ACTION for WILDLIFE

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan



REVISED PLAN MAY 2017 LAPWING Vanellus vanellus

1. INTRODUCTION

Also known as the green plover or peewit (after its distinctive call), the lapwing is easily recognised by its iridescent plumage and the long, wispy crest on its head. Birds nest principally on arable fields, in wet pastures and around gravel pits, preferring unimproved ground with short swards, splashy pools and ditch edges. Their nests are particularly vulnerable to ground predators (Archer, 2013). Lapwings feed predominantly on ground - living



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invertebrates, including earthworms, and require sparse vegetation during the breeding season to enable them to forage for themselves and their chicks.

During spring their noisy, tumbling display flights were once a common sight and sound across most of the UK, including the sub-region but their numbers have plummeted and heir range has contracted in the past decade, due mainly to changes in farming practices. Even the wintering population, massively augmented by immigrants from Eastern Europe, is much reduced.

2.	OBJECTIVES	TARGETS				
	Associated Action Plans are: 'Quarries & Gravel Pits', 'Lowland Neutral Grassland', 'Lowland Calcareous Grassland', 'Lowland Acid Grassland', 'Farmland Birds' and 'Snipe'					
	PLEASE CONSULT THE 'GENERIC SPECIES' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL SPECIES PLANS					
Α.	To increase their breeding range to its 1968-72 level (present in virtually every 10km square).	2015				
В.	To increase the size of the breeding population from c. 840 pairs to 1,500 – 2,000 pairs (size in 1990).	2020				

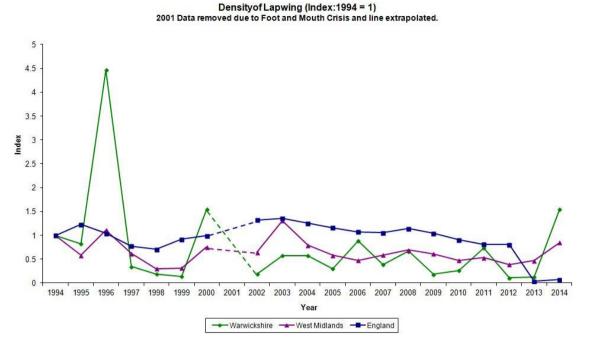
NATIONAL BAP OBJECTIVES & TARGETS 3.

In 2007 the lapwing was upgraded from amber to red list status (Eaton et al. 2009) and in 2016 was added to the International Union for the Conservation of Nature (IUCN) 'near threatened' species list. The species 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 Lapwing BAP, updated in 2010, may be seen online.

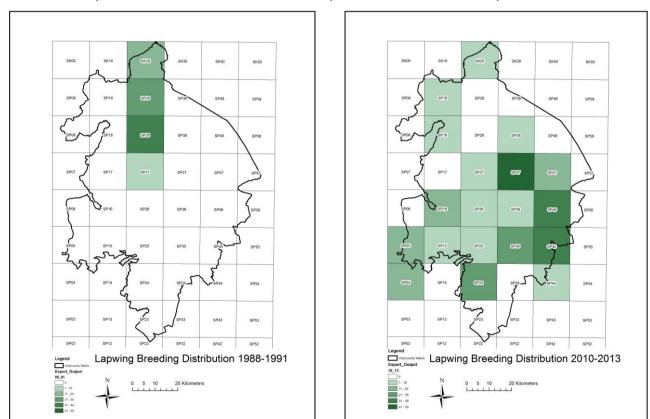
CURRENT STATUS 4.

The lapwing is said to be stable within Europe, though its breeding populations are poorly monitored. In the UK, it has been relatively stable but numbers have crashed in recent years (see graph below, Smith, 2016). Between 1994 -2012 Numbers dropped by 19% in

England and 61% in the West Midlands (Smith, 2014). The <u>Breeding Bird Survey</u> reports particularly low numbers of lapwing during the spring of 2011 (British Wildlife, August 2012).



The situation continues to be worse locally than nationally. Within Warwickshire, the breeding bird surveys of 1966-68 and 1968-72 showed the species to be present in virtually every 10km square but this had fallen by 78% to just four between 1988-91. By 2010-13 the number of breeding pairs recorded by the WMBC was up from 20.6 pairs at 7 sites across 40 km^2 to 90 pairs at 41 sites across 190 km², present in 19 x 10km squares.



