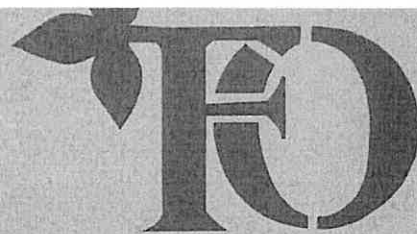
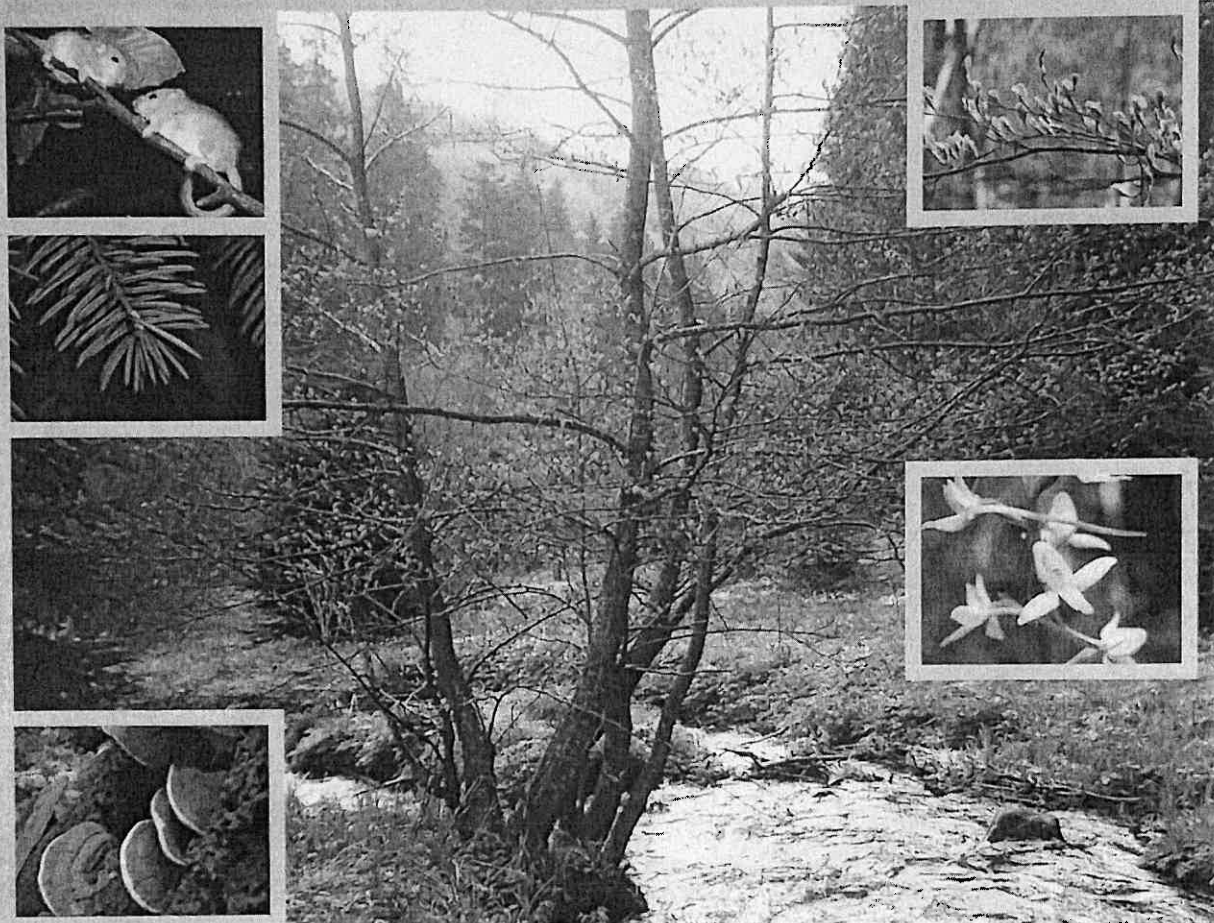


FOLIA OECOLOGICA



Volume 43, Number 1
Special Issue: A tribute to FJT

2016



Institute of Forest Ecology
Slovak Academy of Sciences
Zvolen



An international scientific journal, *Folia Oecologica* is a continuation of the journal *Folia dendrologica* published within the years 1974–1997. *Folia Oecologica* publishes peer reviewed articles covering all aspects of both theoretical and applied ecology and related interdisciplinary fields (nature conservation, forestry, agriculture, ecological economics etc.). The journal publishes full-text papers, short communications and review articles.

