| Respondent No: 259 Login: Anonymous Email: n/a | | Responded At: Last Seen: IP Address: | Jul 02, 2018 22:19:19 pm Jul 02, 2018 22:19:19 pm n/a |
|--|--------------|--|---|
| Q1. First name | Jennifer | | |
| Q2. Last name | Harkness | | |
| Q3. Phone | | | |
| Q4. Mobile | not answered | | |
| Q5. Email | | | |
| Q6. Postcode | | | |
| Q7. Country | australia | | |
| Q8. Stakeholder type | Individual | | |
| Q9. Stakeholder type - Other not answered | | | |
| Q10. Stakeholder type - Staff | | | |
| not answered Q11. Organisation name | not answered | | |
| Q12. What is your preferred method of contact? | Phone | | |
| Q13. Would you like to receive further information and updates on IFOA and forestry matters? | Yes | | |
| Q14. Can the EPA make your submission public? | Yes | | |
| Q15. Have you previously engaged with the EPA on forestry issues? | No | | |

Q16. What parts of the draft Coastal IFOA are most important to you? Why?

the proposal as a whole is important, I refuse to reduce it into seperate compartments because it operates and effects our native forests as a whole.

Q17. What parts of the draft Coastal IFOA do you think have a positive outcome on the management of environmental values or the production of sustainable timber? Why?

I dont see a positive. the simplicity is that taking more trees causes environmental degradation to the benefit of the timber industry. you may think the positive is that the timber industry has more dollars in their pocket, but it is debatable whether this is a positive. If you are judging wellbeing solely on financial gain, which we all know deep down is unfounded, then I suppose you could name it a positive.

Q18. What parts of the draft Coastal IFOA do you think have a negative outcome on the management of environmental values or the production of sustainable timber? Why?

Forests are disappearing at an alarming rate, we need them for clean air, for habitat, for the health of the planet and it is plain and obvious that increasing the timber supply quota (when as it stands it has not been met for the past several years) is completely absurd and can ONLY lead to environmental degradation. Clear felling techniques are simply unsustainable and are an insult to wilderness. How should we trust the foresters that they leave hollow logs in their place if they are allowed to slash and post harvest burn the evidence? removing any protection laws for threatened and endangered species can only have a negative outcome for biodiversity. reducing the size and number of trees to be left and reducing the buffering zone around waterways can only have a negative outcome. CUTTING MORE FORESTS CAN ONLY HAVE A NEGATIVE OUTCOME! please see attachments

Q19. What are your views on the effectiveness of the combination of permanent environmental protections at the regional, landscape and operational scales (multi-scale protection)?

They have to potential to be very effective if set up properly, with proper values and the true intention to honour nature and preserve biodiversity, which would mean far less logging, selective harvesting and investment in plantation timber. you simply are not protecting the environment on any level by clearfelling 100000's of thousands of hectares of native forests. its a joke that relies upon the disconnection between man and nature, and human beings insatiable appetite.

Q20. In your opinion, would the draft Coastal IFOA be effective in managing environmental values and a sustainable timber industry? Why?

NO. see attachments

Q21. General comments

I am not an expert, I am however a living being on this planet, I am a busy mother of three and I hardly have time to complete this form, I find it an insult that the nsw government attempts to restrict my right to protest, and my right to express my opinion, restricting it to this format. there is no address provided for hand written letters, we can only oppose the sneakily written, greenwashed draft. I can only oppose the destruction of natural life, of our environment through this website and these questions which you have formulated to your advantage. Its not fair play.

| Q22. Attach your supporting documents (Document 1) | not answered |
|--|--------------|
| Q23. Attach your supporting documents (Document 2) | |

Q24. Attach your supporting documents (Document

3)



THE CONVERSATION

Forests of eastern Australia are the world's newest biodiversity hotspot

November 4, 2011 2.20pm AEDT



Australia's eastern forests are on par with those of Brazil. YAZMDG

If you live in eastern Australia there's a good chance you're one of nine million Australians who call the world's newest biodiversity hotspot home.

In a recent publication, "Forests of East Australia: The 35th Biodiversity Hotspot" a team of researchers from CSIRO working with Conservation International documented their analysis of the fauna and flora in two of Australia's World Wildlife Fund Ecoregions.

The team found that these diverse and unique coastal forests - that stretch from just south of Sydney to north of Cairns - more than qualify to be included as part of an elite global club.

This is the second hotspot to be identified in Australia. The other is the Southwest Australia Hotspot near Perth.

