

ORNITHOLOGICAL RECORD FOR DERBYSHIRE, 1945.

Compiled by W. K. MARSHALL.

It is with great regret that I record the death of Mr. R. Eglinton, of Starkholmes, near Matlock, during the year. His accurate records, particularly of early migrants, in the Matlock-Rowsley area, will be much missed.

One of the most interesting records this year is the nesting of the Pied Flycatcher, *Muscicapa h. hypoleuca*, in the north of the County. Another is the apparent increase of Woodcock, *Scolopax rusticola*, as a nesting species.

SYSTEMATIC LIST.

To the 158 Species recorded up to 1944 must be added the following five Species recorded in 1945, thus making the total 163:—

Spotted Redshank, *Tringa erythropus*.

Smew, *Mergus albellus*.

The Southern Puffin, *Pratercula artica grabæ*.

The Common Tern, *Sterna h. hirundo*.

Firecrest, *Regulus i. ignicapillus* (1944 record).

Raven, *Corvus c. corax*. August 3rd, one, Thorpe Cloud (R.J.R.).

Hooded Crow, *Corvus c. cornix*. October 20th, Whitwell (G.T.W.).

Carrion-Crow, *Corvus c. corone*. Increase in South Derbyshire (H.J.W.). Five nests on Abney Moor (H.C.B.B.). Not seen near Ilkeston (F.G.L.). Seen in March, May, July, October, but never more than four together; no breeding, Glossop (C.M.S.). There is a

roost of 100-150 on an island, Locko Park, the birds assembling on the ground in the Park and flying to trees on the island after dark (A.W.W.). December 1st, more than 200 in the Radbourne roost (W.K.M.).

Jackdaw, *Corvus monedula spermologus*. Increased, Locko Park (A.W.W.). April 12th, two plucking hair from a horse's back (R.P.).

Magpie, *Pica p. pica*. Increase in South Derbyshire (A.W.W.; H.J.W.). Numerous nests on Abney Moor (H.C.B.B.). Very common, Nutbrook (F.G.L.).

Jay, *Garrulus glandarius rufitergum*. Owing to felling of fir woods odd pairs reported in suburban gardens (H.J.W.). Increasing on Abney Moor (H.C.B.B.). Tree felling appears to have disturbed this species at Allestree (S.W.). Present in most woods near Ilkeston. Apparent increase at Shipley (F.G.L.). Numbers maintained Locko Park (A.W.W.).

Hawfinch, *Coccothraustes c. coccothraustes*. Reported from Derby, Bretby, Bentley, Bradley, Totlley (about normal numbers), Ilkeston, Glossop, Radbourne, Sudbury, Baslow.

Greenfinch, *Chloris c. Chloris*. "An extraordinary number of nests—fifteen—in my garden." The Chaffinch's nest adopted by a Greenfinch in 1944 (see 1944 Record) was this year pulled to pieces by a hen Greenfinch which she let fall to the lawn; she then used some to build this year's nest; male in attendance but not taking part, Whitwell (G.T.W.). More numerous in breeding season, Ilkeston (F.G.L.).

Goldfinch, *Carduelis c. britannica*. In a breeding colony in the south-west of the County there were eight nests, six being in apple trees, one in pear, one in elder. Five nests contained eggs or young at the same time, the other three probably being second broods of the first five known nests. All reared young successfully (S.W.). Also reported in breeding season in Ashbourne district, Chellaston, Hathersage, Calver Sough, Eckington, and

at other times at Glossop, Erewash Valley, Spondon, Hoon, Littleover, Allestree.

Siskin, *Carduelis spinus*. January, in Hartshorne—Repton Valley and at Allestree. November, in Chatsworth Park.

Lesser Redpoll, *Carduelis flammea cabaret*. Unusually plentiful in April and May in Glossop district (C.M.S.). Reported at times other than breeding season at Allestree, Hartshorne-Repton Valley, Combs, Radbourne, Windley.

Twite, *Carduelis flavirostris pipilans*. May 24th, one at 1,700 feet; no evidence of nesting, Glossop (C.M.S.).

Bullfinch, *Pyrrhula p. nesa*. One pair reared three broods and another had C/7, Dore (A.W.).

Common Crossbill, *Loxia c. curvirostra*. February, 1944, cock seen feeding hen; no nest found; north Derbyshire. None seen in 1945.

Brambling, *Fringilla montifringilla*. January 14th, small flock, Bretby (H.J.W.).

Corn-Bunting, *Emberiza calandra*. Almost absent from several areas where it always nested until the last few years (A.W.).

Reed-Bunting, *Emberiza s. schoeniclus*. Decreased, Glossop (C.M.S.).

Snow-Bunting, *Plectrophenax n. nivalis*. March 7th, one male, Birchinlea (E.H.P.).

Tree-Pipit, *Anthus t. trivialis*. Fairly common, Dove-dale (F.G.L.).

Yellow Wagtail, *Motacilla flava flavissima*. Several pairs, Baslow (H.C.B.B.). Numerous and has not varied in numbers for many years, near Burton-on-Trent (C.C.). Exceptionally common, Hartington district (A.E.J.). Nested, Glossop (C.M.S.). Reduced numbers in Chatsworth Park; usual numbers elsewhere (R.P.).

Grey Wagtail, *Motacilla c. cinerea*. October 24th,

Whitwell (G.T.W.). Several pairs, Baslow (H.C.B.B.). One pair only; used to be fairly common, Birchinlea (E.H.P.). June 23rd, one pair, Dovedale (A.E.J.).

Pied Wagtail, *Motacilla alba yarrellii*. July 24th, forty on the Cricket Square, Repton (R.S.F.C.). Only seen at Ilkeston in September and October (F.G.L.).

Tree-Creeper, *Certhia familiaris britannica*. Out of eight nests seen with eggs, only one reared young. Several, I feel sure, were destroyed by red squirrels. The one nest in which young were reared was in a split stump below ground level, Dore (A.W.). Present in most woods near Ilkeston (F.G.L.). Only two records, both in February, Glossop (C.M.S.).

Nuthatch, *Sitta europæa affinis*. Appears to be extending its range. Reported from Ashbourne, Tissington, Shirley, Locko Park, Osmaston, Dalbury, Foston, Sudbury, Radbourne, all in the breeding season. S.W. reports that tree felling is the cause of its leaving Allestree.

Great Tit, *Parus major newtoni*. Has recovered its numbers after decrease of recent years, Spondon (A.W.W.).

Coal-Tit, *Parus ater britannicus*. Present in Cotmanhay Wood and Shipley (F.G.L.). A few throughout winter and autumn, but only two records in summer, Glossop (C.M.S.). Seen occasionally, Spondon (A.W.W.).

Willow-Tit, *Parus atricapillus kleinschmidti*. January 6th, one, Ashbourne Green; August 5th, one, Yeaveley (K.M.H.). On Nutbrook Canal throughout the year (F.G.L.). April 1st, one, Spondon (A.W.W.). Recorded at Radbourne, Sudbury, Hulland Ward (W.K.M.).

Long-Tailed Tit, *Ægithalos caudatus rosaceus*. Two pairs known to have bred at Allestree (S.W.). Several nests reared young, Totley (A.W.). Seen at Ilkeston early in the year but not since. March 24th, three, Ashover (F.G.L.). Increase, Spondon (A.W.W.).

Spotted Flycatcher, *Muscicapa s. striata*. Increasing, Whitwell (G.T.W.), and Ilkeston area (F.G.L.). Plentiful, Glossop (C.M.S.). None seen at Spondon (A.W.W.). Nest inside a Missel Thrush's nest of this year (R.S.F.C.). One bird laid in two nests at the same time (W.K.M.).

Pied Flycatcher, *Muscicapa h. hypoleuca*. Nested in north Derbyshire; young destroyed by Jays. This is believed to be the first record of nesting in the County. For full report see *British Birds*, Vol. XXXVIII, page 317 (R.C.).

Goldcrest, *Regulus r. anglorum*. Unusually scarce (A.W.). Increased; several nests found (R.S.F.C.). Also reported in breeding season at Derby, Baslow, Foston and Sudbury, and at other times at Cotmanhay, Ilkeston, Glossop and Radbourne.

Firecrest, *Regulus i. ignicapillus*. December 1st, 3rd, 14th, 1944, several, Calke Abbey (R.S.F.C.).

Chiffchaff, *Phylloscopus c. collybita*. Not at Shipley in breeding season (F.G.L.). None seen this year at Glossop (C.M.S.).

Willow-Warbler, *Phylloscopus t. trochilus*. Nests very common; seen feeding young Cuckoo, Repton (R.S.F.C.).

Wood-Warbler, *Phylloscopus sibilatrix*. Rather more plentiful than in recent years (A.W.). Common in Dovedale and Mill Dale (A.E.J.).

Grasshopper-Warbler, *Locustella n. naevia*. Reduced numbers due to ground becoming less suitable, Whitwell (G.T.W.).

Garden-Warbler, *Sylvia borin*. For the last five or six years one pair has been at Combs; none this year (W.E.D.).

Blackcap, *Sylvia a. atricapilla*. Continuing to increase in Dore area (A.W.). June 23rd, one pair, Dovedale (A.E.J.). July 5th, one only seen, a male, Glossop (C.M.S.).

Lesser Whitethroat, *Sylvia c. curruca*. General but thinly distributed (H.J.W.). Only once or twice heard in Dore and Totley area (A.W.). Very rare, Glossop (C.M.S.).

Song-Thrush, *Turdus e. ericetorum*. August 6th, nest with three half-grown young, Dore (A.W.).

Ring-Ouzel, *Turdus t. torquatus*. One pair at Abney in May; one bird in August (H.C.B.B.). Nested at Combs (A.J.P.B.). May 21st, one, Baslow (R.P.).

Wheatear, *Ænanthe o. ænanthe*. Very few, Glossop (C.M.S.).

Whinchat, *Saxicola rubetra*. Nested at Allestree (S.W.). Combs (A.J.P.B.). Glossop (C.M.S.). Radbourne, unusual (W.K.M.).

Stonechat, *Saxicola torquata hibernans*. One only seen, a female, on July 7th, Glossop (C.M.S.).

Robin, *Erithacus rubecula melophilus*. Adult seen feeding two young Song Thrushes (R.S.F.C.).

Dipper, *Cinclus c. gularis*. Usual numbers. March 27th, nest with young 5-6 days old. I estimate laying commenced in last week of February, Lathkill Dale (A.W.). Usual numbers, Birchinlea (E.H.P.). Fewer than usual nested; only seen twice in winter, Glossop (C.M.S.).

Swallow, *Hirundo r. rustica*. In a new nest for the third brood the first of four eggs was laid on August 8th; young reared, Holmesfield (A.W.). Just before leaving in September, a pair destroyed their nest containing three fledglings, Hoon (C.M.B.).

House-Martin, *Delichon u. urbica*. A solitary nest has been used for three successive seasons, the nearest nest being half a mile distant (C.E.B.; T.C.F.).

Sand-Martin, *Riparia r. riparia*. Six nests in soil two feet deep on the top of a Home Guard shelter, Mayfield (A.E.J.).

Nightjar, *Caprimulgus e. europæus*. Nested, Repton Shrubs (H.J.W.). July 8th, cock disturbed from two young (R.C.).

Kingfisher, *Alcedo atthis ispidata*. Absent from their usual breeding sites, probably due to cleaning of brook-courses and possibly also to frosts of January and February, near Burton-on-Trent (C.C.).

Green Woodpecker, *Picus viridis pluvius*. Absent from Allestree. See separate report on nest at Radbourne (S.W.).

Great Spotted Woodpecker, *Dryobates major anglicus*. Only one nest at Allestree; probably disturbed by tree felling (S.W.). None seen this year, Glossop (C.M.S.). Slight increase, Spondon area (A.W.W.). Adult male found dead with oak gall firmly fixed on bill (W.K.M.).

Cuckoo, *Cuculus c. canorus*. More common than in recent years, Repton (R.S.F.C.). Large numbers this year, but I did not see a young one, Birchinlea (E.H.P.). On May 23rd, at 4-30 p.m., a Hedge-Sparrow's nest contained three eggs. At 8 p.m. there were four Hedge-Sparrow's eggs and a Cuckoo's. On June 5th, by 7 p.m., the nest contained a young Cuckoo, three young Hedge-Sparrows and one Hedge-Sparrow's egg. On June 6th, at 4-30 p.m., there remained the young Cuckoo and one egg which had gone by 8 p.m. The Cuckoo left the nest at 5-0 p.m. on June 26th (C.E.B.; T.C.F.).

Little Owl, *Atheue noctua vidalii*. Two pairs at least, Glossop (C.M.S.). Increase, Spondon area (A.W.W.).

Long-Eared Owl, *Asio o. otus*. Nested, Repton Shrubs (H.J.W.). Abney (H.C.B.B.). Birchinlea (E.H.P.).

Short-Eared Owl, *Asio f. flammeus*. Numerous a few years ago; seem to have left the district, only one seen, and I do not think they nested, Birchinlea (E.H.P.).

Tawny Owl, *Strix aluco sylvatica*. Nest C/2 Bretby, March 31st (H.J.W.). By far the most common Owl in the Dore/Totley area in recent years. Clutches averaged two. Three seen with eggs before the end of March (A.W.). Numbers nested, and again in the usual oak, Birchinlea (E.P.H.). Increase; five pairs known, Spondon area (A.W.W.).

Barn-Owl, *Tyto a. alba*. One seen twice in January, Cubley (S.T.N.). Several nests found. In one nest, two young, which had previously been ringed, were found eaten, probably by the parents (R.S.F.C.). February 23rd, one, Hoon (C.M.B.). February 15th, one, Foston; October 21st, one, Radbourne (W.K.M.).

Peregrine Falcon, *Falco p. peregrinus*. February 13th, a Tiercel, Dovedale (K.M.H.). April 30th, one; September 18th, one young with damaged wing caught; probably nested in the district, North Derbyshire.

Merlin, *Falco columbarius aesalon*. One pair at Abney in spring; several seen since (H.C.B.B.). January 20th, March 10th, one male; none nested, Glossop (C.M.S.). One, Baslow (R.P.).

