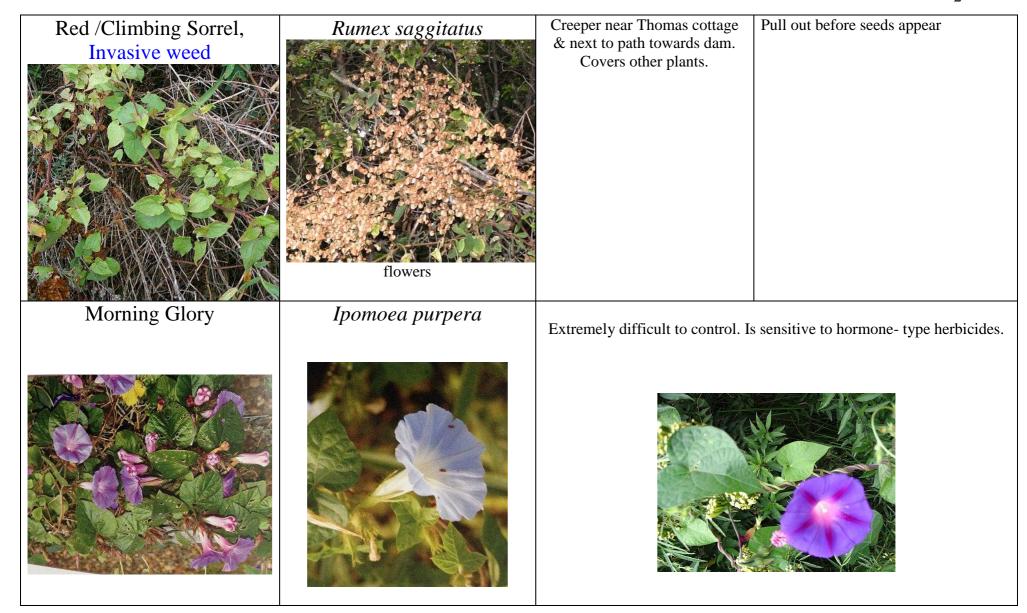
COMMON PROBLEM INVASIVE PLANTS IN KLOOFENDAL NATURE RESERVE

Compiled by Karin Spottiswoode from Friends of Kloofendal April 2014 DRAFT – NOT FINISHED YET

With advice from Andrew Hankey, specialist horticulturist Walter Sisulu National Botanical Gardens in 2009 BROMILOW, C., 2010. Problem Plants and Alien Weeds of South Africa. Briza Publications, Pretoria. FABIAN, A. & GERMISHUIZEN,G.1997. Wild flowers of Northern South Africa. Fernwood Press, Vlaeberg VAN WYK, B & MALAN, S.1998. Field guide to the wild flowers of the Highveld. Struik. Cape Town http://www.invasives.org.za/

Advice on poisons can be obtained from Avoncod (2009 information)

Picture	Description	Location of the weed	Action
Moth catcher Category 1b	Araujia serricifera – Creeper with milky latex & big seedpod	Amphitheatre, path towards dam and amongst riverside vegetation Big seedpod	Pull out. Remove seed pod if accessible.



HERBS & SHRUBS Pull out Edges of amphitheatre, Jerusalem Cherry, Category 1 Solanum pseudocapsicum northern part, along path to Bosgifappel, small bush with bright dam and yellow on map orange round poisonous fruit Thorny Pigweed – Invasive alien weed Amaranthus spinosis Remove when small. Bigger ones treat with broadleaved herbicide

Category 1b Very prickly weed biocontrol with many success so far	
success so far	ninimal

Khakibos Invasive alien weed	Tagetes minuta	Any disturbed area, usually together with Black jacks. It has a distinctive, strong small	Slash above grass level before seeds are ripe,
Blackjacks Invasive alien weed	- Bidens pilosa yellow flowers, prickly seeds which cling onto socks & clothes		Slash above grass level before seeds are ripe
Forget-me-not Invasive problem weed	Cynoglossum hispidum (family: Boraginaceae) – little blue flowers in summer, followed by horrible burrs (=fruits & seed) ID by prof. Braam van Wyk, April 2012	Wetland –. Indigenous, but extremely invasive	Remove before seeds/ burrs appear

