UK Biodiversity Action Plan for Linnet (*Carduelis cannabina***)**

Current status

The linnet is a common and widespread species across the UK countryside where it uses weedy fields, hedgerows, gorse thickets, heathland and scrub (particularly near the coast). However, based on the Common Bird Census, numbers declined by 56% on farmland between 1968 and 1991. Their UK range declined only slightly over this period but was most marked in Northern Ireland. The UK population was estimated at 540,000 territories in the New Breeding Atlas (1988-91). It is widespread and common in much of Europe, though declining in some areas, particularly The Netherlands and Finland. A variable proportion of the UK breeding population winters in Spain and western France; the birds remaining in the UK are joined by breeding birds from northern Europe.

The linnet is protected under the Wildlife and Countryside Act 1981, the Wildlife (Northern Ireland) Order 1985 and EC Birds Directive, and is listed on Appendix II of the Bern Convention.

Current factors causing loss or decline

The recent decline of the linnet has occurred at the same time as decreases in the numbers and/or range of other farmland birds which share its diet of grass and wildflower seeds, and some cereal grains. Linnets are more dependent than other seed-eaters on wildflower seeds during the breeding season, when the chicks are also fed on seeds rather than insects. It is likely that the decline in linnets may be due to changes in agricultural practice, both in the UK and in their wintering range in south-west Europe. These include the increased use of herbicides and fertilisers, the switch from spring-sown to autumn-sown crops and the consequent loss of winter stubble fields, and the general reduction in farmland habitat diversity due to the loss of mixed farming and increased specialisation. Changes in management of pastoral areas may also have caused declines through the increased use of fertilisers, re-seeding of species-rich fields, more intensive grazing, early cutting for silage and the loss of the small proportion of arable fields that were typically present on such farms. The removal of hedges, gorse thickets and other unmanaged scrub, combined with the increased frequency and severity of hedge trimming and heavy grazing in some areas, will have led to losses of suitable nesting habitat.

Current action

Until recently, the linnet was not regarded as a high priority species for conservation action but it is likely to have benefited, incidentally, at a small number of individual sites from initiatives for other species associated with heathland and scrub habitats, particularly in coastal situations. A good example is the acquisition and management of heathland, including the establishment and management of gorse for Dartford warblers.

Large stretches of rocky coast have been brought under appropriate conservation management, which involves intensive land use on cliff-tops, particularly by the National Trust under `Enterprise Neptune`. The provision of rotational set-aside will have benefited the species, although this has been significantly reduced in area in recent years. New prescriptions encouraging the growing of spring cereals and retention of winter stubbles in the South Downs ESA, and the pilot Arable Stewardship Scheme, should also benefit the linnet.

Linnets may also have benefited from the provision of game cover crops and the young stages of conifer plantations.

Action plan objectives and targets

In the short term, halt or reverse the decline in numbers of the linnet by the year 2003 so that the Breeding Bird Survey index is at least at 1996 levels.

In the long term, see a sustained recovery in numbers so that the BBS index is at least 50% higher than 1996 levels by 2008.

In the long term see a sustained recovery in range so that it has recovered to the 1968/72 range by 2008.

Proposed actions with lead agencies Policy and legislation

Take account of the need to recover linnet and other farmland bird populations when developing agricultural policy and CAP reform; consider how to extend the Arable Stewardship Scheme if the pilot is successful, and how to substitute for the benefits of set-aside, if this is further reduced or abolished. Retention of coastal and other scrub habitats should be encouraged. (ACTION: DANI, MAFF, SOAEFD, WOAD)

Where appropriate, incorporate new management prescriptions when reviewing agri-environment schemes, especially ESAs, Countryside Stewardship, Tir Cymen and Countryside Premium Scheme, in order to reverse some of the recent changes in farm management outlined in Section 2. (ACTION: CCW, DANI, MAFF, SOAEFD, WOAD)

Seek uptake of a more cautious and targeted use of herbicides and fertilisers on farmland to reduce the impacts on potential food sources for the linnet. This could include encouraging integrated crop management, organic farming and the more widespread adoption of initiatives such as the recently begun Scottish 'TIBRE' project. (ACTION: DANI, MAFF, SOAEFD, WOAD)

Site safeguard and management

None proposed.

Species management and protection

None proposed.

Advisory

Promote further advice to land managers on management for linnets as one of a suite of farmland birds and update that advice in the light of new policies and research findings. (ACTION: DANI, FA, MAFF, SOAEFD, WOAD)

Promote effective management of set-aside for breeding and wintering birds, including linnet. (ACTION: DANI, MAFF, SOAEFD, WOAD)

Promote the effective management of hedgerows and farmland scrub for the benefit of linnet and other farmland birds. (ACTION: DANI, MAFF, SOAEFD, WOAD)

Future Research and Monitoring

Ensure appropriate monitoring of numbers through continuation of the BTO/JNCC/RSPB Breeding Bird Survey and consider the setting up of an equivalent survey to monitor winter populations. (ACTION: CCW, EHS, EN, JNCC, SNH)

Study the diet of the linnet in different breeding habitats and relate this to nesting success. Information is required on the diet of adults at different stages of the year, particularly during the summer, and on the food supplied by the adults to chicks and fledglings. (ACTION: CCW, EHS, EN, FA, JNCC, SNH) Investigate winter survival of linnet in relation to habitat and food availability and hence improve knowledge of the winter habitat requirements of the species. (ACTION: CCW, EHS, EN, FA, JNCC, SNH)

Communications and Publicity

As appropriate, use the linnet as an example when highlighting the issue of declining farmland birds. (ACTION: CCW, EH, EN, SNH)

Promote a change in perception of wild plants on farmland as essential food sources for seed-eating farmland birds rather than as 'weeds'. (ACTION: DANI, MAFF, SOAEFD, WOAD)