

NSW Threatened Species Scientific Committee

Notice of Preliminary Determination

The NSW Threatened Species Scientific Committee, established under the *Biodiversity Conservation Act 2016* (the Act), has made a Preliminary Determination to support a proposal to remove *Lepidium pseudopapillosum* Thell. from the Schedules of the Act by omitting reference to this species from Part 2 of Schedule 1 (Endangered species). The omission of species from the Schedules is provided for by Part 4 of the Act.

How to make a submission

The NSW TSSC welcomes public involvement in the assessment process and places preliminary determinations on public exhibition on the NSW TSSC pages on the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) website. This public exhibition provides an opportunity for the public to comment on this preliminary determination as well as provide any additional information that is relevant to the assessment.

Postal submissions regarding this Preliminary Determination may be sent to:

Secretariat
NSW Threatened Species Scientific Committee
Locked Bag 5022
Parramatta NSW 2124.

Email submissions in Microsoft Word or PDF formats to:

scientific.committee@environment.nsw.gov.au

Submissions close 11 January 2025

What happens next?

After considering any submissions received during the public exhibition period the NSW TSSC will make a Final Determination and a notice will be placed on the NSW DCCEEW website to announce the outcome of the assessment. If the Final Determination is to support a listing, then it will be added to the Schedules of the Act when the Final Determination is published on the legislation website. www.legislation.nsw.gov.au.

Privacy information

The information you provide in your submission may be used by the NSW TSSC in the assessment to determine the conservation status and listing or delisting of threatened or extinct species, threatened populations and threatened or collapsed ecological communities or to assess key threatening processes.

The NSW TSSC may be asked to share information on assessments with NSW Government agencies, the Commonwealth Government and other State and Territory governments to collaborate on national threatened species assessments using a common assessment method and to assist in the management of species and ecological communities.

NSW Threatened Species Scientific Committee

If your submission contains information relevant to the assessment it may be provided to state and territory government agencies and scientific committees as part of this collaboration.

If you wish your identity and personal information in your submission to be treated as confidential you must:

- *request your name be treated as confidential, and*
- *not include any of your personal information in the main text of the submission or attachments so that it can be easily removed.*

Senior Professor Kristine French
Chairperson
NSW Threatened Species Scientific Committee

NSW Threatened Species Scientific Committee

Public Exhibition period: 11/10/2024 - 11/01/2025

Preliminary Determination

The NSW Threatened Species Scientific Committee, established under the *Biodiversity Conservation Act 2016* (the Act), has made a Preliminary Determination to support a proposal to remove *Lepidium pseudopapillosum* Thell. from the Schedules of the Act by omitting reference to this species from Part 2 of Schedule 1 (Endangered species). The omission of species from the Schedules is provided for by Part 4 of the Act.

Summary of Conservation Assessment

The NSW Threatened Species Scientific Committee has found that:

1. *Lepidium pseudopapillosum* Thell. (family Brassicaceae) was first described in 1917, with the type collection cited as being from “Australien: Neu-Süd-Wales: Formbe, rocky lands, leg. E. Smith, VIII. 1902” (Thellung 1917). This resulted in the species being considered native to New South Wales (NSW) (NPWS 2001; CHAH 2024) despite the locality of ‘Formbe’ never being properly identified and remaining unknown.
2. Specimens subsequently collected from the Canberra area in the Australian Capital Territory (ACT) were tentatively included in *Lepidium pseudopapillosum* (Retter and Harden 2000). However, these specimens were considered atypical for the species (Hewson 1981; Retter and Harden 2000), and were later described as a new species, *L. ginninderrense*, considered endemic to the ACT (Scarlett 2001). With the exception of the ambiguously geolocated type specimen, no other specimen-backed record has been made for *L. pseudopapillosum* in NSW (OEH 2023; AVH 2024). The only confirmed specimens of *L. pseudopapillosum* are known from the northern plains of Victoria and the Flinders Ranges in South Australia (Scarlett 2001; Scarlett and Hewson 2019).
3. A recent re-appraisal of the notes attached to the type specimen of *Lepidium pseudopapillosum* has shown that the translation of the locality ‘Formbe’ is an error, and the collection site is correctly ‘Formby’ (Phillips 2024). While several places and properties named Formby were known in Australia at the time of the type collection, none are known from NSW (ICSM 2024). Furthermore, an incorrect association between the type collection site and NSW appears to have arisen from the pre-printed text ‘N.S.W.’ on the specimen label, with this not being strictly indicative that it was sourced from within the state (Phillips 2024). Overall, evidence suggests the specimen most likely came from the Adelaide Hills in South Australia, and was almost certainly not sourced from within NSW (Phillips 2024).
4. The finding that the holotype of *Lepidium pseudopapillosum* is not from NSW, and a lack of any other confirmed record in the state means *L. pseudopapillosum* is not known to be native to NSW (Phillips 2024).
5. In view of the above, the NSW Threatened Species Scientific Committee is of the opinion that *Lepidium pseudopapillosum* Thell. is no longer eligible to be listed as a threatened species under the Schedules of the Act.

NSW Threatened Species Scientific Committee

Overall Assessment Outcome:

Lepidium pseudopapillosum Thell. is not eligible to be considered a species of plant native to New South Wales under Section 4.3 of the Act.

Senior Professor Kristine French
Chairperson
NSW Threatened Species Scientific Committee

NSW Threatened Species Scientific Committee

References:

- AVH (Australian Virtual Herbarium) (2024) *Records of *Lepidium pseudopapillosum**. URL: https://avh.ala.org.au/occurrences/search?taxa=lepidium+pseudopapillosum#tab_mapView (accessed 31 July 2024).
- CHAH (Council of Heads of Australian Herbaria) (2024) *Lepidium pseudopapillosum* in the Australian Plant Name Index URL: <https://biodiversity.org.au/nsl/services/rest/name/apni/84379/api/apni-format> (accessed 31 July 2024).
- Hewson HJ (1981) The genus *Lepidium* L. (Brassicaceae) in Australia. *Brunonia* **4**: 217–308.
- ICSM (Intergovernmental Committee on Surveying and Mapping) (2024) Composite Gazetteer of Australia. URL: <https://placenames.fsdf.org.au/> (accessed 31 July 2024).
- NPWS (NSW National Parks and Wildlife Service) (2001) *Recovery Plan for the “lost” threatened flora of south-eastern NSW*. (NSW National Parks and Wildlife Service, Hurstville).
- OEH (Office of Environment and Heritage) (2023) Formbe Peppercross – profile. URL: <https://threatenedspecies.bionet.nsw.gov.au/profile?id=10977> (accessed 31 July 2024).
- Phillips GP (2024) Notes on the type specimen of *Lepidium pseudopapillosum* (Brassicaceae) and its presence and conservation status in New South Wales, Australia. *Telopea* **27**: 135–139.
<https://doi.org/10.7751/telopea18798>
- Retter L, Harden GJ (2000) Brassicaceae. In: Harden GJ (ed), *Flora of New South Wales. Volume 1*. Revised edition. Pp. 459–486. (UNSW Press: Kensington)
- Scarlett NH (2001) *Lepidium ginninderrense* (Brassicaceae), a new species from the Australian Capital Territory. *Muelleria* **15**: 69–74.
- Scarlett NH, Hewson HJ (2019) Brassicaceae (partly) (version 1). In Kellermann J (ed.), *Flora of South Australia* (ed. 5). 25 pp. (State Herbarium of South Australia: Adelaide).
- Thellung A (1917) III. Alabstra Diversa in Mitteilungen aus dem botanischen Museum der Universität Zurich (LXXV). *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zurich* **61**: 462–464.