

This Bush Blitz has recorded

71 new species

(2 moths, 7 ground beetles,
7 weevils, 29 true bugs,
15 spiders, 2 snails,
2 vascular plants, 7 lichens)

1252
species of plants
and animals



806

species not
previously known
from the reserve

2

threatened
animal species



27

exotic and pest
species
(4 animals, 23 plants)

Additional surveys for plants and animals are
likely to expand the list and may record other
species of conservation significance.



Bush Blitz

Namadgi National Park, ACT
and
Kosciuszko National Park, NSW

8–14 December 2013

Bush Blitz is a multi-million dollar partnership between the Australian Government, BHP Billiton Sustainable Communities and Earthwatch Australia to document plants and animals in selected properties across Australia.

Namadgi National Park and Kosciuszko National Park are situated in Australia's alpine region and provide habitat for a wealth of alpine and sub-alpine species. They are part of a 1.6-million hectare chain of national parks and reserves across the Australian Alps that are jointly managed by the Australian, ACT, NSW and Victorian governments in recognition of the significance of the area as a single biogeographical region. Kosciuszko National Park has been named a UNESCO Biosphere Reserve in recognition of its unique value as a conservation area.

In a Bush Blitz survey in 2013, Bush Blitz scientists recorded 1252 species of plants and animals in the parks including 806 species that were not previously known from the reserves; 71 of the species collected are putatively new to science.

Who was involved?

Staff from the Australian Biological Resources Study (Australian Government) coordinated and led the Bush Blitz. Experts from the following organisations carried out the field and laboratory work: Australian Museum; Centre for Australian National Biodiversity Research; CSIRO — Australian National Insect Collection; Environmental & Biodiversity Consultancy; Royal Botanic Gardens, Melbourne; University of New South Wales; and Australian Biological Resources Study.



www.bushblitz.org.au
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Image credits
Front cover: Alpine Heath (*Epacris paludosa*), photo Chris Manchester © ANIC
Back cover: Naas River, ACT, photo Chris Manchester © ANIC
Inside cover background: Alpine Sunray (*Leucochrysum alpinum*), photo Emma Clifton © CANBR

Numbered Images: 1. Alpine Cockroach (*Polyzosteria viridissima*), photo Chris Manchester © ANIC; 2. Barbara Baehr digging pitfall traps, photo Karen Meusemann © ANIC; 3. Jacqueline Kanras beating for bugs, photo Michael Preece © ABRIS; 4. Dull Copper Butterfly (*Paralucia pyrodiscus*), photo Chris Manchester © ANIC; 5. *Pelargonium* n. sp. Boordomba Rocks, photo Neville Walsh © RBG; 6. Karen Meusemann collecting insects, photo Chris Manchester © ANIC; 7. Rocky tors, photo Chris Manchester © ANIC; 8. *Rhizocarpon geographicum* lichen, photo Patrick McCarthy © ABRIS; 9. *Asterolasia* sp. Namadgi, photo Neville Walsh © Royal Botanic Gardens; 10. *Prosopogmus* n. sp. 04 © Barbara Baehr; 11. A Chrysomelidae leaf beetle, photo Chris Manchester © ANIC; 12. *Melanterius* sp., Chris Manchester © ANIC



Australian Government



Sustainable Communities



What did Bush Blitz find?

This survey gave researchers an opportunity to explore little-known areas and to benchmark the biodiversity of the Australian alpine regions. The survey provided researchers with an opportunity to assess the recovery of the area since the bushfires of 2003. The fauna and flora present in the parks indicate that there has been recovery since the fires. There has been little recovery of the alpine eucalypt canopy in many of the more severely burnt areas, but many populations of invertebrates and flora have persisted.

Animals

This was the most comprehensive invertebrate survey ever conducted in the area. The species collection included 1 wasp, 15 butterflies, 449 moths, 1 scorpion-fly, 131 flies, 41 beetles, 105 true bugs, 1 cockroach, 9 damselflies and dragonflies, 33 spiders and 20 snails and slugs. 69 species are likely to be new to science.