Kestrel, *Falco t. tinnunculus*. Not increasing like the Sparrow-Hawk (H.J.W.). Remains of Starling in nest with three young (R.S.F.C.). Probably fewer than usual; one nest had young in mid-August, Glossop (C.M.S.).

Common Buzzard, *Buteo b. buteo*. March 9th and April 22nd, one, Bretby (H.J.W.).

Hen-Harrier, *Circus c. cyaneus*. January to April, one seen at intervals, north Derbyshire.

Sparrow - Hawk, *Accipiter n. nisus*. Increasing (H.J.W.). Decreasing, Spondon area (A.W.W.). Not often seen, Chatsworth (R.P.). One ringed as nestling, June 29th, 1944, at Willington, was shot at Dunstall, Staffs., April 2nd, 1945 (R.S.F.C.). One hunted regularly in centre of Ilkeston for some weeks (F.G.L.).

Heron, *Ardea c. cinerea*. Thirty-four nests, Calke Abbey (H.J.W.).

Goose. One, probably Pinkfooted, and possibly pricked, flying up the River Trent, February 25th (H.J.W.). February 11th, unidentified skein flying S.E. and high; February 18th, another flying E., Glossop (C.M.S.). October 7th, forty, unidentified, passing over Derwent Dams (R.P.).

Canada Goose, *Branta c. canadensis*. Present all the year; two pairs again bred, rearing six and three, Allestree Lake (S.W.). January 7th, about 180; July 29th to August 6th, thirty-five; September/October, eleven, Shipley; September 8th, a large skein flying S.W. (F.G.L.).

Mallard, *Anas p. platyrhyncha*. Large number nested, Derwent Dams (E.H.P.). April 17th, three drakes; none in breeding season; five in September, Shipley (F.G.L.). Fair numbers autumn and winter; several pairs bred, Longdendale Reservoir (C.M.S.).

Gadwall, *Anas strepera*. February to April, one drake, Bradley (K.M.H.).

Teal, *Anas c. crecca*. Increased but not numerous, Whitwell (G.T.W.). April 7th, one pair, Allestree Lake (S.W.). Up to seven, January to May, and in September and October, Bradley and Osmaston; up to forty frequented Calwich pond; one drake, June 14th, Yeaveley (K.M.H.). Large number nested, Derwent Dams (E.H.P.). October 21st, ten, Shipley (F.G.L.). A few in October, Glossop (C.M.S.). Up to four in winter, Locko Park (A.W.W.). Several during the year, Chatsworth (R.P.).

Wigeon, *Anas penelope*. Several present on Allestree Lake during February and early March (S.W.). September 5th, three, Bradley; September 30th, four, Osmaston; October 10th and 28th, a pair Osmaston (K.M.H.). None seen, Chatsworth (R.P.).

Pintail, *Anas a. acuta*. October 28th, one drake, after rough weather, Osmaston (K.M.H.).

Shoveller, *Spatula clypeata*. June, 1944, bred in a thirty-six acre clover field C/9, Whitwell (G.T.W.). September 5th, one young drake, Bradley (K.M.H.).

Common Pochard, *Aythya ferina*. Small numbers in January, February, March, September, October, the largest number being sixteen on October 18th, Osmaston (K.M.H.). November 9th and 11th, two, Locko Park (A.W.W.).

Tufted Duck, *Aythya fuligula*. Present throughout the year, but no evidence of breeding; February 18th, twenty-three males, fifteen females, Allestree Lake (S.W.). One pair seen throughout May, and two pairs April 8th, Calke Abbey; no nest found (R.S.F.C.). Several until April 15th, and from September 30th, Shipley (F.G.L.). November 9th and 11th, five, Locko Park; bred, Chatsworth (R.P.).

Goldeneye, *Bucephala c. clangula*. November 23rd, one drake, Repton (R.S.F.C.).

Goosander, *Mergus m. merganser*. Two on February 25th, and seventeen on February 28th, River Trent, Newton Solney (H.J.W.). One shot, Middleton-by-Youlgreave in October (F.E.G.B.). Three, Alton Manor, at the beginning of November (E.C.W.W.).

Smew, *Mergus albellus*. One shot on River Trent, near Repton, at the end of January (H.J.W.).

Cormorant, *Phalacrocorax c. carbo*. September 24th, a young bird, Osmaston; October 13th, a young bird, Calwich (K.M.H.). March 31st, three, near Burton-on-Trent (C.C.). One, Lady Bower Dam, in September and October (E.H.P.).

Great Crested Grebe, *Podiceps c. cristatus*. Reported from Willington, Allestree, Osmaston, Shipley, Butterley, Combs, Locko Park, Sudbury.

Turtle-Dove, *Streptopelia t. turtur*. Possibly there is a slight decrease.

Common Curlew, *Numenius a. arquata*. Arrived Repton, March 3rd; several nests between Catton and Swarkeston in the Trent Valley; where Curlew appear Redshanks disappear (H.J.W.). About seventy on Abney Moor in early March; usual number nested (H.C.B.B.). Normal numbers in breeding areas (A.W.). Three pairs in Trent Valley between Drakelow and Croxall; two pairs Marston-on-Dove (C.C.). More nested than usual, Birchinlea (E.H.P.). One pair during breeding season as in previous years, Lea; April

17th and October 21st, Shipley; several in breeding season, Beeley (F.G.L.). March 15th, arrived in nesting area, Parwich (C.L.C.). Early arrivals in late February, Glossop (C.M.S.). March 8th, four in nesting area, Hartington; September 15th, one, Radbourne (W.K.M.).

Woodcock, *Scolopax rusticola*. Present all the year; brood of young seen in May; one seen in August, Abney (H.C.B.B.). January 7th, adult found dying of starvation on an island, Allestree Lake (S.W.). Normal numbers during breeding season; April 22nd, one nest C/4, Derwent (A.W.). Nested in large numbers; saw a lot of nests and young; increasing every year as a breeding species, Birchinlea (E.H.P.). Bred near Wirksworth (E.C.W.W.). March 25th, hen calling cock to, or cock calling hen off, nest (R.P.).

Common Snipe, *Capella g. gallinago*. Extraordinarily scarce (A.W.). Three to thirty late September and October, Butterley (F.G.L.).

Dunlin, *Calidris alpina schinzii*. September 3rd, Holmewood (C.B.C.). Male flushed from usual breeding ground, Glossop (C.M.S.).

Common Sandpiper, *Actitis hypoleucos*. May 12th, pair displaying, Matlock Bath; June 23rd, one pair, Dovedale (A.E.J.). Nested at Combs (A.J.P.B.).

Green Sandpiper, *Tringa ochropus*. April 18th, three, Barbrook Reservoir (R.C.).

Redshank, *Tringa totanus britannica*. February 28th, twenty-eight, Newton Solney (H.J.W.). April 17th, one, Ashbourne; July 3rd, adult and one young, Sturston (K.M.H.). March 14th, three pairs, but did not nest here, Hoon (C.M.B.).

Spotted Redshank, *Tringa erythropus*. September 2nd, two, Williamsthorpe Reservoir; only recorded there once previously; identified by call note, light upper tail coverts and dark bill; waded breast high in the sewage effluent with necks stretched out as they fed (C.B.C.).

Ringed Plover, *Charadrius h. hiaticula*. September 22nd and 27th, one, Butterley (F.G.L.). August 18th, one, Barbrook Reservoir (R.C.).

The Southern Golden Plover. *Pluvialis a. apricaria*. Usual number nested on Abney Moor (H.C.B.B.). Scarce, Birchinlea (E.H.P.). Also reported in breeding season at Hathersage (A.W.). Glossop (C.M.S.), and Baslow (R.P.). October 20th, first seen this autumn; November 20th, 1944, more than I have ever seen here before, Hoon (C.M.B.).

The Northern Golden Plover, *Pluvialis apricaria altifrons*. May 1st, 4th, 12th, 16th, one each day, Glossop (C.M.S.).

The Common Tern, *Sterna h. hirundo*. May 21st, one fishing for twenty minutes; no fish apparently taken, Allestree Lake (S.W.).

Blackheaded Gull, *Larus r. ridibundus*. Nested on Egginton Sewage Farm. This is the first definite record of nesting there, but the birds have been there for some years (H.J.W.). No nests in gullery, near Baslow (H.C.B.B.). January 7th, about eighty, Nutbrook; many at Shipley, but not after May; June 15th, five, with Curlews, Lea (F.G.L.). March, Baslow (R.P.).

Common Gull, *Larus c. canus*. September 24th, two Wyaston, rough weather (K.M.H.).

Herring-Gull, *Larus a. argentatus*. January 28th, one, Chatsworth (R.P.).

Lesser Black-Backed Gull, *Larus fuscus graellsii*. Three at c. 400 feet, Matlock, May 12th (R.J.R.). Two, Repton, September 15th (H.J.W.). July 15th, two, in adult breeding plumage, Barrow-on-Trent (S.W.). September 29th, one, Butterley (F.G.L.).

The Southern Puffin, *Fratercula arctica grabæ*. During severe weather, about the middle of January, forty to fifty stayed some days on Melbourne Pool, one flying inside a house (H.J.W.).

Corn-Crake, *Crex crex*. September, one, Abney (H.C.B.B.). Not heard anywhere (A.W.).

Water-Rail, *Rallus a. aquaticus*. Reported from Allestree, Bradley and Ticknall.

Coot, *Fulica a. atra*. Bred, but less numerous than previous years, Allestree Lake (S.W.). Up to twenty at Shipley throughout the year (F.G.L.). March 17th, display of four, Locko Park; one swam towards another with head down and tail up; the other did the same, and when they were two feet apart they both swam round and round on their own axis; then two more came up in the threatening manner; the four then faced each other still with heads down and tails up, twelve inches apart in perfect square; then two opposite stood on their tails and beat their wings together breast to breast for a few seconds; the other two then joined in and all beat and splashed for a few seconds; they resumed the heads down position for a few moments, and then suddenly seemed to lose all interest, swimming off one by one in normal attitude (A.W.W.). Bred at Radbourne; unusual (W.K.M.).

Black Grouse, *Lyrurus tetrrix britannicus*. One Grey hen seen at Abney in spring; none since (H.C.B.B.). May 6th, one Black cock, Grindleford (R.C.).

Red Grouse, *Lagopus s. scoticus*. A good year on Combs Moss (W.E.D.).

Partridge, *Perdix p. perdix*. A poor year (H.J.W.). Nest with two eggs, April 24th, sitting on eighteen eggs, May 18th; "Partridges have done well," Whitwell (G.T.W.). March 13th, one, rare, near Glossop (C.M.S.). More than last year, Spondon area (A.W.W.).

Redlegged Partridge, *Alectoris r. rufa*. May 6th, two, Kirk Ireton (K.M.H.).

Quail, *Coturnix c. coturnix*. April 27th, one flew into telegraph wires on the Derby-Burton road (H.J.W.). On June 17th, 22nd, 23rd, one heard; June 26th, two, on Notts. border of N.E. Derbyshire (G.T.W.). Nest and eggs cut out when mowing clover, Radbourne (W.K.M.).

ARRIVAL OF SPRING MIGRANTS.

Tree-Pipit. April 12th, Ashbourne (K.M.H.); Dore (A.W.); 13th, Holmewood (C.B.C.); 15th, Bretby (H.J.W.); North Derbyshire (R.C.); 16th, Derby (T.C.F.); Sudbury (W.K.M.); 17th, Shipley (F.G.L.); Glossop (C.M.S.); 19th, Allestree (S.W.); 20th, Winhill (C.H.); May 26th, Radbourne (H.C.).

Yellow Wagtail. April 14th, Dore (A.W.); 15th, Bretby (H.J.W.); 17th, Ashbourne (K.M.H.); 19th, Allestree (S.W.); 21st, Duffield (T.C.F.); 22nd, Glossop (C.M.S.); 23rd, Sudbury (W.K.M.); May 1st, Egginton (C.H.); 15th, Ilkeston (G.D.W.).

Spotted Flycatcher. May 6th, Bretby (H.J.W.); 7th, Radbourne (W.K.M.); 9th, Whitwell (G.T.W.); Dore (A.W.); Glossop (C.M.S.); 11th, Ashbourne (K.M.H.); 12th, Winhill (C.H.); 13th, Allestree (S.W.); 17th, Littleover (T.C.F.); 19th, Repton (R.S.F.C.); June 13th, Ilkeston; same date and place as previous years (G.D.W., F.G.L.).

Chiffchaff. March 18th, Chatsworth (R.P.); 21st, Allestree (S.W.); 22nd, Ticknall (H.J.W.); 25th, Shirley (K.M.H.); 25th, Elvaston (T.C.F.); Sudbury (W.K.M.); 29th, Radbourne (W.K.M.); 30th, Ilkeston (G.D.W.); April 1st, Dore (A.W.); Spondon (A.W.W.); 10th, Hoon (C.M.B.); 11th, Bretby; Winhill (C.H.).

Willow-Warbler. March 24th, Ogston (G.D.W.); April 3rd, Combs; a fortnight earlier than usual (W.E.D.); 5th, Bretby (H.J.W.); 7th, Yeldersley (K.M.H.); 8th, Whitwell (G.T.W.); Chellaston (G.A.W.); Allestree (S.W.); Ilkeston (F.G.L.); Radbourne (W.K.M.); 10th, Hoon (C.M.B.); 11th, Swarkeston (T.C.F.); Holmewood (C.B.C.); Dore (A.W.); 13th, Spondon (A.W.W.); 17th, Repton (R.S.F.C.); 21st, Markeaton (H.C.).

Wood-Warbler. April 15th, North Derbyshire (R.C.); 18th, Dore (A.W.); 22nd, Ilkeston (G.D.W.); 25th,

Sudbury (W.K.M.); May 8th, Glossop (C.M.S.); 12th, Matlock (R.J.R.); 17th, Foston (W.K.M.); 18th, Shirley (K.M.H.).

Grasshopper-Warbler. April 16, Sudbury (W.K.M.); 18th, Dore (A.W.); 24th, Whitwell (G.T.W.); 26th, Radbourne (W.K.M.); May 9th, Repton (R.S.F.C.).

Sedge-Warbler. April 16th, Ilkeston (G.D.W.); 30th, Sudbury (W.K.M.); May 1st, Egginton (C.H.); 9th, Chellaston (G.A.W.); 10th, Ashbourne (K.M.H.).

