LAKE MACQUARIE LANDCARE RESOURCE CENTRE







COASTAL WEEDS

IDENTIFICATION BOOKLET













Coastal Weeds Identification - List of Contents

This booklet of Coastal Weeds has been compiled by the Landcare Resource Centre to assist Landcarers in identification and control of common coastal weeds. The information contained within is a guide only and should be used in conjunction with direct site-specific advice from the Landcare Resource Centre (LRC) which can be contacted on 4921 0392.

For information on how to treat weed waste and what weeds can be left on site to break-down once removed please see

Landcare Fact Sheet 4 - Weed waste

Grasses					
Buffalo Grass 3 Kikuyu 3 Pampas Grass 3	Parramatta Grass				
Herbaceous/ Ground Weeds					
American Pennywort 5 Blackberry Nightshade 5 Canna Lily 5 Cobblers Peg 6 Crofton Weed 6 Fireweed 6 Fishbone Fern 7 Fleabane 7 Formosa Lily 7	Gazania 8 Glory Lily 8 Mother of Millions 8 Nasturtium 9 Palm Grass 9 Prickly Pear 9 Stinking Roger 10 Trad 10 Wild Watsonia 10				
Vines and Scramblers					
Asparagus Fern (Ground) 11 Asparagus Fern (Broom) 11 Balloon Vine 11 Blackberry 12 Black-eyed Susan 12 Bridal Creeper 12 Cape Ivy 13 Climbing Asparagus 13 Climbing Asparagus Fern 13	Coastal Morning Glory 14 Japanese Honeysuckle 14 Madeira Vine 14 Morning Glory 15 Moth Vine 15 Siratro 15 Turkey Rhubarb 16 White Passion Flower 16				
Woody Weeds					
African Olive 16 Bitou Bush 17 Boneseed 17 Broad-leaf Pepper Tree 17 Camphor Laurel 18 Cassia / Senna 18 Castor Oil Plant 18 Coral Tree 19 Green Cestrum 19	Golden Wreath Wattle 19 Lantana 20 Mickey Mouse Plant 20 Myrtle-leaf Milkwort 20 Small-leaved Privet 21 Umbrella Tree 21 Wild Tobacco Tree 21				

Buffalo Grass - Stenotaphrum secundatum

Native to America & Africa



Buffalo grass has been used extensively for gardens. Buffalo grass forms dense mats of intertwining rhizomes and stolons which prevents native plants from becoming established. Present along the entire coast growing in most coastal habitats.

Form: Creeping herb, forming dense mats of stolons up to 0.3 m high.

Flower: Inconspicuous. Summer.

Leaf: Flat or strongly folded, fleshy, pale to dark green.

Control: The structure of Buffalo grass makes manual removal of large infestations very difficult and follow-up work is often necessary for successful eradication. The long stolons and underground rhizomes should be removed. This may take considerable digging. Any stolon or rhizome fragments left on the ground are likely to re-establish into new plants so total removal from the site is necessary. Chemical controls may be suitable for large infestations. Contact the LRC to request.

Kikuyu - Cenchrus clandestinus

Native to tropical Africa



A very common grass used extensively for lawns and pastures. Kikuyu often escapes the areas where its initially planted causing problems on adjacent sites. Kikuyu is found along the entire coast in most coastal habitats. It often becomes the dominant ground cover and can even climb up into small shrubs.

Form: Creeper herb up to 0.9m high. Forms dense mats of stolons and underground rhizomes.

Flower: Very small, hidden in a sheath. Autumn to Spring.

Leaf: Hairs present, light green.

Control: The structure of Kikuyu grass makes manual removal of large infestations very difficult and follow-up work is often necessary for successful eradication. The long stolons and underground rhizomes should be removed. This may take considerable digging. Any stolon or rhizome fragments left on the ground are likely to re-establish into new plants so total removal from the site is necessary. Chemical controls may be suitable for large infestations. Contact the LRC to request.

Pampas Grass - Cortaderia spp.

Native to South America



There are a number of species of pampas grass which invade the coast. A problem in disturbed areas on hind-dunes, headlands and in bushland.

Form: Large grass in tussocks, blades up to 2.5m long.

Flower: Large plume on end of long spike, silvery white to pink. Summer to autumn.

Fruit/Seed: Produces numerous tiny seeds up to 100,000 per plume.

Control: Seed heads should be bagged to contain seeds and stop spreading during removal. To dig it out by hand (small infestations only), cut back all the long blades then mattock and lever the root mass from the ground. Ensure all rhizomes are removed. Cut and paint (after the main parts of the plant have been removed to allow for easier access) is also an effective way of control.

Other chemical controls may be suitable for large infestations. Contact the LRC to request.



A major threat to grassland and grassy woodland communities in SE Australia. Predominantly summer growing, able to flower and seed year-round if conditions suitable.

Produces large numbers of seeds that persist on the plant and are easily spread by attaching to clothing and machinery. Commonly invades degraded or overgrazed pasture, encouraged by soil compaction.

Form: Perennial grass to 70 cm tall. Flowers mainly Nov.-Jun. Reproduces by seed.

Control: Dig out. Remove and bag seed heads and place them in general waste. Contact LRC if infestations are large.

Giant Parramatta Grass (a regionally listed Priority Weed) is a very similar looking species but it reaches 1.5m in height. Take care with identification as there are also native Sporobolus species.

Paspalum - Paspalum dilatatum and P. quadrifarium Native to South America



A very common weed of parks, reserves, roadsides and disturbed areas. Mostly found in the southern and eastern parts of Australia. Note there are some native Paspalum species so take care with identification.

Form: Perennial grass to 1m or sometimes 1.5m tall. Tussock Paspalum (*P. quadrifarium*) can grow to 2m tall. It forms large clumps via short creeping underground stems (i.e. rhizomes).

Flower: Seed heads are up to 25cm long with several branches containing numerous flower spikelets.

Control: Dig out as required. Contact the LRC to discuss identification and possible chemical controls.

