NORFOLK BIODIVERSITY ACTION PLAN

***Charadrius hiaticula* –Common Ringed Plover**

Ref:	L/S4	Local Species Action Plan XX
Plan Author:	RSPB (Anne Casey)	
Plan Co-ordinator:	Coastal BAP Topic Group	
Plan Leaders:	RSPB / NE	
Date: 30 April 2013	**Stage:** FINAL	
Plan Duration:	2013-2018	

The ringed plover is a small, dumpy, short-legged wading bird. It is brownish grey above and whitish below. It has an orange bill, tipped with black, orange legs and a black-and-white pattern on its head and breast. In flight it shows a broad white wing-stripe. It breeds on beaches around the coast, but has also bred inland in sand and gravel pits and former industrial sites. Many UK birds live here all year round, but birds from Europe winter in Britain and birds from Greenland and Canada pass through on migration.

The Ringed Plover is almost entirely a coastal species with a wide distribution from the east coast of the Baffin Island Northern Canada to Greenland across the Russian tundra to the north of the Bering Sea at Chukotka. Distribution also extends downward to the temperate coasts of north-western Europe and some inland areas such as Iceland, Northern & central Scandinavia, Britain and Ireland. Britain supports the most southerly edge of world breeding range with the exception of a few numbers of pairs in the North-West of France and supports the *Charadrius hiaticula* population (JNCC, 2004).

In summer invertebrates are the main diet and in the winter primarily marine worms, crustaceans and molluscs

Nests are a small scrape in the open or in short vegetation. Three or four eggs are incubated by both sexes for around 24 days. There are 3 to 4 nesting attempts per year. (Holden and Cleeves, 2011)

CURRENT STATUS

In Europe, it is included in the Species of European Conservation Concern (SPEC) list, classified as Non Spec (E) - Concentrated in Europe but with a Favourable Conservation Status. Ringed plover is also listed on Appendix 2 of the Bonn Convention, and Appendix 2 of the Bern Convention.

The species is listed on the IUCN Red List as currently of Least Concern

National Status

Under the Birds of Conservation Concern listing (Eaton et al 2009) the ringed plover has an amber listing: moderate decline, 25% to 50% of UK breeding population over 25 years, species level and race *hiaticula,* and at least 20% of European (East Atlantic Flyway) non-breeding population in the

UK.

BTO lists states 8,540 pairs in 1984 (Prater 1989: APEP06), and 5,438 (5,257-5,622) pairs in 2007 (Conway et al. 2008) for summer, 34,000 individuals for winter 2004-2009 (Musgrove, 2011) and 30,000 passage individuals.

The national breeding population is not monitored annually, but a BTO survey in 1984 showed increases throughout the UK since the previous survey in 1973-74 (Prater 1989). The 1984 survey revealed that over 25% of the UK population nested on the Western Isles, especially on the machair (Jackson *et al.* 2004).

Surveys in England and Wales revealed an increase of 12% in breeding birds in wet meadows between 1982 and 2002 (Wilson *et al.* 2005).

The BTO's repeat national survey in 2007 found an overall decrease in UK population of around 37% since 1984, with the greatest decreases in inland areas (Burton & Conway 2008, Conway *et al.* 2008, Conway & Burton 2009). Wintering numbers have been in decline since the late 1980s (Holt *et al.* 2011). The marked increase in nest failures at the egg stage has earned Ringed Plover a place on the NRS concern list (Leech & Barimore 2008).

Ringed Plovers have a wide breeding distribution around the coast of Britain and Ireland, breeding mainly on coastal sand, gravel and shingle beaches, upper saltmarshes and artificial habitats such as the shores of gravel pits and reservoirs. In England, East Anglia's extensive sandy and shingle beaches between the Thames and the Humber is an important stronghold for the species.

Ringed Plovers that choose beaches for nesting are especially vulnerable to disturbance and in 1984 were already largely confined in some regions to wardened reserves (Prater 1989). Human usage of beach areas severely restricts the availability of this habitat to nesting plovers (Liley & Sutherland 2007).

Norfolk Status

- There are 19 monitored sites in Norfolk where ringed plover has bred in the last twenty years: (Fig. 1 and Table 1). There are likely to be breeding birds elsewhere on the Norfolk coast but lack of monitoring means it is not possible to be accurate on these figures.

- Coastal monitoring has confirmed breeding at 15 of these sites (Table 1) in the last five years, with breeding unrecorded at the other four traditional breeding sites.

