

Life – Limosa Schleswig-Holstein

**Conservation studies of
Ruff (*Philomachus pugnax* – KAMPFLÄUFER)
and
Baltic dunlin (*Calidris alpina* – ALPENSTRANDLÄUFER)
in Schleswig-Holstein**

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Progress report 2014

Introduction and summary:

Ruff and Baltic dunlin are two of the rarest and most threatened breeding bird species in Germany, and both are red listed as critically endangered in the most recent red lists for Schleswig-Holstein and Germany. In contrast to most other endangered bird species, the level of knowledge of the two species is low, and for years it has even been questioned, whether the two species are breeders in Schleswig-Holstein any longer (LANU 2008, LLUR 2010).

There are no monitoring programmes in Schleswig-Holstein directed specifically at ruff or dunlin, and the two species are covered in their key areas by observing presence or absence in pre-described periods during multispecies mappings, only (e. g. Hälterlein et al. 1995). Additional observations of breeding behaviour are collected unsystematically. Furthermore, ruffs have a prolonged breeding season with a peak after most other meadowbirds are being surveyed, their behaviour in the breeding season is very discrete apart from a short period during the early chick rearing, and they tend to breed away from the highest concentrations of other – more conspicuous – meadowbirds. Hence, there is not collected sufficient information from the standard monitoring programmes to evaluate the population status or to identify the exact breeding sites including nest and chick rearing areas, crucial information in order to safeguard proper management in the core breeding areas of the two species.

As part of the Life Limosa project in Schleswig-Holstein, more detailed knowledge about breeding of the two species is sought after, in order to understand and thereby improve the breeding conditions.

Ruffs

In 2013, breeding in four project sites was verified by finding of females with nests and/or with chicks. Two of these sites were very wet meadows with a late hay making, the other two were wet pastures on a poor sandy soil with no grazing or a low grazing pressure in the ruff breeding season.

In two sites – Rickelsbüller Koog and Beltringharder Koog (outside the Arlauer Speicherbecken) – a favourable high water table is kept, and usually good numbers of ruffs are found in both areas during the entire breeding season. It is most likely that ruffs are regular breeders in the areas but the exact nesting sites are not known, and no obvious nesting habitat is present. In both areas cattle grazing starts in the early part of the incubation period of the ruffs. In 2014, the ruff nesting sites were searched for here, and one nest was localized in Beltringharder Koog, whereas the search was unsuccessful in Rickelsbüller Koog. Similarly, a search for nesting sites in Oldensworter Vorland was unsuccessful, although a good number of ruffs with breeding behaviour was present during the main breeding season, and the water table in the area seemed favourable in 2014.

At the project site Alte Sorge Schleife, water table and vegetation management has been improved markedly for meadowbirds including ruff, and as ruffs were seen at the site in the pre-breeding season, it was investigated late May whether the species stayed and started breeding. Unfortunately, this was not the case, but patchily there seems to be potentially suitable meadows for future breeding of the species.

At two of the sites with documented breeding in 2013, ruffs were breeding successfully in 2014. In the southernmost part of the Dittmarscher Speicherkoog 2-3 females hatched chicks, and in Arlauer Speicherbecken no less than 4 different females were found with chicks.

A much higher number of ruffs was seen in the project sites through the breeding season in 2014 compared to 2013, and the population estimate is accordingly more than doubled to 43 breeding females (Table 1). The difference is primarily due to more favourable water tables in three sites: In Rickelsbüller Koog and Hauke-Haien Koog a mistake in the hydrology management in 2013 meant that the water table here was much too low for e. g. breeding ruffs. In 2014, a proper water table was re-established, and the ruffs reacted immediately in both sites. In Oldensworter Vorland the hydrology is basically natural, and the difference between the two years was due to a quite wet May in 2014, compared to a dry one in 2013.

Table 1. Breeding ruffs found in the Life Limosa project sites in the 2014 breeding season.

Ruff 2014

Site	Verified breeders		Probable breeders		Birds attempting to breed		Population 'guesstimate'	Observers
	Females with chicks or chick clutch seen	Additional females with nest	Additional females from nest habitat	Additional females in nest habitat	Females seen between 21 May and 12 June	Males seen between 21 May and 8 June		
Rickelsbüller Koog	0	0	0	0	22	13	13	Jutta Hansen, Ole Thorup
Hauke-Haien Koog	0	1	0	0	4	1	4	Hermann Hötker, Luis Schmidt, Ole Thorup
Beltringharder Koog, Arlauer Speicherbecken	4	0	0	0	4	4+	4	Brigitte Klinner-Hötker, Dominic Cimotti, Luis Schmidt, Ole Thorup
Beltringharder Koog, other areas	0	1	0	0	5	8+	5	Brigitte Klinner-Hötker, Luis Schmidt, Ole Thorup
Eiderdammflächen, Katinger Watt	0	0	0	1	1		1	Holger Bruns
Olversumer Vorland-Grüne Insel	0	0	0	0	0		0	Holger Bruns
Oldensworter Vorland	0	0	0	0	6	10	6	Holger Bruns, Ole Thorup
Meldorf Speicherkoog - Wöhrdener Loch	n/a	n/a	n/a	n/a	n/a	n/a	5	Not visited 2014
Meldorf Speicherkoog - Nordkoog	0	0	0	0	0	2	2	Ole Thorup
Speicherkoog Dittmarschen Süd	2-3	0	0	0	2-3		3	Volker Salewski
Alte Sorge Schleife	0	0	0	0	0	0	0	Ole Thorup
Project sites total	6-7	2	0	1	44-45	38+	43	
2013 Project sites total	3	3	1	2	18	20	19	

