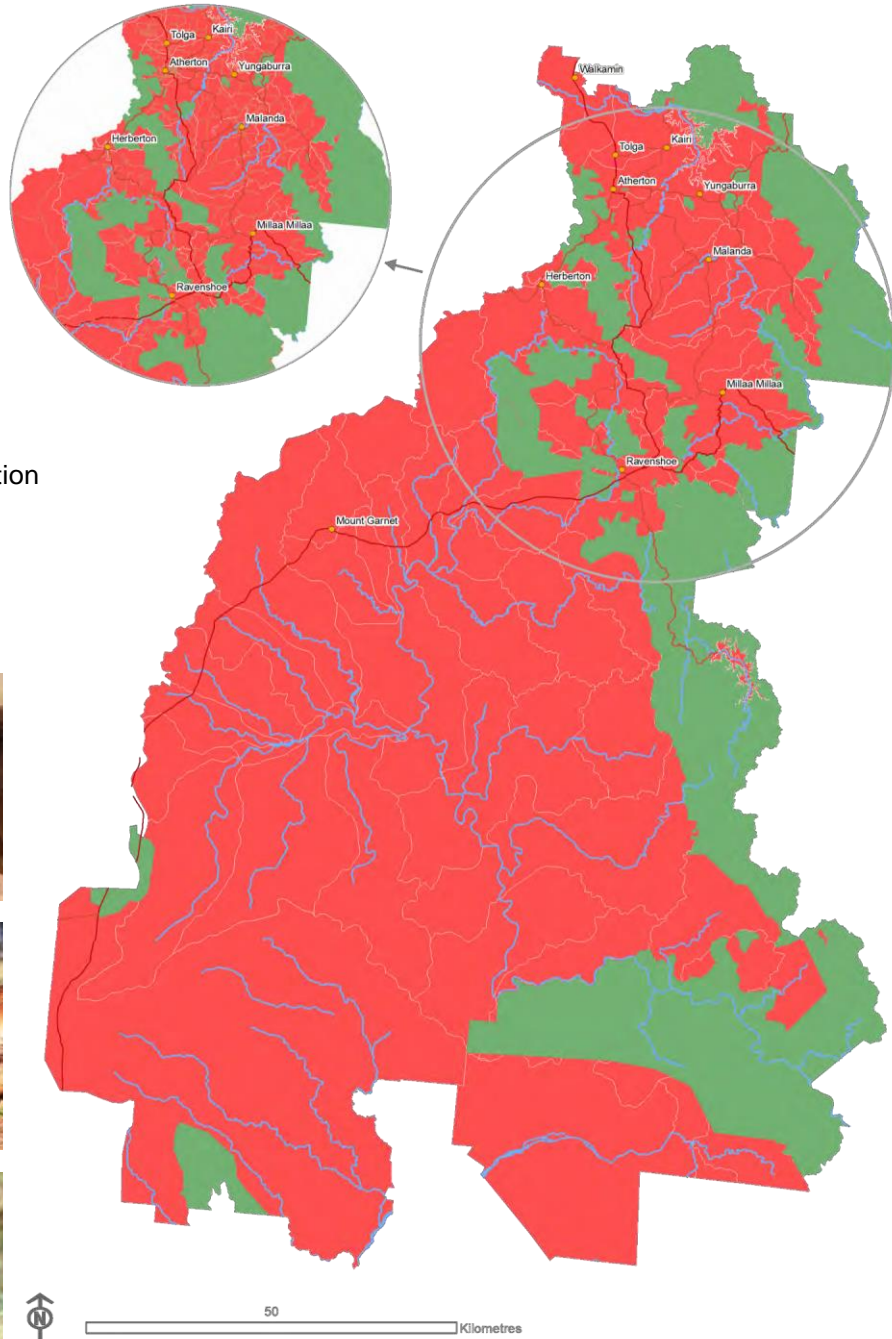
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Tablelands Regional Council

Customer Service Centres in Atherton, Herberton, Malanda & Ravenshoe



Conservation assets



50 Kilometres

Vertebrate

Carnivore

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control



What is my biosecurity obligation?

Wild Dogs are a restricted invasive animal under the *Biosecurity Act 2014*. They must not be moved, kept (if a dingo), fed, given away, sold or released into the environment without a permit.

