Ornithological Record for Derbyshire, 1941. By W. K. Marshall.

#### Systematic List.

Carrion-Crow, Corvus c. corone. As usual throughout the winter there was a roost in Radbourne Rough (W.K.M.).

Rook, Corvus f. frugilegus. 2nd January, snow and severe frost. Rooks in numbers roost regularly in the rookery at Parwich Hall. On the night 22nd-23rd January entirely absent. Had returned on 23rd-24th. On 13th April first egg shells from hatched young on ground. During the second and third weeks of August when many rooks and jackdaws were roosting in the rookery, large numbers of pellets were found beneath the trees, light brown in colour, composed of vegetable matter, with occasional beetle elytra, and—in one pellet fur, probably from a mouse. Each pellet also contained a few small "grinding stones" from the crop. After this period no more pellets were found. During this period at another rook roost a mile away near Ballidon, a single pellet was found during a careful search, although at Parwich two to three hundred could have been gathered at one time. The pellets were almost certainly dropped during the hours of darkness, and it was not possible to say whether they came from jackdaws as well as rooks (C.L.C.).

24th August, Rooks settled to roost with no evolutions. The next day was fine ending a long spell of wet (H.L.B.). 27th February first seen carrying twigs to nests, Darley Abbey (S.W.). In the two Radbourne rookeries there were 470 nests, a decrease of 180 compared with the 1940 exceptionally high figure (W.K.M.).

Goldfinch, Carduelis c. britannica. No nesting pairs found near Parwich but a male heard singing on 7th July (C.L.C.); a few seen in the autumn but fewer than usual (W.K.M.).

Siskin, Carduelis spinus. 24th October, one Sandybrook (K.H.).

Bullfinch, *Pyrrhula p. pyrrhula*. A pair frequently seen in the last fortnight of May and evidently nesting, Parwich (C.L.C.).

Hawfinch, Coccothraustes c. coccothraustes. Present, usually in pairs, throughout the winter of 1940-41 in the Ashbourne district (K.H.); nesting pairs very numerous (R.E.); as usual at Radbourne (W.K.M.). Flock of about 10, Ashbourne, 24th Nov. One, Wyaston, 1st Dec. (K.H.).

Mealy-Redpoll, Carduelis f. flammes. Not recorded.

Meadow-Pipit, Anthus pratensis. 4th May nest with four eggs in grass at side of road, Parwich (C.L.C.).

Twite, Carduelis fl. pipilans. Not recorded.

Crossbill, Loxia c. curvirostra. Not recorded.

Reed Bunting, *Emberiza s. schoeniclus*. Uncommon at Parwich, male on stream below village 6th May (C.L.C.); 22nd March, three males, Repton (H.L.B., H.C.).

Corn-Bunting, Emberiza c. calandra. 19th May, Tansley (R.E.); 2nd July, Stonebroom (W.K.M.).

Tree-Sparrow, *Passer m. montanus*. 7th November, 1940, one in flock of mixed finches, 13th April nesting in hole in ivy-clad oak. 6th May nesting in hole in ash tree, Parwich (C.L.C.).

Pied Wagtail, Motacilla a. yarrellii. The roost in Dr. Hollick's garden at Ashbourne was not used this spring by any number of birds, though odd ones and twos were about the bush, early morning and evening, 4th to 13th April (K.H.).

Yellow Wagtail, Motacilla flava rayi. Exceptionally common in nesting season of 1941. Usually some three

pairs, but in 1941 eight separate nesting pairs were located within a mile radius of Parwich village, the birds do not move far away from the nest (C.L.C.).

Grey Wagtail, *Motacilla cinerea cinerea*. 27th April nest and five eggs Ilam (S.W.); 1st July Belper, 17th September, family of five, Belper (H.L.B.).

Tree-Creeper, Certhia familiaris britannica. Nested at Parwich where it is uncommon (C.L.C.); many more than usual, especially at Radbourne (H.C.).

Wren, Common, Troglodites t. troglodites. Practically absent at Parwich in winter 1940-41. One bird only from mid-November to mid-December. On 16th April a pair in the same place. In Dovedale there were plenty in winter and summer. This species does not move about much so it was probably wiped out by hard weather near Parwich (C.L.C.).

Dipper, Cinclus c. gularis. On 22nd September, 1941 five birds in lower Dovedale were in quite continuous song. On 26th September over the same lower half there were again five, of which four sang. Both days sunny but not warm (C.L.C.).

Ring Ouzel, Turdus torquatus torquatus. Not seen on Abney Moor for two years; have not nested there for many years although they used to do so in numbers, probably twenty to thirty pairs, and the young used to descend on the village to feed on Mountain Ash berries (H.C.B.B.); 27th April, three pairs, Three Shires Head, only two pairs last year (S.W.).

Redstart, *Phoenicurus p. phoenicurus*. Commoner than usual near Parwich, perhaps six to ten pairs about the village (C.L.C.); none at Radbourne, which is unusual (W.K.M.).

Blackbird, *Turdus m. merula*. Nested in bend of rainwater pipe just below gutter eight feet about ground on wall of Parwich Red Cross Hospital, no cover, deserted (C.L.C.).

Song-Thrush, *Turdus philomelus clarkei*. 28th March, first egg; subsequently four young reared; a second four eggs in the same nest (not uncommon) destroyed by magpie on 22nd May (C.H.W.).

Starling, Sturnus v. vulgaris. Nested in three inch drain-pipe projecting through stone retaining wall two feet, nine inches above path; young were reared (C.L.C.); 15th July, first flock Holymoorside (H.L.B.); Oct. 6th eating damsons, Belper (H.L.B.).

Mistle-Thrush, Turdus v. viscivorus. 2nd February, mating (S.W.).

Willow-Tit, Parus a. kleinschmidti. 11th Feb. and 23rd Oct., one Atlow Rough (K.H.).