Scotch Thistle - Category 1b | Cirsium vulgare



Found in wetland

Slash before seeds mature. Burn seeds



Conyza bonariensis Asteracea Annual weed with lots of seed

	,
In grassland near Thomas'	Slash above grass level, before
cottage & in wetland	flowers form seed

Lantana, Category 1	Lantana camara fruit	Amongst rocks near Thomas' cottage, higher up in reserve amongst rocks	Slash before seeds appear, Try to dig out roots. If not successful, poison stem & roots
Cape Gooseberry, Alien invader	Physalis peruviana Invasive creeper, which does not belong on the Highveld		Pull out

Inkberry, Category 1b	Phytolacca octandra - red stem & autumn coloured leaves	Dassie Rock, wetland, upper ridge, little stream crossing - prolific	Cut of flower heads before seeds ripen, pull and dig out the whole plant
Spotted Knotweed Alien invader	Polygonum lapathifolium	In the dam growing from edges inwards	Easy to remove by cultivation
Pompom Weed, Category 1	Campuloclinium macrocephalum	Next to entrance, near Thomas' cottage, on ridge above path to dam	Cut off flower heads before they seed and burn those. Then pull out plants

Mexican Poppy, Category 1	Argemone mexicana	Inlet of dam	Best removed by shallow cultivation
		Seems to be controlled (2012)	
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Achyranthus aspera

Next to path at north-eastern entrance into reserve

Easily controlled by cultivation but mature plants to be removed with care



Cyathula uncinulata— very invasive bur

In the wetland	Slash before fruit & seeds ripen.
	Best removed by cutting it below
	ground level

Wooly plectranthus, Category 1



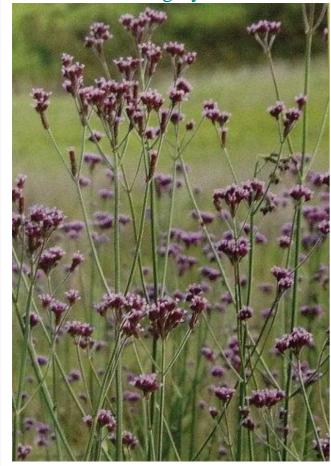
Plectranthus comosus, Salvia tiliifolia, Coleus grandis, Abyssinian coleus

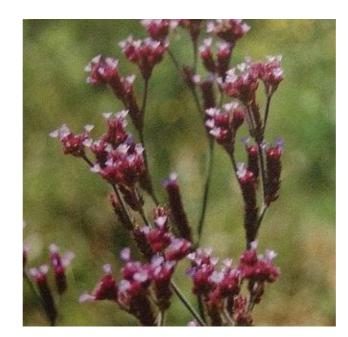


To be carefully identified and removed

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Crofton Weed,	Ageratina adenophora		P
Mexican Devil, Category 1			u
		Could have spread from Christiaan de	1
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Verbena bonariensis/ Verbena braziliensis Category 1





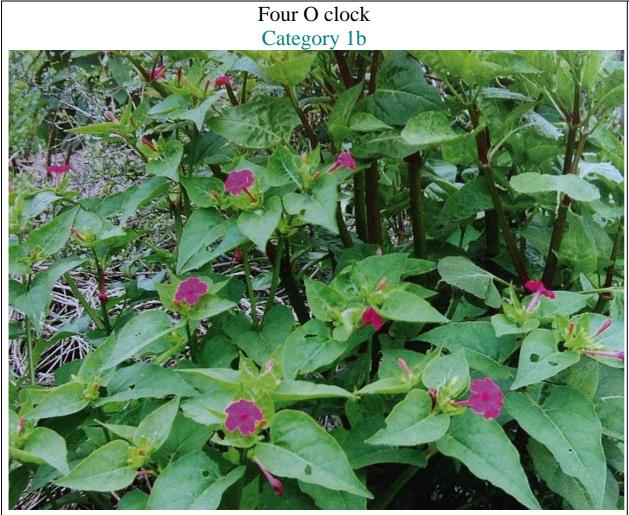
Control by cultivation and broadleaved weed herbicide