The Journal is included in AGRIS, CAB Abstracts, EBSCO *host*TM databases, Elsevier bibliographic databases: GEOBASE, SCOPUS, and in ProQuest databases: Professional ProQuest Central, ProQuest Agricultural Science Collection, ProQuest Biological Science Collection, ProQuest Biology Journals, ProQuest Central, ProQuest Earth Science Collection, ProQuest Engineering Collection, ProQuest Environmental Science Collection, ProQuest Natural Science Collection, ProQuest Sci-Tech Collection and ProQuest Technology Collection.

Editor-in-chief

Miroslav Saniga, Staré Hory

Editorial board

Milan Barna, Zvolen; Eduard Bublinec, Zvolen; Alojz Cicák, Zvolen; János Csiky, Pécs; Peter Ferus, Vieska nad Žitavou; Dušan Gömöry, Zvolen; Alois Honěk, Praha; Juraj Hreško, Nitra; Helena Ivanová, Nitra; Grygori Krynycki, Lviv; Ján Kukla, Zvolen; Ján Kulfán, Zvolen; Jiří Kulhavý, Brno; Zdenka Martinková, Praha; Jerzy Puchalski, Warsaw; Ján Supuka, Nitra; Hristo Tsakov, Sofia; Jozef Váľka, Zvolen; Peter Zach, Zvolen; Tadeusz Piotr Zarski, Warsaw

Executive editor

Katarína Sládeková, Zvolen

Address of the publisher and the editorial office

Institute of Forest Ecology of the Slovak Academy of Sciences, Štúrova 2, 960 53 Zvolen, Slovak Republic

Company registration number: 00679071

Tel.: +421 45 5241111, Fax: +421 45 5479485, <http://www.savzv.sk>

E-mail: knizuel@savzv.sk

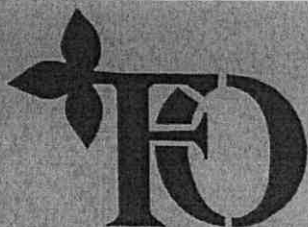
Folia Oecologica is published 2 times a year. The volume 43 (1) published August 2016.

Orders should be directed to the editorial office. The issues are distributed by the publisher. The journal is accessible at <http://www.savzv.sk/editorial-activity/>

