



EUROPEAN UNION MANAGEMENT PLAN

2009-2011



Redshank

Tringa totanus

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Executive summary

The Redshank *Tringa totanus* is still a common and widespread breeder across much of northern Europe and the EU. Nevertheless the species underwent a moderate decline in numbers during the last decades in much of its European range and has been identified as having unfavourable conservation status within Europe, where its global population is also concentrated (more than 50% of the global population breeds in Europe). It is thus a Category 2 Species of European Conservation Concern (SPEC) (BirdLife International 2004a). It is classified as “Declining” due to its moderate continuing decline both in Europe as a whole and in the EU25, which holds 23-36 % of the European breeding population (BirdLife International 2004a, 2004b).

Between 100,000 and 140,000 pairs of Redshank breed in the EU, with particularly large numbers in the UK, the Netherlands, Sweden, Germany and Denmark (BirdLife International 2004a). With the exception of Denmark, these populations have been declining since the 1970s (in some countries for much longer). Also the large populations in Belarus and Ukraine are in decline. Among EU Member States only the relatively small populations in Belgium, Italy and Slovenia appear to be increasing in size.

Degradation of breeding habitat quality and habitat loss are considered to be the major causes of the decline in Redshank population in the EU. The detrimental factors are well known and include drainage, water table regression, loss of winter flooding, increases in stock density and earlier commencement of grazing.

The Redshank is listed on Annex II/2 of the EU Birds Directive as a species for which hunting can be permitted in Denmark, Italy, the UK and France. Currently, the Redshank is only hunted in France. The size of the annual bag is estimated to be 5 - 8,000 birds but the real present figure is unknown. There remains, therefore, a very urgent need to effectively quantify the extent of the current hunting bag in France.

This Management Plan presents a framework for the restoration of Redshank populations in EU and its habitats. It is aimed at all Member States with breeding, staging or wintering populations. It is the responsibility of the relevant authorities of each Member State to decide how to implement the management prescriptions of this plan. The plan should be followed by new versions with revised objectives that take into account the results achieved during the first phase.

The long-term objective (10 years) of the plan is to restore the Redshank to a favourable conservation status in the EU. This plan aims to address the most urgent issues to halt the decline of the Redshank population in the EU but at the same time restricts the activities to be carried out to a realistic level. Thus, the short-term objectives outlined in the plan will focus on (1) improved management and protection of breeding sites across the EU, (2) improved management and protection of staging and wintering sites and (3) collection of better data on the impact of hunting and more robust data on population dynamics across the EU. It is the responsibility of the relevant authorities of each Member State to decide how to implement the management prescriptions of this plan.

To achieve these short-term objectives the plan specifies the following results to be reached during the initial three-year period:

1. An estimate of the annual number of the Redshank shot is available from all Member States where hunting is permitted (France).

2. Management Plans are prepared and implementation initiated for sites of importance for breeding Redshank to ensure no further loss of Redshank numbers and distribution and to increase reproductive success and colonising ability (all Member States with breeding Redshank). Measures are taken to minimize the predation as appropriate.
3. All staging and wintering areas of international importance for Redshank within the EU are identified and designated SPAs. In each of these Member States a minimum of two of the SPAs include hunting and disturbance-free areas.
4. Management Plans are prepared and implementation initiated for designated sites (SPAs) of importance for staging and wintering Redshank.
5. Conservation and wise-use is promoted in wetlands supporting staging and wintering Redshank (other than SPAs) to maintain range and to ensure no net loss of Redshank numbers and distribution.
6. Up to date estimates of the breeding populations from all important sites in the EU are available.
7. Annual mid-winter censuses of all areas of international importance for wintering Redshank within the EU are carried out as part of the International Waterfowl Census with the support of the authorities responsible for the implementation of the provisions of the Birds Directive in each Member State.
8. National ringing and colour-marking activities on breeding, staging and wintering areas, and analyses of existing ringing data to identify population units and provide annual estimates of Redshank mortality, are supported by national authorities in all Member States with important breeding, staging or wintering numbers of Redshank.

0. Introduction

The Redshank *Tringa totanus* is listed on Annex II/2 of the EU Birds Directive as a species for which hunting can be permitted in Denmark, Italy, the UK and France. Currently, the Redshank is only hunted in France.

The Redshank has been identified as having unfavourable conservation status within Europe, where its global population is also concentrated (50 - 74% of the global population breeds in Europe). It is thus a Category 2 Species of European Conservation Concern (SPEC) (BirdLife International 2004a). It is classified as “Declining” due to its moderate continuing decline both in Europe as a whole and in EU25, which holds 23-36% of the European breeding population (BirdLife International 2004a, 2004b). According to Delany *et al.* (2007), there are differences between populations: the biggest population *totanus* (Central and Eastern Europe) is decreasing whereas the *robusta* population is stable or possibly increasing.

It is therefore important to assess the current conservation status of this species and available research information in order to appraise the current effectiveness of conservation actions, identify reasons for the observed trends and recommend options for future management to reverse the downward trend in numbers. Hence, this plan will focus upon the full implementation of the provisions of the Birds Directive as these apply for this species.

The overall format of this action plan follows the Single Species Action Plan format developed by BirdLife International for the UNEP/AEWA Secretariat. However, some parts of the plan have been modified to make it meet the specific need of a plan that covers a relatively widespread species in the EU.

Ideally, the management prescriptions of this plan should cover the entire geographical range of Redshank populations concerned. However, as the implementation of the plan is part of the fulfilment of the EU Birds Directive the geographical scope of the plan is at this stage limited to the 25 EU Member States.

The first chapter of the Management Plan presents key information on Redshank populations. The second chapter provides more detailed information on the populations that occur in Europe with the focus on the 25 EU Member States. Chapter 3 analyses the threats that are believed to be the causes of the decline, while chapter 4 lists the policies and legislation relevant for Redshank in Europe.

Chapter 5 summarises the status of the Redshank in the EU and sets out long-term and short-term objectives for its future management.

Chapter 6 describes the actions to be taken in the EU for the period 2009-2011. These activities cover all 25 Member States.

It is the intention that this management plan shall be revised after three years.

1. Biological Assessment

<p>General information</p>	<p>The Redshank has a Palaearctic breeding distribution in the temperate and steppe zones from Iceland through continental Europe and eastern Russia to eastern Siberia, Mongolia and China. Over half the breeding range is within Europe. The species' wintering areas are predominantly coastal and include the North Sea and Atlantic coasts of Europe, the Mediterranean coastline, west Africa, the Middle East and southern Asia.</p> <p>The Redshank breeds in a wide variety of wetland habitats including lowland wet meadows, flood-lands, bogs and marshes, coastal salt-marshes, as well as upland marshes, and drier steppe areas near moist feeding grounds and saline lakes.</p> <p>Between 100,000 and 140,000 pairs breed in the EU, with particularly large numbers in the UK, the Netherlands, Sweden, Germany and Denmark. With the exception of Denmark, these populations have been declining since the 1970s (in some countries for much longer). Also the large populations in Belarus and Ukraine are in decline. Among EU Member States only the relatively small populations in Belgium, Italy and Slovenia appear to be increasing in size. However, the three largest populations in Europe - in Russia, Norway and Iceland - are stable.</p> <p>Between 191,000 and 375,000 Redshank winter in the EU. While the winter population in NW Europe was stable between 1989 and 2002, numbers increased slightly in the west Mediterranean during the same period.</p>
<p>Taxonomy</p>	<p>Several sub-species are recognised, three of which occur in Europe: the nominate form <i>T. t. totanus</i> in most of Europe, <i>T. t. britannica</i> which breeds in Britain and Ireland and <i>T. t. robusta</i> which breeds in Iceland and the Faeroes. The taxonomy of the Common Redshank has been the subject of much controversy.</p>
<p>Populations</p>	<p>Four populations occur in Europe (Stroud <i>et al.</i> 2004):</p> <p>(i) <u>The western population of <i>Tringa totanus</i></u>: breeding in Fennoscandia, the Baltic countries to Poland and west-central Europe and wintering on the east Atlantic coast (250,500 birds).</p> <p>(ii) <u>The eastern population of <i>Tringa totanus</i></u>: breeding across central and eastern Europe and wintering in the East Mediterranean, Asia Minor, and probably in sub-Saharan Africa (223,000 - 464,000 birds).</p> <p>(iii) <u>The population of <i>T. t. britannica</i></u> in Britain and Ireland (124,000 - 127,000 birds) and wintering there and in north-west France (occasionally in Portugal).</p> <p>(iv) <u>The population of <i>T. t. robusta</i></u> which consists principally of the large breeding population in Iceland with a very small outlying population on the Faeroes (64,500 birds).</p>