Post emergence herbicides



Datura stramonium

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Mirabilis jalapa
Can be removed physically or sprayed with a systemic herbicide

Tree mallow, category 1b	Lavateria orbea		It should be removed when small. No herbicides registrations for this weed
Cactus, Category 1b	Opuntia imbricata	Above smaller mine enclosure next to path & in flower bed in parking lot, in the reserve next to private residences on Galena Street	Biocontrol, herbicide. If plant is cut down, then all pieces must be collected and destroyed

Canna – Category 1b





In flower bed in amphitheatre area

Sword Fern - Category 1b		In flowerbed in amphitheatre area	Hand pulling is possible but make sure all parts of the plant is removed
Zinnia – exotic annual weed	Zinnia peruviana		Susceptible to conventional herbicides and cultivation during seedling stage.

FLAT GROWING HERBS

Tropical Richardia, Alien invasive weed



Richardia braziliensis

Creeper amongst the grass Different common names, e.g. paper thorn, Khaki weed, creeping chafweed Amphitheatre lawn and paths leading away from the amphitheatre (i)Fertilise lawn to give grass strength to compete against weed (ii)Watering when needed (iii) Set lawnmower higher to allow grass to retain its nutrients (leaves photosynthesise = make food for plant)

(iv)Broadleaf herbicide

Wandering Jew Alien invasive weed

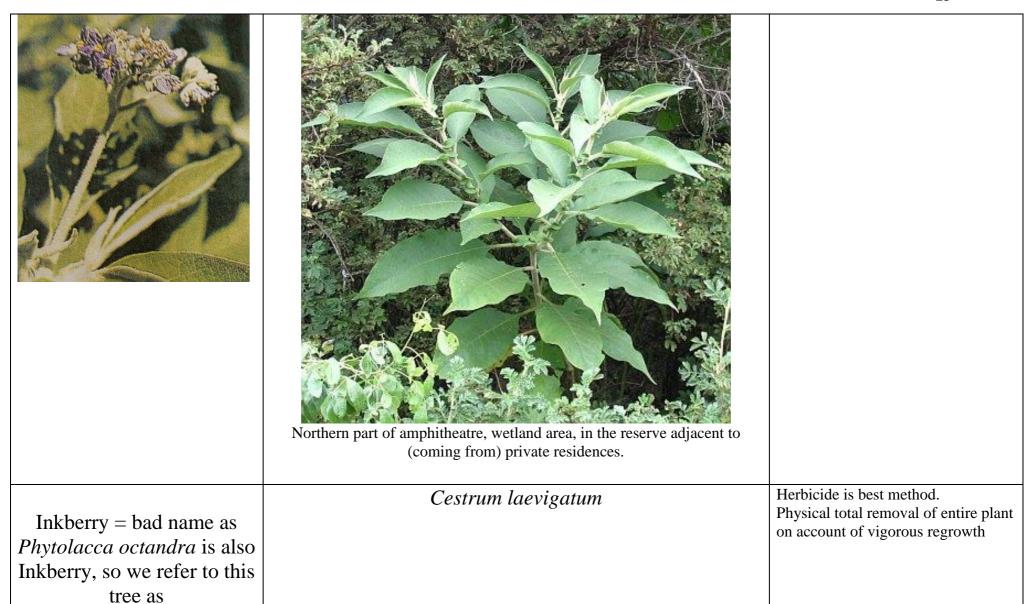


Trandescantia fluminensi

Foliage is easy to remove, but must be done repeatedly

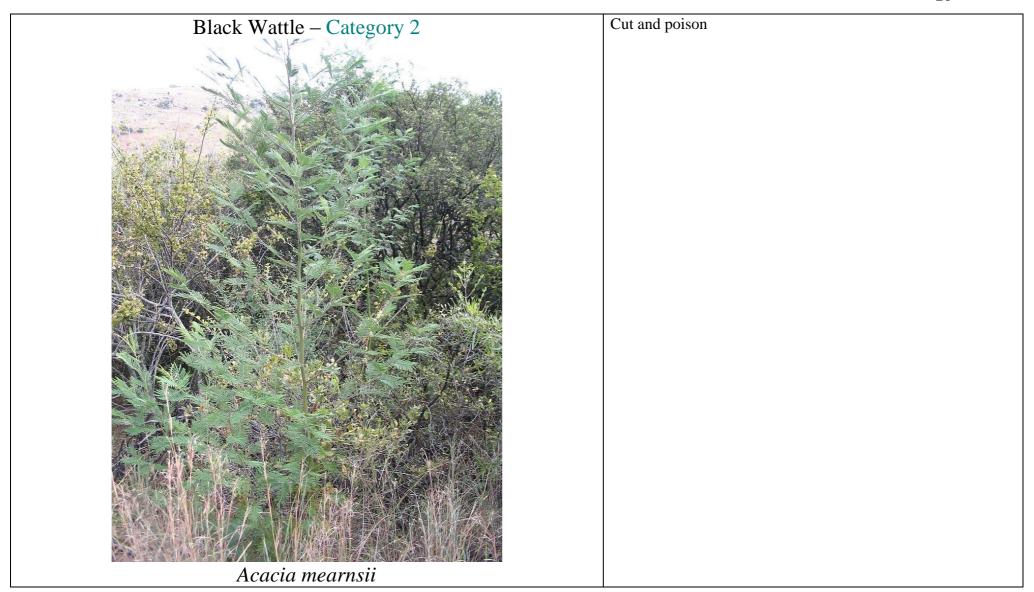


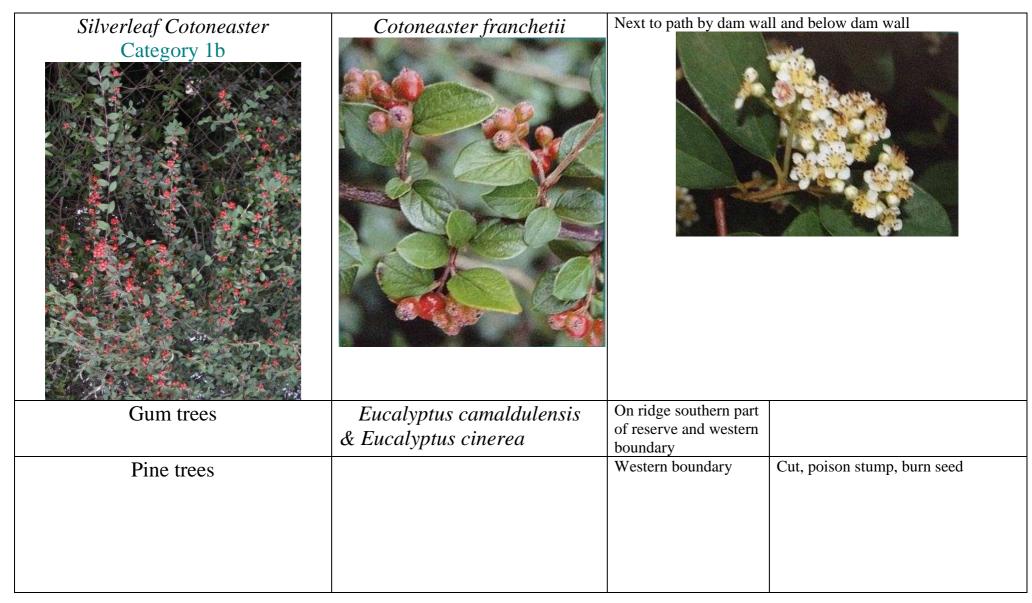
GRASS					
Pampas Grass, Category 1 Cortaderia jubata In mine -has been removed Cut off flowers before seeding, but them, dig out stumps					
No work has been done on invasive, problem and/ or alien grasses TREES					
Bug weed, Category 1		Solanum mauritianum - Very smelly leaves		Pull out if plant is young Cut down, poison stump or apply foliar herbicides if foliage can be reached and follow up.	

