













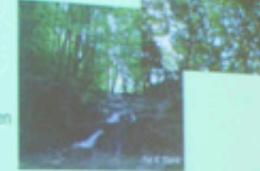


HOLOCENE AND BATS

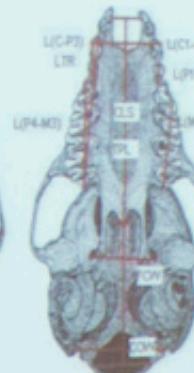
HOLOCENE
(10 250 years BP till today)

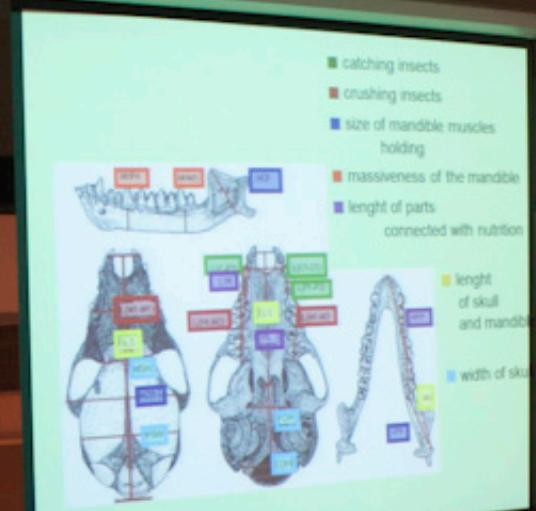
The last, warm period
of Quaternary

Analysis of sediments, pollen
and other organic remains,
 ^{14}C AMS dating



CRANIAL MORPHOLOGY OF BATS





John...
John...
John...
John...





ETAPELE RESTAURĂRII DIAVOLULUI DE MARE (MANTA BIROSTRIS) EXPUS ÎN MNINGA

RAPORTUL DE ACTIVITATE
ANUL 2010



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ETAPELE RESTAURĂRII MARELUI RECHIN ALB (CARCHARODON CARCHARIAS) EXPUS ÎN MNINGA

RAMON STEFAN PAUL, GEORGE STEFANCUZĂRNE
MUSEUL NAȚIONAL DE ISTORIE NATURALĂ "GHEORGHE ȘTEFĂnescu"



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ECOLOGICAL STUDIES ON THE ORTHOPTERA (INSECTA) POPULATIONS FROM THE DANUBE DELTA BIOSPHERE RESERVE: THE SALINE SOILS FROM HISTRIA

Histria it is located on Sacel bank sand, in the north of the "Istria - Sinoe" strictly protected area, a zone with xerophytic vegetation and with halophilic and hydrophilic strips of vegetation along Sinoe shores. Due to the specific microhabitat conditions, the orthoptera fauna presents specific adaptation characteristics to the xerophilic and hydrophilic types. This type of microhabitat is characterized by a sandy substratum having a low higrosopicity. Encouraged by the soil and by the high temperature, here are encountered the following vegetal associations: *Phragmitetum australis* - *Typhaetum angustifoliae* - *Carex extensa* - *Bolboschoenetum maritima*, *Agrostion pectinatae* - *Scallia sylvestri* - *Apertuum maritima*, *Salicornietum europe* - *Suaedetum maritima* - *Puccinellietum distans* - *Halocnemetum aristatae* - *Halimoniinetum hermaphroditae*.

Material and Methods

Material and methods
 In order to determine the intra- and interspecific relations between different Orthoptera species in this sandy dunes ecosystem, a synecological analysis was required and it was performed using some of the most used indices: abundance, constance, dominance and ecological significance index. Samples were collected during 6 years, from 2004 to 2009. Collecting Segun in April and was undertaken regularly until October; a total number of 10 collections were taken each year, at intervals of about three weeks. The total work area covers about 3000m², on a surface of 100m long and 30m wide. The Orthoptera species were identified using the keys of Ka (1976, 1978) and the updated nomenclature follows:
<http://www.orthopter.org> (accessed on 15.09.2010).

