

typed and it is hoped they will be out to the banders by the end of the year. Other sections will be added as they are completed. The rough draft has been made for about 60 of the species sheets. Since the manual will be in looseleaf form, further information may be inserted later.

REACTION OF GREENFINCHES TO SUNFLOWER SEEDS OF VARIOUS COLOURS

By Dr. Janet Kear

It was found during the course of a study of seed selection by captive British finches (Kear, Proc.Zoo.Soc. in press) that many of these birds will include sunflower seed, (*Helianthus annuus*) in their diet. This seed, an achene with a hard, coloured pericarp, can conveniently be obtained in three varieties; black, black and white striped, and white. Occasionally, black seeds turned up in the striped ones normally fed to the birds and it was apparent that most finches would ignore them. This was particularly noticeable in the case of Greenfinches (*Chloris chloris*) and Bullfinches (*Pyrrhula pyrrhula*), which took large amounts of sunflower but left the black seeds in the feeding dish. Some experiments were carried out on the effect of colour in the selection of this seed.

Six individually caged, wild-caught Greenfinches were fed on striped sunflower alone for twelve days in February 1959, during which time they each took an average of 6.4 grams of kernel (weight of a whole seed minus weight of husk) per day. They were then given a choice of black, striped and white seed in three similar brown dishes, the positions of which were changed daily, for twelve days. The birds took a daily average of 5.6 grams kernel weight, of which 49.1 per cent was white, 46.2 per cent was striped, and 4.7 per cent black seed. For a further twelve days they were given black seed, and this they ate readily enough when there was no choice taking 6.4 grams each day. Subsequently they were again allowed a choice and now their selection was 53.4 per cent white, 39.2 per cent striped, and 7.3 per cent black, with an individual average daily intake of 5.8 grams. Temperature was not controlled during the tests and differences in total intake between days when there was a choice and those when there was not are probably not significant.

White seed, then, was preferred to coloured seed; black seed was included in the diet only to a very small extent, although it was taken in an adequate quantity if the birds were given no choice. It is possible that the colour of the pericarp of the sunflower seed is associated with hardness, but no tests of this were made. These results provide an interesting contrast to those of Wood (EBBA NEWS 1960) who found that many American seed-eating birds ate both black and striped sunflower seed and had no preference for either.