20 Weeds to Whack

in the

Moore River Catchment

A practical guide to identifying & controlling 20 weedy plants in the Moore River catchment

Researched and designed by the Moore Catchment Council

Funded by the Western Australian Government's State Natural Resource Management Program

GOVERNMENT OF WESTERN AUSTRALIA

natural resource management program

A Weedy Welcome

Wondering whether a plant is native or a non-native 'weed' in the Moore Catchment?? Here are 20 non-native 'weeds' that often get mistaken for natives. Don't let them take over and push out all our wonderful native vegetation !!!!

This guide has used information provided by Department of Biodiversity, Attractions & Conservation, Department of Primary Industries and Regional Development, and The Centre for Invasive Species Solutions. Please use this guide as a starting point and pointers to conduct further research into weed control on your property

Moore environmental weeds

What are Environmental Weeds? Environmental weeds are plant species that predominately invade natural areas and compete with or choke out native plant species.

Why are they a problem? Environmental weeds cause damage to indigenous plant communities by competing for light, nutrients, water, space and pollinators. Weed species also tend to provide greater harbour for pest animal species and some can be poisonous to animals and stock.

Where have they come from? Some environmental weeds may have been introduced accidentally, however most have been introduced as garden plants that have escaped into the environment. The most common methods of spread are from dumped garden waste, planting in inappropriate areas and from birds or animals spreading seed. Ref WEEDS Of the MOORABOOL and GOLDEN PLAINS SHIRES

Where are these weedy species found? Some weedy species are found all over the catchment whereas some are limited to certain soil types or in riparian zones and damp spots. For example, Spiny Rush (*Juncus acutus*) is found in certain creeks and wetlands as it needs constant moisture to survive. Pink Gladiolus (*Gladiolus caryophyllaceus*) loves sandy soil so it's found in the south and south west catchment on the light country. Arum Lily (*Zantedeschia aethiopica*) is currently only found in drainage lines in the south of the catchment but its definitely on the march north.

Moore River Catchment, Midwest Western Australia

Spotted

- Creek lines near Moora

This booklet states where the weeds have been spotted.

Update us if you've spotted these weeds in your patch !

Whack that weed! Many weeds can be hand pulled or dug out if caught early but if herbicide is the desired route, please read the manufacturers' labels and material safety data sheets before using herbicides to ensure safety for yourself and also to other flora which could be negatively affected. Consult a professional herbicide contractor or local Agriculture Department https://www.agric.wa.gov.au/ for further advice.

Freesia
(*Freesia alba × leichtlinii*)

A sweet smelling garden escapee which will invade bushland and sandy heath country if not controlled

Description

Cormous, perennial, herb, 0.1-0.4 m high. Flowers are cream & white & yellow & purple, Jul to Oct. Grey-white sand, lateritic soils or sandy clay. Amongst grasses in woodland or in disturbed areas.

Originated from

South Africa

Weed status

None

Reproduction

Primarily seed, occasionally offsets/stem-cormels. Spread by water, soil, birds.

Control methods

Hand removal: Dig out, ensure to remove corms

Herbicide control: Spot spray metsulfuron methyl 0.2 g/15 L + Pulse or 2.5-5 g/ha + Pulse. Apply just on flowering at corm exhaustion. Optimal months for spraying are June to August.

Spotted

- Koojan, next to Moora cemetery, Mogumber Town reserve

Other

Generally survives fire.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/18392

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Freesia.pdf

Pink Gladioli (*Gladiolus caryophyllaceus*)

A widespread pink flowering weed spread through the lower catchment on grey or white sand, and loam soils

Description

Cormous, perennial, herb, 0.2-0.8m high, with twisted leaf blades. Flowers pink, Aug to Nov. Grey or white sand, loam.

Originated from

South Africa

Weed status

None

Reproduction

Primarily seed, occasionally offsets . Spread by wind.

