



**SAVING OUR SPECIES**

**Smooth Davidson's Plum**

2022-2023 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>	Billinudgel area; Duroby Nature Reserve; Midgen Flat; Nightcap
<b>Action implementation</b>	3 (of 3) management actions were fully or partially implemented as planned for the financial year.
<b>Total expenditure</b>	\$9,111 (\$7,111 cash; \$2,000 in-kind)
<b>Partners</b>	Environment and Heritage Group



**Scientific name:**  
*Davidsonia johnsonii*

**NSW status:**  
Endangered

**Commonwealth status:**  
Endangered

**Management stream:**  
Site-managed species

Photo: Dianne Brown

# Priority management site: Billinudgel area

<p><b>Local government area:</b> Byron</p> <p><b>Partners:</b> Environment and Heritage Group</p>	<p><b>Population outcome</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">●</span> On track</li> <li><span style="color: lightgreen;">●</span> <b>On track (inferred)</b></li> <li><span style="color: orange;">●</span> Not on track (inferred)</li> <li><span style="color: red;">●</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 - Monitoring undertaken biennially (due 2023-24).

## Investment

Participant	Cash	In-kind
Environment and Heritage Group	\$3,184	\$800

## Management actions

*The following actions are those identified as being required in financial year 2022-2023 to secure the species in the wild.*

Threat	Management action	Implemented as planned?
Infestation of habitat by introduced weeds.	6 days weed control, including management of plantings.	Yes

## Threat outcome

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

Threat	Annual target	Threat status
Grazing by domestic stock.	No breaching of fenced areas by cattle.	On track
Infestation of habitat by introduced weeds.	Weed cover is maintained at below 20% cover within fenced areas.	On track

## Site summary

The sites received 3 rounds of follow up weed control throughout the year. The weed control consisted of hand weeding underneath the plants and follow up spot spray throughout the planting area. The main weeds treated were exotic grasses, annual weeds and tobacco bush. Canopy cover remains sparse in the planting area. The planting area tends to increase in weed cover between follow up control sessions. This area was in-fill planted, mulched and trees were staked.

# Priority management site: Duroby Nature Reserve

<p><b>Local government area:</b> Tweed</p> <p><b>Partners:</b> Environment and Heritage Group</p>	<p><b>Population outcome</b></p> <ul style="list-style-type: none"> <li><span style="color: green; font-size: 20px; margin-right: 10px;">●</span> <b>On track</b></li> <li><span style="color: #90c040; font-size: 20px; margin-right: 10px;">●</span> On track (inferred)</li> <li><span style="color: #f09040; font-size: 20px; margin-right: 10px;">●</span> Not on track (inferred)</li> <li><span style="color: red; font-size: 20px; margin-right: 10px;">●</span> Not on track</li> </ul>
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## 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>	Population remains within 10% of 2017 number of 84 stems.
<b>Long term target</b>	In 50 years the population extent, abundance and condition is maintained to within 20% of baseline abundance and habitat remains weed-free.
<b>Monitoring result</b>	78 stems both patches. Patch A - 27 stems, Patch B - 51 stems.
<b>Scientific rigour of monitoring method</b>	High
<b>Conducted by</b>	Environment and Heritage Group

## Investment

Participant	Cash	In-kind
Environment and Heritage Group	\$367	\$400

## Management actions

*No management actions were planned at this site for the financial year.*

## Site summary

Despite very intense rain events and storms, the population remains healthy and stable. The vegetation at the site is in good condition and damage from flooding in 2022 was not evident. There was a small decrease in stem number, which may have been the result of a tree fall causing damage to a proportion of the population.

# Priority management site: Midgen Flat

**Local government area:**  
Byron

**Partners:**  
Environment and Heritage  
Group

## 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>	Adult plants within plot remain within 10% of the baseline number of 52 plants.
<b>Long term target</b>	By 2050, adult plants will remain healthy and within 10% of baseline data of 52 adult plants within the plot. By 2050, sucker and juvenile plants have remained within 10% of the baseline number of 208. By 2050, population extent and condition will remain within 10% of the extent mapped in 2016.
<b>Monitoring result</b>	53 adult plants. A total of 447 plants and stems recorded (<0.5m: 161 stems; >0.5-1m 75 stems; >1-2m: 88 stems; >2m-5m: 70 stems ; >5m: 53 stems).
<b>Scientific rigour of monitoring method</b>	High
<b>Conducted by</b>	Environment and Heritage Group

## Investment

Participant	Cash	In-kind
Environment and Heritage Group	\$1,160	\$400

## Management actions

*The following actions are those identified as being required in financial year 2022-2023 to secure the species in the wild.*

Threat	Management action	Implemented as planned?
Infestation of habitat by introduced weeds.	Undertake 2 days weed control throughout habitat area.	Yes

## Threat outcome

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

Threat	Annual target	Threat status
Infestation of habitat by introduced weeds	Weed density remains below 5% within 50m of smooth davidson plum	On track

	population.	
Grazing by domestic stock.	No grazing evident within smooth davidson plum population.	On track

### Site summary

The population at this site remains healthy. A small increase in the total stems from 440 to 447 in the plot was measured. This site is likely the largest for the species. Weeds remain at very low levels. The site was surveyed twice for weed invasion and broad-leaved paspalum, small-leaved privet and *Lantana* were hand weeded where found. No cattle access was evident in the areas where the smooth Davidson plum population occurs.

# Priority management site: Nightcap

**Local government area:**  
Byron; Lismore

**Partners:**  
Environment and Heritage Group

## 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>	Within the established plot, the population does not decline by more than 10% of stems previously recorded.
<b>Long term target</b>	By 2050, the population within the plot will remain within 10% of the baseline number of 25 in the Minyon plot and within 10% of the baseline number of 55 in the Snows Gully plot.
<b>Monitoring result</b>	A total of 74 stems were recorded in the plot, an increased from the baseline of 55 (Snows Gully plot). This may be due to a more accurate counting method that was used.
<b>Scientific rigour of monitoring method</b>	High
<b>Conducted by</b>	Environment and Heritage Group

## Investment

Participant	Cash	In-kind
Environment and Heritage Group	\$2,400	\$400

## Management actions

*The following actions are those identified as being required in financial year 2022-2023 to secure the species in the wild.*

Threat	Management action	Implemented as planned?
Infestation of habitat by introduced weeds.	Undertake 5 days weed control in habitat areas.	Yes

## Threat outcome

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

Threat	Annual target	Threat status
Infestation of habitat by introduced	Weed threat levels in treated areas	On track

weeds.

are below 20% cover.

## Site summary

The population at this site remains healthy. A small increase in the numbers of stems is due partly to good conditions, resulting in additional sucker growth and to a more accurate counting method. Weed control is progressing well as weed cover is continuing to be replaced by pioneer native species. This year's work involved manually treating large stems of tobacco bush, giant devil's fig and *Lantana* amongst the regenerating rainforest pioneer species. Seedlings of woody weeds as well as patches of crofton and broad-leaved paspalum were sprayed during several follow up events during 2022-2023.

The areas around the smooth Davidson plum population have been transformed from thick *Lantana* through the various stages of tobacco bush germination into an area dominated by native plants, allowing for an extension of the smooth Davidson Plum population. It is estimated that 2 to 3 more years of weed control work is required before the area requires minimal maintenance.

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Saving our Species 2022-2023 annual report card for Smooth Davidson's Plum (*Davidsonia johnsonii*). For more information refer to the specific strategy in the Saving our Species program.