

## RANDOM JOTTINGS ON THE HEDGE SPARROW.

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Tucker (*infra op. cit.*) implies that the British race of the hedge-sparrow (*Prunella modularis occidentalis*) is fundamentally a bird of the glades and fringes of broad-leaved woods spreading from there to artificial habitats of gardens, hedgerows and plantations of pines. It also frequents low scrub covering moorlands. The European hedge sparrow (*Prunella modularis modularis*) inhabits conifer woods to a greater extent and is a dweller of mountain scrub.

In the Wellington peninsula the hedge sparrow, long introduced from Britain continues to favour the tastes of its parent race. The hedge sparrow keeps to the fringes of native woodland; it frequents gardens and plantations. In the Makara area and other parts of the peninsula the hedge sparrow similarly inhabits the low thickets of *Cassinia leptophylla* growing on hillsides, also scrambling patches of a twiggly *Coprosma* which grows extensively in places near the sea. This vegetation is a New Zealand counterpart of the heath plants of British moorland. The *coprosma* and *cassinia* thickets grow from three to four feet tall. The *cassinia* covers hillsides extensively over an area of several square miles.

To a slight extent habits may appear to reflect the tastes of the European subspecies. The hedge sparrow inhabits scrub on steep wind-swept hillsides up to heights of 1200 feet. Reports, however, suggest that the species is not in New Zealand an inhabitant of actual mountain country, except in the vicinity of Lake Te Anau.

The precise food eaten by the hedge sparrows which inhabit these shrublands near Wellington city is unknown to the writer. Without doubt food must predominantly consist of insect matter in gardens, but in view of the fact that the species eats hemp seed freely, and also crusts of bread, the birds in the shrublands may possibly eat seeds of grasses. Under the *cassinia* thickets soil is hard through hefting of sheep, and insect matter cannot be excessively abundant. In pine plantations in the city, hedge sparrows in association with chaffinches (*Fringilla coelebs*) have been seen to probe pine cones and to remove seeds. Whether the birds ate the seeds removed in the manner that blackbirds will eat the seeds of *Phormium tenax* could not be recorded owing to defective light at the time of observation.

Some degree of territorialism appears to be evident throughout the year in the Wellington population of hedge sparrows. Birds possibly anticipating remating (*c/f.* Fisher, "Watching Birds," 1940, p. 162, or Marshal, *Emu*, 50, 1951, p. 267) from observations tend to re-establish territories in January in suitable places. The degree of permanency of the territories apparently set up after the summer solstice is unknown to the writer. At this time a note pitched in high key, which implies threat or warning is given, usually in the presence of other birds. The manner of delivering the note undoubtedly indicates establishment of territory. Moreover, in April, quarrels accompany use of the note. There is some use of part song also which indicates the establishment of territory (*vide* Fisher, 1940, *op. cit.*). Part song is delivered intermittently throughout the late summer into the autumn and the winter, increasing to full song in early spring.

In some years, apparently when weather conditions are mild, part song is regularly uttered. In other years, part song is not heard to any extent between late autumn (April 25-30) and early spring (July 20-31), except for an occasional burst of song notes during unstable weather. Whether birds not singing on account of bad weather temporarily desert the areas which they seem to defend as territories after the manner of *Erithacus rubecula* in Britain, as recorded by Lack, is unknown.

Record of Part Songs Noted at random in Karori and North Makara Valleys, Wellington, 1943-51:—January, 17/1/47, 1948: most days. February, 1/2/47. March, 1/3/47; 5/3/46; 11/3/46; 23/3/50; 29/3/46. April, 1/4/50; 3/4/43; 6/4/47; 20/4/46. May, 8/5/43; 15/5/43; 23/5/43;

24/5/47; 30/5/43. June, 8/6/43; 8/6/46; 14/6/47, 22/6/47; 20/6/43; 23/6/50; 26/6/43; 30/6/51. July, 3/7/43; 9/7/43; 10/7/43; 20/7/46; full song developing. August: Full song established.

Further habits of hedge sparrows also suggest that some form of territory is held by birds in autumn and early winter. The mannerism of wing flicking characteristic of territorial behaviour in spring is sometimes to be seen in March, and in May. Again, full song, indisputably evidence of territorial behaviour (\*) has been recorded on April 20, 1946, between 1500 and 1600 hours in the North Makara Valley. In steep gullies smothered in thick growth of cassinia, *Griselinia littoralis*, gorse and fuchsia, birds at distances estimated at 100 yards apart were singing lustily.

In addition to part song and occasional full song, the hedge sparrow early in autumn has been heard to deliver a form of whisper song, without turgid quality, and distinct from part song, and full song. This song is likewise distinct from courtship subsong. This particular song may have affinities with the whisper song of the blackbird (*Turdus merula*), which the writer feels convinced arises from emotional disturbances in the mind of the bird, given particularly during autumn and early spring, but at other times also. (Vide Secker, N.Z. Bird Notes, Vol. 2, 6, 1947, p. 132). This sort of song seems to have no territorial significance. For example, in November, 1945, a blackbird, from its actions evidently a migratory and not a local bird, at Florence, Italy, was heard giving vent to this form of song.

There exists a second phase of subsong given in the presence of another bird. This song is characteristic of nuptial display prior to copulation of mated birds. There is close similarity with the accenter's subsong and that subsong delivered by the male blackbird in spring before its mate, mated Richard's pipits (*Anthus novaeselandiae*) on winter feeding grounds, and white-backed magpies (*Gymnorhina hypoleuca*) when apparently engaged in pairing up in autumn (personal observations).

It is generally known that in the blackbird the male in hunched and crouched position, its body rigid, delivers before the female the courtship subsong. In the hedge sparrow the song is delivered, according to personal observations, without this crouching stance, but with rapid vibration of the wings. On these occasions the notes delivered often have sunk below the level of audibility.

In this case, the male appears to supplicate the female by song, but it appears also that the female will supplicate the male by form of display until the ultimate moment arises when both birds of the pair are attuned physiologically for successful copulation. As regards this display, on 20/9/43, of a pair seen together, one bird was seen to crouch, erecting and quivering its tail, its mate making rhythmical darting movements at the region of the cloaca with its bill. If the process of copulation has been correctly observed and not confused with a phase of pre-nuptial display it is an unusual action. The two mated birds fly or move rapidly, half-hopping, half-running, towards each other; when almost touching, both in a flash reverse direction, the male apparently contacting the cloaca of the female, and apparently copulating in this swift action. In contrast, the males of *Erithacus rubecula* (vide Lack, op. cit.) and *Gymnorhina hypoleuca* (personal observations) merely mount the female in an unceremonious action.

#### REFERENCES.

- Witherby, Tucker, Ticehurst, Jourdain, "Handbook of British Birds," Vol. 2; Witherby, London  
Lack D., "Life of the Robin."  
Fisher, J., "Watching Birds" (Pelican.).

\* Notwithstanding this function of full song, the writer has heard migratory chiffchaffs (*Phylloscopus collybita*) delivering full song in tamarisk trees fringing the Suez Canal on January 6, 1946; and redstarts (*Phoenicurus phoenicurus*) on migration singing from olive trees in open croplands on April 6, 1945 (Faenza, Italy). These birds being on migration could not be holding territory.