

## GOANNA NEWS 50<sup>TH</sup> EDITION

### **New fauna record for Naas Valley and suspected faunal changes underway**

Thanks to John, Quentin, Mark, Trish, Joss and other walkers who did Nest Patrols in February, 26 goanna nest excavations were found (a record)! We placed cameras on eight. Rupert, Melinda and I did a final maintenance run around the cams in early autumn, then on 16 Oct, Mark Hollow was successful in changing the memory cards and batteries in all of them.

I could use some help to properly record the photos. It can be quite interesting and if the task is split between a few people it should be fairly easy. But quite a lot of things were evident from a quick skim through about half of the memory cards. Before the batteries ran out there seems to have been an extraordinary amount of interesting fauna activity near the mounds. Goannas are a notable omission. In autumn we had recorded a few benign goanna visits– possibly by the parents - and two cannibal raids (see photos in previous Goanna News), but we would not expect goanna activity over winter, nor did I see any. Also, there seems to have been no attempted nest raid by a dingo or fox.

Fallow Deer featured in several sites I checked (Figure 1) which is a big change from our first few years on the site. For example in a much larger camera survey in 2018, one Sambar was the only deer photographed. Likewise, Red Foxes were not detected by cameras at all in our first few years but continue to be increasingly prevalent and now are seen in every batch of camera records. Cats too! I was astonished to see three, because we have had only one photo of a cat in the previous five years.

The most frequently photographed animals at the termite mounds in winter appear to be Red Necked Wallabies. Introduced Black Rats (*Rattus rattus*) are frequent nocturnal visitors, I noticed. There are also occasional Black Wallabies, Wombats, BT Possums and native small mammals.

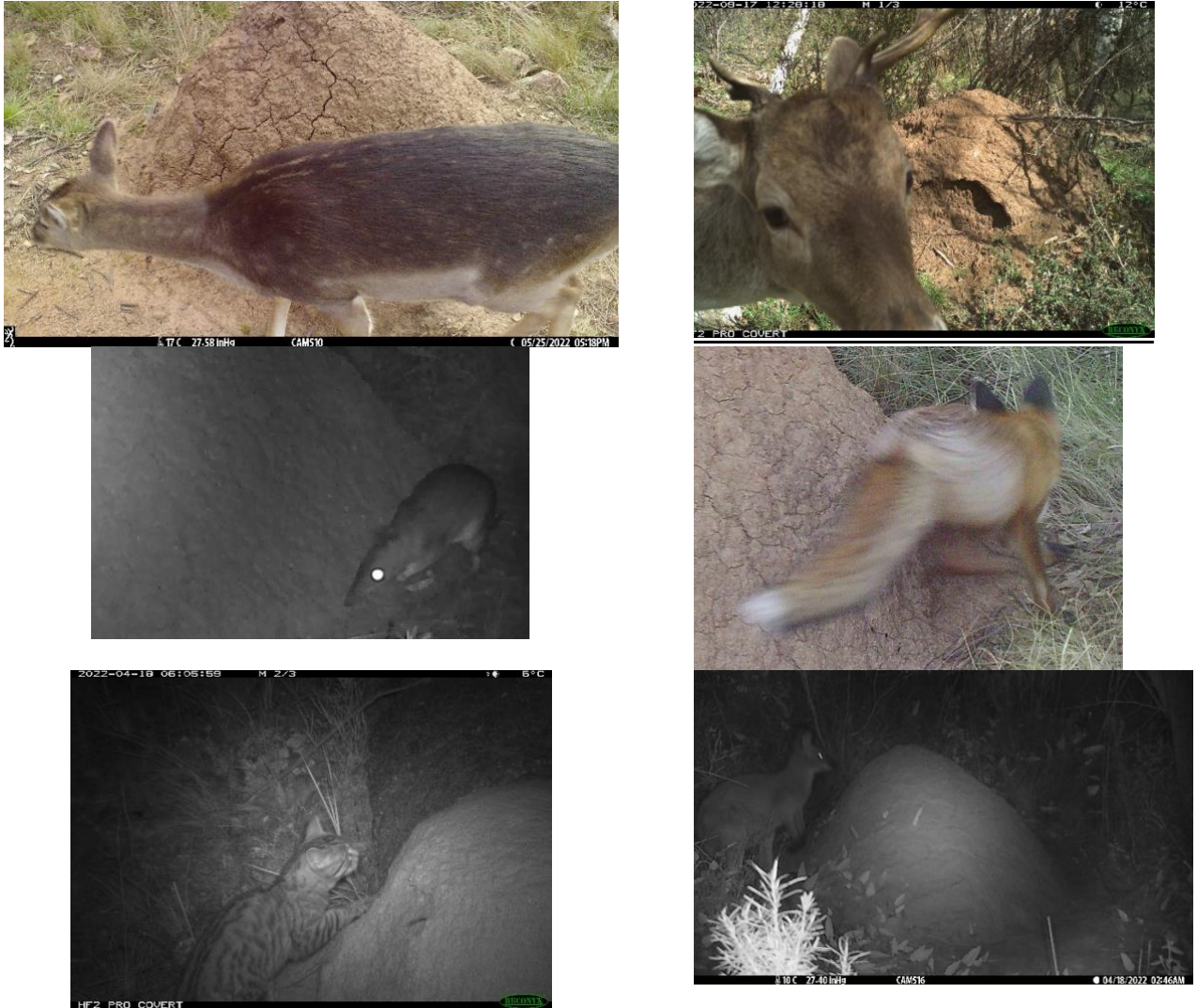
I left the best for last! In skimming through the photos, by good luck I spotted Long Nosed Bandicoots (*Perameles nasuta*). at two sites in March and April. These are the first bandicoot records ever obtained from Naas Valley. It is typical of this species to appear in an area during a phase of post-fire regrowth. One bandicoot was photographed on the very spot where a fox had been photographed two hours earlier.

