

SAVING OUR SPECIES

# Year in Review 2021-22





# Saving our Species 2021-22 at a glance



**947 species at risk  
in New South Wales**



**111 ecological  
communities at risk  
in New South Wales**



**49 populations at risk  
in New South Wales**

## Key achievements

**394**

**threatened species and  
communities under management  
(356 species, 38 communities)**

**8**

**key threatening process  
projects under management**

**945**

**sites in New South Wales with  
active SoS projects**

**258**

**species SoS is investing in are  
on track to survive the next 100  
years (species from site-managed,  
iconic and population management  
streams only)**

**247**

**external and other NSW  
Government partners contributing  
around \$16.8 million**

## Investments overview in 2021-22

|  |                     |
|--|---------------------|
| SoS operating <sup>1</sup>   | \$8,943,816         |
| SoS labour <sup>2</sup>  | \$5,528,294         |
| EHG <sup>3,4</sup> cash  | \$3,585,372         |
| EHG <sup>3,5</sup> in-kind   | \$4,521,561         |
| Other NSW Government cash <sup>6</sup>   | \$2,560,878         |
| Other NSW Government in-kind <sup>6</sup>  | \$4,882,250         |
| External cash (includes program<br>partnerships and communication<br>external cash) <sup>6</sup> | \$3,964,444         |
| External in-kind <sup>6</sup>  | \$5,343,328         |
| Complementary EHG<br>programs <sup>7</sup> (AIS, FPFA, contributing<br>sites) cash               | \$1,627,221         |
| Complementary EHG programs <sup>7</sup><br>(AIS, FPFA, contributing sites) in-kind               | \$1,428,924         |
| <b>Total</b>   | <b>\$42,386,088</b> |

## Investment reported<sup>8</sup> in SoS priority sites split by local government areas (LGAs)



|  |                     |
|--|---------------------|
| Central West and Orana LGAs                            | \$2,525,651         |
| Far West LGAs  | \$335,187           |
| Greater Sydney, Western Sydney and Blue Mountains LGAs | \$3,836,299         |
| Illawarra, South East and Tablelands LGAs              | \$6,461,337         |
| Mid North Coast and North Coast LGAs                   | \$8,025,572         |
| New England North West LGAs                            | \$2,461,563         |
| Newcastle, Hunter and Central Coast LGAs               | \$3,182,871         |
| Riverina Murray LGAs                                   | \$3,101,139         |
| <b>Total across NSW</b>                                | <b>\$29,929,619</b> |

## Investment by external partners to EHG<sup>9</sup>



|  |                     |
|--|---------------------|
| Australian Government                                  | \$2,435,297         |
| Commercial enterprise                                  | \$399,337           |
| Consultants  | \$28,100            |
| Educational institutions                               | \$1,475,215         |
| Individuals and voluntary conservation area landowners | \$649,288           |
| International organisation                             | \$120,000           |
| Local government                                       | \$909,201           |
| Non-government organisation                            | \$1,196,858         |
| NSW Government   | \$7,441,112         |
| State government (other than NSW)                      | \$670,706           |
| Volunteers and community groups                        | \$1,095,951         |
| Strategic partner investment                           | \$329,835           |
| <b>Total</b>   | <b>\$16,750,900</b> |



## Case study

### Achieving milestones in plains-wanderer conservation

*The first ever release of zoo-bred plains-wanderers (Pedionomus torquatus) in New South Wales was a significant step towards the conservation of one of Australia's most threatened bird species. Ten plains-wanderers were released onto private properties in the Western Riverina after hatching at Taronga Western Plains Zoo, Taronga Zoo Sydney and Werribee Open Range Zoo. It is estimated that fewer than 1,000 plains-wanderers are left in the wild because of threats like grassland habitat loss, severe drought and predation by foxes. The successful breeding and wild release provide a vital boost for the plains-wanderer population.*

The project is led and funded by Saving our Species in partnership with the Biodiversity Conservation Trust, Local Land Services, National Landcare Program, Taronga Conservation Society Australia and private landholders through the Paddocks for Plains-wanderers program. This program provides support to landholders to manage their ground cover for both livestock production and plains-wanderer conservation, and has so far protected over 13,000 hectares of native grassland habitat, which is critical for the plains-wanderer and a range of other species. The protection of habitat and the success of the breeding program are conservation in action and represent a step towards securing the future of these birds.





