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WOLF AS NATURAL REGULATOR IN THE NUMBER OF REINDEERS IN LAPLAND RESERVE

V.Sh. Barcan

Summary

The data in the number of reindeers and of wolf meetings in Lapland reserve are summarized and confronted for 74 years — 1929—2003. The number of reindeers in conditions of their total protection and total extermination of wolves increased from 99 in 1929 to 12650 in 1967, after that the producers' cooperative organization was created to hunt of "superfluous" animals. The hunting was stopped to 1976, but the reindeer herd continued to melt away and in 1982 by air inventory was 168. The number of reindeers after 1982—1983 slowly increased, to 1994—1996 reached ~ 1000, and last on this level during 10 years, not be displayed of tendency to increasing. We consider the possible reason of this the permanent residence of 2—3 viable wolf packs in the reserve. 1000 reindeers are evidently optimum number for Lapland reserve, this corresponds to natural capacity of winter pastures. The condition of yagel pastures, exhausted yearly, improved, reindeers behave as cheerful compact groups.

Approximately until eighties the problem of maintenance of optimum in the number of animals in nature reserves was determined with the application of biological technology (biological amelioration), i.e. in account of amelioration of trophic, topic and biocenosis conditions the favourable conditions for progressive rise in the number of some species was created. This invariably resulted in the exceeding of natural capacity of lands with all the ensuing negatively consequences. Population of so called harmful animals (e.g. wolves) depressed up to whole annihilation. The overpopulation of protected species demands to reduce their active annihilation, i.e. the strategy in respect to animals qualitatively is changed — from protection to destruction

DISTRIBUTION AND SPREADING FEATURES OF THE CHARACTERISTIC FOREST SPECIES OF CARABID BEETLES (COLEOPTERA, CARABIDAE) WITHIN THE LIMITS OF VARIOUS PHYSICO-GEOGRAPHICAL AREAS OF THE MOSCOW REGION

S.Yu. Gryuntal, V.Yu. Pavlov

Summary

On the basis of literary given and own supervision the analysis of distribution in view of various areas of the Moscow region is lead. The analysis of the characteristic species of carabid beetles spreading has been performed on the literary data and authors observations in view of various , areas of the Moscow region. It is demonstrated that diversity is in direct dependence on the area edaphic-climatic conditions: the more diversity of conditions, the more species diversity.

The possible reasons of the Coleoptera spreading analysis is lead. It is shown, that the considered group is non-uniform on the structure: it includes as kinds characteristic for forests of various Russin plain zones and as carabid beetles having more limited distribution.

Absence of some kinds in some physico-geographical areas can be explained by methodical , lacks.

SPECIES COMPOSITION AND BIOTOPICAL DISTRIBUTION OF THE MORDELLID BEETLES (COLEOPTERA, MORDELLIDAE) OF THE BELARUS FAUNA

A.V. Zemoglyadchuk

Summary

In the paper list of the species of the mordellid beetles (Mordellidae) of Belarus with determination of their distribution through administrative regions of the republic and different types of biotopes is given. Seven species first are pointed out for the Belarus fauna: *Mordellistenula perrisi* (Mulsant, 1856), *Mordellistena helvetica* Ermisch, 1967, *M. kraatzi* Emery, 1876, *M. koelleri* Ermisch, 1956, *M. pentas* Mulsant, 1856, *M. perroudi* (Mulsant, 1856), *M. purpurascens* (Costa, 1854). *M.pseudonana* Ermisch, 1956 is excluded from the Belarus fauna.