Control methods

Hand removal: Dig out, ensure to remove corms

Herbicide control: Wipe individual leaves with glyphosate 10 % or spray dense infestations in degraded areas with 1% glyphosate just on flowering at corm exhaustion. Optimal months for spraying are July to September.

Spotted

- Widespread on sandplain around Gingin to coast up to Moora

Other

Flowers particularly well following fire, seedling recruitment in the seasons following fire could be very high.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/1520

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Pink-Gladioli.pdf

Paterson's Curse (*Echium plantagineum*)

A purple paddock menace. Its pretty flowers are often mistaken for wildflowers yet the plant is poisonous to farm animals

Description

Erect annual or biennial, herb, 0.1-0.6m high. Flowers blue/blue-purple/pink/white, mainly Sep to Dec or Jan. Weed of roadsides, vacant lands & disturbed grounds.

Originated from

Macaronesia, temperate Asia

Weed status

Declared pest plant (WA)

Reproduction

Primarily seed. Spread by Water, machinery, animals (ingestion and adhesion), contaminated hay and grain

Spotted

- Widespread on sandy/ loam soils throughout catchment

Control methods

Hand removal: Grubbing and cutting are suitable for young plants as long as 20 to 40 mm of taproot is removed. Slashing or mowing can cause out of season flowering and seed production.

Herbicide control: Plants are best treated when young. Spot spray in late autumn/winter when most seed has germinated for the year with 0.5 g/10 L chlorsulfuron + wetting agent. Glyphosate at 75 ml - 100 ml/15 L or metsulfuron methyl 5 g/ 100 L applied at early flowering will control existing plants. Optimal months for spraying are May to September.

Other

Other names: Salvation Jane, Blueweed

Poisonous to mammals, potential allergen

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/6681

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Echium%20plantagineum

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Patersons-Curse.pdf

Soursob
(*Oxalis pes-caprae*)

A common woodland weed which smothers out native vegetation by forming a dense blanket

Description

Bulbaceous and rhizomatous, perennial, herb, 0.1-0.3 m high. Flowers yellow, Jun to Oct. A common weed.

Originated from

South Africa

Weed status

Prohibited (WA)

Reproduction

Bulbils. Spread by birds, soil.

Control methods

Hand removal: Dig out, ensure to remove corms

Herbicide control: Spot spray metsulfuron methyl 0.2 g/15 L + Pulse®, or 1% glyphosate. Apply at bulb exhaustion, generally just on flowering. Exercise care if manually removing as physical removal can result in spread of bulbils. Optimal months for spraying are June to July.

Spotted

- Widespread through Eucalypt woodlands and degraded land

Other

Other names: Sour grass

Florabase file:

https://florabase.dpaw.wa.gov.au/browse/profile/4356

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Oxalis%20pes-caprae

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Soursob.pdf

Gazania
(*Gazania linearis*)

A sun loving garden escapee, this weed will rampage through sandy bushland if left unchecked

Description

Clump-forming perennial, herb, (0.05-)0.1-0.3 m high. Flowers yellow-orange-red, Jun to Dec. Coastal areas, roadsides, waste-land around settlements.

Originated from

South Africa

Weed status

None

Reproduction

Seed and stolons. *Dispersal:* Spread by water, machinery, animals

Spotted

- Piawaning, Moora, Calingiri. Common in townsites

Control methods

Hand removal: Hand pull/dig before flowering to prevent seeds developing.

Herbicide control: Spray plants until just wet with a mix of 50 mL glyphosate(450g/L) in 10 L water. In bushland areas use 4 g of Lontrel®750 plus 25 mL Pulse® in 10 L water to reduce damage to companion plants. 200 g/ha of Lontrel®750 plus 0.25% wetting agent can be used for roadside and overall spraying. The best time to apply herbicides is in autumn or spring, but good results can usually be achieved any time the plants are actively growing.