An ongoing, coordinated baiting and control program is in place to assist graziers manage Wild Dog populations.

Fencing your property is the most effective means of reducing Wild Dog impacts on domestic animals. Participating in cluster and district control programs is the most effective means of controlling Wild Dogs in grazing areas.

The coordinated Wild Dog program does not include management of straying or problematic domestic dogs. These animals are managed in accordance with Tablelands Regional Council's Local Laws.

In the asset protection zone

6. Appendices

6.1.1 Appendix 1 — TRC risk assessment for pest plants

Each category is scored between 1 and 5 as per FNQROC Pest Management Planning Framework and listed in order of rank.

Refer to²⁰ for a description of A–I score categories.

TRC Pest Plant Prioritisation 2019–24	A	B	C	D	E	F	G	H	I	TOTAL
Miconia	5	2.5	5	5	4	3	4	5	5	38.5
Bellyache Bush	2.5	1.5	4	5	5	5	3	5	5	36.0
Olive Hymenachne	2.5	1.5	4	5	5	3	3	4	5	33.0
Gamba Grass	2.5	1.5	3	5	4	4	4	4	5	33.0
Fireweed	2.5	1.5	5	4	3	5	3	4	4	32.0
Parthenium	2.5	1.5	5	4	3	4	3	4	4	31.0
Cabomba	2.5	1.5	3	5	5	3	3	3	5	31.0
Thunbergia species	0	1.5	5	4	4	3	3	5	5	30.5
Salvinia	2.5	1.5	3	5	5	3	4	2	3	29.0
Water Hyacinth	2.5	1.5	3	5	5	3	3	3	3	29.0
Candy Leaf	0	1.5	5	4	3	3	4	3	3	27.5
Siam	0	1.5	5	4	4	3	4	3	3	27.5
Giant Rats Tail Grass and other <i>Sporobolus</i> species	0	1.5	4	4	4	5	3	2	3	26.5
Water Lettuce	0	1.5	3	5	5	3	3	3	3	26.5
Aleman Grass	0	1	4	4	3.6	2.7	2.7	3.2	5.	26.2
Sicklepod	0	1.5	5	3	3	4	2	3	4	25.5
Navua Sedge	0	1.5	5	3	3	4	2	3	3	24.5
Lions Tail	0	0	1	3	4	3	3	5	5	24.0
Madeira Vine	2.5	1.5	0	4	4	2	3	3	4	24.0
Giant Sensitive Plant	0	1.5	3	3	3	3	2	3	5	23.5
Turbina Vine	0	0	1	4	4	3	4	4	3	23.0

²⁰ Description of A–I score category's: A-National; B-State; C-Local; D-Conservation/Biodiversity; E-Riparian/Aquatic; F-Agricultural/Production; G-Residential/Urban; H-Achievability; I-Current Extent

6.1.2 Appendix 2 — Annual calendar of ideal and other times to control pest plants in the Tablelands region

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sicklepod				■	■	■	■					
Candy Leaf			■	■	■	■	■					
Bellyache Bush							■	■	■	■	■	
Olive Hymenachne				■	■					■	■	■
Siam				■	■	■	■	■		■		
Water Lettuce			■	■	■					■	■	■
Madeira Vine						■	■	■	■	■		
Turbina Vine					■	■	■	■	■	■		
Lions Tail			■	■	■					■	■	■
Giant Sensitive Plant	■	■	■	■	■	■	■					
Gamba Grass	■	■	■	■	■						■	■
Water Hyacinth					■	■	■	■	■	■	■	■
GRT & other <i>Sporobolus</i> species	■	■	■	■	■	■	■	■	■	■	■	■
Miconia species	■	■	■	■	■	■	■	■	■	■	■	■
Parthenium			■	■	■	■	■	■	■	■	■	■
Cabomba			■	■	■	■	■	■	■	■	■	■
Thunbergia	■	■	■	■	■	■	■	■	■	■	■	■
Navua Sedge	■	■	■	■	■	■	■	■	■	■	■	■
Salvinia	■	■	■	■	■	■	■	■	■	■	■	■
Fireweed	■	■	■	■	■	■	■	■	■	■	■	■