Red Natal Grass - Melinis repens

Native to South Africa



An annual or short lived perennial grass.

Form: A medium-sized, loosely tufted grass. Can grow to 30–100 cm tall. Stalk erect or ascending. Leaves scattered along stalk, slender and tapering at base. Lower nodes of the weed often rooting.

Flower: Flower clusters are open, ovate-oblong, 5–20 cm long, feathery and soft, silvery pink or purple in colour. Branchlets whorled.

Control: Hand remove. For large infestations contact the Landcare Resource Centre.

2 - HERBACEOUS / GROUND WEEDS

American Pennywort - Hydrocotyle bonariensis

Native to South America



Common to the region, found in coastal dune areas, wasteland, gardens and lawns grown on sandy soils, spread by runners underground. Note that this can be confused with *Centella asiatica*, which is a native plant.

Form: A scrambling prostrate herb with stems running along or beneath the soil surface.

Flower: Heads are compound umbels, profusely branched with many flowers.

Leaf: Bright green, circular, margins with rounded teeth.

Control: Control is difficult and may not be a priority. For advice please contact the Landcare Resource Centre.

Blackberry Nightshade - Solanum nigrum

Native to Europe



Prefers fertile areas invading edges of rainforest, gullies or protected headlands along the entire coast.

Form: Herb to 1m high.

Flower: Small, white with yellow centre, in

clusters. Spring to summer

Fruit/Seed: Small purple to black berry,

glossy

Control: Hand-pull before fruit is set. Ensure the entire plant is removed. Bag and remove

all berries from site.

Canna Lily - Canna indica

Native to South America



A common garden escape, found in wasteland and reserves, dumped from garden waste. Grows mainly in coastal areas as it is not frost hardy.

Form: The plants are large tropical and subtropical herbs with broad flat leaves that grow out of a stem in a long narrow roll and then unfurl. The wild species often grow to 1 to 2 meters.

Spreads from a rhizome, grows in clumps, which spread and quickly join together to form a dense mat.

Flower: The flowers are typically red, orange, or yellow or any combination of those colours.

Control: Small infestations can be dug out. Large infestations may require repeated herbicide treatment - contact the Landcare Resource Centre to request.

Photo Fagg, M www.anbg.gov.au



Found in disturbed areas usually exposed to full sun. Invades dunes, headlands and sides of tracks along the entire coast.

Form: Herb up to 2m high though mainly seen shorter in coastal areas.

Flower: Yellow sometimes white. Flowers all year.

Fruit/Seed: Seed black, 1cm long with forked tip which attaches to clothing and fur.

Control: Easily pulled by hand being careful to remove roots as well. Seeds should be bagged and disposed of.

This plant re-occurs annually and has a very low removal priority. They can be 'shaded-out' by allowing developing forest to overtake them.

Crofton Weed - Ageratina adenophora

Native to America



Grows in disturbed moist areas in gullies and edges of roads along the entire coast. Crofton maybe found growing in similar habitats as its close relative, 'mist flower (*Ageratina riparia*)', also considered a weed. Mist flower can be distinguished by its more slender leaves.

Form: Erect herb, 1 - 2m tall.

Flower: Densely arranged small white flowers. Spring to summer.

Fruit/Seed: Small dry seed with hairs at one

end.

Control: Hand pull but ensure that all seed heads are removed from site. Stems and roots must be raised off the ground as they can strike vegetatively. Caution: may cause allergic reactions in some people.

Fireweed - Senecio madagascariensis

Native to South Africa



Fireweed is mainly a pest on disturbed sites on farmland, but is also found growing on dunes and headlands. *Senecio madagascariensis* is commonly mistaken for a native fireweed (*Senecio lautus*) which is found more commonly on dunes. When removing fireweed particularly on any dune systems, these two plants should be distinguished. The easiest way to tell them apart is to count the number of involucral bracts (under the petals). Generally *S. madagascariensis* has 20-21 bracts and *Senecio lautus* has 15-18 bracts. Note: If you find *S. lautus* do not pull it out.

Form: Spreading herb up to 50cm high.

Flower: Bright yellow. Spring to autumn.

Fruit/Seed: Produces numerous white fluffy seeds.

Control: Plants can be easily hand-pulled, which is best done when before any buds or seed are set. Flowering or seeding plants should be bagged and removed from the site.



Mainly a problem in older urban areas in adjacent bushland. Invades coastal rainforest, headlands and hind-dune areas.

Form: Fronds erect up to 1m high, grows in dense clumps.

Fruit/Seed: Reproduces by tiny brown spores located on underside of the leaf and by rhizome (e.g. in dumped garden waste).

Control: Hand-pull ensuring the entire plant is removed. Remove all bulbs from the area.

Chemical controls may be suitable but give mixed results. Contact the LRC to discuss.

Fleabane - Conyza sp.



Native to America

There are a number of species of Conyza with *C. albida* (also known as Canadian Fleabane) one of the most common along the coast. Found on disturbed sites such as roadsides, tracks or disturbed areas on dunes, headlands and edges of bushland. Very common along the entire coast.

Form: Single stem, erect, up to 1.5m high.

Flower: White to pink. Summer.

Fruit/Seed: Small with fine white hairs.

Control: Bag seed heads then hand-pull and ensure

roots are removed.

This plant re-occurs annually and has a very low removal priority. Can be shaded out with long-term

canopy development.

Formosa Lily / Taiwan Lily - Lilium formosanum





A garden escape that affects southeast Australia. A similar plant November Lily *Lilium longiflorum* can also be a problem.

Form: A bulbous plant with upright stems 1-1.8m high

Flowers: White trumpet shaped flowers

Control: Dig and remove garlic-like corm which can be relatively deep (note it can be very fragile). Bag and remove. Cut off flowers or seed heads and remove from site.



A very common garden plant, invading dunes and headlands usually in exposed sunny positions.

Form: Spreading herb up to 20cm high.

Flower: Mainly yellow to orange with some creamy white varieties. Flowering all year.

