



Higher and more stable **black grouse abundance** rates were recorded from Eastern Fennoscandia (Finland-4.4, Karelia – 3.6 birds/10 km; coefficients of variation – 27% and 12%, respectively). The rates in Murmansk and Arkhangelsk Regions were 0.5 and 2.5 birds/10 km, respectively, and the coefficients of variation – 56 and 20%. For **capercaillie**, the highest abundance rates were found in Finland, the lowest – in Arkhangelsk and Murmansk Regions. Capercaillie abundance in Komi Republic was similar to the mean in the European North (0.36), but most stable.

The **years of “peak” and lowest abundance** of capercaillie and black grouse differ among regions of the North European taiga zone.

General trends in the abundance dynamics of both species in Murmansk and Arkhangelsk Regions coincide in the two regions (positive correlation, quite high for capercaillie – 0.83). In Finland and Karelia in 2000-2009 the trends showed reliably negative correlation with those in Arkhangelsk Region (-0.6 for black grouse), and weakly positive correlation with each other. The abundance of both species in the north of Europe differed also in its among-year dynamics.



WETLAND BIRDS STAGING IN OLONETS AREA (REPUBLIC OF KARELIA, RUSSIA) IN SPRING

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Large spring staging areas of wetland birds along the Baltic-White Sea flyway are concentrated in eastern Ladoga area. There are several of them, but the principal one is located in the farmland near the town of Olonets (Karelia). The main results of studies of Anser and Branta geese, for which this staging area is the main one before the departure for breeding areas,



have been published elsewhere (Zimin et al., 2007). This paper summarises the results of years of observations over ducks and waders during spring migration across Olonets grasslands. There gather birds that breed in the forest and tundra zones of Russia and winter mostly in Europe and Africa. So far, 7 species of poodle ducks, 8 diving ducks, 3 merganser species and 26 wader species have been recorded from the area between mid-April and late May. The dates of earliest and latest sightings (for passage migrants) of the species in the study area, abundances and their among-year variations, the species' wintering areas have been determined.



PRE-WINTER DIET COMPOSITION OF ESTONIAN RED DEER

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The present study was carried out on three different red deer (*Cervus elaphus* L.) populations in Estonia, located on the islands of Saaremaa and Hiiumaa and in Southern Estonia. The diet composition of red deer was studied from September to January using the rumen content analysis of 86 animals, which were culled during the period of 2004-2009. Grasses formed the main component of red deer diet throughout the period, 70% of volume on the average. The trophic diversity was the highest in September and November, when red deer consumed more shoots from deciduous trees, fruits, lichen, crops and shrubs. Conifers are less frequently used as a food source than deciduous trees. The biggest share of conifers (mainly *Juniperus communis*) was found in the rumens of deer, culled in the island of Saaremaa. Our results show, that red deer browsing does not have a significant economical effect on