



DRAFT REVISED PLAN 2014

BITTERN *Botaurus stellaris*

1. INTRODUCTION

The bittern is a rare and secretive golden-brown relative of the grey heron that inhabits swamps and well-vegetated wetlands, especially reed beds. Bitterns are extremely difficult to observe, rarely leaving their reed beds and matching their surrounding vegetation perfectly. They may even 'freeze' with neck outstretched in an upright posture and sway with the reeds when disturbed. The males advertise their territories by a deep 'booming' noise which allows a breeding population to be identified.



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Food is mainly taken within the cover of vegetation and birds spend much of their time standing motionless between reed stems, watching for fish and amphibians. These form the major part of their diet, though aquatic invertebrates and occasionally small birds and mammals are also taken. The size and shape of the reed bed is important to the animal and the habitat should ideally be in blocks greater than 20ha ([Norfolk Biodiversity Action Plan](#)).

Within Europe, the northern and eastern populations are migratory and some of these birds winter in the UK, especially in hard weather. Although a rare bird in the sub-region, up to four have regularly overwintered at two sites in the county since 2010.

2.	OBJECTIVES	TARGETS
Associated Action Plans are: 'Lakes & Reservoirs', 'Reed beds' and 'Quarries & Gravel Pits'		
PLEASE CONSULT THE ' GENERIC SPECIES ' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL SPECIES PLANS		
A.	To maintain the size of the regularly wintering population.	ongoing
B.	To increase the size of the regularly wintering population to at least six birds.	2015
C.	To increase the range by having wintering bitterns regularly present on at least three sites.	2018
D.	To secure at least one breeding pair of bitterns in the county.	2018

3. NATIONAL BAP OBJECTIVES & TARGETS

The bittern is on the current UK Biodiversity Action Plan (BAP) Priority Species list published in 2007([Joint Nature Conservation Committee](#)). The targets and objectives for the [Bittern](#) BAP, updated in 2010, may be seen online.

