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# Larus fuscus fuscus

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English name:	Scientific name:			
Lesser black-backed gull	Larus fuscus fuscus			
Taxonomical group:	Species authority:			
Class: Aves	Linnaeus, 1758			
Order: Charadriiformes				
Family: Laridae				
Subspecies, Variations, Synonyms: –	Generation length: 10 years			
Past and current threats (Habitats Directive	Future threats (Habitats Directive article 17			
article 17 codes):	codes):			
Epidemics/diseases (K?), Extra-regional threats	Epidemics/diseases (K?), Extra-regional threats			
(DDT, hunting; XE), Contaminant pollution (H03),	(DDT, hunting; XE), Contaminant pollution (H03),			
Alien species (I01), Competition and predation	Alien species (I01), Competition and predation			
(I02), Tourism (G01)	(I02), Tourism (G01)			
IUCN Criteria:	HELCOM Red List	VU		
A2abce	Category:	Vulnerable		
Global / European IUCN Red List Category	Annex I EU Birds Directive:			
(BirdLife International 2004)	no			
LC / LC	Annex II EU Birds Directive:			
Assessment on species level, not for the sub-	II B (DK, DE)			
species L. f. fuscus				
Red List status in HELCOM countries:				
Denmark: LC (species level), Estonia: EN (species level), Finland: VU (species level), Germany: * (Not				
threatened, species level), Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: NT (species level)				

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# Range description and general trends

The lesser black-backed gull is a widespread breeder in coastal areas of northern and western Europe. There are 3 subspecies recognized: The lesser black-backed gulls of the central and eastern Baltic Sea and eastern Scandinavia belong to the nominate subspecies *Larus fuscus fuscus*. A second subspecies, *L. fuscus intermedius*, breeds in the Netherlands, at the German and Danish North Sea coast, in Norway and in the western Baltic (Denmark, Swedish west coast, recently also in Germany), whereas the third sub-species, *L. fuscus graellsii*, occurs in western Europe (UK,



Larus fuscus fuscus. Photo by Andrei Frenkel.

Iceland, France, Portugal and Spain). The European breeding population of all three subspecies is large (>300,000 bp) and increased since the 1970s. However, there has been a long-term decline of *L.f. fuscus* in the eastern parts of the range. The world population of this subspecies was about 15 000 bp around the year 2000, of which 45% bred in Finland and 35% in Sweden.

In the Baltic Sea area, *Larus fuscus intermedius* breeds at the Swedish West coast and the Danish Kattegat with a stable population, and has started to colonize the Baltic coast of Schleswig-Holstein (Germany) in 2001.



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### Distribution and status in the Baltic Sea region

The largest breeding populations of the nominate subspecies of the lesser black-backed gull in the Baltic Sea area are found in Finland, Sweden and Russia (St Petersburg region). There it has suffered a strong long-term decline since the 1970s.

In **Sweden**, *L. fuscus fuscus* almost exclusively breeds at the Baltic coast where it has shifted its distribution towards the north. The population counted 17 000 bp in the 1970s, today only 7 000–13 000 bp have left. However, there are indications for a population increase during the last *c.* 5 years.

Strong declines have been observed in **Finland**. These declines commenced on the southern coast. The Finnish population was 20 000 bp in the 1960s, of which only 7 000 have remained today. The decline concerns both the coastal (5 000 bp) and the inland (2 000 bp) populations (Valkama *et al.* 2011).

In **Russia, St Petersburg** region, the lesser black-backed gull breeds on the islands in the Gulf of Finland with 300–500 bp.

In Estonia, the species breeds with 50–100 pairs; it has suffered a long-term decline (Elts et al. 2009).

In **Poland**, the lesser black-backed gull is a sporadic breeder. Single pairs probably bred during (1973?) 1983–1989 and 1992–1994 on the coastal lakes Gardno and Łebsko and 1991 near Świnoujście (Tomiałojć & Stawarczyk 2003).

At the **German** Baltic coast, the lesser black-backed gull is a rather recent breeding bird. The breeding birds in Schleswig-Holstein obviously belong to the sub-species *L.f. intermedius,* whereas the birds breeding in Mecklenburg-Western Pomerania are supposed to belong to the subspecies *L.f. fuscus.* However, a clear identification on subspecies level has never been done. The first breeding attempt in Mecklenburg-Western Pomerania was recorded in 1943 on the island Langenwerder, the next in 1974 on the island Greifswalder Oie. Since then, the species has bred in most years with 1–4 bp (Nehls 2006).

In **Denmark**, *Larus f. fuscus* has been once a numerous breeder on Bornholm, especially on the bird island Græsholm (Ertholmene) with up to 1,200 bp during the 1940s. Nowadays there are only 3–5 bp on this island (http://www.chnf.dk/fugle/yffugle\_chroe.php) and some single pairs on other sites of Bornholm (Olsen 2010; http://Gulldk.blogspot.com/2010/08/baltic-Gull-larus-fuscus-fuscus-ad.html) . In the Danish western Baltic Sea area, *Larus f. fuscus* is a breeding bird on Saltholm in the Øresund near Copenhagen. The exact number of breeding pairs is unknown. Both subspecies *L.f. intermedius* and *L.f. fuscus* are breeding in this colony with a total of 80–240 bp (1993–2006). In 1999 it was estimated that the proportion of *L.f. fuscus* was 10–20%.

