

**Environment and Communications**  
Answers to questions on notice  
**Threatened Species Scientific Committee**

**Question No:** 1  
**Hearing:** Nature Repair Market Bill 2023 and Nature Repair Market  
(Consequential Amendments Bill 2023 - 30 June 2023)  
**Agency:** TSSC  
**Topic:** Meetings with the Threatened Species Scientific Committee  
**Question Date:** 6 July 2023  
**Question Type:** Written

**Senator Jonathon Duniam asked:**

Following on from the evidence at the hearing of 20 June 2023 that the Minister has not spoken directly to the TSSC about the nature repair market Bills: has the full membership of the TSSC still ever had a meeting with the Minister on biodiversity or any other subject covered by her Environment portfolio? If so, on what date(s) did this occur – and what topic(s) did the meeting(s) cover?

**Answer:**

1. Minister Plibersek maintains a strong working relationship with the Threatened Species Scientific Committee, with substantial and regular advice received from the Committee on behalf of all members.
2. The Chair of the Threatened Species Scientific Committee met with Minister Plibersek on 4 July 2022. The Committee's Deputy Chair met with Minister Plibersek on 30 November 2022.
3. Opportunity is being sought for the Minister to meet in person with the full Threatened Species Scientific Committee at the earliest possible convenience.

**Environment and Communications**  
Answers to questions on notice  
**Threatened Species Scientific Committee**

**Question No:** 2  
**Hearing:** Nature Repair Market Bill 2023 and Nature Repair Market (Consequential Amendments) Bill 2023 – 30 June 2023  
**Agency:** TSSC  
**Topic:** Proposed membership of the Nature Repair Market Committee  
**Question Date:** 6 July 2023  
**Question Type:** Written

**Senator Jonathon Duniam asked:**

Does the TSSC have any knowledge about who has been approached to be a member of the Nature Repair Market Committee? If so, do those prospective member(s) each have what TSSC believes to be the requisite expertise to undertake this work?

**Answer:**

1. The TSSC has no knowledge of approaches to individuals regarding membership of the proposed Nature Repair Market Committee.
2. The TSSC suggested two models on size and membership of the proposed Committee in its submission of 3 March 2023.

**Environment and Communications**  
Answers to questions on notice  
**Threatened Species Scientific Committee**

**Question No:** 3  
**Hearing:** Nature Repair Market Bill 2023 and Nature Repair Market (Consequential Amendments) Bill 2023 – 30 June 2023  
**Agency:** TSSC  
**Topic:** Proposed appointment process for members of the Nature Repair Market Committee  
**Question Date:** 6 July 2023  
**Question Type:** Written

**Senator Jonathon Duniam asked:**

By what process, or processes, would the NRM committee members best be appointed?

**Answer:**

1. This question is a matter for government and should be referred to the Department of Climate Change, Energy, the Environment and Water.
2. The newest members of the TSSC were appointed through an open and transparent Expression of Interest process which was welcomed by the scientific community.

**Environment and Communications**  
Answers to questions on notice  
**Threatened Species Scientific Committee**

**Question No:** 4  
**Hearing:** Nature Repair Market Bill 2023 and Nature Repair Market (Consequential Amendments) Bill 2023 – 30 June 2023  
**Agency:** TSSC  
**Topic:** Evidence for determining projects delivering high value outcomes.  
**Question Date:** 6 July 2023  
**Question Type:** Written

**Senator Jonathon Duniam asked:**

What kind of evidence does the TSSC believe would be most needed, and most relevant, in determining whether a proposed activity or project would deliver a high value outcome?

**Answer:**

1. The TSSC provided comment on the evidence required for high-value outcomes in its submissions of March and June 2023.
2. TSSC prioritises the following criteria as those most needed when assessing a project or activity:
  - a. Methods and technologies that are proven and available and based on robust and defensible science.
  - b. Inclusion of achievable restoration or threat abatement activities with outcomes drawn from existing national and internal Standards and planning documents.
  - c. Clear evidence that a proposed activity will succeed (such as methods and technology are available, proven and deliver a permanent benefit) and achieve a standard that equates with a native reference or analog site.
  - d. Robust monitoring and reporting content to demonstrate projected gains are occurring.

