

SPECIES INFORMATION SHEET

Vanellus vanellus

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|---|---|-------------------------------------|
| English name: Lapwing | Scientific name: <i>Vanellus vanellus</i> | |
| Taxonomical group: Class: Aves Order: Charadriiformes Family: Charadriidae | Species authority: Linnaeus, 1758 | |
| Subspecies, Variations, Synonyms: – | Generation length: 5 years | |
| Past and current threats (Habitats Directive article 17 codes): Ditching (J02.01, J02.04), Changes in agricultural management (A02), Alien species (I01), Competition and predation (I02), Hunting (F03.01) | Future threats (Habitats Directive article 17 codes): Ditching (J02.01, J02.04), Changes in agricultural management (A02), Alien species (I01), Competition and predation (I02), Hunting (F03.01) | |
| IUCN Criteria: A2bc | HELCOM Red List Category: | NT Near Threatened |
| Global / European IUCN Red List Category LC / VU (A2b; A3b,c) | Annex I EU Birds Directive -no Annex II EU Birds Directive- II B (BE, DK, EL, ES, FR, IE, IT, MT) | |
| Red List status in HELCOM countries: Denmark: LC, Estonia: LC, Finland: LC, Germany: 2 (Endangered), Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: LC | | |

Range description and general trends

The lapwing has a wide breeding range from the Atlantic to the Pacific Ocean between 35° and 70° of northern latitude. The global population is concentrated in Europe, where the species now has an unfavourable conservation status. Its European breeding population was probably fairly stable until around 1990, but since then the species has suffered significant declines across most of Europe and underwent a large decline (>30%) overall during 1990–2000. Consequently, on the European level, it is now evaluated as vulnerable. The European population of the lapwing is estimated at 1.7 to 2.8 million breeding pairs. The available demographic data indicate that the ongoing population decline is mainly caused by an insufficient production of fledglings, due to an increased clutch failure rate, reduced possibilities of re-nesting and poor chick survival, as a consequence of agricultural intensification and change in land use.



Vanellus vanellus. Photos by Lech Karauda (left) and Frank Joisten (right).

According to data from the European Bird Census Council covering 21 countries, the European population underwent a decline of nearly 30% during the period 1990–2008 (Vorisek 2008). Since 1970, declines of the breeding populations have been reported from all European countries holding more than 50 000 bp: Finland (1970–1990), Sweden (1970–1990), Norway (1970–2000), UK (1970–2000), Germany

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(1970–2000), Hungary (1970–2000), Netherlands (1990–2000), Russia (1990–2000), Belarus (1990–2000), Poland (1990–2000) and Ukraine (1990–2000). The important Dutch population has decreased a further 2% per year since 2000.

Distribution and status in the Baltic Sea region

In **Finland** and **Sweden**, the lapwing has declined during the period 1970–1990; however, since the 1990s the populations have been increasing rapidly, being currently 40% (Finland) and 10–19% (Sweden) larger than 10 years ago and possibly exceeding the level of the 1980s.

In **Estonia**, the lapwing has suffered a strong decline (>50%) during the period 1971–1990, but is increasing since the late 1990s. For the period 1998–2002, Elts *et al.* (2003) give a population number of 25 000–40 000 bp, which has increased to 40 000–60 000 bp in 2003–2008 (Elts *et al.* 2009).

In the **Kaliningrad Region** of **Russia**, the breeding population of the lapwing is estimated at 2 500–3 000 bp, with a declining trend in recent years. In the St. Petersburg Region of Russia it is a common breeding bird with seemingly increasing trend in the short and long term.

In **Poland**, the lapwing is a widespread breeder in the lowland and on the foothills of the mountains.

It is found all over the country up to altitudes of 900 m. It is most numerous in the eastern river valleys (*e.g.*, Biebrza, Narew, Bug and Nida; Tomiałojć & Stawarczyk 2003; Sikora *et al.* 2007). Surveys in western Poland during the periods 1980–1990 and 2000–2010 revealed a decrease of the species by 66.1% in this region (Ławicki *et al.* 2011). According to data from the Polish common Bird Census, the decline of the species for the whole country was 34% between 2000 and 2004.

