Mammal Survey Group of Victoria
NEWSLETTER

October 2006

Next Meeting Tuesday October 10th
To be held at Arthur and Jess Howard's House, at 8 pm, 6 Alphington St, Fairfield. Chis and John will be showing some slides from their trip to the Simpson Desert in June.
Last Meeting Andrew McCutcheon presented a slide talk on the field trips he attended run by CALM in Western Australia . The trips and the animals seen looked fantastic but the cost was very high. MSGV is much cheaper!
Last Camps
August 12-13: Clydesdale
We checked half a dozen existing nestboxes on the Trust for Nature property of Liz Ingham and Trevor Coon and installed another 18 boxes on the adjacent property of Ian Higgins. Half of these are designed for sugar glider/tuans and half for feathertail glider/pygmy possums. The existing nest boxes contained one family of five sugar gliders and an owlet nightjar. Spotlighting revealed brushtail possum and sugar gliders. Only a few traps and one bat trap were set on what turned out to be a freezing night with nil result. The days however were glorious sunshine.


Resident Owlet nightjar

Sept 9 -10: Mt Ida and Crosby Forest:
We checked the 32 nest boxes at Mt Ida and found some 40 adults and juveniles. We appear to have chosen a good weekend. We did not get time to go across to the Crosbie forest site so will need to set another date to do this.




Photos from Andrew's collection on the day.

Next Camp – Mullungdung October 7-8 or October 14-15.
A conflict has arisen for the original Date of October 7-8 as the commandant for this camp, Chris Wilson has ended up planning for October 14 and 15. Could members interested in this camp please advise by return email to John Olden or Chris Wilson which of these two dates works for them. Would appreciate knowing by evening of October 3rd members intentions. A map will be sent later this week if the camp ends up being on the 7th and 8th with a new commandant.
Future camps
November 4-7 – Redbank Nature Conservation Reserve
December 26-Jan 1 – possibly Suggan Buggan

Howard's Way: IDENTIFIABLE WASTE

In 1939 Jessie and I joined the former Fauna Survey Group of the FNCV, and for the first time we heard that polite word scats, referring to mammal waste. Up till then the only time we could recall hearing that word was to describe improvised jazz singing, imitating musical instruments. Checking out the word scats (skats) I found it is derived from the Greek word Skatos meaning dung. Though when I accidentally step in the various dog varieties the word scats has no impact.

In the early days of this Survey Group some of us would collect scats on the weekend camp outs, also pellets, those indigestible wads regurgitated by predator birds, especially owls. Both scats and pellets, contain fragments of indigestible matter such as bone, teeth, hair or feather, which then needs to go on to an expert who can then process this waste product to identify the pieces. In the Group we had as chairman the late Norman Wakefield, he was head of the Biology department at the Monash Teachers College. Whatever droppings were found Norm would extract the fragments of bone and feather and provide the members with adequate analysis of the hunters prey at the next meeting. The identification of scats or pellets has its limitations, one has no means of knowing how far away from the pick up point the victim was caught. It does however, give a clue to the presence of species not otherwise observed.

Not only mammals but birds also have been studied by scat analysis. Researches studying a high population of honeyeaters found it almost impossible to get an accurate observation of the specific shrubs from which the birds were taking nectar, in an area where many plants were in bloom. They mistnetted the honeyeaters, and retained them in holding boxes till they defecated. By examining the droppings under a microscope it was possible to tell from which plant they had been feeding from. The birds when extracting nectar take in a little pollen which is hard shelled and passes through the bird unaltered. Nectar is digestible, but pollen like hair, is readily identified under a microscope.

It wasn't till the 1970s that scat analysis developed to a scientific skill by two researchers--Hans Bruner and Brian Coman from the Keith Turnbull Research Institute. They found under the microscope analysis the hair of each species of mammal can be separated from even closely allied groups. The skill became necessary when they were analysing the diet of feral cats to see how severely their predation was impacting upon the small native mammals. Scats were readily obtained but there was no easy way to determine the cats preference. Brian Coman found that feral cats were opportunist, taking as a major part of their diet what ever prey was most easily obtained, whether it be native or introduced mammals, birds or grasshoppers. One may assume from this study that feral cats do little harm. However, when they live close to a bird nesting colony, or an isolated concentrated population of small native mammals, their presence is devastating.

When researches started gathering data about our small native mammals, they turned to the pellets of predator birds, especially owls. These silent hunters tend to swallow large pieces of their prey, useful bone fragments that could be identified belonging to a species were found in their pellets. Owls being nocturnal, hunt mostly small mammals, often swallowing them whole. Their digestive system has almost no affect on the bones, and after taking nourishment from the prey, a day later they regurgitate the waste in the form of a pellet with the identifiable skeletal remains with fur or feather. Occasionally a bonus awaits the collector, a complete skeleton may be extracted from the pellet. Predator mammals and birds deposit daily their body waste in the form of scats or pellets. The chance of finding these, is far greater than coming across the skeletal remains of a small mammal that has died of natural causes. With the skill of detailed analysis of these waste products it can provide valuable research information.

ARTHUR HOWARD.