

Snake cactus

Cylindropuntia spinosior



Snake cactus can form dense infestations that will compete with native vegetation, limiting the growth of small shrubs and groundcover species. Snake cactus can also reduce pastures.

Snake cactus can harbour invasive animals, such as foxes and rabbits and, due to their spiny nature, can limit access for stock mustering and recreational activities. The spines or barbs can cause injury to stock and native animals, reducing or preventing grazing activities and productivity.

Possession, propagation and distribution of snake cactus as an ornamental plant are not considered reasonable and practical measures to prevent or minimize the biosecurity risks posed by snake cactus.

In Queensland, it is illegal to sell snake cactus on Gumtree, Ebay, Facebook, at markets, nurseries or any marketplace.



Queensland
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Legal requirements

Snake cactus is a restricted category 3 invasive plant under the *Biosecurity Act 2014*. It must not be given away, sold, or released into the environment. The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with invasive plants under their control. This is called a general biosecurity obligation (GBO). This fact sheet gives examples of how you can meet your GBO.

At a local level, each local government must have a biosecurity plan that covers invasive plants in its area. This plan may include actions to be taken on snake cactus. Some of these actions may be required under local laws. Contact your local government for more information.

Description

Snake cactus is a multi-branched perennial shrub generally 0.5–1.2 m high, sometimes up to 2 m high. Stems are green to purplish-green and are divided into hairless, dull green, cylindrical pads that vary up to 20 cm in length and are 3.5–5 cm thick. The pads have a series of short-raised ridges that give them a twined rope-like appearance. The areoles are found on the bottom of these ridges and produce 5–10 pale yellow to brown spines, with the longest being 3 cm long.

Flowers are variable in colour but usually pink, purple, white or yellow, commonly 5–7 cm wide. Snake cactus produces fruit that is yellow and 2–5 cm wide. Fruit are often sterile, barrel-shaped, without spines, fleshy, green or yellow, 20–50 mm long and 17–30 mm wide. Seeds are pale yellow, suborbicular to oval in outline, flattened to warped, 4–5 × 3–4 mm.

Life cycle

Snake cactus reproduce both sexually and asexually. Birds and other animals readily eat the many seeded fruits and deposit seeds in their droppings. The seeds have hard seed coats that allow them to survive heat and lack of water.



Snake cactus can be spread by footwear

Asexual reproduction (cloning) of snake cactus occurs when pads (joints, segments) or fruits located on the ground take root and produce shoots. Flowering usually occurs in spring and early summer.

Methods of spread

Animals and floods move broken stems long distances. These stems can survive long periods of drought before weather conditions allow them to set roots. It can also spread by machinery, vehicles and footwear and from ornamental plantings.

Habitat and distribution

Native to Arizona and southwestern New Mexico in the United States and northern Mexico. In can be found near Longreach in Queensland.

Preferred habitat is well-drained soils within arid to semi-arid open grassland and low woodland, particularly elevated rocky ridgelines where climate is temperate to subtropical.

Control

Managing snake cactus

The GBO requires a person to take reasonable and practical measures to minimise the biosecurity risks posed by snake cactus. This fact sheet provides information and some options for controlling snake cactus.

Snake cactus infestations can be controlled with biological, mechanical and herbicide controls and pasture management.

Physical control

Dig out plants completely and burn. Ensure that all tubers that can grow are removed and destroyed.

Ploughing is not considered an effective means of control unless followed by annual cropping.

Mechanical and fire control

Mechanical control using machinery is difficult because pads can easily re-establish. A hot fire is an effective control method for dense infestations. Before burning, consult Biosecurity Queensland to see if this practice is suitable for your pasture and land management practices.

Biological control

A cochineal *Dactylopius tomentosus* (bigelovii biotype) has recently been approved for release. In laboratory trials it appeared to be very effective against snake cactus. However, it should be noted that this biotype of the insect is not as effective on other species of *Cylindropuntia*. In addition, other *Dactylopius* species/biotypes of the cochineal are not as effective on snake cactus, so their utilization should be discouraged.

Once established on individual plants, the adults provide a continuous supply of new insects to attack new growth and surrounding plants. Cochineal insects are wind-borne and surrounding plants. Cochineal insects are wind-borne that can spread to new plants and relies on individuals landing on suitable plants. However, control and spread can be enhanced if the cochineal is manually transferred to new plants.

How to distribute cochineal

Spreading cochineal insects simply involves the manual transfer of cochineal-infested segments into plants that don't contain cochineal insects.

To assist in the distribution and spread of cochineal, physically move infected stem segments and place in isolated plants (>50 m away). Collect infected stem segments from existing snake cactus plants using tongs and a knife. To transport stem segments, use plastic tubs with lids. Don't leave cochineal in direct sunlight or hot vehicles.

Table 1. Herbicides for the control of snake cactus

Situation	Herbicide	Rate	Method
Agricultural non-crop areas, commercial and industrial areas, fence lines, forestry, pastures and rights-of-way	Triclopyr 240 g/L + Picloram 120 g/L (e.g. Access)	1 L/60 L diesel	Basal bark/cut stump Apply as an overall spray, wetting all areas of plant to ground level
Agricultural non-crop areas, commercial and industrial areas, forests, pastures and rights-of-way	600 g/L triclopyr products (e.g. Garlon)	3 L/100 L water	Apply as an overall spray APVMA permit PER92465 (expires 30/11/2024)
Pastures, non-crop areas, commercial and industrial areas, domestic and public service areas and rights-of-way	Aminopyralid 8 g/L + picloram 100 g/L + triclopyr 300 g/L (e.g. Grazon Extra)	500 mL/100 L of water	Foliar spray APVMA permit PER90719 expires (31/02/2024)
Pastures, roadsides, rights of way, bushland/native forests, agricultural non-crops areas, commercial and industrial areas, domestic and public service areas, vacant lots, wastelands	Triclopyr 200 g/L + Picloram 100 g/L + Aminopyralid 25 g/L (Tordon Regrowth Master)	undiluted	Stem injection Apply 2 mL solution per 10 cm cut APVMA permit PER92459 (expires 31/08/2025)
	Glyphosate 360 g/L (Roundup Biactive)	diluted to 1:1 in water	
	Amitrole 250 g/L + Ammonium thiocyanate 220 g/L (e.g. Amitrole T)	undiluted	
Non-crop areas, including: native vegetation, conservation areas, gullies, reserves and parks	Aminopyralid 4.47 g/L+ picloram 44.7 g/L (Vigilant II)	undiluted	Cut stump 3–5 mm thick layer over cut surface APVMA permit PER92475 (expires 30/11/2024)

Note: Refer to the permits for more herbicide options. Read the label carefully before use and always use the herbicide in accordance with the directions on the label.

Herbicide control

Herbicide options available for the control of snake cactus in Queensland are shown in Table 1.

Landholders and contractors should check if the property is in a hazardous area as defined in the *Agricultural Chemicals Distribution Control Act 1966* prior to spraying.

More information

Contact your local government for more information or visit biosecurity.qld.gov.au.



Fact sheets are available from biosecurity.qld.gov.au. The control methods recommended should be used in accordance with the restrictions (federal and state legislation, and local government laws) directly or indirectly related to each control method. These restrictions may prevent the use of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, the department does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

