Monitoring the monitor

The dawn chorus at Horse Gully Hut in the Naas Valley in mid December was palpable, led by kookaburras and a strident oriole, supported by a chorus of magpies, lyrebirds, tree-creepers, whistlers and small birds; it lasted a good half hour. The four campers so gloriously awakened were preparing for a long day, arming the southern half of the 21 monitor traps distributed at 400 m intervals along the Naas Firetrail from a few hundred metres south of Horse Gully Hut. They were half of the project team. They met the other half at the midway point after it had 'commuted' from the northern end arming traps. We then did the rounds twice more each day to clear any captures, record details of the captured animals, and finally close the traps for the night ahead.

Don Fletcher (retired, but now an ANU researcher) led the field trip and did most of the preparatory work, assembling the traps, collecting the rabbits and baiting the traps. The other campers were Katherine Jenkins aka Kat (ACT Conservation Research), Matthew Higgins (independent researcher) and Kevin McCue (NPA). The second group of researchers, commuters from Canberra, included Brian Green and Enzo Guarino (University of Canberra), and Deklyn Townsend (ACT Parks Conservation) or Melissa Snape (ACT Conservation Research).

Once distributed from east to west coasts of southern Australia, Rosenberg's Monitor is now found in just three unconnected patches; at each end and in the centre of its former range. Its status in NSW, Victoria and SA is threatened, so the precautionary

principle would dictate that we assume it is equally threatened in the ACT, at least until proven otherwise. Its close relative, the Lace Monitor, has all but disappeared from the ACT.

Most of the only published research on these amazing, large (to 1.5 m), ground-dwelling reptiles has been undertaken by our co-worker Brian Green and colleagues, on the Kangaroo Island (KI) population. These are only two-thirds the size of ACT specimens. Little research has been done on the local population before now and the first thing that needs to be established is their abundance. Insights into their life history, home range, nesting sites, size, weight etc. will be a bonus.

Because the home range of females was presumed to be smaller than that of males, and their use of habitat and breeding site of more interest to researchers, we had hoped to attach wireless trackers purchased by NPA to two large females (minimum weight 1.6 kg). Only one of the nine captured lizards was female (same ratio on KI), however, and its weight was too close to the minimum. The males were all about 2.5 kg, so after painting ID numbers on their backs (sloughed off at the next moult), Brian kitted up two of them with transmitters. We kept them captive for as short a time as possible and, after numbering them 0 to 8, released them where they were trapped. Two of the nine lizards Deklyn and Enzo managed to run down or snag with Don's 'noose on a fishing pole'; one escaped after capture.

At least we answered one question – can Rosenberg's Goannas climb trees? One example may not mean that all of them can or could, unlike their cousin

the Lace Monitor. Some were carrying ticks and others were scarred, had broken ribs, or had lost the tips of their tails (cars, fighting or predator?) but all appeared to Brian to be in good shape. They were very quiet after being transferred to the hessian or denim bags and didn't rush away on being released. In fact, we caught one twice, so much did he like the dead rabbit bait on offer.

There are now two numbered, randy male Rosenberg's Goannas carrying tracking equipment wandering Nass Valley looking for love and we hope to monitor their activity for as long as possible to establish a database of their movements. If anyone spots a large goanna with a white number on its back we would appreciate a report giving the date, time and location. They mate in December, the females every second year, and lay about a dozen eggs in a nest excavated by the female in a termite mound. The clutch is guarded for 2-3 weeks by their mother, sometimes with help from her mate (see Matthew Higgins' article in the June 2017 NPA Bulletin). The young, not always from the same male progenitor, hatch after about 8 months and feed on their hosts, the termites, before digging themselves out of the mound.

Kat, Deklyn and/or Mel drove us skilfully on the trip and around the traps. So interesting are these creatures that Brian is planning to publish a book on the Rosenberg's Monitor this year. We will notify you when it happens.

In January and February, under Don Fletcher's guiding hand, new teams, including NPA members Sonja Lenz, Philip and Jan Gatenby, Isobel Crawford and John Brickhill, installed 56 cameras at 19 sites along the central part of the Naas Valley, the cameras focussed on a bait of putrid chicken, to start studying the monitors' distribution and density. We have downloaded data and resited and reset the cameras and traps, Don and Enzo even reattached the collar on one of the monitors and retrieved the discarded collar of the other. Invaluable, interesting information has already been obtained on our Monitors in the Naas Valley guaranteeing the success of the pilot project to trap, mark and track them.