Some notable collections:

- The spectacular Mountain Cockroach (*Polyzosteria viridissima*). This alpine cockroach is large and bright metallic green. It is known only from a few localities in the Namadgi and Kosciuszko National Parks, along high alpine creek margins and in swamps. The helicopter allowed access to swamps that previously had not been surveyed. Three specimens were collected in the sphagnum bog near the top of Mt Murray, extending the species known range and allowing research into its genetic diversity. The bog was severely burnt during the 2003 bushfires, and the collection of this wingless ground-dwelling species provides evidence that it can survive fires, perhaps by burrowing into the ground or depositing egg cases into the soil.
- Two male *Nannochorista eboraca*, from the living fossil scorpion-fly family Nannochoristidae. The family has a fossil record going back to the Jurassic, 200 million years ago.
- For the first time in Australi, two species of true bug ant-mimics (Myrmecoroides) were recorded on the same grass species. Eleven species of Acanthosomatidae were recorded, representing a quarter of the Australian acanthosomatid fauna
- Two very small charopid snails putatively new to science were collected. Charopidae n. sp. ST 44 was found at Mount Ginini. Charopidae n. sp. ST 45 was found at three sites at Cooleman Caves. This was the first recording of this species despite a snail survey done in the area in the 1990s.

Plants

268 vascular plant species were collected, including two potentially new species (*Pelargonium* n. sp. Booroomba Rocks and *Geranium* n. sp. Blue Waterholes). Three species were newly recorded for Namadgi; 23 new occurrences were recorded for the Bogong Peaks Wilderness Area.

Two threatened flora species were identified: Hoary Sunray (*Leucochrysum albicans* var. *tricolor*, listed as endangered under the EPBC Act) and Leafy Anchor Plant (*Discaria nitida*, listed as vulnerable in NSW).

Alpine areas are particularly lichen rich — more than 500 lichen species are known above 1000 metres in mainland south-east Australia. 177 lichen species were collected, representing around one-third of all mainland Australian alpine and subalpine taxa: 7 are potentially new species.

Exotic and pest species

Animals

Two pest insects were identified: European Wasp (*Vespula germanica*) and Rutherglen Bug (*Nysius vinitor*). Two exotic gastropod species were also identified: Grey Field Slug (*Deroceras reticulatum*) and the predatory Garlic Snail (*Oxychilus alliarius*). Its presence at Yankee Hat and Boboyan forest walking tracks in Namadgi National Park is of some concern as it has had an adverse impact on native snails in isolated bushland fragments in Western Australia. No eradication methods are known.

While mammals were not a target of the survey, it should be noted that there are significant populations of feral animals in the parks, including wild horses.

Plants

Twenty-three weeds were collected, particularly at the heavily disturbed and grazed Blue Waterholes site in Kosciuszko National Park. Of the 23 introduced species collected, only the Scotch Thistle (*Onopordum acanthium*) is listed at the national or state level—as a declared weed in NSW. Other species of concern are Brown Sedge (*Carex disticha*), Drooping Brome (*Bromus tectorum*), Sheep Sorrel (*Acetosella vulgaris*), Flatweed (*Hypochaeris radicata*) and White Clover (*Trifolium repens*). The remaining weedy species collected in the parks are not currently of concern.

Future management priorities

While most species seem to have recovered from past fires, recovery is slow and fire prevention remains a key protection measure for the ecological communities of the Australian Alps.

Only one listed weed was recorded. Continued management of weeds, focusing on those species of potential concern, will help keep the parks in good condition. The two species of exotic snail should also be monitored.



