

NORFOLK BIODIVERSITY ACTION PLAN

SPOTTED FLYCATCHER (*Muscicapa striata*)

An insectivorous summer migrant which breeds in open woodland habitats, and gardens and churchyards with mature trees, throughout the UK.

Ref 2/S22	Tranche 2	Species Action Plan 22
Plan Author:	NCC and NE	
Plan Co-ordinator:	Communities & Nature Topic Group	
Plan Leader:	RSPB	
Date: April 2007	Stage: Final	

1. CURRENT STATUS

National Status

- The spotted flycatcher has been in rapid and consistent decline since the early 1960s. Data derived from the Common Bird Census and the Breeding Bird Survey reveal an overall decline of 83 per cent between 1970 and 2004 (Eaton *et al.*, 2006).
- The species is scarcer in the far north and west and is almost absent from the Western and Northern Isles. There are additional gaps in distribution elsewhere but with no clear pattern.
- The species is a common and widespread summer visitor across mainland Europe, except northern Scandinavia and densely forested, arid or mountainous areas. Numbers are fluctuating in some countries, such as Sweden and the Netherlands, and there is evidence of recent declines in others including Finland, Germany and Spain.
- The spotted flycatcher is listed as a Red Data Book species and is protected under the Wildlife and Countryside Act 1981, the Wildlife (Northern Ireland) Order 1985 and the EC Birds Directive.

Norfolk Status

- The spotted flycatcher nests in scattered locations across Norfolk, with an average occupancy of 1.4 pairs per occupied tetrad. There is an estimated total population of 660 breeding pairs in the county (M. Taylor, pers. comm.).
- In keeping with national trends, there is evidence to suggest that the Norfolk population has experienced a substantial decline. In 1999, for example, *The Birds of Norfolk* (Taylor *et al.*, 1999) defined the status of spotted flycatcher as a "common summer visitor". By definition, this implies that there were between 1,001 and 5,000 breeding pairs in the county and suggests that there has been a sharp decrease in numbers over the last seven years.

2. CURRENT FACTORS CAUSING LOSS OR DECLINE

These are not well known, but may include one or more of the following:

- *Drought in the Sahel Region:* This has been implicated in the declines of a number of trans-Saharan migrants. The spotted flycatcher passes through the Sahel region en route to wintering grounds in southern Africa. Changes in conditions in the Sahel or the wintering areas could be a factor in the species' decline but no clear link has yet been established.

- *Changes in Agriculture:* Firm data on the importance of this for spotted flycatcher are lacking, but there is growing evidence that a range of birds found on lowland farmland areas are affected by low invertebrate availability during the summer.
- *Weather Effects in Europe:* These appear to be important and could have population impacts if long-term climate change occurs. The key factor appears to be summer weather conditions; more birds breed early if temperatures are warmer, and one study found that clutch sizes are larger when there is more sunshine.
- *Nest Predation:* There is some evidence to suggest that nest predation by grey squirrels may be significant.
- *Loss of Nest Sites:* Many spotted flycatchers nest in large trees and there has been a large-scale loss of these in woodland, parks and hedgerows (especially following Dutch elm disease), which are favoured habitats. However, there are no quantitative data on the effects of these losses and it has been argued that the Norfolk population of spotted flycatchers continues to have access to many potential nesting sites (M. Taylor, pers. comm.).

3. CURRENT ACTION IN NORFOLK

- Until recently, the spotted flycatcher was not regarded as a species of conservation concern, so little action for the species was taken. However, some aspects of broadleaved woodland management, particularly the creation and maintenance of clearings and wide rides, will have benefited the species. The provision of nest-boxes (usually for other species) will also have helped spotted flycatchers, particularly in areas with a dearth of natural nest sites.
- The Norfolk Spotted Flycatcher Project was set up in 2003 by Rachel Warren of the University of East Anglia to monitor site fidelity, site occupancy and nesting success of individual spotted flycatchers to sites in Norfolk. The project has been a valuable source of data and has also helped to increase public awareness about the declines in this species.
- The spotted flycatcher is one of 36 species featured in the NWT publication, *Norfolk Wild File*, produced in 2006.
- Since the summer of 2000, different tetrads in the county have been surveyed each year for all bird species, including spotted flycatcher. The data resulting from these surveys will be published in the summer of 2008.

4. ACTION PLAN OBJECTIVES AND TARGETS

National

- In England, ensure the BBS index is no longer showing a negative trend by 2010 and is at least at 100% of the 2003 level by 2015.
- In England and Wales, maintain the percentage of occupied BBS squares at the 2003 level.

Norfolk Targets

- Maintain the Norfolk population at 660 pairs.