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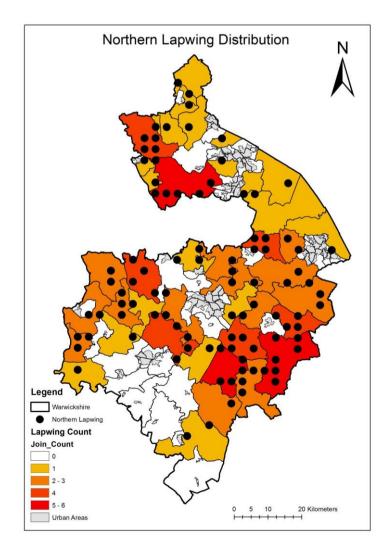
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Extrapolating from various estimates, the population around 1990 was probably in the range 1,500-2,000 pairs. Between 1995 and 2008 the population declined by 22% (calculated from the Breeding Bird Survey data from Warwickshire – see graph), and remained stable at low numbers until 2011, followed by a considerable decline in 2012 to an estimated breeding population of c.840 pairs (generated by multiplying 5 year average for 2006-2010 by an approximate area of 2000 sq.km). There was a total decline of 89% over the period 2003-11 with a decline in the size of over-winter flocks by 56% between 1988-90 and 2010-13. With the breeding population for 2013 probably in the range of 1900-2600 there has been a return to the 1990 population size, followed by a large upswing in 2014.

Each pair needs to fledge an average of 0.6-0.8 young per year (Ausden et al. 2009) to maintain a stable population. However, little is known about the productivity of lapwings within Warwickshire. Limited data from WMBC Annual reports indicates a fledging rate of 0.67 per pair (n=5) with indications of high mortality between hatching and fledging. It is possible that the dynamic equilibrium highlighted between 2003 and 2011 indicates a capacity value for the county with further breeding season densities only improving if extra habitats are developed.

The distribution of breeding lapwings in the county has increased since 1988-90, quite widely spread across the centre of the county - key hotspots include Fenny Compton, Burton Dassett, Harbury and Kineton - and in the north with Meriden, Fillongly and Curdworth particularly important (Smith, 2016).



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4.1 Legal and Policy Status

A wide range of species and habitats are protected under international and domestic laws, including the <u>Wild Birds Directive</u> (1979), the <u>Wildlife and Countryside Act</u> (1981), the <u>Conservation Regulations</u>(1994) and <u>EC Habitats Directive</u> (1992). Protection of sites is afforded nationally through <u>Sites of Special Scientific Interest</u> (SSSI) designation, <u>Special Areas of Conservation</u> (SAC) and <u>Local Nature Reserve</u> (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 <u>National Planning Policy Framework</u> (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 <u>Conservation of Habitats & Species Regulations</u> (2010) make it an offence to intentionally kill, injure, take, possess, sell, buy or transport a range of species.

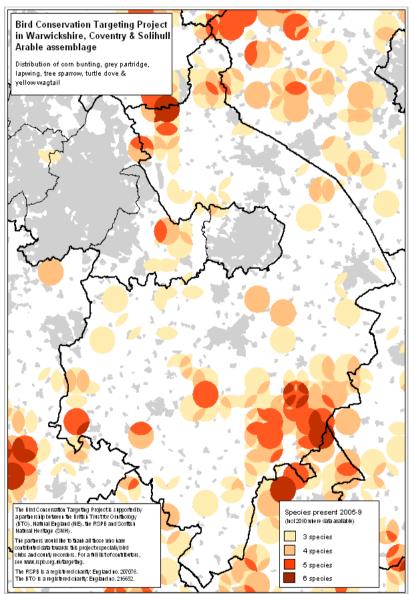
The lapwing is protected under the Wildlife & Countryside Act and also under Appendix 2.2 of the Wild Birds Directive.