MALACOFAUNA (GASTROPODA, PULMONATA) OF CONIFEROUS FORESTS OF RUSSIAN PLAIN EAST

T.G. Shikhova

Summary

Based on the studying of composition, structure and spatial distribution of malacofauna of the taiga and coniferous broad-leaved forests of the Vyatka river basin the following features of zonal malacological groups were revealed: a) such boreal species as *Zoogenetes harpa*, *Vertigo modesta*, *Arion subfuscus* are characteristic of the middle taiga; b) malacofauna of the south taiga of a transitional type includes both cold-resistant species *Vertigo modesta*, *Arion subfuscus*, and heat-loving species *Cochlodina laminata*, *Arion fasciatus*, *Trichia hispida*, *Cochlicopa lubricella*, *Euomphalia strigella*; c) in a subtaiga zone the species typical of broad-leaved forests grow: *Vertigo angustior*, *Vitrea cristallina*, *Trichia hispida*, *Ena montana*, *Cochlodina laminata*, *Clausilia pumila*, *Bulgarica cana*, *Limax cinereoniger*.

In the north-eastern direction the exhaustion of a specific composition of malacofauna is noted. The decline of a specific diversity towards the north (from 42 species in a subtaiga zone to 29 in a zone of coniferous broad-leaved forests) is caused by a combined effect of a number of factors: the decrease of a frostless period, the fall in an average annual air temperature, the increase of soil acidity and partly the decrease of the role of plantae nemorales in taiga phytocenoses. The decrease of the number of species of terrestrial malacofauna in a subtaiga zone of the Vyatka river basin as compared with the central area of the Russian Plain as a result of the growth of climate continentality towards the east takes place in the main owing to Clausiliidae.

HYBRIDIZATION BETWEEN SPECIES FROM SUBSECTIONS PATULA TZVEL. AND POLYGONUM (POLYGONUM, POLYGONACEAE)

O.V. Yurtseva, T.E. Kramina

Summary

Hybridization between *P. patulum* Bieb. and *P. aviculare* L. (Belosarayskaya kosa, Mariupol distr. Donetsk region), *P. patulum* Bieb. and *P. arenastrum* Boreau (Volgograd distr.) was investigated using one-way ANOVA, two-way ANOVA and stepwise discriminant analysis (DA) in some mixed populations. The parents differ mainly in leaf and bract length and width, leaf and bract index and heterophylly index. The hybrids possess intermediate character means or means close to the first or to the second parent, higher or lower than of the last ones. Though light-brown evenly papillate fruit surface is common for *P. patulum* and dark-brown striate papillate fruit surface is common for *P. aviculare* and *P. arenastrum*, in both species the characters of the partner occur sometimes. *P. patulum* and *P. aviculare* are hardly separated by DA owing to high variability of the characters, the hybrids falling between them or into *P. patulum* group. *P. patulum* and *P. arenastrum* are well separated by DA, the hybrids falling between them. Di-, tetra- and hexaploids were detected among the parents and the hybrids. *P. patulum* Bieb. *P. novoascanicum* Klok. and some related polyploid taxa from subsection *Patula* are supposed to be allopolyploids of hybrid origin, but this assumption needs molecular evidences.

THE VEGETATION OF DRIFT SANDS ON AN ISLAND OLKHON (BAIKAL)

L.N. Kasyanova, M.G. Azovsky, A.M. Mazukabzov

Summary

The vegetation of sand area of the island is considered. The sandy dunes, elongated cavities, deflation plates, are the main geomorphological sculptures, on which different plant communities developed. Diversity of plant communities is low. Four associations, two subassociations, two primitive plant aggregations were revealed. The flora contains 96 vascular plant species.