Longtailed-Tit, Ægithalos caudatus roseus. For the first time I have not seen any (S.W.).

Goldcrest, Regulus r. anglorum. 14th April, Radbourne (S.W.).

Hedge-Sparrow, *Prunella modularis occidentalis*. 2nd June, nest on ground, Sudbury Coppice (W.K.M.).

Nuthatch, Sitta europoea affinis. One pair at Calke (H.C.); present in Shirley Wood throughout the winter and spring (K.H.); 14th April, cleaning out nesting hole, Radburne (S.W.); 25th May, the female referred to above by S.W. was found dead under the nesting hole; from 3rd March to 10th November a pair, and later young, were in Sudbury Coppice, where I have not previously found them. There was a second pair at Sudbury and a pair at Windley (W.K.M.).

Redbacked-Shrike, *Lanius c. collurio*. Not seen near Rainster Rocks, which seems a suitable locality (C.L.C.); 19th June, nest and five eggs, Cromford, eggs were taken, nested again within fifty yards and reared five (R.E.).

Spotted-Flycatcher, Muscicapa s. striata. In early September one took several white butterflies; some of the severed wings showed beak marks. These were sent to Professor Hale-Carpenter at Oxford University who

collects records of birds attacking butterflies (C.L.C.); very few seen (S.W.).

Pied-Flycatcher, Muscicapa h. hypoleuca. One at Matlock Bath, 12th August (R.E.).

Greater Spotted-Woodpecker, *Dryobates major anglicus*. 31st January, drinking water in trough in field, Allestree, it did not perch but appeared to lie on its stomach, clawing the edge of the trough (S.W.).

Nightjar, Caprimulgus e. europoeus. 30th June, several Derwent Valley (R.C.).

Shorteared-Owl, Asio f. flammeus. 16th March, Tansley (R.E.).

Longeared-Owl, Asio otus otus. Not recorded.

Black-Grouse, Lyrurus tetrix britannicus. For the last forty years or more there have been a few on Abney Moor, and I have endeavoured to preserve them. This year I have not seen one; last year I saw three cocks and one hen and no young. In 1938 one hen and two old and one young cock; in 1937 seven hens and two cocks (H.C.B.B.); 4th February, a grey hen, Bentley Brook (K.H.).

Red-Grouse, *Lagopus s. scoticus*. 1st February, driven from Derbyshire Moors by snow to garden on outskirts of Sheffield (C.H.W.); 5th February, one Culland (K.H.).

Partridge, *Perdix p. perdix*. One almost pure white (K.H.); 21st January, a covey of 14 stayed on a snow-covered field at Allestree, becoming very tame and feeding on household scraps, they left on 30th January; thaw (S.W.).

Redlegged-Partridge, *Alectoris v. rufa.* 23rd October, three Bradley (K.H.).

Kestrel, Falco t. tinnumculus. A pair always present on slopes of Parwich Hill in Winter 1940-41; on 21st May, a pair on the same part of North Dovedale as last year (C.L.C.); 3rd November; a kestrel was taking mice or voles as turned up by tractor plough, Radbourne (W.K.M.).

Redfooted-Falcon, Falco v. vespertinus. Not recorded. Merlin, Falco columbarius oesalon. Not recorded.

Common Buzzard, Buteo b. buteo. 3rd March, three flying S.W. between Bretby and Burton-on-Trent (C.H.); reported as being seen in the Wirksworth district in the Autumn (W.K.M.).

Sparrow-Hawk, Accipiter n. nusus. See separate notes at end.

Montagu's Harrier, Circus pygargus. Not recorded.

Teal, Anas c. crecca. 4th January, seven drakes, five ducks, 8th October, at least nine, Osmaston; 15th February and 12th Sept., a pair, Bradley (K.H.).

Goldeneye, Bucephala c. clangula. Not recorded.

Tufted-Duck, Nyroca fuligula. One drake for two or three weeks after 16th August, 2nd November four on Barbrook Reservoir (R.C.); 17th March, six pairs, Allestree (S.W.); 23rd March, one, Radbourne (W.K.M.). Shelduck, T. Tadorna. Not recorded.

Pochard, Nyroca f. ferina. 4th January, two drakes, Osmaston; 13th October, two in eclipse, Ednaston (K.H.); 2nd August, two pairs and four young, Bradley (H.L.B.); present on Player's Pond, Ednaston throughout the Autumn, four drakes 28th Nov. (K.H.).

Scaup, Nyroca m. marila. Not recorded.

Great Crested-Grebe, *Podiceps c. cristatus*. 13th March, one, Osmaston; 2nd May, a pair with four young—a very early date, probably a second brood was reared as on 21st August there was one old and one small young bird. Both of these were still there on 13th October (K.H.); 2nd August, pair with two young, Bradley Dam (H.L.B.); 26th April, one nest at Melbourne. Old and young still there on 2nd October (H.C.), 21st October, one adult in winter plumage with one young (K.H.); 17th March, male, Allestree (S.W.); one pair, Sudbury, were not there on 10th (W.K.M.); 20th March, one, Allestree, mate arrived later but did not breed there (R.E.); one young bird still there 15th Nov.

Green-Plover, Vanellus vanellus. 2nd February, pairing (S.W.); 28th returned to Bretby (H.J.W.). 7th April, forty-two in scattered flock north of Parwich, perhaps fewer in 1941 than usual (C.L.C.). 15th May, abnormal clutch, one egg being normal and the other three much rounder and bulging out irregularly to one side and very lightly marked (K.H.).

Golden-Plover, Charadrius apricarius. 26th February, eight, Clifton (K.H.); 15th April, two pairs and several scrapes N. Derbyshire (R.C.); about twenty pairs breed regularly on Abney Moor (H.C., B.B.); 24th February, about one hundred, Allestree. Not previously seen here. The flock gradually diminished until all had left by 1st March (S.W.); 6th April, about fifty on newly ploughed turf, Stenson, not previously seen here (S.W.).