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NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
5.1	Policy and Legislation			
5.1.1	No action proposed until the outcome of research actions is available. However, it is expected that the species will benefit from the policy actions proposed for other declining farmland birds.	Where appropriate, take account of the requirements of the species when preparing or revising prescriptions for relevant agri-environment schemes.	NE	
5.2	Site Safeguard and Management			
5.2.1	None proposed.	Identify particular strongholds for this species and target habitat management accordingly.	NWT, RSPB, NT, LAs, FC, NE	
5.3	Species Management and Protection			
5.3.1	Consider the requirements of nesting spotted flycatchers when providing nest-boxes in nature reserves, country parks and other protected areas.	Consider the requirements of nesting spotted flycatchers when providing nest-boxes in nature reserves, country parks, County Wildlife Sites and other protected areas.	NWT, RSPB, NT, LAs, FC, NE	
5.4	Advisory			
5.4.1	Consider the needs of spotted flycatchers in general advice on woodland management. These should include encouraging the provision of broadleaved stands with an open canopy and open spaces, including rides and tree fall gaps.	Consider the needs of spotted flycatchers in general advice on woodland management. These should include encouraging the provision of broadleaved stands with an open canopy and open spaces, including rides and tree fall gaps.	FC, RSPB, NWT, LAs, NE	

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NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
5.5	Future Research and Monitoring			
5.5.1	Analyse BTO Nest Record Cards from the 1960s to look for changes in productivity which might explain the recent population decline.	Continue to complete nest record cards to contribute to BTO's national database.	Norfolk Spotted Flycatcher Project	
5.5.2	Undertake a study into the summer ecology and habitat use of spotted flycatchers, including an investigation of the relationship between diet/insect availability, the growth/survival of chicks and fledging success.	Support the continuation and possible expansion of the Norfolk Spotted Flycatcher Project.	BTO, UEA	
5.5.3	Ensure appropriate monitoring of spotted flycatcher numbers through continuation of the BTO/JNCC/RSPB Breeding Bird Survey.	Contribute to the BTO/JNCC/RSPB Breeding Bird Survey.	BTO, RSPB, NNNS	
5.6	Communications and Publicity			
5.6.1	No action proposed until the results of research actions are available	<p>Encourage participation in the Norfolk Spotted Flycatcher Project and publicise the project's results.</p> <p>Raise awareness of the species' decline and its habitat requirements.</p> <p>Include this species within the NWT's proposed "citizen science" surveys.</p>	<p>C & N Topic Group</p> <p>NWT, RSPB, LAs, FC, NE</p> <p>NWT</p>	

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NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
5.7	Links with Other Action Plans			
5.7.1	None given	This plan should be considered in conjunction with the Norfolk HAPs for: lowland wood-pasture and parkland; churchyards and cemeteries; and built-up areas and gardens.	Woodland Topic Group, C & N Topic Group	

NORFOLK DISTRIBUTION (1980 – 2005)

Spotted flycatchers are distributed widely (but unevenly) across Norfolk. According to data from the Norfolk Biological Records Centre for the period 1980-2005, the species has been found in every 10km grid square in the county.



Distribution map provided by NBRC (March 2005).

MANAGEMENT GUIDANCE

(This guidance is a general summary; for more detailed information or advice, please consult the references or contacts below).

Spotted flycatchers typically breed in areas which have shelter from the prevailing winds, mature trees and open space. Favoured habitats include gardens with tall trees, open woodland, parkland, churchyards, and farmland with sheltered tree-lines and coppices. The availability of perches from which birds can feed on insects is also important.

According to the RSPB's Terrestrial Research Section, spotted flycatchers are often found breeding close to human activity. Nests, for example, are frequently sited on house ledges or within climbing garden plants.

Spotted flycatchers can be helped by:

- Creating and maintaining their preferred habitat types;
- Putting up open-fronted nest boxes in sheltered, sunny positions;
- Choosing and encouraging climbing garden plants such as ivy and clematis to grow against south-facing walls;
- Encouraging flying insect populations, by choosing nectar and pollen-providing plants in gardens, creating ponds and keeping livestock.

REFERENCES

- Amar, A. et al. (2006). *What's Happening to our Woodland Birds?* Long-term changes in the populations of woodland birds. RSPB Research Report Number 19/BTO Research Report Number 169. Sandy and Thetford: RSPB and BTO.
- Eaton, M.A. et al. (2006). *The State of the UK's Birds 2005*. Sandy, Bedfordshire: RSPB, BTO, WWT, CCW, EN, EHS and SNH.
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- Symes, N. and Currie, F. (2005). *Woodland management for birds: A guide to managing for declining woodland birds in England*. Sandy and Cambridge: The RSPB and Forestry Commission.
- Taylor, M., Seago, M., Allard, P. and Dorling, D. (1999). *The Birds of Norfolk*. Pica Press.

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