In the Hasta area, there have been captured a total of 5830 orthopterans. The biggest number of orthopterans was captured in 2009 and the smallest in 2005. Years 2004, 2006 and 2009 were years in which the abiotic factors values had no significant changes and have enabled the development of constant populations at Hasta. In 2005, the rainfall was increased throughout the study period. The lower temperature related to the abundant rainfall, affected the orthopterans populations. Years 2007, 2008 had a summer drought and affected the number of orthopterans in a lesser extent (Fig. 3.1). In terms of biodiversity, the yearly situation is relatively similar; a total of 30 species were reported for this area. The most species being caught in 2006 (37 species) and the fewest in 2009 (Fig. 3.2).

Total relative abundance (Fig. 3) shows that the species *Chorthippus brunneus*, *Chorthippus fontalis* and *Caloptilia rufipennis* form the basis of the fauna's orthopterocenosis. Other species that form stable populations are *Abraxas grossularia* and *Euphydryas aurinia* which are indicator species for salty soils. Nostranotus species and *Caloptilia tatarinovi*, *Chorthippus brunneus*, *Chorthippus albicans* and *Euchorthippus declivis*. We found 12 constant species. Deciduous forests (*Acacia dealbata*, *Quercus ilex*, *Q. pubescens*, *Q. petraea*, *Q. robur*) and grasslands (*Agrostis capillaris*, *Anthoxanthum odoratum*, *Agrostis capillaris*) are the most abundant habitats. The presence of indicator species indicates diversity and stability of the habitat (Fig. 4).



Fig. 1 *Lathyrus sativus* L. var. *sativus*



Fig. 2. Tree Orthotrichum spiculatum (number in each year).

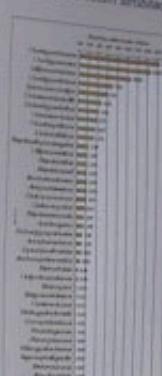


Fig. 2 Assessment of the Unadjusted sample (November 2009–2010)

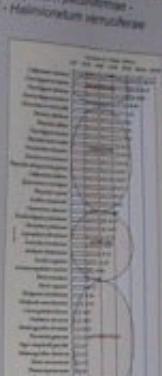


Fig. 4. Definitions used and Comparison between 2004-2005



In conclusion, the pre-mining vegetation at Minto is xeric-halophytic, which depends on the availability of environmental conditions and feeding regime. Halophytes form the soil and especially in saline areas, the common species include *Chorizandra enneandra*, *Chorizandra ionurus*, *Chorizandra lutea*, *Acacia saligna*, *Acacia cyclops* and *Acacia melanoxylon* which are endemic plants populations in this area.

