

Short report from the 2003 Spoonbilled Sandpiper expedition to South Chukotka, Russia

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This is only a short summary report of this year's expedition from the study area of Mainopylgino, Beringovski. Participants also include E. Lappo, V. Morozov, I. Taldenkov (all Moscow) and Minoru Kashiwagi from Tokyo. Full report will be produced later and published soon.

First main results:

1. There are more pairs breeding in South Chukotka than previously thought
2. Breeding in hilly habitats not only adjacent to the spit but up to 6 km from the sea has been found not to be an exception
3. There is additional evidence that the breeding success of the species is very low and threatening the population
4. The first sighting of one of the ringed young birds in Saemangeum, South Korea on September 21st.

Due to bad weather and logistical problems we arrived only on June 12 (14 days later than anticipated!!) However, just in time and still not too late as the SBS were breeding surprisingly late in this year or in this area, about 6 – 10 days later than in last years study area in North Chukotka.

Mainopylgino is a 50 km long and up to three km broad gravel spit with ideal habitat conditions for SBS closing the large Pikulny Lake with again additional habitats along its western and may be eastern shores. In total the team of 5, later 6 scientists covered the entire area by foot or motorcycle to reach more remote areas along the spit. Temporary camps at the outer ends of the spit allowed better access to the remote areas.

Several hundred kilometres have been walked and searched for SBS territories. In total 76 territories were identified by end July (map in prep). Some of the territories could not be confirmed at second visits, but by July 19th at least 38 nests or broods were found and not less than 60 pairs of SBS are supposed to breed in the area. Surprisingly during a 12 day caterpillar excursion inland we found for the first time SBS breeding in adjacent hills, two nests 30 km away from the majority of territories in hills 6 km distant to the sea or to big lakes in hills at 62 and 68 m altitude, suggesting that there might be some more additional pairs in the entire area. The first complete nest was found on June 14, with fairly fresh complete clutch not more than 2 or three days old. The brood hatched on July 4th with several others following the days after. The majority hatched on July 9 and 10, about 8 to 10 days later than in 2002 in Northern Chukotka!

During the expedition a total of 53 adult birds have been caught, sexed, measured and individually colour-marked with a little green flag. Birds caught early in the season (29) have also been sampled for feathers for further analyses on stable isotopes. By July 11th 45 young birds have been ringed and colour marked in the same way. By August about 85 young had been ringed. At least 12 ringed chicks disappeared. In some cases broods already lost young before ringing. The number of predated or lost chicks is likely higher, but no exact figures could be gained, as the follow up of the families is very difficult. In Mainopylgino area the destiny of 50 – 60% of broods is unknown. Considering normal and equal conditions as in North Chukotka in the 80s, it is reasonable to estimate fledgling success as approximately 2 chicks per brood. This value of survival rate of Spoonbilled Sandpiper's chicks is based on 3-year studies by Tomkovich (1995). But there is reason to assume that this does no longer apply.

Out of the 31 birds ringed during a shorter visit in 2001 only one bird, the only adult of the 31 birds has been re-sighted and found breeding again in the same area only a few hundred meters from its ringing site. But

none of the ringed young (30) yet returned or have been sighted. It is unlikely to have missed all of them. It is also unlikely that they have not yet returned to the breeding grounds, as most sandpipers do normally in the second year, as also have been proven in North Chukotka (Tomkovich 1994). It is possible, but also not very likely that the young have dispersed in the wider area and are now breeding further north, as Tomkovich has found young returning after two years at his study area in Northern Chukotka in the late 80s.

The hatching success is good with 87% hatched. Three nests have been predated and two nests were abandoned for unknown reasons. The fledging success of the young has not been monitored for reasons mentioned above.

With now more than 200 colour-flagged birds it should be more likely to encounter the birds along the migration route. However since the first ringed 30 birds in 2000 only one recovery from Japan in 2003 demonstrates the difficulty and the low observer density along the migration route. However, good news just arrived in September from South Korea, where on September 21, 2003, one and ½ months after ringing a young bird was seen with the colour flag in the mudflats of Saemangeum. The area on the West coast of South Korea is threatened by reclamation plans. More info on <http://www.wbkenglish.com/saemref.asp>

Open questions still include the exact population size, the main wintering area and the main reasons for its decline. With the stable isotope analyses of 29 feathers taken from the birds caught in the season in June/July 2003 we hope to bring further light into the mystery of the wintering grounds.

The analyses of only O¹⁸ and Deuterium, promising geographical markers, alone will cost about 1,800 EUR, which is not yet fully funded. At present N and C isotopes, two more indicators directing towards the wintering areas are examined and results due in a few weeks.

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