Garden-Warbler. April 12th, Winshill (C.H.); 19th, Bretby (H.J.W.); Dore (A.W.); 23rd, Shirley (K.M.H.); Elvaston (T.C.F.); 25th, Sudbury (W.K.M.); 27th, Allestree (S.W.); May 2nd, Radbourne (W.K.M.); 7th, Holmewood (C.B.C.); June 14th, one only seen, a male, Glossop (C.M.S.).

Blackcap. April 18th, Allestree (S.W., D.J.H.); 19th, Bretby (H.J.W.); Dore (A.W.); 20th, Radbourne (H.C.); 22nd, Ilkeston (G.D.W.); 23rd, Shirley (K.M.H.); May 7th, Repton (R.S.F.C.); July 5th, Glossop (C.M.S.).

Whitethroat. April 12th, Winshill (C.H.); 16th, Ilkeston (G.D.W.); Spondon (A.W.W.); Sudbury (W.K.M.); 18th, Allestree (S.W.); 19th, Bretby (H.J.W.); Dore (A.W.); 20th, Ashbourne (K.M.H.); 21st, Markeaton (H.C.); Quarndon (T.C.F.); 22nd, Holmewood (C.B.C.); 23rd, Whitwell (G.T.W.); 25th, Chellaston (G.A.W.).

Lesser Whitethroat. April 18th, Radbourne (W.K.M.); 22nd, Bretby (C.H.); 25th, Dore (A.W.); 26th, Ashbourne (K.M.H.); 28th, Allestree (S.W.).

Wheatear. March 21st, Bradley (K.M.H.); 24th, Lea (G.D.W.); April 28th, Dovedale (T.C.F.).

Whinchat. April 25th, Ashbourne (K.M.H.); May 4th, Allestree (H.C.); 12th, Matlock (R.J.R.); 14th, Derby (T.C.F.); 15th, Ilkeston (G.D.W.); 26th, Markeaton (D.J.H.).

Redstart. April 10th, Holmewood (C.B.C.); 15th,

North Derbyshire (R.C.); 18th, Dore (A.W.); 22nd, Brassington (K.M.H.); 26th, Radbourne (W.K.M.); 28th, Dovedale (T.C.F.); May 10th, Drakelow (H.J.W.); 12th, Glossop, later than usual (C.M.S.).

Swallow, April 3rd, Sudbury (W.K.M.); 7th, Bretby (H.J.W.); Allestree (S.W., D.J.H.); 11th, Repton (R.S.F.C.); 12th, Holmewood (C.B.C.); Radbourne (W.K.M.); 13th, Ashbourne (K.M.H.); 14th, Dore (A.W.); Ilkeston (G.D.W.); 15th, North Derbyshire (R.C.); Chellaston (G.A.W.); 18th, Whitwell (G.T.W.); 21st, Markeaton (H.C.); Quarndon (H.C.F.); 22nd, Spondon (A.W.W.); 23rd, Hoon (C.M.B.); 24th, Glossop (C.M.S.).

House-Martin. April 11th, Bretby (H.J.W.); 14th, Dore (A.W.); 15th, Allestree (S.W.); 18th, Birchinlea (E.H.P.); 21st, Derby (H.C.); 28th, Ilkeston (G.D.W.); 30th, Sudbury (W.K.M.); May 8th, Winshill (C.H.); Glossop (C.M.S.); 9th, Rodsley (K.M.H.).

Sand-Martin. April 7th, Bretby (H.J.W.); 8th, Norbury (K.M.H.); 9th, Borrowash (T.C.F.); 10th, Ilkeston (G.D.W.); 11th, Allestree (S.W.); 14th, Dore (A.W.); 15th, North Derbyshire (R.C.); 17th, Repton (R.S.F.C.); 18th, Birchinlea (E.H.P.); Chellaston (G.A.W.); 21st, Newton Solney (C.H.).

Swift. May 3rd, Bretby (H.J.W.); 6th, Derby (H.C.); Holmewood (C.B.C.); Foston (S.W.); Ashbourne (K.M.H.); Dore (A.W.); Repton (R.S.F.C.); Glossop (C.M.S.); 7th, Normanton, near Derby (T.C.F.); Allestree (S.W.); Winshill (C.H.); 8th, Ilkeston (G.D.W.); 9th, Spondon (A.W.W.); 15th, Whitwell (G.T.W.).

Cuckoo. April 12th, Bretby (H.J.W.); 13th, Spondon (A.W.W.); 15th, Whitwell (G.T.W.); Allestree (S.W.); Ilkeston (G.D.W.); 16th, Hoon (C.M.B.); Radbourne (H.C.); 17th, Derby (T.C.F.); Dore (A.W.); Birchinlea (E.H.P.); 19th, Chellaston (G.A.W.); Repton (R.S.F.C.); 20th, Bradley (K.M.H.); 22nd, Glossop (C.M.S.); 23rd, Sudbury (W.K.M.).

Turtle-Dove. April 10th, Whitwell (G.T.W.); 20th, Winshill (C.H.); 26th, Holmewood (C.B.C.); May 6th, Bretby (H.J.W.); Foston, Allestree (S.W.); Radbourne (W.K.M.).

Common Sandpiper. April 5th, Ashbourne (K.M.H.); 22nd, Dore (A.W.); 23rd, Duffield (S.W.); May 6th, Glossop (C.M.S.); 12th, Matlock Bath (R.J.R.).

Common Tern. May 21st, Allestree (S.W.).

Corn-crake. April 15th, two, Nutbrook (G.F.L.); 16th, Ilkeston (G.D.W.); 30th, Bretby (H.J.W.).

DEPARTURE OF SPRING MIGRANTS.

Yellow Wagtail. September 19th, Ashbourne (K.M.H.).

Spotted Flycatcher. August 25th, Winshill (C.H.); September 2nd, Dore (A.W.); 15th, Chellaston (G.A.W.); 21st, Ashbourne (K.M.H.); 23rd, Allestree (S.W.); 28th, Normanton, near Derby (T.C.F.); Derby (C.E.B., T.C.F.).

Pied Flycatcher. Male, September 23rd, Allestree (S.W.).

Chiffchaff. September 15th, Radbourne (W.K.M.); 17th, Chellaston (G.A.W.); 18th, Bradley (K.M.H.); 19th, Normanton, near Derby (T.C.F.); October 3rd, Allestree (S.W.); Baslow (R.P.).

Willow-Warbler. September 1st, Dore (A.W.); 13th, Normanton, near Derby (C.T.F.); 14th, Allestree (S.W.); Ashbourne (K.M.H.).

Blackcap. September 9th, Allestree (S.W.).

Whitethroat. September 12th, Allestree (S.W.); 25th, Dore (A.W.).

Wheatear. September 2nd, Barbrook Reservoir (R.C.).

Whinchat. September 1st, Holmewood (C.B.C.); 2nd, Allestree (S.W.).

- Redstart. August 31st, Ashbourne (K.M.H.).
- Swallow. September 28th, Allestree (D.J.H., S.W.); Spondon (A.W.W.); October 5th, Ashbourne (K.M.H., G.A.W.); 10th, Buxton (W.S.); 18th, Whitwell (G.T.W.).
- House-Martin. September 28th, Spondon (A.W.W.); October 7th, Ashbourne (K.M.H.); 13th, Allestree (D.J.H.); 25th, Chaddesden (S.W.).
- Sand-Martin. September 2nd, Ashbourne (K.M.H.); 9th, Allestree (S.W.).
- Swift. August 21st, Winshill (C.H.); 24th, Dore (A.W.); 25th, Dalbury (W.K.M.); 26th, Holmewood (C.B.C.); 31st, Derby (S.W.); September 7th, Ashbourne (K.M.H.); 12th, Normanton, near Derby (T.C.F.).
- Cuckoo. September 2nd, Ashbourne (K.M.H.).
- Turtle-Dove. September 5th, Allestree; feeding young in nest on 2nd (S.W.); 15th, Radbourne (K.K.M.); October 9th, Elvaston (T.C.F.).
- Common Sandpiper. August 18th, Barbrook Reservoir (R.C.); September 3rd, Holmewood (C.B.C.); October 13th, Chatsworth (R.P.).
- Corn-crake. August 14th, Whitwell (G.T.W.); 18th, near Burton-on-Trent (C.C.); September, Abney (H.C.B.B.).

ARRIVAL OF WINTER MIGRANTS.

- Fieldfare. September 30th, Spondon (A.W.W.); October 17th, Ashbourne (K.M.H.); 20th, Bretby (H.J.W.); Allestree (S.W.); 30th, Radbourne (W.K.M.).
- Redwing. September 30th, Spondon (A.W.W.); October 12th, Glossop (C.M.S.); 15th, Radbourne (W.K.M.); 20th, Bretby (H.J.W.); 27th, Allestree (S.W.); Bradley (K.M.H.); 31st, Baslow (R.P.).



FEMALE MISSEL THRUSH
at nest with young.

Photo. by S. Whitaker.

Facing p. 93.

DEPARTURE OF WINTER MIGRANTS.

Fieldfare. February 7th, Thorpe (K.M.H.); March 2nd, Glossop (C.M.S.); 17th, Allestree (S.W.).

Redwing. March 2nd, Glossop (C.M.S.); 9th Allestree (S.W.); 24th, Atlow (K.M.H.).

LOW NESTING OF MISSEL THRUSH, *Turdus v visavorus*,
AT FOSTON.

By S. WHITAKER.

A nest was found in the lowest branch forks of an apple tree, only 3 ft. 4 in. from the ground, containing three young, on April 26th. Although a "hide" was erected on April 29th, I was unable to carry out a spell in the "hide" until May 6th. On this day the three youngsters were fully fledged and flew the next day. During a spell in the "hide," on May 6th, from 12-50 p.m. to 4 p.m., the parent birds fed the young fourteen times during this period, at 1 p.m., 1-20 p.m., 1-36 p.m., 1-47 p.m., 1-58 p.m., 2-10 p.m., 2-26 p.m., 2-50 p.m., 3-16 p.m., 3-27 p.m., 3-45 p.m., 3-53 p.m., 3-55 p.m. and 3-59 p.m.

In all these feeds, earth worms were brought to feed the young. Excreta was swallowed after eleven feeds by parent bird. On two occasions no excreta passed, and on one occasion excreta was carried away in adult bird's bill. During this three-hour ten-minutes' spell in the "hide" the weather was very warm with strong sunshine. Ground surface dry and hard baked, probable reason for long spells between feeding intervals due to difficulty in finding food.

Male bird spent $1\frac{1}{2}$ hours resting, preening and carrying out song periods from 2-50 p.m. to 3-20 p.m. in nearby spruce tree. Young spent time between feeding intervals on edge of nest finding places in the shade to get out of the direct sun.

The nest was built of material which was available close at hand, mainly, dead cabbage stalks and sheeps' wool. It was a very loosely compiled nest.

COLONY OF GOLDFINCH, *Carduelis c. britannica*,
BREEDING IN DERBYSHIRE, 1945.

By S. WHITAKER.

A small colony of the British Goldfinch were found breeding in an orchard south-west of Derby this summer. It was reported by the gardener that they had bred there for several years past, but no numbers or dates of years could be accurately given.

The first nest found in 1945, was on May 6th, containing five eggs. The nest was in a pear tree. Nest No. 2 was found on May 9th, again containing five eggs. A further nest was found on May 10th, just outside the garden in an elder tree—this contained four eggs.

In nests Nos. 1 and 2 the young hatched on May 11th, and flew on May 23rd—thirteen days fledging period. A fourth nest was found on May 27th, in another apple tree. This contained two eggs and four by June 3rd. It was felt that this was a fourth pair and not one of the second broods of pairs No. 1 or 2. No. 3 nest on this date had got seven-day old young. On June 3rd, two further nests were found, again in apple trees, both being ready for eggs. It was fairly certain these were second brood nests, as both only contained three eggs when clutch was laid.

Late in July a visit was paid to the site and two further nests were found, again in apple trees, which had reared young. From observations it was certain that there were at least four pairs breeding in this colony. The maximum number of adult birds seen at any one time was seven. The young of the first broods were moved away from the district and were never seen about after leaving their nests.



Male Goldfinch about to feed brooding female on nest.

Facing p. 94-



Female Goldfinch sheltering almost fully fledged young during thunder storm. Note rain drops on certain leaves and ring of excreta around nest not removed.

Photographs by S. Whitaker.

From observations obtained in a "hide" at nest No. 2 before hatching, the male was noted to feed the female during incubation at roughly one hourly periods. For the first two days after hatching the male brought the food to the nest whilst the female brooded. He would pass food to her and leave the nest before she got up and again pumped up the food from her crop to feed the young. Feeding of young after three days was carried out by both adult birds. Feeding was carried out at roughly one hourly intervals, both birds returning to the nest together.

In the early stages of fledging excreta was seen to be both carried away and swallowed, but in later stages it was never removed. It was just left and allowed to build up in a solid ring on the edge of the nest. I have noticed this habit also takes place with other birds that feed by regurgitation, namely Crossbills, Greenfinch and Woodpigeon, though in the latter case, a lot of the excreta falls away over the edge of the stick platform.

From the notes in this report on breeding of Green Woodpecker, again a bird that feeds by regurgitation, no definite proof of removal of excreta was obtained, and in view of the obnoxious odour after the young left the hole, it can be safely said that birds which feed by regurgitation as a rule do not remove excreta.

In conclusion, it was pleasing to note, that there was a 100 per cent. hatching from all the nests located in this breeding colony of Goldfinch.

REPORT ON BREEDING OF GREEN WOODPECKER,

Picus viridis pluvius, 1945.

Compiled by S. WHITAKER.

Times:—D.B.S.T.

Nesting Site.

Nest found on May 13th, by new chippings on the ground. Situated 28 ft. 6 in. from ground in a live English Oak. Entrance hole faced south-west, the only

direction which commanded an uninterrupted view for over 250 yards. Diameter of entrance hole, $2\frac{3}{4}$ in. Depth of shaft, 1 ft. $2\frac{1}{2}$ in. Number of eggs laid, unknown.

Hide Building.