AQUATIC HYPHOMYCETES FROM FOREST-PARK BITSA AND VOROBIOVY HILLS LOCATED ON TERRITORY OF MOSCOW CITY

V.P. Prokhorov, V.V. Bodyagin

Summary

The leaves samples of various trees species and were collected mensually at period from April to October on territories of forest-park Bitsa and Vorobiovy hills. In laboratory the leaves were incubated in Petri dishes during 50—60 days. In results 35 species of aquatic hyphomycetes belonging to 21 genera were found which are presented in Tabl. 1. Furthermore 5 species in indicated pertaining to genera *Clavariopsis*, *Dactylella*, *Helicon*, *Tetracladium*, *Septonema* were founded. Between aquatic species of hyphomycetes *Alatospora acuminata*, *Angullospora aquatica*, *Fusarium aquaeductum*, *Lemonniera aquatica*, *Tetracladium marchalianum*, *Tricladium angulatum*, *Tripodermum campelopardus*, *Septonema secedens* were dominated. The species *Angullospora crassa*, *A. longissima*, *Camposporium antennatum*, *Lemonniera centrosphaera*, *Tetracladium setigerum*, *Tricladium gracile* were more frequent. But *Angullospora curvula*, *A. gigantea*, *Camposporium pellucidum*, *Mycocentrospora acerina*, *Clavariopsis aquatica*, *Clavariopsis* sp., *Dactylella aquatica*, *Dactylella* sp., *Flabellospora verticillata*, *Flagellospora curvula*, *Helicon* sp., *Heliscus lugdunensis*, *Jaculispora submersa*, *Lemonniera terrestris*, *Tetracladium* sp., *Tricladium splendens*, *T. myrtii* were pertained to quite uncommon species. The variability of aquatic hyphomycetes was more strongly pronounced in running water (33 spp.) than in the ponds (8 spp.). The number of species of aquatic hyphomycetes in Moscow number 35 spp. whilst 56 spp. on Zvenigorod Biological Station (ZBS). At two investigated localities 19 common species were present. There are *Alatospora acuminata*, *Angullospora crassa*, *A. curvula*, *A. gigantea*, *A. longissima*, *Clavariopsis aquatica*, *Flagellospora curvula*, *Fusarium aquaeductum*, *Heliscus lugdunensis*, *Lemonniera aquatica*, *L. terrestris*, *Tetracladium marchalianum*, *T. setigerum*, *Tricladium angulatum*, *T. gracile*, *T. splendens*, *Tripodermum campelopardus*, *T. myrtii*, *Varicosporium elodeae*. At the territory of forest-park "Bitsa" 10 species was registered which are not found on ZBS. There are *Actinospora megalospora*, *Camposporium antennatum*, *C. pellucidum*, *Mycocentrospora acerina*, *Dactylella aquatica*, *Flabellospora verticillata*, *Jaculispora submersa*, *L. centrosphaera*, *Septonema secedens* and *Vargamyces aquaticus*.

SCIENTIFIC COMMUNICATIONS

CHARACTERISTICS OF THE REPTILES OF THE POPULATIONS COSMODROME "BAIKONUR" (KAZAKHSTAN) AND ADJOINING DESERTS AREA

D.A. Bondarenko

Summary'

In 2000—2001 the study of cosmodrome and its adjoining deserted landscapes reptiles community was carried out. The transect censuses was used with registration of the perpendicular detection distances from each individual to the route line. In 14 points the length of routes consist of 73,3 kms. The 13 species of reptiles was founded in total. There was a low diversity of reptiles on a stony and sandy-clay plateau with sparse vegetation. *Trapelus sanguinolentus*, *Phrynocephalus helioscopus* and *Agrionemys horsfieldi* were dominate. The species composition of clay and sandy-clay plots was similar. The absence representatives of genus *Eremias* on compact grounds is caused by rigid environment of biotope. The density of reptiles' population on sandy-clay plain Daryalik was not more than 1,5 ind./ha. The abundance of reptiles on sandy massifs was a few time higher from the score psammobiontic species — from 5,2 up to 27,3 ind./ha. *Eremias lineolata* was dominated everywhere on the sands.

**NEW SUBGENUS OF THE GENUS MYCETOPHAGUS FABRICIUS, 1792
(COLEOPTERA, MYCETOPHAGIDAE) FROM INDIA**

N.B. Nikitsky

Summary

Redescription of *Mycetophagus sulcicollis* Champion, 1917 from Northern India (W. Almora) and description of new subgenus for this species — *Paramycetophagus* Nikitsky, subgen. nov., are given.

**DIAGNOSTIC KEY OF THE GENUS COLON HERBS!, 1797
(COLEOPTERA, COLONIDAE) OF THE NORTHERN
AND CENTRAL PART OF EUROPEAN RUSSIA**

G.I. Yuferev

Summary

The overview of 17 species of the genus *Colon* of Kirov and adjacent Areas with diagnostic key of species is given.