Being formally recognised as a hotspot acknowledges something that many of us already know: we live in one of the most biologically diverse regions on Earth.

The listing puts eastern Australia on par with places such as Madagascar and the tropical rainforests of Brazil – areas that have great biological diversity, but that have been greatly modified by human activities.

Authors



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Eastern forests biodiversity hotspot. VAST -ABARES

What makes hotspots hot?

The "**Biodiversity Hotspot**" concept identifies "exceptional concentrations of endemic species that are undergoing exceptional loss of habitat".

The idea was conceived by British environmentalist **Professor Norman Myers** back in 1988 with the aim of making the best use of limited financial resources. By identifying those areas where investment in conservation efforts will give the greatest return, more species can be saved from extinction.

To make the grade as a Global Biodiversity Hotspot, a region must first have more than 1,500 endemic vascular plants (that is, plants found there and nowhere else on earth). Second,

more than 70% of its original (pristine) native vegetation must have been lost or significantly degraded.

So being a hotspot is recognition there is much to lose, and it's being lost way too quickly.

The research team found the forests of east Australia easily qualify under these two criteria. The area has more than 2,144 endemic plant species, and about 77% of the original native cover has been lost or degraded.

Plants are a good proxy for other levels of diversity, so it's not just our plants that are unique and diverse. Almost a third of the hotspot's frogs and reptiles are endemic. Examples include the spectacular rainforestdwelling Boyd's Forest Dragon, and the Yellow-Spotted Bell Frog. The latter was thought to be extinct until rediscovered in 2009.

Alongside the tremendous plant diversity, the team documented more than 150 endemic vertebrates – amphibians, reptiles, birds and mammals found nowhere else on earth – from a list of more than 1,100 native species.

Just the tip of the iceberg

Recently, it was **estimated** that less than 15% of the predicted 8.7 million species of life on Earth have been described by science. This means there's every chance the tally of endemic species in eastern Australia will grow as more species are discovered and described.

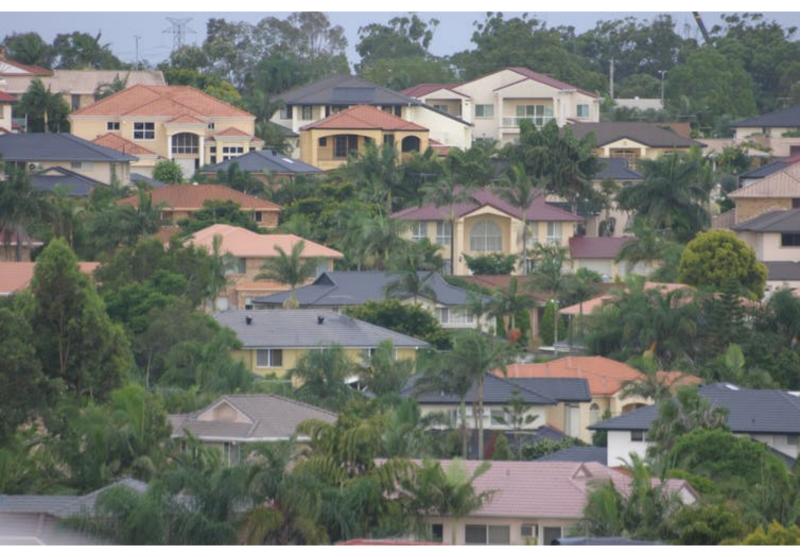


Boyd's forest dragon. Peter Nijenhuis

Take the example of the **Wollemi Pine**. Discovered in 1994 in a rainforested sandstone gorge just 150 kilometres from the CBD of Australia's most populace city, its discovery was the plant equivalent of stumbling onto a living, breathing dinosaur.

Looking after the newest member of the hotspot family

Examples of many of the diverse vegetation types present in the hotspot are encapsulated within protected areas, which collectively cover about 18% of the hotspot. But urban and agricultural land-scapes dominate, covering about 35% of the total land area.



Like biodiversity hotspots everywhere, modified landscapes predominate. troykelly

As well as **legislation** to protect biodiversity there are now many government and non-government conservation organisations and initiatives working hard to protect and enhance our natural ecosystems. Many of these groups rely on **volunteers** who enjoy a weekend of tree planting or weeding in the bush. Such efforts can be given a boost by the findings of this hotspot analysis.

With so much habitat lost, even our **suburban gardens** can provide valuable food and shelter for a range of native animals. This is something to think about when you're tending your own quarter-acre of the forests of east Australia.

On a larger scale, many landholders are now protecting habitat and enhancing wildlife corridors through their properties as part of the **Great Eastern Ranges** initiative.