Fruit/Seed: Seed disguised in hair. **Control:** Hand-pull or use a mattock.

Glory Lily - Gloriosa superba

Native to tropical Asia & Africa



An aggressive garden escape which is spreading rapidly on the coast of mid and north NSW. It invades coastal dunes, rainforest and headlands.

Form: Herb or scrambler. Stems up to 2 - 4m long.

Flower: Large with 6 red/orange and yellow petals. Spring to autumn.

Fruit/Seed: Large green pod turning black with bright orange to brown seeds.

Control: A very difficult plant to completely eradicate. Manual control includes removing the rhizomes with a knife. Ensure the entire plant is removed. Chemical controls may be suitable for large infestations. Contact the LRC to request.

*Note: All parts of this plant are toxic and may cause sensitivity.

Mother of Millions - Bryophyllum delagoense

Native to Africa



Invades hind-dunes, open bushland and headlands, preferring full sun and infertile soils. Commonly spread in garden waste as each leaf edge has many leaflets that grow into new plants (reproducing vegetatively). All parts of the plant are toxic to cattle, pets and humans.

Form: Succulent erect herb, up to 1m high.

Flower: Salmon/scarlet to orange. Flowers from May to October. **Fruit/Seed:** Four-clustered follicles (dry fruit). Produces many

seeds.

Control: Hand pull, being careful to remove the entire plant as other plant sections can easily re-establish. Pulled plants should be bagged and disposed of in general waste (not green waste).



A garden escape which occurs in coastal areas of eastern Australia.

Form: A sprawling, succulent annual herb. Leaves circular, spirally arranged, each along a long periole attached to the centre of the leaf.

Flower: Flowers with 5 bright yellow to deep orange petals

Fruit/Seed: Fruit green and succulent.

Control: Easily pulled out, although it can readily

reinfest so follow up is needed.

Palm Grass - Setaria palmifolia

Native to Asia



A garden escape used in landscaping that can invade damp, shady and disturbed sites.

Form: A large tufted perennial to 1.5m or sometimes 2m high. Palm-like leaves.

Flower: Flower spikelets in loose branching clusters

Fruit/Seed: Brown seeds in grass-like seed head.

Control: Take care with leaves which are rough with irritating hairs with a fibreglass quality.

Grub out (dig out with mattock). Remove all seed heads from site.

Prickly Pear - Opuntia spp.

Native to America



There are a number of different species of prickly pear that invade the coastal environment. Out-breaks are isolated along the entire coast of NSW. Prickly pear can survive in dry infertile areas invading rocky headlands, dunes and open bushland.

Form: Erect up to 2m high. **Flower:** Pale yellow. Summer.

Fruit/Seed: Red, large and succulent with fine spiky hairs.

Control: Use gloves and be careful of the small fine spiky hairs. The entire plant should be bagged and disposed of.

Chemical controls may be suitable . Contact the LRC to discuss.





Invades mainly disturbed sites adjacent to roadsides, walking tracks and hind-dune areas.

Form: Erect herb, 1-2m high.

Flower: Small, yellow and in clusters.

Summer to autumn.

Fruit/Seed: Small, black and elongated with

fine hairs.

Control: Hand-pull or cut low to the ground

before it goes to seed.

Trad - *Tradescantia fluminensis*





Trad (formerly called Wandering Jew) is found along the entire coast on moist fertile soils often on protected sites such as the understorey of rainforest or in gullies. Trad can be confused with the native Commelina (*Commelina cyanea*), which is distinguished by blue flowers and smaller leaves which are less crowded on the stem.

Form: Creeping herb.

Flower: White with three petals. Spring to

summer.

Fruit/Seed: Produces no fruit.

Control: The smallest fragments of this plant are capable of re-establishing into new plants so careful removal and follow-up is needed. Rake back and pile ideally on an impervious surface (away from watercourses). Can also be 'solarised' with black plastic.

Wild Watsonia - Watsonia meriana var. bulbillifera

Native to South Africa



Invades roadsides, headlands, hind-dunes and bushland. Is capable of invading undisturbed areas along the entire coast.

Form: Erect herb to 2m high.

Flower: Red to salmon pink, trumpet shape. Spring.

Fruit/Seed: Seed is not produced but up to 4 - 12 bulbils are formed on the

lower part of the spike.

Control: Plants can be removed using a hoe or mattock. Be careful when removing the plant that the bulbils are not dislodged and spread around. It is

best to bag the bulbils before removing the rest of the plant. Also ensure no corms are left in the soil. Chemical controls may be suitable. Contact the LRC to discuss.





3 - VINES AND SCRAMBLERS

Asparagus Fern (Ground) - Asparagus aethiopicus Native to South Africa



Asparagus fern is one of the most significant garden escapes invading the coastline. It survives well on dunes, headlands and in the rainforest understorey. In some places it has become the dominant ground cover displacing indigenous plants.

Form: Spreading nature, long arching stems up to 2m long, sometimes spiny.

Flower: Small, pinkish-white. Flowers chiefly spring to summer.

Fruit/Seed: Fruit ripens to bright red.

Control: The crown of the plant (where the stems meet the roots just below the soil surface) must be removed from the site and disposed of. The small light brown globular parts of the roots store water and are not capable of producing new plants. Any green or red berries should be bagged and disposed of.

Chemical controls may be suitable for large infestations. Contact the LRC to request.

Asparagus Fern (Broom) - Asparagus virgatus

Native to South Africa



Potential invader of a wide range of coastal environments, north from Sydney. Can form very large and continuous infestations.

Form: Climber or scrub

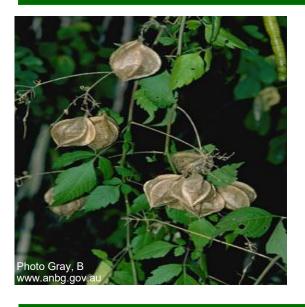
Flower: Greenish-white flowers in spring.

