

Threatened Species of the Northern Territory

Sporobolus latzii

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Conservation status

Australia: Not listed

Northern Territory: Vulnerable



Photo: D. Albrecht

Description

Sporobolus latzii is a fairly robust erect tufted perennial grass with flowering stems to almost 1 m high from a short rhizome. The leaves are minutely roughened, flat and to 16 cm long and 3.5 mm wide. Spikelets are 2-2.3 mm long and arranged in a panicle 11-13 cm long. The main branches of the inflorescence are solitary and spikelet-bearing throughout.

Flowering: recorded in May.

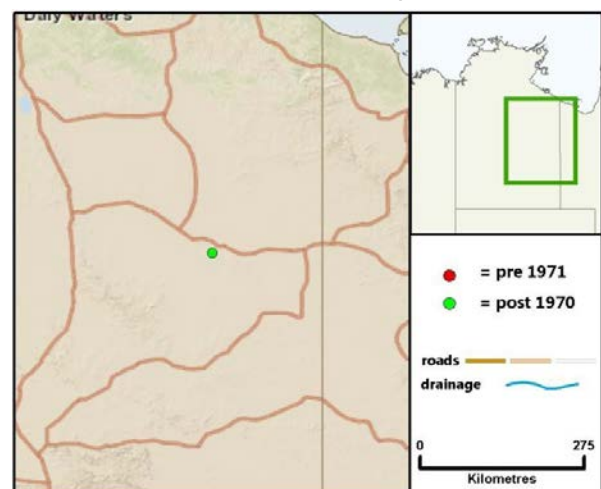
Distribution

Sporobolus latzii is endemic to the Northern Territory (NT) where it is known only from the type locality in the Wakaya Desert (east of the Davenport Ranges and south of the Barkly Tablelands).

The species was originally discovered in 1993 during a biological survey of the Wakaya Desert (Gibson et al. 1994). Some 40 swamps in the Wakaya Desert and additional similar swamps to the north of the Wakaya Desert were visited in the course of this survey work, but *Sporobolus latzii* was only found at the one site (the type locality; P.Latz pers. comm.) and

less than 200 plants were found there. Given, however, that the region is relatively poorly sampled (with less than two flora survey or collection points per 100 km²) the existence of additional populations cannot presently be ruled out. The swamps surveyed represent approximately one third to one half of the potential swamps in the region (P. Latz pers. comm.).

Conservation reserves where reported: None



Known locations of *Sporobolus latzii*

Ecology

Sporobolus latzii occurs in clay soil on the edge of a Coolabah-fringed seasonal swamp.

Associated species include *Cullen cinereum* and *Leptochloa fusca*.

Conservation assessment

Sporobolus latzii could be assessed as Endangered based on d): number of mature individuals <250. However, as the Wakaya Desert is not a highly sampled area, with less than two flora survey or collection points per 100 km², there remains an element of data deficiency and the possibility of further small subpopulations being located. Therefore, the species is currently classified in the NT as **Vulnerable** (under criteria D1 + D2) based on:

- number of mature individuals <1 000;
- restricted to fewer than five known locations; and
- threats from human activities and inappropriate fire regimes.

Threatening processes

The Wakaya Desert experiences frequent, short-interval wildfire that may result in surface sand deposition into clay depressions, potentially making them unsuitable habitat for this species (see Latz 2007). In addition, competition from Buffel Grass (*Cenchrus ciliaris*) is a potential future threat as this species is becoming more common in Wakaya Desert just to the north of the *S. latzii* population (P.Latz pers. comm.).

The Wonarah phosphate mine is due to commence operating in this area in the near future and White et al. (2000) note that *Sporobolus latzii* may be reliant on the project area for its continued persistence. There is a cultural exclusion zone associated with the ephemeral lake land unit where *S. latzii* occurs which will not be disturbed by mining operations.

Conservation objectives and management

A land unit verification survey conducted in the 2009 Wet season targeted *S. latzii*, but it was not recorded. Further survey work is not planned within the cultural exclusion zone.

Further survey is required in the Wakaya Desert to determine whether additional populations are present, particularly to the east and south-east of the type locality. The establishment of monitoring plots would assist in gathering data on longevity of individuals, recruitment events and changes in population structure over time. An assessment of the extent to which mobile sands may engulf the *S. latzii* population is required. Invasion of the site by Buffel Grass also needs to be monitored and management actions undertaken to prevent it from impacting on the site. Careful fire management is also required to ensure that large hot summer fires do not burnt out the site.

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References

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- Simon, B.K. & Jacobs, S.W.L. (1999) Revision of the genus *Sporobolus* (Poaceae, Chloridoideae) in Australia. *Australian Systematic Botany* 12(3): 399, Figs. 2E, 16
- White, M., Albrecht, D., Duguid, A., Latz, P. and Hamilton, M. (2000). *Plant species and sites of botanical significance in the southern bioregions of the Northern Territory; volume 2: significant sites*. A report to the Australian Heritage Commission from the Arid Lands Environment Centre. Alice Springs, NT.