

Conservation Action Plan

Crimson spider orchid (*Caladenia concolor*)

This plan has been prepared in accordance with the requirements of s.78C of the National Parks and Wildlife Regulation 2019 (Reg.) in relation to an Asset of Intergenerational Significance (AIS) as declared under s.153G of the *National Parks and Wildlife Act 1974*.

Site details

AIS site	AIS-ES-231, AIS-ES-232, AIS-ES-233, AIS-ES-234, AIS-ES-235, AIS-ES-236
Site location	An area of 55 hectares in Benambra National Park An area of 12 hectares in Bango Nature Reserve An area of 9 hectares in Burrinjuck Nature Reserve
NPWS contact	Team Leader - Conservation, Southern Ranges Branch

Environmental values

This table sets out the environmental values for which the land was listed as an AIS (Reg. 78C(3)(a)).

Identified value(s)	Value description
Important habitat for crimson spider orchid	The endangered crimson spider orchid is associated with regrowth woodland on granite ridge country. The species produces a single leaf, around 15 centimetres long, and a flower stem that grows up to 30 centimetres tall with one or two deep purplish-red flowers. The flower has five long spreading petals and sepals set around a broad down-curved labellum ('lip').

Key risks to environmental values

This table sets out the key risks to the environmental values of the land (Reg. 78C(3)(b)).

Key risk(s)	Description
Inappropriate fire regimes	Inappropriate fire frequency and intensity that degrades habitat through changes to the structure and function of associated vegetation communities may lead to a decline or extinction of crimson spider orchid population at the sites. This risk is exacerbated by the restricted distribution and small population size of the species at the sites.
Weeds	Habitat degradation and competition through invasion, establishment, intensification and/or spread of weeds (e.g., annual exotic grasses, St John's wort and exotic pine trees) to the extent that recruitment or establishment of plants is impaired.
Feral herbivores	Damage to individual plants and degradation of crimson spider orchid habitat by introduced herbivores, such as feral goats, through grazing and trampling.
Feral pigs	Damage to individual plants and degradation of crimson spider orchid habitat by feral pigs, through grazing and trampling.
Interactions with native species	Degradation of habitat by native macropods through trampling and browsing may lead to a reduction in suitable habitat and affect the persistence of crimson spider orchid at the sites.
Disturbance	Authorised infrastructure maintenance activities (e.g., road and trail maintenance) and visitor use that leads to degradation of habitat and damage to individuals through damage to substrate and trampling of individual plants.

Conservation activities

This table sets out the conservation activities required to:

1. Control, abate or mitigate the key risks and
2. maintain, restore and remediate the environmental values of the land (Reg. 78C(3)(c)).

Key risk(s)	Impacted site(s)	Conservation activities
Inappropriate fire regimes	All sites	<ul style="list-style-type: none"> • Develop guidance on the appropriate fire management for the habitat of the crimson spider orchid within 12 months of adoption of this plan and update as required. This guidance must provide for: <ul style="list-style-type: none"> - maintenance of an appropriate fire regime by developing and implementing a site-specific burn plan for the declared areas - implementation of any required fire protection and response measures in the declared areas - integration of site-specific requirements into NPWS and NSW Government bushfire planning, risk management and operational response arrangements. • Implement fire management consistent with the guidance.

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Key risk(s)	Impacted site(s)	Conservation activities
Weeds	All sites	<ul style="list-style-type: none"> Remove weed species to the extent required to ensure weeds do not have a negative impact on the crimson spider orchid, by targeted application of physical, biological and/or chemical weed control.
Feral herbivores	AIS-ES-235 AIS-ES-236	<ul style="list-style-type: none"> To the extent practicable, reduce the density of feral goats to a level that is not having an ecologically significant impact on the crimson spider orchid, and maintain the density at or below that level, by shooting and other approved integrated control measures such as mustering and removal.
Feral pigs	AIS-ES-235 AIS-ES-236	<ul style="list-style-type: none"> To the extent practicable, reduce the density of feral pigs to a level that is not having an ecologically significant impact on the crimson spider orchid, and maintain the density at or below that level by trapping, baiting and shooting.
Interactions with native species	AIS-ES-233	<ul style="list-style-type: none"> As required, install and maintain protective barriers or fences to prevent trampling and browsing from native macropods.
Disturbance	All sites	<ul style="list-style-type: none"> Undertake periodic reviews to identify whether infrastructure maintenance and/or visitor use is having an adverse impact on crimson spider orchid. If adverse impacts are observed implement actions to mitigate the impacts. This may include: <ul style="list-style-type: none"> upgrade and/or realignment of trails to avoid known plants and habitat installation of signage or more discrete marking systems to delineate exclusion areas to prevent ground disturbance, slashing or herbicide use near sites. installation of barriers or other suitable protective structures to minimise impacts from authorised and unauthorised visitor use If required, develop and implement guidance for staff and contractors about appropriate maintenance practices that minimise impacts to crimson spider orchid population and habitat.
All risks	All sites	<ul style="list-style-type: none"> Establish and maintain ex-situ living collection or seedbank from a genetically representative sample of the population.

Other land management activities

Within the declared land there are existing assets and infrastructure of NPWS and other external service providers, including public utilities.

Maintenance operations (including inspection, emergency works and routine and standard maintenance) that are exempt development in accordance with the *Environmental Planning and Assessment Act 1979*, and which are performed on and around existing assets and infrastructure, are authorised under this conservation action plan (CAP) provided such operations are undertaken in a manner that aims to minimise the risk to the declared environmental values of the land and with any other required consents or approvals.

All maintenance operations on the declared land are to be undertaken in accordance with this CAP.

Measuring and reporting

This table sets out the requirements for measuring and reporting on health and condition (Reg. 78C(3)(d)).

Attribute	Metric	Method
Health and condition of the crimson spider orchid population	Population count	Design, and implement every 2 years, a survey to generate a count of the number of flowering individuals in the population.

A report on the health and condition of the value for which this AIS was declared will be prepared and published on the Department of Planning and Environment website: www.environment.nsw.gov.au. The report will summarise the baseline and current health and condition of the values of the declared land and its overall trajectory.

Evaluation of conservation action plans

This CAP will be amended or replaced as new information becomes available that helps improve our management of the identified assets (Reg. 78H).

The Secretary must appoint a scientist, or a panel of scientists, to conduct a review, as soon as possible after the period of five years from the first approval of a CAP, to examine whether CAPs have been effectively implemented (Reg. 78J(1)).

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Approved by	Atticus Fleming, Acting Coordinator General, Environment and Heritage Group
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