- In 1993, 297 breeding pairs were recorded along monitored sections of the Norfolk coast. However, numbers have fluctuated between 124 and 211 breeding pairs (Table 1). There is not a count on every site each year so annual totals may not be accurate.

- This is 4 percent of the UK ringed plover breeding population.

- Some Norfolk sites have exhibited good ringed plover productivity in recent years. Examples include Scolt Head Island, Gore Point and Blakeney Point (Table 1). Where pairs are successful these support the wider population where disturbance, predation, and tidal flooding result in breeding failure.

Figure 1. Monitored sites with Ringed Plover in Norfolk

2. CURRENT FACTORS INFLUENCING BREEDING SUCCESS AND SURVIVAL

- **Disturbance:** Ringed plover occupancy is significantly reduced in areas of high disturbance. In recent years, the East Anglian colonies have been affected significantly by a range of recreational activities, including beach users and dog walkers. As access to more remote sites and coastal land has improved over the past ten years (passing of the CRoW Act 2000) much concern has grown over the impact of increased human disturbance on ground nesting birds, including breeding ringed plover populations. Disturbance and predation may be linked as there may be increased opportunities for predators when adult birds are disturbed by people or dogs.

- **Predation:** A large number of predators prey on ringed plover, of which, red fox *Vulpes vulpes*, common kestrel *Falco tinnunculus* and sparrowhawk *Accipiter nisus* are the main species. In addition, hedgehogs, gulls and mustelids have also been recorded predating ringed plover nests and chicks. Many of Norfolk's ringed plover pairs have experienced poor productivity or failed entirely due to high predation levels.

- **The impact of coastal development:** The construction, maintenance and running of various coastal infrastructure, notably ports and wind farms, can impact on breeding species through increased disturbance (people, traffic, noise and light) and reduced prey availability. These effects could reduce the breeding density, breeding productivity, or cause the birds to relocate elsewhere.

- **Sea-level rise/coastal squeeze:** Ringed plover nests are facing a greater risk of being washed out due to rising sea-levels, and a reduction in size of breeding beaches due to beach scouring and dune encroachment. This issue may become worse in the coming years if shoreline management policies do not allow foreshore and beaches to adapt and be resilient to climate change.

- **More frequent storm events:** Increased storm events in the future could act to reduce habitat availability. Conversely more shingle ridges could be formed providing additional habitat.

- **Increased coastal access:** The government is planning to designate a footpath, with spreading room, around the coastline of England. Unless planned for and managed, this could result in increased disturbance to breeding ringed plover around the Norfolk Coast, especially unprotected nests with no wardening.

3. CURRENT ACTION IN NORFOLK

- Site fencing on some reserves during breeding season
- Some pairs nest within fencing erected to protect little tern colonies.
- Where nests are outside of fenced areas, nest cages are used on some sites. These are typically in areas close to areas managed by conservation organisations.
- Site monitoring is carried out at specific locations to record breeding activity annually.
- Some PhD research was undertaken in the late 1990s on ringed plover between Snettisham and Heacham.

4. ACTION PLAN OBJECTIVES AND TARGETS

National
No national objectives or targets

Norfolk objectives

- Maintain number of pairs in Norfolk, as a minimum, at 2012 levels.
- Maintain range of breeding pairs in Norfolk at existing sites (see Figure 1)
- Increase Norfolk breeding population and range, from 2012 levels, over the life of the plan.

5. Ringed plover – Norfolk Action Pan

	NORFOLK ACTION (*High priority actions in bold*)	LEAD PARTNER(S)[1]	PARTNERS	ACHIEVED BY
5.1.	**Policy and Legislation**			
5.1.1	Comment on all development strategies, plans and projects with a potential impact on ringed plover breeding sites, to ensure that the important sites identified in Figure 1 are protected both during and outside the breeding season;	**NE**	**NN/KL/RSPB/ NT/NWT**	**ongoing**
5.1.2	Provide input to future local and regional policies regarding access to the countryside, to ensure that these do not conflict with ringed plover conservation.	**NE**	**NN/KL/RSPB/ NT/NWT**	**ongoing**
5.2	**Site Safeguard and Management**			
5.2.1	Implement access management (including exclusion zones) at coastal locations, as	**LTWG**	**NCP**	**2013**

[1] Lead partner to take on responsibility to coordinate and facilitate delivery of an action

