

Research grant presentation



l to r: Clive Williams (Vice Chairman), Vanessa Morrissey, Suzanne Medway (Executive Director), Ralph Campbell (Treasurer).

Fauna-sensitive road design

Our Society has awarded a research grant of \$2,000 to Vanessa Morrissey an Honours Student from the School of Biological, Earth & Environmental Sciences at University of New South Wales to assist with her project on roadkill in the Royal National Park. This project is part of a larger project being undertaken by Dr Dan Ramp and Dr David Croft of University of New South Wales called "Saving Wildlife, Saving People on Our Roads". It aims to collect, collate and analyse statistics on wildlife-vehicle collisions, as well as developing, deploying and field testing collision abatement technologies. Vanessa's project is concerned with the statistical phase of the project in a temperate climate (the Royal National Park). Other statistics have been collected from Fowlers Gap in the arid zone and Tumut in the snowy mountains.

Vanessa's report

The roadkill surveys are still rolling along - I'm up to the late 60s in roadkill numbers now. The most numerous kills so far have been swamp wallabies and possums (both brushtail and ringtail) as far as the mammals go, but birds outnumber them by far - mainly little wattle birds, yellow-faced honeyeaters, new holland honeyeaters, eastern spinebills and superb fairy wrens.

I've had a few problems to get around with the sandplotting (to measure roadside use of animals). I have only been able to detect relatively large animals due to the coarseness of the sand that we have access to, so it's a good thing I'm focusing on swamp wallabies. The smallest animal I've been able to detect in the sandplots so far was a brushtail possum; however I did find some bandicoot prints at one roadkill site while scrounging around collecting site data. Apart from that, most of my sand got washed away with all that rain, which also wiped out 4 out of 7 of my checking days. We had to replace all the sand for the second time round and this time I lost only 2 out of 7 days, not to weather this time, but to a nasty virus that sent me to bed for those last couple of days. But I have getting some data, which is good - mostly fox and deer prints though, which doesn't look too good for the native wildlife.

I've also collected 2 lots of hair samples from the 90 hair tubes put out each month with the sandplots. I'll be starting to look at analysing them so it will be interesting to see what I find there.

I'm also in the process of organising a survey of the attitudes of drivers to the issue of roadkill. This survey will be distributed to Royal National Park visitors via the entrance station and visitors centre and to Bundeena and Maianbar residents via local businesses (yet to be arranged). It will be in the form of a competition to give people incentive to fill it out the survey. Hopefully this will give us some insight into what people think on the issue as well as how willing they would be to take various measures to minimise the problem. I believe it is important to incorporate the factor of human behaviour into any roadkill management strategy.



Vanessa taking measurements of the first dead swamp wallaby found during her project.

As a result of a small article in a local newspaper, I got a call from a local wildlife carer who read the article and told me she had just put out of its misery an eastern brown snake that had been run over by a truck about 15 minutes after I finished my run through the park. I was very grateful for all the detailed information she provided, and for the fact that I wasn't the one to find the deadly snake still wriggling!

Well it's closer to the end now with my daily surveys FINALLY finishing off at the end of this month. The roadkill rate seems to have slowed down a bit over the last few weeks, but there's still plenty to keep me busy. I've actually been really happy with the way the project's been going lately. I've had some interesting obstacles with the driver attitude surveys, but it's all going ahead now. Once again, I've had tonnes of support from Bundeena local businesses as well as from the Royal National Park staff.



A female superb fairy wren, of which I have found quite a few -I'm sure my results will be an underestimate though, as I have seen the way these birds float along the road's surface - they could easily tumble out of sight or be snatched up by one of the many ravens that are continually scanning the roads for an easy feed.

I've started collecting some survey results already, which is encouraging, and I've also started to analyse some of my hair samples. So far I've been getting almost all swamp wallaby hair, which is good because the tubes were chosen and placed specifically to maximise swamp wallaby detection. However I still have a fair bit to get through.



This is one of my saddest photos. This baby brushtail possum was found mangled in its dead mother's pouch. I have found another like this with only the head and arms left in two separate pieces still in the pouch - I assume this is probably due to a predator/scavenger such as a bird (maybe a raven?) actually checking the pouches for these 'tasty morsels'. The condition of both adult possums suggests that the injuries to the young were not caused by the impact of the vehicles that killed their mothers.

I found it interesting that I had not found any deer roadkills (apart from an old skeleton), until last month, when I found three in the space of 10 days. Since then I have found no more in my section (although there were some reports of kills in other parts of the park), although this may have something to do with a cull that occurred just after this 'run' of roadkills. I also found my first road-killed echidna last month – an adult male.

There was some great news on the financial front thanks to the Wildlife Preservation Society of Australia who has kindly given a grant of \$2,000 to help with my project costs (which exceed this amount considerably, but it certainly is a HUGE help!).