These types of initiatives offer the best opportunities to promote and coordinate conservation actions across the Forests of East Australia Global Biodiversity Hotspot, and beyond.

Conservation Forests Biodiversity O

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Home > Threatened species > Legislation and framework > NSW Threatened Species Scientific Committee > Determinations

Clearing of native vegetation - key threatening process listing

NSW Scientific Committee - final determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to list "Clearing of native vegetation" as a KEY THREATENING PROCESS on Schedule 3 of the Act. Listing of Key Threatening Processes is provided for by Part 2 of the Act.

The Scientific Committee made a Preliminary Determination to support the proposal to list the "Loss of biodiversity as a result of loss and/or degradation of habitat following clearing and fragmentation of native vegetation." The Scientific Committee considers that "Clearing of native vegetation" is a more appropriate name for this Key Threatening Process.

The Scientific Committee has found that:

1. Clearing of native vegetation is recognised as a major factor contributing to loss of biological diversity.

2. Land Clearance is listed as a Key Threatening Process under the Commonwealth's Environment Protection and Biodiversity Act, 1999.

3. In New South Wales since 1788 at least 61% of the original native vegetation has been cleared, thinned or substantially or significantly disturbed (Environment Protection Authority 1997). The proportion of area cleared varies between region and community type (Native Vegetation Advisory Council 1999) and in some cases has exceeded 90% (for example - South East Grassy Forests - (Keith & Bedward

1999).

4. Clearing of any area of native vegetation, including areas less than 2 hectares in extent, may have significant impacts on biological diversity.

5. Some examples of the impacts of the clearing of native vegetation on biological diversity are:

Destruction of habitat results in loss of local populations of individual species

Destruction of habitat is the major cause of loss of biological diversity. For species of restricted distribution, clearing of native vegetation may result in total extinction, for more widespread species there may be loss of local genotypes.

Fragmentation

Clearing of native vegetation often results in fragmentation, the process by which initially contiguous areas of habitat are separated into a number of smaller areas. Fragmentation impacts include the creation of small isolated populations with limited gene flow between populations, leading to inbreeding depression and reduced potential to adapt to environmental change. Fragmentation also leads to the loss or severe modification of the interactions between species, including those interactions that are important for the survival of species. Small isolated populations may be subject to local extinction from stochastic events. The hostility of the surrounding (cleared) environment is a major factor in limiting movement of organisms between patches. The physical environment within patches may be altered as a result of creation of edges and anthropogenic influences.

Important variables that must be considered in assessing the impacts of fragmentation include the distance apart of the fragments, the area of the fragments and their shape. Increasing the edge/area ratio increases the impacts of edge effects such as changed microclimate and susceptibility to invasion by non-indigenous species. This response of particular species to fragmentation will be affected by the mobility of the species (both as adult and in dispersal stages) and the scale of the fragmentation relative to the environmental scale of the species habitat.

Expansion of dryland salinity

The evidence of a relationship between the clearing of native vegetation and

dryland salinity is substantial. There is evidence that increases in land salinisation can be attributed to rising groundwater consequent on clearing of native vegetation. There is evidence of a relationship between increases in stream salinity and the proportion of catchments cleared.

Riparian zone degradation

Riparian zones and the organisms inhabiting them have been substantially altered as a result of clearing of native vegetation. Clearing of native riparian vegetation has led to bank erosion, reduced nutrient filtering capacity and changes to stream behaviour. Aquatic communities throughout catchments and in coastal waters have been impacted by sedimentation and other changes following clearing of native vegetation.

Increased greenhouse gas emissions

Clearing of native vegetation results in emissions of greenhouse gases, both from burning of cleared vegetation and from the loss of soil organic matter. Agricultural practices after clearing may further contribute to greenhouse gas emissions.

Increased habitat for invasive species

The creation of increased edge habitat and disturbed habitat may permit the establishment and spread of exotic species which may displace native species. A number of native species may also have increased as a result of clearing of native vegetation (for example noisy miner).

Loss of leaf litter layer

Clearing of leaf litter and fallen logs, often associated with clearing and/or burning of the understorey for clearing, removes habitat for a wide variety of vertebrates and invertebrates which live in the leaf litter and in the fallen logs - including reptiles, small mammals, invertebrates, for example, spiders, molluscs, millipedes, ants etc. These impacts may affect ecological functioning. Loss of the leaf litter also exposes bare soil which will be susceptible to soil erosion and drying, and hence affects the soil biota, and may make sites more vulnerable to weed invasion.