## Saving our Species

# Species and project highlights for 2021-22

### Cultural knowledge supports conservation of critically endangered birds

A total of 58 critically endangered regent honeyeaters (*Anthochaera phrygia*) were released into the wild as part of an ongoing breed and release program to help boost the species' wild population. The birds were released on Wonnarua Country, within the Kurri Kurri and Cessnock Woodlands north of Sydney, in partnership with the Mindaribba Local Aboriginal Land Council, who made their land available for the release.

Almost 600 honeyeaters have been bred, with 315 being released across sites in New South Wales and north-east Victoria since 2000. This release was particularly special given the cultural connection shared by the Mindaribba community to this threatened species, which has lost its song culture, vital for the species' survival. Returning the regent honeyeater to Country has powerful parallels with the struggles of the local Aboriginal people and their fight to protect their land and reawaken their language.

This Saving our Species project is being delivered in partnership with Taronga Conservation Society Australia and BirdLife Australia.



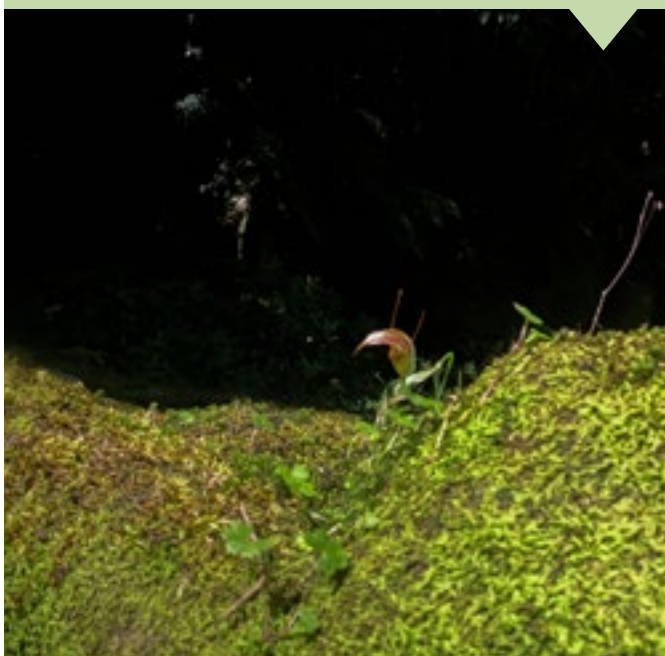
### Population boost for spotted tree frogs in Kosciuszko National Park

A total of 100 critically endangered spotted tree frogs (*Litoria spenceri*) were released into Kosciuszko National Park after the population was decimated in the 2019-20 bushfires, reducing to an estimated 10 frogs. The species became extinct in New South Wales in 2001 because of the chytrid fungus. A captive-bred population of the frogs was released in 2015 into a specially selected chytrid-resistant site and this approach was proving successful until the devastating bushfires.

This second chance for the species has been made possible with the support of bushfire funds provided by the Australian Government and a captive breeding program at the Amphibian Research Centre in Melbourne to establish an insurance population.

## Search and rescue operation for rare orchid

Saving our Species took advantage of an emergency services training operation in Budderoo National Park to undertake surveys of the threatened and rarely seen waterfall greenhood orchid (*Pterostylis pulchella*). The training, conducted with NSW National Parks and Wildlife Service, NSW Police Rescue, the SES and NSW Ambulance crews, allowed safe access to the national park's remote canyons, where the native orchid had last been seen around 7 years ago. The 10-hour expedition resulted in approximately 300 orchids being recorded and provided the team with the information needed to develop management plans and minimise threats to the species' survival.