<p>Population developments</p>	<p>Breeding populations</p> <p>The Redshank is still a common and widespread breeder across much of northern Europe and the EU. Nevertheless it underwent a moderate decline during the last decades in much of its European range.</p> <p><u>The nominate population</u> has shown long-term declines in many parts of central and north-west Europe, since at least the 19th century (Glutz von Blotzheim <i>et al.</i> 1977, Cramp & Simmons 1983). Between 1970 and 2000, up to <i>c.</i> 40% of the breeding population (for which trends are known) show declines, including the large populations in the Netherlands, Sweden and Germany (Tucker & Heath 1994, BirdLife International 2004a).</p> <p>For instance, numbers in the Netherlands during 1979-1987 appear to be half of those in 1958-1962 (Osieck and Hustings 1994) and are down at 20,000-25,000 pairs in 1998-2000 (BirdLife International 2004a). In Denmark a 24% reduction in breeding numbers was recorded between 1978-81 and 1993-96 (Grell 1998) but during the last decade numbers have remained more or less stable (BirdLife International 2004a).</p> <p><u>The range of the <i>britannica</i> subspecies</u> declined by 12% in Britain and 15% in Ireland between 1968-1972 and 1989-1991 (Gibbons <i>et al.</i> 1993), with declines particularly associated with loss and modification of inland lowland wet grasslands. Raven & Noble 2006 reported a non-significant population decline of 12% between 1994 and 2005 based on data from the UK Breeding Bird Survey. Other evidence suggests widespread declines of the species in both the British uplands and lowlands (Stroud <i>et al.</i> 2004). Comparing numbers of breeding Redshank in lowland wet grassland sites in England and Wales between 1982 and 2002, Wilson <i>et al.</i> 2005 found a significant decline of 29%. When comparing summer population in marginal upland areas of Britain between 1968-1980 and 2000, Henderson <i>et al.</i> 2004 observed that Redshank were found on less than half of the number of plots on which they were originally recorded.</p> <p>Little is known about the development of the large Icelandic and Faeroese population of <i>T. t. robusta</i> (estimated at 50,000-140,000 pairs in BirdLife International 2004a, but at 64,500 birds by Stroud <i>et al.</i> 2004) but it is generally considered stable in numbers, although there are few quantitative data to support this (BirdLife International 2004a, Delany <i>et al.</i> 2007).</p> <p>Wintering populations</p> <p>Mid-winter counts from January 1989 to January 2002 suggest the <u>north-west European</u> population of Redshank has been close to stable at around 120,000 birds observed, while the population in west Mediterranean has increased slightly during the same period to <i>c.</i> 12,000 (Wetlands International 2005). The trend for the population wintering in the east Mediterranean countries (<i>c.</i> 8,000) is also a slight increase but with large fluctuations between years, while the winter population in the Baltic/Nordic counties (<i>c.</i> 500 in 2002) show a declining trend but again with large fluctuations (Wetlands International 2005).</p>
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<p>Distribution throughout the annual cycle</p>	<p>The Redshank populations occurring in Europe are migratory, except in Britain and Ireland, where birds may be more or less resident. Generally, the smallest birds (from northern Fennoscandia) winter furthest south (west Africa), whilst the largest (from Iceland) winter on average furthest north (around the North Sea coasts). Intermediate-sized birds tend to show intermediate strategies, wintering in France, Iberia and the western Mediterranean (Cramp & Simmons 1983). There is considerable overlap in the wintering distributions of the populations, especially in Britain and Ireland.</p> <p><u>The Icelandic/Faeroese form <i>robusta</i></u> winters mainly in Britain and Ireland with small numbers also occurring in coastal habitats from southern Iceland and southern Norway and countries bordering the North Sea, occasionally south as far as Portugal (Smit & Piersma 1989, Stroud <i>et al.</i> 2004).</p> <p>As <u>British and Irish breeding birds (<i>britannica</i>)</u> are largely resident they mix with <i>robusta</i> in winter although some migrate to western France and occasionally Portugal.</p> <p><u>Fennoscandian and Baltic breeding birds (<i>totanus</i>)</u> are more migratory, and have been found wintering from the North Sea countries, through the western Mediterranean to west Africa. There is some evidence that birds wintering in Guinea-Bissau migrate though NW Africa and the Mediterranean to breeding areas further north and west than those wintering further north in Mauritania (Wymenga <i>et al.</i> 1990).</p> <p><u>Continental birds from north-west Europe</u> winter mostly around the Bay of Biscay, north-west Spain and Portugal, though some move as far south as Senegal. Western Russian birds are assumed to winter in the eastern Mediterranean, Red Sea and Arabian Gulf (Smit & Piersma 1989, Perennou <i>et al.</i> 1994).</p> <p>Most Redshank moult on, or near to, their wintering grounds. Complete wing moult for many birds occurs in the Wadden Sea in July-September (Boere 1976) A substantial number of summering birds (particularly first year individuals) moult on the Banc d'Arguin in Mauritania (van Dijk <i>et al.</i> 1990). However, some birds from Baltic and North Sea areas initiate moult during their progress from estuary to estuary along the Atlantic coast towards ultimate wintering areas (Cramp & Simmons 1983).</p> <p>Redshanks are generally highly site faithful in winter, although juveniles are more likely to disperse than adults (e.g. Buxton 1988). Return rates of 89% and 83% at sites in the UK were estimated over two successive summers, indicating high site-fidelity between winters (Burton 2000).</p>
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<p>Survival and productivity</p>	<p><u>Mortality</u></p> <p>There are no Europe-wide monitoring schemes to measure annual mortality of Redshank nor is there any mechanism to gather bag statistics on numbers killed annually. Several states support ringing schemes, which generate recoveries from which annual estimates could be created.</p> <p>There is relatively little published on annual survival rates of local breeding populations. Studies in Britain show that survival rates are similar for both sexes (72% of females and 75% of males surviving each year, Thompson & Hale 1993).</p> <p>Survival rates of first-year Redshank (between the first and second winters of life) averaged 43 % in a study in Scotland (where both <i>robusta</i> and <i>britannica</i> birds winter), while adult survival rate was 67% between the second and third winters of life compared to 74% for older birds (Insley <i>et al.</i> 1997).</p> <p>Annual survival for birds wintering in south Wales, UK, was estimated at 81-83% (Burton 2000). Redshank populations are susceptible to changes in annual survival, as the species is known to be sensitive to hard winters (e.g. Davidson & Evans 1982, Clark 2004). The estimated annual survival of adult Redshank from Cardiff Bay, south Wales, fell from 84.6% to 77.8% following displacement by habitat loss (Burton <i>et al.</i> 2006). In comparison, annual survival of adult Redshank at a neighbouring site stayed constant over the same period at 86% and estimates for adult Redshank at a control site increased from 73.0% to 93.2%.</p> <p><u>Reproduction</u></p> <p>There are no European-wide monitoring schemes to measure annual productivity of Redshank. It is known that approximately 50% of birds breed in their first-year (Thompson & Hale 1989). Breeding success varies between 86% at hatching and 50% to fledging (n=286 eggs in 72 clutches from Germany, Cramp & Simmons 1983), 58% at hatching and 0.83 young fledged per breeding pair in Lower Saxony (Bairlein & Bergner 1995), 19% of nests survived until hatching and only 13 % of chicks survived until fledging in Sweden (Ottvall <i>et al.</i> 2005) and in the UK, 28, 34 and 11% of nests survived on saltmarsh, inland and coastal grassland respectively (Smart 2005).</p> <p>Older, more experienced birds tended to pair with birds of similar experience; experienced females nested earlier and laid larger eggs resulting in bigger offspring (Thompson & Hale 1991). May associate with larids (e.g. in Finland, von Numers 1995), although Gull predation can be a problem (e.g. Thorup 1998).</p>
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Life history	Breeding:	Feeding:	Outside breeding season:
	<p>According to Snow & Perrins 1998: laying in the EU occurs from early-April while further north in Iceland, in late May. The single brood is found on the ground usually among vegetation and often in hollow in tussock.</p> <p>Clutch size is normally 4 (range 3-5), with means of 3.95 (n=379, Germany, Cramp & Simmons 1983) and 3.87±0.56 (Italy, Valle <i>et al.</i> 1996).</p> <p>The incubation takes 24 days.</p>	<p>According to Snow & Perrins 1998: large number of prey species recorded, but most typically feeds on limited range of items: crustaceans, molluscs and polychaete worms on estuaries, and earthworms and crane-fly larvae inland.</p> <p>Winter diet consists mainly of marine invertebrates harvested from mudflats, <i>Corophium</i>, <i>Hydrobia</i> and <i>Nereis</i> all being favoured food items (Lack 1986), although the species winters in lesser numbers in freshwater habitats also (Hale 1980).</p>	<p>According to Snow & Perrins 1998: mainly migratory, though some resident in maritime countries of western Europe. Populations in west Palearctic have broad intergradation zones.</p> <p>European migration mainly SW and SSW in autumn (reversed in spring) with important concentrations along coasts. Many also cross overland (overflying large areas), and passage probably along broad front.</p>

