

very noticeably in the British Isles in the past 100 years. It was accordingly selected for special study by the British Trust. The paper also deals with its nesting and feeding habits. It is of interest to us, especially from the point of view of the methods used in tackling such an investigation.

INVASION OF SPINE-TAILED SWIFTS.

The bird nests in eastern Asia and winters in Australia and Tasmania. According to Oliver's book, only one specimen has been taken in New Zealand, but at the end of November "hundreds" were reported near Greymouth, and specimens have been seen as far apart as Auckland and South Canterbury. Clearly this is worth special mention, and all members are asked to look out for these birds, to gather information, and to send it in, so that a full account may be prepared. This bird has a wing spread of about 18 inches, very long wings, and a swift and conspicuous flight.

Report for Period Ending June, 1942, on Population, Song, and Habits of Birds in Masterton Gardens.

By J. M. CUNNINGHAM.

(The first part of this paper, dealing with methods of observation, appeared in the third bulletin for 1941-42.)

J. M. Cunningham—March 12-June 30.

R. H. D. Stidolph—April 1-June 30.

S. B. Yelverton—April 15-June 30.

The following notes are those of J.M.C. first, with any essential differences noted by R.H.D.S. and S.B.Y. added. The areas under observation are: J.M.C.—town garden with open paddock on two sides, and R.H.D.S. and S.B.Y.—the district adjoining this, between their homes and work. The times of observation are before nine, lunch hour, and after about three in all cases, plus week-ends.

BLACKBIRD.—This bird has been constantly present, with little fluctuation in numbers. An autumn song commenced on March 12, the first for some time, at least a month (four songs were heard in February, each lasting only three or four seconds). It continued, spasmodically (two or three songs every day or two), through April and ceased on May 5, since when it has not been heard. Except for one or two full songs, this song was short, up to half a minute, but during April were heard about a dozen sub-songs, which last several minutes, and while exceedingly beautiful, are audible only within a few yards of the singer.

General moulting took place through the whole of March, and was complete by the beginning of April, except for one female seen in moult on May 14. A record of male fighting male was recorded on April 24.

R.H.D.S.—No songs heard except one or two sub-songs in April.

S.B.Y.—Two part songs only (in May). In April and May were four records of fighting—three of male v. male and one of male v. female. June—five records of fighting, male v. female, another female spectator.

NOTE.—The "occasional" song which commenced as the moult was tapering off was not noted to any extent out of J.M.C.'s garden.

CHAFFINCH.—Although constantly present, during May and June a diminution in the numbers of males present was noticed, and of male and female during the last fortnight in June.

The first song for a considerable period was heard on March 9, and several songs, mostly "part," i.e., without the characteristic slur at the end, were heard up to April 22, when they ceased altogether.

R.H.D.S.—Part songs heard on April 22, May 13, June 15. Male chasing female June 11, male fighting male June 15.

S.B.Y.—Part songs heard May 1, 2, 12, 13.

GOLDFINCH.—Constantly present in considerable numbers (flocks 20-50) during March and April and first week in May, during which month the numbers lessened rapidly, and only three or four have been seen during June.

Song (full) was heard every two or three days (none since 17th)—first for some time on March 21, and there were several occasions when **regular songs** were heard several days in succession. Song stopped finally on May 23.

R.H.D.S.—Not seen after April 4 until May 1, and spasmodically since. Several songs in May.

S.B.Y.—Second half April and all May noticed most days; June lessening in numbers. Occasional songs in May, none in June.

GREENFINCH.—Present several successive days in April, since when only noticed once (May).

R.H.D.S.—Not seen in April or May; single bird observed on four occasions in June.

S.B.Y.—Not seen.

J.M.C.'s records were of the bird's call. The birds were not seen, and it is believed to be present far more often.

HEDGE SPARROW.—Constantly present in small numbers. No song third week in March, after which heard occasionally every day except for a complete gap from May 8 to 24, since when song has been spasmodic; i.e., odd songs every day or two (full and part songs).

R.H.D.S.—Part songs heard between May 8 and 22; frequently in June. Fighting on June 15.

S.B.Y.—No song in April; more or less regular part song in May and a fewer number in June. Fighting on May 3.

KINGFISHER.—Seen four times during March, May, and June, always about the same time in the same position. This time is 3.15

as the writer arrives in the garden, and suggests that it may be present more often than supposed.