A proper answer to the question about significant change in the fauna will be obtained when we manage to repeat our 2018 survey – in a dry year maybe?

### **Failed attempt to replace GPS packs**

To reduce our risk exposure at Naas Valley due to the la Nina conditions, we want to remove GPS packs from four goannas and replace GPS packs on the two most accessible females. (We still have much less data from females). With the NVFT closed, in sunny weather on 16 October John Brickhill and I backpacked much equipment in to the first two female goannas but all the equipment remained in our packs because both females were deep beneath large boulders. It sometimes takes more than one attempt in sunny weather to find a female out of her burrow where we can catch her but it was especially frustrating this time to find both of these females out of reach on the same day, when the rain was forecast to return the following week. We were able to download their GPS data but the important task of replacing the GPS packs requires a repeat visit, as does the job of capturing the other four. Unfortunately this looks unlikely to be possible for at least another month, due to the weather, river height and park closure.

**Figure 1: Upper left, Fallow Deer; Upper right, Sambar; Mid left, Long Nosed Bandicoot; Mid right, Red Fox, Lower left, Feral Cat; lower right Red necked Wallabies are hard to distinguish at night from Black Wallabies.**



### **la Nina again – so we are shifting some things to Ainslie-Majura**

Nass Valley Fire Trail (NVFT) has 12 fords through the Naas River, plus some significant crossings of tributary creeks. Last year, flooded crossings proved to be a major barrier for our project, as was the wet road because we had to avoid worsening the damage already done by the water flows. Floods in small creeks collapsed the road in three places, one of which eventually became unsafe for vehicles, thus blocking the firetrail. PCS generously trusted us to decide when and where we should go, although the valley was closed to staff for several months. In Autumn, trucks involved in road repairs broke through the road surface in one place, resulting in a bog so bad that the road is still impassable there.

Unlike normal years, in *la Nina* conditions the river remained high for many days after the rain stopped, and springs kept the road wet for weeks. Due to this lag, road or river conditions often made me cancel a planned visit even though the sun was shining out of a blue sky. I cancelled at

short notice, at least as many planned field trips as we actually carried out. No wonder volunteer numbers plummeted! Sometimes John Brickhill and I waded the flooded fords and walked along the road to reach our GPS-wearing goannas (Figures 2, and 3), but the time it took to reach them meant we worked hard to manage only about one goanna per day

**Figure 2: Left, Ford 7 is wide and shallow: Right, crossing below Naas Falls.**



**Figure 3: When the flood gauge at Caloola is at 20cm, Ford 1 looks like this, with the big rock submerged, which is too scary for my Pajero, and Fords 2 to 6 are much worse – 5 and 6 are probably impassable in any normal high clearance 4WD. Its good to go if the gauge is below 16cm**



In the absence of traffic, weeds grew across the least travelled parts of the road (Figure 4) including Tarweed (*Madia sativa*) newly arrived in the ACT. Nothing could be done to control the Tarweed in time before the road repairs reached it, so it will have been spread along the valley by the roadworks.

