## LIBRARY

Department of Biodiversity,
Conservation and Attractions

This PDF has been created for digital preservation. It may be used for research but is not suitable for other purposes. It may be superseded by a more current version or just be out-of-date and have no relevance to current situations.

## AND LAND MANAGEMENT DEPARTMENT OF CONSERVATION



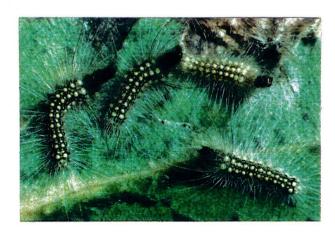
- Suph nog PI
your held nog si dish ruog
no bast -1'nsuph nog PI
... Kawena



Have sidt nass sinsect?

### Why?

Because between 1983 and 1988, up to 160,000 hectares of jarrah forest were severely affected by an outbreak of *Uraba lugens*, the Gum Leaf Skeletoniser (GLS). CALM Research is currently monitoring GLS population levels and distribution in the central and southern forest regions and asks for your assistance.



#### How can I help?

- 1. By being our "eyes in the bush",
- 2. By learning to identify GLS,
- 3. By conducting a series of five-minute spot observations, possibly in the course of your normal duties.

# O.K. I'm your "eyes in the bush" but how do I identify GLS?

The caterpillars are green/black and yellow with long, pale hairs which are an irritant to human skin. A characteristic horn-like tuft is commonly seen in older caterpillars. This is formed from moulted head capsules stacked on top of each other. Fully grown caterpillars are about 25mm long.

## PAND LAND MANAGEMENT DEPARTMENT OF CONSERVATION



Dr Janet Farr or Stephen Dick at The Research Centre, CALM, Brain Street, Manjimup WA 6258. Telephone (097) 711 988 and facsimile (097) 712 855

Who do I contact for for further information?

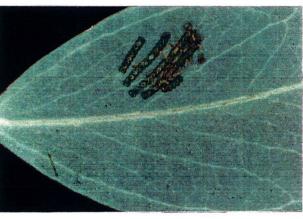
Regions.

Results will be plotted on maps so please provide a sixfigure Forest Department or Australian Map Grid reference in the space provided. Keep observations at least 2km apart. Many closely spaced observations give us less information than relatively few over a wider area. Our aim is to collect at least two observations per forest block throughout the Central and Southern Forest

What happens next?

Regardless of your findings, please fill in a report form (copies available through your district office) and send it to us with sample of leaf damage. A record of no GLS is as important as a positive sighting.

What do I do next?



GLS site and hatchlings

### What is the life cycle of GLS?

The eggs are laid in parallel rows on eucalyptus leaves. The caterpillars are most commonly seen between September and January. After going through a series of 10 to 13 moults, they usually pupate in litter at the base of trees or under loose bark on the trunks.



Old egg site and skeletonisation

# What damage does GLS cause?

The young GLS caterpillars feed in clusters. They eat most of the leaf tissue except the veins, reducing the leaf to a skeleton. At about the sixth instar (moult) they disperse among the surrounding foliage and feed separately, biting through the entire leaf and often leave only the mid-vein. In an outbreak, trees may be completely defoliated. Many species of trees are attacked by GLS including most of Western Australia's eucalypts.



Typical leaf damage - skeletonisation and leaf-chewing

# What are the best conditions for observing GLS?

Warm, clear conditions with good light are best for observing GLS. Observation points may be chosen at random in any eucalyptus bush. Proximity to roads or tracks is not a problem.

Checking by your watch, spend a good five minutes looking around for telltale signs. Suspect leaf damage may lead you to old egg sites and caterpillars. Damaged leaves are not conclusive evidence. However, leaves bearing egg sites or moulting casts (skins) does tell us that GLS has been there.