Construction of a "hide" for photography and study was commenced on June 5th. Two hours, from 8 p.m. to 10 p.m., was spent near the nesting tree, during which time one adult bird remained throughout incubating. When tree was tapped adult bird would look out for a few seconds, but went down again to incubate. No appearance of other adult bird during these two hours, which I consider shows an incubation period exceeding two hours by one bird. The night was very dull with intermittent rain falling.

On June 9th, further "hide" building operations were carried out. Commencing at 3-45 p.m. a ladder was placed up the tree, an adult bird was found to be incubating, although it kept peeping out of the hole periodically for spells of one to three seconds; its moves were too quick to identify its sex. Work was continued and the bird settled down to incubation. I worked up the tree at nest level, whilst A.W.W. was below sending up the four main 30 ft. uprights. These were put in position by 7-30 p.m., with short breaks away from the nest to allow a changeover of the birds. However, none took place, and the other bird was not seen nor heard calling.

Site was left at 7-30 p.m. without an observer until 9 p.m. Further work on the "hide" structure was continued until 11-15 p.m. Adult was found incubating on our return at 9 p.m., but no visit from the other bird was paid during the latter $2\frac{1}{4}$ hours.

On June 10th, "hide" visited at 6 p.m. and work was carried out and completed by 9 p.m. During these three hours the male was in the vicinity the whole time, calling loudly, and the female, although incubating, kept



FEMALE GREEN WOODPECKER
leaving nesting hole.

Photograph by S. Whitaker.

Facing p. 96.

looking out intermittently. A break away from the nest was taken to give the male a chance to take over; however, he would not enter the nesting tree and the female remained in the nest throughout our stay.

Changeover for Incubation.

On June 13th, W.K.M. watched changeover at 6 p.m. The male called the female off first before entering to incubate himself.

June 19th, visit to site at 7-30 p.m., adult bird incubating. No calling of young, which we assumed had not yet hatched.

Young Hatched.

June 22nd, "hide" visited by C.W.N., at 5 p.m. Young heard calling. No bird in nesting hole. By their calling, young estimated to be two days old. Both birds appeared very shy and wary, flying all around the "hide." At 6-30 p.m. the female came to hole, and after working up food into bill, entered to feed. She did not leave after feeding, but settled down to brood. "Hide" was left at 8-30 p.m. with female still brooding. Male not having come to hole during the 3½ hours spent in the hide. He appeared very shy and wary and spent a lot of time moving about the outlying branches of the nesting tree, calling intermittently with the three-note alarm call, "Quee, qee, qui."

June 23rd.

I put A.W.W. in "hide" at 7-45 p.m., the young were calling continuously on arrival. The female flew into the tree at 8-45 p.m. and approached straight away to the entrance hole. Without gulping up food from the crop she went into the hole. At 8-47 p.m. male called from nearby and female came out of hole and flew away in south-west direction. It was noticed that her bill was covered in a reddish earth (keuper marl). Male came into nesting tree at 8-50 p.m., and after a cautious approach, he arrived to feed at 9-5 p.m. After gulping up food into bill before entering, he entered at 9-7 p.m., and after feeding left at 9-10 p.m. No excreta was

being carried in his bill. "Hide" was vacated at 9-15 p.m.

June 24th.

I arrived at "hide" with J.W. at 3-30 p.m. No sign or call from the adult birds. Young calling continuously from hole. Female called softly at 3-50 p.m. and flew into tree. After a cautious approach she arrived at entrance hole at 4-5 p.m. She was disturbed by camera shutter and flew away, being frightened by the noise of the "click." She returned to the tree at 4-43 p.m. and was at hole by 5-5 p.m., entered and fed young. She left again at 5-9 p.m. after taking four minutes to feed—no excreta carried by female on leaving. It was noticed that she extended her tongue twice whilst gulping up food from crop into bill. Male called from nesting tree at 5-35 p.m., female also in tree. Both birds could be seen on outlying branch from "hide." They appeared to spend a long time resting, turning food over in their crops. At 6-30 p.m. male approached and fed. He left at 6-33 p.m., being followed by female. She returned and fed at 7-45 p.m., leaving again at 7-48 p.m. J.W. left "hide" at 8-10 p.m., but up to 9-5 p.m., when I left "hide," the birds had not visited the nest again. The male had appeared very wary all through the period in the "hide." The female was definitely more comfortable and becoming used to the presence of the "hide."

June 26th.

Overcast and windy. I visited "hide" alone, which was entered at 2-15 p.m. No sign of adult birds on arrival. Young also not calling, but they started to call at 2-30 p.m. Female returned to tree at 2-45 p.m. and was at entrance hole by 2-47 p.m. She fed at 2-49 p.m. and left at 2-52 p.m., no excreta being carried on leaving. Food was gulped up in two gulps into bill before entering hole. Young very noisy during feed but settled down again soon after female left tree. Male arrived in tree at 3-10 p.m. and remained perched

on outlying branch without moving until 3-35 p.m., then he worked his way to nesting hole by 3-45 p.m. Just as he was going to pump up food he was frightened away by passing horse and cart. He flew out of tree, but returned again by 3-55 p.m. Female returned at 4-2 p.m. and went straight to hole. She was in hole from 4-4 p.m. to 4-7 p.m. Male left the tree when female left at 4-7 p.m. A Nuthatch on a food forage came to within two feet of entrance hole, but was driven off by the male—this occurred at 4-30 p.m. Female back at 5-17 p.m. Male returned at 5-18 p.m. Female feeding young 5-19 p.m. to 5-21 p.m. Male at hole by 5-35 p.m. He entered but flew out again in thirty seconds. He did not gulp up food before entering. I feel he was disturbed by the return of the horse and cart which had previously disturbed him. He returned at 5-50 p.m. and was at the hole by 5-55 p.m. He did not enter to feed as he was put out again, this time by a passing man and his dog. He returned at 6-5 p.m. and was at hole by 6-7 p.m. He entered and fed young, leaving at 6-10 p.m. Female arrived in tree at 6-21 p.m., at hole by 6-24 p.m. and out at 6-27 p.m.—three minute feed. Male had apparently come to tree with female, as both birds were seen to fly out south-west at 6-27 p.m. A.W.W. called from nearby and entered "hide" at 6-30 p.m. No further sign of parent birds up to 7-15 p.m. when I left "hide." A.W.W. continued in "hide" until 9-45 p.m., during which time the female returned at 8-15 p.m., and was at hole by 8-16 p.m., she left at 8-19 p.m., after feeding. Male back in tree at 8-32 p.m., and after several attempted approaches, during which time he was calling repeatedly, he entered to feed at 8-40 p.m. and left at 8-43 p.m. Female returned to tree at 9-5 p.m., peered into hole at 9-6 p.m. and left at 9-8 p.m.—she did not enter or feed on this occasion. Male in tree at 9-10 p.m. and at hole by 9-13 p.m., he looked in and then flew out in south-west direction, calling loudly as if disturbed. He was

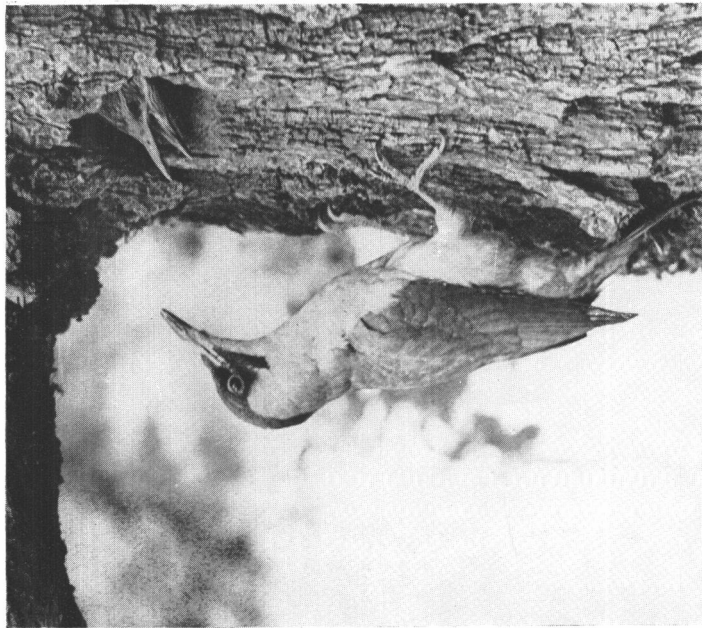
back at 9-35 p.m. and at hole by 9-36 p.m. After entering he turned round in hole and kept on peeping in and out of the hole no fewer than twenty-three times. After the first five lookouts, he was seen to be gulping up food. He then went down and fed young, not leaving hole until 9-45 p.m. This being the longest space of time spent in the hole by either of the parent birds since brooding young after feeding in the early stages. "Hide" was then left at this juncture.

June 29th.

Weather very close and thunder showers. I put A.W.W. in "hide" at 5 p.m. No sign of adult birds on arrival. Male in tree at 5-30 p.m. but no attempt made to come to hole to feed. He left tree again at 6-5 p.m. Female arrived at 6-10 p.m. and went straight to hole to feed, she left again at 6-13 p.m. High wind got up and blew "hide" cloth about, which appeared to frighten the male. He came to the tree at 6-47 p.m., but after several attempts to approach the nest he left tree again at 7-3 p.m. The call of the young was noticed to be changing from a continuous squarking, and at this time one young was heard to make a call resembling the adult "Yaffle" note. The female returned at 7-4 p.m., fed, and left at 7-7 p.m. On leaving she appeared to have what looked like a dark mud oozing from the sides of her beak from tip to half way down her bill. This was the first evidence we had seen of anything having been taken away from the nest after feeding. It was now assumed that nest cleaning had been carried out all along, the adult birds collecting up the excreta and carrying it away inside their mouths completely hidden from sight. By this stage a strong stench was observed from the nest, and flies were seen to be ever present around the entrance hole. I joined A.W.W. in "hide" at 7-30 p.m. and stayed until 9 p.m. During this hour and a half the male was very wary and remained around in the tree for about one hour. The female arrived at 8-30 p.m. and entered hole at 8-45 p.m. At 8-47 p.m.



MALE GREEN WOODPECKER
about to feed young.



FEMALE GREEN WOODPECKER
about to feed young.

male was at entrance hole with female still inside. She came out at 8-48 p.m. and he flew off with her. "Hide" was vacated at 9 p.m. Due to the high wind it was felt that the male had been made very wary due to the "hide" cloth flapping about.

July 1st.

Weather—Light periods but still windy. Entered "hide" at 7-40 p.m. with J.Wn. Female was in tree by nesting hole on arrival at 7-30 p.m. She flew off on our arrival and both birds arrived back in tree at 7-50 p.m., the female coming straight to hole to feed. This feed, which lasted three minutes, was the first witnessed when the adult did not go inside to feed. She remained on the outside and appeared to reach down inside to feed, keeping half her body projecting out of the hole and coming out each time to eject food into her bill. She ejected food on ten occasions. On completion of feeding she went right inside to complete nest cleaning.

No external excreta was seen to be carried away on leaving at 7-56 p.m. The long time taken over this feed was felt due to the new position for feeding. The male remained in tree after female left and, after a careful approach, he reached the hole at 8-10 p.m. Unlike the female he went straight in to feed and left at 8-13 p.m. The female returned again at 8-35 p.m. with another feed, and this time she too went right inside to feed at 8-40 p.m. She left at 8-43 p.m. It was now felt her previous feed had been an effort to get the youngsters to come up to the hole to receive the food. "Hide" was left at 8-50 p.m. No sign of birds about on leaving. "Hide" cloth had been tightened up at commencement of this period in the "hide" and the male appeared far more comfortable.

July 4th.

Weather—fine and sunny; wind—nil. In hide at 7 p.m. with C.E.B. Female back in tree at 7-25 p.m.,

she remained in one position on outlying branch until 7-45 p.m., before working up to hole to feed at 7-50 p.m. Young coming well out of hole to receive food. All ejecting up of food done after arrival at hole, ten to twelve times in all. Youngsters' heads were noticed to be well feathered and very crimson. Female did not enter hole to nest clean after this feed, but remained in tree on an outlying branch preening. Male arrived at 8-20 p.m. and female then left. Male stayed on branch which female had just left, and showed no signs of wanting to feed. Weather had now turned sultry and very cloudy. Female again back in tree at 8-45 p.m. and fed at 8-59 p.m. She again did not enter hole after feeding from the outside of nest. When she left at 9-3 p.m., male remained until 9-10 p.m., when he too left without coming to nesting hole after spending forty minutes on the outlying branch. "Hide" left at 9-15 p.m.

July 6th.

Weather—Bright but cloudy. In "hide" at 7 p.m. with A.W.W. No sign of adult birds on arrival. Young not calling. Male arrived at 7-30 p.m. and worked up to hole by 7-50 p.m. Feed completed by 7-45 p.m., and he left without going into nest for cleaning. Female arrived and fed at 8-20 p.m. Male back before female left at 8-24 p.m. He was at hole feeding by 8-37 p.m., leaving at 8-40 p.m. Male back again by 9-10 p.m. and feeding by 9-15 p.m., left at 9-19 p.m. Female back at 9-30 p.m. and feeding at 9-35 p.m. and leaving again 9-40 p.m. Young are now almost ready for flying. Crimson on heads of young varies in richness, the brighter colouring thought to be males.

On one occasion, when the male arrived to feed, as he popped his head into the entrance hole, a young popped his out. There was a collision and the male took fright and fell, apparently out of control, to the bottom of the

tree trunk. He soon worked his way back up to the entrance hole and went straight inside. It appeared from the loud calling of the young that one of them was getting a beating for knocking father off his balance. He came out after three-quarters of a minute and commenced to feed. On another occasion he had been seen to push one young which had fed several times from the hole to make way for another young to receive some food. Only one young appeared at the hole for feeding at a time, and other than this occasion, when the male pushed a young away, one young always received the whole feed from one adult bird. The call of the young to-day reminded me of ducks quacking on a pond whilst swimming around surface feeding. The young were now spending much time between feeds shooting their tongues out at flies which were resting on the sides of the entrance hole. At none of the feeds witnessed during this period did either bird enter the hole after feeding for nest cleaning.

The paste which was gulped up from the crop for feeding was greyish brown in appearance, but sometimes it was noted to be milky white as stated in the *Handbook of British Birds*. "Hide" was left at 9-45 p.m.

