Heritage (Decision about Registration of Small Purple Pea Habitat) Notice 2011 -

Notifiable Instrument NI 2011 - 127

made under the

Heritage Act 2004 section 42 Notice of Decision about Registration

1. Revocation

This instrument replaces NI 2010 - 337

2. Name of instrument

This instrument is the Heritage (Decision about Registration for the Small Purple Pea Habitat) Notice 2011 -

3. Registration details of the place

Registration details of the place are at <u>Attachment A</u>: Register entry for the Small Purple Pea Habitat.

4. Reason for Decision

The ACT Heritage Council has decided that the Small Purple Pea Habitat meets one or more of the heritage significance criteria at s 10 of the *Heritage Act 2004*. The register entry is at Attachment A.

5. Date of Registration

10 March 2011

Gerhard Zatschler Secretary ACT Heritage Council 10 March 2011

Appendix A



AUSTRALIAN CAPITAL TERRITORY

HERITAGE REGISTER (Registration Details)

Place No:

For the purposes of s. 33 of the *Heritage Act 2004*, an entry to the heritage register has been prepared by the ACT Heritage Council for the following place:

Small Purple Pea (Swainsona recta) Habitat (Aranda, Kambah and Mt Taylor)

DATE OF REGISTRATION

Notified: 11 March 2011 Notifiable Instrument: 2011/

Copies of the Register Entry are available for inspection at the ACT Heritage Unit. For further information please contact:

The Secretary ACT Heritage Council GPO Box 158, Canberra, ACT 2601

Telephone: 13 22 81 Facsimile: (02) 6207 2229

IDENTIFICATION OF THE PLACE

The Place Small Purple Pea (Swainsona recta) Habitat (Aranda, Kambah and Mt Taylor) includes three separate sites:

Block 1550 (part) District of Belconnen (see map entitled 'Small Purple Pea Habitat Aranda')

Block 1552 (part) District of Tuggeranong and

Blocks 13, 14, 15 Section 487 Kambah in the Australian Capital Territory (see map entitled 'Small Purple Pea Habitat, Mt Taylor and Kambah').

At Mount Taylor and Aranda the sites include a buffer of 100 metres around the plants. At Kambah the site is defined by the nominated suburban blocks that together surround the habitat of the plants, which is fenced.

Specific location details should be kept confidential to avoid unauthorised disturbance or removal (especially Mt Taylor and Aranda).

STATEMENT OF HERITAGE SIGNIFICANCE

The sites that comprise the Place are the only known locations in the ACT that support populations of the Small Purple Pea. These sites provide habitat conditions suitable for maintaining the species in the ACT. The ACT occurrences are part of Canberra – Williamsdale cluster of populations (the other cluster being in northeastern Victoria).

The Kambah site illustrates the kind of understorey habitat that preceded urban development. The Aranda site illustrates one of the herbs characteristic of the understorey of Yellow Box Red Gum Grassy Woodlands (an endangered ecological community), and the Mt Taylor site is in open woodland and contains the largest population of this endangered species in the ACT.

The Small Purple Pea is listed as an endangered species under ACT, NSW, Victoria and Commonwealth legislation. It has been assessed to be at risk of premature extinction in the ACT region in the medium-term future. Due to the small and fragmented nature of the ACT populations these are highly vulnerable to any site disturbance (Figure 1 and Figure 2).

FEATURES INTRINSIC TO THE HERITAGE SIGNIFICANCE OF THE PLACE

Features intrinsic to the heritage significance of the place which require conservation include:

- Each of the three sites that comprise the Place contains one of the only populations of the endangered Small Purple Pea now found in the ACT.
- Each site is small and separated from the others and each is highly vulnerable to any site disturbance.
- The sites are a remnant of open woodland vegetation that was once common in lower elevations of the ACT, with a native grassland understorey (of varying quality) dominated by Kangaroo Grass (*Themeda triandra*) Poa Tussock (*Poa sieberiana* var *sieberiana*) or speargrasses.

REASON FOR REGISTRATION

Small Purple Pea (Swainsona recta) Habitat (Aranda, Kambah and Mt Taylor) has been assessed against the heritage significance criteria and been found to have heritage significance when assessed against one criterion (I) under the ACT Heritage Act.

ASSESSMENT AGAINST THE HERITAGE SIGNIFICANCE CRITERIA

Pursuant to s.10 of the *Heritage Act 2004*, a place or object has heritage significance if it satisfies one or more of the following criteria. Significance has been determined by research as accessed in the references below. Future research may alter the findings of this assessment.

(I) for a place—it is a significant ecological community, habitat or locality for any of the following:

(ii) rare, threatened or uncommon species;

The Small Purple Pea (*Swainsona recta*) is listed as an endangered species under ACT, NSW, Victoria and Commonwealth legislation. In 1997, fewer than 4000 plants were recorded across its fragmented distribution (ACT Government 1997).

There three main populations of the Small Purple Pea in the ACT and these are small and fragmented and are therefore highly vulnerable to any site disturbance. The species was once widespread from north-eastern Victoria to central western NSW. Its range and numbers are now dramatically reduced. Previous records of the species in the ACT are in locations now under residential development.

