DWELLINGUP

CONSERVATOR OF FORESTS. 29th May 53.

PERTH.

D.S.H.3.3.4

LITTER POPULATION STUDIES.

Some preliminary work has been carried out by Mr. McNamara on this project and a report of progress is attached hereto.

It is indicated that there is a 25% increase in population between the firebreak (annually burnt) and the Compartment (protected 22 years), while the totals compare reasonably well with those given for beech (Bornebusch) and (Eaton & Chandler).. working in North American Hardwoods.

Further work will be carried out to:-

1. Determine the influence of depth on population.
2. Compare areas on Teesdale representative of Dead Jarrah, Marri regrowth and healthy Jarrah.
3. Compare seasonal tendencies by regular monthly sampling.

R.F.O.

MR. STEWART. MANJIMUP.

For your information,

R.F.O.

D.S.H. 3.3.4.

LITTER POPULATION STUDIES.

PROGRESS TO: 28.2.53.

1. A total of 7 samples (4 Break and 3 Compartment) have been taken from Holmes 1. Populations range from 25 - 172 units per sample; the greatest variation being found in the Cpt. whose population, with one exception has consistently been appreciably higher than that of the break, reaching an average of 117 units as opposed to 93 units per sample.

2. The lowest populations recorded were those taken in the H - A1 layers on 29th April, before any appreciable rainfall had been received. The highest were taken in the F - A1 layers on 11th May immediately after fairly heavy rain. The samples since collected on 18th May have shown a slightly lower population despite continued moist conditions.

3. The mean percentage composition of the populations have been found generally similar, as follows:-

	Break.	Compartment.
Mites & Springtails	70.0%	71.5%
Millipedes & Centipedes	4.2%	1.8%
Bristletails	4.2%	2.6%
Ants	7.5%	7.7%
Insect Larvae	5.2%	6.8%
Insect Adults	1.0"	2.6%
Others	7.9%	7.0%

but it is uncertain whether this tendency would be maintained in further samples. (Eaton & Chandler's findings appear to indicate that it would). The main difference between the two sets of samples therefore, appears to be the 25% unit increase in compartment populations over break populations.

4. There was no evidence of increase in stocking by seedlings of the current season's growth, as would be expected from the early date at which the count was taken. Fruiting was not observed on Jarrah saplings, but 5 Marri in the 6' - 25' height classes had set fruit.

5. In most cases Jarrah and Marri seedling deaths were associated with either rocky patches, bare gravel, or dense competing vegetation.