Report on the Preliminary survey of the food of the Noisy Scrub Bird (Atrichornis clamosus)

Dr. J.A. Springett

Forests. Dept. Research. Como.

File No. 827/53.

Report on the preliminary survey of the food of the Noisy Scrub Bird (Atrichornis clamosus).

Dr. J.A. Springett.
Como.

Part of my work is the collection and identification of soil animals in the S.W. of the State. Collection has mainly been in the forest areas but some collections outside the forest have been made to give some indication of the range of species. I have tried, where possible, to collect animals in places where the data can be of use to others.

C.S.I.R.O. Wildlife is engaged on a study of the Noisy Scrub Bird which feeds on soil fauna. The Department of Fisheries and Fauna felt that some information on the extent of the bird's feeding area would be useful in planning the bird's protection. The N.S.B. nests in permanently damp reed beds and it was thought that the bird would be fairly well protected from the effects of fire.

Direct observation of the bird is difficult because of its shy manner. A survey of the available food was made to discover where the animal was most likely to be feeding and which food organisms it could be using. It was found that the bird probably feeds in the tree belt round the nesting site and also that the availability of food is less when the soil surface is dry. It follows that although most fires would not threaten the nest they could have a marked effect on the quantity and availability of food.

The following information has been given to Mr. N. Robinson of C.S.I.R.O. Wildlife who is giving a paper on the N.S.B. at the International Ornithological Congress in Amsterdam in September, 1970.

Soil and litter invertebrates were collected by hand sorting and seiving. Qualitative samples were taken on 20th July, 1968 by Mr. Robinson and quantitative samples (5 soil cores 100 cm^2 in area, 20 cm deep, at each of 5 distances from the nest) were taken by Dr. Springett on 4th March, 1969 and 26th July, 1969. On 28th July and 4th March, 1969 the samples contained mainly isopods and amphipods with some centipedes, spiders, beetles, cockroaches and earthworms. The live weight of animals taken from the litter on 4th March, 1969 under the dwarf eucalypt belt was equivalent to about 150 gm per square metre. On 26th July, 1969 the situation was quite different, the only animal collected by hand sorting and seiving was a small earthworm, the live biomass of which was equivalent to 100 gm per square metre.

Soil and litter dwelling invertebrates move downward in the soil as the litter surface dries out (Springett, Brittain and Springett, 1970). In dry conditions a bird would need to scratch litter to a greater depth to find food which would increase the time spent in feeding and decrease the song output. In very dry conditions it seems that the type of food available also alters, bringing in a different factor.