<p>Habitat requirements</p>	<p><i>Breeding/moulting</i></p> <p>Breeds in a wide variety of wetland habitats including lowland wet meadows, floodlands, bogs and marshes, coastal salt-marshes and saltpans (e.g. in Iberia), as well as upland marshes, and drier steppe areas near moist feeding grounds and saline lakes. In Iceland, breeds in agricultural areas in association with small wetlands and ditching drain.</p> <p>Highest densities encountered on saltmarshes (Glutz von Blotzheim <i>et al.</i> 1977), in Britain exceeding 100 pairs/ km on a small number of sites (Cadbury <i>et al.</i> 1987, Davidson <i>et al.</i> 1991). However, in meadows grazed and regularly mown at Tipperne, Denmark, densities of 75-500 pairs/ km can be maintained (Thorup 1998). Average densities in north Holland are: 7 pairs/ 100 ha on peaty wet meadows, 5 pairs/ 100 ha on other peat meadows, 5 pairs/100 ha on clay grasslands and 0.8 pairs/ 100 ha on arable (Ruitenbeek <i>et al.</i> 1990). Saltmarsh densities in the Netherlands are generally around 14-17 pairs/100 ha, but up to 73 pairs/100 ha have been recorded (Melter <i>et al.</i> 1997).</p> <p>Key requirements are high spring water tables with locally saturated soils, open landscapes with look-out posts, moderately tall and densely tussocky vegetation and adjacent wetlands, especially open shorelines (Tucker & Heath 1994, Thorup 1998). Can nest quasi-colonially in island situations, where dense vegetation is selected (e.g. in Italy, Valle <i>et al.</i> 1996 and Denmark, Thorup 1998). The species responds well to improvements to hydrological and grazing management, especially where regular mowing can be sustained, together with medium grazing densities and reduction in early season grazing (Thorup 1988, 1998). On grasslands in eastern England, breeding location and densities are closely associated with increasing abundance of wet features especially pools and linear wet features (Smart <i>et al.</i> 2006). Areas of taller vegetation influence nest site selection, although a mosaic of tall and short vegetation is preferred, and highly penetrable soils indicative of higher water tables are also important in determining nest location and success (Smart <i>et al.</i> 2006).</p> <p>On salt-marshes, breeding densities were found to be highest on sites where grazing pressure is of medium quality, lowest on heavily grazed sites (Allport <i>et al.</i> 1986, Cadbury <i>et al.</i> 1987). In the Wash in eastern England Norris <i>et al.</i> 1997 found the highest breeding densities in heavily grazed plots dominated by sea-couch grass community as this supported the most structurally diverse vegetation. In East Anglia in eastern England, Smart 2005 found that breeding densities of Redshank increased with increasing cover of sea purslane.</p> <p>There has been considerable debate about the influence on water table changes on the size of breeding populations of meadow birds in The Netherlands. Generally, there is a widely held belief that drainage and water-table regression (associated with intensification of dairy farming) has a detrimental effect on the number of breeding birds, although the mechanisms for this are not clear. In a detailed study on peatland soils in the Netherlands, there was no relationship between change in water table depth of individual fields and the densities of breeding Redshank at moderate levels of water table regression, as long as nests were actively protected (Guldmond <i>et al.</i> 1995). Hence, the effects of lowering the water table appear not to reduce the number of breeding pairs, but reduce breeding success.</p>
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<p>Habitat requirements</p>	<p>In response to lowering of the water table in such intensively managed grassland areas, nest protection schemes need to be implemented.</p> <p>In coastal grazing marshes in England, Milsom <i>et al.</i> 2002 found that during breeding Redshank preferred to feed in rills (relict saltmarsh drainage channels) and that settling densities were higher in marshes containing rills with many branches.</p> <p>In a Dutch study, hatching dates and mowing of intensively managed grasslands were correlated with spring temperature sums, hence contrary to current impressions; early mowing frequently coincided with the early appearance of broods (Kruk <i>et al.</i> 1996). However, the study showed that postponement of the current median mowing date by 1-2 weeks would increase clutch survival to the levels necessary for maintaining current population levels (Kruk <i>et al.</i> 1996). Similar findings have been reported elsewhere (Pfeifer & Brandl 1991).</p> <p>Mechanisms to enhance reproductive output in order to exceed known mortality rates through modifications to agricultural practice have been suggested by a number of authors (e.g. Bairlein & Bergner 1995).</p> <p><i>Winter</i></p> <p>Throughout much of western Europe, the species winters on the coast.</p> <p>In Britain and Ireland it predominantly occurs on estuarine coasts (Rehfishch <i>et al.</i> 2003a) a coastal species mainly frequently bare mud in estuaries, inlets and sheltered bays as well as rocky shores (Rehfishch <i>et al.</i> 2003b).</p> <p>Redshanks tend to feed higher up on the upper reaches of the inter-tidal areas than other waders, which make the species vulnerable to cold weather, since these are the most likely areas to freeze. There is evidence of age-specific feeding segregation from several studies (e.g. Cresswell 1994).</p> <p>The species is widely dispersed in winter, existing 36 sites in Britain supporting more than 1% of the estimated total population (Collier <i>et al.</i> 2005). In addition, Davidson <i>et al.</i> (1991) demonstrated that 18% of the East Atlantic flyway population of Redshanks was dispersed around 111 sites, each supporting less than 600 birds. Hence, the contribution of small numbers of birds occurring at large numbers of sites to the overall total is surprisingly large. By contrast, in France, the wintering population is very concentrated in some major coastal wetlands: 12 sites cover more than 80 % of birds counted in mid-January (Mahéo 1977-2006).</p> <p>Winter Redshank distributions are changing with warming winters brought about by climate change. In NW Europe their central distribution centroid has moved North West by 30 km between 1981 and 2000 (Maclean <i>et al.</i> in review). In Britain the distributions of Redshank are moving eastwards (Rehfishch <i>et al.</i> 2003). Declining wader numbers on the west coast of Britain as a result of changing distributions of Redshank and other waders are leading to some designated sites no longer holding some species features in nationally or internationally important numbers (Austin & Rehfishch 2005).</p>
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Table 1. Geographical distribution of Redshank *Tringa totanus* during the year (EU 25 only)

Breeding	Formerly breeding <i>(date of extinction)</i>	Migrating <i>(June - September & March - May)</i>	Non breeding visitor <i>(October - March)</i>
<ul style="list-style-type: none"> • Austria • Belgium • Czech Rep. • Denmark • Estonia • Finland • France • Germany • Greece • Hungary • Rep. Ireland • Italy • Latvia • Lithuania • Netherlands • Poland • Portugal • Slovakia • Slovenia • Spain • Sweden • UK 	-	<p>Principally all EU Member States but the following have areas of particular importance for staging Redshank during migration:</p> <ul style="list-style-type: none"> • Belgium • Cyprus • Denmark • France • Germany • Rep. Ireland • Italy • Netherlands • Portugal • Spain • UK 	<ul style="list-style-type: none"> • Cyprus • Denmark • Germany • Netherlands • Portugal • Rep. Ireland • Spain • UK

2. Available key knowledge

In a number of tables this chapter provides a summary of up-to-date knowledge on the biology, distribution and trends of the populations of Redshank that occur in the EU. It also gives information on the hunting status in the Member States, including those that became EU Member States in 2004.

