

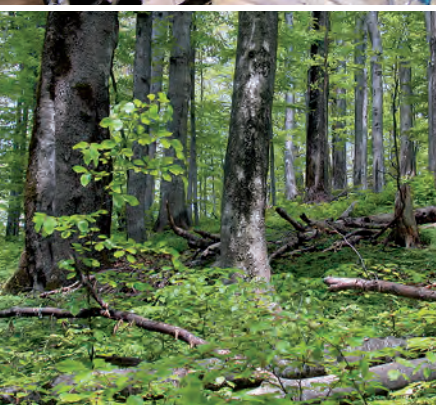
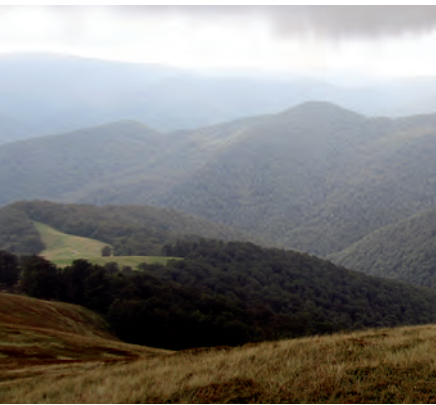
Fauna of a German Strict Forest Reserve and its Adjacent Managed Site

Blick, Theo; Dorow, Wolfgang H. O.

Senckenberg Gesellschaft für Naturforschung, Germany

The fauna of the Strict Forest Reserve (31.3 ha) and its adjacent managed site (36.9 ha) "Goldbachs- und Ziebachsrück" (Hesse, Germany) was inventoried over a period of two years. The study area is situated in the mountainous part of northern Hesse, Germany (300–365 m a.s.l., coordinates 9° 53' E, 50° 56' N). Mean temperature 8°C, mean annual precipitation 748 mm. The dominant forest type is submontane beech forest (mean age of trees 142 years) with sessile oak, spruce, larch, pine and hornbeam. The different taxa were assessed with diverse methods like pitfall traps; different types of collectors on tree trunks, stumps, dead branches; blue, white and yellow pans; window traps; hand sampling, viewing, light traps for moths, population density mapping for birds). Annelida, Isopoda, Araneae, Opiliones, Pseudoscorpiones, Plecoptera, Saltatoria, Psocoptera, Neuropteroidea, Heteroptera, Coleoptera, Symphyta, Aculeata, Trichoptera, Macrolepidoptera, Mecoptera, Siphonaptera and Aves, in total representing 28% of the German fauna, were analysed completely to species level. More than one million individuals of animals were trapped. In total 1595 species were identified, which by extrapolation indicate that more than 5000 species occur in the area. 24 species were new to Hesse, 128 species are included in the Red Data Books. Clear differences in numbers of species and/or individuals between the total reserve and the reference area as well as between the single study sites were observed. These results point to the necessity for species inventories to study a broad spectrum of animal groups and conducting a thorough analysis of their ecological requirements at species level. Only this approach guarantees a representative evaluation of alpha and beta diversity. Research was conducted in cooperation with and financially supported by "Landesbetrieb Hessen-Forst".

Keywords: Strict Forest Reserve, managed site, biodiversity, ATBI, Germany



International Conference

Primeval Beech Forests

Reference Systems for the Management and Conservation of Biodiversity, Forest Resources and Ecosystem Services

June 2nd to 9th, 2013
L'viv, Ukraine

Abstracts



Swiss Federal Institute for Forest, Snow
and Landscape Research WSL

International Conference

Primeval Beech Forests

**Reference Systems for the Management and
Conservation of Biodiversity, Forest Resources
and Ecosystem Services**

June 2nd to 9th, 2013
L'viv, Ukraine

Abstracts

Scientific committee

Scheidegger Christoph, Swiss Federal Research Institute WSL, Birmensdorf, Switzerland

Bauhus Jürgen, Universität Freiburg, Freiburg, Germany

Bollmann Kurt, Swiss Federal Research Institute WSL, Birmensdorf, Switzerland

Commarmot Brigitte, Swiss Federal Research Institute WSL, Birmensdorf, Switzerland

Diaci Jurij, University of Ljubljana, Ljubljana, Slovenia

Hamor Fedir Dmytrovych, Carpathian Biosphere Reserve, Rakhiv, Ukraine

Jonsson Bengt Gunnar, Mid Sweden University, Sundsvall, Sweden

Keeton William S., University of Vermont, Burlington, USA

Krynytskyy Hryhoriy, Ukrainian National Forestry University, L'viv, Ukraine

Nadyeina Olga, M.G. Kholodny Institute of Botany, National Academy of Sciences of Ukraine, Kiev, Ukraine

Piovesan Gianluca, University of Tuscia, Viterbo, Italy

Layout

Jacqueline Annen, WSL

We acknowledge financial support from the State Secretariat for Education, Research and Innovation, SERI, Switzerland.

The authors are responsible for the content and style of the contribution.

Recommended form of citation

Swiss Federal Research Institute WSL, 2013: International Conference Primeval Beech Forests Reference Systems for the Management and Conservation of Biodiversity, Forest Resources and Ecosystem Services. June 2nd to 9th, 2013 Lviv, Ukraine. Abstracts. Birmensdorf, Swiss Federal Institute for Forest, Snow and Landscape Research WSL, 144 pp.

PDF-Download: www.wsl.ch/publikationen/pdf/12499.pdf

Contents

Opening Session	5
1 Primeval beech forests: Biodiversity sanctuaries or refuges	
Symposia 1	12
2 Structure, composition and dynamics of primeval forests	
Symposia 2A	24
Symposia 2B	34
Symposia 2C	41
3 Sustainable forest management and biodiversity conservation: Integrative and segregative approaches and restoration	
Symposia 3E	52
Symposia 3F	62
Symposia 3G	69
4 The future of European beech forests	
Symposia 4	76
Poster	87
Index Oral Presentations and Posters	131
Program	138