Fruit/Seed: Bright orange when mature, 4-6mm

in diameter

Control: Cutting fronds and removal of crowns is only feasible in small infestations. Bag all fruit. Contact LRC regarding large infestations.

Balloon Vine - Cardiospermum grandiflorum Native to tropical Africa & America



Invades moist areas especially gullies. It will also invade coastal rainforest.

Form: Climber with stems up to 10m long.

Flower: Small and white. Summer to autumn.

Fruit/Seed: Inflated capsule with papery membrane, three black seeds inside capsule.

Control: For small infestations, hand-pull young plants and scrape and paint larger plants with herbicide. If possible, remove all lantern-like fruit from site. Follow up weeding of seedlings for two years.

Note: Take care with ID as leaf looks similar to native plant *Cayratia sp.* (Native Grape)



Blackberry may be confused with native species which are distinguished by lighter green leaves and finer thorns. Blackberry is a problem along the entire coast where it invades coastal forest and dunes.

Form: Scrambling shrub up to 3m high. **Flower:** White or pink. Summer to autumn.

Fruit/Seed: Segmented berry ripening to black.

Control: Scrape and paint with herbicide. Remove

all seeds from site.

Other chemical controls may be suitable for large infestations. Contact the LRC to request.

Black-eyed Susan - Thunbergia alata



Native to Africa

A garden escape that has become an environmental weed in Eastern Australia.

Form: Long-lived vine growing up to 5m in height Flower: Tubular orange flower with black throat Fruit/Seed: Green fruit with rounded base and elongated neck.

Control: Remove fruit from site. Pull up including root stock.

Bridal Creeper - Asparagus asparagoides





A large problem in southern areas of Australia, invading hind-dunes, bushland and rainforest.

Bridal veil creeper can be confused with a native species, 'wombat berry (*Eustrephus latifolius*)', which generally has non-glossy larger leaves and produces a yellow fruit.

Form: Climbing herb with stems up to 3m long.

Flower: White. Winter to spring.

Fruit/Seed: Red berry.

Control: Contact the LRC to discuss removal. Some infestations are subject to biological control.



Found in wet moist gullies and semi-shady forested areas of the coast.

Form: Twining stems up to 3m long.

Flower: Yellow. Winter.

Fruit/Seed: Achene (dry, one-seeded fruit).

Control: Hand - pull small infestations, removing every part of the stem (as it spreads vegetatively

as well as by seed).

Chemical controls may be required for large infestations. Contact the LRC to request.

Climbing Asparagus - Asparagus scandens

Native to South Africa



Form: Twining stems up to 3m long. Leaves arranged in a flat plane along stems.

Flower: White to pinkish-white.

Fruit/Seed: Berries 5-7mm, green turning orange-red on

maturity.

Control: Remove and bag all accessible fruit. Cut ascending stalks and leave in place. Dig up crown and bag it for

Climbing Asparagus Fern - Asparagus plumosus

Native to South Africa



This is a problem along the entire coast of NSW. Thick infestations are isolated.

Prefers shady sites usually in closed forest.

Form: Wiry climber with stems 5m or more in

Flower: Greenish-white. Spring to summer.

Fruit/Seed: Light green fruit turning blue-black

with maturity, 4-5mm in diameter

Control: Remove and dispose of all accessible fruit. Cut ascending stalks and leave in place. Dig up crown and rhizomes (underground horizontal stems between crowns) and bag for disposal.

Coastal Morning Glory- Ipomoea cairica

Native to tropical Asia and Africa



Also known as 'Mile-a-minute'. Invades coastal rainforest at times completely smothering the indigenous vegetation. It also invades dunes and adjacent bushland. Found along the entire coast of NSW.

Form: Trailing and twining stems.

Flower: Purplish with darker throat. Summer. **Fruit/Seed:** Brown globular capsule splitting

into 4 valves.

Control: Small plants can be hand-pulled. The stems root at the nodes so the entire plant should be removed including the roots. Scrape and paint larger plants. Trace through to the base of the main stem to scrape.

Japanese Honeysuckle - Lonicera japonica

Native to East Asia



A serious weed in moist gullies.

Form: Robust scrambler or climber to 10m high with paired leaves along steams.

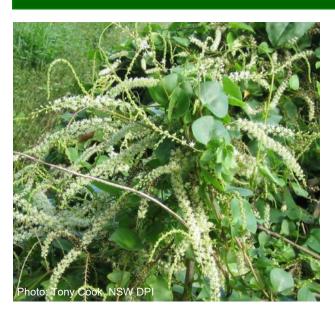
Flower: Yellow cream to white, in pairs. Spring and autumn.

Fruit/Seed: Shiny black berries in autumn

Control: Scrape and paint with herbicide on each stem that branches off main woody trunk. Once established it is difficult and time-consuming to remove. Strongly roots at the nodes so spreads very easily.

Madeira Vine - Andredera cordifolia

Native to tropical South America



Forms very thick infestations, often smothering trees particularly in rainforest areas. It may also invade hind-dunes and coastal headlands.

Form: Climber or blanket scrambler, stems up to 20m long.

Flower: Small greenish white and fragrant. Spring to summer.

Control: Scrape and paint only when vines are growing up into trees and shrubs. Do not cut or pull otherwise aerial tubers will fall to the ground. Remove any accessible or fallen tubers from the site. Follow-up will be needed.

Contact the LRC to discuss removal. Some infestations are subject to biological control.



Invades coastal rainforest and headlands preferring moist areas.

Form: Twining stems forming large blankets over other vegetation.

Flower: Bluish-purple. Flowers any time of the year.

Fruit/Seed: Seed reportedly not set in Australia.

Control: Small plants can be hand-pulled. The stems root at the nodes so the entire plant should be removed including the roots. Scrape and paint larger plants. Trace through to the base of the main stem to scrape.

Moth Vine - Araujia sericifera

Native to Peru



Invades hind-dunes, rainforest and bushland.

Form: Climber with twining stems up to 5m

Flower: White or pale pink. Summer.