Cover photos

Benjamin Jarčuška, Ján Kulfán, Peter Kaňuch

© Institute of Forest Ecology of the Slovak Academy of Sciences, 2016

**Contents**

Phylogenetic status of endemic <i>Chionomys nivalis mirhuanreini</i> in the Western Carpathians Martina Dorková, Marcela Kocianová-Adamcová, Peter Pristaš, Peter Klinga	3
Influence of climatic factors on the population dynamics of small mammals (Rodentia, Soricomorpha) on the sites affected by windthrow in the High Tatra Mts Ladislav Hlôška, Barbara Chovancová, Gabriela Chovancová, Peter Fleischer	12
Null model analysis of spatial species associations in spruce, tree-line and dwarf-pine bird assemblages in the High Tatras, the Western Carpathians Martin Korňan, Ján Korňan	21
Breeding bird assemblage of a fir-oak natural forest in Ponická dúbrava – the oldest Slovak nature reserve Peter Lešo	33
Bird community structure and population trends in the Little Carpathians Mts vineyard area Peter Puchala	42
Assessment of ornithochory in the north-western part of the Podunajská nížina Lowland (SW Slovakia) Jana Ružicková, Blanka Lehotská, Eva Kalivodová	50
Expansion of the Striped field mouse (<i>Apodemus agrarius</i>) in the south-western Slovakia during 2010–2015 Filip Tulis, Michal Ambros, Ivan Baláž, Dávid Žiak, Veronika Hulejová Sládkovičová, Peter Miklós, Alexander Dudich, Andrej Stollmann, Peter Klimant, Balazs Somogyi, Győző Horváth	64
Nest site location and breeding success of Common kingfisher (<i>Alcedo atthis</i>) in the Danube river system Lucia Turčoková, Mária Melišková, Mária Balážová	74
The occurrence of Pannonian root vole (<i>Microtus oeconomus mehelyi</i>) in small mammals' communities in Danubian Plain Michal Ambros, Ivan Baláž, Peter Klimant, Filip Tulis, Alexander Dudich, Andrej, Stollmann, Balazs Somogyi, Győző Horváth	83
The activity of bats in the Badínsky prales primeval forest Peter Bačkor	89
Winter activity of European badger (<i>Meles meles</i>) in Slovakia Marian Slamka	95
Abstracts of conference papers presented at FJT100	101

Folia oecologica is published in Zvolen by the Institute of Forest Ecology of the Slovak Academy of Sciences. Graphic design and printing by the Publishing House of the Technical University in Zvolen. Registration number EV 1842/08.

KONFERENCIA FJT100

CONFERENCE FJT100

Peter URBAN

Katedra biológie a ekológie, Fakulta prírodných vied UMB, Tajovského 40, 974 01 Banská Bystrica;
email: Peter.Urban@umb.sk, urbanlutra@gmail.com

Abstract

The conference with an international participation called “FJT100” was held 11. – 12. December, 2015 in Zvolen, on the occasion of the 100th anniversary of the birth of František Jozef Turček, the first Slovak ecologist. Organisers of this conference were the Technical University in Zvolen, the Institute of Forest Ecology of the Slovak Academy of Sciences in Zvolen, Poľana Protected Landscape Area Administration in Zvolen, the Department of Biology and Ecology from the Faculty of Natural Sciences of Matej Bel University in Banská Bystrica and the Slovak Ornithological Society / BirdLife Slovakia. The conference brought together 160 participants from Slovakia and Czech Republic and presented 38 papers and more than 20 posters. During the introductory section of the conference, participants could listen to nine presentations on the life of František Jozef Turček, his work and its importance. Further speeches and presentations were divided into four main sections. During a simple ceremony, as part of the event, a memorial plaque to František Jozef Turček was unveiled in the entrance hall of the SAS Institute of Forest Ecology, from Zbigniew Nišponský.

Abstracts of conference papers presented at FJT100

Large carnivores in the Czech Republic: the past and the future

Jan Andreska*, Dominik Andreska

The possible and the actual return of the described species Brown bear (*Ursus arctos*), Grey wolf (*Canis lupus lupus*) and Eurasian lynx (*Lynx lynx*) to the region of their original range raises an important question: exactly when, why and under what circumstances a particular species was pushed out of this area. Finding the right answer may be crucial for future successful protection of large carnivores in the area of densely populated Central Europe. The aim of the research was to obtain specific information about past occurrences of the aforementioned species in concrete regions of the Czech Republic, particularly to find evidence of last recorded occurrence of whelps. Available sources, both literary and archival ones were excerpted. As a result, several hundred records about historical occurrences of individual animals on the territory of the Czech Republic (in today's borders) and adjacent regions of neighbour countries were accumulated. Specific information about the last bear cubs catch was noted in the Šumava Mountains in 1800; the last wolf pups were recorded in 1823 in the Beskydy Mountains in the Carpathian range. As for the lynx cubs, it can be speculated that the last ones were hunted down in 1824 in Southern Bohemia. While comparing with similar works from abroad it was found that time frame of the extirpation of large mammalian predators from the Czech territory corresponds well with the data from the wider Central European region.