**Environment and Communications**  
Answers to questions on notice  
**Threatened Species Scientific Committee**

**Question No:** 5(a) and 5(b)  
**Hearing:** Nature Repair Market Bill 2023 and Nature Repair Market (Consequential Amendments) Bill 2023 – 30 June 2023  
**Agency:** TSSC  
**Topic:** Success of Nature Repair Market and associated risk.  
**Question Date:** 6 July 2023  
**Question Type:** Written

**Senator Jonathon Duniam asked:**

5(a) - Would it be vital, to the success of the nature repair market legislation, that the relevant Federal Government is acting in a very timely way on Threat Abatement Plans, Recovery Strategies and Conservation Advices?

5(b) - What would be the key risks if this approach was not followed?

**Answer 5(a):**

1. This question is a matter for government and should be referred to the Department of Climate Change, Energy, the Environment and Water.
2. The TSSC considers that a desirable objective is that all documents supporting Nature Positive reforms be harmonised and consistent in referencing common content and prioritised for implementation.
3. The TSSC considers that a transition strategy should be developed to update conservation planning documents into the format required by the reforms.

**Answer 5(b):**

1. This question is a matter for government and should be referred to the Department of Climate Change, Energy, the Environment and Water.

**Environment and Communications**  
Answers to questions on notice  
**Threatened Species Scientific Committee**

**Question No:** Hansard (pg 3)  
**Hearing:** Nature Repair Market Bill 2023 and Nature Repair Market (Consequential Amendments) Bill 2023 – 30 June 2023  
**Agency:** TSSC  
**Topic:** Correspondence on the Nature Repair Market between TSSC and Minister Plibersek.  
**Question Date:** 30 June 2023  
**Question Type:** Verbal

**Senator DUNIAM:** Following on from your submission, have you written to the minister to outline your concerns around this bill and what it will or won't do?

**Prof. Marsh:** Our committee has written to the minister twice recently about information relevant to her aspiration of no new extinctions. Those letters have included information relevant to the bill and to the fact that, in order to respond to the biodiversity crisis and the effects of climate change, any bill would need to have agile systems in it which can be updated for new methodologies and also for changing circumstances. We haven't written a detailed submission to the minister about the bill. We have made submissions to this inquiry, as you know, but not directly to the minister, except in the context of her laudable aspiration of no new extinctions.

**Senator DUNIAM:** Have those two letters you mentioned been responded to?

**Prof. Marsh:** The first of those two letters has been. The second letter is rather more recent and I haven't had a response yet, but I'm anticipating I will.

**Senator DUNIAM:** Given the committee's standing and the technical expertise, I think it's important that they are responded to and that your concerns are addressed, given all of you happen to know what you're talking about. I just wonder—perhaps take it on notice—whether you're able to table those letters and the response you've received; I don't need an answer to that now.

**ANSWER:**

1. The following documents are attached in response:
  - a. TSSC's correspondence to Minister Plibersek dated 20 April 2023.
  - b. Minister Plibersek's response to TSSC dated 19 May 2023.
  - c. TSSC's correspondence to Minister Plibersek dated 15 June 2023 for which a response is awaited.



**THE HON TANYA PLIBERSEK MP**

MINISTER FOR THE ENVIRONMENT AND WATER

MS23-001628

Emeritus Professor Helene Marsh AO FAA FTSE FRZS FQA  
Chair, Threatened Species Scientific Committee  
C/- Secretariat, Threatened Species and Communities Governance Section  
Department of Climate Change, Energy, the Environment and Water  
GPO Box 3090  
CANBERRA ACT 2601

Dear Professor Marsh

Thank you for your correspondence of 20 April 2023 regarding matters of immediate concern discussed at the Threatened Species Scientific Committee meetings of March/April 2023. I greatly welcome the Committee's active engagement in the Australian Government's commitment to no new extinctions pledged through the Threatened Species Action Plan.

Collaboration across governments, researchers, community and industry is critical to preventing new extinctions and building momentum on action for the recovery of threatened species. The threats to the five species of particular concern identified in your letter are alarming, and I am pleased to note that a range of actions are actively underway to improve their protection. This includes the important work of the Committee in advising on necessary updates to the conservation listing status of the species as well as on-ground conservation and research.