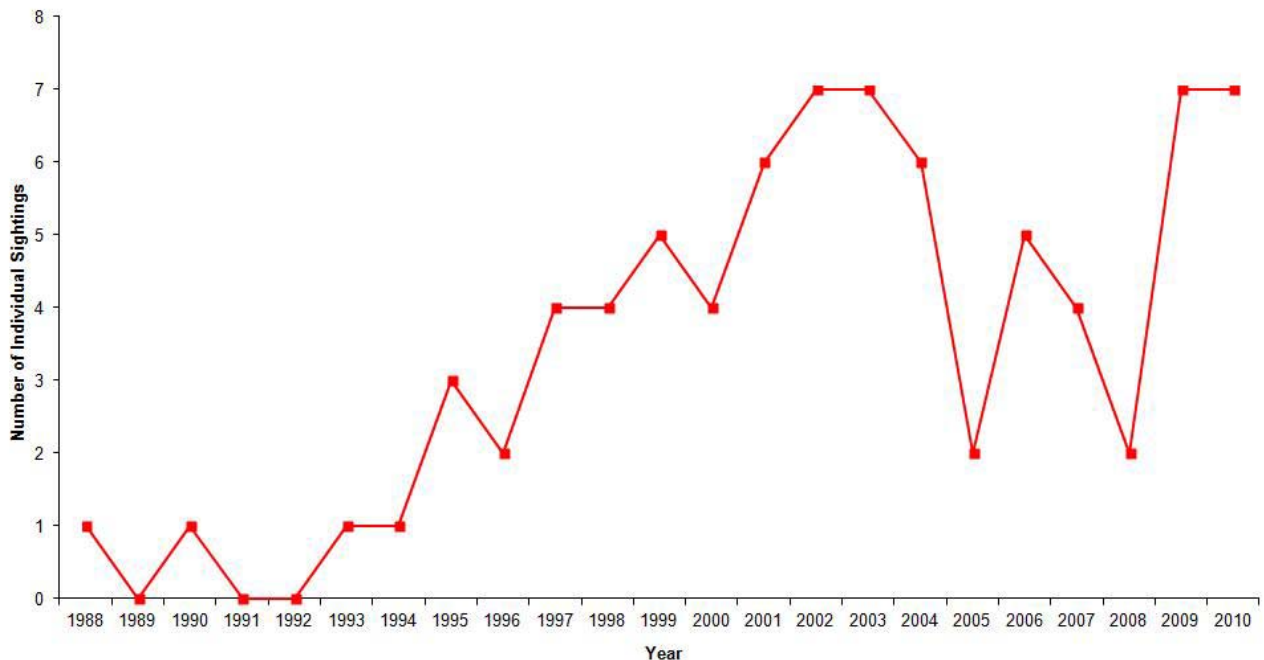
4. CURRENT STATUS

The bittern has an unfavourable conservation status in Europe, where it is said to be vulnerable, with breeding numbers having recently declined in most countries. In the UK it is on the [Red Alert list](#), though numbers have improved, with 2001 being the best year for a decade (Gilbert *et al.* 2001). Even so, the average breeding population during 1997-2001 was just 19 pairs (Gregory *et al.* 2002) and these were largely confined to a few sites in Lancashire, Norfolk and Suffolk. However, winter numbers can be boosted up to 100 birds through immigration from the continent.

A recovery programme funded largely through two EU LIFE-Nature projects (Wotton *et al.*, 2009) increased the breeding population to 106 booming males; since 1998 a large area of reed bed has either been restored (700ha) or created (300ha) in England. Figures from the [Breeding Bird Survey](#) show an increase in the number of booming males from 11 in 1997 and 104 in 2011 with confirmed breeding in 1% of 10km² in the UK (Smith, 2014).

Bittern numbers seem to have reached a peak of up to 7 individuals in the county at any one winter time but as far as is known, bitterns have never bred in the sub-region. It is likely seasonal variations may account for changes in this distribution where mild winters may not encourage birds to travel so far to overwinter. The emphasis for this species is the development of the habitat so that individuals can be encouraged to stay into the breeding season and establish the county's first breeding pair (Smith, 2014). Up to three birds (on one occasion possibly four) have been regularly recorded at [Ladywalk Reserve](#) (North Warwickshire) in every winter since 1993/4 (except for 1994/5). This is now one of the most regular wintering sites in the UK and it is known that one bird, carrying an expired [Royal Society for the Protection of Birds](#) radio transmitter, originated from either Leighton Moss (Lancashire) or Minsmere (Suffolk). Up to four birds have overwintered at [Brandon Marsh](#), a [Site of Special Scientific Interest](#) (SSSI) since 2010. Warwickshire's overwintering bitterns constitute approximately 5% of the British population.

Graph illustrating the number of Bittern in Warwickshire between 1988 and 2010.
Data collated from WMBC Annual Reports (WMBC)



4.1 Legal and Policy Status

A wide range of species and habitats are protected under international and domestic laws, including the [Wild Birds Directive](#) (1979), the [Wildlife and Countryside Act](#) (1981), the [Conservation Regulations](#) (1994) and [EC Habitats Directive](#) (1992). Protection of sites is afforded nationally through SSSI designation, [Special Areas of Conservation](#) (SAC) and [Local Nature Reserve](#) (LNR) statutory status. Other sites are offered recognition of their value through Local Wildlife Site status (LWS), Local Character Areas and identified Landscape Scale Areas. The [National Planning Policy Framework](#) (2012) chapter/section 11 states conditions with regard to any development negatively affecting biodiversity, including protected sites, ancient woodland and other irreplaceable habitats (paragraph 118). The Wildlife & Countryside Act and schedule 2 of the [Conservation of Habitats & Species Regulations](#) (2010) make it an offence to intentionally kill, injure, take, possess, sell, buy or transport a range of species.

The bittern is protected under Schedule 1 of the Wildlife & Countryside Act and also listed on Annex 1 of the [EC Birds Directive](#) 2009 and Appendix III of the [Bern Convention](#).