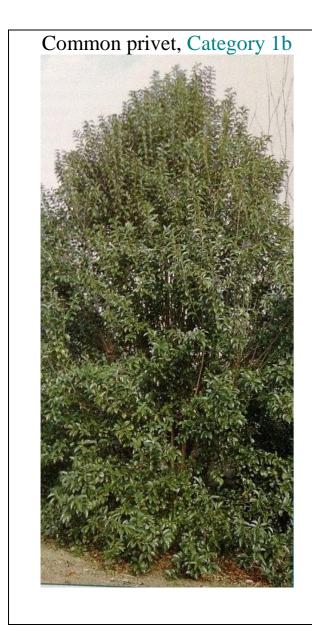


Cestrum - Category 1b Above little stream in forest above dam. Smelly leaves

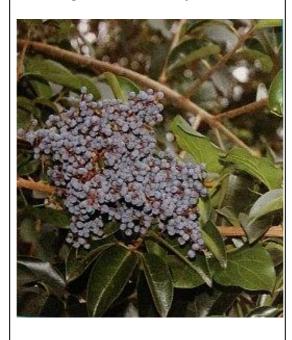
Syringa, Cate Melia azed	arach		Tree to be cut down below ground level Triclopyr mixed with Diesel oil painted onto the stem immediately after cutting
Black Wood, Category 1b	Acacia melanoxylon	Few biggish ones seen from paths near dam wall, in between <i>Protea roupelliaes</i> on hill side north of the dam and other places	Cut & poison stumps





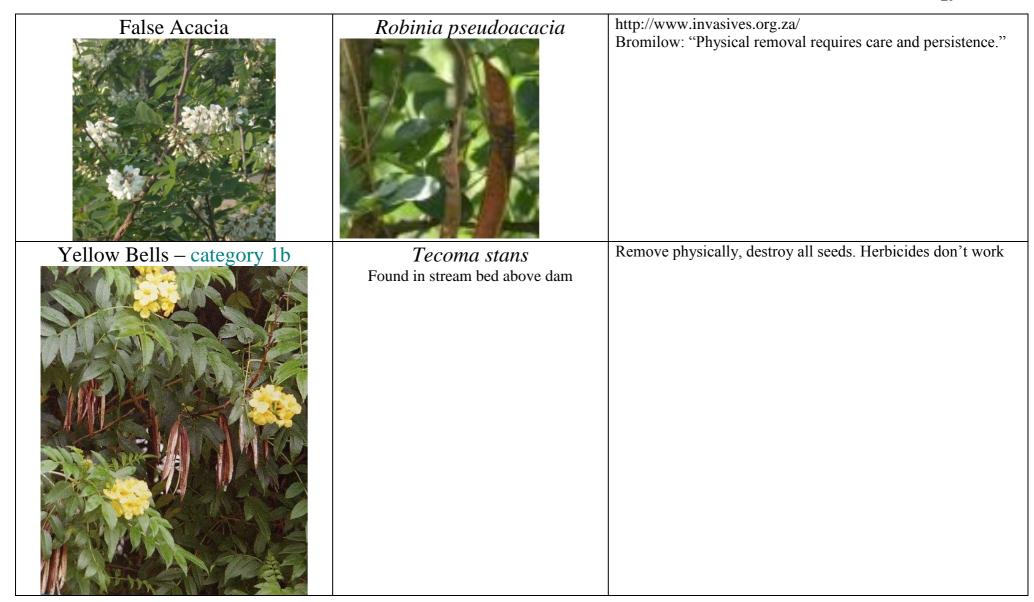


Ligustrum ovalifolium



North eastern side of Amphitheatre area – Cut, poison stump, follow up as seeds stay viable for many years





CARA: 1983/2001	CARA/ NEMBA: Proposed 2009	
Category 1b CARA/ NEMBA	Plants widespread invasive species controlled by a management programme	
Category 1 CARA	Plants prohibited, must be controlled	
Category 2 CARA	Plants (commercially used plants) may be grown in demarcated areas, providing there is a permit and	
	steps are taken to prevent their spread	
Category 3 CARA	Plants(ornamentally used plants) may no longer be planted; existing plants may remain except within	
	floodline of watercourses and wetlands, as long as all reasonable steps are taken to prevent their	
	spread.	
Cultivation: the act of growing plants in general tilling the soil or disturbing the soil mechanically with the specific aim of destroying		

Cultivation: the act of growing plants in general, tilling the soil or disturbing the soil mechanically with the specific aim of destroying weeds