**Figure 4: Tarweed in the middle section of NVFT with deep rills threatening to cut the road.**



Because the road damage was so severe (e.g. Figure 6) and was polluting Naas River, we were not content with simply reporting damage to Namadgi staff. We took time out of the project to help NPA lobby politicians for funds to carry out the much needed maintenance which had been absent from roads across Namadgi generally, for two years since the 2020 bush fire. Work commenced late in the 2021/22 goanna season (Figure 5).

**Figure 5: Unprecedented resources were put into roadworks on NVFT late in the 2021/22 goanna season, with seven major plant units operating in two areas of the NVFT at once**



Unfortunately the work was almost completely unsupervised. Normal forestry style principles of road construction and drainage were not followed. Apparently the advice of local Namadgi staff was

also disregarded. We saw dozens of essential rollover drains removed or reduced in capacity. Consequently, rilling overtopped the road drains in the first storm, while work was still underway! Also now the road has collapsed in the same place as it had this time last year (Figure 6). There seems to be a risk that before road maintenance resumes, the other collapse sites may also reopen. Each collapse site threatens to block the road.

**Figure 6: NVFT collapsed and undercut in the same place as 12 months previously. Already there is barely enough road remaining, that is not undercut, for a 4WD to pass.**



In summary, the *la Nina* conditions in the 2021/22 goanna season proved even worse than 2019/20 when the research site was closed to us for weeks because of extreme dryness (which is associated with the risk of challenging bush fire behaviour). We are keen to avoid another year as difficult as these two. But so far in 2022/23, the weather, the river and the road are following the same trajectory as last year. And this time the management response is less trusting - unwilling to grant us access when other researchers have been excluded. Because the prognosis for access in Naas Valley this goanna season is incompatible with the planned camera survey (to estimate goanna population size) and challenging for our other activities, we will try to withdraw as much goanna research as possible from Namadgi. Instead we will put more time in at Ainslie Majura Nature Reserve, where there is a small goanna population at risk of disappearing.

### **First GPS on a goanna at Ainslie Majura**

Thanks to good observations and camera work by PCS Ranger Riley Basso, we have been able to place a GPS pack on goanna Rex (Figure 8) at an early stage. He proved to be the largest of the 116 Rosenberg's Goanna we have captured in our project, at 3.4 kg. Rex was named by Matthew Higgins in 2015. He is presently living between boulders beneath Mt Ainslie Drive. Presumably he is wise about cars.

**Figure 8: Goanna Rex in Ainslie-Majura Nature Reserve: Left photo by Matt Higgins in 2015, Right photo by Riley Basso in 2022.**



### **Some camera traps are already set at Ainslie Majura**

John and I placed our first fourteen camera traps in the hope of finding somewhere to start cage-trapping for another goanna to which a GPS pack can be fitted. Cameras require more work to instal than cage traps but thereafter only require weekly maintenance visits, compared to at least two visits per day for cage traps. This illustrates a key difference between Naas and Ainslie Majura. At Nass we simply set cage traps because goannas are abundant. At Ainslie Majura the scarcity of goannas necessitates the two stage process.

Due to the history of theft and damage to research equipment in Ainslie-Majura, we place both camera traps and cage traps as far as possible from foot tracks and roads and we secure them to trees with python locks. For camera traps, we also use a ladder to place a security camera in a nearby tree where people can not climb to it. Stickers on the camera trap say what it is for, who is responsible, how to contact us, and 'another camera is watching' (Figure 9).

**Figure 9: A camera set up at Ainslie-Majura with a steel security box, python lock and labels. This camera is within the view of another camera placed in a nearby tree using a ladder**



## **Environment Grant**

We are grateful to the Environment Minister, Rebecca Vassarotti and the Environment Directorate for the funds awarded to the project under the ACT Environment Grants scheme. This is our third such grant.

## **Environment Minister to visit**

Rebecca Vassarotti is visiting the recipients of Environment Grants and will be with us for an hour on Monday 31 October.

## **NPA plan for goanna conservation in Ainslie Majura Nature Reserve**

Independent of the *la Nina* – driven plan to shift some research to Ainslie-Majura Nature Reserve, NPA is drafting a plan to be submitted to relevant parts of the Environment Directorate, for conservation of the last remaining goanna population in Canberra Nature Park. We hope to see the plan rewritten and rebadged as a government document and put into practice. The plan must deal with some politically sensitive topics related to the management of foxes and domestic dog walking.

