2. The ranges of several mammal species have decreased over the past 100-150 years, 1 subspecies and 1 species disappeared from the Ural fauna – European beaver (*Castor fiber pohlei*) and red deer (*Cervus elaphus*). Presence of European mink is questionable –no reliable evidence has lately been discovered. The ranges of reindeer, wolverine and sable have shrunk sharply. Such species as moose and roe deer have extended their range to forest steppe, which was not typical for them 150 years ago. The numbers of beaver (another subspecies), sable, pine marten and red fox notably increased after fur economy collapse some 15 years ago.

3. Species abundances, biodiversity, anthropogenic impact on ecosystems were studied in five areas in Mid Urals which have similar landscape, climate and vegetation characteristics. Drawing upon this analysis measures are proposed to make hunting sustainable and to conserve rare species.

GADWALL BREEDING IN LENINGRAD REGION

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In the mid-20th century, the only occasion of Gadwall (Anas strepera L.) nesting was reported from Rakovye Lakes in 1966 (Molis, 1967). The main wave of dispersal began in the 1990s and proceeded along the Gulf of Finland southern coast via Kurgalsky Peninsula, where solitary birds appeared regularly in 1988-1994. In 1995, we observed 9 breeding occasions on the peninsula western coast; further on, we found 10 to 24 clutches there every year. In 1997, Gadwall started breeding on Seskar Island. Today, Gadwall is a common breeder at the Neva Bay, on Kotlin Island, at Lahtinsky and Sestroretsky Razliv*s*, on Beryozovye Islands, on islands and shores of the Vyborg Bay, and at

some lakes of the Karelian Isthmus (Melkovodnoye and Rakovye Lakes), Ropshinskiye ponds; it is now regularly sighted also in the south-western part of Ladoga.

Gadwall sticks to large eutrophic shallow-water reservoirs heavily overgrown with emergent vegetation. The main reserve for the species is Kurgalsky Peninsula, where 151 Gadwall nests were found in 1995-1999 and 2005-2009. Most birds there start laying eggs on 16.05-05.06. (84.92%, n=126), but some clutches may be formed after May 5th and until mid-June.

A normal clutch size is 7-11 eggs, the mean being 9.27±1.28 (n=127). Egg dimensions are 48.9-59.1×34.9-40.7, mean – 53.12±2.12×37.77±1.79 (n=207). Mean clutch size on abundance rise yeas (1996, 1998-1999 and 2007) was slightly smaller (9.13±1.29, n=73) than in other seasons (9.48±1.08, n=54). The clutches started after 26.05 (8.79+0.96, n=15) were smaller than earlier ones (9.55+1.09, n=18). The incubation success for Gadwall in 2006-2009 was 85.37% (n=383 eggs), and most of the egg loss (78.57%, n=56) was due to discord of their laying in communal clutches or because the incubating female abandoned such clutches. The proportion of communal clutches was high (18.46%, n=65 in 2006-2009): with Tufted Duck (8 nests), less often with Red-breasted Merganser and Goosander, Garganey or conspecific (1 nest each).

The broods stay reticent in emergent reed stands. One to three communal Gadwall or Gadwall/Tufted Duck broods are found every year. Some 2-3-week-old Gadwall ducklings regularly stay apart from the broods. Part of the broods move to overflow land soon after taking to water, crossing 1-2 km of open water. Survival to fledging in 2006-2009 was 64.52% (n=327). Total reproductive success in Gadwall on Kurgalsky Peninsula in these years was 55.09 % (n=383).