Loss or disruption of ecological function

Survival of ecological communities relies on the maintenance of ecological processes and interactions. Loss of habitat and fragmentation may disrupt these

processes. For example, small fragments may not be large enough to support viable populations of pollinators or seed dispersers so that reproduction of plant species will be impaired.

Disruption of ecological processes may continue long after initial clearing of native vegetation has occurred, with consequent continued decline in biological diversity. In cleared and/or fragmented landscapes there may be an extinction debt, whereby, as a consequence of reduction in population size and disturbance to population structure, future local population extinction is inevitable.

Changes to soil biota

Clearing of native vegetation and its replacement by pasture or crops, and the subsequent management of these agricultural systems, may be accompanied by changes to the soil biota, both through the introduction of exotic species and declines in native species.

6. Examples of activities or developments which may result in the clearing of native vegetation include inter alia:

- Conversion of native vegetation to crops, improved pasture or plantations
- Urban development.
- Development for industry and/or infrastructure (for example quarries, mines, factory sites, dams, roads, railways, power lines)
- Removal of understorey e.g. along roadsides or at picnic areas and "cleaning up" of native vegetation. (removal of one stratum may result in the loss or longterm modification of the structure of the native vegetation and also composition and function).

7. Clearing has been identified as a threat to a number of species, communities and populations listed under the Threatened Species Conservation Act (Appendix 1) and could cause species, populations or ecological communities that are not threatened to become threatened (Appendix 2). The determination applies to clearing as a process, regardless of the species, populations and ecological communities affected in a particular instance.

8. In view of the above the Scientific Committee is of the opinion that 'Clearing of native vegetation' adversely affects two or more threatened species, populations or ecological communities and could cause species, populations or ecological communities that are not threatened to become threatened.

Definitions

Clearing

Clearing is defined as the destruction of a sufficient proportion of one or more strata (layers) within a stand or stands of native vegetation so as to result in the loss, or long term modification, of the structure, composition and ecological function of stand or stands. The definition of clearing does not preclude management activities to control exotic species, or Australian species growing outside their natural geographic range.

Destruction

Destruction may include physical removal by cutting, underscrubbing, bulldozing etc., or processes which leave a proportion of one or more strata on site in a dead or dying state [for example ringbarking, poisoning or herbicide spraying (except where specifically targeted at weed control) or modification of abiotic conditions].

Ecological function

Ecological function encompasses the ecological processes/interactions that occur within an ecological community.

Ecological function includes:

- Provision of habitat for native biota
- Provision of food and other resources for native biota
- Maintenance of interactions between species (e.g. pollination, dispersal, mutualism, competition)
- Nutrient cycling and filtering and retention of nutrients
- Carbon storage
- Maintenance of soil processes
- Maintenance of catchment scale hydrological and geochemical processes
- Maintenance of landscape scale ecological processes

Some of the processes and interactions within ecological communities may depend upon the presence of leaf litter and fallen or standing dead trees.

Long term modification of native vegetation

Long term modification of native vegetation is the alteration of the composition, structure or ecological function of an ecological community such that recovery by

natural means will take periods of time from decades to centuries (depending on the plant community concerned) or will require substantial management intervention.

Selective removal or alteration of one or more strata - for example removal and replacement of the understorey or removal of the canopy which can result in alteration of composition, structure and ecological function of the plant community may constitute long term modification.

Loss of native vegetation

Loss of native vegetation is the removal of native vegetation by direct or indirect actions.

Loss of all strata may occur when native vegetation is replaced by infrastructure (for example, buildings or roads) or by the removal of pre-existing native vegetation and its replacement by species not previously present.

Native Vegetation

Native vegetation is made up of plant communities, comprising primarily indigenous species, the composition and structure of which reflects the interactions between plant species, between plants and fauna and with the environment. Native vegetation includes canopy trees (where present), understorey, ground cover and below ground biomass (roots, bulbs and the seed bank).

For the purposes of this Determination native vegetation does not include marine vegetation within the meaning of the Fisheries Management Act.

Introduced species may be prominent in many plant communities, but defining an arbitrary proportion of non-indigenous species, measured at a single point in time, as setting a limit between native and non-native vegetation is inappropriate. For example, at some sites, in 'good' seasons, there can be a very large cover of annual weeds in the ground cover, but at other times, these weeds may provide little or no cover.

If the composition has been altered (as a result of invasion by species outside their natural distributional range or the selective removal of species) or the structure modified, the vegetation is still native vegetation if the ecological functions of the unmodified plant communities are maintained and if composition and structure could be substantially restored in the short term through management intervention. Regrowth and newly colonising stands of indigenous species are native vegetation.