(iii) species at the limits of their natural range;

The distribution of the Small Purple Pea included the Tablelands of NSW. The ACT locations are at or near to the limit of their natural range.

SUMMARY OF THE PLACE HISTORY AND PHYSICAL DESCRIPTION

The Small Purple Pea is a slender, erect perennial plant producing several rigid stems 20–30 cm high with a woody root. The leaves are pinnate, 5–7 cm long with 7–11 narrow leaflets. Its flowers are purple to bluish, 5–6 mm long, borne in racemes (spikes) of 10 to 21 that are 10–27 cm long. The plants re-sprout each autumn and winter from a woody root and flower in spring over 2-3 weeks. Seed ripens in late December to early January and shoots die, leaving the perennial rootstock. The pods are rounded to oblong, 7–11 mm long and 4–6 mm wide and hairless except along the suture and base. It is thought that perennial rootstock survives for approximately 20 years but because it can persist as dormant rootstock potentially for several years, it is difficult to determine mortality and recruitment rates

The Small Purple Pea is found in open woodland with a native grassy understorey dominated by Kangaroo Grass (*Themeda triandra*), Poa Tussock (*Poa sieberiana* var. *sieberiana*) or spear grasses. In the ACT region, soils are grey sandy or stony loams on undulating terrain and all aspects.

The Small Purple Pea was once widespread from north-eastern Victoria to central western NSW. Its range and numbers are now dramatically reduced. Fewer than 4000 plants now survive with the largest known population containing about 3400 plants. This population extends along the Tralee/Williamsdale railway and road easement along the NSW/ACT border of which most plants fall within the NSW border. This cluster of Small Purple Pea is one of only two remaining population clusters (the other is in central eastern NSW between Wellington and Mudgee)

Decline of this species in the ACT is due to habitat loss and degradation from urban development; and weed invasion. Preceding these threats, degradation occurred due to agricultural land uses and stock grazing.

The largest of the three ACT populations of the Small Purple Pea is found in the Mt Taylor Nature Reserve; a smaller population exists in suburban Kambah and a third population of only a very few plants occurs in an area adjacent to the Aranda Bushland Nature Reserve. In 2003, 169 plants flowered at the Mt Taylor site. This is the number of plants that were last recorded at this site. There have previously been 12 plants recorded at the Kambah site; in 2003 seven of the plants were flowering; and when last counted in 2004 10 plants were recorded. In 2003 a population of several plants was found near Aranda; 3 plants were last counted there in 2004.

References

ACT Government 1997 Small Purple Pea (*Swainsona recta*): An Endangered Species Action Plan No. 9. (Environment ACT, Canberra).

ACT Government 2004 Woodlands for Wildlife: ACT Lowland Woodland Conservation Strategy. Action Plan No. 27. (Environment ACT, Canberra).

NON-STATUTORY BACKGROUND INFORMATION

The Small Purple Pea was once relatively widespread, found in north-eastern Victoria and the south and central western slopes and tablelands of NSW. Over the past 60 years its known range has been drastically reduced, and fragmented. In the ACT region, the species was previously recorded but no longer occurs in the following areas: Queanbeyan (1887); Black Mountain (CSIRO) (1939); O'Connor (1961); Harman (1964); Kambah (1980); and Mawson (1983) (ACT Government 1997). There are now only two clusters of populations in NSW (of which one borders the ACT and three main remnant populations in the ACT

The population of Small Purple Pea at Mount Taylor is the largest in the ACT. It is found in a grassy woodland habitat within Canberra Nature Park - the Mount Taylor Woodland Reserve. The size of the area where the species is found is approximately 0.03 ha and it is located on the South Western side of Mt Taylor. Wildlife Research and Monitoring (Parks, Conservation and Lands) has implemented regular monitoring of the Small Purple Pea since 1997, after it was declared an endangered species. Plants have been tagged in order to try to identify mortality and recruitment rates and to inform management of the population. In 2002 and 2003 new locations of flowering plants were tagged as well as some of the previously flowering plants. Due to monitoring and tagging of this species at Mt Taylor there has been an increase in the known population at this site. In 2003 169 plants flowered; this is the number of plants that were last recorded at this site.

A second population of 12 plants (previously recorded) is located in suburban Kambah on 3 undeveloped house blocks on the corner of McTaggart Crescent and De Sailly St. These occur on an area of secondary grassland over 0.06 ha. In 2001 the plot was burnt, and ten of the original tagged plants were subsequently recorded. In 2003 seven of the plants were flowering; and in 2004 10 plants were recorded (ACT Government, 2004). The area has since been designated a Swainsona Reserve.

In October 2003 several plants were found in southeast Belconnen in an area of intact Yellow Box – Red Gum grassy woodland near William Hovell Drive. This area is a block bounded by William Hovell Dr, Caswell Dr and the Aranda Bushland boundary - just outside the Canberra Nature Park. It lies between the Aranda Snowgums site and Caswell Drive. Three plants were last counted at this site in 2004.



Figure 1. Small Purple Pea in flower



Figure 2. Small Purple Pea