July 7th.

Weather—Bright periods. Some cloudy spells. In "hide" with A.W.W. at 3 p.m. Adult birds not about. Young not calling on arrival. Female arrived back in tree at 3-50 p.m. and soon approached to feed by 3-55 p.m. Flew out at 3-57 p.m. due to human disturbance. Male arrived in tree at 4-30 p.m. He stayed on outlying branch until 4-50 p.m., then approached nesting hole. He was feeding by 4-55 p.m. and left at 5 p.m. I left "hide" and C.E.B. took over at this stage. Female returned and fed at 6-10 p.m., leaving at 6-14 p.m. She came again at 7-20 p.m. and fed at 7-25 p.m., leaving at 7-30 p.m. I took over

from A.W.W. at this stage and remained until 9 p.m., when "hide" was vacated. During this last $1\frac{1}{2}$ hours' spell only one visit was paid by the male at 8-20 p.m. He spent a long time on the branch he alighted upon before approaching hole at 8-50 p.m., he fed at 8-52 p.m. and left at 8-56 p.m. This was my last spell in the "hide" when C.E.B. and I left at 9 p.m.

During this day's spell the young had been reaching well out of the nest, and it was felt they would be gone the next day.

July 8th.

Weather—Fine on arrival but dull and overcast later. Put C.W.N. in "hide" at 4-30 p.m. Young still in nest. Visits from male and female once each up to 7-15 p.m., when I released him from "hide."

July 11th.

Weather—Rained all day until 5 p.m. Previous two days had also been wet. C.W.N. found only one young in the nest at 5 p.m. on arrival. He had three visits from the female between 6 p.m. and 9 p.m. Three other young were to be seen in the nesting tree, and they were receiving visits and being looked after by the male.

July 12th.

The last young bird left the hole at 6-30 p.m. There was one other young bird still in the tree (W.K.M.).

Summary.

Total number of hours to build "hide"	11 hrs.
Number of man-hours	28 hrs.
Total number of hours spent in "hide" observing by:—	
S.W.	21 hrs. 45 mins.
A.W.W.	16 hrs.
C.W.N.	9 hrs. 15 mins.
J.Wn.	1 hr. 10 mins.
C.E.B.	6 hrs. 15 mins.
J.W.	4 hrs. 40 mins.
Total	<u>59 hrs. 5 mins.</u>

Overlap of observation periods in "hide":—

S.W. and J.W.	- - -	4 hrs. 40 mins.
S.W. and A.W.W.	- - -	7 hrs.
S.W. and J.Wn.	- - -	1 hr. 10 mins.
S.W. and C.E.B.	- - -	3 hrs. 45 mins.
A.W. and C.E.B.	- - -	2 hrs. 30 mins.

Total	- - - -	19 hrs 5 mins.
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Therefore, "hide" occupied by

individual or double watch - - 40 hrs.

"Hide" occupied by man-hours (single

or double) - - - - 59 hrs. 5 mins.

Feeds witnessed—by the male - - 15

Feeds witnessed—by the female - 29

Total of 44 feeds witnessed in 40 hours, which averages one feed just under every hour.

It will be noticed that average duration of feed is three minutes.

Longest and shortest intervals between feeds could not be accurately ascertained, as arrival at "hide" sometimes coincided with a bird in the tree about to feed, or disturbed just having started a feed. This would find the bird back feeding in ten minutes of entering "hide." On the other hand, after a feed was witnessed through binoculars from some distance, and the bird had left the district before entering the "hide," it was found that the average interval before nest feed was about 1 hr. 10 mins.

From first finding nest on May 13th to young flying on July 11th, period covered 59 days.

Known data:—

Fledging period - - - - 20-21 days.

Assumed incubation - - - - 18 days.

Assumed number of eggs, five - - - 5 days.

Nest building at least - - - - 15 days.

Young first being fed from outside of hole 12 days.

Besides the Nuthatch, which visited near the nesting hole, the following species of birds alighted in the tree or passed near to the nesting hole during "hide" occupation:—

Great Tit.
Blue Tits.
Marsh Tits.
Chiffchaff.
Willow Warbler.
Jackdaws.
Woodpigeons.
Blackbird.
Chaffinch.

Nest sanitation could not be proved, as the only time any substance was seen to be carried away after leaving nest, was by the female on June 29th, after the feed at 7-7 p.m. Certainly no nest cleaning was done after young were fed from outside of hole on July 4th. Nesting hole was nearly as obnoxious as Kingfisher's after the young had flown.

Identification and Peculiarity of Adult Birds.

Plumage alike, except brighter crimson on male's head and the crimson centre on male's moustache. Male's moustache appeared to have a rounder finish at end, while female's appeared more triangular and jagged at end, as can be seen in photographs.

A marked peculiarity was present on the female, in so much that she had no white iris in her right eye. This may have been damaged by young in previous season in a similar case as when male collided with young on July 6th. It was tested for blindness by putting a finger out of the "hide" and moving same about when she was at nesting hole with only this eye in sight of the finger. She immediately flew away. This peculiarity can be readily seen in the photographs of her at the nesting hole, and in comparison with her left

eye, in the photographs of her leaving the nesting hole and looking away from nesting hole.

The abbreviations used are:—

S.W.	- - -	S. Whitaker.
A.W.W.	- - -	Alec. W. Ward.
C.W.N.	- - -	C. W. Newberry.
C.E.B.	- - -	C. E. Brown.
J.W.	- - -	Dr. J. Woodward.
J.Wn.	- - -	J. Weston.
W.K.M.	- - -	W. K. Marshall.

(F.E.G.B.), Major F. E. G. Bagshawe; (C.M.B.), Mrs. C. M. Betterton; (A.J.P.B.), A. J. P. Booth; (H.C.B.B.), Captain H. C. B. Bowles; (C.E.B.), C. E. Brown; (C.B.C.), C. B. Chambers; (R.C.), Ralph Chislett; (C.C.), Camden Clarke; (C.L.C.), C. L. Collenette; (W.E.D.), Lt.-Col. W. E. Dodds; (T.C.F.), T. C. Frost; (D.J.H.), D. J. Hancock; (C.H.), C. Hanson; (K.M.H.), Miss K. M. Hollick; (A.E.J.), A. E. Jolley; (F.G.L.), F. G. Lee; (W.K.M.), Captain W. K. Marshall; (E.H.P.), E. H. Peat; (R.J.R.), R. J. Raines; (R.S.F.C.), Repton School Field Club; (W.S.), W. Shipton; (C.M.S.), C. M. Swaine; (H.J.W.), H. J. Wain; (G.T.W.), G. T. Walker; (E.C.W.W.), Brigadier-General Walthall; (A.W.W.), A. W. Ward; (G.D.W.), G. D. Webster; (G.A.W.), G. A. Weston; (S.J.W.), S. J. Weston; (A.W.), A. Whitaker; (S.W.), S. Whitaker; (R.P.), Mrs. Ruth Palmer; (S.T.N.), S. T. Nash.

ROOK SURVEY IN DERBYSHIRE IN 1944.

A survey of the rookeries and census of breeding birds was made in the spring of 1944.

There were 16,547 nests in 381 rookeries. Average size of rookery 43.44 nests.

There were six rookeries of a single nest (Glossop; Whitfield House; Slack Hill, Blackwell; Blackwell on main road; Tunstead; Buxton near Gasworks).

There were 24 rookeries of two nests.

There were 40 rookeries with 100 or more nests.

The largest rookery was at Flower Lilies, which contained 482 nests. At Kedleston, in two rookeries, there were 558 nests.

In Radbourne Park and Radbourne Rough with one rookery each, there was a total of 425 nests. At Locko Park in three rookeries there were 404 nests. In the north of the county, near Sheffield, there was a big concentration; 346 nests at Eckington, and at Norton, 431 nests in three colonies.

The area between Locko, Alkington and Turnditch has the highest concentration of rooks in the Midland or Trent Province.

The area of the County is 1,009 square miles. Therefore there are $16\frac{1}{2}$ nests per square mile.

The area of agricultural land is 505,000 acres.

There is one breeding pair to $30\frac{1}{2}$ acres.

Those who did this survey were Mr. James Fisher in the extreme north; Mr. L. M. Waud in the south-west; Messrs. L. Broadbent, A. I. H. Docksey and A. Roebuck surveyed the remainder.

(Mr. James Fisher is of the British Trust for Ornithology, Mr. L. M. Waud is an officer of the County War Agricultural Committee. The others are from the Midland Agricultural College—Advisory Entomology Department).

ORNITHOLOGICAL RECORD FOR DERBYSHIRE, 1946.

Compiled by W. K. MARSHALL.

It has been suggested to me more than once that it would be a good thing if arrangements could be made for the Ornithologists in the County to meet. Therefore I suggest that anyone who would like such a meeting should notify me within a month of the publication of this Record. Should it be in Derby? I realise that those in the North of the County might find it difficult to attend. Should it be in the summer or winter, in the daytime or in the evening? Lunch, tea, or dinner? My address is:—The Silverhill, Radbourne, Kirk Langley, nr. Derby.

It may be of interest to record that the experiment of printing the 1945 Record separately and putting it on sale has only shown a loss of £16. It is now possible to revert to the former practice of using reprints from the Journal of the Archaeological and Natural History Society, thus reducing printing costs.

I am indebted to Mr. Hudson Read, 2, Fleet Street, Rosehill, Derby, for the following notes from the Nature Diaries of John Joseph Briggs, F.R.S.L., who was born at King's Newton, near Melbourne, Derbyshire, in 1819, and who commenced writing for "The Field" in 1854.

The notes are all from the Melbourne district.

"September 24th, 1865. Black Tern on the River Trent.

May 20th, 1845. Dippers come here for the winter but depart in spring.

December 30th, 1870. Hawfinch at Weston Cliff. A winter visitor to Derbyshire, they never breed here.

1843. Whooper Swans always visit us about Christmas.

November, 1842. Nuthatch, a pair in Melbourne Gardens. Rare in Derbyshire.

May 10th, 1855. Pied Flycatchers. A pair but did not breed.

May 26th, 1842. Sandwich Terns. Several on the River Trent.

May 5th, 1861. First Swift."

The following notes on, and dates of arrival of, Spring migrants may be compared with 1946 records:—

"April 15th, 1844. During the course of several years I have observed that our earliest spring visitant is the Chiff Chaff, our latest the Spotted Flycatcher. The arrival of the birds appears to be more influenced by the state of the season than almost any other cause, and yet be the weather ever so fine about their usual period of arrival and vegetation has considerably advanced in its progress, if the moon is not at the full at that particular time, their arrival will be delayed until it is. The Chiff Chaff usually arrives a little before the larch is visibly green. The Willow-Warbler when the Willows are in infant leaf, the Wood Warbler when the oak and elm are budding. When the gooseberry is in full leaf the Garden Warbler appears, and the Blackcap scarcely ever before the hawthorns are expanded. The Yellow Wagtail comes mostly just when the spring-corn is sown, and frequents the fallow ground. The Landrail when the vegetation of hedgerows has just sprung sufficiently high to hide it. The Swallows never appear until flies become abundant, nor the Cuckoo until the weather becomes sunny altogether. The Reed and Sedge Warblers rarely visit us until the rank flags and reeds are a foot high and afford them concealment. I think that the males of most species arrive before the females by some days, and all birds seem to begin their songs and cries immediately on their arrival.

1854.	March 29th.	Chiff Chaff appeared Stanton Hills.
	April 5th.	Sand Martin.
	April 8th.	Yellow Wagtail.
	April 10th.	Willow Warbler.
	April 13th.	Chimney Swallow.
	April 14th.	Redstart
	April 15th.	Blackcap.
	April 19th.	Common Whitethroat.
	April 19th.	Lesser Whitethroat.
	April 19th.	Grasshopper Warbler.
	April 19th.	Tree Pipit.
	April 19th.	Cuckoo.
	April 20th.	Common Martin.
	April 20th.	Sedge Warbler.
	May 3rd.	Landrail."

The Derbyshire Ornithological Record is exchanged with those of other Counties; in future these will be deposited in the County Library where those interested can see them.

Readers are reminded that a complete list of the birds recorded in the County up to 1944 is printed in the 1944/45 Journal of the Derbyshire Archaeological and Natural History Society, copies can be obtained price 15/- from Mr. S. Taylor, 3, Market Place, Derby. Unfortunately there are several misprints, chiefly in the Latin names, which it is hoped to correct at some future date. Additions were made to the list in 1945 as stated in the Record of that year, and this year seven more have been recorded: Grey-lag Goose, *Anser a. anser*. Scaup-Duck, *Aythya m. marila*. Whimbrel, *Numenius a. arquara*. Knot, *Calidris c. canutus*. Grey Plover, *Squatarola squatarola*. Black Tern, *Chlidonias n. niger*. and Kittiwake, *Rissa t. tridactyla*. This makes the County total 170. The nesting of the Pied Flycatcher has increased.

The following have contributed:—H. W. Barnfather

(H.W.B.), Mrs. C. M. Betterton (C.M.B.), T. Bunting (T.B.), A. J. P. Booth (A.J.P.B.), H. C. B. Bowles (H.C.B.B.), C. E. Brown (C.E.B.), J. F. Crompton-Inglefield (J.F.C-I.), C. B. Chambers (C.B.C.), Ralph Chislett (R.C.), Camden Clarke (C.C.), H. Clayton (H.C.), A. P. Coote (A.P.C.), W. E. Dodds (W.E.D.), T. C. Frost (T.C.F.), C. Greaves (C.G.), W. E. Godfrey (W.E.G.), D. J. Hancock (D.J.H.), Miss K. M. Hollick (K.M.H.), D. C. Hulme (D.C.H.), N. Harwood (N.H.), F. G. Lee (F.G.L.), W. K. Marshall (W.K.M.), S. T. Nash (S.T.N.), Mrs. R. Palmer (R.P.), E. H. Peat (E.H.P.), G. R. Pryor (G.R.P.), F. Price (F.P.), Repton School Field Club (R.S.F.C.), P. A. E. Rudge (P.A.E.R.), H. Read (H.R.), W. Shipton (W.S.), C. M. Swaine (C.M.S.), J. Sheldon (J.S.), H. J. Wain (H.J.W.), A. W. Ward (A.W.W.), G. A. Weston (G.A.W.), A. Whitaker (A.W.), S. Whitaker (S.W.), S. J. Weston (S.J.W.), L. M. Waud (L.M.W.), C. H. Wells (C.H.W.).