Other

Abundant seed producer, 60 or more per seed head.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/16311

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Gazanias.pdf

Arum lily
(*Zantedeschia aethiopica*)

A creek system and damp area invader. This toxic plant is rampant in the Gingin Brook and lower catchment

Description

Rhizomatous (tuber-like), perennial, herb, to 1 m high. Flowers white, Jul to Nov. Loam, sand. Swamps, rarely uplands.

Originated from

South Africa

Weed status

Declared pest plant (WA)

Reproduction

Primarily by seed, occasionally offsets. *Dispersal:* Water, birds, foxes, stock, soil.

Spotted

- Gingin Brook, south of Mogumber on road

Control methods

Hand removal: Dig out early before plants become too large.

Herbicide control: For the most effective control spot spray metsulfuron methyl 0.4 g/15 L of water (or 5g /ha) + 225 mL glyphosate + Pulse®. As glyphosate is non selective, only apply where there is no chance of off target application on native vegetation. Otherwise, spot spray metsulfuron methyl or chlorsulfuron 0.4 g/15 L of water (or 5g /ha) + Pulse®. Herbicide application can send some tubers into dormancy therefore any control program needs to continue for at least five years. Apply any time between June and September.

Other

Other names: Trumpet Lily, Funeral Flower.

All parts of the plant are toxic.

Florabase file:

https://florabase.dpaw.wa.gov.au/browse/profile/1049

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Zantedeschia%20aethiopica

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Arum-lily.pdf

Spiny Rush (*Juncus acutus*)

A prickly unwelcome creek and wetland invader, this weed will slowly take over and become a nightmare to remove

Description

Robust rhizomatous, perennial, herb, to 1.5 m high. Flowers brown/green, Aug to Nov or May. Grey sand, loam, often saline. Creeks, soaks.

Originated from

Europe, Mediterranean

Weed status

None

Reproduction

Primarily by seed, also crown fragments. *Dispersal:* Water, mud, soil movement, machinery,

Control methods

Hand removal: Dig out when small. Destroy seeds.

Herbicide control: Spray 2% Glyphosate + wetting agent in late summer/ autumn if surface water is present throughout the rest of the year. In dry conditions apply in spring/early summer. Repeat application six weeks later. Burning plants after they have been stressed by herbicide can increase kill rate. Combination of two or more methods might be the best approach for control. Optimal spraying months are November to March

Spotted

- Tributaries of Moore River inc Yadgena Brook, Watheroo branch, Gunyidi, Piawaning

Other

Other names: Sharp rush

Controlling infestations early and preventing further spread is the most effective form of management.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/1175

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Juncus%20acutus%20subsp.%20acutus

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Spiny-Rush.pdf

Fountain Grass
(Cenchrus setaceus)

Another garden escapee, Fountain grass out-competes and suppresses native vegetation and greatly increases fire risk

Description

Rhizomatous (tuber-like), perennial, herb, to 1 m high. Flowers white, Jul to Nov. Loam, sand. Swamps, rarely uplands.

Originated from

East Africa, tropical Africa, the Middle East and SW Asia.

Weed status

None

Reproduction

Seed. *Dispersal:* Wind, vehicles, humans, livestock, water and possibly birds.

Spotted

- Coomberdale, Namban, Coorow

Control methods

Hand removal: Small infestations of Fountain Grass can be removed by uprooting and removing and destroying seed-heads.

Herbicide control: Spray with 1% glyphosate + penetrant in spring to autumn. Follow up seedling control and treatment until regrowth ceases. Use unplanned fire events to effectively control any regrowth. Read the manufacturers' labels and material safety data sheets before using herbicides. Optimum treatment should be done in March, April, November and December.