Native vegetation is dynamic and subject to change, either endogenous as in some successions, or in response to external factors - such as seasonal variation, longer term changes in climate (drought-wet cycles) or disturbances such as fire or storm.

Plant Community

A plant community is an assemblage of plant species occupying a particular area.

The composition of a plant community is the assemblage of plant species that occur in the community.

Plant communities are dynamic and subject to change, either endogenous as in some successions, or in response to external factors - such as seasonal variation, longer term changes in climate (drought-wet cycles) or disturbances such as fire or storm.

Stand

A group of co-occurring plants being an observable feature in the landscape, stands may be of different size depending on the types of plants concerned, the availability of habitat and post clearing. A lichen or bryophyte mat on a rock covering a few tens of square centimetres may constitute a stand, as may a forest covering hundreds of hectares.

Stratum (plural strata)

A more or less distinct layer within a stand of vegetation - for example ground layer, understorey, canopy, emergents. Some types of vegetation have a more complex structure and more strata than others. For example a rainforest compared with a grassland.

Structure

The structure of a plant community is the three dimensional distribution of biomass within the community. Structure can be described in terms of more or less distinct layers (strata) - for example ground layer, understorey, canopy, emergents, and the spacing of plants (for example where trees are present, forest is distinguished from woodland by the canopies of the trees in a forest being closer together than those in a woodland).

Proposed Gazettal date: 21/09/01 Exhibition period: 21/09/01 - 26/10/01

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APPENDIX 1

Threatened species, populations and ecological communities adversely affected by this threatening process.

This list is provided to substantiate that the key threatening process satisfies section 15(a) of the Threatened Species Conservation Act. The determination applies to clearing of native vegetation as a process, regardless of the species, populations and communities affected in a particular instance.

Vertebrates

Mammals

Aepyprymnus rufescens - Rufous Bettong

Cercartetus concinnus - Western Pygmy Possum

Cercartetus nanus - Eastern Pygmy-possum

Chalinolobus dwyeri - Large-eared Pied Bat

Chalinolobus picatus - Little Pied Bat

Dasyurus maculatus - Spotted-tailed Quoll

Isoodon obesulus - Southern Brown Bandicoot

Lasiorhinus latifrons - Southern Hairy-nosed Wombat

Macropus dorsalis - Black-striped Wallaby

Ningaui yvonneae - Southern Ningaui

Nyctophilus timoriensis - Greater Long-eared Bat

Petaurus australis - Yellow-bellied Glider

Petaurus norfolcensis - Squirrel Glider

Phascogale tapoatafa - Brush-tailed Phascogale

Phascolarctos cinereus - Koala

Pseudomys apodemoides - Silky Mouse

Pseudomys bolami - Bolam's Mouse

Pseudomys pilligaensis - Pilliga Mouse

Pteropus poliocephalus - Grey-headed Flying-fox Saccolaimus flaviventris - Yellow-bellied Sheathtail-bat Scoteanax rueppellii - Greater Broad-nosed Bat Vespadelus baverstocki - Inland Forest Bat

Reptiles

Anomalopus mackayi - Five-clawed Worm-skink Aprasia inaurita - Mallee Worm Lizard Aprasia parapulchella - Pink-tailed Legless Lizard Cyclodomorphus melanops subsp. elongata - Gunther's Skink Delma impar - Striped Legless Lizard Echiopsis curta - Bardick Hoplocephalus bitorquatus - Pale-headed Snake Hoplocephalus bungaroides - Broad-headed Snake Suta flagellum - Little Whip Snake Tiliqua occipitalis - Western Blue-tongued Lizard Tympanocryptis lineata pinguicolla - Southeastern Lined Earless Dragon Underwoodisaurus sphyrurus - Border Thick-tailed Gecko

Amphibians

Litoria aurea - Green and Golden Bell Frog *Litoria castanea* - Yellow-spotted Tree Frog *Litoria littlejohni* - Littlejohn's Tree-Frog *Litoria raniformis* - Southern Bell Frog

Birds

Amytornis striatus - Striated Grasswren *Amytornis textilis* - Thick-billed Grasswren *Ardeotis australis* - Australian bustard *Botaurus poiciloptilus* - Australasian Bittern