4.2 Current Factors Affecting the Species

- Past lack of suitable habitat: the historic change in arable cropping from springsown to autumn-sown crops restricted the availability of nesting areas on farmland for lapwing. Birds need a mosaic of damp, invertebrate-rich semiimproved grassland and large areas of sparsely vegetated ground, with birds laying in the latter before moving into the former when chicks have hatched. With crops sown in autumn the vegetation is already too tall and dense for birds to breed in by the time laying takes place in late March and April. Many old pasture fields where birds used to take their chicks to feed are now either ploughed up or too intensively grazed due to increased stocking rates in recent decades, with no tussocks to hide young from predators. As pastures are improved with field drains and artificial fertilisers the invertebrate populations are considerably reduced leading to a scarcity of suitable food for chicks.
- **Future climate change:** Weather effects on breeding grounds: insufficient rainfall to provide conditions for invertebrate prey, overly wet springs causing nest and chick mortality. Harsh overwintering conditions.
- **Woodland and biofuel planting:** Policy shift towards afforestation of poor yielding farmland and planting on floodplains.
- **Poor current productivity:** There have been several poor years for egg-survival since 1996, and there is increasing evidence to support the view that predation of both eggs and chicks may be constraining population recovery (Bolton et al. 2007; Sharpe et al., 2008). Suitable areas of habitat for breeding are often very limited in size e.g. on wetland reserves or gravel quarries, leading to a concentration of predators such as crows and foxes, resulting in heavy loss of chicks and eggs.
- <u>Agri-environment schemes</u> administered by Natural England (NE) are resulting in the local increase of lapwings but the mosaic of habitats needs to be maintained.
- Physical disturbance.

• **Predation of eggs and young birds:** by corvids, foxes and mink.

The range of farmland birds in 2005-9 is shown in the map below; there is no update available. The farmland bird target area in Warwickshire is in the south-east of the county, also where there are 3 or more of the following species confirmed as breeding: turtle dove, corn bunting, tree sparrow, grey partridge, yellow wagtail or lapwing. Hence the Leam Valley for example, although out of the direct S.E. Warwickshire farmland bird target area, has 3 or more target species over most of the area and is a key area for farmland bird-orientated Higher Level Stewardship (HLS).



Agri-environment schemes administered by NE in 2016 include the following Entry Level (ELS), Higher Level (HLS) and Organic HLS options to support lapwing:

- EF13/HF13/OHF13 uncropped cultivated areas for ground nesting birds on arable land.
- HK9/HK11/HK13 maintenance/restoration/creation of wet grassland for breeding waders.
- HK10/ /HK12/HK14 maintenance/restoration/creation of wet grassland for wintering waders.

5. LOCAL ACTION

- The Habitat Biodiversity Audit provides detailed information on some habitats (e.g. wetlands), though it would not identify agricultural land suitable for breeding.
- The national Breeding Bird Survey is carried out annually, typically including just over 20 sample plots within Warwickshire.
- The Warwickshire Breeding Bird Tetrad Atlas provided data on the species in parts of the county until 2006 when survey work ceased (pers.comm.Jon Bowley, 2012).
- The <u>R.Leam Pilot Catchment Plan</u> includes the target of lapwing breeding successfully by 2027.
- The <u>Bird Conservation Targeting Project</u> collates all breeding season records of lapwing from the <u>Royal Society for the Protection of Birds</u>, BTO and local bird groups, and makes the information available in order to target agri-environment resources as well as informing individual farm management plans.
- Lapwing plots at a farm in Sherbourne since 2010 have resulted in 2 breeding pairs (2012); the 2 plots are 1 acre each. In addition over 40 birds have been seen feeding behind the plough around Sherbourne and the local area within the last 2 months (2013).
- <u>Brandon Marsh Nature Reserve</u>: Brandon Marsh Volunteer Conservation Team have been involved in the exclusion of mammalian predators (i.e. mink control) in recent years but have never been involved in legal corvid control although carrion crows are probably the main predator of lapwing eggs and young since mink have reduced substantially, with no records since 2014 (pers.comm. James Rushworth, 2015)
 - 2015: 6/7pairs of lapwing nested, with 4 pairs hatching young but all were predated before fledging; it is likely that the predators were mainly carrion crows but foxes and gulls could also have been responsible.
 - 2016; only 4 pairs nested with 3 pairs thought to have hatched young; again most young were predated but at least one young fledged successfully; one of the pairs nested in a quieter part of the reserve where fledging may have been successful

6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	Ву		
PLEASE CONSULT THE 'GENERIC SPECIES' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL SPECIES PLANS					
Site / Species Safeguard & Management					
SM1. Increase populations at the key monitoring sites: Brandon Marsh, Middle Tame Valley gravel pits(including Dosthill - Ladywalk) and Salford Priors gravel pits (where there are known to be more than 10 pairs, the minimum required for effective	BMVCT	NE RSPB WCC BTO WWT	2015		