SYSTEMATIC LIST.

Raven, *Corvus c. corax*. October 11th, one, North Derbyshire (E.H.P.).

Hooded Crow, *Corvus c. cornix*. February 28th, one pair, Ramsley (N.H.). October 27th, one, Holme-wood (C.B.C.).

Carrion Crow, *Corvus c. corone*. Increase in North West Derbyshire, particularly on the limestone belt (L.M.W.). Decrease, Ford Hall (T.B.). Four pairs, Abney. Increase in district (H.C.B.B.).

Magpie, *Pica p. pica*. Increase in most districts.

Hawfinch, *Coccothraustes c. coccothraustes*. March 7th, return to Radbourne (W.K.M.). Seen in Chatsworth Park from March 31st (R.P.). March 27th, one; April and May, one pair, Glossop area (C.M.S.). Nested, Upper Padley (G.R.P.). March 10th, ten pairs present throughout the summer, Ashbourne (K.M.H.). March 12th, five, Derby (H.C.).

Greenfinch, *Chloris c. chloris*. Increase, Repton (R.S.F.C.).

Goldfinch, *Carduelis c. britannica*. Families more frequent than usual (C.C.). Scarce, S.W. Derbyshire (D.C.H.). Seen occasionally, Baslow (R.P.). October 27th, several, Curbar (N.H.). For the first time in my nine year's residence a pair was seen in spring but not later, Baslow (H.C.B.B.). May 12th, a family, Hoon (M.B.). April 16th, a pair, Locko Park (D.J.W.). Up to five in February and March, Nutbrook (F.G.L.). Same numbers present as last year in colony in S.W. Derbyshire but nesting was later (S.W.). January 18th to 23rd, two, Bretby (H.J.W.).

Siskin, *Carduelis spinus*. Winter visitor, Ingleby (C.C.). Numerous on March 31st and seen up to April 7th, Chatsworth Park (R.P.). February 7th, a few with Redpolls., Ashbourne (K.M.H.). January 1st, one, Allestree (D.J.W.). March 17th, about twenty, Nutbrook (F.G.L.). October 13th, about two hundred, Egginton Sewage Farm (R.S.F.C.).

Lesser Redpoll, *Carduelis flammea cabaret*. Always in Chatsworth Park (R.P.). Decrease, Glossop area (C.M.S.). Fairly common (G.R.P.). Up to twelve in February and March, Nutbrook. May 9th, a female, Butterley (F.G.L.). Two pairs at least, Combs (A.J.P.B.). None nested where three pairs nested in 1945. Holmewood (C.B.C.).

Twite, *Carduelis flavirostris pipilans*. September 30th, two, near Beeley Moor (N.H.).

Bullfinch, *Pyrrhula p. nesa*. Increase, Repton (R.S.F.C.).

Brambling, *Fringilla montifringilla*. September 30th, Glawdin's Mark, near Beeley in the company of Chaffinch, Greenfinch and Tits (N.H.). October 13th, one, Kedleston (K.M.H.). November 4th, 1945, a small flock with Chaffinches, Repton, (R.S.F.C.).

Corn-Bunting, *Emberiza calandra*. None seen 1946 although frequent in 1945, S.W. Derbyshire (D.C.H.).

Yellow Bunting, *Emberiza c. citrinella*. Increase, South Derbyshire (H.R.). Increase, Baslow area (J.S.).

Tree Pipit, *Anthus t. trivialis*. Decrease, Holmewood area (C.B.C.).

Yellow Wagtail, *Motacilla flava flavissima*. Decrease, Baslow area (R.P.). Decrease, Combs (A.J.P.B.).

Grey Wagtail, *Motacilla c. cinerea*. June 12th, three, Miller's Dale (H.R.). On the Barbrook throughout 1945/6 winter.

Pied Wagtail, *Motacilla alba yarrellii*. Decrease S. W. Derbyshire (D.C.H.). Frequent, Baslow area (R.P.).

White Wagtail, *Motacilla a. alba*. April 14th, adult male, Glossop area (C.M.S.).

Tree Creeper, *Certhia familiaris britannica*. Appear to be on the increase, Ford Hall (T.B.). Increase, Baslow area (J.S.).

Nuthatch, *Sitta europæa affinis*. Ingleby (C.C.). January 6th and into the nesting season in Chatsworth Park. I have not found it here before (R.P.). Increase from two to four or five pairs, Radbourne (W.K.M.). Two pairs, Elvaston (T.C.F., C.E.B.). February 13th, one, Sandybrook, new locality (K.M.H.). March 9th, three Osmaston. April 17th, one, Allestree (D.J.W.). February 24th, one pair, Foremark (R.S.F.C.).

Long-Tailed Tit, *Ægithalos caudatus rosaceus*. Decrease S.W. Derbyshire (D.C.H.). Frequent, Baslow area (R.P.).

Willow-Tit, *Parus atricapillus kleinschmidti*. Twyford (D.C.H.). Windley, Hulland, Radbourne, Sudbury (W.K.M.). Atlow Rough (K.M.H.).

Great Grey Shrike, *Lanius e. excubitor*. October 13th, 15th, one, Holmewood (C.B.C.). October 18th, one, feeding on a Redwing on the ground and not impaled, Beeley Moor (N.H.).

Spotted Flycatcher, *Muscicapa s. striata*. May 22nd,

young had left nest, Parwich (J.C-I.). Decrease, Glossop area (C.M.S.). Very common, Upper Padley (G.R.P.).

Pied Flycatcher, *Muscicapa h. hypoleuca*. Nested but nest destroyed, Ford Hall (T.B.). Nested Grindleford, see "British Birds" October 1946 page 317 (G.R.P.). A pair in the same area also reported by C.H.W. and R.C. the latter stating that there were two pairs. April 16th, one, Locko Park (D.J.W.).

Goldcrest, *Regulus r. anglorum*. Present throughout the year, Baslow area (R.P.), also Elvaston (H.C., T.C.F., C.E.B.). Common between Leadmill and Grindleford Bridges (G.R.P.). Present in summer at Foston and Sudbury, but in winter only at Radbourne (W.K.M.). March and April, Allestree (D.J.W.). Decrease, due to tree felling, Allestree (S.J.W.).

Firecrest, *Regulus i. ignicapillus*. March 11th, identified by call note and then seen at close quarters, Repton Shrubs (R.S.F.C.).

Wood-Warbler, *Phylloscopus sibilatrix*. Several, Baslow area (R.P.).

Blackcap, *Sylvia a. atricapilla*. June 21st, one singing at 08-00 hours G.M.T. Cheapside Car Park, Derby (W.K.M.).

Lesser Whitethroat, *Sylvia c. curruca*. Ceased singing the day young left nest. It may have moved but one sang in the same area ten days later (W.K.M.).

Fieldfare, *Turdus pilaris*. Not so many as usual in Autumn (L.M.W.).

Song-Thrush, *Turdus e. ericetarum*. Decrease, Baslow area (R.P.).

Ring Ouzel, *Turdus t. torquatus*. Pair in Lathkill Dale in April (L.M.W.). Did not nest at Ford Hall (T.B.). One pair, Baslow (R.P.). Very few, Glossop area (C.M.S.). Two pairs in spring, none seen since, Abney (H.C.B.B.). Combs (A.J.P.B.).

Blackbird, *Turdus m. merula*. One heard mimicking Curlew's notes in June (D.C.H.). Female seen taking frog to nest (G.R.P.).

Wheatear, *Enanthe o. œnanthe*. Breeds fairly commonly in the extreme North West (L.M.W.). Probably nested Foremark (C.C.).

Whinchat, *Saxicola rubetra*. Two Foremark (C.C.). Fairly common S.W. Derbyshire (D.C.H.). Four, near Burrs Wood in April (N.H.). At least three nests near the Nottingham Road, Derby (T.C.F.). Two or three pairs, Combs (A.J.P.B.). Decrease, Holmewood area (C.B.C.). Two, Wirksworth in May (C.G.). May 9th, one, Repton, June 25th, one, Willington (R.S.F.C.).

Redstart, *Phoenicurus p. phoenicurus*. Several pairs in Baslow area and Monsal Dale (R.P.). Common at Upper Padley (G.R.P.). July 4th, one, Repton (R.S.F.C.). Nested, Radbourne (W.K.M.). Several observers supplied information for the inquiry held this year.

Robin, *Erithacus rubecula melophilus*. February 17th, nest found, February 21st, first egg. Between this date and June this pair reared three broods, the second nest being within eight yards of the first, and the third nest being completely new but on exactly the same site as the first (R.S.F.C.).

Dipper, *Cinclus c. gularis*. One swam on surface of water a distance of two feet with wings outstretched (D.C.H.).

Swallow, *Hirundo r. rustica*. Nested two years in succession on an electric light shade, Curbar (R.P.).

House-Martin, *Delichon u. urbica*. Of 35 nests, 10 had the entrance hole facing N.N.W., 4 N.E., 4 S.S.E., 4 S.E., 2 E., 2 E.S.E., 2 E.N.E., 2 N., 2 S.W., 1 S., 1 N.W., 1 S.S.W. (D.C.H.).

Nightjar, *Caprimulgus e. europæus*. Considerable decrease (G.R.P.). June 4th, Belper (H.W.B., H.C.).

Kingfisher, *Alcedo atthis ispida*. Seems to have recovered and nested in usual sites (C.C.).

Green Woodpecker, *Picus viridis pluvius*. March

28th, Ford Hall, not seen since (T.B.). November 2nd, the first in six years, Chatsworth (R.P.).

Great Spotted Woodpecker, *Dryobates major anglicus*, October 28th, Shire Oaks (T.B.).

Cuckoo, *Cuculus c. canorus*. "Although a good number of Cuckoos were here this summer, I never saw a young one. Has anyone else noticed this?" (E.H.P.). Decrease, Upper Padley (G.R.P.). "Not one young one seen" (R.P.).

Little Owl, *Athene noctus vidalii*. One at Edale and one at Derwent. "I have only seen one here before" (E.H.P.).

Long-eared Owl, *Asio o. otus*. One pair (E.H.P.).

Short-eared Owl, *Asio f. flammeus*. May 13th, one, Lady Bower reservoir (A.P.C.). Two pairs on the Northern boundary, one of which almost certainly succeeded in rearing young (C.H.W.). Scarce (E.H.P.). March 7th, and the four subsequent weeks, one, Osmaston Park, Derby (G.A.W.). November 4th, 1945, two, Repton (R.S.F.C.). Absent from Baslow and Ramsley Moors (R.P.).

White-Breasted Barn-Owl, *Tyto a. alba*. Slight increase and bred, Radbourne (W.K.M.). One in June, Ingleby (D.C.H.). One in September, Ashgate (N.H.). Allestree (D.J.W., S.J.W.). Nested, Willington (S.W.). One pair, Belper (H.W.B.).

Peregrine Falcon, *Falco p. peregrinus*. February 7th, one, Ashbourne. March 27th, one, Shirley Wood. One, Staffordshire border. There is now no doubt that they would breed in Derbyshire if allowed to do so.

Merlin, *Falco columbarius aesalon*. April 5th, one Beeley Moor (N.H.). A pair reared three young, Abney (H.C.B.B.). August 25th, two, Beeley Moor (R.P.).

Kestrel, *Falco t. tinnunculus*. July 27th, 21-00 hours at Upper Padley; "Hearing a bird screaming, I looked up and saw a Kestrel diving with shut wings at an angle of 40° about 30-40 feet up. The bird's mate appeared,

hovered, and I saw the "pass." The prey appeared to be a small rodent and the "pass" was made from talon to talon" (G.R.P.).

Common Buzzard, *Buteo b. buteo*. April 22nd, one, Willington (D.C.H.). One, in September, Combs (A.J.P.B.). Two, in April and May, Newton Solney (H.J.W.).

Hen-Harrier, *Circus c. cyaneus*. October 19th and 27th, near Baslow. The bird was in fine blue-grey plumage. In view of the date and situation there can be no doubt that it was a Hen-Harrier (G.R.P., R.P.).

Heron, *Ardea c. cinerea*. Thirty-seven nests, Calke (H.J.W.).

Grey Geese. January 25th, 12.20 hours, two skeins flying W., Glossop (C.M.S.).

Grey Lag-Goose, *Anser a. anser*. April 25th, forty-three flying South-West, Taddington (L.M.W.).

White-fronted Goose, *Anser a. albifrons*. January 21st, sixty-five flying E. and low over Glossop at noon; recognised by calls and black bars on breast (C.M.S.).

Canada Goose, *Branta c. canadensis*. June 12th, one pair, Miller's Dale (H.R.). About seventy in January, Shipley. August 12th about seventy flying N. Nutbrook (F.G.L.). Except in July, the numbers at Allestree increased steadily throughout the summer from six on March 9th to one hundred on August 24th (S.J.W.).

Gadwall, *Anas strepera*. February 1st, May 11th and 25th, one drake, Bradley Dam (K.M.H.).

Teal, *Anas c. crecca*. June 3rd, one pair, near Burrs Wood (N.H.). A small nocturnal passage in late March over Glossop (C.M.S.). A fair number nested (E.H.P.). Five young reared, Belper (H.W.B.). In 1945 nested near Newton Solney (R.S.F.C.).

Garganey, *Anas querquedula*. One pair in May, Egginton; nest not found (R.S.F.C.).

Wigeon, *Anas penelope*. March 23rd, nocturnal passage, Glossop (C.M.S.). October 25th and 26th,

one pair, Chatsworth (N.H.). January 10th, ten, Osmaston. February 14th, a few, Calwich (K.M.H.). December 29th, 1945, about forty, Redmire's dam. January 19th, three, Renishaw (A.W.). January 20th, three, Shipley (F.G.L.). Very plentiful on River Trent in January (R.S.F.C.).

Pintail, *Anas a. acuta*. One drake, February 9th, Osmaston; 14th, Calwich (K.M.H.). A few on River Trent in January (R.S.F.C.).

