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## **SELECTED BREEDING BIRDS IN THE AUKSTUMALA BOG**

**LIFE12 NAT/LT/965, Restoration of raised bog of Aukštumala in Nemunas  
Delta Regional Park  
Action D1**

### **Monitoring report**

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## **Introduction**

June 6-8<sup>th</sup> 2016 a breeding birds' survey of the Aukstumala raised bog was conducted, with emphasis on Golden Plover and Wood Sandpiper. The investigation should be seen as a follow-up to the one by Hansen (2014), which concluded that the two species mentioned would probably be amongst the best avian indicators of the restoration project carried out with the aims of improving the raised bog ecosystem by creating wetter conditions.

This survey took place somewhat later in the season than the one by Hansen (May 19<sup>th</sup>-23<sup>rd</sup>), which could partly explain some of the differing results between the two investigations; also different weather conditions in the two seasons could have caused some of the fluctuations seen.

## **Methods**

The conservation area (20 km<sup>2</sup>) was divided in three parts, a western, a central and an eastern part. Each part was visited during one morning from sunrise to around noon – East on the morning of 6<sup>th</sup> June, Central the 7<sup>th</sup> and West on the 8<sup>th</sup>. The route walked in each part aimed at covering the maximum area possible without getting too exhausted, giving greatest effort at zones of presumed preference for the target species; open treeless spaces for Golden Plover and wet areas with ponds for Wood Sandpiper. Routes are shown on Fig. 1.

During the investigation period weather was optimal for registering breeding birds, sunny but not too hot, with slight westerly breeze, only occasional reaching 6-7 m/sec. Only on the morning of June 8<sup>th</sup> a short shower prompted the survey to being interrupted for a few minutes; the only precipitation during the three days.

Registrations of breeding birds were made both by visual and aural sense; often birds were heard before they were seen. Each pair with breeding behavior was mapped on a print of satellite imagery from Google Maps on A3 paper format, supported by a handheld Garmin GPS, allowing very precise positions to be made. In the case of Golden Plover, however, the exact position of the territory was often hard to establish, since each breeding pair warned over large areas.

Apart from the two target species, other breeding birds of apparent interest were mapped –Common Crane, Common Snipe, Black-tailed Godwit and Great Grey Shrike.

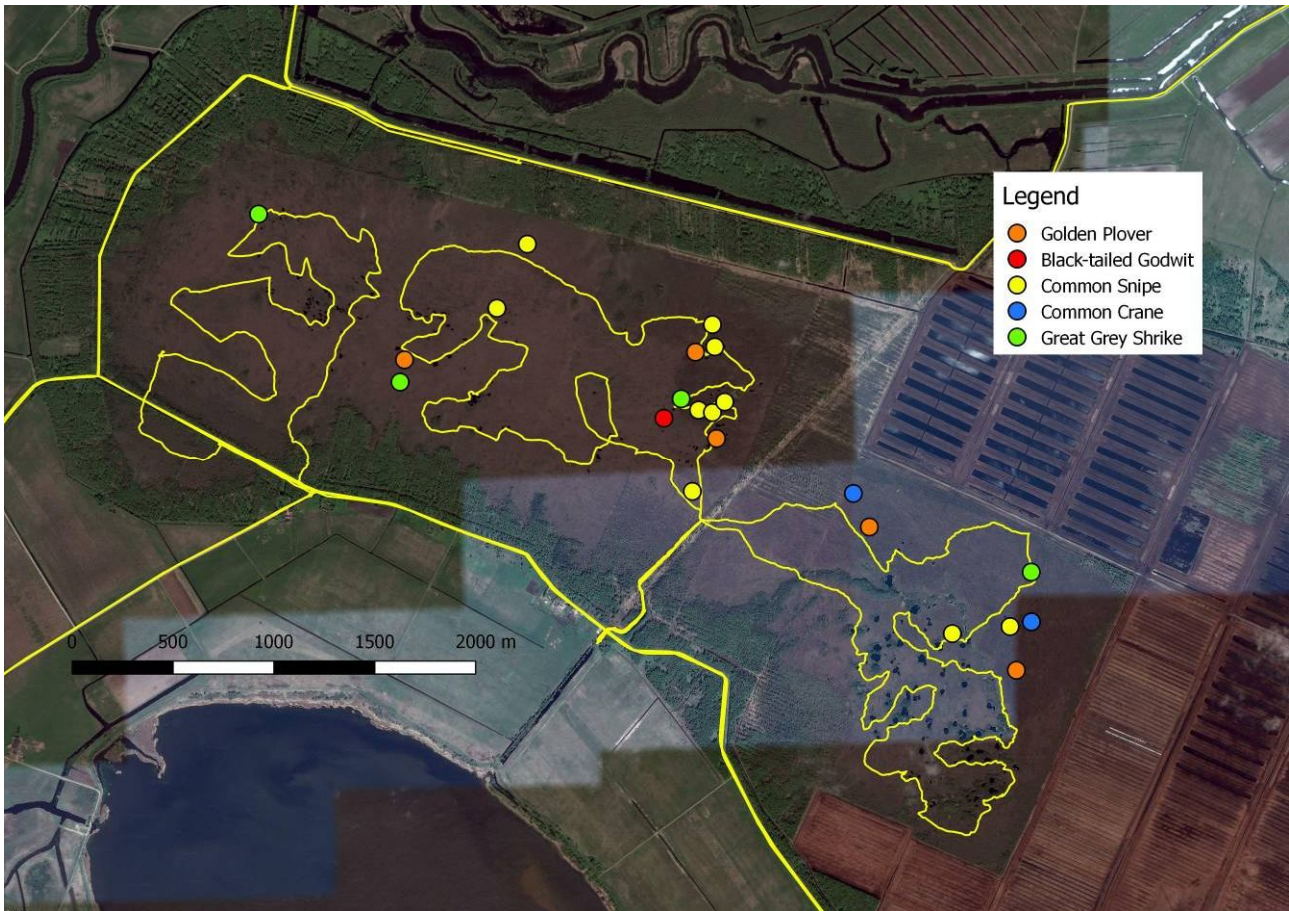


Fig. 1 RoutS of the monitoring and location of breeding birds

## Results

### **Golden Plover** *Pluvialis apricaria*

Five pairs were located in the bog, two in the eastern part and three in the central part. This number compares to four pairs during the 2014 investigation.