Pest plant species

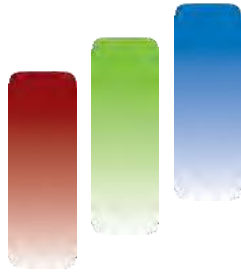
■	Ideal control time
■	Other control time

6.1.3 Appendix 3 — Biosecurity obligations of stakeholders

Stakeholders	Within a delimitation zone	Within a prevention zone	Within an eradication zone	Within an Intensive control/ Transitional Management zone	Within an Asset Protection/Containment zone
Management advisory committee	Compile and distribute GIS data and maps for survey targets				
	Report on secure sites and schedule revisits	<ul style="list-style-type: none"> Deploy early intervention to new outbreaks. Deliver extension and communication. Deliver disaster weed spread prevention protocols as required. 	Maintain operational works programs	Cost and develop long term operational works program	Liaise with local, State and Commonwealth governments
		Report on progress		Maintain operational works programs.	
	<ul style="list-style-type: none"> Implement/conduct vehicle equipment hygiene activities Undertake visitor/user management Install signs 		Liaise with research organisations and programs		
Local government	<ul style="list-style-type: none"> Education and awareness Risk assessment. Aerial/ground surveys 	<ul style="list-style-type: none"> Vehicle/equipment hygiene Education and awareness Capacity building 	<ul style="list-style-type: none"> Spot spraying Manual removal Bag seed heads Install signs. Collect data Monitoring 	Develop property pest management plans	Fire planning and management
Department of Agriculture and Forestry		<ul style="list-style-type: none"> Ensure clean equipment enters clean zones Time operations to coincide with control programs Immediately report outbreaks Adjust maintenance and design practices Allocate resources to prevention activities Install signs. 		Invasive biology and management research	<ul style="list-style-type: none"> Release and monitor biocontrol Conduct control and impact research
			Engage with neighbouring land owners in management programs.		



Stakeholders	Within a delimitation zone	Within a prevention zone	Within an eradication zone	Within an Intensive control/ Transitional Management zone	Within an Asset Protection/Containment zone
Road construction and maintenance staff, Council, contractors, energy services providers and infrastructure managers	<ul style="list-style-type: none"> Immediately report outbreaks. Education and awareness Risk assessment Aerial/ground surveys 	<ul style="list-style-type: none"> Ensure clean equipment enters clean zones Time operations to coincide with control programs 	<ul style="list-style-type: none"> Allocate resources to removal activities Data collection Monitoring 	<ul style="list-style-type: none"> Engage contractors to manage removal targets on road estates Maintain GIS data for operational and design activities Distribute information and facilitate the securing of resources for management 	<ul style="list-style-type: none"> Work with pest management staff and contractors to maintain buffer areas Where possible adjust maintenance and design practices
Department of Environment and Science and unallocated state land managers	<ul style="list-style-type: none"> Education and awareness Risk assessment Aerial/ground surveys 	<ul style="list-style-type: none"> Ensure clean equipment enters clean zones Undertake visitor/user management Install signs 	<ul style="list-style-type: none"> Spot spraying. Manual removal Bag seed heads Install signs Data collection Monitoring 	<ul style="list-style-type: none"> Maintain GIS data 	<ul style="list-style-type: none"> Fire planning and management Release and monitor biocontrol
Terrain NRM	<ul style="list-style-type: none"> Education and awareness. Capacity building Distribution of information and facilitate the securing of resources for management 	<ul style="list-style-type: none"> Promote prevention targets and activities across stakeholder networks Incorporate capacity building into management programs 	Distribute information and facilitate the securing of resources for management	Align landscape restoration targets with pest management priorities	<ul style="list-style-type: none"> Facilitate education and awareness programs for visitors and recreational users Liaise with local, State and Commonwealth governments
Indigenous, catchment and community groups	<ul style="list-style-type: none"> Actively monitor areas to ensure they are free of target pests Immediately report outbreaks 	<ul style="list-style-type: none"> Ensure clean equipment enters clean zones Where possible collaborate with management agencies Immediately report outbreaks 	<ul style="list-style-type: none"> Collaborate with pest management staff on management programs Spot spraying Manual removal Bag seed heads 		



Live, discover and invest in a Tablelands community



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