Shoveller, *Spatula clypeata*. June 3rd, one drake, Sudbury (W.K.M.). January to March, reappearing in September, up to four, Osmaston. February 14th, two, Calwich (K.M.H.). Nested, Williamsthorpe (C.B.C.). June 2nd, one pair, Repton (R.S.F.C.).

Pochard, *Aythya ferina*. January 2nd, two drakes, Hardwick; January 27th, October 16th, one drake, Ramsley (N.H.). One with damaged wing in April and May, Lady Bower (E.H.P.). January to April, reappearing October, usually in small numbers increasing in February and March to twenty: more drakes than ducks, Osmaston (K.M.H.). January 19th, several, Renishaw (A.W.). A few up to beginning of April, Butterley, Loscoe, Shipley, October 31st, two, Loscoe (F.G.L.). March 17th, one female, Newton Solney (R.S.F.C.).

Tufted Duck, *Aythya fuligula*. Nested, Chatsworth (C.G., N.H., R.P., G.R.P.). June 3rd, one pair, Sudbury (W.K.M.). January 2nd, one drake, Hardwick, 27th, twelve, Ramsley (N.H.). May 18th, one pair, Barbrook reservoir (R.C.). Nested, Hassop (E.H.P.). January 19th, several, Renishaw (A.W.). Present but did not breed, Allestree (D.J.W.). April 29th, Mark-eaton Park (H.C.). January 20th, over eighty, Shipley. Also at Loscoe and Butterley up to April 9th (F.G.L.). Decrease, Allestree (S.J.W.).

Scaup-Duck, *Aythia m. marila*. May 18th, one female, Barbrook reservoir. The previous night had been stormy (R.C.).

Goldeneye, *Bucephala c. clangula*. November 3rd, two, Barbrook reservoir (R.P., G.R.P.).

Goosander, *Mergus m. merganser*. February 23rd, several on River Trent, Repton (H.J.W.). Several, mostly drakes, in January, Newton Solney (R.S.F.C.).

Cormorant, *Phalacrocorax c. carbo*. Seen several times in spring, as many as five at once. Lady Bower (E.H.P.). Two, River Trent, in September (H.J.W.).

Great Crested Grebe, *Podiceps c. cristatus*. Several observers supplied information for this year's inquiry.

Stock-Dove, *Columba œnas*. Slight decrease, Glos-sop area (C.M.S.).

Turtle-Dove, *Streptopelia t. turtur*. Considerable decrease (W.K.M.).

Curlew, *Numenius a. arquata*. General increase recorded in several districts. Nested again in River Trent meadows (C.C.). Decrease, Repton-Foremark area (D.C.H.). Increase (E.H.P.). Two, in breeding season but did not nest, Radbourne (W.K.M.). Sturston, Atlow, also Norbury, which is a new locality (K.M.H.). Increase, Abney (H.C.B.B.). Present in nesting season, Hoon (C.M.B.). June 10th, Mugginton (D.J.W.). March 9th, Swarkeston (H.C.). June 8th and 20th, two, Swarkeston (C.G., F.G.L.). Nested between Barrow-on-Trent and Willington (S.W.). Fairly common in Trent Valley; one pair hatched four young (R.S.F.C.).

Whimbrel, *Numenius p. phœopus*. August 24th, eleven, flying S.W. Holmewood (C.B.C.).

Woodcock, *Scolopax rusticola*. Nested Chatsworth Park (R.P.). Nested again in numbers. "I had a good view of one carrying a nearly full-grown chick. It was too heavy for it to make a bracken bed and dropped short of it. The chick flew into the bracken and I put the old one up, so there was no mistake" (E.H.P.). A pair seen with three young, Abney, (H.C.B.B.). Up to April 1st, one roding, Duffield (C.G.).

Common Snipe, *Capella g. gallinago*. Decrease, Baslow area (R.P.). Late brood of three observed between July 28th and August 17th. One adult fed two and the other one (N.H.). Usually three or four pairs but did not see a single bird (G.R.P.). For the second year none nesting where there used to be two or three pairs in each of three areas (A.W.). Decrease, Holmewood area (C.B.C.).

Jack Snipe, *Lymnocyptes minimus*. Not seen, North West Derbyshire (L.M.W.). None seen (W.K.M.). Several seen, Abney (H.C.B.B.).

Turnstone, *Arenaria i. interpres*. May 11th, three, Egginton Sewage Farm (W.K.M.). March 13th, three, May 9th, one, Egginton Sewage Farm (R.S.F.C.).

Knot, *Calidris c. canutus*. May 11th, two, Egginton Sewage Farm (W.K.M.). May 7th, one, 9th, five, same place (R.S.F.C.).

Dunlin, *Calidris alpina schinzii*. May 11th, Egginton Sewage Farm (W.K.M.). May 31st, Freebirch (N.H.). June 2nd, one male, near Glossop (C.M.S.). Only one seen (E.H.P.). May 7th, six, 13th, three, Egginton Sewage Farm (R.S.F.C.).

Sanderling, *Crocethia alba*. May 9th, one, Egginton Sewage Farm (R.S.F.C.). May 11th, one, same place (W.K.M.).

Green Sandpiper, *Tringa ochropus*. September 26th, October 18th, one, Hungry Bentley (K.M.H.). Repton and Newton Solney (R.S.F.C.).

Ringed-Plover, *Charadrius h. hiaticula*. May 11th, Egginton Sewage Farm (W.K.M.). May 13th, three, same place (R.S.F.C.).

The Southern Golden Plover, *Pluvialis a. apricaria*. Increase since Carrion Crow decreased, Ford Hall (T.B.). Scarce (E.H.P.). April 8th, about one hundred Darley Moor (S.T.N.). Decrease, Abney (H.C.B.B.). Decrease this Autumn, Holmewood area (C.B.C.).

Grey Plover, *Squatarola squatarola*. March 31st, one. Beeley Moor (N.H.).

Lapwing, *Vanellus vanellus*. Increase, Baslow area (R.P.). Decrease, Upper Padley (G.R.P.).

Black Tern, *Chlidonias n. niger*. May 27th, Ramsley (N.H.). May 11th, one in breeding plumage, Bradley Dam (K.M.H.).

Black-Headed Gull, *Larus r. ridibundus*. May 11th, thirty, Egginton Sewage Farm (W.K.M.). April 5th, four, May 27th, twenty, Ramsley (N.H.). Usual numbers nested at Spondon (T.C.F.). At Butterley throughout the year (F.G.L.).

Common Gull, *Larus c. canus*. February 10th, one, Repton (D.C.H.). March 2nd, two, probably more, Butterley (F.G.L.).

Herring-Gull, *Larus a. argentatus*. February 24th, two, Twyford, May 5th and June 30th, one, Willington (D.C.H.).

British Lesser Black-Backed Gull, *Larus fuscus grællsii*. Reported from S.E. Derbyshire in February, April and July (D.C.H.). Baslow in May and July (R.P.). August, Mercaston (W.K.M.). May 11th, one adult, Glossop (C.M.S.). May 9th, one flying N., Ashbourne (K.M.H.). June 11th, one adult, Butterley, June 20th, one adult and one immature, Loscoe. October 10th to 19th, one, Loscoe (F.G.L.). March 17th, two, Newton Solney (R.S.F.C.).

Great Black-Backed Gull, *Larus marinus*. March 19th, one immature, Shipley (F.G.L.). One, in March, River Trent (R.S.F.C.).

Kittiwake, *Rissa t. tridactyla*. February 17th, one adult with oiled underparts and dead, Ashbourne Hall pond ((K.M.H.).

Corn-crake, *Crex crex*. None heard North West Derbyshire (L.M.W.). Three heard, Abney (H.C.B.B.). June 6th, one, Belper (H.C.). April 3rd, one, heard and seen, Nutbrook (F.G.L.). July 14th, one, Monks Bridge (H.J.W.).

Coot, *Fulica a. atra*. Increase in the Spring, Codnor reservoir (A.P.C.).

Black Grouse, *Lyrurus tetrrix britannicus*. April 19th, one pair, near Burrs Wood (N.H.). None, Abney (H.C.B.B.).

Red Grouse, *Lagopus s. scoticus*. Increasing, Abney (H.C.B.B.).

Common Partridge, *Perdix p. perdix*. June 1st, two cocks, E. of Glossop, usually rarely seen (C.M.S.).

Quail, *Coturnix c. coturnix*. A pair shot near Burton-on-Trent (C.C.).

ARRIVAL OF SPRING MIGRANTS.

Tree-Pipit. March 31st, Baslow (R.P.); April 2nd, Abney (W.K.M.); 12th, Duffield (C.G.); 14th, Findern (D.C.H.), Bretby (H.J.W.); 15th, Radbourne (W.K.M.), Glossop (C.M.S.); 16th, Derby (T.C.F.); 17th, Findern (S.W.); 19th, Bradley (K.M.H.); 21st, Linacre (N.H.); 25th, Hoon (C.M.B.); May 5th, Ilkeston (F.G.L.).

Yellow-Wagtail. March 26th, Allestree (H.C.); April 20th, Baslow (R.P.); 22nd, Doveridge (S.W.), Breadsall (D.J.H.); 23rd, Ashbourne (K.M.H.); 27th, Elvaston (T.C.F.); May 1st, Glossop (C.M.S.).

Spotted Flycatcher. April 23rd, Sudbury (S.W.); May 4th, Bretby (H.J.W.); 8th, Ashbourne (K.M.H.); 12th, Melbourne (H.R.); 16th, Radbourne (W.K.M.); 19th, Findern (D.C.H.), Darley Dale (N.H.); 20th, Baslow (N.H.), Elvaston (T.C.F.); 22nd, Shelton Lock (G.A.W.); 23rd, Baslow (R.P.).

Chiffchaff. March 28th, Sudbury (W.K.M.), Allestree (D.J.H.); 30th, Bradley (K.M.H.); 31st, Repton (R.S.F.C.), Ticknall (H.J.W.); April 1st, Elvaston (T.C.F.); 5th, Ashgate (N.H.); 7th, Doveridge (S.W.); 14th, Baslow (R.P.).

Willow-Warbler. March 31st, Ticknall (H.J.W.), Baslow (R.P.); April 1st, Allestree (D.J.H.); 3rd, Coombs (W.E.D.), Ilkeston (F.G.L.), Derby (G.A.W.);

4th, Scropton, Radbourne (W.K.M.), Ashgate (N.H.); 6th, Findern (D.C.H.), Ashbourne (K.M.H.), Markeaton (H.C.), Elvaston (T.C.F., C.E.B.); 7th, Doveridge (S.W.), Glossop (C.M.S.); 10th, Derby (T.C.F.); 14th, Holmewood (C.B.C.).

Wood-Warbler. May 1st, Shirley (K.M.H.); 10th, Glossop (C.M.S.); 12th, Radbourne (W.K.M.); 19th, Bretby (H.J.W.).

Grasshopper-Warbler. April 30th, Foremark (H.C.).

Sedge-Warbler. April 26th, Shardlow (S.W.); May 5th, Ilkeston (F.G.L.), Ashbourne (K.M.H.).

Reed - Warbler. May 19th, Radbourne (S.W., W.K.M.).

Garden-Warbler. April 20th, Hoon (C.M.B.); 21st Foston (S.W.); May 5th, Radbourne (W.K.M.); 8th, Ashgate (N.H.); 11th, Bradley (K.M.H.); 12th, Ilkeston (F.G.L.); 19th, Bretby (H.J.W.).

Blackcap. March 30th, Radbourne (W.K.M.); April 19th, Bretby (H.J.W.); 20th, Baslow (R.P.); 21st, Foston (S.W.), Shirley (K.M.H.); 22nd, Ashgate (N.H.); 24th, Allestree (D.J.H.); May 12th, Ilkeston (F.G.L.).

Whitethroat. April 9th, Duffield (C.G.); 16th, Radbourne (W.K.M.); 17th, Findern (S.W.), Ilkeston (F.G.L.); 19th, Bretby (H.J.W.); 21st, Findern (D.C.H.); 22nd, Allestree (D.J.H.); 26th, Littleover (T.C.F.); 27th, Ambaston (T.C.F.); 29th, Ambaston (H.C.); May 1st, Shelton Lock (G.A.W.), Shirley (K.M.H.); 2nd, Hardwick (N.H.); 10th, Glossop (C.M.S.).

Lesser Whitethroat. April 20th, Allestree (S.W.); 21st, Radbourne (W.K.M.); 24th, Fenny Bentley (K.M.H.); May 4th, Bretby (H.J.W.); 6th, Shelton Lock (G.A.W.); 9th, Glossop (C.M.S.).

Wheatear. March 23rd, Dronfield (S.W.); 26th, Ballidon (K.M.H.); April 6th, Milnehay (D.J.H.), Baslow (R.P.); 27th, Elvaston (T.C.F.); 28th, Calke (H.J.W.); 29th, Ambaston (H.C.).

Whinchat. April 14th, Burrs Wood (N.H.); 23rd, Ashbourne (K.M.H.); 28th, Bretby (H.J.W.); 29th, Buxton (S.W.); May 5th, Ilkeston (F.G.L.); 7th, Findern (S.W.); 10th, Glossop (C.M.S.); 11th, Radbourne (W.K.M.); 12th, Allestree (D.J.H.); 17th, Derby (T.C.F.); 19th, Swarkeston (D.C.H.); 21st, Holmewood (C.B.C.).

Redstart. March 31st, Baslow (R.P.); April 19th, Radbourne (W.K.M.); May 4th, Calke (H.J.W.); May 12th, Glossop (C.M.S.); 23rd, Ashbourne (K.M.H.).

Swallow. April 3rd, Rowsley (R.P.); 4th, Hoon (C.M.B.); 5th, Ford Hall (T.B.); 6th, Bretby (H.J.W.); 9th, Ilkeston (F.G.L.); 10th, Doveridge (H.C.); 13th, Glossop (C.M.S.); 14th, Shardlow (H.R.), Allestree (S.W.), Ingleby (D.C.H.); 15th, Dalbury (W.K.M.); 16th, Markeaton (W.K.M.), Littleover (T.C.F.); 19th, Radbourne (W.K.M.), Ashbourne (K.M.H.); 20th, Ramsley (N.H.); 21st, Holmewood (C.B.C.).