	NORFOLK ACTION (*High priority actions in bold*)	LEAD PARTNER(S)[1]	PARTNERS	ACHIEVED BY
	appropriate, throughout the breeding season.			**onwards**
5.2.2	Evaluate the effectiveness and public acceptance of access management at all sites on an annual basis, and implement improvements as needed.	**LTWG**	**NCP, landowners, Local authorities**	**2013 onwards**
5.2.3	Continue to implement predator management at colonies where this is currently undertaken for Little Tern management.	**Landowner/ site manager**	**RSPB/NE/NT/NWT.**	**ongoing**
5.2.4	Extend predator management to other sites as appropriate and where agreed with landowner	**Landowner/ site manager**	**RSPB/NE/NT/NWT**	**2014**
5.2.5	In consultation with site managers determine what additional management measures may be required to provide suitable habitat for nesting.	**NE**	**RSPB/NT/NWT**	**2015**
5.3	**Species Management and Protection**			
5.3.1	Continue to include protection for Ringed Plover, if present, where Little Tern colonies are being protected.	**LTWG**	**NT/NWT/NN/KL**	**2013 onwards**
5.3.2	Extend protection of nests to other sites as appropriate. This may include fencing of individual nests or nest cages if deemed safe to use.	**LTWG**	**NT/NWT/NN/KL**	**2015**
5.3.3	Determine what additional resource is required to undertake protection.	**LTWG**	**NT/NWT/NN/KL**	**2014**
5.3.4	In consultation with site managers determine what additional management measures may be required to reduce nest failure	**LTWG**	**NT/NWT/NN/KL**	**2016**
5.4	**Research and Monitoring**			
5.4.1	Continue annual monitoring, with a consistent method and over the whole range, of current Norfolk breeding sites to improve understanding of long-term population trends and current numbers of breeding birds.	**NE/RSPB/NWT/NT**		**ongoing**
5.4.2	Undertake increased monitoring to record additional breeding pairs along the Norfolk coast and, if appropriate, inland.	**LTWG**		**2015**
5.4.3	Collate and analyse results of previous research. Research what additional measures are required to reduce nest failure and research how to measure baseline productivity.	**LTWG**		**2017**
5.4.4	Review understanding of chick survival and decline in site populations.	**LTWG**		**2016**

	NORFOLK ACTION (*High priority actions in bold*)	LEAD PARTNER(S)[1]	PARTNERS	ACHIEVED BY
5.4.5	Improve understanding of predators and predation.	**LTWG**		**2018**
5.4.6	Enter information on an annual basis about the implementation of the Ringed Plover Action Plan onto the Biodiversity Action Reporting System.	**LTWG**		**2013 onwards**
5.4.7	Provide NBIS with annual data from all Norfolk sites. Data to be received by December of each year.	**LTWG**		**ongoing**
5.4.8	Summarise and share information on site management and research.	**LTWG**		**ongoing**
5.5	**Communications and Publicity**			
5.5.1	Include messages about RP in any talks given to the public about Little Terns.	**All**		**2014**
5.5.2	Develop coordinated messages and use a centralised website, for the whole of the Norfolk Coast, to focus on the public visiting sites with ringed plover to encourage local support, ensure raised awareness and sensitive use of the sites.	**LTWG**		**2014**
5.6	**Links with other Action Plans**			
5.6.1	Little Tern Species Action Plan	**Coastal BAP topic group**		**2013 ongoing**
5.6.2	Habitat Action Plans: This plan should be considered in conjunction with the action plans for Coastal Dunes and Vegetated Shingle.	**Coastal BAP topic group**		**2013 ongoing**

KL Kings Lynn and West Norfolk Borough Council
NCP Norfolk Coast Partnership
LTWG Little Tern Working Group
NE Natural England
NN North Norfolk District Council
NT National Trust
NWT Norfolk Wildlife Trust
RSPB Royal Society for the Protection of Birds

MANAGEMENT GUIDANCE

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

- **Habitat:** The birds are found on wide sandy or shingle tidal beaches with access to resting or nesting places above the high water mark. Ringed plover likes terrain with wet or moist surfaces but spends little time even in shallow water (Cramp, 1985). The best nesting sites in the open or in short vegetation but never far from the water. Once chicks have hatched they have a high degree of independent activity and leave the nest shortly thereafter. They are brooded by the parents whilst small. The chicks are self feeding and become independent after fledging at about 24 days.