ACTION	Lead	Partners	Ву	
PLEASE CONSULT THE 'GENERIC SPECIES' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL SPECIES PLANS				
measurable breeding programme) through a combination of habitat creation/improvement and productivity monitoring.				
SM2. Ensure best use of agri-environment schemes in wet grassland management in conjunction with appropriate capital works to manage water levels. Ensure targeted use of fallow plots in appropriate locations.	NE	LOs WWT	ongoing	
SM3. Increase the area of wet grassland for waders.	CSG	WMBC WWT RSPB HBA LAs	2015- 2026	
Advisory				
A1. Actively promote the take-up of agri environment schemes for sensitive farming options that will benefit lapwings, e.g. spring sown crops, wet grassland, lapwing plots.	NE	WWT RSPB LOs	ongoing	
Research & Monitoring				
RM1. Maintain effective monitoring of range and population by the Breeding Bird Survey.	вто	RSPB WMBC SRNBG	ongoing	
RM2. Monitor the existing 3 key sites and any additional sites annually, recording chick survival rates.	WWT	LOs	2020	
RM3. Assess feasibility of exclusion of mammalian predators, where productivity averages <0.6 fledged per pair. If corvids are identified as the main predator, initiate legal corvid control.	BMVCT	LOs	2015	
Communication & Publicity				
CP1. Communicate information re the needs of lapwing, with examples of best practice, to land managers.	RSPB	BTO NE WCC WWT LAs MOs	2020	

Abbreviations:
BMCT – Brandon Marsh Voluntary Conservation Team,
BTO – British Trust for Ornithology, CSG – LBAP Core Steering

Group, HBA
- Habitat Biodiversity Audit,
LAs – Local Authorities,
MOs – Mineral Operators,
NE – Natural England,
RSPB – Royal Society

for the Protection of Birds,
SRNBG – Sun Rising Natural Burial Ground,
WCC– Warwickshire County Council,
WMBC - West Midland Bird

Club,
WWT – Warwickshire Wildlife Trust.
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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. Progress with this plan up to 2016 can be seen at <u>www.warwickshirewildlifetrust.org.uk/LBAP</u>

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Ausden, M., Bolton, M., Butcher, N., Hoccom, D., Smart, J., & Williams, G. (2009) Predation of breeding waders on lowland wet grassland – is it a problem? *British Wildlife*, Oct 2009: 29-38.

Sharpe, F., Clark, J. & Leech, D. (2008). Does variation in demographic parameters account for regional variation in Northern Lapwing *Vanellus vanellus* population declines across Great Britain? Bird Study 55: 247–256.

Lawton, J.H. (2010) <u>Making Space for Nature</u>: a review of England's wildlife sites and ecological network. Report to Defra, advocating a landscape-scale approach guided by four key principles, summarised as '*more, bigger, better and joined*'.

Defra (2011) <u>Biodiversity 2020</u>: A strategy for England's wildlife and ecosystem services.

Archer, R. (2013) Farewell to the silver meadows? The story of breeding waders on the Somerset Levels. British Wildlife, vol.25, no.2, pp77-84.

BTO (2013) <u>Bird Atlas 2007-11</u>: 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.

RSPB, BTO & Wildlife & Wetland Trust (2014) The State of the UK's birds - the theme is migrants, a group showing some of the most dramatic population changes in the last few decades.

BTO (2014) The latest <u>Bird Trends</u> report, bringing together the latest BTO survey data for 120 breeding bird species across Britain & Ireland, shows that it is bad news for backyard biodiversity. Long-term population trends for each species are presented by country and by habitat.

RSPB (2015) <u>Birds of Conservation Concern 4</u> : the population status of birds in the United Kingdom, Channel Islands and the Isle of Man.

Smith, M.C. (2016) Updated analysis of Local Biodiversity Action Plan Bird Species, 2013-14.

RSPB (2016) <u>State of Nature</u> – a stocktake of all our native wildlife by over 50 wildlife organisations.

Natural England (2016) <u>Conservation Strategy for the 21st Century.</u> Sets out how NE will help deliver DEFRA's ambitions for the environment to reverse biodiversity loss, sustain distinctive landscapes and enhance engagement with nature.

9. FURTHER INFORMATION

Habitat Biodiversity Audit (HBA) for Warwickshire, Coventry & Solihull – mapping data set and associated information. Phase 1 (JNCC) 1996-2002 and Phase 2 (Local Wildlife Sites) ongoing.

RSPB <u>Management Guide to Birds of Lowland Farmland</u>' (2005) and <u>Farm Wildlife</u> <u>Handbook</u> (2007). Available online or tel. 01234 263616.

RSPB (2008): The <u>Bird Conservation Targeting Project</u> collates all breeding season records of lapwing from the RSPB, BTO and local bird groups, and makes the information available in order to target agri-environment resources as well as informing individual farm management plans with advice on <u>re-wetting grassland</u>.

10. CONTACT

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