Fruit/Seed: Large fruit resembling a choko with

feathery seeds encased in the fruit.

Control: Hand pull the plant out by the roots. It is best to bag any fruit and remove from site.

Take care with ID as a similar looking native, Marsdenia, occurs in Lake Macquarie LGA.

Siratro - Macroptilium atropurpureum

Native to Central & North America



Can form dense ground covers on the dunes displacing indigenous plants.

Form: Twining herb, stems can be 2 - 3m long.

Flower: Dark purple. Summer to autumn

Fruit/Seed: Long slender pods.

Control: Hand removal is difficult because of its large root system. Scrape and paint base of stem. Seed pod collection and disposal is important to ensure eradication.

A number of chemical controls are available.



Invades mainly disturbed sites in coastal rainforest, moist gullies and hind-dunes.

Form: Scrambles, climbing stems greater than 1m

long.

Flower: Cream. Spring.

Fruit/Seed: Papery with three wings, straw colour at

maturity.

Control: This plant has a large tuber and often many small tubers which needs to be removed. This often takes considerable digging. Scrape and paint

where tubers are inaccessible.

Chemical controls may be suitable for large infestations. Contact the LRC to request.

White Passionflower - Passiflora subpeltata

Native to Brazil





Invades headlands, bushland and rainforest. Other species of introduced passion fruit vine also have the tendency to invade the coastal environment. Take care with ID as a native passionfruit with hard pointed angular leaves occurs in Lake Macquarie LGA.

Form: Climber with tendrils.

Flower: Large, white with green tinges. Spring to summer.

Fruit/Seed: Large fruit, light green, oval

snaped.

Control: For smaller plants, pull out by roots. For larger plants, Scrape as much of the stem and basal branch stems as possible and apply herbicide.

4 - WOODY WEEDS

African olive - Olea europaea subsp. africana

Native to Africa & Asia



Usually planted as an ornamental or hedge. It is becoming a problem in coastal areas where it invades most environments including, dunes, headlands and bushland.

Form: Tree from 2 - 15m high.

Flower: White to cream. Flowers mainly in

spring.

Fruit/Seed: Purple to black.

Control: Hand remove small seedlings. For mature plants, cut and paint or scrape and paint with herbicide. Frill/drill larger plants.

Bitou Bush - Chrysanthemoides monilifera subsp. Rotundata Native to South Africa



The most significant environmental weed on the NSW coast. It can form large thickets smothering indigenous plants, threatening both indigenous plant and animal survival. Mainly invades dunes but it also invades headlands and rainforest.

Form: Shrub, sprawling to erect 1.5m high.

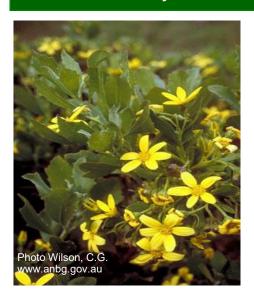
Flower: Yellow with 11-13 petals. Flowering most of the year mainly

spring to summer.

Fruit/Seed: Purplish-black berry.

Control: Has a shallow root system so small seedlings can easily be hand-pulled. Larger shrubs can be pulled out (be careful not to destabilise the sand) or poisoned and left on site as mulch. Where practical, plants removed during their seeding stage should be totally removed to avoid contaminating the site with more seed. Seed stock stays viable in the soil for up to 7 years. Follow-up work is necessary for eradication. Cut and paint with glyphosate is recommended for smaller infestations. Chemical controls may be suitable for large infestations. Contact the LRC to request.

Boneseed - Chrysanthemoides monilifera subsp. Monilifera Native to South Africa



A close relative of Bitou Bush. Invades headlands, dunes and bushland. Leaf margin is more serrated than Bitou Bush and flowers have less petals.

Form: Shrub sprawling to erect. Up to 1.5m high. **Flower:** Yellow with 4-8 petals. Winter to summer.

Fruit/Seed: Purplish-black berry.

Control: Boneseed has a shallow root system so pulling by hand is practical if the soil is soft enough. Plants carrying seed should be totally removed from the site to prevent seed germination.

Chemical controls may be suitable. Cut and paint with glyphosate is effective. Infestations must be reported to LMCC Council as this is a State Prohibited Weed.

Broad-leaf Pepper Tree - Schinus terebinthifolius Native to South America



A recent invader which is displaying potential to become a problem. Mainly found on the north coast of NSW around the Coffs Harbour region invading hind-dunes.

Form: Tree to 10m high.

Flower: Tiny white flowers. Summer to autumn.

Fruit/Seed: Pink to red berry in large bunches.

Control: Hand-pull small seedlings. More mature plants can be treated with herbicide by cutting and painting as close to the ground as possible.

Note: Sap and flowers/ fruit of this plant are toxic and may cause sensitivity.

Camphor Laurel - Cinnamomum camphora

Native to China & Japan



Mainly found on the north coast. Invades coastal rainforest, dunes and headlands.

Form: Large tree up to 20m high. Flower: Small, white. Spring. Fruit/Seed: Glossy black berry.

Control: Seedlings are easily handpulled or can be scraped and painted with herbicide. Frill and paint larger plants, however mature plants may need to be kept to provide a canopy for

native plants to take hold.

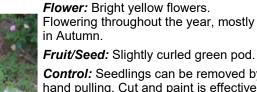
Cassia / Senna - Senna pendula var. glabrata

Native to South America



Cassia invades hind-dunes, bushland and gullies along the entire coast. Can easily be confused with the native 'Brenyia (Brenyia oblongifolia)' which is distinguished by smaller alternate leaves.

Form: Spreading shrub up to 3m high.



Control: Seedlings can be removed by hand pulling. Cut and paint is effective for mature plants.

Ensure all braches are kept of the ground as they can re-establish vegetatively from cuttings.

Castor Oil Plant - Ricinus communis

Native to tropical Asia & Africa





Invades highly disturbed areas in or near hind-dunes, roadsides and bushland.

Form: Tall shrub up to 4m high. Flower: Reddish green. Summer.