Other

Fountain Grass readily out-competes native plants and can alter nutrient cycling and increase fire fuel loads.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/41568

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Cenchrus%20setaceus

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/fountain-grass.pdf

Caltrop
(Tribulus terrestris)

A creeping menace that creates carpets over degraded land and produces hundreds of spiny burrs which persist in the soil

Description

Prostrate annual, herb, plants villous; leaflet pairs 4-7; cocci with distinct divergent, median spines 3-8 mm long. Flowers yellow, Jan to Dec. Often on sandy soils. Waste places.

Originated from

Native to the Mediterranean, Africa, Asia and subtropical parts of Australia

Weed status

None

Spotted

- Widespread on degraded sandy/loam soils

Reproduction

Seed 'nutlets'. Dispersal of the burrs via tyres, water, machinery, soil movement and adhesion to animals, clothing, footwear

Control methods

Hand removal: Spot and pull out when small. Collect seeds and destroy.

Herbicide control: Preventing the spread of Caltrop is the best control measure. Apply herbicide to prevent seed set. Glyphosate at 1% is effective on seedlings. On bare tracks diesel can be used to kill plants and penetrate and destroy seed in surface soil.

Other

Caltrop produces sharp, spiny burrs throughout summer and autumn. Up to 1000 fruits can be produced on each plant, with a total of up to 20,000 seeds.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/4383

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Tribulus%20terrestris

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/caltrop.pdf

Slender Iceplant
(Mesembryanthemum nodiflorum)

A rampaging invasive succulent which favours degraded, heavy and saline soils. It will turn productive land unproductive by dropping salt.

Description

Prostrate or erect, succulent annual, herb, 0.02-0.2 m high. Flowers white, Sep to Nov. Sandy clay, loam, clay loam. Claypans, saline areas.

Originated from

South Africa

Weed status

None

Reproduction

Seed. *Dispersal:* Wind, vehicles, humans, livestock, water and possibly birds.

Control methods

Hand removal: Remove plants when small in spring/summer and dispose of.

Herbicide control: n/a. Advice for Mcrystallinum (Iceplant) Logran® at 12.5 g/100L + the penetrant Pulse ® is very effective with little offtarget damage in coastal heathlands. Optimal July to September.

Spotted

- Widespread on sandy/loam soils mainly in eastern catchment

Other

When it is dead and dry in summer, it contains high levels of sodium, which seems to attract sheep, and high levels of oxalate, which can poison sheep.

Once it dominates, nothing else grows

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/2814

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Slender-Ice-Plant-1.pdf

Bugle Lily
(Watsonia meriana var. bulbillifera)

A garden escapee, it has become a major environmental weed of disturbed bushland and roadsides, particularly near water.

Description

Cormous, perennial, herb, to 2.5 m high, flowers in lower part of inflorescence replaced with clusters of cormils; capsules rarely produced. Flowers pink-red/orange, Sep to Dec. Grey sandy loam, brown gravelly loam, brown sandy clay, pale sandy alluvium. Valley slopes, winter-wet areas, along creek-lines, roadside drains.

Originated from

South Africa

Weed status

None

Spotted

- Wannamal, Moora

Reproduction

Offsets, cormels on stem and base, occasionally seed. *Dispersal:* Water, soil, wind

Control methods

Hand removal: Spot and dig out when small.

Herbicide control: Wipe individual leaves with glyphosate 10% or spray dense infestations with 2,2-DPA 10 g/L + Pulse®. Apply just as flower spikes emerge at corm exhaustion. 2,2-DPA at 5 g/L+ Pulse® is also quite effective and is appropriate to use when particularly concerned about off-target damage, for example following fire when Watsonia is growing among germinating native seedlings and resprouting native shrubs. Optimal treatment time is September.

Other

Plants resprout and appear to flower prolifically following fire.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/18108

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Watsonia%20meriana%20var.%20bulbillifera

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Bugle-Lily.pdf

One-leafed Cape Tulip
(Moraea flaccida)

A garden escapee found extensively through sandy soil in the lower parts of the catchment, now a Declared pest plant

Description

Cormous, perennial, herb, to 0.75 m high. Flowers yellow & orange/ yellow, Sep to Nov. White sand, grey sandy loam over limestone, laterite clay, gravel. Seasonally wet sites, along creek-lines, hilltops, pasture and disturbed land.

