

# Upper Bunyip Action Group Inc. - November 2002

## Environmental Statement re Leadbeater's possum... an FFG-listed species that is subject to FFG-listed threatening processes that result from timber harvesting.

Transcript from Andrew et al. (1984) *Sites of Zoological Significance in the Westernport Region*, Dept of Conservation, Forests and Lands (Victoria) - (bolding by UBAG).

From pp. 89-93 of Sect. 6.2 - "Species of Special Significance"

"Leadbeater's Possum is a small, agile possum which except for its lack of a gliding membrane, superficially resembles the much commoner sugar glider.

(...)

Leadbeater's possum was recently rediscovered in the Westernport catchment in an A.P.M. concession area on the edge of the Gembrook State Forest by E. McNabb and R. Loyn in April 1981 (in press). The site was on the northern boundary of the catchment, on the southern slopes of Mt. Beenak, just below the ridge which forms the watershed of the Bunyip River. **[UBAG's Note - i.e. in the northern extreme of the 350 Upper Bunyip forestry block!]** The possum was observed foraging among the loose strands of decorticating bark of a large Mountain Ash (approximately 20 metres in height and 40 cm in diameter) in an area of younger regenerating Mountain Ash and Silver Wattle (*Acacia dealbata*). A tall stag (approximately 14 metres) stood within 20 metres of the Mountain Ash. This record is the closest to the Melbourne metropolitan area and forms the most south-westerly limit of Leadbeater's possum's known distribution. **Its abundance and local distribution in the catchment is yet to be determined.** The Bunyip valley immediately to the south of this site is one of the few areas in the central highlands which escaped the 1939 bushfires and contains **one of the finest stands of mature Mountain Ash in the Westernport catchment.** The creekside vegetation is dominated by ferns and Myrtle Beech (*Nothofagus cunninghamii*), the latter being a relic of wetter climates of the past and which today only survives in wet, sheltered, undisturbed environments (Gullan et al., 1979).

Although Leadbeater's possum has not yet been recorded from the Bunyip valley, **this area has not been thoroughly surveyed and future investigation may reveal its presence there. The Bunyip valley probably provided a refuge for Leadbeater's possum throughout the 1939 fires from which it is able to recolonize surrounding areas of regenerating Mountain Ash as it reaches a suitable age.**

Recent research into the ecology of Leadbeater's possum indicates that it prefers tall open forests dominated by mature Mountain Ash (*Eucalyptus regnans*), Alpine Ash (*E. delegatensis*) or Shining Gum (*E. nitens*). These forests must be at least 150 years of age before they can provide an abundance of large, old, hollow trees for essential nesting sites (Rawlinson and Brown, 1977; Smith, 1978).

Unlike its close relative the Sugar Glider, Leadbeater's possum cannot glide and moves about solely by running and jumping between the vegetation. Therefore it also requires a dense tangled understorey, generally composed of a mixture of wattles (*Acacia* spp.) and young eucalypts.

Much of the forest in the present known range of Leadbeater's possum was extensively burnt in the 1939 bushfires. It was once considered that the dense post-fire regrowth was essential for the maintenance of vigorous populations of this possum and therefore forestry operation rather than fire could be used to constantly ensure such areas of regrowth (Rawlinson and Brown, 1977). However it was later realised that the large dead trees or stags, which provide dens, are essential components of the regrowth habitat (Winter, 1979) and **it is the trees over 150 years in age which are a more important feature of the forest. Retention of large living or dead trees is not encouraged in current forestry operations, particularly if clear felling is practised.**

In some areas populations of Leadbeater's possum are known to reach densities of three animals per hectare. Such high densities are only considered possible due to the presence of

numerous potentially suitable nesting trees. The nest is extremely important to the survival of these small possums, providing a well insulated warm retreat. Nests are constructed from shredded strands of Mountain Ash bark and placed inside the hollow centre of a large tree of this species, 12 to 35 metres above the ground (Smith, 1978).

Food availability also appears to be directly related to their population density. Leadbeater's possum feeds on insects and spiders found under the loose hanging masses of decorticated eucalypt bark and also nectar and sugary exudates such as saps, manna and honeydews produced at wound and insect damage of eucalypts and acacias (Ryan, 1963; Smith, 1978).

**In a publication on the status of endangered Australian wildlife, Winter (1979) considered Leadbeater's possum to be the most endangered possum in Australia due to its restricted range and threats to its habitat.**

Parts of the known range of Leadbeater's possum still provide an abundance of nest trees but many of these trees are unsound, especially the stags of the 1939 fires, and will eventually fall. In areas of regrowth, old stags are unlikely to survive until the regenerating ash matures to the stage where they can provide nest trees. This will undoubtedly lead to a marked reduction in numbers of possums when the present nest trees have collapsed.

In addition, the entire present known distribution of Leadbeater's possum is contained within a concession zone planned to be progressively clear-felled for saw log and pulpwood production. **There is no evidence to suggest Leadbeater's possum can recolonize a clear felled and regenerating site** (Rawlinson and Brown, 1977; Smith, 1978). **Water catchment areas contain stands of mature ash forest and once provided a small but secure haven, but possibly even these areas may be used for timber extraction** (Smith, 1978; Winter, 1979).

In the Westernport catchment the major part of the Bunyip valley has been zoned for hardwood timber production and the remainder is in the Upper Yarra multi-purpose park, which accommodates timber extraction (LCC, 1977). The site from which Leadbeater's possum was recorded is within an A.P.M. concession area. **Logging of the Bunyip valley would certainly threaten the survival of Leadbeater's possum in the Westernport catchment.**

**Although it has been previously recommended that Leadbeater's possum is given top priority for conservation (Winter, 1979), to date no area has been set aside for the protection of this species' habitat. Unless some mature Mountain Ash forests remain of which adequately sized areas are reserved from logging, and a portion of today's regenerating trees are allowed to reach maturity to provide nest trees, Leadbeater's possum will almost inevitably decline to extinction. Only through the establishment of reserves combined with the evolution of new forestry management procedures which take into account the habitat requirements, distribution and abundance of the wildlife characteristic of each forest type (Recher *et al.*, 1980) can the survival of Leadbeater's possum be ensured in the future."**

**[UBAG's Comments - Is any plainer statement of supporting zoological evidence needed to justify an immediate cessation of logging in the 350 Upper Bunyip forestry block? *Gymnobelideus leadbeateri* (Leadbeater's possum) is currently listed as a threatened taxon under Schedule 2 of the Victorian Flora and Fauna Guarantee Act 1988 (as amended at 29 June 2000). It is also the mammalian faunal emblem of the State of Victoria.**

It should be borne in mind by the reader that **the above extract is from a 1984 report by scientists of the Dept of CFL, the forerunner of the current Dept of NRE!** Details of the references cited therefrom can be supplied if required.

### **Further Leadbeater's possum research is needed NOW!**

Similar material in this report relates to the 1984 status of the Sooty Owl (*Tyto tenebricosa*), and Powerful Owl (*Ninox strenua*), and all of this evidence supports our contention that the 350 Block must be closed to logging immediately.

**The Blue Range - Mt Beenak area (including the 350 Block) is identified in this 1984 report as a Site of National Significance. A large proportion of the upper reaches of the Bunyip River was recommended by the Land Conservation Council in 1977 to be part of a hardwood production zone, and the UBAG can point to the deploring consequences of this decision. There are no prizes for guessing why this LCC decision fell this way!]**