Control: Hand-pull or use a mattock. Bag and remove the seed heads.

Fruit/Seed: Spiny capsule with toxic

*Note: All parts of this plant are toxic and may cause sensitivity.

Coral Tree - Erythrina X sykesii

Origin uncertain, pos. New Zealand



Coral tree is a popular garden plant invading areas adjacent to urban settlements. It prefers moist soils and will grow in hind-dunes and edges of rainforest along the entire coast.

Form: Tree up to 15m high.

Flower: Red. Flowering most of the year mainly

winter to early spring.

Fruit/Seed: Fruit not set (hybrid species).

Control: If the tree is cut down, do not leave branches on the ground as they can re-establish into new plants. Chemical controls may be suitable. When the tree is in leaf, frill ring at ground level and apply herbicide within 15 seconds of cutting. Follow-up work is necessary. Check every 6 months until the tree is dead.

Green Cestrum - Cestrum parqui

Native to South America



Found on hind-dunes, river banks and in urban areas.

Form: Woody shrub up to 3m high. Leaves are pointed at both ends and produce a foul odour when crushed.

Flower: Greenish to yellow. Flowering all year.

Fruit/Seed: Black berry.

Control: Scrape and Paint lower stems near base of plant with herbicide. Note that plant grows from a rhizome so follow

up / scrape and paint will be necessary.

Caution: All parts of plant are highly toxic if ingested.

Golden Wreath Wattle - Acacia saligna

Indigenous to Western Australia





Golden Wreath Wattle (also known as Willow Wattle) has previously been planted for dune rehabilitation and road-side planting. It is now invading dunes and bushland on sections of the NSW coast.

Form: Large shrub to tree 3 - 8m high. New stems have a zig-zag shape and leaves have a slight twist.

Flower: Yellow, globular. Spring.

Fruit/Seed: Pod straight to strongly curled.

Control: Small seedlings can be hand removed, larger shrubs should be cut and painted with herbicide. Remove all pods from the site.



Lantana is a problem on the entire NSW coast. It was originally introduced as an ornamental garden plant and now invades coastal dunes, rainforest, headlands and bushland.

Form: Large spreading shrub forming dense thickets, grows up to 3m high.

Flower: Clustered tube shaped flowers either pink, yellow or red. Flowers most of the year.

Fruit/Seed: Small black fruits.

Control: Hand pull small plants. Remove the root system particularly the lateral roots. For larger plants, cut stump and paint with glyphosate or scrape and paint branches.

Pile on site., but stack upon existing logs as branches in contact with the ground may re-establish into new plants.

Mickey Mouse Plant - Ochna serrulata

Native to South Africa



Invades coastal rainforest and can also survive in more arid environments.

Form: Shrub, 2 - 3m high with serrated leaves.

Flower: Bright yellow. Spring to

autumn.

Fruit/Seed: Sepals turn bright red holding up to five glossy green fruit which ripen to black.

Control: Hand remove small seedlings with entire taproot. For larger plants, scrape and paint with herbicide. Repeat treatment may be necessary. Removal all seeds from site.

Myrtle-leaf Milkwort - Polygala myrtifolia

Native to Africa



Found along sections of the coast south of Port Macquarie. Grows on dunes, headlands and edges of estuaries. It is a growing problem in Victoria where it occupies similar habitats to Boneseed. Another closely related species, *Polygala virgata*, has a slender form with very similar flowers. *P. virgata* is found between Port Macquarie and Sydney growing on disturbed sites near roads, tracks and gullies.

Form: Erect dense shrub up to 5m high.

Flower: Purple to pale lilac. Can flower all year, may only flower in spring.

Fruit/Seed: Produces capsules.

Control: Small seedlings can be pulled by hand. Mature plants which are cut off at the base are unlikely to resprout. Disturbed sites will need follow-up over at least three years as seeds disturbed in soil may continue to germinate.





A large problem in moist gullies and rainforest especially where there is nutrient enrichment. Its close relative, 'large-leaved privet (*Ligustrum lucidum*)' may also be found in similar habitats. Large-leaved privet is very similar in appearance, bearing similar fruit except it grows taller (to 10m high) and has larger leaves. Large-leaved privet is also considered a pest and requires similar control measures to small-leaved privet.

Form: Large shrub up to 4m high. **Flower:** Small, white. Spring.

Fruit/Seed: Berry, purple to black in large bunches. **Control:** Small seedlings can be removed by hand. Chemical treatments may be suitable. Cut and paint or injection with undiluted glyphosate is effective.

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Umbrella Tree - Schefflera actinophylla

Indigenous to Northern Queensland





A popular garden species now invading hind-dunes. Only a problem on the far north coast of

Form: Tree up to 10m high.

Flower: Dark red flowers on large spikes. Autumn to winter.

Fruit/Seed: Dark red to black,

arranged on large spikes.

Control: If the plant is cut down, do not leave the trunk or branches on the ground as they can re-

establish.

Chemical controls may be suitable. Frill ring at ground level and apply herbicide or cut and paint.

Wild Tobacco Bush - Solanum mauritianum

Native to tropical Asia



Invades disturbed sites on edges of roads, tracks, hind-dunes and rainforest along most of the coast.

Form: Large shrub up to 4m high.

Flower: White to violet. Autumn to spring. **Fruit/Seed:** Dull yellowish brown fruit.

Control: Often a low-priority for control as it can be useful to protect young plants until a canopy forms and other habitat is established. Cut and paint with herbicide to remove.