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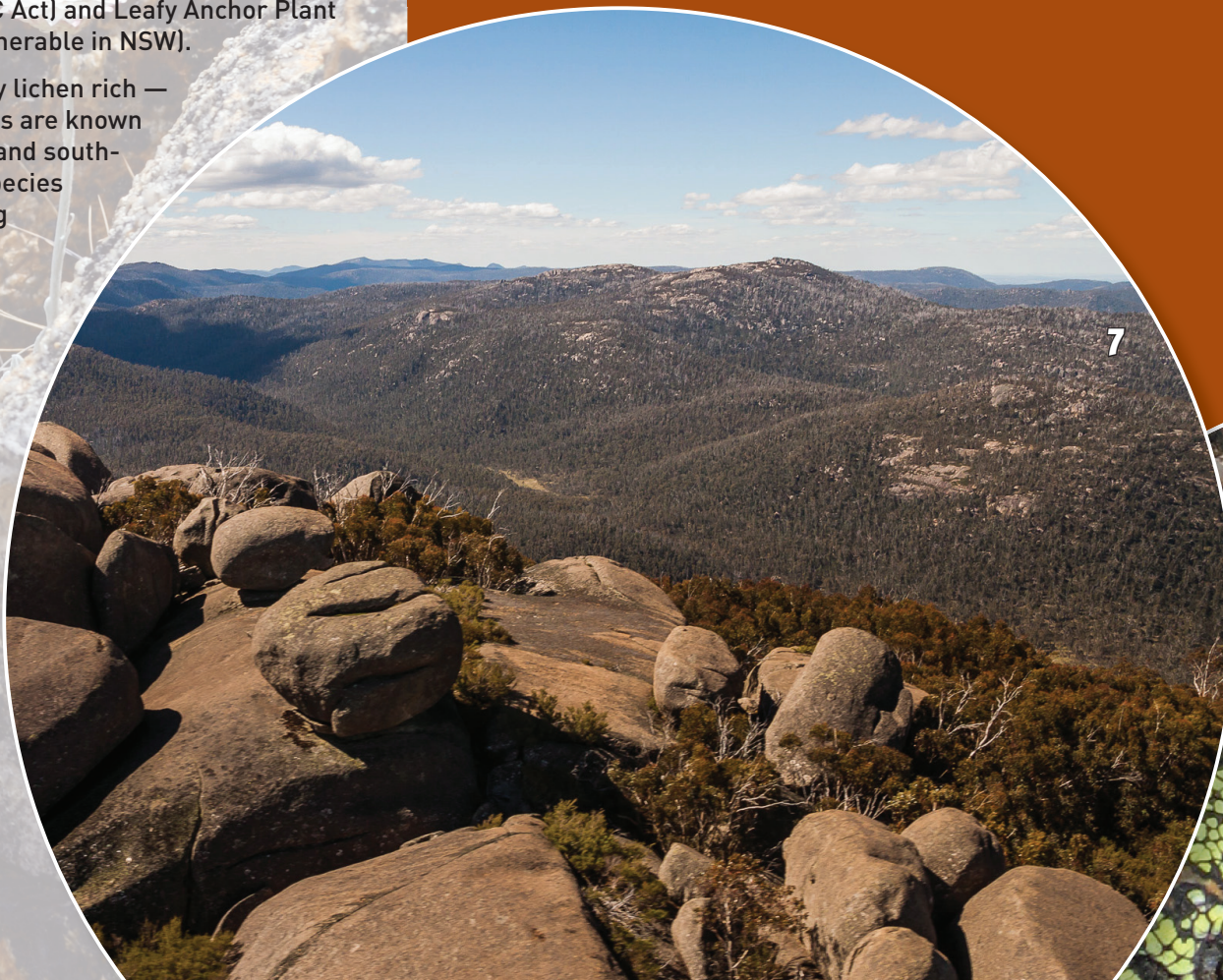


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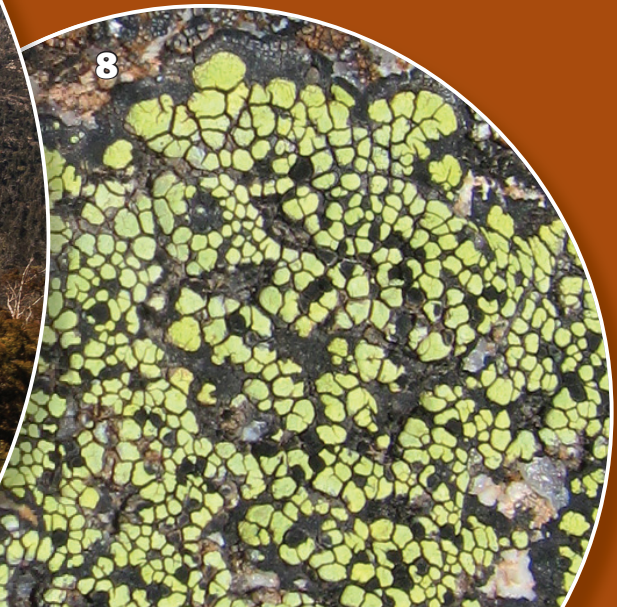


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