



Tree Sparrow



Scientific Name:
Passer montanus

Current factors causing loss or decline

Little is known about the factors affecting numbers of Tree Sparrows, but their recent decline has occurred at the same time as decreases in the numbers and/or ranges of other farmland birds which share their diet of wildflower and cereal seeds, and also feed their young on insects. It is therefore likely that its decline is due to changing agricultural practices, particularly the increased use of herbicides; the shift from spring-sown to autumn-sown crops with the consequent loss of winter stubble fields; the more intensive management of grassland; and the general reduction of habitat diversity on farmland due to increased specialisation and the loss of mixed farming.

Within the Glasgow area, it has been noted by ornithologists that many of the Tree Sparrow's favoured winter food plants, particularly Fat-hen (*Chenopodium album*) and Redshank (*Polygonum persicaria*), have declined markedly during the past two decades due to the intensification of arable farming. Relentless use of selective herbicides to control broad-leaved plants, and the increased autumn ploughing of stubbles, are the main practices which are causing the decline of agricultural 'weeds'. Another factor is the local decline of weedy turnip fields cultivated as winter fodder for sheep.

As the Tree Sparrow is a colonial or semi-colonial hole-nesting species, the availability of nest sites may also be a limiting factor. The fact that nest boxes are readily occupied seems to support this, although studies by the Clyde Ringing Group in South Lanarkshire recorded a continuing decline during the 1980s despite the provision of nest boxes. The loss of old trees from farmland, including the felling of elms affected by Dutch elm disease, may have reduced the availability of nesting niches. Tree Sparrows will also nest in holes in masonry, but usually only in undisturbed localities.

LOCAL SPECIES ACTION PLAN

Current status

The Tree Sparrow is patchily distributed on farmland across Britain and Ireland, being scarcer in the uplands and the far north and west. It appears to undergo irregular fluctuations in numbers. However, based on the Common Bird Census, there was a decline of 85% in numbers in Britain between the two breeding atlas periods (1968-72 and 1988-91), the largest decline of any common species during this period. The Tree Sparrow also decreased in range by 20% over the same period, with particular losses in Wales and Scotland.

In the City of Glasgow there is only one currently known population, in the Summerston area. They appear to be concentrated at West and East Millichen Farms. The exact number of breeding pairs is unknown, with only 2-3 pairs reported in most recent years.

Most winter counts are of around 20 birds, which could be the breeding pairs and their progeny of the previous breeding season, although an exceptional count of 35 birds in March 1999 suggests either a higher local population or a wider catchment area for the winter flock.

Another known population was in the Carmunnock area, although there are no recent records and it is possible that this population has died out. The same may well apply to the Robroyston area, where housing developments have removed much of the previously occupied farmland habitat. Survey work is required in both areas to determine current status. It is also essential to assess current population sizes at known sites, and to survey other potential habitats.

Main Locations of Tree Sparrows in Glasgow



Tree Sparrow

- | | | |
|------------------------|------------------------------|---|
| 1. East Millichen Farm | 2 pairs | } Summerston: winter flock up to 35 birds |
| 2. West Millichen Farm | 1 pair | |
| 3. Carmunnock area | Population currently unknown | |
| 4. Robroyston area | Population currently unknown | |

Current Action

The Tree Sparrow is protected under the Wildlife and Countryside Act 1981, and the EC Birds Directive.

In Glasgow there is some degree of planning protection of habitats, for example the wildlife corridor along the River Kelvin at Summerston is afforded Green Belt status within the City Plan. This helps to protect potential nest sites in riverside trees.

A trial winter feeding programme was undertaken by local RSPB members between December 2001 and April 2002. It is hoped to repeat this whilst also providing nest boxes.

Other courses of action, to meet the species' requirements on farmland, could be pursued through the Rural Stewardship Scheme.

Objectives and targets

The overall aim is to increase the breeding Tree Sparrow population, by at least 25% by 2005, through targeted nest box, supplementary winter feeding and habitat enhancement schemes, with no negative impact on existing UK priority biodiversity species or habitats. This will aim to achieve the following three key objectives:

Objective 1: To ensure no net loss of breeding Tree Sparrows at currently known sites.

Objective 2: To maximise existing or establish new populations at currently known sites.