THE DIVERSITY OF THE ORTHOPTERA COMMUNITIES IN HYGROPHILOUS GRASSLANDS AND MARSHLANDS IN SOUTHERN AND EASTERN ROMANIA

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Introduction

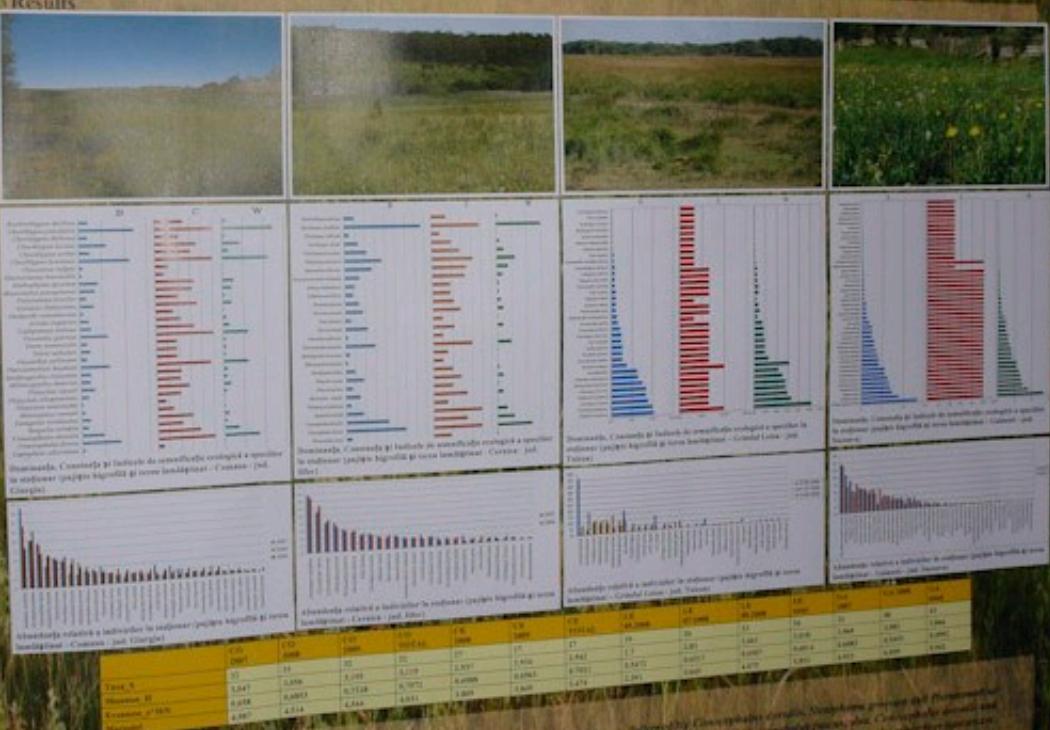
Orthoptera are an important component of grassland biodiversity (Gardiner & Hill, 2005). Orthoptera also play an important role in trophic networks because they are primary phytophagous species and are also an important source of food for other animal groups, such as reptiles and birds. Some species have a key role in grassland communities (Lockwood, 1998), while other species are good indicators, in order to detect changes occurring in areas that switched management regime (grazing, intensive mowing, etc.) (Hamann, 1997). We propose to investigate the diversity of some Orthoptera communities from hygrophilous grasslands of southern and eastern Romania and to make contributions to the knowledge about orthoptera ecology in Romania.

Materials and methods

The studied sites: Cozna, Giurgiu county - GPS coordinates: 44°09'13" N, 26°09'33" E, 61m altitude (2189 collected individuals); Cernica, Ilfov county - GPS coordinates: 42°38'57" N, 26°17'20" E, 48m altitude (1779 collected individuals); Letea, Tulcea county - GPS coordinates: 45°17'10" N, 28°31'50" E, 2m altitude (616 collected individuals); Galbeni, Ilfov county - GPS coordinates: 42°27'35" N, 25°56'22" E, (1374 collected individuals).

In each site we made a systematic collection of orthopterans in the months with the highest orthoptera density, in order to reflect as many species with different phenology, as possible. We have been sweeping the vegetation on a constant number of transects, 100m long and 1m wide. The number of sweeps per transect is 110 / 50m in average. For each transect community we performed a synecological analysis and the relative abundance, dominance, constancy and the ecological significance indexes were calculated, together with the Shannon-Wiener, Evenness and Margalef indices.

Results



Discussions

- At Cozna the most abundant species in samples were *Chortophaga viridifasciata* and *Catantops deserti*, followed by *Conocephalus dorsalis*, *Acrida ungarica* and *Trimerotropis pallidipennis*. Regarding the indicator species, the most abundant species are *Chortophaga viridifasciata* and *Conocephalus dorsalis*, but "C" and "W" seasons are dominated by *Stethophyma grossum* and *Locusta migratoria*. *Conocephalus pallidipennis* is the only species present in all samples. *Catantops deserti* is an indicator species for the wetter habitats.
- At Cernica there are two dominant species *Chortophaga viridifasciata* and *Chortophaga parallelus*. *Locusta migratoria* is an indicator species for the wetter habitats.
- At Letea the most abundant species is *Acrida ungarica*, present in all the study ecosystems. The dominant species are *Locusta migratoria* and *Acrida ungarica*, but "C" and "W" seasons are the most abundant. The Orthoptera diversity is small, still, the populations species are distributed very well and can be represented with high values of richness.
- As Giurgiu is situated in the highest number of autochthonous Orthoptera species, the diversity is higher than the other sites. The dominant species are *Locusta migratoria* and *Locusta pardalina*.
- The diversity richness in the hygrophilous grassland environment resulted in a value as follows: Cozna, Cernica, Letea and the last Cozna, with the same results, were the highest.