Weed Control Easy Reference Table

Common Name	Scientific Name	Pg no.	Hunter priority weed	Habit	Priority for site regeneration
African Olive	Olea europaea subsp. cuspidata	16	Yes	tree	high
Alligator Weed	Alternanthera philoxeroides		Yes	ground	high
Asparagus Fern (Broom Asparagus)	Asparagus virgatus	11	Yes	ground	high
Asparagus Fern (Climbing Asparagus)	Asparagus plumosus	13	Yes	vine	high
Asparagus Fern (Climbing Asparagus) Asparagus Fern (Ground Asparagus)	Asparagus scandens Asparagus aethiopicus	13 11	Yes	vine ground	high high
Asparagus Fern (Ground Asparagus) Asparagus Fern (Pom Pom Asparagus)	Asparagus macowanii	11	162	ground	high
Balloon Vine	Cardiospermum grandiflorum	11		vine	medium
Bitou Bush	Chrysanthemoides monilifera subs. rotundata	17	Yes	shrub	high
Blackberry (Vine)	Rubus fruticosus aggregate	12	Yes	vine	medium
Blackberry Nightshade	Solanum nigrum	5		ground	low
Black-eyed Susan	Thunbergia alata	12		vine	medium
Boneseed	Chrysanthemoides monilifera subs. monilifera	17	Yes	shrub	high
Bridal Creeper	Asparagus asparagoides	12	Yes	vine	high
Broad-leaf Pepper Tree Buffalo Grass	Schinus terebinthifolia Stenotaphrum secundatum	17		tree	medium
Camphor Laurel	Cinnamomum camphora	3 18		grass	medium
Campilor Laurer	Canna indica	5		tree ground	medium low
Cape Ivy / German Ivy	Delairea odorata	13		vine	medium
Cape Leeuwin Wattle or Cape Wattle	Paraserianthes lophantha	10		shrub	medium
Castor Oil Plant	Ricinus communis	18		shrub	low
Cobblers Peg /Farmers Friend/ Sticky Beaks	Bidens pilosa	6		ground	v. low
Cocos Palm / Queen Palm	Syagrus romanzoffiana			tree	medium
Coral Tree	Erythrina x sykesii	19		tree	medium
Cotoneaster	Cotoneaster spp.			shrub	high
Crofton Weed	Ageratina adenophora	6		ground	high
Fireweed	Senecio madagascariensis	6	Yes	ground	low
Fishbone Fern	Nephrolepis cordifolia	7		ground	medium
Fleabane (aka Canadian Fleabane) Formosa Lily / November Lily / Taiwan Lily	Conyza spp. Lilium formosanum or L. longiflorum	7		ground ground	medium
Gazania	Gazania rigens	8		ground	medium low
Glory Lily	Gloriosa superba	8	Yes	ground	high
Golden Wreath Wattle	Acacia saligna	19	700	shrub	medium
Green Cestrum	Cestrum parqui	19	Yes	shrub	medium
Hypoestes or Purple Haze	Hypoestes aristata			ground	medium
Indian Hawthorn	Rhaphiolepis indica			shrub	medium
Japanese Honeysuckle	Lonicera japonica	14		vine	medium
Kikuyu	Cenchrus clandestinus	3		grass	medium
Lantana	Lantana camara	20	Yes	shrub	high
Madeira Vine	Anredera cordifolia	14	Yes	vine	high
Mickey Mouse Plant	Ochna serrulata	20		ground	high
Montbretia (Coppertips) Morning Glory (Blue)	Crocosmia x crocosmiiflora Ipomoea indica	15		ground vine	medium
Morning Glory (Coastal) / Mile a Minute	Ipomoea cairica	14		vine	high high
Moth Vine	Arauiia sericifera	15		vine	medium
Mother of Millions	Bryophyllum delagoense	8	Yes	ground	medium
Myrtle-leaf Milkwort (Polygala)	Polygala myrtifolia	20		shrub	medium
Nasturtium	Tropaeolum majus	9		ground	low
Paddys Lucerne	Sida rhombifolia			ground	low
Palm Grass	Setaria palmifolia	9		ground	medium
Pampas Grass	Cortaderia spp.	3	Yes	grass	medium
Parramatta Grass	Sporobolus africanus	4		grass	medium
Paspalum (incl Tussock Paspalum)	Paspalum dilatatum incl P. quadrifarium	4		grass	low
Passionflower (White) / Passionfruit Pennywort (American)	Passiflora subpeltata Hydrocotyle bonariensis	16 5		vine	low
Peruvian Lily	Alstroemeria psittacina	5		ground ground	low medium
Prickly Pear	Opuntia spp.	9	Yes	ground	low
Privet (Broad Leaf)	Ligustrum lucidium	3	703	tree	medium
Privet (Small or Narrow Leaf)	Ligustrum sinense	21		shrub	high
Purple Top	Verbena bonariensis			ground	medium
Red Natal Grass	Melinis repens	4		grass	medium
Senna (Cassia)	Senna pendula var. glabrata	18		shrub	medium
Siratro	Macroptilium atropurpureum	15		vine	medium
Stinking Roger	Tagetes minuta	10		ground	medium
Trad (Wandering Jew)	Tradescantia fluminensis (formally T. albiflora)	10		ground	high
Turkey Rubarb	Acetosa sagittata	16	-	vine	high
Umbrella Tree	Schefflera actinophylla	21	1	tree	low
Wild Tobacco Wild Watsonia	Solanum mauritianum	21	-	shrub	low
Willow	Watsonia meriana cv. Bulbillifera Salix spp.	10	Yes	ground tree	medium medium
Yellow Bells	Tecoma stans		168	shrub	medium
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Suggested Treatment

Cut & paint. Scrape & Paint, Frill/Drill larger plants

Don't touch. Notify Landcare Office immediately.

Forms dense stands so cutting fronds & removal of crowns only feasible with small infestation. Bag all seed.

Remove & bag all accessible fruit. Cut ascending stalks & leave in place. Dig up crown & bag it.

Remove & bag all accessible fruit. Cut ascending stalks & leave in place. Dig up crown & bag it.

Crown out - remove all crowns & all berry (red & green) from site.

Contact the Landcare office to report occurrences and for control advice

Scrape & paint. If possible remove all Lantern like fruit from site. CARE: Leaf looks similar to native plant Cayratia (Native Grape).

Pull small plants. Cut & paint others. (Note that plant can bear fruit up to three times per year).