Table 2. *European breeding population of Redshank Tringa totanus.*

Country	Breeding pairs	Quality	Year(s) of the estimate	Breeding Population trend	Baseline population (year)	Reference
Albania	30 - 90	2	1996 - 02	- 1		BirdLife International 2004a
Armenia	350 - 850	2	1998 - 02	?		BirdLife International 2004a
Austria	120 - 190	1	1998 - 02	- 1	1998	BirdLife International 2004a
Belarus	40,000 - 70,000	1	1997 - 00	- 1	-	BirdLife International 2004a
Belgium	413 - 456	1	2000 - 02	+ 1	1990	BirdLife International 2004a
Bulgaria	5 - 20	1	1995 - 02	- 2		BirdLife International 2004a
Croatia	6 - 10	1	2002	0		BirdLife International 2004a
Czech Rep.	25 - 40	1	2000	- 2	-	BirdLife International 2004a
Denmark	12,000 - 15,000	1	1999	F	1987	BirdLife International 2004a
Faeroe Islands (DK)	25	2		0		BirdLife International 2004a
Estonia	5,000 - 6,000	3	1998	- 2	-	BirdLife International 2004a
Finland	6,000 - 8,000	2	1998 - 2002	- 2	1992	BirdLife International 2004a
France	1,300 - 1,500	1	1998 - 2002	0	1989	BirdLife international 2004a Girard 2008
Germany	9,700 - 12,000	1	1995 - 1999	- 2	1990	BirdLife International 2004a
Greece	400 - 800	3	1995 - 2000	0		BirdLife International 2004a
Hungary	600 - 800	3	1990 - 1993	0	-	BirdLife International 2004a
Iceland	50,000 - 140,000	2	1999 - 2001	?	-	BirdLife International 2004a
Ireland	250 - 1,000	2	1988 - 1991	- 2	1989	BirdLife International 2004a
Italy	800 - 1,200	1	2003	+ 2	-	BirdLife International 2004a
Latvia	300 - 700	2	1990 - 2000	- 2	-	BirdLife International 2004a

Lithuania	600 - 800	2	1999 - 2001	- 2	-	BirdLife International 2004a
Macedonia	10 - 20	3	1990 - 2000	0		BirdLife International 2004a
Netherlands	20,000 - 25,000	1	1998 - 2000	- 1	-	BirdLife International 2004a
Norway	40,000 - 80,000	3	1990 - 2003	(0)	-	BirdLife International 2004a
Poland	2,000 - 2,500	1	1995 - 2000	0	-	BirdLife International 2004a
Portugal	10 - 50	3	2002	F		BirdLife International 2004a
Romania	800 - 1,200	3	1990 - 2002	0	-	BirdLife International 2004a
Russia	30,000 - 140,000	2	1990 - 2000	0	-	BirdLife International 2004a
Serbia & MN	360 - 470	1	1990 - 2002	0	-	BirdLife International 2004a
Slovakia	35 - 70	2	1980 - 1999	- 2	-	BirdLife International 2004a
Slovenia	5 - 15	2		+ 2		BirdLife International 2004a
Spain	650 - 800	3	2002	(-1)	-	Birdlife International 2004a, Hortas <i>et al.</i> 2004
Sweden	10,000 - 20,000	2	1999 - 2000	- 1	-	BirdLife International 2004a
Ukraine	14,000 - 23,000	2	1990 - 2000	- 1	-	BirdLife International 2004a
UK	31,400 - 44,400	1	2000 1985 - 99 (Baker <i>et al.</i> 2006)	- 2	-	BirdLife International 2004a; Baker <i>et al.</i> 2006
Totals	280,000 - 610,000					BirdLife International 2004a

Breeding population data quality:

1: reliable quantitative data, 2 incomplete quantitative data, 3 no quantitative data

Breeding population trend:

- 2 Large decrease, - 1 Small decrease, + 2 large increase, +1 small increase, 0 Stable, F Fluctuating.

Table 3. *Wintering population numbers of Redshank Tringa totanus in Europe.*

Country	Wintering population (individuals)	Quality	Year(s) of the estimate	Trend in numbers	Baseline population	Reference
Denmark	(500 - 1,500)	1	1997 - 1999	-	-	Wetlands Int. 2005 / Gilissen <i>et al.</i> 2002
Cyprus	50 - 200	1	2004 - 2005	-	-	Michael Miltiadou, BirdLife Cyprus
Greece	3,900 - 5,800	1	1997 - 1999	-	-	Wetlands Int./ Gilissen <i>et al.</i> 2002
Ireland	12,700 - 14,600	1	1997 - 1999	-	-	Wetlands Int./ Gilissen <i>et al.</i> 2002
France NWE	4,500 - ,6,800	1	-2000 - 2006	+1	-1993	Mahéo 2006
Netherlands	1,100 - 8,800	1	1997 - 1999	-	-	Wetlands Int./ Gilissen <i>et al.</i> 2002
Portugal	700 - 3,600	1	1997- 1999	-	-	Wetlands Int./ Gilissen <i>et al.</i> 2002
Italy	2,900 - 3,300	1	1997 - 1999	-	-	Wetlands Int./ Gilissen <i>et al.</i> 2002
Spain	2,100 - 3,200	1	1997 - 1999	-	-	Wetlands Int./ Gilissen <i>et al.</i> 2002
UK	125,800	1	1997 - 1999	-	-	Wetlands Int./ Gilissen <i>et al.</i> 2002
Totals	191,000 - 375,000¹		1997 - 1999			Wetlands Int./ Gilissen <i>et al.</i> 2002

Wintering population data quality:

1: reliable quantitative data, 2 incomplete quantitative data, 3 no quantitative data

Wintering population trend: + 2 large increase, + 1 small in crease, - 2 Large decrease, - 1 Small decrease, 0 Stable, F Fluctuating.

₂

¹ Total includes "other european countries" estimations not listed above, as no detail information was available.