Dunlin, Calidris a. schinzii. 2nd June, several nests with eggs on Kinderscout. First clutches below normal but second clutches made up for it (R.E.).

Little-Stint. Calidris Minuta. Not recorded.

Ringed-Plover, *Charadrius h. hiaticula*. 19th August, Holmewood (C.B.C.).

Green-Sandpiper, *Tringa ochropus*. 3rd August, Barton Blount (W.K.M.); 22nd August, Holmewood (C.B.C.); Hungry Bentley 30th Nov. and 1st Dec. (K.H.).

Greenshank, T. nebularia. 28th June, one Mercaston (W.K.M.).

Redshank, T. t. britannica. 7th February, three flying N. over Ashbourne, thaw (K.H.); 22nd March, a few, Repton (H.L.B., H.C., S.W.); 6th March, Matlock district (R.E.); two pairs to breed, Barton Blount, but one killed on barbed wire across brook (W.K.M.); 10th June, Fairfield (W.S.).

Woodcock, *Scolopax r. rusticola*. Two pairs in April on Abney Moor where they now nest (H.C., B.B.).

Great-Snipe, Capella media. One in a marshy field by the Dove, Ashbourne, 8th Dec. (K.H.).

Curlew, Numerius arquata. 23rd March, one Parwich (K.H.); 25th, return to Repton (H.J.W.); one or two pairs nested on flat land at 550 feet near Ballidon Church (C.L.C.); 22nd April, two curlew scrapes, N. Derbyshire (R.C.); about twelve pairs breed regularly on Abney Moor (H.C.B.B.); 8th November, one flying west, Kirk Langley (W.K.M.).

Gannet, Sula bassana. 8th Dec. two flying S.W. over Parwich at 200-300 ft. (C.L.C.).

Herring-gull, Larus a. argentatus. 5th January, one large immature gull, probably this species, flying over Ashbourne in hard weather (K.H.); 1st May, two, Radbourne; 15th June, two, Barton Blount (W.K.M.); 6th August, one adult, Buxton (W.S.).

Common-gull, Larus c. canus. 7th February, one, Ashbourne, during thaw, 17th February, two, 27th March, one; on 6th February, 31st August, 4th, 5th and 14th September odd gulls seen at Ashbourne which were almost certainly this species; 20th October, one, Clifton (K.H.).

Blackheaded-gull. Larus r. ridbundus. 2nd March, thirteen; 25th July, seven, Belper (K.L.B.); often over Ashbourne; 17th February, thirty-eight flying E. misty and wet (K.H.); 2nd November, about twenty following tractor-plough, Radbourne. I have not previously seen this in this county.

Lesser Blackbacked-gull, Larus fuscus graellsi. 13th April, an adult flying N. over Parwich (C.L.C.); 6th May, one flying east up the Henmore Valley, Ashbourne, 50-100 ft. up (K.H.).

Cormorant, *Phalacrocorax c. carbo*. Not recorded. Redbreasted-Merganser, *Mergus serrator*. Not re-

Heron, Ardea c. cinerea. 24th February, at nests, Calke (H.J.W.); 24th March, twenty-four nests at Calke (H.C.); two or three were often in the tree tops at Shirley Wood

corded.

but I do not think they nested. 21st October, six Shirley Wood (K.H.).

Common-Tern, Sterna h. hirundo. Not recorded.

Great-Northern Diver, *Colymbus immer*. One on the River Derwent, Rowsley for two weeks in January and February (R.E.).

Corncrake, Crex crex. 29th June, one near Hathersage, first for ten years (R.C.); 5th June and subsequently, one on Derbyshire and Yorkshire border (C.H.W.); 14th July, Dovehead, Buxton. Not heard elsewhere (R.E.); 16th July, one Marston Montgomery (K.H.); for the first time I have not heard it (S.W.).

Quail, Coturnix c. coturnix. 22nd June, male heard Barton Blount (W.K.M.).

### ARRIVAL OF SUMMER MIGRANTS.

Tree-Pipit. April 16th, Ambergate (R.E.); 21st, Sudbury (W.K.M.); Osmaston (K.H.); 23rd Holmewood (C.B.C.).

Yellow-Wagtail. April 17th, Duffield (R.E.); 19th Bretby (H.J.W.); Ashbourne (K.H.); 25th, Sutton-on-the-Hill (S.W.); Barrow-on-Trent (H.C.); 29th, Lea (R.E.); May 3rd, Barton Blount (W.K.M.); 4th, Matlock (R.E.); Belper (H.L.B.); 6th Hathersage (H.C.B.B.); 10th, Newton Solney (C.H.); 18th, Sheldon (W.S.); 23rd, Holmewood (C.B.C.).

Spotted-Flycatcher. May 12th, Mackworth (H.C.); 14th Allestree (S.W.); 17th, Ashbourne (K.H.); Barton Blount (W.K.M.); Bretby (C.H.); 21st, Radbourne (W.K.M.).

Chiffchaff. March 28th, Shirley (K.H.); 29th, Ticknall (H.J.W.); April 3rd, Allestree (R.E.); 5th, Radbourne (W.K.M.); 7th Sudbury (W.K.M.); 12th, in numbers, Bretby (H.J.W.); 14th, Radbourne (S.W.); 16th Mackworth (H.C.); 21st, Belper (H.L.B.).