Originated from

South Africa

Weed status

Declared pest plant (WA)

Spotted

- South catchment on sand, around Dandaragan

Reproduction

Primarily seed, occasionally corm offsets. *Dispersal:* Water, soil, cattle droppings.

Control methods

Hand removal: Remove plants including corms and dispose of.

Herbicide control: Spot spray metsulfuron methyl 0.2 g/15 L or chlorsulfuron 0.2 g/15 L + Pulse® or 2.5-5 g/ha + Pulse® or 2,2 DPA 55 g/10 L + Pulse®. Apply just on flowering at corm exhaustion. Optimal July/August.

Other

When following fire is a particularly important time to control One Leaf Cape Tulip as fire can bring corms out of dormancy and stimulate flowering.

All parts of the plant are toxic to stock.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/19179

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Moraea%20flaccida

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/one-leafed-Cape-Tulip.pdf

Cape Bluebell
(Wahlenbergia capensis)

Regularly thought to be a native wildflower, this blue annual is readily found on light sands all over the Moore River catchment

Description

Slender, erect or ascending annual, herb, 0.1-0.5 m high. Flowers blue/blue-green, Sep to Nov. Sandy soils. Disturbed grounds, plains.

Originated from

South Africa

Weed status

None

Reproduction

Seed. *Dispersal:* Water, soil, wind

Control methods

Hand removal: Spot and pull out.

Herbicide control: No official advice recommended. Contract Department of Primary Industries and Regional Development or Department of Biodiversity, Attractions & Conservation to seek further advice.

Spotted

- Widespread on sandy soils throughout south west catchment

Other

The species was first collected in Western Australia in 1898

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/7384

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Cape-bluebell.pdf

Perennial Sea Lavender
(Limonium sinuatum)

A garden escapee, possibly a cultivar. Widespread on wasteland, roadsides and disturbed vegetation, especially on margins of saline soils.

Description

Rosetted perennial, herb, 0.15-0.6 m high. Flowers white-cream-yellow/blue, Jan or Mar to May or Sep to Dec. Disturbed areas.

Originated from

Europe, western Asia, northern Africa

Weed status

None

Reproduction

Seed. *Dispersal:* Garden refuse, plantings.

Control methods

Hand removal: Hand remove small infestations

Herbicide control: No official advice recommended. Contract Department of Primary Industries and Regional Development or Department of Biodiversity, Attractions & Conservation to seek further advice.

Spotted

- Miling, Watheroo, Moora, Gingin, Coorow

Other

Other names: Statice.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/6489

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Perennial-Sea-Lavender.pdf

Rose Pelargonium
(Pelargonium capitatum)

Pelargonium is a major weed of the Moore coastal heathland and dunes pushing out native vegetation.

Description

Straggling, shrubby perennial, herb, 0.1-1 m high. Flowers pink-purple/white, Feb to Apr or Aug to Dec. Sand. Coastal sand dunes & limestone.

Originated from

South Africa

Weed status

None

Reproduction

Seed, root fragments. *Dispersal:* Wind, water, soil.

Control methods

Hand removal: Hand pull isolated plants taking care to remove the entire stem as it can reshoot from below ground level.

Herbicide control: Spot spray metsulfuron methyl 5 g/ha + Pulse®. Easily controlled after fire. Optimal June to September.

Spotted

- Widespread along coastal dunes at Guilderon, Seabird and Ledge Point

Other

Introduced as an ornamental, gene source and for medicinal purposes.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/4343

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/rose-Pelagonium.pdf

Beach Evening Primrose *(Oenothera drummondii)*

Mat-forming, secondary sand stabiliser that readily spreads by seed into dune areas. Common around Guilderton.