Riparian vegetation of the Bešeňová water dam as an important habitat for migrating passerines – results of bird ringing

Michal Baláž†, Lucia Hřčková, Michaela Ďurkáčová

Migrating birds often use the same places for migration paths and migration stop-overs for many years. These places are considered to be important habitats for birds and their identification and protection can help in bird conservation. Migratory bird assemblages were studied in riparian vegetation around the Bešeňová water dam (Liptovská kotlina Basin, northern Slovakia) during the spring and autumnal migration periods of 2007–2015. Numbers and species composition of birds was determined using ornithological mist-nets and CMR method. Mist-nets were situated in small willows and tall grasses in the water dam vicinity from the evenings to the next mid-days. Altogether 1,376 birds (51 species) were ringed during 47 trapping phases. The most frequent species were Blackcap, *Sylvia atricapilla* (21%), European robin, *Erithacus rubecula* (12%), Willow warbler, *Phylloscopus trochilus* (10%) Chiffchaff, *Phylloscopus collybita* (8%) and Garden warbler, *Sylvia borin* (8%). We have re-trapped ca. 6% of marked birds during next seasons and we have registered several migrants twice (or more than twice) in this place during the migration periods. To the most interesting records belong a Willow warbler re-trapped after four years (spring 2009–spring 2013), two Blackcaps re-trapped after three years (autumn 2009–spring 2012; spring 2011–spring 2014), Garden warbler re-trapped after two years (autumn 2013–spring 2015) and several birds re-trapped after two years or during the next year or next migration season. Based on these results, this place seems to be an important habitat for migratory birds, mainly passerine species.

(poster)

*e-mail: jan.andreska@pedf.cuni.cz

†e-mail: michal.balaz@ku.sk

Are birds and mammals problem for the Košice airport service?

Marcel Uhrin*, Stanislav Danko

Wildlife strikes with planes on airfields represent serious problem on air traffic. We analysed risk of wildlife strikes on the Košice airport based on data from different methodological approaches: (1) quantitative bird census on quadrates (2011), (2) maximally day numbers of birds on airport field (2008–2011), (3) registry of collisions of animals with aircrafts (2008–2011). In total, 118 bird species were registered on the airport among them 51 bird species breeding there. In period 2008–2011, 68 cases of wildlife strikes and 45 records of dead animals on the airport field were registered. Most accidents (58.8%) were caused by kestrels (*Falco tinnunculus*) following by common buzzard (*Buteo buteo*). According heuristic risk analysis, four animal species (*Falco tinnunculus*, *Buteo buteo*, *Phasianus colchicus*, *Lepus europaeus*) should be considered as species which require particular management actions.

(poster)

Mammals under the wheels, or road ecology in practice

Peter Urban†, Miloslav Badík, Jerguš Tesák, Gabriela Ligasová

The role of road ecology is concerned with understanding how roads affect ecological processes, often with the goal to develop strategies of mitigating negative environmental impacts of roads, including killing of wild animals by vehicles. Animal mortality on roads in Slovakia is directly connected with an increase of the transport frequency, insufficient biocorridor identification and the consequent application of wrong measures, or their total absence. The aim of the present work was to determine numbers, places and dates of mammal collisions on selected road sections in Muránska planina National Park (central Slovakia), including its buffer zone and identification the role of migration objects on the roads and habitat structure along the roads. The model area is surrounded by three roads, with the total length of 68 km. The 4.2 km long road section Zbojská–Tisovec I/72 was partially reconstructed in the years 2013–2015. Despite incorporation of some migration objects the road permeability (concerning movement of animals) has been reduced. On this road we registered 13 mammal carcasses in the year 2013 and 10 in 2014. The permeability status of the other two roads is relatively good, but the absence of mitigation measures results in the collisions between vehicles and animals. On the road I/66 Brezno–Červená Skala we registered 23 mammal carcasses in the year 2012, 33 in 2013 and 23 in 2014. On the road II/531 Tisovec–Červená Skala we registered 6 carcasses in the year 2012, 1 in 2013 and 3 in 2014.

(talk)

*e-mail: marcel.uhrin@gmail.com

†e-mail: urbanlutra@gmail.com