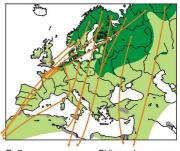
## Ruff (Philomachus pugnax) movements

The Ruff breeds in northern Europe and eastward to eastern Siberia, mainly north of 60°N. It also breeds locally in western Europe and in southern Scandinavia. The species is migratory and winters mainly in Africa south of the Sahara. Some Ruffs also winter in western Europe, in the Middle East and in coastal areas in India and Sri Lanka.

Ruffs have been ringed in many countries in Europe and the largest numbers of recoveries are available from Finland, Sweden, the Netherlands and Denmark. Recoveries from the winter (November – January) are reported in West Africa as well as in western and southern Europe. The number of recoveries in Europe is probably overrepresented compared with those reported in sub-Saharan Africa, where the largest number of Ruffs is known to winter. Recoveries in Africa are



Ruff Philomachus pugnax Distribution Map: Bauer, Bezzel & Fieder 2006, AULA-Verlag

**Figure 1:** Map depicting the movements of Ruff (*Philomachus pugnax*) based on published information and ring recoveries in the

reported mainly in Senegal, Mali and Niger. Large concentrations of Ruffs are known to occur in the Senegal delta and the inland delta of the river Niger. A higher proportion of males winter in the northern part of the wintering range while females are more common in the south. Recoveries show that non-breeding birds regularly remain in Africa during the summer. The species also winters in southern Africa. However, there is only one recovery from a bird ringed in Europe and found south of the equator indicating that the main wintering area of birds breeding in or migrating through Europe is in West Africa. Spring migration from Africa starts in February and follows a more direct route back to the breeding areas, with more migration also takes place along the coast in western Europe. The breeding area in the north and east is reached in May. Autumn migration takes place from the end of July to mid-November and Ruffs seem to reach the African wintering areas in larger numbers from September and onwards. During autumn migration many Ruffs from northern and eastern breeding areas, seem to follow a Great Circle route, migrating through coastal areas in western Europe in large numbers.

Summary of the movements of Ruff (*Philomachus pugnax*) from the literature based on published information and ring recoveries in the EURING Data Bank.

## Ruff Philomachus pugnax

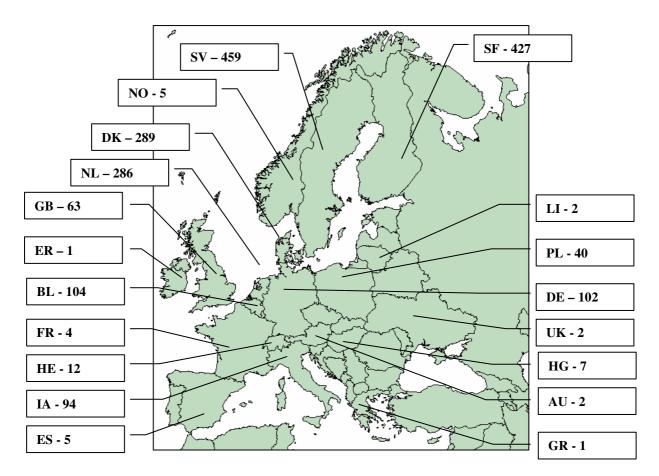
**Distribution:** in northern Eurasia from NW Europe and lowlands in northern Central Europe through wet taiga in eastern Europe to Tundra of eastern Siberia, mainly north of 60° Latitude

**Moult:** Postnuptial moult of flight feathers starts in males and females without young in the breeding areas; females with young start later; moult finished in December or January, sometimes interrupted during migration; no obvious moult migration

Population or part of population	Autumn migration		Wintering/Non-breeding Grounds		Spring Migration		Ref.
	Direction/via	during	location	during	Direction/via	during	
Netherlands	France close to Atlantic coast, northern Italy		West Africa South of Sahara				2
Scandinavia, Finland	Sweden, western Europe, western Mediterranean	End July and August; latest birds in October	West Africa South of Sahara (south to Kenya and southeastern Africa), few winter in France and Mediterranean. In Africa higher proportion of males in North, higher proportion of females in South		central Mediterranean (especially Italy)	February - May	1, 3, 5
	some also North Sea area		UK				1
Northern Norway	eastern central Europe, central and eastern Mediterranean		Sub-Saharan Africa between Lake Chad and Senegal		eastern Mediterranean		9
Eastern Siberia	mainly Caspian region, Arabia; few also via Finland, Scandinavia, Denmark, Netherlands, Germany and UK. Birds to India with unknown flyway		Eastern and southern Africa, India				1,9

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Number in Tables			
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**Figure 2**. Country of ringing and numbers of recoveries of birds featured in maps of finding locations - Ruff (*Philomachus pugnax*).