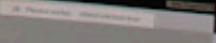
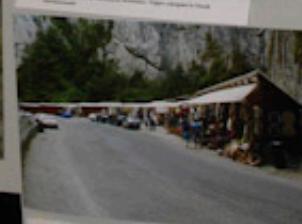
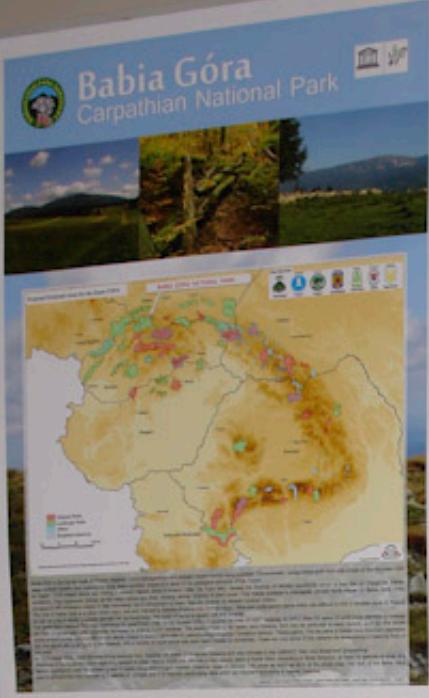




Photo Exhibitions



Protected and unprotected landscapes
of Romania

Bronisław W. Wołoszn









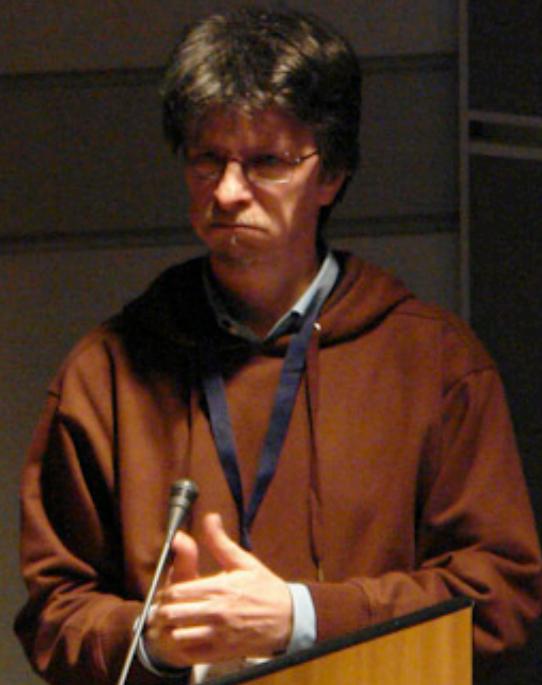




Situația actuală a conservării naturii în România

- Rețeaua națională de arii protejate a crescut de la 4,1% înainte de 1989 la 19,3% din teritoriu în prezent.
- Au fost înființate 27 Parcuri Naționale, Parcuri Naturale și Geoparcuri și 382 situri comunitare incluse în rețeaua Natura 2000.
- Siturile Natura 2000 acoperă 96% din suprafața ariilor protejate anterior, generând suprapunerile de statut de conservare.





Situația actuală a conservării naturii în România

Studiu de caz *Phenargis teleius*
Genul s-a numit până recent *Maculinea*.
Mirmecofil, specie ocrotită (DH-A2,
A4, C. Berna-A2, LR Eur-VU).