Willow-Warbler. March 28th, Matlock (R.E.); 30th Bretby (H.J.W.); April 2nd, Ashbourne—one, and none seen again until 15th (K.H.); 11th, Markeaton (H.C.); 12th, in numbers, Bretby (H.J.W.); 13th, Allestree (S.W.); 16th, Radbourne (W.K.M.); 17th, Parwich in some numbers (C.L.C.); 20th, Belper (H.L.B.); 21st, Buxton (W.S.); N.E. Derbyshire (C.H.W.); 22nd, Holmewood (C.B.C.).

Wood-Warbler. April 30th, Bretby (H.J.W.); May 1st, Leahurst (R.E.); 9th, Shirley (K.H.).

Grasshopper-Warbler. May 4th, Darley Moor and Ambergate (R.E.); 6th, Sudbury (W.K.M.); 17th, Weston Underwood (W.K.M.).

Reed-Warbler. May 10th, Radbourne (S.W.).

Sedge-Warbler. April 29th, Weston-on-Trent (R.E.); May 3rd, Butterley (R.E.); 6th, Ashbourne (K.H.); roth, Radbourne (S.W.).

Garden-Warbler. April 30th, Bretby (H.J.W.); not heard at Parwich although recorded in former years (C.L.C.); 6th, Sudbury (W.K.M.); 17th, Ashbourne (K.H.); 19th, Repton (H.C.).

Blackcap. April 21st, Sudbury (W.K.M.); 29th Radbourne (2) (W.K.M.); 30th, Bretby (H.J.W.); May 9th, several, Shirley (K.H.); 13th, Matlock (R.E.); 19th, Repton (H.C.); not heard at Parwich although recorded in former years (C.L.C.).

Whitethroat. April 26th, Bretby (H.J.W.); 30th, Kirk Langley (H.C.); May 3rd, Markeaton; 4th, Matlock (R.E.); Clifton (K.H.); 6th, Radbourne (W.K.M.); 18th, Belper (H.L.B.).

Lesser Whitethroat. April 29th, Swarkestone (R.E.); May 5th, Radbourne (W.K.M.); Clifton (K.H.); 26th, Parwich (C.L.C.).

Wheatear. March 16th, Tansley, a pair (R.E.); 26th, Dovedale, several (K.H.); April 7th, Sudbury (W.K.M); 13th, Longshaw (R.C.); 15th, Sheldon (W.S.); 20th, N.E.

Derbyshire (C.H.W.); 27th, six pairs, Earl Sterndale (S.W.).

Whinchat. May 4th, Matlock (R.E.); 7th, Ashbourne (K.H.).

Redstart. April 7th, Sudbury (W.K.M.); 25th, Rowsley (R.C.); 3oth Darley Dale (R.E.); May 1st, Leahurst (R.E.); Thorpe (K.H.); 4th, numerous at Longshaw, 15-18 pairs (R.C.); 10th, three, Holymoorside (H.L.B.).

Nightingale. May 17th, Yeaveley, a pair (K.H.).

Swallow. April 3rd, Allestree (R.E.); 6th, Sudbury (W.K.M.); 9th, Markeaton (H.C.); 12th, Radbourne and Barton Blount (W.K.M.); 13th, Allestree (S.W.); Ashbourne (K.H.); 17th, first nesting pair, Weston Underwood killed by cold (W.K.M.); 19th, Bretby (H.J.W.); 23rd, Holmewood (C.B.C.); 26th, Belper (H.L.B.); May 1st, Bakewell; 7th, Buxton (W.S.); 20th, N.E. Derbyshire (C.H.W.).

Martin. April 11th, Markeaton (H.C.); 21st Holmewood (C.B.C.); 24th, Belper (H.L.B.); May 6th, Sutton-on-the-Hill (R.E.); 10th, Barton Blount (W.K.M.); 11th, Markeaton (S.W.); 19th, Buxton (W.S.); Ash-bourne (K.H.).

Sand-Martin. April 11th, Ashbourne (K.H.); 13th, Allestree (S.W.); 15th, Sudbury (W.K.M.); 18th, Newton Solney (C.H.); 23rd, Holmewood (C.B.C.); 29th, Draycott (R.E.); May 4th, Matlock (R.E.); 6th, Monsal Dale (W.S.).

Swift. April 30th, Allestree (S.W.); May 2nd, Bretby (H.J.W.); 4th, Ashbourne, several (K.H.); 6th, Belper (H.L.B.); Monsal Dale (W.S.); 7th Buxton (W.S.); Ravensdale Park (W.K.M.); 8th, Holmewood (C.B.C.); Cromford (R.E.); 10th, several passing through Barton Blount (W.K.M.); 12th, Derby (H.C.); 15th N.E. Derbyshire (C.H.W.).

Cuckoo. April 18th, Sutton-on-the-Hill (S.W.); 21st, N.E. Derbyshire (C.H.W.); 29th, Clifton (J.R.H.);

Bretby (H. J. W.); Shardlow (R.E.); May 3rd, Barton Blount (W.K.M.); 4th, Matlock (R.E.); Sheldon (W.S.); 9th, Ashbourne (K.H.); Belper (H.L.B.); 14th Calke (H.C.).

Turtle-Dove. April 21st, Bretby, exceptionally early (H.J.W.); May 9th, Radbourne (W.K.M.); 12th, Holmewood (C.B.C.); 18th, Belper (H.L.B.); June 9th,

Osmaston (K.H.); 11th, Tansley (R.E.).

Common Sandpiper. April 17th, River Trent (H.J.W.); 22nd, Tissington (C.L.C.); 24th, a pair Rowsley (R.E.); May 3rd, River Dove, near Ashbourne (K.H.); Barton Blount (W.K.M.); 6th, Monsal Dale (W.S.); 11th, Doveridge (S.W.).

Ring Ouzel. February 23rd, a pair, Holymoorside

(H.L.B.).

Nightjar. May 20th, Bretby (H.J.W.).