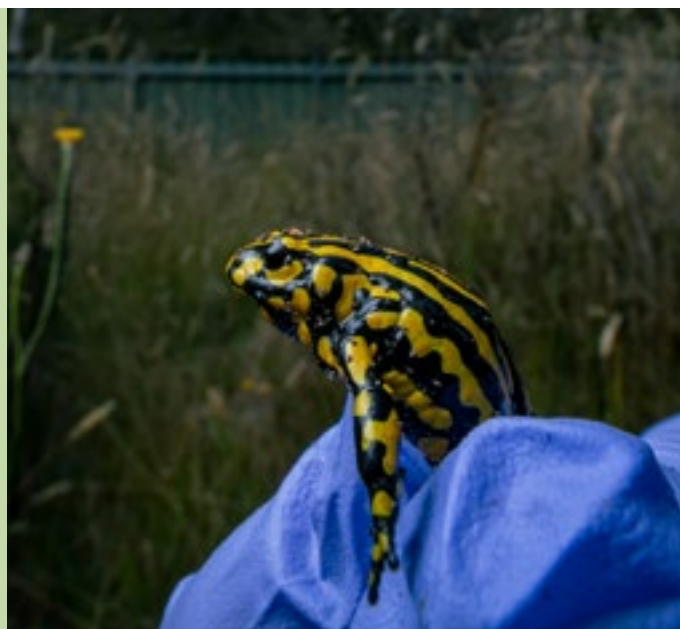


## Secret translocation to secure nightcap oak population

The first ever insurance populations of the endangered nightcap oak (*Eidothea hardeniana*) have been planted in the wild. Forty seedlings of the Gondwana-era tree species were planted across 8 secret sites to increase the species' population and distribution across the NSW North Coast. The nightcap oak is significant to the evolution of the ancient rainforest. However, 20% of the only known wild population was impacted by the 2019–20 bushfires. Saving our Species has been working in partnership with Firewheel Rainforest Nursery on the project, collecting more than 500 seeds for propagation, with 50 seedlings successfully grown. NSW National Parks and Wildlife Service has also collected cuttings to improve the genetic representation of propagated material, which is being grown at the Australian Botanic Garden Mount Annan.

## Southern corroboree frogs reintroduced into native habitat

In partnership with National Parks and Wildlife Service, Taronga Conservation Society Australia and Zoos Victoria, threatened species experts from Saving our Species reintroduced 100 critically endangered southern corroboree frogs (*Pseudophryne corroboree*) into their native habitat at Kosciuszko National Park. The frogs were released into a purpose-built field enclosure to support the population to grow and thrive. The species had been badly affected by the amphibian chytrid fungus and habitat loss due to invasive species, drought and the 2019–20 bushfires. A successful breeding program has resulted in an insurance population of approximately 400 frogs.





## Record-breaking season continues for superb midge orchid

Summer rains resulted in a continued record-breaking streak of high numbers of the endangered superb midge orchid (*Genoplesium superbum*) being found across the Southern Tablelands. Prior to the 2019–20 bushfires, only a handful of the miniature, raspberry-scented orchids had been recorded. Since 2020, over 300 plants have been discovered across 3 sites, thanks to increased rainfall and the fires reducing grazing opportunities for herbivores. A total of \$100,000 in funding for orchid conservation is supporting Saving our Species to commit resources to threat control and to continue surveys and monitoring to help secure the species.



## Innovative captive breeding facility for the booroolong frog

A state-of-the-art facility to support a captive breeding program for the booroolong frog (*Litoria booroolongensis*) was created and almost 60 frogs from this rare and endangered species have taken up residence in the new facility. The species' population had been almost completely wiped out in recent droughts and bushfires. A project team made up of experts from Saving our Species and the broader department, Taronga Zoo Sydney and the Australian Museum's Dr Jodi Rowley and ecologist Phil Spark developed the program and design of the facility. The purpose-built space will replicate the natural environment of booroolong frogs, including special UV lighting, flowing water, and temperature controls to mimic seasonal changes.