**Figure 1. Wintering Redshank *Tringa totanus*
in North West Europe 1989-2002
(Wetlands International 2005)**

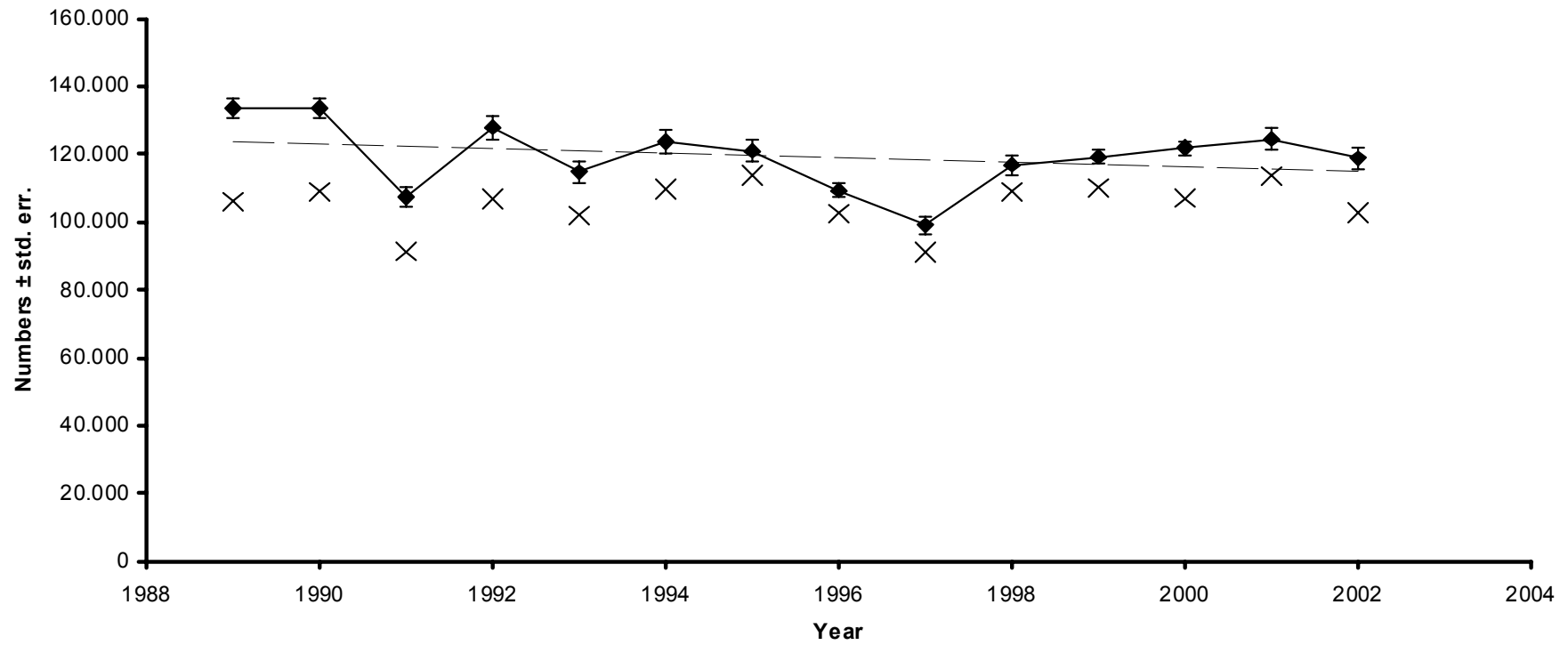
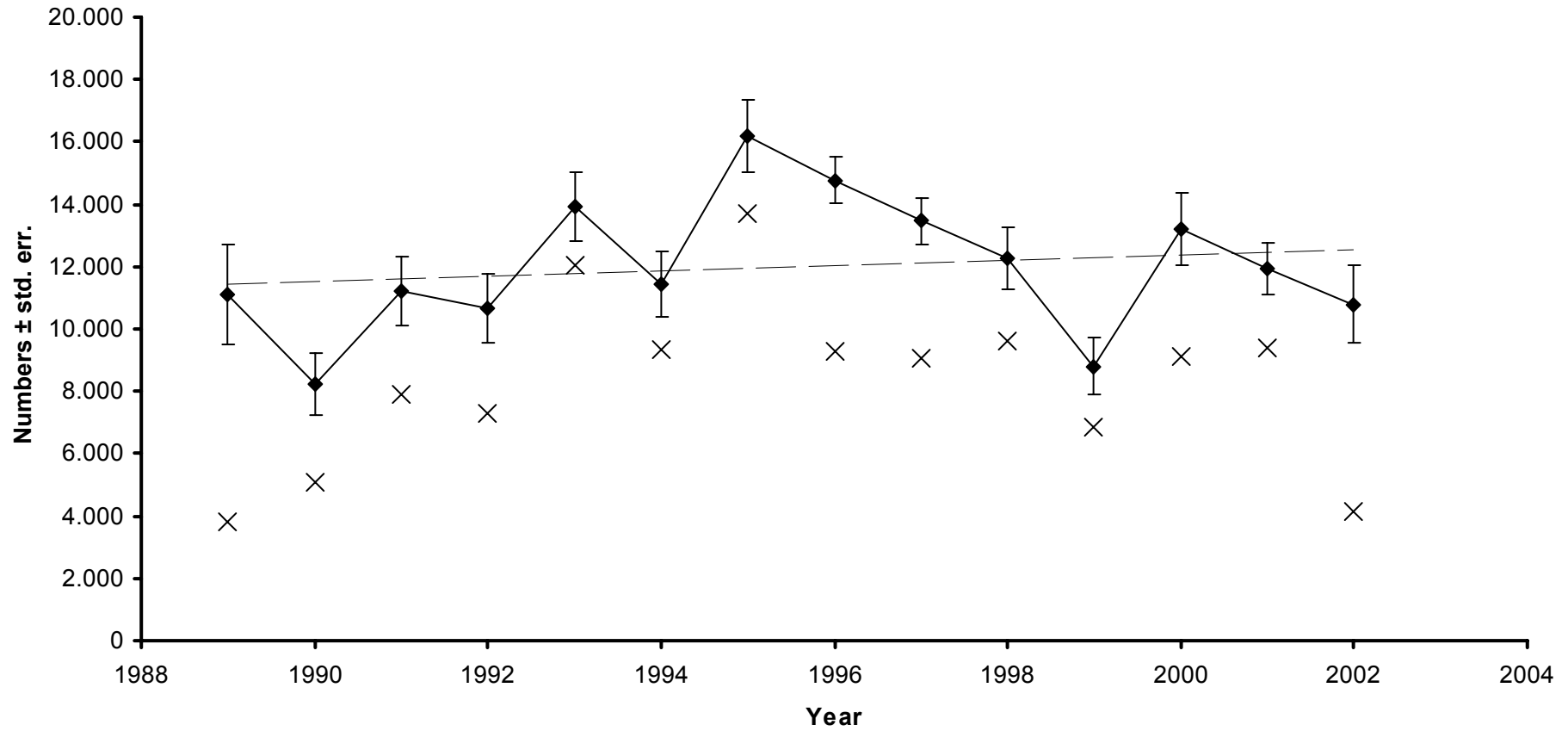


Figure 2. Wintering Redshank *Tringa totanus* in West Mediterranean 1989-2002 (Wetlands International 2005)



3. Threats

This chapter gives an overview of current human activities that are believed to have a negative impact on the European population of Redshank. To describe the importance of threats to the European Redshank population, the following categories are used:

Critical: a factor causing or likely to cause **very rapid declines** (>30% over 10 years);

High: a factor causing or likely to cause **rapid declines** (20-30% over 10 years);

Medium: a factor causing or likely to cause relatively **slow, but significant, declines** (10-20% over 10 years);

Low: a factor causing or likely to cause **fluctuations**;

Local: a factor causing or likely to cause negligible declines;

Unknown: a factor that is likely to affect the species but it is unknown to what extent

1. Habitat loss/degradation (human induced)

Breeding

Degradation of breeding habitat quality and habitat loss are considered the major cause of the decline in Redshank population in the EU. Throughout northern Europe the loss of wet grassland as breeding habitat has been significant while loss of coastal salt-marshes seems less severe, although increasing sea-levels may make salt marshes less suitable in future. Modification of drainage, reseeded and changes in nutrient and grazing regimes have been detrimental to wet grassland and salt-marshes in terms of a breeding habitat for Redshank. In Iberia, salt-pans are an important breeding habitat which is being lost through conversion to other habitats such as aquaculture and rice fields; specific measures are required to address this.

Habitat loss is usually associated with the complete abandoning of previous management (resulting in scrub and wet woodland), conversion of such meadows to tillage, or through increases in grass production for silage rather than grazing (e.g. Klinner 1991).

There continues to be as well a major loss of coastal wetlands supporting breeding Redshank to industry and infrastructure (e.g. in the UK, Davidson *et al.* 1991). Even where changes have been less dramatic, modification to water-levels (especially through drainage, reduction of winter inundation and water table drawdown) and nutrient regimes (especially through application of organic and inorganic fertiliser) have reduced the attractiveness of such habitat (see Pienkowski 1991).

The hydrological and grazing management techniques required to maximise Redshank breeding densities are well demonstrated in lowland (e.g. Hötter 1991, Evans *et al.* 1995, O'Brien & Self 1994, Milsom *et al.* 2000, Wilson *et al.* 2004, Smart *et al.* 2006) and upland areas (Baines 1988, 1989).

Winter-flooding of breeding habitats and the presence of shallow pools and flooded rills appear particularly important to Redshank (Ausden *et al.* 2001, Ausden *et al.* 2003, Milsom *et al.* 2002, Olsen & Schmidt 2004, Smart *et al.* 2006). Grazing of salt-marsh and wet grassland appear also to be critical. Little or no grazing leads to unsuitable tall vegetation, whilst excessive grazing pressure may lead to lack of suitable nesting cover (or high predation rates because of exposure) and high nest loss from trampling (Allport *et al.* 1986, Cadbury *et al.* 1987, Norris *et al.* 1997, Norris *et al.* 1998). Hence, grazing of salt-marshes and losses due to sea level rise (Smart & Gill 2003) could reduce the amount and quality of nesting habitat for Redshank in future. For example Smart 2005 found that on average 11% (range 0 - 40%) of nests were lost to tidal flooding, which would be expected to increase in future with sea-level rise.

Wintering

Like all species associated with coastal wetlands, the Redshank is threatened by habitat loss and modification (Burton *et al.* 2006). Studies of wintering Redshank in the UK have shown that the species is site-faithful both within and between winters (Burton 2000) making the species particularly vulnerable to habitat changes.

Construction of proposed tidal barrages could eliminate considerable parts of existing Redshank feeding areas (e.g. 80% on the Severn Estuary in UK, Clark & Prys-Jones 1994). However, a tidal barrage on the Severn would lead to the intertidal becoming muddier with an associated increase of prey biomass; this change in habitat structure is likely to help compensate for the loss of intertidal foraging area (Holloway *et al.* 1995, Austin & Rehfish 2003, 2006). The complete loss of Cardiff Bay Site of Special Scientific Interest in UK has led to the displacement and partial loss of its internationally important population of wintering Redshank following the construction of an amenity barrage (Burton in press, Burton *et al.* 2006).

The species is also particularly sensitive to the encroachment of *Spartina* on open mud-flats as it spends a high proportion of its time feeding in the upper zones of intertidal areas (Goss-Custard & Moser 1988). In trial areas cleared using the herbicide Dalapon, Redshank fed more on those recently cleared of *Spartina* than on *Spartina* areas or those areas of mud cleared of *Spartina* 3 - 4 years earlier (Evans 1986).

Importance of habitat loss/degradation

- For **areas of breeding** in the EU the importance of habitat loss/modification is set at High.
- For the **winter areas** in the EU the importance of habitat loss/modification for the European wintering group is set at Medium.