Description

Rosetted Herb, 0.1-0.6 m high. Flowers yellow, Jan to Dec. White sand. Coastal dunes, roadsides.

Originated from

North America

Weed status

None

Reproduction

Seed. *Dispersal:* Wind, soil

Control methods

Hand removal: Hand remove small infestations in areas not susceptible to erosion.

Herbicide control: Control in seedling stage, as older plants resistant to herbicide. Relatively resistant to glyphosate. Spot spray chlorsulfuron 0.4 g/10 L + spray oil. Optimal time: July to October.

Other

Seed can persist up to 80 years.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/6138

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Beach-evening-primrose.pdf

Spotted

- Widespread along coastal dunes at Guilderon, Seabird and Ledge Point

African Lovegrass
(Eragrostis curvula)

African Lovegrass is regarded as a major environmental weed and can form dense stands which crowd out native species and prevent their regeneration.

Description

Densely caespitose perennial (often purple near base), grass-like or herb, 0.3-1.2 m high. Flowers purple/green, Aug or Nov to Dec or Jan to May. Variety of soils. Disturbed sites.

Originated from

South Africa

Weed status

None

Reproduction

Seed. *Dispersal:* Water, wind, mammals, slashing (particularly along roadsides), machinery, vehicles, soil, contaminated grain.

Control methods

Hand removal: Scattered African Lovegrass plants can be chipped out before they flower. When chipping out the plant, ensure that the entire tussock crown is removed, as this will prevent regrowth.

Herbicide control: Herbicide foliar application should only be conducted when the plant is green and actively growing. Residual herbicides are best applied from July to December. Glyphosate at 10-20ml per litre plus wetter can be effective.

Spotted

- Widespread on degraded sandy/loam soils

Other

Accidentally introduced into Australia at some time prior to 1900, probably as a contaminant of pasture seed.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/376

Weeds Australia: https://profiles.ala.org.au/opus/weeds-australia/profile/Eragrostis%20curvula

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/African-lovegrass.pdf

Wild Oats
(Avena fatua)

Highly persistent and competitive grass which readily outcompetes native vegetation especially on road reserves and disturbed ground.

Description

Erect annual, grass-like or herb, 0.6-0.9 m high. Flowers green, Aug to Dec. Brown clayey sand, heavy, red loam.

Originated from

Mediterranean/North Africa, Eurasia, Europe

Weed status

None

Reproduction

Seed. *Dispersal:* Mammals, agricultural machinery, possibly wind (local disperal only).

Spotted

- Widespread on degraded sandy/loam soils

Control methods

Hand removal: Hand remove small infestations.

Herbicide control: Spray at 3-5 leaf stage with Fusilade® Forte at 16 ml/10 L + wetting agent or for generic fluazifop-p (212g/L active ingredient) 10ml/10L or 500ml/ha + wetting agent. Repeat treatment over following 2 years. Prevent seed production and seedbank inputs each year. Optimal August to November.

Other

Produces prolific seed. Approximately 40% of the seedbank germinates after opening rains and a further 30% later in the season

Smoke can stimulate seedling emergence.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/234

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Wild-Oats.pdf

Stinking Roger
(Monoculus monstrosus)

Often mistaken for a native wildflower, this stinky colourful plant will pop up in paddocks and through native woodland

Description

Erect annual, herb, to 0.7 m high. Red-brown loams or sandy clays, yellow-white or grey-brown sandy loam, brown clay loam, limestone, granite. Undulating sandplains, hills and slopes, valley slopes, creek beds, saline watercourses.

Originated from

South Africa

Weed status

None

Reproduction

Seed. *Dispersal: Wind, water, soil movement.*

Control methods

Hand removal: Hand remove small populations and/or isolated plants prior to flowering. Optimum June to September.

Herbicide control: Try spot spraying with glyphosate at 0.5% before flowering. Optimum July to September.

