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**Lark Rise Farm, Barton, Cambs (Plot 1571)
The Countryside Restoration Trust
Report on Breeding Birds 2001**

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1. INTRODUCTION

Year 2001 saw a third, excellent census of Lark Rise Farm, Barton, Cambridgeshire completed. The survey uses the BTO's Common Birds Census (CBC) mapping method of assessing bird populations by delimiting clusters of territorial activity. This modest sized (53.2 ha), primarily arable farm, acquired by the Countryside Restoration Trust (CRT) in 1998, was managed in the current year chiefly for winter wheat and undersown spring barley. Other fields were planted with spring beans and grass cut for hay. Set-aside covered just 5.5 ha, one-half that of the previous year (Appendix I, Habitat Sheet). Winter 2000/2001 saw further habitat enhancement for wildlife on the farm, with the planting of a small Millennium Wood (1 ha), composed mostly of ash, oak and shrub species, in the north-east corner. This complements previous sympathetic management (Carter and Glue 2000, Carter and Glue 2001).

2. METHODS

A full census was carried out following the guideline procedure established for the BTO's CBC method (see Marchant *et. al.* 1990). Twelve complete visits were made from early April through to the end of June, including a useful evening visit to detect potential crepuscular species (Visit I). The field effort expended spanned over 28 hours and was broadly comparable with the previous two years (9, 11 visits covering some 19, 27 hours in 1999 and 2000 respectively). The data are considered valid in assessing population sizes, densities, and changes between seasons, and with UK bird populations at large. To ensure ongoing continuity, the fieldworkers should continue to complete 10-12 visits (including two in the evening separated by 10 or more days), from early April through to early July – ideally in fair weather.

3. RESULTS

Overall, 59 species were observed on or flying low over the plot and considered an integral part of the bird community (equal in total to 2000, just 50 species in 1999). Of these, 41 species satisfied the CBC criteria for an acceptance of an established territory (see Appendix II, CBC Master Sheet) compared with 37 in 2000. This shows Lark Rise Farm, Barton, to be a relatively bird-rich, modest-sized holding by comparative standards for eastern England, with some locally significant densities for key bird species (see below). Non-territory holding, yet interesting species, included: Fieldfare, a lingering winter visitor; hunting Peregrine and Hobby; Swift, Swallow and Sand Martin hawking for insects; and transient Mandarin, Quail, Wheatear and Whinchat.

3.1 Waterbirds

The best year yet for wildfowl overall: no doubt, in part, a legacy of record-breaking rains in winter 2000/2001 and the subsequent spring, leaving high water tables. Mute Swan and Moorhen activity along the southern boundary meadow and ditch constituted a single territory each: with three of the four Mallard territories (single only in Year 2000) also located there. Grey Heron and Mandarin (new for the site) were casual visitors only. No Cormorant or Canada Geese, both species that have increased nationally, were noted this year although they had been present in earlier years.

3.2 Diurnal Birds of Prey

Kestrel and Sparrowhawk hunted widely across the farm's fields, meadowland, beetle bank and network of hedges, meriting acceptance of a single territory for each. The first confirmed territory for Sparrowhawk reflects the general increases in numbers as a consequence of the withdrawal of organochlorine pesticides used as seed-dressings in the agricultural environment, impairing breeding success in the 1950s and 1960s. A juvenile Peregrine (new for the site) and Hobby made casual visits only.

3.3 Gamebirds

This year was the best for gamebirds. Red-legged Partridge, Pheasant and Grey Partridge were represented by eight, seven and four territories respectively, in each case a substantial improvement over their status in 2000, and the foundation year 1999. Red-legged Partridges were active across the entire farm field network. Pheasant territories were focussed around the fringing hedgerows, field margins and wildlife strips, notably those flanking spring-sown cereals and beans. One territory was centred on the newly planted Millennium Wood. Grey Partridge ranged widely over the farm. Surprisingly the beetle bank and the two undersown spring barley fields were not particularly attractive to them. Quail (new for the site) sang briefly in late May in the set-aside field, among forerunners of a modest-sized influx to the UK from the Continent in Summer 2001.