2. Harvesting

Winter/staging

The present estimated bag in France is 5,000 - 8,000 (see table 6). There remains an urgent need to effectively quantify the extent of the current hunting bag in France, the effects of crippling, the numbers and distribution of the birds involved in this hunt, and assess the effects of hunting disturbance on this species.

If this estimate is correct, hunting in France might be considered to be of relatively little significance to Redshank populations as a whole. The wintering population is increasing in France since 1977 (Mahéo 2006).

Breeding

Nothing is known about the extent of hunting on the breeding and staging areas of the species. Hunting does not occur on the breeding areas within Member States, but the impact of hunting in Russia is unquantified and unknown.

Importance

- The importance of hunting in the EU is set at Low/Unknown at continental scale.

3. Pollution

There is little available information on the effects of pollution on the Redshank, but it is not considered a major threat in most Member States. In the Dutch Wadden Sea the Redshank were investigated for lead and cadmium concentrations. The rapid accumulation of lead in the veins of juveniles after the arrival to the Wadden Sea and the elevated levels found in adults indicate that Redshank are exposed to lead. With regard to cadmium the situation did not seem to be serious (Goede & de Voogt 1984). Evidence from studies of snipes (Beck & Granval 1997) suggest that ingestion rates of lead shot by some wader species may be as high as amongst Anatidae.

Ironically, organic enrichment may actually increase food stocks in estuaries in winter, hence actions to reduce discharge of organic material under the Urban Waste Water Directive (91/271/EEC) and the Water Framework Directive could reduce the benthos and hence wintering Redshank numbers (e.g. see discussion in Hill *et al.* 1993 and overview by Burton *et al.* 2002) as it appears to do so for some species of water bird (Burton *et al.* 2004, in prep.).

Importance

- For **areas of breeding** in the EU the importance of pollution is set at Unknown.
- For the **winter areas** in the EU the importance of pollution is set at Unknown.

4. Human disturbance

Summer/staging

A detrimental effect of disturbance on breeding Redshank has not been demonstrated. In one study in upland Britain, the species was found to be confined to areas of low potential disturbance above 430 m (Haworth & Thompson 1990).

Wintering

In common with other waders, Redshank may be frequently disturbed by human activities on more urbanised wintering sites. The flight distance when disturbed by humans may be lower than for some other wader species, especially if birds are habituated to activities that might cause disturbance (Fitzpatrick & Bouchez 1998). However, construction work disturbance around Cardiff Bay, south Wales were found to significantly reduce the densities and feeding activity of Redshank on adjacent intertidal mudflats (Burton *et al.* 2002). Work by West *et al.* 2002 and Goss-Custard *et al.* 2006 has aimed to quantify the impacts of disturbance on the wader mortality rates.

Importance

- For **areas of breeding** in the EU the importance of disturbance is set at Low.
- For the **winter areas** in the EU the importance of disturbance for the European wintering group is set at Low/medium

5. Predation

In most studies, predation is the most important cause of nest and chick failure (Smart 2005, Ottvall 2004).

Across different habitats in East Anglia, predation accounted for 58.6, 83.3 and 78.4% of the daily failure rate on saltmarsh, coastal and inland grassland respectively (Smart 2005). Information from dataloggers suggests that nocturnal predators are the most important predators of Redshank nests although on saltmarshes Gulls may be an important source of predation (Smart 2005). There is an increasing body of evidence that Redshank nests may be more susceptible to predation by stoats or weasels than Lapwing nests (RSPB unpublished data) although studies are underway to elucidate this.

Similarly, Redshank chicks also suffer from predation. One study across 6 sites in East Anglia, Eastern England found that out of 43 chicks radio tagged 30 were probably taken by predators, with five definitely taken by birds of prey (Kestrels and Marsh Harriers) and Crows, Magpies, Grey Herons and Gulls have also been observed taking chicks (Smart 2005). Mammalian predators are also thought to be important but it is more difficult to quantify this given their nocturnal behaviour.

Importance

- For **breeding** in the EU the importance of predation is set at Medium.
- For **wintering** in the EU the importance of predation is set at Unknown.

4. Policies and legislation relevant for management

Table 4. *International conservation and legal status of the Redshank Tringa totanus.*

World Status ³ (Criteria)	European Status ⁴	SPEC category ⁵	EU Birds Directive Annex	Bern Convention Annex	Bonn Convention Annex	African-Eurasian Migratory Waterbird Agreement	Convention of International Trade on Endangered Species
Least Concern	Declining	2	Annex II/2	Appendix III	Appendix II	Column B 2c ⁴ except <i>robusta</i> population: Column C1 ⁵	Not listed

Member States / Contracting parties obligations

Redshank is listed on Annex II/2 in the EU Birds Directive, which indicates that it can be hunted only in the Member States, which have defined a hunting season for this species (potentially Denmark, France, Italy and the UK).

³ BirdLife International/IUCN Red List assessment. - 2005 IUCN Red List Category

⁴ BirdLife International (2004a).

⁵ BirdLife International (2004a) - SPEC 2: Species whose world populations are concentrated in Europe, but which have an unfavourable conservation status in Europe.

⁴ Populations numbering more than around 100,000 individuals and considered to be in need of special attention as a result of significant long-term decline.

⁵ Populations numbering more than around 100,000 individuals which could significantly benefit from international cooperation and which do not fulfill the conditions in respect or either Column A or B.

National policies, legislation and ongoing activities

Table 5. Brief overview of management measures and restoration planning processes currently underway for the Redshank *Tringa totanus* in Member States.

MEMBER STATE	TITLE	CATEGORY	HUNTING ACTIONS	HABITAT/ SPECIES ACTION	OTHER ACTIONS
AT ¹	Distelverein Ramsar Project (LIFE)	I		hads	s
AT	Leitha-Auen Burgenland conservation activities	R		h	s
AT ²	Seewinkel National Park management and monitoring programmes	I		hamds	s
DK ¹	Wetland restoration by state and private persons	I		A, d, s	P:s
D	Financial programme to support management of agricultural habitats	I		amd	
D	Long lease and purchase of pasture Schleswig-Holstein	I		P:hamds	s
D	Eider, Treene and Sorge river systems	I		C:hamds	ps
FI	Protection of Liminganlahti Bay	R		I:ha	I:pes
FR ¹	Acquisition by Fédération des Chasseurs de France		g	I:hs	
FR ¹	Establishment of Réserves de chasse (hunting-free areas)		C:g		s
FR ¹	Shortened hunting period		s		
FR	Designation of nature reserves, including Baie de l'Aiguillon	R		r	

MEMBER STATE	TITLE	CATEGORY	HUNTING ACTIONS	HABITAT/ SPECIES ACTION	OTHER ACTIONS
FR	Management of Ile de Ré; Réserve Naturelle de Moëze and R.N. d'Yves	I	C,P, g		
FR	Wet meadow purchase and management by LPO in Western France, such as Marais de Rochefort, Marais Poitevin, Marais Breton, Basses Vallées Angevines, Marais de Brouage (conservatoire du Littoral)	I	C,P,g	o	
IT ¹	Valli da Pesca-Aziende Faunistico Venatorie management	I	C:dhb	C:hds	s
IT ¹	Wetland creation/restoration by hunters	I	C:dr	C/I:hads	
IT ¹	Wetland creation/restoration by authorities	I		C:hds	
IT ¹	Habitat improvement financed by hunting tax			I/P:hads	
IT ¹	Regional laws limiting hunting		o		
NL	Meadow birds project	I		I:am	I:es
NL	Meadow birds nest protection	R		amd	eo
SE	Reserve management measure	R		I:had	I:s
SE	River Helgeå Ramsar site	I		hams	s
UK	Catchment management plans	I		hms	s
UK	SSSI/ASSI management plans	I		hamds	s
UK	ESA	R		ham	s
UK	Integrated estuary management plans	I		hmnds	pes
UK	Water level management plans	I		ham	s
UK	RSPB species action plan	I		hampdso	res

Key

Category: R = restricted measure, I = integrated management plan.

Action status: C = completed, P = in progress, F = planned in future.

Hunting actions: g = general hunting ban, b = bag limits, r = regional hunting ban, s = shortened hunting period, d = limit to hunting days, h = limit to hunting hours, o = other.

Habitat/species actions: h = habitat improvement, a = modifications to agricultural activity, m = minimisation of adverse effects of harvesting, roads, etc., p = predator control, d = prevention of disturbance, s = site safeguard, o = other.

Other actions: r = research, p = public awareness, e = education campaigns, s = survey, census and monitoring, o = other.

