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Local Biological Recording Centres & the Micro User

J. Lee

The continued growth of Micro Computer ownership in this country, linked with the ever increasing power of these machines, promises to have considerable future impact upon the natural history recording business. For some of the most widely used machines, expansion options are increasingly available affording individual users considerable data handling and computing power. Further, individual machines may be linked to form 'Networks' via the telephone system enabling superior communication in the form of "electronic mail", "bulletin boards", and the use of shared facilities such as databases. This developing facility has expanded the potential of the individual micro enormously and there are good reasons for supposing that decentralised computing based upon shared facilities will be of considerable importance in the future.

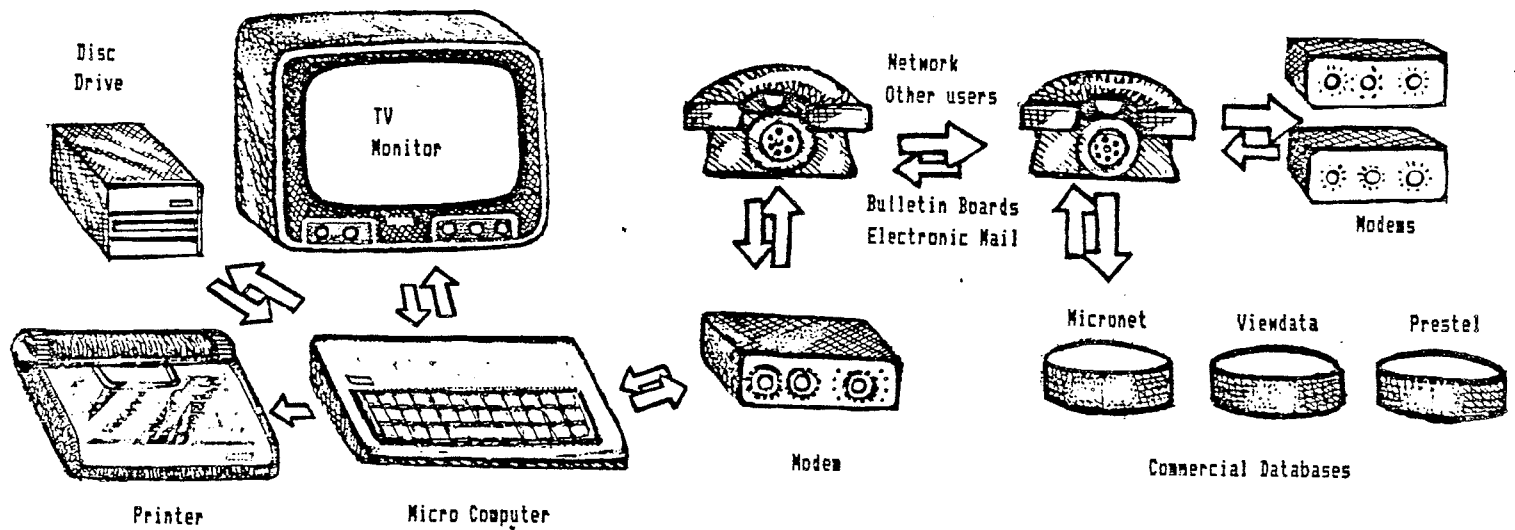
The increasing power of the micro is illustrated well in the case of the Acorn BBC B. The very large market created by wide sales has resulted in the availability of a huge variety of development options for this machine, both in terms of programmes, (often available in chip form, internally fitted, and a permanent addition to the machine's capabilities) and peripherals such as data storage disk drives, printers, and memory expansion units. In the last year for example, several add-on processing units have become available, enabling BBC B users to upgrade and to use the sophisticated IBM PC and CP/M business programmes. Upgrades of this sort vastly increase the inboard memory of the BBC B as well as enabling the

use of Winchester hard disk storage systems (of capacities of over 100 Megabytes). For the future, Phillips, the BBC and Acorn are at present jointly developing computer interactive video systems based upon laser read disks, with Gigabyte capacity. The launch of this new technology is promised for 1986, to coincide with the completion of 'The Doomsday Project', and aims to exploit a computer based training industry worth an estimated £50 million per annum.

There are currently available many powerful programmes for exploiting such computing powers, often in 'chip' form. Examples range from a choice of computer languages, word processors and databases with inbuilt statistical analytical capabilities, to graphic programmes and printer controllers. These fairly low cost programmes give the user considerable flexibility in terms of data handling and collation (Database), data manipulation (Word processor), and data output (the printing of formatted reports, maps, tables, charts etc). Both the inboard memory and the storage capacity of Micros are becoming less and less limiting factors in terms of serious scientific and business application.

With this in mind, recent developments in the field of communication between micros can be seen to be very significant. Via the telephone system, the facilities and the DATA of individual micro users can now be shared, (called 'Networking'), main frame databases accessed, and a variety of almost instantaneous lines of communication opened (electronic mail). Different micro makes can also be networked together.

Figure 1



Groups of users may develop Networks of considerable power based upon BBC or similar micro units, and utilise shared facilities (eg. Hard Disk storage) and an unlimited variety of information may be communicated almost instantaneously in the form of data searches, maps, charts, high quality print, lists and moving graphics etc. Communication is considered to be the fastest growing area in micro computing.

Decentralised computing of the type outlined may prove to have many advantages to offer to those engaged in Natural History recording, and interesting questions emerge regarding the future.

1. Will 'Networks' under the collective control of groups of field workers and specialists tend to hold the most up-to-date information.
2. How will LBRCs relate to 'alternative' sources of data held by local recording 'Networks'.
3. Will the bargaining position of 'alternative' databases be strengthened in terms of demands for better servicing (and perhaps patronage) from recipient institutions?

4. Will freedom from political constraints (ie. county and district boundaries) give 'alternative' databases an advantage over some LBRCs, in terms of a coverage based upon geographic, and biological criteria?

At what rate Micro computer facilities are adopted, and in which direction they lead are matters for speculation, however, LBRCs clearly need to be aware of and very responsive to present developments .

A possible problem with preservation of insects in alcohol

There is a rather enigmatic statement in the latest issue of Antenna (Bulletin of the Royal Entomological Society) 8(4); p.201. In a report on the results of tree fogging a statement is made to the effect that "some Diptera in particular may deteriorate irretrievably after preservation in alcohol for more than two years". The large numbers of adult (and larval insects) collected by fogging in tropical rain forests does obviously present a problem of curatorial nature. It will inevitably be several years before material can be sorted beyond the order level, except in the odd family a particularly keen taxonomist is interested. In the meantime evaporation, bleaching, etc., can take its toll.

Peter Cranston of the BM(NH) kindly responded to my enquiry and states (in litt., 4 Dec. 1984) that in his area of interest (principally chironomids) specimens lose colour and are difficult to macerate after a period of a decade or more. Two to three year old material in his experience were still suitable for making good slide preparations. He knew of no published accounts of this phenomenon.

Here we have another example of a lack of apparently necessary research by conservation scientists in the field of natural history in museums. They are almost to a man employed on the human history side of things.

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