3.4 Doves

Woodpigeon fed in large numbers throughout the spring and summer. A paucity of vigorous song, clumping of activity and evidence of pairing, prevented a confident assessment of population size by the conventional CBC analytical method. At best, an estimate of 15 territories, based largely on limited song records, clusters of activity from late spring (as deployed in previous years), suggested little change in status (hitherto 15 and 13 territories respectively – Table 1). Many birds sought temporary refuge in hedges to the north, east and south-west, between feeding forays, primarily into the adjacent spring beans, winter wheat and spring barley. Little activity was noted in the centre of the plot. Stock Dove registered three territories, maintaining a welcome year-on-year increase thus far (Table 1). Birds ranged extensively over the farm with most observations being of birds in flight. A small flock of Feral Pigeon was noted on one occasion, Collared Dove, with two territories was strongly associated with domestic housing in the north-west corner, Turtle Dove, once again, were sadly absent.

3.5 Owls to Wagtails

The evening visit failed to detect any owls. Cuckoo was confined to a single sighting, off CRT land, in mid-June, reduced from a solid territory in year 2000, reflecting ongoing countrywide concern for its status (Glue 2001a). There was just one sighting of a Green Woodpecker, in the south-west corner. Once again, Lark Rise Farm lived up to its name, with Skylark detected in considerable numbers. Strong opposed song activity, and clumping of records, gave 26 territories: a small increase from 2000 (25 territories). Twenty-two of these were wholly or partly based on CRT land. This equates to 0.41 territories/ha. This is an impressive density, both in regional and nationwide terms. Much Skylark activity was associated with field centres, notably of cereals and set-aside.

Swift (in south-west corner), Swallow and Sand Martin trawled intermittently across the farm for aerial insects, but none provided evidence of nest site occupation.

Meadow Pipit (four territories), encouragingly, maintained its status for this vulnerable species on a lowland arable farm in eastern England (as in year 2000 – Table 1). Three territories included the small set-aside field within their boundaries. Sadly, Yellow Wagtail (single territory) was reduced to its 1999 status, down from three territories the previous season. This reflects worries expressed by other fieldworkers for this flagship farmland bird (Glue 2001a). Most activity was centered on fields of set-aside and winter wheat. Pied Wagtail was absent, for the first time, possibly a consequence of weather-related losses during winter 2000/2001.

3.6 Thrushes and Allied Species

Wren (9 territories), encouragingly, was broadly comparable in status with previous seasons (10 and 8 territories respectively). Cold snaps over the preceding winter had no detectable impact on survivorship. Robin (eight territories) and Dunnock (three territories), showed marginal ups and downs on the previous year (seven and five territories respectively). This trio of insect-gleaning species has benefited overall from the general trend towards a warmer and wetter climate in recent years. Song, breeding and feeding activity for this trio was largely confined to the peripheral, thicker

hedges, fragments of scrub, and wildlife strips. Interestingly, no Robin or Dunnock territories were located along the southern fringe where Wren territories were located.

Blackbird (ten territories), exceeded the status achieved in the two earlier years – eight and seven territories, respectively (Table 1). This species though, like the other resident trio considered above, showed limited signs of penetrating the relatively recently planted internal network of hedges. Instead, it preferred to exploit the mature peripheral hedges, field margins and strips managed for wildlife. Song Thrush, merited acceptance of two territories, a welcome upturn in fortunes on the farm for this UK Red Alert species. Clusters of activity were centred on the eastern hedge and spinney, and cover afforded by domestic housing in the north-west corner. Mistle Thrush was a ‘first-time’ casual visitor, with two registrations. Clearly, the strength shown by thrushes breeding overall demonstrated that worries over severe winter weather losses (Carter and Glue 2001) were largely unfounded. Winter 2000/2001, though punctuated by four severe cold weather snaps, was of short duration, with welcome milder relieving interludes (Glue 2001b).

3.7 Warblers and Tits

The cool, late spring, followed by a warm, though damp sunless, Summer 2001, with successive late mini heatwaves, will have influenced, in part, the mixed fortunes shown by warblers on Lark Rise Farm. Highlight was the solid Grasshopper Warbler territory, with strong song coming from the internal hedge dissecting fields of winter wheat and set-aside. Inexplicably, Sedge Warbler was restricted to just a single territory, centred on the wildlife strip between the winter wheat and set-aside, a marked decrease on previous years (three and four territories respectively, Table 1). Lesser Whitethroat (two territories), sang strongly, and ranged widely, chiefly over the more mature elements of fringing hedges, tree standards, and scrub – as in previous years. Whitethroat, the commonest warbler with 14 territories, was again present in impressive strength, showing a marginal increase on earlier years (dozen territories in each). Linear clusters of activity were clustered along the peripheral hedges, some of the internal recently planted hedges, thickets and scrubby corners. Blackcap (five territories), favoured the more mature elements of hedge and pockets of scrub around the farm margins, maintaining an encouraging ongoing upturn in strength (three and four territories in previous years – Table 1). Fragments of scrub in the south-east corner, and along the southern margins played home to a roving vocal pair of Willow Warbler (as in 2000), and a late visiting transient Garden Warbler.