Baltic dunlins

Breeding was not documented in Schleswig-Holstein in 2013 but most likely 2-3 pairs bred in Rickelsbüller Koog. In 2014, a full day, 26 May, was devoted for a special effort to localize breeding dunlin at this site, but the species was not observed at all during this survey. However, on the regular multispecies counts in the area, four stationary pairs were observed late May and early June, and both the presence of an incubating bird and a chick family was suspected (Jutta Hansen).

Lately, breeding of dunlin has also been suspected in the westernmost part of the nature reserve Wöhrdener Loch. Although observed carefully for several hours 28 May, no dunlin of the local breeding 'baltic' or 'southern' type was found.

Land use/management improvement for ruffs and dunlins:

In the 2013 progress report, comments to and advise were given for a number project sites. Some of those comments are still of topical interest but are not repeated here.

Beltringharder Koog – Arlauer Speicherbecken:

From the season 2013, grazing was delayed in this area, and the eastern part of the meadows north of the Arlau had extensive areas with favourable nesting habitat for ruff in the breeding season 2014, providing breeding habitat for an impressive four females with hatching success. Although the present succession stage is very favourable for ruff, as it is for redshank and black-tailed godwit, the habitat is very fragile, however. There is an urgent risk that the reed bed along the Arlau gradually expands into the meadows and small reed islands will establish in the wetter parts of the meadows, both developments causing an overgrowth that will gradually deteriorate the meadow as breeding area for ruff and other meadowbirds. It will be worthwhile to adjust to a very specific management by grazing and cutting that keeps very near to the present succession stage of the area.

In addition to being an important site for breeding ruff and other meadowbirds, the Arlauer Speicherbecken is also a very important breeding site for kentish plovers. Consequently, not only overgrowing of the meadow is a threat to the important bird populations of the site, also overgrowing of the bare soil areas where kentish plovers are concentrated must be avoided by the right management.

Alte Sorge Schleife:

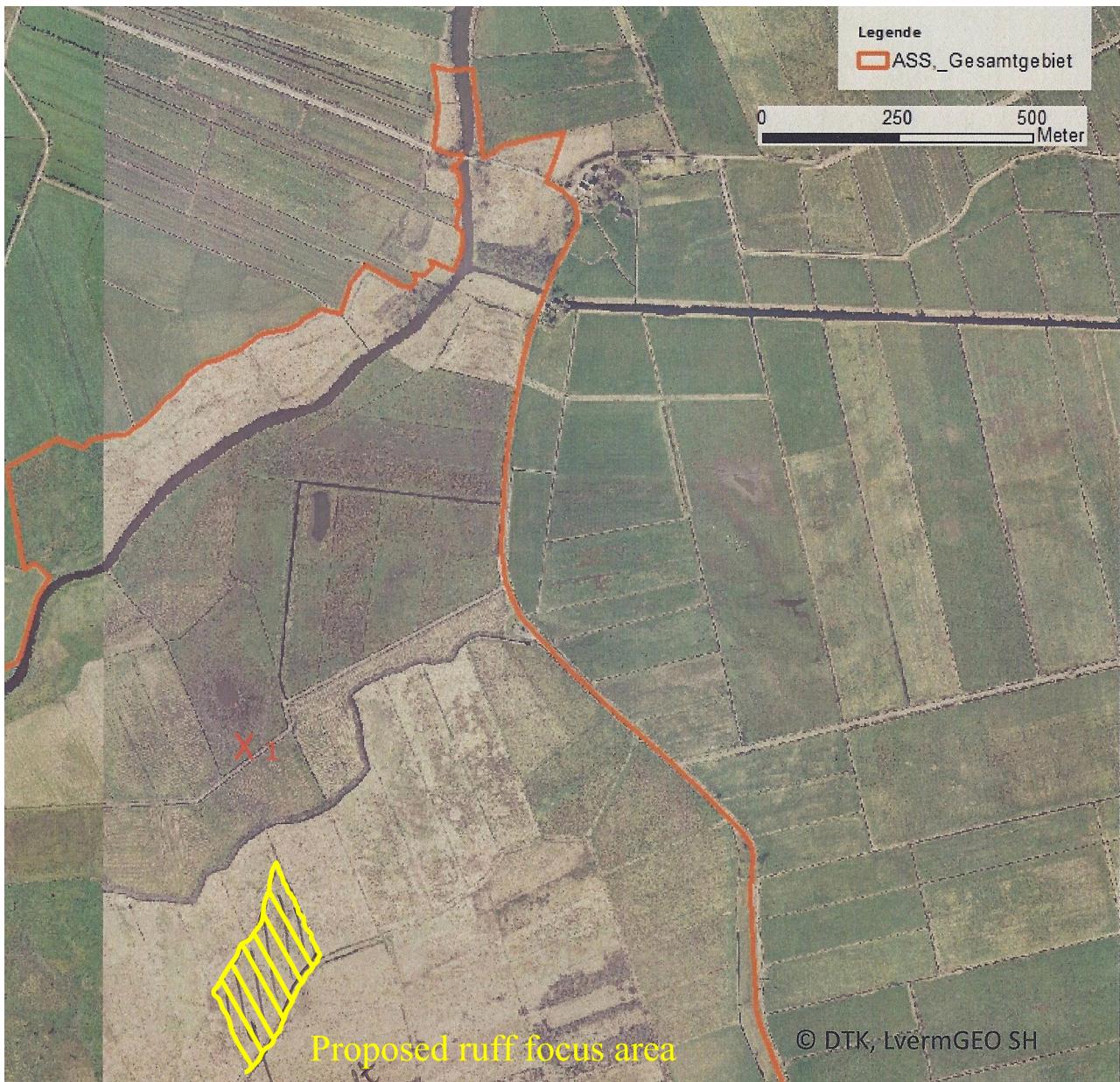
Late April and early May, in the peak spring migration period just prior to the breeding season, several ruffs were seen in the restored wet meadow areas in the northernmost part of the Alte Sorge Schleife. In order to check whether some ruffs had stayed and started breeding in this former breeding area, the restored wet hay meadows south of Fünfmühlen were carefully walked through in late May, and also the pastures between the hay meadows and the ‘Vorfluter’ waterbody were visited at the same date.