¹FACE in litt. As supplied to Ecoscope (1996)

²A. Ranner, Conservation Department, Regional Government of Burgenland *in litt.*

Table 6. National conservation, hunting status and bag statistics of the Redshank *Tringa totanus* in the EU.

Key: P = protected; H = species is huntable and open season declared; NH = species is huntable, but no hunting season is established; L = species protected, but may nevertheless be killed with government authorisation (licence) under conditions defined by national legislation.

Country	Status in national Red Data Book	Year of protection status	Hunting Status	National open season	Regional open season	Annual bag size (period)	Annual Statutory Bag Statistics	Reference	Highest responsible national authority
<i>United Kingdom</i>	-		P	-					
<i>Italy</i>	-		P	-	-	-	-		
<i>Denmark</i>	-	1982	P	-	-	-	-		Ministry of Environment
<i>France</i>	-	-	H	1 st Saturday of August - 31 January	For security reasons, the opening is often postponed by the Préfet.	5,000 - 8,000 ¹ 5,000 ²	No	Estimate based on data from: Trollet & Girard 2000	Ministry of Environment
Total						5,000-8,000			

¹ Rough estimate based on the 115,250 "other waders" shot during the hunting season 1998-1999 (last national survey on bags statistics) (11 species) of which 20-26% are *Tringa* / *Philomachus* spp. (Redshank, Spotted Redshank, Greenshank & Ruff) and further taking into account the percentage of the Redshank among *Tringa*/*Philomachus* that pass or winter in France and assuming equal chance of getting shot.

²"Fédération Nationale des Chasseurs" Survey 2007/08 unpublished.

5. Framework for Action

Priority statement/evaluation

The Redshank is still a common and widespread breeder across much of northern Europe but the populations on the British Isles and in continental Europe have been declining for several decades. Between 98,700 and 141,100 pairs breed in EU which holds 23-36 % of the European breeding population. The wintering population is more or less stable.

The main causes for the declines in the EU are believed to be loss and significant changes to the breeding habitat. Loss of wet grasslands and salt-marshes and changes in grassland management such as drainage, reseeding and changes to the grazing regime are among the most important factors causing the decline in the EU breeding population.

France is currently the only Member State, which permits hunting of the Redshank. The size of the annual bag is estimated to be 5 - 8,000 birds but the real present figure is unknown.

Careful management of key breeding sites for the Redshank, better protection and reduced disturbance of sites utilised during migration and in winter should lead to the recovery of the population in the EU. Furthermore, there is an urgent need to collect bag data to assess if the impact of hunting in the EU is sustainable and also new population dynamic information from key breeding areas across the EU is much needed. The impact of hunting should be assessed through reliable bag data at a local level. Measures should be taken to lower the off take on the major wintering sites where appropriate.

Purpose of the management plan

Recognising that the Redshank has an Unfavourable Conservation Status in EU and Europe due to a moderate continuing decline the long-term objective (10 years) of this plan is:

To restore the Redshank to a favourable conservation status in the EU¹.

¹ The EU Habitats Directive (92/43/EEC) states that a species' conservation status will be taken as Favourable when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; and
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its population on a long-term basis.

This plan aims to address the most urgent issues to halt the decline of the Redshank population in the EU but at the same time restrict the activities to be carried out to a realistic level. Thus, the short-term objectives outlined in the plan will focus on:

- Improved management and protection of breeding sites across the EU
- Collection of better data on the impact of hunting, especially on key wintering sites, and more robust data on population dynamics across the EU.
- Improved management and protection of staging and wintering sites in the EU. Reduction of hunting take off will be sought on key wintering sites where the impact of hunting appears to be significant.

The plan applies for a three year period after which it should be evaluated and reviewed. This should include an assessment of the results achieved during the first three years. During this process new short-term objectives for the next Redshank EU Management Plan should also be identified that most effectively will lead to the recovery of the European Redshank population and the achievement of the long-term objective to restore the Redshank to favourable conservation status.

Results for the period 2009-2011

This section outlines the Results to be achieved during the first 3-year period of the Redshank management within the EU. The Results outlined below (and the corresponding Activities in Chapter 6) are targeted at the authorities responsible for the implementation of the provisions of the Birds Directive in the Member States. In the Logical Framework Analyses (LFA) table 9, the Results with corresponding Activities, verifiable indicators, means of verification and assumptions are summarised. It is the responsibility of the relevant authorities of each Member State to decide how to implement the management prescriptions of this plan.

Policy and legislative actions

An essential component when managing a quarry species is the detailed information on the number of birds shot per year and the proportion this constitutes of the flyway population. This type of information is currently lacking in France, the only country where it may be hunted. Collection of reliable and updated bag data is therefore a key Activity of this plan.

Results of the implementation of this Management Plan should therefore be that by the end of 2011:

1. An estimate of the annual number of the Redshank shot is available from all Member States where hunting is permitted (France). This estimate is made at a local level to assess the impact of hunting on key wintering sites.

Management of breeding populations

Degradation of breeding habitat quality and habitat loss are considered the major cause of the decline in Redshank population in the EU. The detrimental factors are usually well known and include: (i) increased fertilisation of wet grasslands, (ii) conversion of grazing meadows to hay meadows and tillage, (iii) drainage, water table regression, loss of winter flooding, and (iv) increases in stock density and earlier commencement of grazing.

Fortunately, experience from several Member States has documented that with careful management of the Redshank breeding habitats - in particular lowland wet grasslands and coastal salt-marshes - it is possible to halt the declines and reverse the population trend.

Much new information on management of these breeding habitats is available, which identify effective management prescriptions for the Redshank breeding on coastal grasslands (e.g. Milsom *et al.* 2000) and inland wet grasslands (e.g. Wilson *et al.* 2004). This includes the importance of creating a mosaic of winter-flooded and unflooded grassland (e.g. Ausden *et al.* 2001, Olsen & Schmidt 2004) and choosing the right (moderate) grazing intensity to keep the sward short and open (e.g. Norris *et al.* 1998). Results of the implementation of this Management Plan should therefore be that by 2011:

2. Management Plans are prepared and implementation initiated for sites of importance for breeding Redshank to ensure no further loss of the Redshank numbers and distribution and to increase reproductive success and colonising ability (all Member States with breeding Redshank). Measures are taken to minimize the predation as appropriate. The control of generalist predators is associated with the management of the sites.

Management of staging and wintering populations

On migration and in particular during winter Redshanks are widely dispersed along coasts. This makes effective protection of the overall population difficult through site safeguard measures restricted to the most important sites. Results of the implementation of this Management Plan should therefore be that by 2011:

3. All staging and wintering areas of international importance for the Redshank within the EU are identified and designated SPAs. In each of these Member States a minimum of two of the SPAs include hunting and disturbance-free areas.
4. Management Plans are prepared and implementation initiated for designated sites (SPAs) of importance for staging and wintering Redshank. If necessary, prescriptions will be set up to lower the off take on key wintering sites.
5. Conservation and wise-use is promoted in wetlands supporting staging and

wintering Redshank (other than SPAs) to maintain range and to ensure no net loss of Redshank numbers and distribution.

Start planning for the effect of climate change – help birds adapt to climate change by increasing the resilience of used habitats and by ensuring a coherent network of staging sites that remains suitable as the distributions of these migratory birds changes.

International co-operation

Regular, co-coordinated surveys provide vital data on the population size, trends and identify key breeding, wintering and moulting areas. This information is also essential to monitor the effects of the management prescriptions of this Plan. Result of the implementation of this Management Plan should thus be that by 2011:

6. Up-to-date estimates of the breeding populations from all important sites in the EU are available.
7. Annual mid-winter censuses of all areas of international importance for wintering Redshank within the EU are carried out as part of the International Waterfowl Census with the support of the authorities responsible for the implementation of the provisions of the Birds Directive in each Member State.

Research and monitoring

There remain large gaps in our understanding of the population groups of the Redshank staging and wintering in Europe. In particular, marking of the Redshank to identify migration routes and breeding provenance is essential (based on international ringing and colour-marking analyses). Up-to-date estimates based on sound analyses of the size of the Redshank populations and their recent trends is essential (based on the Wetlands International 'International Waterbird Census' for wintering populations and BirdLife International data for breeding populations) and to achieve this, there is an urgent need to improve the capacity and delivery of population information from all Member States. Such information is essential to provide a basis for informed decision-making when considering management options. Results of the implementation of this Management Plan should thus be that by 2011:

8. National ringing and colour-marking activities on breeding, staging and wintering areas, and analyses of existing ringing data to identify population units and provide annual estimates of Redshank mortality, are supported by national authorities in all Member States with important breeding, staging or wintering numbers of the Redshank.