I acknowledge the considerable contribution of the Committee to the government's Nature Positive Plan, including through design of regional planning and the Nature Repair Market. The expertise of Committee members is a vital contribution to reforms that will enable us to improve outcomes for Australia's threatened biodiversity. Your letter has been passed on to relevant areas of the Department of Climate Change, Energy, the Environment and Water and I have asked them to ensure that your concerns are addressed, including through reform processes currently underway.

Thank you again for bringing the Committee's concerns to my attention.

Yours sincerely

TANYA PLIBERSEK

cc: Dr Fiona Fraser, Threatened Species Commissioner  
Dr Ilse Kiessling, A/g Division Head, Biodiversity Division  
Dr Alison McMorro, Branch Head, Regional Planning and Landscapes Branch  
Ryan Wilson, Branch Head, Biodiversity Markets Branch

19. 5-23

## THREATENED SPECIES SCIENTIFIC COMMITTEE

*Established under the Environment Protection and Biodiversity Conservation Act 1999*

---

Hon Tanya Plibersek MP  
PO Box 6022  
House of Representatives  
Parliament House  
Canberra ACT 2600

Dear Minister

The Threatened Species Scientific Committee applauds your commitment to no new extinctions as articulated in the 'Threatened Species Action Plan: Toward Zero Extinctions'.

In recognition of this commitment, the Committee has decided that I should write to you to bring to your attention relevant information discussed at our meetings. We will formally consider these matters as a standing agenda item at the end of each meeting and write to you as appropriate.

TSSC 91 was held in two stages over several weeks and the second meeting was held on April 18<sup>th</sup> 2023. A summary of matters of relevance to your commitment that arose is outlined below.

### **Immediate concerns**

This information is aimed at alerting you to species of particular concern to the Committee that you might like to discuss with the Threatened Species Commissioner and the Protected Species and Communities Branch of your Department:

1. *Zearaia maugeana* (maugean skate)
2. *Acacia prismifolia* (Diels' wattle)
3. *Pherosphaera fitzgeraldii* (dwarf mountain pine)
4. *Fontainea* sp. Coffs Harbour
5. *Gentiana baeuerlenii* (Baeuerlen's gentian)

The Department can advise you of priorities within these species in the context of the overall government response to your commitment to 'Towards Zero Extinctions'.

### *Other Critically Endangered Species Matters*

The Committee lists at Attachment 1, twenty- seven species that are on course for recommendation for listing as Critically Endangered; some have an assessment at the pre-consultation stage and others are closer to our making a recommendation to you.

This anticipated increase in Critically Endangered species demonstrates the importance of being able to adapt a regional plan as additional information becomes available.

Regional Planning is an initiative that has the Committee's strong in-principle support. However, we consider that a capacity for regular revision of the zoning boundaries in a regional plan or some

other means of protecting newly- listed threatened species and ecological communities and their critical habitats will be critical to your commitment to no new extinctions.

#### *Planning Matters*

The draft recovery plan for four grassland earless dragons (*Tympanocryptis* spp) was tabled for the Committees' consideration prior to release for public consultation. The accompanying briefing from the Department highlighted the generic lessons for species with habitat on urban and city fringes, evidenced by the development of this recovery plan. The Committee noted the potential for these species to be an example of the biodiversity conservation challenges associated with regional planning if new extinctions are to be avoided.

#### *Nature Repair Market Matters*

The Committee recommended uplisting the Mary River turtle from Endangered to Critically Endangered at TSSCC91 (see Appendix 1). This species faces several threats, including habitat destruction from water management through dam and weir construction and predation of nests by foxes.

Turtles can be protected from fox impacts using several methods, including targeted fox control and nest protection, both of which can be implemented by landholders. The biodiversity outcomes of these management activities can be readily measured (i.e., turtle nesting success and hatchling survival should increase immediately), an excellent example of a potential Feral Predator Management Methodology under the Nature Repair Market.

If this example is used, it will be critical to seek appropriate expert input to guide Methodology development and outcome monitoring for all target species.

The Committee noted that the availability of seed is essential to successful restoration of plant communities under the Nature Repair Market. **This matter is as important for nature repair as rare minerals are for renewable energy and could perhaps be a national initiative.** Information is urgently required regarding seed collection, germination, storing, technology deficit, the complexities of putting ecosystems back together in restoration, investment in generating better information and research requirements, abatement cost curve to endorse protection of habitat.