## Sloane's froglets protected in new housing estate habitat

Saving our Species worked with Albury City Council to ensure the protection of the endangered Sloane's froglet (*Crinia sloanei*) within new housing estates. Surveys conducted by threatened species experts indicated that the new habitat is supporting Sloane's froglets, with over 100 individuals heard calling from some of the newly built wetlands. Building habitat for this miniature frog involved creating stormwater basins to certain specifications to provide suitable wetland breeding and refuge habitat for the species. Only a few populations remain of the tiny, ground-dwelling frog and these are mainly found in urban and industrial areas of Albury and Corowa. This project aimed to improve and maintain the connectivity and extent of available habitat.





## Case study

### Exploring new boundaries in eDNA technology

Science and research are incorporated into almost every aspect of Saving our Species. Major program decisions are guided by strategic research, and on-ground interventions are underpinned by science, applying the best evidence available to help species recover and to secure their long-term future.

In 2021–22, the research projects funded by Saving our Species directly benefited 43 threatened species and addressed key knowledge gaps to directly improve the management and conservation of threatened species in New South Wales. This included research to test new and innovative technology such as using environmental DNA (eDNA).

A research project led by the Biodiversity and Conservation Hunter Central Coast team successfully trialled the use of eDNA as a survey technique in remote and rugged locations in Barrington Tops National Park. This emerging technology has the potential to transform biodiversity monitoring and provide a holistic picture at the landscape scale. A highlight from this project includes building strong partnerships with EnviroDNA and the University of Newcastle, which are undertaking analysis, modelling and reporting of eDNA samples and, with luck, rediscovering the long-lost eastern quoll, last seen on the Australian mainland (in the Barrington Tops) in 1989.



## Endnotes

- 1 Includes investments that go into project delivery, science and research and community engagement
- 2 Total labour expenditure within the SoS program, including Biodiversity, Conservation and Science (BCS) and National Parks and Wildlife Service (NPWS)
- 3 Environment and Heritage Group (EHG) of the Department of Planning and Environment (DPE)
- 4 Reported investments at priority sites, including the EHG-leveraged program cash and not including SoS operating
- 5 Reported investments at priority sites and not including SoS labour
- 6 Reported investments at priority sites only
- 7 Reported investments at contributing sites, including investment by EHG, Other NSW Government, and External but not including SoS operating or SoS labour. AIS = Assets of Intergenerational Significance; FPFA = Feral Predator-Free Areas
- 8 Reported investment:
  - is for priority sites only (no contributing sites)
  - includes both cash and in-kind
  - includes reported SoS labour expense claim (LEC), noting that LEC is under-reported in the SoS database
  - does not include NSW Koala Strategy investment
  - includes supporting actions at priority sites
  - includes key threatening processes (KTPs) and data deficient (DDs) if there was spatial information available
- 9 Reported investments at priority sites only

## Photos

**Page 2:** Swamp wallaby in the spotlight Richard Taylor; **Page 4:** Male plains-wanderer Alex Pike/DPE; **Page 5:** Regent honeyeater Alex Pike/DPE, Spotted tree frog in Kosciuszko National Park Alex Pike/DPE; **Page 6:** Waterfall greenhood plant inside canyon in Budderoo National Park L Hook/DPE, Southern corroboree frog released in Kosciuszko National Park Alex Pike/DPE, Nightcap oak Justin Mallee/DPE; **Page 7:** Booroolong frog in purpose-built facility (Taronga Zoo), Superb midge orchid (*Genoplesium superbum*) E Roper/DPE, Sloane's froglet David Hunter/DPE; **Page 8:** Luke Foster from NSW National Parks and Wildlife Service collecting water samples for eDNA analysis Nigel Hunter/DPE.

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