	Population size		Short-term	Long-term
Country	Breeding pairs	year	population trend (10 years)	population trend (50 years)
Sweden	6 800–11 500	2010	?	-
Finland	7 000	2006-2010	-	-
Russia - PET	300–500	2009	-	-
Estonia	50–100	2003–2008	-	
Poland	Sporadic breeder			
Germany - MV	1–4 (?)	2003–2009	0	+
Denmark	<100	2003–2009	-	
Baltic Sea	14 200–19 200			

Table1: Population numbers of the lesser black-backed gull *Larus f. fuscus* in the Baltic Sea area. For population trends O=stable, -=decreasing, --=strongly decreasing, +=increasing, ?=unknown.



Larus fuscus fuscus

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# **Distribution Map**

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# Habitat and ecology

This species breeds in colonies on coasts and lakes, *Larus f. fuscus* also as solitary pairs, especially on inland waterbodies. Currently, the colony size of the nominate *Larus f. fuscus* seldom exceeds 100 pairs. *Larus f. fuscus* is strictly insular, nesting on grassy treeless skerries in the Baltic archipelagos and on small rocks in lakes, solitary pairs also on wooded islets in the midst of trees. The western subspecies Larus f. *intermedius* nests within the urban environment, often in association with herring gulls, but for *Larus f. fuscus* the roof-nesting is exceptional and there is no association with herring gulls. The species is omnivorous, but *Larus f. fuscus* is predominantly fish-feeder. It also takes insects, crustaceans, worms, starfish, molluscs, seeds, berries, small mammals, eggs, even small birds. *Larus f. fuscus* is a long-distance migrant spending the winter in equatorial Africa, there becoming exposed to pesticides. Western forms seldom travel longer than to the Mediterranean – northern Africa.

### **Description of major threats**

The population decline of the nominate lesser black-backed gull in the Gulf of Finland is caused by an exceedingly high chick mortality due to diseases and predation by herring gulls. In the 1980s and 1990s, 65–70% of chicks had degeneration in various internal organs (primarily liver), inflammations (mainly intestinal), and sepsis, the final cause of death (Hario & Rudbäck 1996). Most of the remaining chicks (the potential recruits) were taken by predatory herring gulls, so the fledging rate was only 0.02 chicks per pair. As the only African migrant among the Baltic gulls, the nominate lesser black-backed gull is especially prone to DDT and its metabolites. The DDE/PCB ratio in chick livers was significantly elevated in the 1990s, indicating an increased exposure to DDTs as compared with other Baltic and circumpolar seabirds. Similarly, in northern Norway blood residues of DDE were higher in *L. f. fuscus* than in the increasing *L. f. intermedius* (Bustnes et al. 2006).

A significantly lower proportion of chicks have been found diseased in the 2000s in the Gulf of Finland. This is a genuine change. The mean hepatic concentration of PCBs was not significantly smaller than previously, whereas those of DDE were, leading to a lower DDE/PCB ratio. This is the first record of an apparent lowering in some of the OC levels in nominate lesser black-backed gull chicks. The reduced rate of preyed-on chicks is supposed to be a result of the culling programme for predatory Gulls conducted over the entire central Gulf of Finland in 2004–2007. PCB levels in Baltic herring (*Clupea harengus*), the staple food of *L. f. fuscus* during the breeding time, have not decreased. However, with regard to the different OC profiles, it has been difficult to decisively attribute effects of different pollutants in wild birds due to the correlative nature of OCs (reviewed in Hario & Nuutinen 2011).

### **Assessment justification**

The species is classified, according to the observed decline during the last 3 generations and the possible continuation of this trend, as Vulnerable (VU) (criteria A2abce).

#### **Recommendations for actions to conserve the species**

The exposure of the lesser black-backed gulls to pesticides in their African wintering areas seems to be a main factor affecting the population. Hence, stopping of inappropriate or even illegal application of such substances is a key element for the conservation of the species. Also, the efforts to reduce the levels of organochlorines in Baltic biota have to be continued. On the breeding grounds, measures to reduce the predation by herring gulls should be considered.

Hunting of *Larus fuscus* is allowed in Denmark and Germany. Since the subspecies are difficult to distinguish, it has to be assumed that hunting may also affect the nominate subspecies. Hence, hunting



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of Larus fuscus should be stopped in all EU member states.

#### **Common names**

Denmark: Sildemåge, Estonia: Tõmmukajakas, Finland: Selkälokki, Germany: Heringsmöwe, Latvia: Reņģu kaija, Lithuania: Silkinis kiras, Poland: Mewa żółtonoga, Russia: Клуша, Sweden: Silltrut

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