Biological series
Volume 113, Part 1
2008

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NEAREST NEIGHBOUR DISTANCES OF ADULT EUROPEAN BISON UNDER ENCLOSURE CONDITION

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Summary

Nearest neighbour distances of males and females of European bison under enclosure condition was observed. The data has been collected in the nursery on the Prioksko-terrasny Reserve. The analyzed factors depended on the distance were: calve, calfness, heat, origin — for females and environmental (environmental impact) and anthropogenic disturbing factors, activity, rut, sex, dominance, leadership, aggressive and friendship interaction for all adult animals. Rut, sex and calve (for females) are the most effective factors. Some factors influent on nearest neighbour distances between females with and without calves, and on females originally from zoos and from nursery. We found changes in distances between adult males which can be the domestication changes.

DYNAMICS OF SPATIAL DISTRIBUTION, NUMBERS AND NESTING SUCCESS OF THE EURASIAN CURLEW AT THE NORTH OF MOSCOW REGION UNDER INFLUENCE OF ANTHROPOGENIC FACTORS AND WEATHER

T.V. Sviridova, S.V.Volkov, D.B. Koltsov, T.V. Konovalova, V.A. Zubakin

Summary

The study was carried out at a model plot of 48 sq. km at the north of Moscow Region (56°45' N, 37°45' E). It was demonstrated that spatial distribution, numbers and nesting success of the Eurasian Curlew (*Numenius arquata*) on farmlands are primarily determined by intensity of landuse. Hatching success was increasing in a series of years 1997, 1999, 2005 from 32-97% due to improvement of protective characteristics of habitats on abandoned lands, as well as growth of the density of territorial pairs on considerably reduced area of mown meadows, a preferred nesting habitat. Abandonment of farmlands probably leads to decreased feeding activity of corvids, while density growth of Curlews facilitates effective nest protection by their communal agressive behaviour. Alterations of nesting habitats due to ploughing and growth of shrubs did not result in decrease of the species numbers, but caused changes in spatial distribution of territorial birds within the study plot. Catastrophic events in some years, like widespread grass fires (up to 43,5% of the area of nesting habitats burnt) did not result in changes of Curlew numbers or distribution, but markedly reduced total nesting success like in 2006 (49%, compared to 97% in 2005). This occures due to both decreased hatching success in nests affected by fire and low hatching success in replacement clutches on burnt meadows (31,25%, n = 5) compared to clutches on unimpaired meadows (80%, n = 5).

In years with late prolonged springs numbers of breeding pairs were increased from 10-15 to 26-32, the start of nesting was delayed by approximately 5 days ($x2= 14,45$, $p= 0,025$) and egg-laying period was prolonged compared to phenologically normal and early seasons.

COMPOSITION OF PLANT LIVING FORMS IN THE VIETNAM MONSOON TROPICAL FORESTS

A.N. Kuznetsov

TAXONOMIC REVISION OF SUBSECTIO *SALSUGINEA* SECTIO *POLYGONUM* (*POLYGONUM, POLYGONACEAE*)

O.V. Yurtseva

Summary

The studying of type specimens (B, LE, KW), natural and hermarial material showed distinctive and stable features of *P. salsugineum, P. aschersonianum, P. samarense*.

P. salsugineum differs from majority *Polygonum* species by narrowest leaves, tube-funnel ochreas with 13-20 veins and sharp long teeth, yellow perianth, subulate stamen filaments, dark-brown lanceolate achenes with evenly papillate faces.

P. aschersonianum is rather similar to *P. salsugineum*, but possesses tube semi-transparent ochreas 7-10 mm long with 10-17 brown veins, torn at the top in withish thread-lanceolate lacinules, shorter stamen filaments, which are dilatated at base in 3 inner stamens.

P. samarense differs by whitish semi-transparent ochreas 7—10 mm long, with 10—13 yellowish veins, torn to 1/3-2/3 in withish thread-lanceolate lacinules, shorter stamen filaments,

abruptly broaden in base, ovoid achenes, inequally triquetrous in section, light- or dark-brown, with evenly or striate-papillate faces.

The studying of type and herbarium material showed identity of *P. samarense* and *P. scythicum* type specimens, permiting to include *P. scythicum* in *P. samarense.*

ORCHID POLLINATION IN NORTHERN LATITUDES

I.V. Blinova

Summary

Orchid pollination is analyzed at arctic latitudes within Murmansk Region. The taxa of insect-pollinators, their attractants and possible co-evolution lines of insects and orchids are discussed.

