



## SAVING OUR SPECIES

# Trailing Woodruff

2020-2021 annual report card

### Overall status\*

- Populations at all sites are known to be on track.
- **Threat management is known to be on track at all sites, and population status is unknown at one or more sites.**
- Threat management is known to be off track at one or more sites, and population status is unknown at one or more sites.
- Populations at one or more sites are known to be off track.

\* For SoS priority management sites (may not include all locations where the species occurs in NSW)

### Summary

<b>Management sites</b>	Darawank; Goonook Nature Reserve; Granite Creek; Wallingat; Wilson River; Bachelor State Forest
<b>Action implementation</b>	No management actions were planned for the financial year.
<b>Total expenditure</b>	\$18,730 (\$8,440 cash; \$10,290 in-kind)
<b>Partners</b>	Environment, Energy and Science



**Scientific name:**  
*Asperula asthenes*

**NSW status:**  
Vulnerable

**Commonwealth status:**  
Vulnerable

**Management stream:**  
Site-managed species





Photo: Paul Hillier

# Priority management site: Darawank

**Local government area:**  
Mid-Coast

**Partners:**  
Environment, Energy and  
Science

## Population outcome

-  **On track**
-  **On track (inferred)**
-  **Not on track (inferred)**
-  **Not on track**

## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

<b>Monitoring metric</b>	Species abundance
<b>Annual target</b>	The population is maintained at a minimum of 5000 individuals.
<b>Long term target</b>	The population is maintained at a minimum of 5000 individuals.
<b>Monitoring result</b>	Monitoring indicates a population increase from approximately 1700 individuals in 2019 to over 41,000 in 2020.
<b>Scientific rigour of monitoring method</b>	Moderate
<b>Conducted by</b>	Environment, Energy and Science

## Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$3,940	\$3,150

## Threat outcome

*Assessment on the status of critical threats at this site.*

Threat	Annual target	Threat status
Invasion of habitat by introduced weeds, particularly near watercourses.	Weed densities (excluding crofton weed) are maintained at under 10% cover within recorded populations.	On track

## Site summary

The Darawank *Saving our Species* (SoS) site was effected by the 2019—20 bushfires which resulted in all monitoring sites being burnt. Monitoring results from February 2020 showed a significant population reduction as a result of the fires. However, the latest monitoring results from November 2020 showed a significant increase. The previous highest population estimate was in 2016 at 4800 individuals. The population estimate in 2020 is over 41,000 individuals.

Minor occurrences of weeds were recorded across the Darawank SoS site and are not inhibiting the success of the *Asperula asthenes* populations.

# Priority management site: Goonook Nature Reserve

<p><b>Local government area:</b> Mid-Coast</p> <p><b>Partners:</b> None</p>	<p><b>Population outcome</b></p> <ul style="list-style-type: none"> <li><span style="color: green; font-size: 1.2em; margin-right: 5px;">●</span> On track</li> <li><span style="color: #90c040; font-size: 1.2em; margin-right: 5px;">●</span> <b>On track (inferred)</b></li> <li><span style="color: #f7941d; font-size: 1.2em; margin-right: 5px;">●</span> Not on track (inferred)</li> <li><span style="color: #e31a1c; font-size: 1.2em; margin-right: 5px;">●</span> Not on track</li> </ul> <p>The species population is inferred to be on track based on threat management being on track. The population trend is unknown at this time.</p>
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## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

Species population monitoring was not conducted at this site this financial year - dependent on other component.

## Threat outcome

*Assessment on the status of critical threats at this site.*

Threat	Annual target	Threat status
Invasion of habitat by introduced weeds, particularly near watercourses.	Maintain or reduce level of threat.	Not assessed

## Site summary





No work was planned for Goonook Nature Reserve in the 2020—21 financial year. This site was formally included as a priority management site in June 2021. Monitoring and management of the site’s populations will be conducted in future years.

# Priority management site: Granite Creek

**Local government area:**  
Kempsey

**Partners:**  
Environment, Energy and  
Science

## Population outcome

-  **On track**
-  On track (inferred)
-  Not on track (inferred)
-  Not on track

## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

<b>Monitoring metric</b>	Species abundance
<b>Annual target</b>	The population is maintained at a minimum of 10,000 individuals.
<b>Long term target</b>	There is insufficient data to set a long term population target for this site.
<b>Monitoring result</b>	<i>Asperula asthenes</i> within the Granite Creek SoS site for the 2020-21 monitoring year is estimated at >10,000.
<b>Scientific rigour of monitoring method</b>	Moderate
<b>Conducted by</b>	Environment, Energy and Science

## Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$3,000	\$3,850

## Threat outcome

*Assessment on the status of critical threats at this site.*

Threat	Annual target	Threat status
Invasion of habitat by introduced weeds, particularly near watercourses.	Establish a baseline assessment and determine level of threat posed by weeds within the site.	On track

## Site summary

The Granite Creek *Saving our Species* site is highly significant as it represents the northern extent of the known distribution of *Asperula asthenes*. Part of the site was burnt during bushfires in 2017, with another part burnt in the 2019—20 bushfires. Large regenerating patches of *Asperula asthenes* were recorded in burnt areas, indicative of good post-fire recovery of the species.

