A catalogue of lice

A mammoth work on lice, cataloguing all the lice of birds and mammals south of the Saharah, is now beginning to take shape at the Medical Research Institute in Johannesburg. By the time it is complete, John Alexander Ledger, the young British entomologist labouring away on this may well be middle-aged, for it could take as long as 12 years. One of the difficulties he found, when the work began in 1968, was that a large part of the material was dispersed in museums all over the world. This was because the early collectors of African birds and mammals took them back home and picked their specimens from the skin of these dead animals. Thus Ledger had to spend three months in the British Museum, taking notes of every African louse he could find in this famous collection. One thousand two hundred species of African lice are, in fact, known and have been described; but half as many again have not yet been described and getting together all the facts about a new species may take up to a year.

An important gap will be filled when this catalogue is complete but those who look for practical economic returns will not be disappointed. Some of this is emerging even at this relatively early stage. Recently, for instance, Roan antelopes were brought from Rhodesia to South Africa to replace dwindling stocks in the Kruger Park. In quarantine the animals were found to be lice-infected, which severely affected their health. It was suspected that the lice had been passed on to them by another species of antelope. Ledger was able to establish that this particular louse was specific to the Roan and would not live on other antelopes. So they were sprayed and presumably now live happily in the Kruger Park. This is not to say that louse control of wild animals in *wild* areas would also be an economic proposition. But, as Ledger explains, it could well be in the more intensive situations of game farming, where all the factors affecting the health of the animal as well as its relationship with other animals and man come under scrutiny. Also, as he points out, in the long run the future of many wild animals depends on their co-existence with domestic animals. On many farms in South Africa, for instance, Blesbok and Springbok are kept under almost domesticated conditions. The culled carcases fetch high prices. But most of these farmers also run cattle and sheep which mingle with the antelopes. Occasionally this stock becomes infested with lice which means expensive dipping and spraying. If the farmer thinks that the wild animals are the source of the infestation he is inclined to get rid of them for good. One of the things the lice catalogue will do, however, will be to define the host association of the lice, so that it can be determined, with certainty, whether a particular pest can only live on one host or transfer to others. And since, in most cases, the lice of the wild animals cannot infest domestic animals eradicating game needlessly should become far less frequent.

New Scientist 20 December 1973