SPECIES COMPOSITION AND ABUNDANCE OF NESTING *ANATIDAE* AT SOME LAKES IN THE KARELIAN ISTHMUS (LENINGRAD REGION)

V.M. Khrabryi

Zoological Institute, Russian Academy of Science, Universitetskaya Nab. 1, St. Petersburg, Russia, E-mail: Lanius1@yandex.ru

The paper is based on the results of observations by the author in the central part of the Karelian Isthmus at Lakes Bolshoye Kirillovskoye, Vishnyovoye, Volochaevskoye, Nakhimovskoye and Pobednoye from 1992 to 2002. The counts of Anatidae were carried out from July 15 to August 25 in the first half of the day. All ducks encountered along the lake shores were counted. Birds were counted through 12x binoculars using a combination of methods: by walking transects along the shoreline, from inflatable boat, and by driving birds from shore vegetation stands. The number of adult birds, brood size and chick age were logged. Total surveyed area was 1200 ha. The aim of the study was to determine the dynamics of the species composition and abundance of Anatidae before the opening of the summer-autumn hunting season.

All in all, 11 nesting duck species were recorded during the study period: *Anas platyrhynchos, Anas penelope, Anas acuta, Anas crecca, Anas querquedula, Anas clypeata, Aythya ferina, Aythya fuligula, Bucephala clangula, Mergus serrator, Mergus merganser*. Total abundance of nesting ducks was roughly estimated at no more than 120 pairs. The dominant among dabbling ducks was Mallard, among diving ducks – Tufted Duck. An overwhelming majority of the nests found and broods sighted were located at lakes Bolshoye Kirillovskoye and Pobednoye. The main habitats of the broods are shallow overgrown bays, stream mouths or sources.

Mallard and Tufted Duck are the determinants of the total Anatidae abundance; these species contribute 48 and 16 % to the total number of ducks recorded, respectively.

EFFECT OF CONSORTIA ON THE SPATIAL STRUCTURE OF COMMUNITIES AND POPULATIONS

V.V. Kochetkov

Central-Forest State Biosphere Reserve, Nelidovo, Russia, E-mail: celiger@yahoo.com

Studying the relationship between the spatial distribution of communities, populations and the structure of biotopes we neglect the influence of consortia. Hence, the aim of our study was to reveal their effect on the spatial-temporal distribution of wildlife.

Consortium is a structural unit of a biocenosis which comprises organisms on the basis of their local and trophic relationships. Any biotope is non-uniform and consists of consortia, which shape its structure and regime. We distinguish between permanent and temporary consortia.

The main study method was registration of all traces of the animals' activity along 6 fixed routes differing in the characteristics of human impact in the snow and snow-free periods from 2004 to 2009. Biotopes and their consortia were identified along the route. Walking the route we logged all animal tracks using Garmin 60 GPS. OziExplorer, Excel and MapInfo software were employed to analyse long-term data on visitation and track-generating activity of mammals in the consortia. We found that changes in the vegetation component of the consortium cause reconstructing of the spatial and trophic structures of populations and communities. This phenomenon was observed both in permanent and in temporary consortia.