Nature Conservation (Small Purple Pea) Conservation Advice 2019

Notifiable instrument NI2019-710

made under the

Nature Conservation Act 2014, s 90C (Conservation advice)

1 Name of instrument

This instrument is the *Nature Conservation (Small Purple Pea) Conservation Advice 2019.*

2 Commencement

This instrument commences on the day after its notification day.

3 Conservation advice for Small Purple Pea

Schedule 1 sets out the conservation advice for Small Purple Pea (*Swainsona recta*).

Arthur Georges Chair, Scientific Committee 6 November 2019

Schedule 1

(see s 3)





CONSERVATION ADVICE

SMALL PURPLE PEA - Swainsona recta

CONSERVATION STATUS

The Small Purple Pea Swainsona recta A.T. Lee, is recognised as threatened in the following jurisdictions:

International Endangered, International Union for Conservation of Nature (IUCN) Red List
National Endangered, Environment Protection and Biodiversity Conservation Act 1999.

ACT Endangered, Nature Conservation Act 2014

NSW Endangered, Biodiversity Conservation Act 2016

VIC Threatened, Flora and Fauna Guarantee Act 1988

Endangered, Advisory List of Rare and Threatened Plants in Victoria

ELIGIBILITY

The factors that made the Small Purple Pea eligible for listing as Endangered in the ACT Threatened Native Species List in the ACT are included in the Listing Background section below.

DESCRIPTION AND ECOLOGY

The Small Purple Pea is a slender, erect perennial plant that produces several rigid stems 20-30 cm high. It has a thick taproot that can extend at least 60 cm below the soil surface (NSW OEH 2012). The leaves of the species are odd pinnate, they are composed of 7-11 narrow leaflets, 5-7 cm long. The terminal leaflet is distinctly longer than adjacent laterals. The species produces 10-21 racemes (that range from 10-27 cm long), which bear purple or blue-purple flowers that are 5–6mm long. Individual flowers are borne on short recurved stalks, 0.1-0.3 cm long; they have two distinct white spots or short stripes on the base of the standard (central) petal (NSW OEH 2012). The pods are rounded-oblong (7-11 mm long and 4-6 mm wide) and are hairless except along the suture and base. Pods contain several small, hard-coated kidney shaped seeds that are approximately 2 mm long (Briggs and Leigh 1990; Leigh and Briggs 1992).

The Small Purple Pea is a perennial forb that persists as woody rootstock throughout late summer and autumn. It re-sprouts between April and Small I



Small Purple Pea (Emma Cook – Canberra Nature Map)

August and flowers during spring. Peak flowering occurs during a 2–3 week period in October. By the end of December the seed is ripe and individuals enter dormancy (NSW OEH 2012). Insects are the primary means of pollination and seed set is assumed to be influenced by annual climatic variation (NSW OEH 2012). A plant is most likely to flower when there are 7–15 nights equal to or less than -4°C (Wilson et al. 2016). The life span of the Small Purple Pea is unknown, however, individual plants have been monitored for over 30 years and they may live up to 50 years (NSW OEH 2012).

DISTRIBUTION AND HABITAT

The Small Purple Pea was relatively widespread in the past, recorded in north-eastern Victoria and the south and central-western slopes and tablelands in NSW. Over the past 80 years the known range of the species has declined considerably. The distribution is now fragmented into two clusters of populations with one in central eastern NSW (between Wellington and Mudgee) and the other in the Canberra – Williamsdale district (ACT Government 2019). The Small Purple Pea has been recorded in the ACT at Aranda, Mount Taylor, Farrer Ridge and Kambah.

In the ACT region, the Small Purple Pea occurs on grey sandy or stony loams, on all aspects of undulating terrain (Briggs and Leigh 1990). It occurs in open woodland with a grassy understorey that occasionally may have a low shrub component and groundcover that includes a wide range of native forbs (NSW OEH 2012; NSW OEH 2017). Most ACT sites have a midstorey shrub layer (ACT Government 2019).

THREATS

The main threats to the Small Purple Pea in the ACT (ACT Government 2019) include:

- Woodland habitat loss, degradation and fragmentation due to urban development
- inbreeding and reduced genetic diversity
- invasive plants
- browsing by native and feral herbivores
- inappropriate fire regimes
- indirect climate change impacts, including increased drought conditions, changes in plant species composition and fire frequency and intensity.