## LATEST RECORDS OF SUMMER MIGRANTS.

Martin. September 26th, Holmewood (C.B.C.); 27th, Belper (H.L.B.); 30th, Buxton (W.S.); October 3rd, local birds, Ashbourne (K.H.); 11th, Allestree (C.H., S.W.); 18th, Radbourne (W.K.M.); 19th, Ashbourne (K.H.); 20th, Derby (H.C.).

Sand-Martin. August 26th, Ashbourne (K.H.); September 26th, Allestree (H.C.); 28th, Mayfield (S.W.).

Swift. August 15th, Buxton (W.S.); 19th (C.H.); 20th, many Derby (W.K.M.); 21st, large flock, probably over 200, Heath (C.B.C.); Hucklow, Bamford, Duffield (W.K.M.); 26th, Ashbourne (K.H.); Holmewood (C.B.C); 29th, Derby (H.C.); September 3rd, Allestree (S.W.); 9th, Belper (H.L.B.).

Swallow. September 26th, Holmewood (C.B.C.); October 1st, Ashbourne (K.H.); 3rd, Derby (H.C.); 8th, Buxton (W.S.); 11th (C.H.); 15th, Belper (H.L.B.); 17th,

Allestree (S.W.).

Cuckoo. July 21st (H.C.).

Chiffchaff. August 26th, Markeaton (H.C.); September 21st, Tissington (C.L.C.).

Willow-Warbler. August 30th, Markeaton (H.C.); September 3rd, Ashbourne (K.H.); 4th, Allestree (S.W.).

Yellow-Wagtail. October 1st, Ashbourne (K.H.).

Turtle-Dove. September 5th, Belper (H.L.B.); 21st, Radbourne (W.K.M.).

Common-Whitethroat. August 30th, Kirk Langley (H.C.); September 8th, Ashbourne (K.H.).

Lesser-Whitethroat. September 2nd, Ashbourne (K.H.). Spotted-Flycatcher. August 26th, Mackworth (H.C.); September 24th, Ashbourne (K.H.).

Wheatear. September 4th, Bretby (H.J.W.); 23rd and 24th, Radbourne (W.K.M.; October 12th, Derby (S.W.).

Redstart. September 13th, Ashbourne (K.H.).

Arrivals and Departures of Winter Migrants. All dates are in 1941, unless otherwise stated. Siskin. October 24th, Sandybrook (K.H.).

Fieldfare. Many flocks passed over Ashbourne, going mainly S.E. and S.W. with Redwings, during the last few days of 1940, immediately prior to the hard weather (K.H.); April 5th, Ashbourne (K.H.); 17th, Stenson (S.W.); 9th Radbourne (W.K.M.); September 26th, Elvaston (W.K.M.); 27th, Sudbury (W.K.M.); November 7th, 1940, 200-300 Parwich; did not stay long (C.L.C.); October 6th, Wirksworth, about fifty; 12th, Tansley (R.E.); 19th, Belper (H.L.B.); 23rd, Atlow (K.H.); 25th, large flock, Holmewood (C.B.C.); November 2nd, forty migrating S. Longshaw (R.C.).

Redwing. March 19th, Ashbourne (K.H.); 24th, Allestree (S.W.); September 26th, Radbourne (W.K.M.); October 3rd, Holmewood (C.B.C.); November 23rd-28th, 1940, 20-30, Parwich. These left, but 300 present on December 26th, 1940 (C.L.C.); October 11th, 12-20

Atlow (K.H.); 12th, Tansley (R.E.); 18th, Belper (H.L.B.); November 2nd, Longshaw (R.C.).

Brambling. October 23rd, Atlow Rough (K.H.).

### Song-Period Notes.

Radbourne. February 1st, Great Tit; 8th, Chaffinch, Blue-tit (W.K.M.); 9th, Chaffinch, Nuthatch (S.W.); 10th, Green-Woodpecker; 13th, Hedge-Sparrow, Skylark; 14th, Thrush; 22nd, Tree-Creeper; 25th, Nuthatch; March 1st, Wood Pigeon; 3rd, Blackbird (flying); 19th, Lesser Spotted-Woodpecker (W.K.M.).

Lathkill Dale. March 24th, Goldcrest (W.K.M.). Sudbury. February 17th, Wren (W.K.M.).

Newton Solney. January 11th, Thrush, Mistle Thrush, Skylark (H.J.W.).

Bretby. February 17th, Chaffinch, Mistle Thrush; March 1st, Wood Pigeon, Blackbird; 3rd, Yellowhammer; 7th, Greenfinch; 10th, Great Tit; 17th, Nuthatch; 30th, Lesser and Greater Spotted-Woodpeckers; April 5th, Green-Woodpecker; 17th, Linnet (H.J.W.).

Milton. March 22nd, Reed-Bunting (H.J.W.).

Belper. January 24th, Blackbird; October 6th, Thrush, subdued song (H.L.B.).

Holmewood. January 16th, Great Tit; February 9th, Thrush (C.B.C.).

Allestree. February 1st, Great Tit; 3rd, Blue Tit; 6th, Robin; 7th, Hedge Sparrow; 9th, Blackbird; 24th, Green Plover (S.W.).

Ashbourne. December 25th, 1940, Hedge-Sparrow; January 10th, Great Tit; 30th, Blue Tit; February 8th, Chaffinch; 10th, Mistle Thrush; 11th, Skylark; 15th, Blackbird—one—not again until March 3rd; March 1st, Wren; 3rd, Greenfinch; 4th, Green Plover (K.H.).

Notes on Increases or Decreases in Numbers.

Swallow. Continued decrease.

Sand-Martin. Very few.

Red-start. Very numerous. (R.E.).

Barbrook Reservoir in 1940 from Mid-August to the end of September had a large area of sand and mud exposed which attracted passing waders. This year the reservoir was generally full so that there were no waders. Generally the nesting season was good, in spite of the cold spring. The species which had suffered heavily from the frosts of 1940 mostly showed that they were in process of recovery, but I heard no Goldcrests. (R.C.).