In **Germany, Mecklenburg-Western Pomerania**, the population has declined from 6 000–8 000 bp in 1978–1982 to 2 500–3 000 in 1994–1998, which means a decline of about 60% within 3 generations (Prill & Stegemann 2006). The negative trend has continued since then. A major reason for this trend was the eradication of rabies during the 1990s. Currently, only the bird sanctuaries on coastal islands with strict management of predatory mammals still host stable breeding pair numbers (Herrmann 2010).

In **Schleswig-Holstein**, the lapwing breeds on grassland and arable land, but reaches especially high densities on the salt marshes of the North Sea coast. The total population counts c. 12 500 bp, of which 3 800 bp are breeding in the eastern inland parts of Schleswig-Holstein and close to the Baltic Sea. Declining trends have been reported already at the end of the 19th century. Studies on breeding pair densities on marsh- and grassland indicate a strong decline especially during the 1980s and 1990s. The negative trend seems to continue until now. Changes in agricultural management practices and predatory mammals are seen as main factors (Berndt *et al.* 2002).

In **Denmark**, only few counts of breeding lapwings are performed on important bird breeding sites – in particular coastal meadows - outside DOF (Danish Ornithological Society) project periods. During the last project 'Fuglenes Danmark' in 1993–1996 (Grell 1998), together with the Wadden Sea programme (Thorup & Laursen 2008) and annual counts at Tipperne and Vejlerne, 9 900–11 700 pairs were counted at 'bird sites'. In the same period (1995–1999), Thorup (2006 and unpublished) estimated 30 000–41 500 pairs on cultivated land, based on a rather small sample of agricultural areas in different parts of Denmark.

Data from the rather few sites with frequent counts of lapwings show that the species is doing quite well on coastal meadow sites with a proper meadow habitat management. This is the case in Baltic Denmark as well as in North Sea Denmark. However, a number of small coastal sites are not managed well, and overgrowing, drainage and fragmentation of open meadows is a problem in many regions in

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the Danish Baltic. For instance, on 32 coastal meadow sites in the former Storstrøms Amt the number of breeding lapwings declined by 42% between the late 1980es and 2003, whereas numbers increased significantly on those sites where particular management effort took place (Jørgensen 2006). In the same period, breeding numbers increased markedly on Læsø (P.A.F. Rasmussen 1996 unpublished) and Saltholm (Jensen 1987, Mortensen & Hansen 1999, M. Jørgensen 2006, unpubl.).

The Danish point count programme basically reflects trends away from the coastal meadows. If 1978 is set at index 100, the index in 1988 was at 116, 1998 at 75 and 2008 at 66 (Heldbjerg & Eskildsen 2010). It is unknown whether trends are different in the North Sea and the Baltic part of Denmark.

A rough subdivision of the Danish breeders in the late 1990s into Baltic and North Sea populations would be that half of the birds breeding on coastal meadows and half of the farmland lapwings are Baltic, giving some 22 000 pairs in the Danish Baltic Sea areas. Since then the numbers may have declined by 10–15%, giving a 2010 total of some 19 000–20 000 pairs in the Baltic. The earliest point count index is from 1976 and is 3.7 times higher than the latest from 2009 (Heldbjerg & Eskildsen 2010). The numbers in coastal meadows were perhaps 25–50% higher in the mid 1970es, and the Baltic Danish total would then have been in the magnitude of 50 000–60 000 pairs.