Blue Tit, Great Tit and Long-tailed Tit, with four, two and single territories respectively, were present in similar strength to previous years. Such relatively low densities, for these ubiquitous titmice, will result, in part, from the few mature deciduous trees, with canopy cover, and thick scrub on the farm, to provide the safe cavity nest sites and soft-bodied invertebrates required by this group. These elements are likely to increase over time, as vegetation on the farm matures.

3.8 Corvids

Carrion Crow (three territories) was the most numerous corvid on Lark Rise Farm. It foraged widely across most features of the plot, though most activity was along the hedge and scrub borders. Magpie (single territory) and a wandering Jay (single territory) were present in comparable status with earlier years (Table 1). Jackdaw (single territory) was associated with domestic housing in the north-west corner, which will have afforded nest site potential, and winter wheat alongside. Rook also fed in some strength on the winter wheat fields, notably in late spring when demands of hungry young will have placed pressure (flock sizes of 20-120 recorded from early May to start of June). Suitable mature trees for nesting were, however, lacking.

3.9 Starling, Sparrows and Finches

Starling and House Sparrow, with single territories each, were centred primarily on domestic property and parking areas in the north-west, places where supplementary feeding by man may have assisted both. Chaffinch (14 territories), was numerically the dominant of four species of finch established on the farm, a fractional improvement in strength (12 and 13 territories in previous years – Table 1). Most chaffinch activity, song or foraging, was associated with peripheral tracts of hedgerow, scrub, and areas improved for wildlife. This is where suitable song posts and soft-bodied foods will have been most plentiful.

Goldfinch and Linnet (three territories each), were highly mobile, ranging widely across the farm. Despite some strong activity in spring, with Linnet flocks of 80 birds noted on fields of spring beans in April, evidence of breeding activity (especially song) was limited for this fine-billed finch on the Biodiversity Action Plan (BAP) species list. Both Linnet and Goldfinch showed a marginal reduction in status on the previous year (four territories each). Greenfinch (two discrete territories) sang strongly in the north-west corner, again where supplementary foods may have supplied energy needs in late spring – as in previous years (Table 1). Bullfinch, noted in June, remained a casual visitor only.

3.10 Buntings

Yellowhammer (12 territories), maintained an impressive breeding density on Lark Rise Farm, in broadly similar strength to 2000 (13 territories). Territories were scattered widely around the farm features, activity chiefly embracing both peripheral and newly planted internal hedges, field margins, ditches, wildlife strips and pockets of scrub. Feeding flocks, exceeding 50 birds in April, exploited areas of winter wheat, spring barley and beans. Reed Bunting (six territories) was present in an equally encouraging density, for a BAP Species, though a slight reduction from previous years (eight and seven territories in 1999 and 2000 respectively – Table 1), is a concern. This is enhanced by the legacy of a record-breaking wet winter, leaving high water tables more likely to benefit this, and other riparian breeding species, such as Sedge Warbler. Reed Bunting activity was centred on the damper areas of meadowland, ditches, wildlife strips, hedges and scrub in the southern sector. Corn Bunting, with limited activity associated mainly with the internal field margins, merited acceptance of a single territory only, a worrying decline from three territories in year 2000, for this UK BAP species.

4. DISCUSSION

Fittingly, in 2001, Skylark, a BAP species, retained its position as dominant species within the breeding bird community of Lark Rise Farm, with a fractionally higher density compared with the previous year. More importantly, perhaps, 59 species were observed using the farm during the bird breeding season, and 41 qualified for acceptance of confirmed territories, representing an improvement in diversity (36 species in 1999, 37 species in 2000). This is due, in part at least, to the sympathetic cropping regime, and habitat management, and ongoing maturation of vegetation components created earlier with wildlife enrichment in mind. Despite concerns for possible cold-weather related losses over Winter 2000/2001, co-dominant resident species within the farm community, notably Chaffinch, Blackbird, Wren, Robin and Yellowhammer, maintained or enhanced their former status. Similarly, despite a cool and late spring, and summer of weather extremes, most summer visitors, notably co-dominant Whitethroat and Blackcap, maintained their former strength. Following the exceptionally wet winter and spring, Reed Bunting and Meadow Pipit, both represented by significant local populations for a lowland arable farm of this type in eastern England, held up well, but Sedge Warbler and Yellow Wagtail decreased, a cause for concern. The absence of oil-seed rape from the rotation in 2001 could have adversely affected Sedge Warbler and Reed Bunting, as oil-seed rape is a known nest site for these two species. Linnet too may have been adversely affected as it is known to feed on seeds of the crop.