In addition, in the eastern part a flock of five adult birds in full breeding plumage were observed, presumably individuals with failed breeding attempts. And in the western part an overflying calling bird was heard.

The behavior of three of the breeding pairs indicated that their clutches had hatched; the other two were more discreet. All were found in open terrain with scattered and small trees and bushes.

Without having concrete data about the humidity or the flora of the bog in the breeding territories, the habitat could be described as wet heathland or semi-dry bog. Some of the territories were dominated by heather, others by seemingly more humid plant communities, but the one factor that definitively was common for all territories was the openness and scarcity of trees.



Fig. 2 **Golden Plover** *Pluvialis apricaria*

**Wood Sandpiper** *Tringa glareola*

Although almost all of the ponds of the bog were visited during the investigation, no Wood Sandpipers were found, in contrast to three pairs in 2014. It cannot be excluded that a few pairs may have been present, but given the focused effort to seek for the species in optimal habitat, that possibility is assessed as being really minimal.



Fig. 3 Wood Sandpiper *Tringa glareola*

**Black-tailed Godwit** *Limosa limosa*

One adult male in territory display flight was observed close to the new boardwalk and observation tower in the central part of the bog. Close to this bird a group of five (two males and three females) was circling, giving alarm calls, but probably no longer engaged in breeding attempts. The lone male was still displaying several hours later when completing the day's route and passing by the same area. Whether this bird still had an active breeding attempt going on is uncertain; but nevertheless, the observation indicates that the species does breed in Aukstumala. Maybe this year's breeding population initially had been three pairs.

Black-tailed Godwit was not mentioned by Hansen for the 2014 investigation.



Fig. 4 Black-tailed Godwit *Limosa limosa*

**Common Snipe** *Gallinago gallinago*

Ten males displaying over their territories were mapped in the eastern and central parts of the bog, in some of the wetter zones. This probably doesn't represent the total population of the species in Aukstumala, the habitat seems adequate but the optimal period for registering display activity is during early morning hours, and given the size of the bog it was not possible to cover it all during this time of day. Common Snipe was not mentioned by Hansen in 2014.

**Common Crane** *Grus grus*

Two breeding pairs were located in the bog, both in the eastern part, from where calling was heard each morning. On the morning when the central part was covered, a pair arrived to this part of the bog from the east. Judged by their behavior it is most likely that both observed pairs had lost their clutches. In 2014 three pairs of Cranes were encountered in the bog.



Fig. 5 Common Crane *Grus grus*

**Skylark** *Alauda arvensis*

Skylark is not a bog specialist, and the territories of singing birds were not mapped. However, compared to 2014, when less than 10 pairs were found according to Hansen, an increase appears to have occurred. The number of singing birds was definitely much larger this year.

**Great Grey Shrike** *Lanius excubator*

Four pairs with breeding behavior were found, compared to one pair in 2014. Three of the pairs were observed in the dryer parts with many small trees close to the edge of the bog.



Fig. 6 Great Grey Shrike *Lanius excubator*

## **Discussion**

The low populations of Golden Plover and Wood Sandpiper found in 2014 by Hansen had not increased in the meantime. Although five pairs of Golden Plovers were found instead of four, too small an increase to be significant; this year Wood Sandpiper was absent from the bog.

It is possible, of course, that some pairs of Wood Sandpipers started a breeding attempt earlier in the season and for some reason failed. This apparently had also happened for small flocks of Golden Plover and Black-tailed Godwit, as well as many Lapwings.

The management initiatives for raising water levels might have been in operation for too short time to show a marked effect on the populations of breeding bog and heathland specialist birds.

The lack of Wood Sandpiper and the observation of other wader species with apparent failed breeding attempts maybe imply that predation is a limiting factor for breeding birds on the bog. During the three days visit, potential predators that were observed were one Red Fox on one occasion, daily 1-4 White-tailed Sea Eagles, a similar number of Ravens and a few Marsh Harriers and Common Buzzards.

Without access to weather data for the area to compare the years 2014 and 2016 it is impossible to tell if one year was wetter or drier than the other. The increased presence of Skylarks and Great Grey Shrike could imply drier conditions, on the other hand, Common Snipe and Black-tailed Godwits prefer wet situations (-but was Common Snipe really not seen in 2014?).

In the 2014 report, Hansen recommended cutting down trees in the most overgrown parts of the bog. In 2016 especially close to the northern edge of the bog many birch trees were dead, probably not because of water level raising, but some other form of manmade manipulation? Felling trees could of course create more habitat for species like Golden Plover, but eventually the raised water levels and general wetter conditions on the bog should cause many trees to die, I would suppose.

Hansen mentioned the possible presence of Black Grouse on the moor, without finding any evidence. I also had no direct observations of that species, but found feces of what appeared to be this species, or at least a member of the grouse family (one small pile only, in the western part).