Objective 3: To investigate possibilities for nest box, winter feeding and habitat enhancement schemes at known or potential sites.

Proposed Action with Lead Authorities

| Action | Lead | Delivery | Objective |
|--|------|--------------------------------------|-----------|
| Policy and Legislation | | | |
| To protect known breeding sites from development pressures. | RSPB | GCC-DRS | 1, 3 |
| Site Safeguard and Management | | | |
| Negotiate with farmers/landowners with view to undertaking management measures for Tree Sparrows within existing key areas/sites and, where possible, promote them on adjoining farmland. Measures will include nest box schemes, retention of dead trees and provision of winter feeding. | RSPB | GfC, FWAG, GCC-LS, RSPB, GCC-LS(CRS) | 1, 3 |
| Negotiate/liase with farmers to encourage RSS creation of weedy headlands and habitat enhancement at Millichen Farms and at Windlaw Farm. | RSPB | CfC, FWAG, GCC-LS | 1, 3 |
| Investigate, through liaison with landowners and stakeholders, possibilities for habitat creation/enhancement or other measures at potential sites. | RSPB | CfC, FWAG, GCC-LS | 1 |
| Advisory | | | |
| Promote advice to farmers/landowners on management for Tree Sparrows and update advice in the light of new research findings. | RSPB | FWAG, GfC, GCC-LS | 1 |
| Future Research and Monitoring | | | |
| Conduct annual breeding Tree Sparrow censuses in 2002-2005 at East and West Millichen Farms, and survey Carmunnock and Robroyston areas in 2002/2003 (then monitor any breeding populations annually thereafter). | RSPB | GCC-LS, SOC, RSPB | 1, 3 |
| Survey the three known core areas for winter flocks in early 2003. | RSPB | GCC-LS, SOC, RSPB | 1, 3 |
| Establish annual Tree Sparrow monitoring programme. | RSPB | GCC-LS, SOC | 2 |
| Ensure all monitoring is co-ordinated by Clyde SOC Bird Recorder, and methodology standardised with previous surveys. | RSPB | GCC-LS, SOC | 2 |
| Ensure annual monitoring activity is undertaken at all sites by 2005. | RSPB | GCC-LS, SOC, RSPB | 3 |
| Investigate winter habitat usage by Tree Sparrows in the City, by recording all individuals and flocks seen outside the breeding season. | RSPB | GCC-LS, SOC, RSPB | 3 |
| Communications and Publicity | | | |
| Use the Tree Sparrow as an example when highlighting the issue of declining farmland birds. | RSPB | RSPB, GCC | - |
| Recruit volunteer assistance to aid with monitoring programme. | RSPB | SOC, RSPB, GCC-LS | 1, 2, 3 |
| Launch appeals to the public for records of Tree Sparrows in the City. | RSPB | RSPB, SOC, GCC-LS | 1, 2, 3 |
| Liaise with Lead Agency for national Species Action Plan. | RSPB | RSPB, SOC, GCC-LS | - |
| Review progress of plan and actions by 2006. | RSPB | GCC-LS | - |
| Links with other Action Plans | | | |
| It is likely that implementation of this action plan will also benefit the following priority species of conservation concern: Grey Partridge, Skylark, Song Thrush, Linnet, Bullfinch, Reed Bunting. | - | - | - |
| The plan should be considered in conjunction with those for cereal field margins and hedgerows. | - | - | - |

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Glasgow City Council: Development and Regeneration Services(GCC-DRS), Glasgow City Council: Land Services(Conservation Group) (GCC-LS(CG),

Glasgow City Council: Culture and Leisure Services (GCC-CLS), Glasgow City Council: Education Services (GCC-ES), Glasgow City Council: Housing Services (GCC-HS)

Glasgow City Council: Land Services Countryside Ranger Service (GCC-LS(CRS)), Scottish Ornithologists' Club (SOC), Greenspace for Communities(GfC), British Waterways (BW), Forestry Commission (FC), Farming Wildlife

Advisory Group (FWAG), The WISE Group (TWISE) Glasgow Natural History Society (GNHS), Royal Society for the Protection of Birds (RSPB), Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage

(SNH), Scottish Wildlife Trust (SWT), Clyde Amphibian and Reptile Group (CARG), Butterfly Conservation (BC), Concern for Swifts (CfS)