4.2 Current Factors Affecting the Species

Nationally, this is the inundation of coastal reed beds by saltwater reduces the total area of freshwater reed bed. The main threats to the future of bitterns in Warwickshire are:

- **Lack of large areas of reed beds of appropriate shape**
- **Population size:** such a small, migratory population is extremely vulnerable.
- **Disturbance** from incompatible activities on adjoining land, e.g. water-skiing at Dosthill pool

5. LOCAL ACTION

- The [West Midland Bird Club](#) obtains advice from the RSPB about how to manage the Ladywalk reserve for the benefit of bitterns. It is hoped to increase the size of the reed bed in an attempt to create suitable conditions for the birds to breed.
- New reed beds have been planted at [Brandon Marsh](#), [Kingsbury Water Park](#) and [Middleton Lakes](#), former sand and gravel quarries at Middleton Hall taken over in 2007 by RSPB from Hanson Aggregates. These will all increase the extent of the habitat available to bitterns. The Brandon Marsh work has already proved successful in attracting wintering bitterns. Further extensions to the reed beds at Brandon Marsh of 12ha were implemented in 2010/2011.
- Bitterns have been overwintering at Ladywalk Nature Reserve since 1994/5 and at Brandon Marsh since 2013.

6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	By
PLEASE CONSULT THE '<i>GENERIC SPECIES</i>' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL SPECIES PLANS			
Policy, Legislation & Protection			
PL1. Ensure that all known bittern sites are considered for designation as Local Wildlife Sites (LWSs), including Ladywalk Reserve at the earliest opportunity (2013/14).	LWSP	WCC NE WWT HBA	ongoing
PL2. Include in Local Development Plans appropriate policies for the after-use of mineral workings and other land which would favour reed bed development.	WCC	WWT LAs LOs	2015
Site / Species Safeguard & Management			
SM1. Enhance any sites which are important for bitterns by increasing the area and importantly the width of reed-bed which meets the species' needs, including those of wintering birds.	WWT	RSPB NE WMBC	ongoing
SM2. Continue with the development of the new reed beds at Brandon Marsh Phase 4, aiming at a maximum of a further 5ha.	WWT	BMVCT	2018
Advisory			
A1. Promote and support the creation of new reed beds on suitable sites, such as mineral extraction sites and in floodplains.	WCC	WWT WBRC NE RBC EA NWBC NAM	ongoing

ACTION	Lead	Partners	By
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Research & Monitoring			
RM1. Annually monitor the bittern population in Warwickshire.	WMBC	WWT	ongoing
Communication & Publicity			
CP1. Use the bittern to promote the importance of reed beds and their conservation.	RSPB	WWT WCC WMBC	ongoing

Abbreviations: **BMVCT** – Brandon Marsh Voluntary Conservation Team, **HBA** – Habitat Biodiversity Audit partnership, **EA** – Environment Agency, **NE** – Natural England, **LAs** – Local Authorities, **LOs** – Landowners, **LWSP** – Local Wildlife Sites Project, **NAM** – Nature After Minerals, **NWBC** – North Warwickshire Borough Council, **RBC** – Rugby Borough Council, **RSPB** – Royal Society for the Protection of Birds, **WBRC** – Warwickshire Biological Record Centre, **WCC** – Warwickshire County Council, **WMBC** – West Midland Birds Club, **WWT** – Warwickshire Wildlife Trust.

7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Results will be entered onto the national Biodiversity Action Reporting System [BARS](#). Progress with this plan up to 2008 can be seen at www.warwickshirewildlifetrust.org.uk/LBAP2014.

8. BIBLIOGRAPHY

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BTO (2013) [Bird Atlas 2007-11](#): The Breeding and Wintering Birds of Britain and Ireland - a comprehensive overview of bird distribution and change in Britain and Ireland, giving national level trends which will place local issues in the national context.

Smith, M.C. (2014) Update on the status of Bird Local Biodiversity Action Plans in Warwickshire. 'Wild Warwickshire' Wildlife Information & Consultancy.

9. FURTHER INFORMATION

[Natural England](#)

[LIFE](#) is the EU's financial instrument supporting environmental and nature conservation.

[Warwickshire CC Mineral Strategy](#) - the minerals development framework consists of a number of documents.

MineralsUK - the British Geological Survey's [Centre for Sustainable Mineral Development](#) website has a wealth of information on mineral resources, mineral planning, policy and legislation, sustainable development, statistics and exploration.

[Nature After Minerals](#) is a resource for everyone with an interest in quarry restoration & minerals planning for biodiversity.

10. CONTACT

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