Observations made at a Sparrow-Hawk's Nest. By S.W.; A.W.W.; H.C.; and W.K.M.

All times given are Greenwich Mean Time.

The Eggs, Nest, Incubation period and hatching.

Nest found on May 10th with two eggs. One egg was laid on the 11th, one on the 12th and one on the 13th. The nest was 12 feet 6 inches from the ground in a Scotch Fir, in a wood of Scotch Fir of four and a half acres planted sixteen years ago.

1st day. The female commenced incubating on May

14th.

32nd day. The sitting female took no notice of Miles Magister training planes flying low over the wood. Respirations 44 per minute increasing to 60 on approach of relief to hide. Four eggs chipping and chicks inside could be heard.

33rd day. Female left nest at 12-30 p.m. First egg hatched at 12-35 p.m. when female was away from nest. At 12-40 she returned, stood for a minute on the edge of the nest with wings outstretched gazing at the chick. She then walked round the nest and ate the eggshell. She moved the eggs out of the way of the chick. After ten

minutes she settled down to brood with the wind behind her ruffling her feathers. At four hours old the chick's chirping could be heard at a distance of five feet. At 4-44 p.m. male flew across the wood calling. The female moved her head round watching him, made as if to go to him but settled down. At 4-45 p.m. this occurred again. First feed to the only chick 4 hours 40 minutes after hatching, the male having called the female off the nest to give her a plucked unidentified bird. The female only fed very small pieces of flesh to the chick, eating the rest herself. The chick, covered with white down, was dry in 45 minutes. The day was warm but the female covered him as much as possible all the time he was drying. At 5-33 p.m. a second egg hatched, the chick struggling for five minutes. A third egg hatched at 5-38 p.m. The female tried to brood but could not get comfortable until she had eaten all the shells. The female's respirations before this hatching were 44 per minute.

# The Rearing of the Young.

1st day (16th June). A fourth egg had hatched between leaving the hide at 5-50 p.m. yesterday and entering it at 4-25 p.m. to-day. The fifth egg was unfertile.

Male dropped food on nest staying five seconds. He was carrying a fir twig in his beak. Two minutes later the female returned to tear up the food and feed the four young. Male came to the nest a second time with a twig and remained six seconds. The female ate something picked from the bottom of the nest on several occasions on this day. This may have been pieces of food or excreta. At no time, however, during the whole nesting period was either adult definitely seen to eat excreta.

4th day. Young still have the egg tooth. One of the young—the largest—shook its wings, wriggled backwards to the edge of the nest, elevated its posterior and ejected excreta over the edge of the nest with considerable force.

Young are disturbed by blue-bottle flies. A Blue Tit "scolds" for 45 seconds in a neighbouring tree. The Sparrow Hawk takes little notice of this, nor of bombs exploding in the distance. Talking in the hide did not affect her nor did cigarette smoke through the peepholes. A Blackbird's alarm made her look around. At times she sits back on the edge of the nest with her legs about four inches apart. At 11-37 a.m. the male dropped a twig in the nest and flew off like a flash. At II-38 the female brought a small plucked bird in her left foot, mewing softly. Feeding pieces the size of a pea took 14 minutes. She offered each a larger piece which they refused so she ate it herself. If one of the young had any difficulty in eating its piece she either pushed it down gently or ate it herself. After feeding the young she cleaned their beaks, using her tongue slightly. She then cleaned her left foot. At 1-15 p.m. the young are gasping in the heat and the female straddled the nest with wings drooping to shelter them from the sun. All this hot day the young were very silent. The female tugged at the bottom of the nest as though to let air through. At 4-1 p.m. the male dropped another twig on the nest.

5th day. First feed of the day at 4-22 a.m., dawn having broken at 3-30, the sun breaking through at 4-45. Feeding the young took eleven minutes; only wings and legs eaten by female. All food brought to the nest headless. During the feed a male Blue Tit came to the nesting tree and "scolded" several times during a minute, the Sparrow Hawk apparently taking no notice. Female's claws are clenched tight when about to cover the young. Young ejected excreta over edge of nest after working to the centre of the nest and elevating itself to do so.

6th day. Young have grown quite a bit since yesterday. Entered hide at 1-15 p.m., the female flying off. At 1-29 p.m. male brought a Meadow Pipit in foot and twig in

beak, both being placed in nest. He stayed 15 seconds. Female returned at 1-30 p.m. calling twice after commencing to feed young which were not hungry so she ate most herself. She stood over young with dropped wings. panting herself in the heat and remained in that position until 3-0 p.m. During that period the male called from 2-25 to 2-50 frequently, coming to the nest at 2-50 p.m. He dropped food on the nest, flew off at once and returned at 2-55 with a twig which he placed in the nest. They exchanged calls and he flew off returning at 2-57 but left at once. At 3-0 p.m. the female flew off with the fooda bird. At 3-10 p.m. she returned having apparently eaten it herself. At 5-10 p.m. the male kept calling until she flew off the nest. At 5-22 and 5-23 the male brought a twig to the nest but no food. The female returned with food at 5-25 p.m. Feeding the young took eight minutes. 7th day. 6 a.m. Young sleeping, very hot weather, barometer falling. 6-27 a.m. Female came to nest without food, broods young, "yawning" as she does so. 6-47 a.m. male calls "Kestrel" call from west side; 6-51 he calls from S.E. side and farther away. Female takes no notice. She left on relief at hide at 0-15 a.m.. returning at 9-50. Male called her off at 10-35. returned at 10-40 with food, the feeding taking five minutes. This was the first time she was seen to feed legs and feet to the young, eating the intestines herself. The Blue Tit again comes to nesting tree and "scolds" and again the Sparrow Hawk takes no notice. There was no further feed until 3-5 p.m., the young being then very hungry and clicking their beaks. This feed took five minutes. The next feeds were at 4-5 and 5-35 p.m. The male only came to the nest once between 6-o a.m. and 6-0 p.m. when he dropped a twig across the young at 5-30 p.m.