## **NPA membership**

If you participate in goanna field activities more than once, I will gently pressure you to **join the National Parks Association ACT** (if you are not already a member). As well as supporting the ACT community group that lobbies governments about reservation and management of protected areas in the ACT region, there are many other benefits from membership and it is amazingly cheap at \$22 per year for a family. Have a look at [www.npaact.org.au](http://www.npaact.org.au)

## **Project governance documentation**

Our plan for the NPA Goanna Project is the **Project Outline**. It lists our aims for the project and how we intend to achieve them and achievements to date. The 22/23 annual update is almost complete, after which the Project Outline will be available on request by emailing me.

## **Who gets this Goanna News? And who gets invited to field activities**

Goanna News is a series of occasional emails providing photos and updates from the NPA Goanna Project. I write the emails, sometimes with the help of the other members of the **Goanna Project Committee** – John Brickhill, Enzo Guarino, and Rosemary Hollow. (And Brian Green is a part-time committee member who the other committee members consult on biological matters.)

I have two email groups, this Goanna News one and one about recent and upcoming activities. The latter is mainly intended for people planning to come out in the field. I will send a test email to the latter group a few minutes after this email. **Please let me know if you would like to be added to, or removed from, either group.** Aside from the emails, there are occasional articles in the NPA Bulletin about the project. They provide a more succinct account than Goanna News, after a longer delay. We have written 12 of those articles so far.

## **Refresher Training and Familiarisation sessions (Note date changes!)**

Three half-day refresher sessions are planned on consecutive Sunday mornings. Contact me by email if you are interested in attending any or all of them.

Session 1) Radio tracking for goannas. (Mostly outdoors **Sunday 6 Nov 8.30 am to 12.30 pm**)

Session 2) Maintaining camera traps; and simple ways to process images. (Partly out doors) **Sunday 13 Nov 8.30 am to 10.30 am**

Session 3) Using mapping apps on smartphones to record termite mounds, goanna nests, and goanna burrows; Also, how goannas are trapped and processed. (Partly outdoors)

For this session, Please load some mapping apps onto your phone beforehand: Backcountry Navigator seems the most popular in local walking groups, except on iphones where TerraMaps is a better option. However **Gaia** is outperforming Backcountry Navigator in my (Android) experience to date so you might prefer that. It is claimed to work on iphones as well.

Some mutual help is expected to make this session work. You will be given waypoints to load into your apps and can then navigate to them outside the visitor Centre, record other features on the way, and export those to me. **Sunday 20 Nov 8.30 am to 12.30 pm**

As in previous years, these will all be held at the **Namadgi Visitor Centre**, so bring your own food, drink and rain protection.

## **Help! Volunteers needed**

We want to attempt to count the number of Rosenbergs Goannas on Ainslie Majura with our largest yet camera trapping survey. Failures in February 2021 (three goannas detected but none resighted) and February 2022 (no goannas detected) tell us that extra effort is needed because of the low density of goannas.

Weekly visits are required to replace memory cards, batteries and baits. I have scheduled four Sunday morning visits in November - December and seven Sunday morning visits in January-February. Its ideal from my perspective if you can go to the same sites on every one of the eleven visits, but single day visits also work well if we have enough people to get the job done. A key requirement for participants is to be able to find the camera site using the GPS in a mapping app on your smart phone. (I provide the GPS coordinates of the cameras). See training session 3.

In February 2021 we found that a novice person (more often a couple or family) could attend the site briefing then walk in and service two camera sites and hand over the resulting cards etc, in 2 to 4 hours. The time can be reduced if the walk is shortened by driving to the optimal start point, but many people were doing the activity because of the walking. Others preferred to take responsibility for a particular set of cameras, and visit them throughout the survey on a different day of the week to our main session. That can be arranged separately with me if you prefer.



The booking opportunities are provided in the Sign Up Genius app at this link

<https://www.signupgenius.com/go/10C0D4EA5AC2CA2FEC70-ainsliemajura1>

On each of the 11 dates there 20 slots for people to put their names. That means you will do two cameras on that date. If you intend to work in a pair with someone, please add their name as a comment.

Afterward there will be photos to process – a substantial task. I estimate we will obtain between  $\frac{3}{4}$  and  $1\frac{1}{2}$  million images. But I will make a separate request later for help with that.

### **Also more trips to Naas and camera installation at Ainslie Majura**

Small parties will continue to deal with the remaining tasks at Naas Valley, as permitted by the weather, the river, road conditions, and park closures. Also we continue to instal the camera traps a Ainslie Majura ready for the November start. Please email me separately if you would like to help with those.

---