- **Predation management**: Erect electric fences around nests to limit red fox access. Cage nests if avian predators are present. Patrol nest areas, particularly at night, to identify key predators.

- **Access management:** Ensure that nesting sites are roped off and visitors have clear guidance on avoiding areas and the reasons for this. Consider seasonal exclusion zones, particularly in areas frequented by dog walkers.

For further information please contact the organisations listed below.

The RSPB
Eastern England Regional Office
65 Thorpe Road
Norwich
NR1 1UD
Tel: 01603 660066
Website: **www.rspb.org.uk**.

National Trust
Norfolk Coast Office,
Friary Farm
Cley Road
Blakeney, NR25 7NW
Tel: 01263740241
Website: **www.nationaltrust.org.uk**

Natural England
Scolt Head National Nature Reserve
Scolt Head Boat Shed
Harbour Way
Brancaster Staithe, PE31 8BW
Tel: 07899 901551
Website: **www.naturalengland.org.uk**

Norfolk Coast Partnership
South Wing , Fakenham Fire Station
Norwich Road
Fakenham
Norfolk, NR21 8BB
Telephone: 01328 850530
Website: **www.norfolkcoastaonb.org.uk**

Norfolk Biodiversity Partnership
Norfolk County Council
Martineau Lane
Norwich
NR1 2DH
Tel: 01603 222112
Website: **www.norfolkbiodiversity.org**

Norfolk Wildlife Trust
Bewick House
22 Thorpe Road
Norwich
NR1 1RY
Tel: 01603 625540
Website: **www.norfolkwildlifetrust.org.uk**

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Leech, D. & Barimore, C. (2008) Is avian breeding success weathering the storms? *BTO News* 279: 19–20.

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Wilson, A.M., Vickery, J.A., Brown, A., Langston, R.H.W., Smallshire, D., Wotton, S. & Vanhinsbergh, D. (2005) Changes in the numbers of breeding waders on lowland wet grasslands in England and Wales between 1982 and 2002. *Bird Study* 52: 55–69.

	RSPB Snettisham	RSPB Snetts to Heacham	Gore Pt - Thornham channel	Thornham Channel-Titchwell Ch	RSPB Titchwell	Titchwell Ch Branc GC	NT Brancaster	NE Scolt Head Island	Burnham Norton Grazing	Holkham Grazing	Gun Hill Holkham Bay	Holkham Bay Wells	Wells East Hills & Bob Hall's Sands & Outer Harb Bank	Stiffkey Binks	NT Stiffkey/ Morston Meals	NT Blakeney Point	NWT Cley	Eccles to North Denes	Winterton	Mean for sites	Total for all sites
1993			32	19		**3**	16	74	0	0	25	15	9	6	22	60	16			16	297
1994			48		19	3		17	1	0	22	10	10	8		38				9	176
1995			45		26	3	12	25	0	2	19	9	7	5		47				11	200
1996			30		0	3		30	0	3	17	6	7	7		75				9	178
1997			10		4	3	7	39	0	2	13	6	5	6		50				8	145
1998			22		14	3	16	47	0	3	10	8	7	10		45				10	185
1999			17		16	3	14	55	0	3	13	9	9	6		20	20			10	185
2000			16			3	8	61	0	1	15	7	16	6		18	23			9	174
2001			25			3		59	0	1	11	8	9	6		15	21			8	158
2002			18	19	13	2	9	48	0	0	12	4	10	4	10	18	13			9	180
2003			18	9	14	3	2	54	0	1	10	5	3	1	11	18	6			8	155
2004	18		16	8	8	2	6	53	0	1	9	6	9	4	11	15	17			10	183
2005	20		13	9	5		5	57	0	1	11	5	5	4		15				8	150
2006			16	13	9		5	64	0	0	9	1	5	2		12	7			8	143
2007			34	7	13		10	79	0	0	10	1	10	3	3	14	21			11	205
2008	17		20	7	7			70	0	0	10	1	11	1		13	5			9	162
2009	15		21		7			70	0	0	9	1	7	2	2	13	7			8	154
2010	12		17	8	5			75	0	0	11	1	7	1		15	4			8	156
2011	16	14	15		2		3	59	0	0	11	1	6	2	1	17	1			8	148
2012	15	23	27	6		1	4	62	0	0	11	1	6	1	2	15	4	18	6	11	202

Table 1. Ringed Plover breeding sites and numbers. (Information from Natural England, National Trust, Norfolk Wildlife Trust, RSPB)