9th day. Very hot. 5-30 p.m. male dropped a twig

on nest and flew off at once. Female arrived immediately afterwards with young Song Thrush.

Toth day. Young have grown a lot in the last two days. When the female was away each of the young carried out complete preening of itself. Their pin feathers are beginning to show through the down. Two feeds took four minutes and three minutes. The pieces fed to young are much larger. Excreta beginning to collect around the nest, on the tree and on the ground. The final leg was passed to each bird in turn until the largest managed to swallow it.

IIth day. Young can eject excreta a distance of a foot. Again one of them ate a leg and foot. At one feed one got nothing.

13th day. Weather dull, cloudy and very close. Blow flies hovering round nest. On one visit female stood on one leg on edge of nest for 30 minutes until disturbed by people intruding in the wood. One young ate both legs and lower half of body of a half-plucked Willow Warbler in one gulp. This Willow Warbler was brought with the head on, the female eating this herself. All feeds previously observed have been headless and fully plucked. Feed took two minutes. Another feed—a larger bird—took 13 minutes.

14th day. At 4-30 a.m. the young were asleep and the female not at the nest. They took no notice of the call of one of the parents. One of the young appears to eat some of its down. They all watch Rooks and Jackdaws flying over the wood. At 11-18 the female drives off a Carrion Crow near the nest; at 11-50 the male arrived for 10 seconds with neither food nor a twig. The heads of the young are as large as a Sparrow Hawk's egg. The largest bird is about six inches long, the other three are smaller and equal in size. Claws black, and one quarter inch long, legs pinkish-yellow, down creamy-white. No feathers on top of the body but under the wings the feathers are quite

noticeable. Top of beak black, the base a yellowish-green shading off. Eyes black with no yellow ring. At 3-7 p.m. they notice a parent's call. A bird is brought with its head on which is eaten by one of the young. The female eats none of this kill, all being fed to the young. Again the female drives off a Carrion Crow.

17th day. Young's tail feathers now an inch long and are barred light brown and white. The down on the head is now in tufts. Wing feathers protrude half an inch beyond down. The yellow begins to show in the eyes and there is a grey patch round them. The female was away from the nest from 5-55 p.m. till 7-45 p.m. No pellets have yet been found but one of the young appears to try to eject a pellet.

20th day. Amongst the remains at the killing post are Blackbird, Starling and Coal Tit. At 1-0 p.m. young standing on nest and for the first time a bird's carcase is left lying in the nest. Tail and wing feathers now two inches long; down disappearing. At 1-17 p.m. one young tried but failed to feed off the carcase. A Willow Warbler sings in the next tree while the female is on the nest and there are young Blackbirds in a nest nearby. At 2-0 p.m. the male brought a kill to the nest and flew off at once. There are now two carcases in the nest and two young try but fail to feed off them. At 4-25 p.m. the female arrives with a third kill, feeds the oldest carcase to the young then the next oldest and then the last brought kill. At 4-40 p.m. she flew away with one wing bone and feathers.

The young wipe their beaks on the outer twigs of the nest. They can now eject excreta a distance of five to six feet and spend much time standing up preening and flapping their wings. From the warnings of Blackbirds and Tits, it seems that the female stays fairly near the nest and awaits the male. She cleans her feet and leaves

immediately after feeding the young. Willow Warbler mobs her while she is feeding the young.

21st day. 3-35 a.m. young sleeping and female not on nest. No food brought between 3-35 and 4-26 a.m. when the female dropped a kill in front of the smallest young and flew off at once. This kill was a very small bird with black legs and all the young fed off it without fighting. Between 3-35 and 4-26 she came once only to the nest and without food. At the plucking post is a male Blackbird's lower mandible, legs and feet, and a Song Thrush's feathers. When one of the young nearly fell off the nest, the others called as if to attract the parents' attention. At 10-45 a.m. the male dropped a young Tit, not plucked and with the head, on the nest and flew off at once. The largest young had eaten half of this when the female brought a large kill at 10-58. The young were sitting on the remains of the Tit which she did not notice but proceeded to feed the new kill to them. At II-3 she flew to a large Fir on the edge of the wood, stayed there until 11-30 when she flew off, returning to the nest at 11-32 with a kill. After eating this the young stood up and she noticed the Tit remains. These she fed to the young, one of which ate the head and beak. She flew off at II-38 and the young slept. At 12-10 the male called and he came to the nest at 12-15 dropping a kill on the nest and flying off at once. The young went on sleeping. Neither parent came to the nest until 2-17 p.m. when the male arrived. The young were sleeping and he ploughed through them, dropped the kill and flew off at once. He had called before flying in to the nest. The young took no notice of the kill, so there are now two kills in the nest, both brought by the male. At 3-25 the female arrived without kill, fed both the kills in the nest to the young and left at 3-27. She flew past the nest calling at 5-45. Neither parent came to the nest between 3-27 and 6-7 when the female came without kill and left at 6-10 p.m. Very hot sun all day.

22nd day. When the nest was visited at 5-0 p.m. there was a kill in it. At 5-5 the female flew over the wood calling and at 5-25 p.m. she came to the nest without a She fed young with the kill already in the nest and remained shielding the young from the sun until 5-40 when she flew into another tree. At 5-47 the male dropped a kill on the nest without even closing his wings. At 6-10 the female drove off a Carrion Crow making it call loudly and then continued on guard. The smallest of the young has the most advanced feathering and has been preening and wing-flapping all the evening. All now slept until 7-15 when the sun was off them. They then all preened and wing-flapped. At 7-20 one of young fed on the kill left by the male at 5-47 p.m., and continued to do so until the female arrived at 7-30 p.m. brought an adult, headless and partly plucked Partridge, the largest kill observed so far. It took her 15 minutes to feed this, including the legs, to the young. At 7-45 p.m. she flew off carrying the only remains—the wing bones-in her beak. The former carcase still remained in the nest. The young then hopped about the nest wingflapping until 8 p.m. when they settled down.