Burhinus grallarius - Bush Stone-curlew Cacatua leadbeateri - Major Mitchell's Cockatoo Calyptorhynchus banksii - Red-tailed Black-Cockatoo Calyptorhynchus lathami - Glossy Black Cockatoo *Certhionyx variegatus* - Pied Honeyeater Charadrius mongolus - Lesser Sand-plover *Cinclosoma castanotus* - Chestnut Quail-thrush Dasyornis brachyptera - Eastern Bristlebird Drymodes brunnepygia - Southern Scrub-robin *Erythrotriorchis radiatus* - Red Goshawk Falco hypoleucos - Grey Falcon Geophaps scripta - Squatter Pigeon Glossopsitta porphyrocephala - Purple-crowned Lorikeet Grantiella picta - Painted Honeyeater Hamirostra melanosternon - Black-breasted Buzzard Hylacola cauta - Shy Heathwren *Ixobrychus flavicollis* - Black Bittern Lathamus discolor - Swift Parrot Leipoa ocellata - Malleefowl Lichenostomus cratitius - Purple-gaped Honeyeater Lichenostomus fasciogularis - Mangrove Honeyeater Lophoictinia isura - Square-tailed Kite Manorina melanotis - Black-eared Miner Monarcha leucotis - White eared Monarch Neophema chrysogaster - Orange-bellied Parrot Neophema pulchella - Turquoise Parrot Neophema splendida - Scarlet-chested Parrot *Nettapus coromandelianus -* Cotton Pygmy-goose *Ninox connivens* - Barking Owl Ninox strenua - Powerful Owl

Oxyura australis - Blue-billed Duck Pachycephala inornata - Gilbert's Whistler Pachycephala rufogularis - Red-lored Whistler Pandion haliaetus - Osprey Petroica rodinogaster - Pink Robin Pezoporus wallicus - Ground Parrot *Podargus ocellatus* - Marbled Frogmouth *Polytelis anthopeplus* - Regent Parrot Polytelis swainsonii - Superb Parrot Pomatostomus halli - Hall's Babbler Psittaculirostris diophthalma coxeni - Double-eyed Fig Parrot Ptilinopus magnificus - Wompoo Fruit-Dove Ptilinopus regina - Rose-crowned Fruit dove Ptilinopus superbus - Superb Fruit-dove Sericornis brunneus - Redthroat Stictonetta naevosa - Freckled Duck Todiramphus chloris - Collared Kingfisher Turnix melanogaster - Black-breasted Button-quail Tyto capensis - Grass Owl Tyto novaehollandiae - Masked Owl Tyto tenebricosa - Sooty Owl Xanthomyza phrygia - Regent Honeyeater

Invertebrates

Gastropods

Meridolum corneovirens - a large land snail *Thersites mitchellae* - a land snail

Insects

Paralucia spinifera - Bathurst Copper Butterfly Synemon plana - the Golden Sun Moth Nurus atlas - a carab beetle Nurus brevis - a carab beetle

Plants

Acacia acanthoclada Acacia atrox ms Acacia bynoeana Acacia courtii Acacia gordonii Acacia pubescens Acacia ruppii Acacia terminalis subsp. terminalis Acronychia littoralis Alexfloydia repens Allocasuarina defungens Allocasuarina glareicola Almaleea cambagei Amyema scandens Ancistrachne maidenii Angophora inopina Austromyrtus fragrantissima Austrostipa metatoris Boronia repanda Boronia ruppi Bothriochloa biloba Brachycome muelleroides Brachycome papillosa Caladenia concolor

Callistemon linearifolius Callitris oblonga Choricarpia subargentea Corchorus cunninghamii Cratystylis conocephala Cryptocarya foetida Cryptostylis hunteriana Cynanchum elegans Darwinia biflora Davidsonia pruriens var. jerseyana Davidsonia sp. A Mullumbimby Digitaria porrecta Dillwynia glaucula Dillwynia tenuifolia Diospyros mabacea Diploglottis campbellii Diuris arenaria Diuris disposita Diuris pedunculata *Diuris* sp. aff. *chrysantha* (Byron Bay) Drynaria rigidula *Elaeocarpus* sp. Rocky Creek Eleocharis tetraquetra Endiandra hayesii Endiandra muelleri subsp. bracteata Epacris purpurascens var. purpurascens Eriocaulon carsonii Eucalyptus approximans Eucalyptus camfieldii Eucalyptus camphora subsp. relicta