6. Activities

The following two tables list the Results to be achieved by the end of 2011 for breeding and staging/wintering Redshank, respectively, with the corresponding activities to be carried out by the relevant Member States.

Table 7. *Actions in all countries in the EU with breeding population of Redshank Tringa totanus (the scale for Priority and Time Scale is given at the bottom of Table 5).*

Result	Priority	National activities	Time scale	Means of verification
Management Plans are prepared and implementation initiated for sites of importance for breeding Redshank to ensure no further loss of Redshank numbers and distribution and to increase reproductive success and colonising ability (all Member States with breeding Redshank). Measures are taken to minimize the predation as appropriate. The control of generalist predators is associated with the management of the sites.	High	Prepare Management Plans and initiate the implementation in key sites for breeding Redshank to ensure no further loss of numbers and distribution and to increase reproductive success and colonising ability. Include measures to control generalist predators,	Short	All key breeding sites for Redshank in the EU are identified and management is carried out.
Up-to-date estimates of the breeding populations from all important sites in the EU are available	High	Support regular censuses of all sites with large breeding populations of Redshank.	Medium	Publication/web-site of relevant national authority in Member States and report to Ornis Committee by national delegate.
National ringing activities on breeding, staging and wintering areas, and analyses of existing ringing data to identify population units and provide annual estimates of Redshank mortality, are supported by national authorities in all Member States with important breeding, staging or wintering numbers of Redshank.	Medium	Support ringing activities on breeding, staging and wintering areas and analyses of existing ringing data to identify population units and provide annual estimates of Redshank mortality.	Medium	Papers and/or reports produced documenting new information.

Table 8. *Actions in all countries in the EU with staging and/or wintering population of Redshank Tringa totanus (the scale for Priority and Time Scale is given at the bottom of Table 5).*

Result	Priority	National activities	Time scale	Means of verification
An estimate of the annual number of Redshank shot is available from all Member States where hunting is permitted. This estimate is made at a local level to assess the impact of hunting on key wintering sites.	High	Ensure that an annual estimate of Redshank harvest is available at a local level in France.	Immediate	Publication/web-site of relevant national authority in Member State and report to Commission by national Ornis Committee delegate
All staging and wintering areas of international importance for Redshank within the EU are identified and designated SPAs. In each of these Member States a minimum of two of the SPAs include hunting and disturbance-free areas.	High	Identify and designate as SPAs all staging and wintering areas of international importance for Redshank. A minimum of two of the SPAs must include hunting and disturbance-free areas.	Medium	All staging and wintering sites in the EU, which supports more than 1% of the relevant Redshank population according to latest list published by Wetlands International, are designated as SPAs.
Management Plans are prepared and implementation initiated for designated sites (SPAs) of importance for staging and wintering Redshank. If necessary, prescriptions will be set up to lower the off take on key wintering sites.	Medium	Prepare Management Plans and initiate implementation for designated SPAs of importance for staging and/or wintering Redshank. Include if necessary prescriptions to lower the off take on key wintering sites.	Medium	Publication/web-site of relevant national authority in Member State and report to Commission by national Ornis Committee delegate.
Conservation and wise-use is promoted in wetlands supporting staging and wintering Redshank (other than SPAs) to maintain range and to ensure no net loss of Redshank numbers and distribution.	Medium	Promote conservation and wise-use in wetlands supporting staging and wintering Redshank (other than SPAs) to maintain range and to ensure no net loss of Redshank numbers and distribution.	Medium	Publication/web-site of relevant national authority in Member State and report to Commission by national Ornis Committee delegate.

Result	Priority	National activities	Time scale	Means of verification
Annual mid-winter censuses of all areas of international importance for wintering Redshank within the EU are carried out as part of the International Waterfowl Census with the support of the authorities responsible for the implementation of the provisions of the Birds Directive in each Member State.	High	Support annual mid-winter census of all areas of international importance for wintering Redshank within the EU.	Short	Data for annual Redshank mid-winter counts from all sites of international importance in Member States are present in IWC database.
National ringing and colour-marking activities on breeding, staging and wintering areas, and analyses of existing ringing data to identify population units and provide annual estimates of Redshank mortality, are supported by national authorities in all Member States with important breeding, staging or wintering numbers of Redshank.	Medium	Support ringing and colour-marking activities on breeding, staging and wintering areas and analyses of existing ringing data to identify population units and provide annual estimates of Redshank mortality.	Medium	Papers and/or reports produced documenting new information.

The **Priority** of each Result is given, according to the following scale:

- Essential: an action that is needed to prevent a large decline in the population, which could lead to species or subspecies extinction.
- High: an action that is needed to prevent a decline of more than 20% of the population in 20 years or less
- Medium: an action that is needed to prevent a decline of less than 20% of the population in 20 years or less
- Low: an action that is needed to prevent local population declines or which is likely to have only a small impact on the population across the range.

The **Time scales** attached to each Activity use the following criteria:

- Immediate: completed within the next year.
- Short: completed within the next 1-3 years
- Medium: completed within the next 1 - 5 years.
- Long: completed within the next 1 - 10 years
- Ongoing: an action that is currently being implemented and should continue.
- Completed: an action that was completed during the preparation of the Action Plan.

Table 9. Summary of objectives/results and activities of the Redshank *Tringa totanus* Management Plan 2009-2011.

DESCRIPTION	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>Purpose: To restore the Redshank to a Favourable Conservation Status in Europe.</p>	<p>The European Redshank population is restored.</p>	<p>The European Threat Status classification of the Redshank.</p>	<p>Redshank Management Plan approved and supported by EU and Member States.</p>
<p>Results 2007-2009:</p> <ol style="list-style-type: none"> 1. An estimate of the annual number of Redshank shot is available from all Member States where hunting is permitted, at a local level on key wintering sites. 2. Management Plans are prepared and implementation initiated for sites of importance for breeding Redshank. Measures are taken to minimize the predation as appropriate. The control of generalist predators is associated with the management of the sites. 3. All staging and wintering areas of international importance for Redshank within the EU are identified and designated SPAs. In each of these Member States a minimum of two of the SPAs include hunting and disturbance-free areas. 4. Management Plans are prepared and implementation initiated for designated sites (SPAs) of importance for staging and wintering Redshank. If necessary, prescriptions are set up to lower the off take on key wintering sites. 5. Conservation and wise-use is promoted in wetlands supporting staging and wintering Redshank (other than SPAs) to maintain range and to ensure no net loss of Redshank numbers and distribution. 	<ol style="list-style-type: none"> 1. Annual hunting bag data of Redshank are available at a local level on key wintering sites. 2. Numbers of breeding Redshank in the EU have increased due to management. 3. All staging and wintering sites, which regularly support more than 1% of the relevant Redshank population are designated as SPAs. 4. Management Plans are being implemented in all SPAs with staging and/or wintering populations of international importance for Redshank. 5. Management recommendations developed and implemented for Redshank breeding habitats in Member States with important populations. 	<ol style="list-style-type: none"> 1. Publication/web-site with official hunting seasons in relevant Member States and report to ORNIS Committee by national delegate. 2. Publication/web-site of relevant national authority in Member States and report to ORNIS Committee by national delegate. 3. All staging and wintering sites in the EU which support more than 1% of the relevant Redshank population according to latest list published by Wetlands International are designated as SPA. 4. Plans are published and implementation reported on web-site of relevant national authority in Member States. 5. Publication/web-site of relevant national authorities in Member States and report to Ornis Committee by national delegate. 	<p>Member States have adequate resources and commitment to take responsibility for the Redshank management in accordance with the Bird Directive obligations.</p>

6. Up-to-date estimates of the breeding populations from all important sites in the EU are available.

7. Annual mid-winter censuses of all areas of international importance for wintering Redshank within the EU are carried out.

8. National ringing and colour-marking activities on breeding, staging and wintering areas, and analyses of existing ringing data to identify population units and provide annual estimates of Redshank mortality, are supported by national authorities in all Member States with important breeding, staging or wintering numbers of Redshank.

6. Recent breeding population estimates available from all important sites in the EU.

7. Annual mid-winter counts from all sites, which supports more than 1% of the relevant Redshank publication submitted to the International Waterbird Census (IWC) database managed by Wetlands Int.

8. New information on Redshank population units and mortality within the western Palearctic and specifically within the EU Member States is available.

6. Publication/web-side of relevant national authorities in Member States and report to Ornis Committee by national delegate.

7. Data for annual Redshank mid-winter counts from all sites of international importance in Member States are present in IWC database.

8. Papers and/or reports produced documenting new information.

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