Kevin McCue

(continued next page)

Rosenberg's Monitor No 1 marked and measured before return to its capture site. Photo by Kevin McCue.



Strategy for managing feral horses in the Alpine National Park

All of the national parks across Australia's alpine region are facing sustained pressure from feral horses. NPA ACT members have first-hand experience of the degradation of some of Australia's most iconic sites. So the NPA ACT was pleased to see the issue of a draft strategic action plan ('the Plan') for feral horses in Victoria's Alpine National Park (ANP). The Plan outlined five objectives:

- Reduce damage to alpine wetland and other vegetation communities by expanding and improving feral horse control.
- Improve knowledge of the relationship between feral horse impacts and environmental condition through monitoring and research.
- Protect Aboriginal cultural heritage.
- Prevent the establishment of new populations of feral horses in the Greater Alpine national parks.
- Remove small populations.

In its recent submission to Parks Victoria, the NPA ACT welcomed the general thrust of the Plan, being the active and humane reduction of the numbers of feral horses in the ANP,

utilising a strategic and evidence-based approach. However, the NPA ACT questioned whether the long timescale involved in reducing the feral horse population and the size of the proposed remnant population will lead to efficient, effective and economic management of the feral horse population in the ANP.

In general, the NPA ACT supported:

- the expanded horse control program, which would focus on increased feral horse removal and the prevention of the establishment of new populations within the ANP
- the five key core conservation objectives of the Plan
- the Plan's recognition of, and emphasis on, protecting Aboriginal cultural heritage and working with traditional owners
- the removal of all horses from the highly ecologically sensitive Bogong High Plains—Cobungra area
- the introduction of a systematic and realistic monitoring and evaluation system, featuring annual reviews of the efficiency and effectiveness of the feral horse control operations
- · plans to undertake practical, applied

research on key feral horse control issues.

The NPA ACT was concerned that the Plan:

- severely limits the number of feral horses to be removed from the eastern Alps over the next 3 years, given the level and extent of damage that they are causing to this area
- excludes ground and aerial shooting as a control method during the first 3 years of Plan implementation, solely on the basis of public expectations, when there is evidence that, when properly done, it is the most inexpensive and humane way of managing feral animals
- fails to recognise the importance of prioritising the removal of all feral horses from the Murray River catchment area.

The full version of the NPA ACT's submission can be found at http://www.npaact.org.au/.

Rod Griffiths

Monitoring the monitor (continued)

References

Gogerley, H. 1922. Early breeding of ground or low-nesting birds. *Emu* 21, 222–223.

Weavers, B.W. 1989. Diet of the Lace Monitor Lizard (*Varanus varius*) in south-eastern Australia. *Australian Zoologist*, 25(3), 83 (September 1989).

Notes from Weavers' paper:

• Gogerley (1922) speculated that some species of 'low-nesting birds'

including the superb lyrebird (*Menura superba*), nest during winter to avoid predation by the Goanna (*Varanus varius*).

Weavers collected stomach contents or scats from 52 trapped V. varius and samples from specimens at the Australian Museum. Remains of exotic mammals were identified in 38 per cent of the samples, native mammal remains were in 36 per cent, and all mammals combined were represented in 78 per cent of samples ... At least 38 per cent of the samples contained carrion. Cat (*Felis cattus*) was the only species of mammal, exotic or native, observed at Bendethera that did not appear in the dietary samples from the site.

Clearly, introduced mammals are now a major part of the diet of *V. varius* in the study areas. However, it should not be assumed automatically that the introduction of exotic mammals to south-eastem Australia has been of net benefit to *V. varius*. Certainly

some of them (e.g. cattle, horses, rabbits and probably sheep) have become food for the lace monitor, but the provision of grazing land for these exotic animals has dramatically reduced the mature forest available in south-eastern Australia for *V. varius* and its native prey. Additionally, introduced exotic mammals such as dogs, cats and foxes prey on smaller *V. varius*.

 Many types of large food items e.g. rabbits, adult birds, macropod

carrion, and small food items e.g. arthropods are all taken by *V. varius* of a wide range of lengths. The very smallest *V. varius* had dined on grey kangaroo (*Macropus giganteus*) while large Lace Monitors were recorded taking Lepidoptera larvae as well as larger items.



Taking the vital statistics. Photo by Kevin McCue.