R.H.D.S.—Several records in April, May and June.

S.B.Y.—Two records in May.

MAGPIE.—Three birds constantly present with full song; April present and singing nearly every day; May heard singing 9-18 and 28-30. Not seen in June.

R.H.D.S.—One heard in April and one in May.

S.B.Y.—Not seen.

MORPORK.—Heard once only crying "morpork," March 30.

R.H.D.S.—One in April and one in May.

WHITE-EYE.—During period groups of four or five seen. No large flocks seen. Occasionally noted each day in March, several times daily in April, in greater numbers at end of month, and diminished during May, increasing to fair numbers during June. Did not start feeding until Cotoneaster berries were finished. Song on June 28; reported to have sung previously.

R.H.D.S.—First winter flock on June 15, about 100. Song heard throughout period at frequent intervals.

S.B.Y.—More regular occurrence in May and June. Songs heard occasionally since May 11.

SKYLARK.—Absent until April 11, when it appeared and started singing two days later. Several songs heard on each of several days during the remainder of the month, occasionally during May with a gap from 11th-28th, and only once during June.

R.H.D.S. and S.B.Y.—Occasionally seen flying over town.

SPARROW.—Constantly present in large numbers. Fight, male v. male, April 16.

S.B.Y.—Several fights, male v. male and male v. female.

STARLING.—Constantly present in large numbers.

S.B.Y.—Fight, May 16.

THRUSH.—Present in small numbers, March and April, with occasional songs. May 1 occasional song; 2nd, 3rd, 4th, several songs; regular full song ever since. Numbers increased with start of song, and are about in large numbers now. Four fights April, May and June.

R.H.D.S.—Seldom seen in April; singing daily since May 2.

S.B.Y.—Fight April 13; few songs in April.

J.M.C.—A bird sang in the same place every day from April 14-30. May 4 was the beginning of regular song in immediate locality.

TUL.—Arrived May 6 and present ever since. Regular residence from end of May. Song as presence; i.e., regular since end of May.

R.H.D.S.—First noted on April 22; seen occasionally since; more frequent in June. Song heard throughout.

S.B.Y.—First seen May 17, singing, and few songs heard same month. Present regularly June.

GREY WARBLER.—Not often actually seen, but records made usually by song. Is regarded as constantly present. Song regular, all day and every day up to beginning April, since when, after a sudden break, one or two songs only every day. The day before regular song ceased (April 1) the song was most persistent all day. Fights April 16, June 28.

R.H.D.S.—Constantly present; song throughout not so regular in June. Fighting on May 20, June 5 and 10.

S.B.Y.—Singing April and May; easing off since June 12.

YELLOWHAMMER.—Seen twice only; June 1, three believed seen; June 28, two seen.

R.H.D.S.—Not seen until June 11; occasionally seen since.

TIME OF WAKENING OF BIRDS.

Waking takes place from 35-50 minutes before sunrise, and the usual is 40 minutes. All March and April the Blackbird woke first with its characteristic "chinking" sound, but from the beginning of May this eased off, and ceased after a week, and its place was taken by the full song of the Thrush, which is the first and only sound heard for ten minutes or so, when the Tui sings. During May the early song was deafening, but it has now eased off, and only a few birds sing so early. The White-eye is at present appearing about 7.10 a.m.

WEEKLY SUMMARIES.

MARCH	APRIL				MAY				JUNE			
3 4	1	2	3	4	1	2	3	4	1	2	3	4
Time of sunrise: 6.17 6.24	6.25	6.42	6.50	6.57	7.07	7.14	7.21	7.27	7.36	7.40	7.46	7.47
Time of wakening: 5.50 5.50	6.00	6.10	6.10	6.20	6.30	—	6.40	6.50	6.45	6.45	6.50	7.00

A heavy frost tends to make wakening time earlier, and a dull morning five or ten minutes later.

OCCURRENCE OF THE BLACK-BILLED GULL.

In view of recent records of the Black-billed Gull *Larus bulleri*, in the Thames-Bay of Plenty-Rotorua area, notes of its appearance in the Wellington district may be of interest.

On March 2, 1941, one was seen at the north end of Wairarapa Lake; a week later three were recorded, and on April 20, two. It is likely that a few visit this locality every autumn and winter, presumably from the South Island.