Eucalyptus magnificata Eucalyptus mckieana *Eucalyptus parramattensis* subsp. *decadens* Eucalyptus pulverulenta Eucalyptus rubida subsp. barbigerorum Eucalyptus sp. Cattai Floydia praealta Fontainea oraria Genoplesium plumosum Genoplesium rhyoliticum Grammitis stenophylla Grevillea beadleana Grevillea caleyi Grevillea hilliana Grevillea juniperina subsp. juniperina Grevillea parviflora subsp. parviflora Grevillea parviflora subsp. supplicans Grevillea scortechinii subsp. sarmentosa Grevillea wilkinsonii Irenepharsus trypherus Isoglossa eranthemoides Kunzea rupestris Lasiopetalum behrii Lasiopetalum joyceae Lepiderema pulchella Lepidium aschersonii Lepidium hyssopifolium Lepidium monoplocoides Leptospermum thompsonii Leucopogon fletcheri subsp. fletcheri

Lindsaea fraseri Lindsaea incisa Macadamia tetraphylla Marsdenia longiloba Melaleuca biconvexa Melaleuca deanei Melaleuca tamariscina subsp. irbyana Melichrus hirsutus Melichrus sp. Gibberagee Micromyrtus grandis Ochrosia moorei Olax angulata Olearia flocktoniae Owenia cepiodora Persicaria elatior Persoonia bargoensis Persoonia hirsuta Persoonia mollis subsp. maxima Persoonia nutans Persoonia pauciflora Phaius australis Phaius tankervilliae Pimelea curviflora var. curviflora

Prasophyllum affine

Prasophyllum petilum

Prostanthera askania

Prostanthera junonis

Psoralea parva

Pterostylis gibbosa

Pterostylis saxicola

Pultenaea parviflora Pultenaea pedunculata Quassia sp. Mooney Creek Randia moorei Rapanea sp. A Richmond River Rulingia procumbens Rutidosis leptorrhynchoides Sarcochilus weinthalii Senecio garlandii Senna acclinis Sophora tomentosa Styphelia perileuca Swainsona murrayana Swainsona recta Swainsona sericea Syzygium hodgkinsoniae Syzygium moorei Tasmannia glaucifolia Tasmannia purpurascens Tetratheca juncea Thesium australe Triplarina nowraensis Tylophora woollsii Zieria baeuerlenii Zieria floydii Zieria granulata

Populations

Vertebrates

Adelotus brevis - Tusked frog population in the Nandewar and New England Tablelands Bioregion

Callocephalon fimbriatum - Gang-gang Cockatoo population in the Hornsby and Ku-ring-gai Local Government Areas

Calyptorhynchus lathami - Glossy Black-Cockatoo, Riverina population

Eudyptula minor - Little Penguin in the Manly Point Area

Petrogale penicillata - Brush tailed Rock Wallaby, Warrumbungles population

Petaurus norfolcensis - Squirrel Glider in the Wagga Wagga Local Government Area

Petaurus norfolcensis - Squirrel Glider on Barrenjoey Peninsula, north of Bushrangers Hill

Phascolarctos cinereus - Koala, Hawks Nest and Tea Gardens population

Phascolarctos cinereus - Koala in the Pittwater Local Government Area

Menippus fugitivus - Menippus fugitivus population in the Sutherland Shire

Plants

Acacia prominens - Gosford Wattle, Hurstville and Kogarah Local Government Areas

Cryptandra longistaminea - Cryptandra longistaminea in the vicinity of Ellandgrove Road, South Grafton

Darwinia fascicularis subsp. oligantha - Darwinia fascicularis subsp. oligantha population in the Baulkham Hills and Hornsby Local Government Areas

Dillwynia tenuifolia - Dillwynia tenuifolia, Kemps Creek

Glycine clandestina (broad leaf form)- Glycine clandestina (broad leaf form) population in the Nambucca Local Government Area

Hibbertia incana - Hibbertia incana in the Local Government Area of Baulkham Hills

Keraudrenia corrolata var. *denticulata* - *Keraudrenia corrolata* var. *denticulata* in the Hawkesbury Local Government Area

Lespedeza juncea subsp. sericea - Lespedeza juncea subsp. sericea population in the Wollongong Local Government Area

Pomaderris prunifolia - Pomaderris prunifolia in the Parramatta, Auburn, Strathfield and Bankstown Local Government Areas

Wahlenbergia multicaulis - Tadgell's Bluebell in the Local Government Areas of

Auburn, Bankstown, Strathfield and Canterbury

Ecological Communities

Acacia loderi Shrublands

Agnes Banks Woodland in the Sydney Basin Bioregion

Blue Gum High Forest

Blue Mountains Shale Cap Forest in the Sydney Basin Bioregion

Byron Bay Dwarf Graminoid Clay Heath Community

Cadellia pentastylis (Ooline) community in the Nandewar and Brigalow Belt South IBRA Regions

Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions

Castlereagh Swamp Woodland Community

Cooks River Clay Plain Scrub Forest

Cumberland Plain Woodland

Duffys Forest vegetation community

Eastern Suburbs Banksia Scrub

Elderslie Banksia Scrub Forest

Howell Shrublands in the Northern Tablelands and Nandewar Bioregions

Illawarra Lowlands Grassy Woodland in the Sydney Basin Bioregion

Kurnell Dune Forest in the Sutherland Shire and City of Rockdale

Lowland Rainforest on Floodplain in the New South Wales North Coast Bioregion

Low Woodland with Heathland on Indurated Sand at Norah Head

Mc Kies Stringybark/Blackbutt Open Forest in the Nandewar and New England Bioregions

Mount Gibraltar Forest in the Sydney Basin Bioregion

O'Hares Creek Shale Forest

Pittwater Spotted Gum Forest

Robertson Basalt Tall Open-forest in the Sydney Basin Bioregion

Robertson Rainforest in the Sydney Basin Bioregion

Semi-evergreen Vine Thicket in the Brigalow Belt South and Nandewar Bioregions

Shale/Sandstone Transition Forest

Southern Highlands Shale Woodlands in the Sydney Basin Bioregion

Sutherland Shire Littoral Rainforest

Sydney Coastal Estuary Swamp Forest in the Sydney Basin Bioregion

Sydney Coastal River-flat Forest

Sydney Freshwater Wetlands in the Sydney Basin Bioregion

Sydney Turpentine-Ironbark Forest

Western Sydney Dry Rainforest in the Sydney Basin Bioregion

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APPENDIX 2

Species, populations and ecological communities that could become threatened by this threatening process

This list is provided to substantiate that the key threatening process satisfies section 15(b) of the Threatened Species Conservation Act. The determination applies to clearing of native vegetation as a process, regardless of the species, populations and communities affected in a particular instance.

The species listed in the Appendix or populations of these species could become threatened by this threatening process.

Vertebrates

Mammals

Acrobates pygmaeus - Feathertail Glider Antechinus flavipes - Yellow-footed Antechinus Antechinus swainsonii - Dusky Antechinus Isoodon macrourus - Northern Brown Bandicoot Perameles nasuta - Long-nosed Bandicoot Petaurus breviceps - Sugar Glider Pseudocheirus peregrinus - Common Ringtail Possum Pseudomys novaehollandiae - New Holland Mouse Pteropus scapulatus - Little Red Flying-fox Rattus fuscipes - Bush Rat Rattus lutreolus - Swamp Rat Trichosurus caninus - Mountain Brushtail Possum Trichosurus vulpecula - Common Brushtail Possum Wallabia bicolor - Swamp Wallaby

Reptiles

Ctenophorus fordi *Ctenotus brachyonyx Ctenotus ingrami Morethia obscura Proablepharus kinghorni Delma australis Gehyra dubia Oedura monolis Morelia spilota variegata*

Birds

Climacteris picumnus victoriae - Brown Treecreeper (eastern subspecies) *Melanodryas cucullata cucullata* - Hooded Robin (south-eastern form) *Melithreptus gularis* - Black-chinned Honeyeater Neophema bourkii - Bourke's Parrot

Pomatostomus temporalis temporalis - Grey-crowned Babbler (eastern subspecies)

Pyrrholaemus sagittata - Speckled Warbler

Stagonopleura guttata - Diamond Firetail

Strepera versicolor melanoptera - Black-winged Currawong

Invertebrates

Insects

Aryreus hyberius inconstans Cooraboorama canberrae Cressida cressida Keyacris scurra Laxabilla smaragdina Lestis spp. (carpenter bees) Ocbadistes knightorium Ornithoptera richmondia Perunga ochracea Telicota eurychlora Tomoceridae spp. Xanthorhoini (some species)

Plants

Acacia fulva Acianthus amplexicaulis Amphibromus pithogastrus Boronia fraseri Boronia serrulata Brasenia schreberi Callistemon shiressii Discaria pubescens Eucalyptus luehmanniana Eucalyptus michaeliana Euphrasia ciliolata Grevillea granulifera Grevillea longifolia Hibbertia nitida Lomandra brevis Tetratheca neglecta Typhonium eliosurum

Ecological Communities

Grassy Woodland Communities

Riparian Communities

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More information

- Find out more about key threatening processes
- Find out more about the NSW Scientific Committee

Zieria granulata

Page last updated: 28 February 2011