Please contact me if you have any queries on the matters raised in this letter or any other matters that you would like to discuss in more detail.

Sincerely

Helene Marsh

Professor Helene Marsh AO, FAA, FTSE, FRZS, FQA  
Chair Threatened Species Scientific Committee  
Emeritus Professor, Environmental Science  
James Cook University

April 20 2023

## Attachment 1:

Species discussed at TSSC91 and 91A that are on course for a Committee recommendation of listing as Critically Endangered.

Please note that some of these species have an assessment at the pre-consultation stage, while the Conservation and Listing Advices of others are closer to submission to the Minister:

### *Invertebrates*

1. *Pericryptodrilus nanus* (Lord Howe Island earthworm)

### *Fish*

2. *Craterocephalus dalhousiensis* (Dalhousie hardyhead)
3. *Chlamydogobius gloveri* (Dalhousie Goby)
4. *Neosilurus gloveri* (Dalhousie catfish)
5. *Cairnsichthys bitaeniatus* (Daintree Rainbowfish)

### *Frog*

6. *Assa wollumbin* (Wollumbin hip-pocket frog)

### *Reptiles*

7. *Oedura lineata* (Arcadia velvet gecko) (Qld CAM species)
8. *Orraya occultus* (McIlwraith leaf-tailed gecko) (Qld CAM species)
9. *Phyllurus pinnaclensis* (Pinnacles leaf-tailed gecko) (Qld CAM species)
10. *Saltuarius eximius* (Cape Melville leaf-tailed gecko) (Qld CAM species)
11. *Carinascincus palfreymani* (Pedra Branca skink)
12. *Elusor macrurus* (Mary River turtle)

### *Bird*

13. *Turnix olivii* (buff-breasted button-quail)

### *Plants*

14. *Astrotricha* sp. Howe Range (long-leaf star-hair)
15. *Gahnia halmaturina* (West Bay saw-sedge)
16. *Melichrus* sp. Gibberagee (Benwell 97239) (narrow-leaf Melichrus)
17. *Hakea dohertyi* (Kowmung Hakea)
18. *Zieria adenophora* (Araluen Zieria)
19. *Gentiana baeuerlenii* (Baeuerlen's Gentian)
20. *Hibbertia wheelerae* (wheeler's buttercup)
21. *Acacia blayana* (Blay's wattle)
22. *Leptospermum benwellii*
23. *Leptospermum petraeum*
24. *Sannantha whitei*
25. *Nematolepis rhytidophylla* .
26. *Boronia imlayensis*
27. *Caladenia ancylosa* (Genoa spider-orchid)

cc. Dr Fiona Fraser, Threatened Species Commissioner; Dr Ilse Kiessling, Assistant Secretary Protected Species and Communities' Branch; Ms Melissa McEwan, Head of Division, First Nations Heritage, Wildlife and Planning Division; Ms Elizabeth Edye, Environmental Markets; TSSC secretariat.

## **THREATENED SPECIES SCIENTIFIC COMMITTEE**

*Established under the Environment Protection and Biodiversity Conservation Act 1999*

---

Hon Tanya Plibersek MP  
PO Box 6022  
House of Representatives  
Parliament House  
Canberra ACT 2600

Dear Minister

As advised in my letter of 20 April 2023, the Threatened Species Scientific Committee (TSSC) has decided that I should write to you after each TSSC meeting to advise you about matters relevant to your significant commitment to no new extinctions. The Committee now considers this matter as a standing agenda item at the end of each meeting.

TSSC92 was held from 6-9 June. A major focus of the meeting was to determine the 2023 Proposed Priority Assessment List (PPAL), about which I will be writing to you separately.

The purpose of this letter is to advise you of the additional 14 species and one ecological community at Attachment 1 that are on course for recommendation for listing as Critically Endangered. Some of these entities have an assessment at the pre-consultation stage and others are closer to our making a recommendation to you.

As detailed in Attachment 1, although 11 of these species are already protected under state and/or Commonwealth legislation, three species are on-track for listing as threatened for the first time by any Australian jurisdiction. The ecological community was listed as threatened last week in Western Australia for the first time.

Ecological communities do not become extinct but collapse, a situation where the community suffers a drastic, possibly permanent, reduction in carrying capacity for all organisms and the extinctions of some species associated with the community.