House Martin. April 10th, Bretby (H.J.W.); 11th, Holmewood (C.B.C.), Derby (C.B.C.); 13th, Bakewell (N.H.), Baslow (R.P.); 17th, Egginton (S.W.); 21st, Allestree (D.J.H.); 23rd, Markeaton (H.C.); 24th, Bradbourne (K.M.H.); 27th, Whatstandwell (W.K.M.); May 2nd, Glossop (C.M.S.); 10th, Repton (D.C.H.); 17th, Ilkeston (F.G.L.).

Sand Martin. March 13th, Chatsworth (R.P.); 28th, Newhall (H.J.W.); 30th, Ashbourne (K.M.H.); April 7th, Allestree (D.J.H., S.J.W.); 8th, Shardlow (S.W.), Derby (T.C.F.); 12th, Derby (H.C.), Chellaston (G.A.W.); 21st, Willington (D.C.H.).

Swift. April 29th, Bretby (H.J.W.); May 1st, Ashbourne (K.M.H.); 2nd, Derby (S.W.); 3rd, Hartington (G.A.W.); 7th, Glossop (C.M.S.); 8th, Sinfin (T.C.F., C.E.B.); 9th, Ilkeston (F.G.L.); 10th, Holmewood (C.B.C.); 11th, Allestree (S.J.W.), Derby (H.C.), Ashgate (N.H.), Littleover (D.C.H.); 12th, Ripley (A.P.C.).

Cuckoo. April 13th, Duffield (C.G.); 14th, Ilkeston

(F.G.L.), Bretby, Foremark (H.J.W.), Mickleover (H.C.), Elvaston (T.C.F.); Beeley (N.H.); 15th, Darley Abbey (D.J.H.), Bradley (K.M.H.); 16th, Hoon (C.M.B.), Foston (W.K.M.), Willington (S.W.); 17th, Glossop (C.M.S.); 19th, Radbourne (W.K.M.), Baslow (R.P.); 20th, Holmewood (C.B.C.), Tootley (C.M.S.), Taddington (L.M.W.); 21st, Findern (D.C.H.).

Ring Ouzel. April 9th, Glossop (C.M.S.).

Turtle Dove. May 2nd, Shardlow (S.W.); 4th, Bretby (H.J.W.); 18th, Eastmoor (N.H.); June 3rd, Sudbury (W.K.M.); 25th, Radbourne (W.K.M.).

Common Sandpiper. April 15th, Glossop (C.M.S.); 19th, Linacre (N.H.); 22nd, Doveridge (S.W.), Baslow (R.P.); May 4th, Clifton (one pair had eggs by this date). (K.M.H.); 12th, Ilkeston (F.G.L.).

Corncrake. April 3rd, Ilkeston (F.G.L.).

DEPARTURE OF SPRING MIGRANTS.

Yellow-Wagtail. September 6th, Longshaw (R.P.); 7th, Holmewood (C.B.C.); 14th, Doveridge (S.W.).

Spotted Flycatcher. August 17th, Breadsall (D.C.H.); 28th, Miller's Dale (T.C.F., C.E.B.); September 14th, Baslow (R.P.); 17th, Radbourne (W.K.M.); 18th, Willington (S.W.); 26th Curbar (N.H.).

Chiffchaff. September 7th, Woodnook (N.H.); 8th, Allestree (D.J.H.); 16th, Radbourne (W.K.M.); 19th, Shelton Lock (D.J.H.).

Willow - Warbler. September 5th, Shelton Lock (G.A.W.); 6th, Baslow (R.P.); 7th, Woodnook (N.H.); 8th, Allestree (D.J.H.); 14th, Doveridge (S.W.).

Whitethroat. September 1st, (D.C.H.); Ashgate (N.H.).

Wheatear. September 1st, Alport Height (C.G.); 3rd, Ambergate (S.W.); 5th, Baslow (R.P.); 15th, Stanton-by-Dale (F.G.L.); October 2nd, Eastmoor (N.H.).

Whinchat. September 12th, Ramsley (R.P.); 21st, Longshaw (N.H.).

Redstart. September 5th, Chatsworth (R.P.); 7th, Curbar (N.H.); 17th, Radbourne (W.K.M.).

Swallow. September 22nd, Willington (S.W.); 26th, Stubbing (N.H.); 30th, Littleover and Repton (D.C.H.); October 5th, Allestree (D.J.H.); 18th, Derby (G.A.W.).

House-Martin. October 1st, Baslow (R.P.); 12th, Willington (S.W.); Holmewood (C.B.C.).

Sand-Martin. September 22nd, Willington (D.C.H.).

Swift. August 11th, Cordwell Valley (N.H.); 20th, Baslow (R.P.); 26th, Derby (T.C.F.); September 1st, Radbourne (W.K.M.); 2nd, Shelton Lock (G.A.W.); 6th, Holmewood (C.B.C.); 14th, Littleover (D.C.H.).

Nightjar. August 23rd (R.P.).

Turtle Dove. September 7th, Holmewood (C.B.C.); 8th, Willington (S.W.).

Common Sandpiper. September 6th, Linacre (N.H.); 8th, Lathkill Dale and Chatsworth (R.P.).

Cuckoo. August 17th, Radbourne (W.K.M.); 31st, Findern (S.W.).

DEPARTURE OF WINTER MIGRANTS.

Fieldfare. April 7th, Nutbrook (F.G.L.); 16th, Spondon (D.J.H.); 27th, Abney (H.C.B.B.); May 1st, Littleover (D.C.H.); 7th, Smalley (W.K.M.); 23rd, Ashgate (N.H.).

Redwing. April 2nd, Willington (S.W.); March 6th, Baslow (R.P.); 9th, Radbourne (W.K.M.); 24th, Findern (D.C.H.); Glossop (C.M.S.); 30th, Wirksworth (F.G.L.).

ARRIVAL OF WINTER MIGRANTS.

Fieldfare. October 2nd, Hilton (S.W.); 17th, Radbourne (W.K.M.); 26th, Ashgate (N.H.); November 7th, Holmewood (C.B.C.); In 1945/46 first seen at Glossop on January 27th (C.M.S.).

Redwing. October 5th, Willington (S.W.); 9th, Bradley (K.M.H.); 14th, Holmewood (C.B.C.); 15th, Radbourne (W.K.M.); 16th, Allestree (D.J.H.).

1946.

REDSTART NOTES BY S. WHITAKER, A. W. WARD
AND W. K. MARSHALL made from a hide.

Times: G.M.T.

June 20th. Nest and 6 eggs found. Typical site in thorn tree in Park.

June 23rd. First egg hatched 13-30 hrs, second egg hatched 13-40 hrs. No further observations made today owing to risk of disturbance but all six hatched.

June 29th. 15-23 hrs. Male with bluebottle fly.

15-28 hrs. Female with flies joins male in hole.

Female left first followed by male ten seconds later: neither carried excreta.

15-34 hrs. Female with unidentified flies: stays ten seconds.

15-42 hrs. Female with white moth and (?) centipede. No excreta carried at either of these two feeds.

June 30th. Warm and sunny. In hide 10-15 hrs. No feed until 11-05 hrs. when male brought green caterpillar.

11-07 hrs. female with flies: carries away excreta.

11-23 hrs. male with flies: carries away excreta.

11-24 hrs. female with flies and grubs: did not carry excreta.

Feeding continued at about five minute intervals by both birds until 12-35 hrs. excreta being carried away in bill after nearly every other feed.

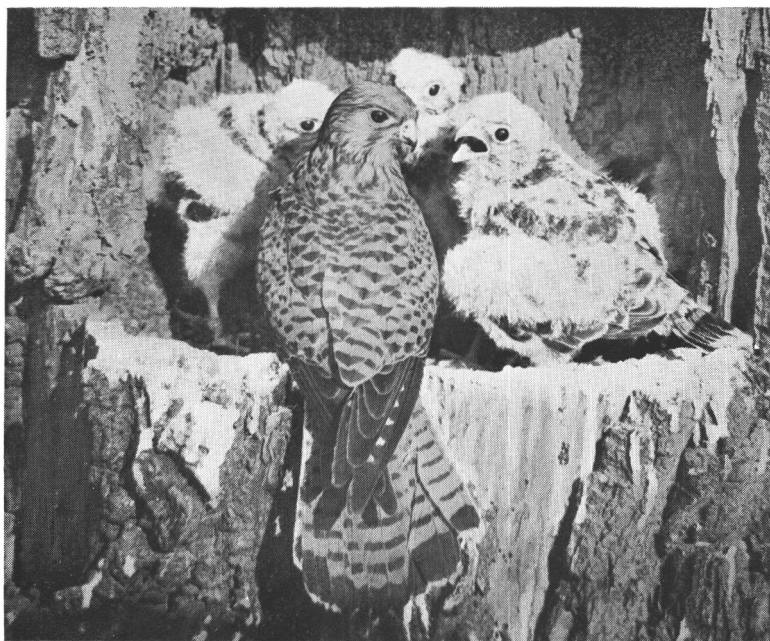
From 12-35 hrs. there was another no feed period until 13-27 hrs. when both returned together and feeding continued at about five minute intervals; this food being obtained from Hawthorns and from the grass under them, until hide was vacated at 14-20 hrs.



MALE REDSTART.



YOUNG KESTRELS.



FEMALE KESTREL.

July 2nd. From 19-35 hrs. until 20-17 hrs. all feeds by female and somewhat more frequent than those previously noted. The male was very nervous. On some occasions when excreta was not carried the female's throat was seen to move as she came out of the hole giving the impression of having eaten it in the hole.

July 7th. It seems that the cock feeds more frequently as fledging proceeds; it may just be that he has become less nervous. He is always much quicker feeding than the female.

[He tends to catch food in the air, the hen on the ground (E.J.M. Buxton).]

At 17-30 hrs. young can be heard moving in the nest.

July 8th. 20-00 hrs. Young still in nest.

July 9th. Young have flown from nest.

NOTES ON THE NESTING OF THE KESTREL, *Falco t.
tinnunculus* MADE FROM A HIDE IN 1946.

By S. Whitaker, A. W. Ward and W. K. Marshall.

The nest was in the same hole in a willow tree in which they bred in 1945. To avoid risk of disturbance the hide was not erected until the first of four eggs had hatched at 20-30 hrs. G.M.T. on June 11th, and all four young left the nest on July 13th.

Feeding. Birds 19, Grub 7, Beetle 2, Worm 3, Rat 1, Vole 16, Mice 9, Shrew 4, Frog 10, Demoiselle Dragonfly 1, Unidentified 2. Total 74 feeds recorded. The birds included greenfinch, starling, moorhen, tree-sparrow, chaffinch, skylark or pipit. Some of the frogs were caught in a brook 300 yards from nest. Once the female landed on the edge of a pond with wings and tail spread. On another occasion when bringing a frog to the nest her head was very wet. The male brought food on 13 occasions, the female 58 and 3 were in the nest on our arrival. Food was carried sometimes in the beak and sometimes in the foot. Birds were brought before 09-52 hours and after 14-05 hours. Grubs before 10-31 and after 15-37; with one exception voles were

brought in the evening as were mice. Shrews in the afternoon and evening. The weather was recorded each day of observation but this did not appear to affect the type of food. There was some evidence that it was more difficult to obtain in bright sunshine and high wind. Only on one occasion was one of the young seen to cast a pellet, an exceptionally quick operation.

Fledging. At 11 days old the young had dirty white down, pearl grey beaks, black eyes with no yellow iris, and yellow legs. At 14 days old they had grown considerably; wing feathers visible under the down. Claws grey-green $\frac{1}{8}$ inch long; can stand up "if the chin is supported." At 18 days they only stood up to pass excreta or to feed: tail feathers coming through about one inch long; wing feathers coming through: breast and head still in full down but slight feathering on the back. 19 days they all stood up to preen. 22 days breast feathers showing. 24 days lost nearly all the down except on their heads. 28 days two had lost nearly all down. 32 days left the nest.

All four were ringed for the Repton School Field Club.

Nest Sanitation. Excreta shot to or over the edge of nest.

NOTES MADE FROM A HIDE ON THE NESTING OF THE JAY
(*Garrulus glandarius rufitergum*) IN 1946.

By S. Whitaker, A. W. Ward and W. K. Marshall.

Nest in thorn 10 feet from ground. All four eggs hatched by May 31st and the young left the nest on or soon after June 19th. There was considerable rain during those 20 days.

Feeding. 17 feeds were recorded. The food was regurgitated from the crop into the beak; usually, but not always, the adult's head was shaken from side to side and the neck stretched while regurgitation was in progress. This brought the food to the throat and the



MALE KESTREL.

Photo. by S. Whitaker and A. W. Ward.

Facing p. 130.



JAY BROODING YOUNG IN THE RAIN.



JAYS AND YOUNG.

Photos. by S. Whitaker and A. W. Ward.

Facing p. 131.

adult then put its beak deep into the young's throat, sometimes peering in before doing so. The tongue was used to push the food into the young. Sometimes the adult's beak was put crosswise inside the young's beak. Usually all four were fed at one visit, each young taking about two seconds to feed. Sometimes each was fed three times on one visit. Usually it was impossible to see what the food was but the following notes were made:—10th day, the only occasion red meat was seen. Also, a green grub or caterpillar, also small white pellets. 20th day: dark brown pellets. Both adults fed, the male sometimes feeding the female on the nest. Sometimes when feeding young the adult would raise its wings to shield the young from rain. No live food was brought to the nest.

Nest Sanitation. The excreta was in a sac up to the day of flying and was taken off the young's tail which was raised for this purpose. It was always eaten at the nest. Once the male was seen to reach under the brooding female to take excreta from two young. Sometimes the adult's crest was raised when taking excreta. On no occasion was prodding of the young observed but once on the 10th day the female was seen to peck mites (?) off the young. On the 10th day and subsequently the female was seen to peck and pull at the bottom of the nest.

Fledging. Naked on hatching the ears of the young are very prominent and were still conspicuous on the 10th day when the blue began to show on the wings and stripes on the heads. 12th day brown feathers on back. By the 20th day the moustache stripe was conspicuous and a little yellow remained round the base of the beak. The young could hear much better than they could see but they could not distinguish the adults' calls from, for instance, our coughing.

On one occasion the brooding female in heavy rain raised her breast feathers in three distinct tiers as an additional shelter.