

CST REPORT NO 66

PHYTOPHAGOUS INSECTS DATA BANK. PROGRESS REPORT 1975/76. 1976.
2 leaves. [Contract Title: Phytophagous Insect Data Bank;
Contractor: ITE (D.F. Spalding); NCC Research Contract: F3/03/30]
Key-Words: DATA-BANKS; INSECTS

This Report is an official document prepared under contract between the Nature Conservancy Council and the Natural Environment Research Council. It should not be quoted without permission from both the Institute of Terrestrial Ecology and the Nature Conservancy Council.

1. Coding of data

Data relating to the Hemiptera/Heteroptera (phytophagous species) have been coded from Southwood and Leston and from a variety of entomological journals.

The data have been checked normally and have been grouped into batches of coding forms for punching on to paper tape at commercial punching bureaux. Bibliographical details of the sources of information have also been coded and checked.

2. Punching of data

Six commercial agencies were approached in early March and presented with detailed punching specifications and similar batches of data. The result has been rather disappointing, and I have had to divert effort from program development to the question of data punching in order to get something done.

Of the agencies approached, one was on the verge of winding up; two no longer punched paper tape; one has not contacted me to date; the Atlas Laboratory has punched only half of its quota (directly from key to disk, as it no longer punches paper tapes for customers); and only one agency has fulfilled its quota of work.

Fortunately, the latter agency has proved to be extremely accurate (and probably will be the cheapest), and so far 30 records from Southwood and Leston, and all the journal and bibliographic records have been punched, making a total of 221 records punched and verified out of 531.

Cambridge University's punching service was also approached, but they had to return their batch of data unpunched, owing to current workloads.

3. Program development - main suite

The suite of programs which will sort and check the data is fairly well developed. Some minor amendments following discussions with Dr. Ward in February need still to be effected. Before these changes were suggested, a demonstration run had been made and the results shown to Dr. Ward (ITE) and Mr. Stubbs (NCC).

The suite written at present would sort the host plants to taxonomic order with links to phytophagous parasites; host insects to taxonomic order with links to predacious and parasitic insects; and parasites/predators to order with links to host species. The suite will not explore chains of dependence of, say, hyper-parasite on parasite on plant at this stage. (It is intended to implement the programs to do this during the 1976/77 financial year.)

4. Program development - input of data and data vetting

This program is very complicated owing to the complicated requirements of the data. I am developing the various sub-programs involved, as fast as it is possible to, and I am "fairly hopeful" that I can get the logic working by round about Easter.

Once input of the data is possible, the only delay will be in "ironing out" whatever coding errors have been made in the data by Dr. Ward's team.

5. Future development - 1976/77 financial year

The requirements of NCC and ITE are, of course, paramount, but there are a number of possible applications of this system which Dr. Ward and I have (independently) in mind, and which might prove to be of both financial and scientific use to the Institute. It is to be hoped, therefore, that some time for further development can be guaranteed.