Among BAP species in long-term decline nationally, represented on the farm, it was worrying to note Corn Bunting restricted to a single territory only, and nationally Linnet failing to capitalize on the seemingly, helpful cropping and habitat enhancement regimes to bolster food and nest site resources in summer. The upturn in Song Thrush fortunes, reflecting the current trend nationwide, was a bonus.

Of those 41 species holding territory in 2001, Mute Swan, Sparrowhawk, Moorhen, Grasshopper Warbler and Jay were new breeding birds. Other birds, Hobby, Cuckoo and Garden Warbler failed to meet the criteria for acceptance of a solid territory or were absent. The increase overall in waterfowl, with Mute Swan qualifying for the first year and Mallard increasing, may reflect helpful winter rains. Doves and corvids maintained their healthy status, while gamebirds, most encouragingly, displayed a marked upturn in fortunes, most notably the 'flagship' farmland partridges.

In future years it will be interesting to quantify: (a) effect of previous winters' plantings of hedgerows, establishment of beetle banks and the Millennium Wood; (b) greater exploitation of the internal hedgerow network and tree standards as they mature; (c) impact of ongoing changes to the cropping rotation programme, and (d) ability of currently locally scarce birds for eastern England, transients at present, to linger and breed.

5. References

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Table 1. Number of breeding territories on Lark Rise Farm in 1999, 2000 & 2001

Species	1999	2000	2001
Cormorant	-	Present	-
Grey Heron	-	Present	Present
Mute Swan	-	-	1
Canada Goose	-	Present	-
Mallard	Present	1	4
Marsh Harrier	-	Present	-
Sparrowhawk	-	Present	1
Kestrel	1	1	1
Hobby	1	Present	Present
Red-legged Partridge	4	5	8
Grey Partridge	1	1	4
Pheasant	2	3	7
Moorhen	Present	Present	1
Lapwing	-	Present	-
Woodcock	-	Present	-
Bar-tailed Godwit	-	Present	-
Lesser Black-backed Gull	-	Present	-
Feral Pigeon	-	-	Present
Stock Dove	1	2	3
Woodpigeon	15	13	c.15
Collared Dove	1	2	2
Cuckoo	-	1	Present
Swift	Present	Present	Present
Kingfisher	Present	-	-
Green Woodpecker	-	Present	Present
Great Spotted Woodpecker	-	Present	-
Skylark	20	25	26
Sand Martin	-	-	Present
Swallow	Present	Present	Present
House Martin	Present	-	-
Meadow Pipit	3	4	4
Yellow Wagtail	1	3	1
Blue-headed Wagtail	Present	-	-
Pied Wagtail	Present	Present	-
Wren	10	8	9
Dunnock	5	5	3
Robin	5	7	8
Whinchat	-	-	Present
Wheatear	-	-	Present
Blackbird	8	7	10
Song Thrush	1	1	2
Mistle Thrush	-	-	Present
Grasshopper Warbler	-	-	1
Sedge Warbler	3	4	1
Lesser Whitethroat	Present	2	2
Whitethroat	12	12	14
Garden Warbler	1	-	Present
Blackcap	3	4	5

Table 1 contd.

Species	1999	2000	2001
Chiffchaff	Present	Present	-
Willow Warbler	1	1	1
Long-tailed Tit	1	1	1
Coal Tit	-	Present	-
Blue Tit	5	4	4
Great Tit	3	3	2
Nuthatch	Present	-	-
Treecreeper	-	Present	-
Jay	1	Present	1
Magpie	2	1	1
Jackdaw	1	1	1
Rook	Present	Present	Present
Carrion Crow	4	4	3
Starling	1	1	1
House Sparrow	Present	1	1
Chaffinch	12	13	14
Greenfinch	2	2	2
Goldfinch	4	4	3
Linnet	3	4	3
Bullfinch	Present	Present	Present
Yellowhammer	13	11	12
Reed Bunting	8	7	6
Corn Bunting	3	3	1
Other species			
Quail	-	-	Present
Fieldfare	-	-	Present
Mandarin	-	-	Present
Peregrine	-	-	Present