24th day. When the nest was visited at 2-45 p.m. one young was feeding on a small bird. Neither parent came to the nest until 4-46 p.m. when the male brought a small bird, headless, plucked and without legs. He left immediately. Two of the young ate this kill in 15 minutes. There was no quarrelling. Young eject excreta a distance of five to six feet. Flies disturb the young, two of which show more brown in their breast feathers than the others.

27th day. On approaching the nest at I p.m. one young male had flown to another tree. The other young male was perched on a branch of the nesting tree. On reaching this tree this young male flew down into undergrowth. The observer put it back in the nest this causing one of the females to fly off. This was replaced and the three young

then stayed in the nest, in which there was a kill. Down on wings, head and lower breast not fully disappeared. Colour of young now greyish brown on back, breast feathers chestnut tipped with richer brown, bills yellow with black tip, legs yellow. From I to 4-30 p.m. (times of arrival at and leaving the hide) neither parent came to the nest. There was a bad thunderstorm—the first rain experienced by the young.

30th day. At noon all four young in the nest. At 12-10 p.m. the female brought a large kill which she fed to all the young, leaving with the remains at 12-30. Much preening and wing-flapping during the afternoon. At 2-45 p.m. the male dropped a kill on the nest, flying off at once. The smaller of the two young males ate the whole of this kill. At 2-50 the other young male flew to the top of a tree twenty yards away. He perched well and called on alighting. Call not unlike that of the adult female. which flew over the tree calling. At 3-0 p.m. a terrific thunderstorm broke with torrential rain. The young male in the tree flew off out of sight and the three in the nest stood up, shook themselves and stood with open beaks catching raindrops. All traces of down in the nest and much of the excreta marks were washed away. During the storm no parent came near the nest.

31st day. When visited at 4-0 p.m. one young was perched on a branch below the nest. The observer left and returned at 4-30 p.m. when three young were in the nesting tree, the female being in the next tree. Leaving and returning at 5-0 p.m. two young were seen in the nesting tree, both of them flying away, and one of the adults flew off the nest which contained two old and one fresh kill and it seemed that the adult was feeding on the latter. At 5-50 p.m. one of the young males returned to the nest, calling. It fed on one of the kills. Very little down is left on it. At 6-16 p.m. it flew off, the flight being strong.

During the Autumn two adults but no young were seen in the wood.

## Summary.

The hide was five feet from the nest. From 15th June (the date of the first hatching) to 16th July (the date the young could fly well) the observations covered 951 hours on 21 days. Of these 81 hours were before and 87 hours after noon. Of 54 feeds watched, II were kills brought by the male to the nest. His visits to the nest totalled 18, on three of which he carried food and a twig, eight food only. six a twig only, and once nothing. On only four of the 18 visits was the female at the nest and on no occasion was the male seen actually to feed the young. There is little doubt that the male did all the killing. Usually it was impossible to identify the birds killed but the following were definitely identified, mostly from remains at a plucking post:-Meadow Pipit, Song Thrush, Willow Warbler, Blackbird, Starling, Coal Tit, Partridge. Before feeding the young commenced many Wood Pigeon in the wood were killed. Of the 54 feeds watched, eight were before noon (G.M.T.), 40 after noon, and six were kills already in the nest on arrival at the hide. The high proportion of feeds recorded after noon is doubtless due to the high proportion of observation hours after noon. Nevertheless, on 20th June the observer between 3-30 and 5-45 a.m. saw only one feed at 4-25 a.m. Again, on 29th June the observer between 4-30 and 5-55 a.m. saw only one feed at 5-48 a.m. whereas, on the same day, observations from 9-15 a.m. to 6-0 p.m. showed two feeds before noon and four after noon. On 22nd June there was no feed between 6 and 7 a.m. and from 9-15 a.m. to 6-0 p.m. the feeds were at 10-40 a.m. and 3-5, 4-5, 5-35 p.m. On 26th June between 5-25 and 6-40 p.m. there were three feeds. On 6th July between 3-35 and 4-35 a.m. there was one feed at 4-26 a.m.; and on the same day from 9 a.m. to 6-15

p.m. the times were:—9-45, 10-45, 10-58, 11-32 a.m. and 12-15, 2-17 p.m. From the first hatching till the time all the young could fly well was 32 days, so that it seems as if some 50 birds were killed to rear one Sparrow Hawk. The last three eggs, at any rate, were laid on consecutive days; the Handbook gives a 48 hours interval as normal. All the eggs were laid before brooding commenced, which the Handbook calls exceptional. From the commencement of brooding to the first hatching was 33 days. Only a few pellets were found. Except for thunder and heavy rain at the end of the rearing period, the weather was very hot and sunny throughout.

In the above notes the following abbreviations are used: H. L. Barnfather (H.L.B.), H. C. B. Bowles (H.C.B.B.), C. B. Chambers (C.B.C.), R. Chislett (R.C.), H. Clayton (H.C.), C. L. Collenette (C.L.C.), R. Eglinton (R.E.), C. Hanson (C.H.), Miss K. Hollick (K.H.), J. R. Hollick (J.R.H.), W. K. Marshall (W.K.M.), Dr. W. Shipton (W.S.), J. H. Wain (H.J.W.), A. W. Ward (A.W.W.), C. H. Wells (C.H.W.), S. Whitaker (S.W.).