SCIENTIFIC COMMUNICATION

AGRICULTURAL ACTIVITY AND LIVE-STOCK FARMING AS THE KEY FACTORS OF NUMBER FLUCTUATIONS OF EUROPEAN SUBSPECIES OF THE STEPPE MARMOT

V.A.Tokarsky, V.I. Ronkin, G.A. Savchenko

Summary

Dynamic of the steppe marmot (*Marmota bobak* (Miiller, 1776); Rodentia, Sciuridae) number in Velikoburluk district (Kharkov region) during XX century has been traced. The process of progressive increasing of pasturable pressure of live-stock on potential habitats of the steppe marmot has been represented. It is recognized, that this process has caused the restoration of pasturable ecosystems, one of the basic components is the steppe marmot. On the Velikoburluk (Kharkov) steppe marmot population the key role of the anthropogenous factor in dynamics of number fluctuation of *Marmota bobak* has been shown.

ECOLOGICAL AND GEOGRAPHICAL ANALYSIS OF BIRD FAUNA OF THE TALISH HIGHLANDS

N.A. Sadikhova

Summary

The results of the complex analysis of ecological and biological adaptations of nesting birds to the conditions of mountainous steppes of the Talish mountains are presented. Data were analysed according to 12 parameters. Comprehensive characteristic of the bird fauna reflects the regional peculiarities, emphasises the value of birds of the region, and provides for elaboration of conservation measures.

FAUNA AND ECOLOGY OF BEETLES RELATED WITH WOOD-INHABITING FUNGI AND MYXOMYCETES IN THE EUROPEAN NORTH-EAST OF RUSSIA

A.F. Tatarinova, N.B. Nikitsky, M.M. Dolgin

Summary

Species composition and biology of beetles related with wood-inhabiting fungi and myxomycetes in the European North-East of Russia are investigated. 232 beetle species from 28 families were found. The great part of beetle species related with Basidiomycetes. We defined three ecological groups of mycetophilous beetles: obligatory mycetophagous (143), facultative mycetophagous (80) and predators (9 species).

THE WALNUT NYCTEOLINE-MOTH, *ERSCHOVIELLA MUSCULANA* ERSCHOV NOCTUID SPECIES, NEW FOR EUROPE AND UKRAINE (LEPIDOPTERA: NOCTUIDAE)

A.V. Sviridov

Summary

The quarantine pest of Walnut, the Walnut Nycteoline-Moth, *Erschoviella musculana* Erschov, is registrated in Europe and Ukraine (Krym: Sevastopol) for first time. Bibl. 15.

THE NEW DATA ABOUT THE AZOOXANTELLATA SCLERACTINIAN CORALS OF THE NORTH PART OF THE INDIAN OCEAN

N.B.Keller

Summary

The scleractinian azooxantellata corals association consisting out of 33 species are reported from collections made by the Russian research vessels in the north of Indian ocean. The zoogeographical and the bathymetrical analysis of this corals fauna is done.

THE SPECIES SATURATION LEVEL AND ABUNDANCE OF THE INVASIVE SPECIES IN OPEN AND CLOSED PLANT COMMUNITIES OF THE WESTERN CAUCASUS

V.V. Akatov, T.V. Akatova

Summary

The relationship between the local species saturation and the invasion resistance in open communities of the river shallows and in closed low altitude meadow communities of the Western Caucasus was studied. The relative level of local species saturation of these communities was estimated by analysis of the relationships between species richness in 0,5 m2 (S) and in 15 m2 plots (N): the higher are values of N/S ratio the higher is the relative level of the local species saturation of the communities on larger plots. It is find that: 1) there is a significant negative correlation between N/S ratio and abundance of the invasive plants; 2) there is no negative relationship between abundance of the invasive plants and native species diversity in the communities with low saturation level; 3) the test results are similar for closed and open communities. These results agree with the idea that establishment by a new (invasive) species is more difficult in saturated communities.

TERRESTRIAL CYANOPROCARYOTA OF THE TERRITORY OF POLAR-ALPINE BOTANICAL GARDEN-INSTITUTE (KHIBINY MOUNTAINS, KOLA PENINSULA)

D.A. Davydov

Summary

The results of studies of terrestrial cyanobacteries (*Cyanoprokariota/Cyanophyta*) of the territory of Polar-Alpine Botanical Garden-Institute (Khibiny Mountains, Kola Peninsula) for the period of 2002-2004 are presented. 21 species have been recorded. Of them 17 species are new for studied area, 5 species are new for Khibiny Mountains. *Aphanocapsa fusco-lutea, A. parietina, Chroococcus cohaer-ens, Ch. varius. Dichothrix baueriana, Phormidium irriguum, Tolypothrix penicillata* are for the first time recorded for Murmansk Region.

LOSSES OF SCIENCE

BRITE LIFE OF THE ENTOMOLOGIST. IN MEMORY OF E.M. ANTONOVA