MAJOR CONSERVATION OBJECTIVE

The priority objective of the action plan (ACT Government 2019) is to preserve the Small Purple Pea in perpetuity in the wild across its natural geographic range in the ACT and contribute to the regional and national conservation of the species.

CONSERVATION ISSUES

Careful habitat management is required for the Small Purple Pea (Australian Government 2015) in the lowland grassy woodlands, including the endangered Yellow Box – Blakely's Red Gum Grassy Woodland. Conservation actions identified in Threatened Species Strategy (Aust Government 2015) that support the National Recovery Plan (NSW OEH 2012) actions, and confirmed by the ACT action plan (ACT Government 2019) include:

- protect sites from soil disturbance, recreation, vehicles, trampling, grazing
- control invasive weeds from existing sites
- monitor regularly
- support seed collection and surveys
- enhance the genetics of small populations and establish new populations through translocations
 in accordance with translocation guidelines (ACT Government 2018)

ecological burns.

OTHER RELEVANT ADVICE, PLANS OR PRESCRIPTIONS

- National Recovery Plan for the Small Purple Pea (NSW OEH 2012)
- Australia's Threatened Species Strategy (Australian Government 2015)
- Small Purple Pea Draft Action Plan (ACT Government 2019)
- Conservator Translocation Guidelines (ACT Government 2018)

LISTING BACKGROUND

The Small Purple Pea was listed in the ACT as an Endangered species on 15 April 1996 in accordance with section 21 of the *Nature Conservation Act 1980*. At that time, the Flora and Fauna Committee (now the Scientific Committee) made the listing recommendation on the grounds that its abundance had been reduced due to habitat loss and changed land management and concluded that the assessment satisfied the following criteria:

- 1.1 Species is known or suspected to occur in the ACT region and is already recognised as endangered or presumed extinct in an authoritative international or national listing.
- 1.2 Species is observed, estimated, inferred or suspected to be at risk of premature extinction in the ACT region in the near future, as demonstrated by:
 - 1.2.1 Current severe decline in population or distribution from evidence based on:1.2.1.1 direct observation, including comparison of historical and current records.
 - 1.2.4 Severely fragmented distribution for a species currently occurring over a small range or having a small area of occupancy within its range.

The Small Purple Pea is eligible for listing as Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as Endangered under the *Endangered Species Protection Act 1992* (Cwlth).

REFERENCES

- ACT Government 2018. Nature Conservation (Translocation of Native Flora and Fauna) Conservator Guidelines. Department of Environment, Planning and Sustainable Development, Canberra. https://www.legislation.act.gov.au/ni/2017-650/
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- Australian Government 2015. *Threatened Species Strategy Improving the trajectories of 30 plants by 2020.* Australian Government. Canberra.
 - https://www.environment.gov.au/system/files/resources/95291b55-a0d9-4cf9-b6de-8f9e8b561dd2/files/factsheet-threatened-species-strategy-30-plants.pdf
- Canberra.naturemapr.org (CNM) 2019. *Canberra Nature Map*. Accessed 20 August 2019 from: https://canberra.naturemapr.org/Community/Species/Sightings/201?ViewMode=Detail
- Briggs JD and Leigh JH 1990. *Delineation of important habitats of threatened plant species in south- eastern New South Wales*. Research Report to the Australian Heritage Commission. CSIRO,
 Canberra.
- Leigh JH and Briggs JD 1992. *Threatened Australian Plants*. Australian National Parks and Wildlife Service, Canberra.

- NSW OEH 2012. *National Recovery Plan for Small Purple Pea (Swainsona recta)*. NSW Office of Environment and Heritage, Hurtsville. http://www.environment.gov.au/resource/small-purple-pea-swainsona-recta-national-recovery-plan
- NSW OEH 2017. *Small Purple Pea Profile*. NSW Office of Environment and Heritage. Accessed 16 August 2019 from: https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10782
- Wilson N, Seddon J and Baines G 2016. Factors influencing a population of the Small Purple Pea (Swainsona recta). Technical Report 36. Environment and Planning Directorate, ACT Government, Canberra.

FURTHER INFORMATION

Further information on the related Action Plan or other threatened species and ecological communities can be obtained from: Environment, Planning and Sustainable Development Directorate (EPSDD). Phone: (02) 132281, EPSDD Website: http://www.environment.act.gov.au/cpr