No ruffs were found in the visited areas in the breeding season, and most of the vegetation was not supposed to be very attractive nest habitat for the species, as the soil was apparently too rich and the vegetation too dense to be very favourable.

However, a plot further to the south was judged to be potentially much more attractive for nesting ruffs with the right management. In May the plot was only checked at the distance, but mid September after parts of the plot was mown and the hay was taken away, the area was checked more thoroughly. The area marked on the attached map was estimated to have a very favourable vegetation structure or the unmown parts could become attractive with a late hay cut followed by removal of the vegetation. The structure of the vegetation was quite open, and in many places the vegetation was dominated by large Carex islands.

It is proposed to introduce ruff friendly management in the marked area. This would include a high water table safeguarding a maximum of 30 cm between the soil surface and the water table in May

and first half of June. Annually, the meadows should be mown late (not earlier than 15 July) and the vegetation should be removed.



Map of the northern part of the Alte Sorge Schleife nature reserve. The area hatched with yellow contains an apparently favourable vegetation for nesting ruff, and it is proposed to designate this area as a ruff focus area, and to introduce ruff friendly management here.

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Appendix 1. Observation details and documentation

Ruff

ID	GPS ID	Site	Coordinates N	Coordinates E	Observations
Females with chicks					
RUCH141	BRBKR141	Arlauer Speicherbecken	54.54078	008.92748	(same as RUNE142) 15 June alarming female (Brigitte Klinner-Hötker). 24 June hatched nest checked, bird not alarming anymore (Ole Thorup)
RUCH142		Arlauer Speicherbecken			[Plot 610e, centre and SE] 5 June female and one very small chick (max 3 days) seen (Brigitte Klinner-Hötker)
RUCH143		Arlauer Speicherbecken			[Plot 621c W] 7 June one female with 3 very small chicks (Luis Schmidt)
RUCH144	BRBKO141	Arlauer Speicherbecken	54.53990	008.92823	(same as RUNE143) 15 June alarming female, seen together with RUCH141 (Brigitte Klinner-Hötker). 24 June not alarming anymore (Ole Thorup)
RUCH145		Dittmarscher Speicherkoog süd	54.04958	008.99887	15 June alarming female, also seen one freshly hatched chick (Volker Salewski)
RUCH146		Dittmarscher Speicherkoog süd	54.04308	008.99510	17 June alarming female (Volker Salewski)
RUCH147		Dittmarscher Speicherkoog süd	54.04648	009.00088	25 June alarming female. Perhaps same as RUCH145 (Volker Salewski)

Nests

RUNE141		Beltringharder Koog			[Plot 510g east] 15 May one female with rodent run, must have left the nest immediately before (Brigitte Klinner-Hötker). 30 May one female stationary in the same place, behaving very nervously, obviously with a nest nearby (Ole Thorup)
RUNE142	BRBKR141	Arlauer Speicherbecken	54.54078	008.92748	20 May female from nest with 4 eggs (Dominic Cimiotti), 24 May, 30 May etc. with eggs (Brigitte Klinner-Hötker, Hermann Hötker, Ole Thorup)
RUNE143	BRBKO141	Arlauer Speicherbecken	54.53990	008.92823	30 May female flushed from nest site, nest not found [Near P, western side of area] App. 27 May female showing nesting behaviour, nest not found (Hermann Hötker)
RUNE144		Hauke-Haien Koog			