Scrape & paint with herbicide. Remove all seeds from site.

Pull. Bag & remove all berries from site.

Remove seed pods from site. Pull up including root stock.

Notifiable weed - report all occurrences to Council/ LRC. Distinguished by having a slighly more serated leaf margin and erect habit than Bitou.

Contact the LRC to discuss removal. Some infestations are subject to biological control.

Sap can be skin irritant. Pull small plants. Cut & paint larger specimens. Follow up will likely be necessary. Shade out over long term.

Invasive stock can be pulled back via removal of the runners.

Pull or scrape & paint seedlings. Wound (Frill) & paint mature plants. However do not remove mature plants as these form a canopy for native to take hold.

Small infestations can be dug out. Remove tubers from site. Large infestation may require repeat herbicide applications.

Hand - pull small infestations, removing every part of stem (as it spreads vegetatively as well as by seed). Chemical controls may be required. Contact the LRC.

Remove all seed pods, bag & take from site. Cut and paint.

Cut & paint. Remove all fruit from site. CARE: All parts of plant are toxic.

Shade out. (Hand pulling is a low priority - better to encourage any developing forest to overtake them. This plant does poorly in shade.)

Remove by digging out or cut below growth point. Bag & remove all seeds on site.

Difficult to eradicate as braches will strike when resting on the ground. Some success with small plants using herbicide.

Cut & paint. Remove all berries from site.

Pull out including all root stock. Stack out of watercourses, preferably high. This plant will strike vegetatively.

Pull out by roots. (Ideally before buds or seed are set.)

Physically remove all parts of the plant notably the corms. A native plant from NSW North Coast & Qld.

Pull out. Better to shade it out in long term.

Dig & remove garlic-like corm which can be relatively deep. Note it can be very fragile! Bag & remove. Cut off flowers or seed heads & remove from site..

Selective removal suggested. An issue on coastal sand & headlands mainly.

All part of the plant are toxic. Contact the Landcare Office for control.

Cut & paint. Pull seedlings. Remove all seed pods from site.

Scrape & paint. Note that plant grows from a rhizome so follow up / scrape & paint may be necessary.

Pull out & scatter on site to die off.

Cut & paint. Remove all flower & seed heads from site.

Scrape & paint. Note that action is needed at each node. So work is time consuming.

Cut & remove all runners. Constant follow up is needed. Contact LRC to request chemical control.

Pull or cut / scrape & paint. Pile on site. Separate root piles from branch piles. Make root piles smaller in size for turning as these are less likely to strike.

Scrape & paint only. Do NOT cut otherwise all aerial corms will fall to ground. Follow up needed. Remove all corms from site.

Scrape & paint with herbicide. Repeat treatment may be necessary. Remove all seeds from site.

Dig out if possible. Note corms will chain underneath. Some wipe / scrape & paint with herbicide may be required.

Trace through to base of stem and scrape & paint larger plants. Hand pull small plants, removing all root stock including all roots at each node.

Slightly easier than Blue Morning Glory because doesn't have deep roots. Scrape & paint.

Pull out by roots. Remove all choko type fruit from site. CARE: A similar Australian native Marsdenia occurs in Lake Macquarie LGA.

Pull out, bag & remove all parts of plant.

Pull small samples. Mature plants which are cut off at the base are unlikely to resprout. Follow up is needed over at least three years.

Is very easily pulled out. Although can readily reinfest so follow up is needed.

Treatment rarely is required. Has a deep tap root so is difficult to pull. Cut & paint with herbicide.

Care with leaves as has a fibreglass quality. Grub out. Remove all seed heads from site. A 'landscapee'.

Remove all seed heads from site and bag them. For small infestations, cut back sharp leaf with shears and dig out root mass.

Dig out. Remove & bag seed heads & place in General (not Green) Waste. Care: There are two varieties of Sporobolus which are native grasses (Rat-Tail Grass)

Dig out as required. Care: A few Paspalums are native plants.

Pull out by roots. Scrape and paint larger plants. CARE: A native Passionfruit with hard point angular leaves occurs in Lake Macquarie LGA.

This is not the water-bourne noxious plant. Control is difficult and may not be a priority.

Apply herbicide just before the plants go dormant. Follow up is required. A garden escapee

Use gloves and be careful of the small fine spiky hairs. The entire plant should be bagged and disposed of. Chemical controls may be suitable - contact the LRC.

Low priority. Although undesirable they form a canopy under which desirable plants can get a hold. Wound or drill & paint.

Cut or scrape & paint/ Frill or drill larger plants.

Pull out roots & all. Scatter but ensure is off the ground as it will strike vegetatively.

Hand remove. Contact Landcare Office for control strategy for large infestations.

Pull or cut/scrape & paint. Hang cuttings off ground because plant will strike vegetatively.

Isolate then hand pull or scrape & paint crown of plant.

Hand pull or cut low to ground before seed is set.

Rake back & pile ideally on impervious surfaces (away from watercourses).

Dig & remove all bulbs and seed (extensive). Scrape & paint where tubers are inaccessible

Cut & paint. Keep limbs off ground as can shoot vegetatively. An Australian Native from FNQ.

This forms a useful plant until the native canopy forms. When it does, this can be removed (via cut & paint)

Remove all bulbs from site. Chemical controls may be suitable. Contact the LRC to discuss.

Contact Landcare office to discuss removal. Drill & fill. Repeat applications may be required.

Scrape & Paint. Remove all seed pods from plant and take away from site.

References and further information

Australian Government - Weeds in Australia www.weeds.gov.au

Australian Native Botanical Gardens www.anbg.gov.au

NSW Department of Primary Industries - NSW WeedWise http://weeds.dpi.nsw.gov.au/

Sydney Weeds http://sydneyweeds.org.au/about/what-is-this-weed/

Weeds Australia www.weeds..ala.org.au

Coastal Weeds Identification Booklet

Updated in 2017 by Lake Macquarie Landcare Resource Centre Photos by LRC staff unless otherwise noted.