Spotted

- Widespread through native woodlands and road reserves throughout catchment

Other

Really does stink when disturbed.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/29418

Weeds Australia: n/a

MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Stinking-roger.pdf

Blue Lupin
(Lupinus cosentinii)

An agricultural crop plant which has escaped into the bushland environment. It will invade and outcompete native vegetation.

Description

Robust, much-branched annual, herb, 0.2-1.4 m high. Flowers blue, Aug to Nov. Sand, loam. River edges, swamps, roadsides.

Originated from

Mediterranean, southwestern Europe

Weed status

None

Reproduction

Seed. *Dispersal:* Planting for agriculture, water, soil movement.

Spotted

- Widespread on degraded soils and east catchment woodlands

Control methods

Hand removal: Hand remove scattered plants prior to flowering.

Herbicide control: Spray dense infestations with metsulfuron methyl 0.1g/15 L (2-3 g/ha) + wetting agent. Larger areas can be treated with more selective herbicides such as 200 g/ha Lontrel® or 50 g/ha Logran® (based on 500 L of water/ha). For spot spraying use 4 g Lontrel® or 1 g Logran® in 10 L of water + wetting agent. Glyphosate is relatively ineffective. Optimal June to September.

Other

Stubble and large quantities of seed can cause poisoning in stock.

Has a well-established root system including a strong taproot. Capable of fixing nitrogen.

Florabase file: https://florabase.dpaw.wa.gov.au/browse/profile/4066

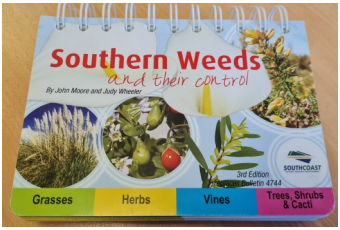
Weeds Australia: n/a

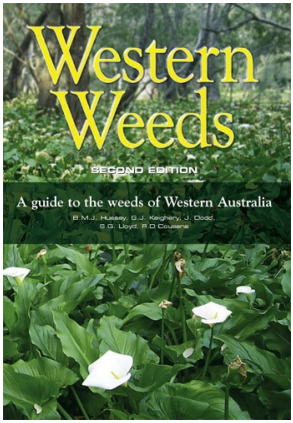
MCC Factsheet: http://www.moorecatchment.org.au/wp-content/uploads/2021/11/Blue-Lupin.pdf

Weed resources

There are a number of good weed resources online and printed.

- Florabase - search 'Alien' species in each Shire https://florabase.dpaw.wa.gov.au/search/advanced
- Weeds Australia. Centre for Invasive Species Solutions https://profiles.ala.org.au/opus/weeds-australia
- Urban Bushland Council WA Inc. weed resource https://www.bushlandperth.org.au/weeds-page/
- Western Australian agriculture the Department of Primary Industries and Regional Development Declared Plants https://www.agric.wa.gov.au/pests-weeds-diseases/weeds/declared-plants
- Weeds of Western Australia Facebook page https://www.facebook.com/groups/WeedsofWesternAustralia/
- Department of Biodiversity, Conservation and Attractions Parks and Wildlife Service https://www.dbca.wa.gov.au/parks-and-wildlife-service/threat-management/plant-diseases/weeds
- The Weeds Society of Western Australia Inc. (WSWA) Western Weeds https://www.wswa.org.au/publications The printed Western Weeds is a bible of WA weeds although printed copies hard to obtain
- Southern Weeds and their control book. A good printed resource. Contact John Moore DPIRD john.moore@agric.wa.gov.au 08 9892 8444
- Moore Catchment Weed bingo downloadable poster http://www.moorecatchment.org.au/wp-content/uploads/2021/11/New-Weed-bingo.pdf






Gazanias at Calingiri

For more information or to obtain a paper copy of this booklet, please contact Moore Catchment Council on 08 9653 1355 or moorecc@bigpond.com

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