Together with the 27 species listed in my letter of 23 April 2023, this anticipated increase in entities listed as Critically Endangered under the EPBC Act demonstrates the very serious and increasing extinction risks to Australia's biota and the importance of being able to adapt planning instruments such as regional plans as additional information becomes available. Reversing the threats of extinction will require on ground action, and it for this reason the TSSC sees the Nature Repair Market Bill as a potentially valuable initiative that could complement existing government and non-government activities, and has engaged with the design team.

Please contact me if you have any queries on the matters raised in this letter or any other matters that you would like to discuss in more detail.

The Committee is very keen to meet with you to discuss the upcoming reforms to the listing and conservation planning for threatened species and ecological communities and the consequential transitional arrangements. TSSC93 is scheduled for 4 -7 September 2023 (on-line). Our next face-to-face- meeting in Canberra (and the last meeting of the current Committee), TSSC 94, will be held on 6 and 7 November 2023. If none of these dates works for you, the full Committee (or I as Chair) would be keen to meet with you out of session at your convenience.

Sincerely,

Helene Marsh

Professor Helene Marsh AO, FAA, FTSE, FRZS, FQA  
Chair Threatened Species Scientific Committee  
Emeritus Professor, Environmental Science  
James Cook University

June 15 2023

cc. Dr Fiona Fraser, Threatened Species Commissioner; Dr Ilse Kiessling, Acting Head Biodiversity Division;  
Alison McMorrow Regional Planning and Landscapes; TSSC Secretariat.

## Attachment 1:

Species and ecological community discussed at TSSC92 that are on course for a Committee recommendation regarding listing as Critically Endangered.

Please note that some of these entities have an assessment at the pre-consultation stage, while the Conservation and Listing Advices of others are closer to submission to the Minister:

### Ecological Community

Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion is listed as threatened in WA; not currently listed as threatened under the EPBC Act

### Species

#### Plants

1. *Androcalva beeronensis* (a flowering plant) listed as Critically Endangered in Qld; not listed under EPBC Act
2. *Androcalva inglewoodensis* (a flowering plant) listed as Critically Endangered in Qld; not listed under EPBC Act
3. *Boronia grimshawii* (Grimshaw's boronia) listed as Critically Endangered in Qld; not listed under EPBC Act
4. *Coleus insularis* (Millmerran mint bush) listed as Critically Endangered in Qld; not listed under EPBC Act
5. *Boronia boliviensis* (Bolivia Hill boronia) listed as Endangered in NSW but proposed for uplisting to Critically Endangered; not listed under EPBC Act
6. *Eucalyptus benthamii* (Camden white gum) listed as Critically Endangered in NSW and Vulnerable under EPBC Act; proposed for uplisting to Critically Endangered under EPBC Act
7. *Leionema ceratogynum* (a dense shrub) not currently listed as threatened in NSW or under EPBC Act
8. *Westringia cremnophila* (Snow River westringia) listed as Endangered in Vic and Vulnerable under EPBC Act but proposed for uplisting to Critically Endangered under both Vic and Commonwealth legislation

#### Fish

9. *Galaxias* sp. nov. Moroka (*Moroka galaxias*) newly described species within the Alpine National Park, Victoria; currently not listed under state or Commonwealth legislation

#### Reptiles

10. *Tilqua scincoides intermedia* (northern blue-tongued skink) is listed as Critically Endangered in Qld; not listed under EPBC Act
11. *Varanus mitchelli* (Mitchell's water monitor) is listed as Critically Endangered in Qld and Vulnerable in NT; not listed under EPBC Act
12. *Lampropholis elongate* (elongate sunskink) primarily discussed at TSSC91 but omitted in previous correspondence; currently not listed under state/territory or Commonwealth legislation

#### Birds

13. *Calidris ferruginea* (curlew sandpiper) listed as Critically Endangered in Qld, Vic and WA, Endangered in NSW and SA and Vulnerable in NT; proposed to retain as Critically Endangered under EPBC Act after re-assessment by TSSC ; listed as migratory and marine under EPBC Act

14. *Numenius madagascariensis* (far eastern curlew) listed as Vulnerable in NT, Endangered in Qld, SA and Tas, Critically Endangered in Vic and WA; proposed to retain as Critically Endangered under the EPBC Act after re-assessment by TSSC; listed as migratory under EPBC Act