Very large patches of *Asperula asthenes* were also regularly recorded along the banks of Granite Creek. Much of the creekline populations would be at risk of being washed out during high rainfall events. However, it is evident that this species is capable of recovering quickly from occasional disturbances, such as fire and flood.





Weeds, particularly *Lantana camara* and crofton weed (*Ageratina adenophora*) were recorded as co-occurring with *Asperula asthenes*. However, due to the remote location and strong persistence of *Asperula asthenes* in the presence of these weeds, control at this location is not planned.

# Priority management site: Wallingat

**Local government area:**  
Mid-Coast

**Partners:**  
Environment, Energy and  
Science

## Population outcome

-  On track
-  **On track (inferred)**
-  Not on track (inferred)
-  Not on track

The species population is inferred to be on track based on threat management being on track. The population trend is unknown at this time.

## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

<b>Monitoring metric</b>	Species abundance
<b>Annual target</b>	The population is maintained at a minimum of 7000 individuals.
<b>Long term target</b>	The population is maintained at a minimum of 7000 individuals.
<b>Monitoring result</b>	Monitoring indicates a population decrease from approximately 2300 individuals in 2019 to 1000 in 2020. These numbers were affected by high rainfall inundating part of the monitoring site and additional monitoring is needed to establish long-term trends.
<b>Scientific rigour of monitoring method</b>	Moderate
<b>Conducted by</b>	Environment, Energy and Science

## Investment

Participant	Cash	In-kind
Environment, Energy and Science	\$1,500	\$3,290

## Threat outcome

*Assessment on the status of critical threats at this site.*

Threat	Annual target	Threat status
Invasion of habitat by introduced weeds, particularly near watercourses.	Weed densities are maintained at under 10% cover within recorded populations.	On track

## Site summary

The Wallingat *Saving our Species* (SoS) site was monitored in November 2020 during extremely wet conditions, which resulted in the population and monitoring site being partially inundated. This site occurs under dense tree cover and unlike the sites affected by bushfire, this shading appears to prevent *Asperula asthenes* from growing and spreading. This means that this population is recovering much slower from the drought. With the added limitation of not being able to count those plants that were under water during monitoring, future monitoring events will be needed to understand the long-term recovery of this population.

Some evidence of grazing of *Asperula asthenes* stems was noted within the monitoring sites. However, no threats of concern were recorded that might prevent the population from persisting within the site.



# Priority management site: Wilson River

<p><b>Local government area:</b> Port Macquarie-Hastings</p> <p><b>Partners:</b> Environment, Energy and Science</p>	<p><b>Population outcome</b></p> <ul style="list-style-type: none"> <li><span style="color: green; font-size: 1.2em; margin-right: 5px;">●</span> On track</li> <li><span style="color: lightgreen; font-size: 1.2em; margin-right: 5px;">●</span> <b>On track (inferred)</b></li> <li><span style="color: orange; font-size: 1.2em; margin-right: 5px;">●</span> Not on track (inferred)</li> <li><span style="color: red; font-size: 1.2em; margin-right: 5px;">●</span> Not on track</li> </ul> <p>The species population is inferred to be on track based on threat management being on track. The population trend is unknown at this time.</p>
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## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

Species population monitoring was not conducted at this site this financial year - dependent on other component.

## Threat outcome

*Assessment on the status of critical threats at this site.*

Threat	Annual target	Threat status
Invasion of habitat by introduced weeds, particularly near watercourses.	Maintain or reduce level of threat.	Not assessed

## Site summary





The Wilson River *Saving our Species* priority management site within Willi Willi National Park was originally established around a single record made of *Asperula asthenes* on the bank of the Wilson River. The original recorder confirmed that it's likely the plants would have since washed away. Having failed to find plants at the original location in previous years, searches in January 2019 focused on looking for a source population within potential habitat further upstream. Despite a total of ten person-days of search effort, no new populations could be found. An alternative site to replace the Wilson River site has been identified in Bachelor State Forest. Large areas of potential habitat around the Wilson River site were burnt in the 2019—20 bushfires. Monitoring at other burnt sites has shown extensive regrowth of *Asperula asthenes* occurs after fire. Therefore, a final attempt will be made in Spring 2021 to find a population within Willi Willi National Park before committing to replacing the Wilson River site with Bachelor State Forest.

# Contributing site (regional priority): Bachelor State Forest

**Local government area:**  
Mid-Coast

**Partners:**  
None

## Population outcome

-  On track
-  On track (inferred)
-  Not on track (inferred)
-  Not on track

Outcome traffic lights are not determined for contributing sites.

## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

Species population monitoring was not conducted at this site this financial year - dependent on other component.

## Site summary

No work was planned for Bachelor State Forest in the 2020—21 financial year. Targeted surveys will be undertaken within fire affected areas surrounding the Wilson River *Saving our Species* site in the 2021—22 financial year. If an *Asperula asthenes* population still exists in that area then it may be easier to find due to fires prompting regrowth of this species. If a population can not be found at Wilson River or if only a small population can be found, then the Wilson River *Saving our Species* site will be replaced with the Bachelor State Forest site.

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Saving our Species 2020-2021 annual report card for Trailing Woodruff (*Asperula asthenes*). For more information refer to the specific strategy in the Saving our Species program.