Table 1: Population numbers of the lapwing in the Baltic Sea area. For population trends -=decreasing, +=increasing, f=fluctuating.

| Country | Population size | | Short-term population trend (10 years) | Long-term population trend (50 years) |
|-------------------|------------------------|-----------|--|---------------------------------------|
| | Breeding pairs | Year | | |
| Sweden | 48 000–77 000 | 2010 | + | - |
| Finland | 90 000 | 2006–2009 | + | - |
| Estonia | 40 000–60 000 | 2003–2008 | + | - |
| Russia PET | abundant | 2010 | + | + |
| Russia KAL | 2 500–3 000 | 2010 | - | f |
| Latvia | 12 000–15 000 | 1990–2000 | - | - |
| Lithuania | 18 000–20 000 | 1999–2001 | - | - |
| Poland | 100 000–150 000 | 2000–2002 | - | - |
| Germany SH | 3 800 | 2005–2009 | - | - |
| Germany MV | 2 500–3 000 | 1994–1998 | - | - |
| Denmark | 19 000–20 000 | 2010 | - | - |
| Baltic Sea | 340 000–440 000 | | | |

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Distribution map

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Habitat and ecology

Originally, the species bred in grassy habitats (steppes, open grassland, peat bogs, moorland) where the structure of the vegetation remained short due to natural conditions. Natural sites still occupied are coastal marshes, fens, bogs, moors and upland grasslands (up to 800–1000 m). Forest clearance and the expansion of livestock rearing considerably increased the availability of suitable areas, and lapwings are now widely distributed in semi-natural habitats such as meadows and pastures (Cramp & Simmons 1983). Vegetation heights below 15 cm are strongly preferred (Lister 1964, Flodin *et al.* 1990). Winter flooding improves conditions for breeding lapwings by keeping the sward short and open and by creating suitable, wet feeding areas (Ausden *et al.* 2001).

Lapwings nest in high abundances on arable land, where spring-sown fields offer suitable breeding conditions for a short period. Proximity of good feeding areas for the chicks is essential; such feeding areas may be found on the fields or meadows used for grazing or on adjacent grassland (Galbraith 1988, 1989).

Outside the breeding season the species frequents a wide variety of habitats, such as cultivated fields, wide expanses of grassland, lake or river margins, estuaries etc. Lapwings seemingly prefer cultivated areas for feeding, but also grasslands and mudflats are used.

Description of major threats

The main reasons are obviously both agricultural intensification, in particular a large-scale shift from spring-sown to autumn-sown crops in the southern Baltic, and an increase of abundance of predatory mammals. Autumn-sown crops are not suitable for breeding, since the vegetation at the beginning of the breeding season is too high. Better drainage, leading to fewer left-over small wet patches in the fields, is also reducing the breeding opportunities on arable land.

The available estimates of the bag size indicate that the annual harvest of the lapwing amounts to less than 9% of the autumn population. Hunting is not the prime reason for the population declines, but it may hinder the recovery of the species (European Commission 2009).

Assessment justification

The lapwing has suffered heavy declines during the period 1970–1990. However, since then the declines seem to have slowed down or the population even has stabilized in several Baltic countries with large populations. For Estonia, Finland, Sweden and the St. Petersburg Region of Russia, even increases are reported (Elts *et al.* 2003, 2009; Lindström *et al.* 2011). Hence, considering the recent trends, the decline during the last 3 generations (15 years) is, from a whole-Baltic perspective, obviously <30%, i.e. the criteria for Vulnerable (VU) are not reached. The species is classified as Near Threatened (NT) according to criterion A2bc.

Recommendations for actions to conserve the species

The agricultural management of the meadow breeding existing sites should be directed to the habitat requirements and breeding performance of the species. Especially the incidental destruction of clutches and killing of chicks by agricultural machinery has to be avoided. Habitat restoration (restoration of the natural flood regime of coastal and riverine polders; establishment of appropriate grazing regimes) of former or potential breeding sites is also recommended. Appropriate structures for breeding and chick rearing on arable land should be conserved (e.g. temporary or permanent wet patches). Control of predatory mammals is essential for sites with high concentrations of breeding lapwings (e.g., some coastal bird islands, where the lapwing usually breeds together with other grassland waders like redshank and black-tailed godwit). Though hunting is probably not the main factor for the decline, it poses an additional pressure and should be banned. The species should be deleted from Annex II of the

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EU Birds Directive.

Common names

Denmark: Vibe, Estonia: Kiivitaja, Finland: Töyhtöhyppä, Germany: Kiebitz, Latvia: Ķīvīte, Lithuania: Gyvė, Poland: czajka, Russia: Чибис, Sweden: Tofsvipa

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