

## The Lower Morava Biosphere Reserve

# ANNUAL REPORT 2015



# CONTENS

INTRODUCTION	2
MAN AND THE BIOSPHERE (MAB) PROGRAMME AND BIOSPHERE RESERVES	4
LOWER MORAVA BIOSPHERE RESERVE	5
ORGANIZATIONAL CHART OF THE CORPORATION	7
IMPORTANT ACTIVITIES IN 2015	10
OTHER ACTIVITIES	18
EXPECTED COURSE OF OUR ACTIVITIES IN 2016	22
DONORS AND PARTNERS	22

# INTRODUCTION

Dear friends,

Lower Morava Biosphere Reserve, Public Benefit Corporation, a Model Biosphere Reserve of the World Network of Biosphere Reserves, has concluded its eleventh year of active service. 2015 brought another climatic extreme to South Moravia in the form of unusually long periods of drought during the growing season and a record number of tropical days and nights in the summer. In the global context, different forms of extreme weather are increasingly common. Some places are plagued by floods, some suffer from numerous tornadoes and tropical storms, while others wither from lack of water and drought. The entire planet is climatically restless and the restlessness transfers to the people affected, particularly in developing countries. Political summits are discussing the issue of climatic threats and the possible ways of fighting them. Global treaties are adopted with the objective to safeguard **sustainable development** and basic protection of the Earth's ecosystems. In December 2015 an important global United Nations Framework Convention on Climate Change was adopted as a follow-up of the **2030 Agenda for Sustainable Development** adopted in September 2015. For the World Network of Biosphere Reserves UNESCO General Conference adopted the **MAB Programme Strategy for the period 2015-2025**. These new global agreements jointly provide a complex and up-to-date framework with the objective to contribute to international cooperation addressing the challenges of sustainable development and to interconnect them with the Strategic Goals of the MAB Programme and World Network of Biosphere Reserves actions in the next ten years.

In our everyday work we are trying to align our activities with the current strategic documents. Our efforts have been acknowledged at the **EuroMAB Conference Estonia in 2015**, where we were the only representatives of Czech biosphere reserves and where, among other

things, we presented our activities in a workshop on Education for Sustainable Development and Biosphere Reserves.

Both the general public and experts have been traditionally attracted by core projects of our BR which focus on landscape management. 2015 saw the successful implementation of projects dealing with the restoration and planting of greenery within the Territorial System of Ecological Stability (TSES) on six cadastral areas covering over 140 ha. We trust that these important permanent green belts will soon be complemented by follow-up measures in the organization of agricultural and water management of the landscape to enhance its general quality. We must bear in mind that arable land and clean water represent our greatest assets and that a landscape with sufficient greenery is capable of withstanding climatic change better.

We cooperate with municipalities, universities and all stakeholders who either are or feel responsible for the sustainable development of our civic society. The range of our activities is considerable, as the issue of "sustainability" is complex and interdisciplinary. We continue to promote model solutions and projects, participate in the education of young people and general public to get across the message that global problems tend to have their very specific local implications. Their successful tackling is possible on condition that interdisciplinary exchange of information is promoted, expert arguments are respected and consent about possible solution is reached. We are doing our best to adhere to these principles in all our activities.

The achievements of Lower Morava BR, PBC, would not have been possible without the continuous support and participation of representatives of our governing bodies, the moral support of our supporters and donations from our partners. Our heartfelt thanks go out to all of them, along with our assurance that joint efforts will take us far.

Jan Vybrál, Managing Director, April 2016



# MAN AND THE BIOSPHERE (MAB) PROGRAMME AND BIOSPHERE RESERVES

The international UNESCO Man and the Biosphere (Mab) Programme was established in 1971. Its primary objective is to promote sustainable and sensible management of natural resources and to improve the relationship between man and the environment.

**Biosphere reserves (BRs)** are areas with an international status, nominated by national governments and designated by UNESCO under the MAB Programme. BRs are designed to create and test innovative approaches to sustainable development, and by combining scientific knowledge and different forms of landscape and natural resources management help reduce biodiversity loss, improve the social, economic and cultural conditions necessary for the environmental sustainability of man's standard of living.

In practice it involves looking for methods of flexible, dynamic and sustainable conservation of natural and cultural values through everyday human activities.

Biosphere reserves differ from traditional reserves by not focusing solely on nature conservation but by respecting and fostering such human landscape activities which promote its positive sustainable development.

All world BRs are bound to fulfil three equally important functions:

1. Conservation of natural and cultural diversity
2. Socially, culturally and environmentally sustainable economic development
3. Support of research, monitoring and environmental education

The territory of each BR is divided into three zones:

The **core zone** is designed for nature conservation, its monitoring and non-destructive research. The **buffer zone** surrounds the core zones and is utilized for activities in accord with sustainable ecological procedures. The remaining area of a BR consists of the **transition zone** or the zone of cooperation, where all stakeholders work jointly towards sustainable management of resources of the entire area.

It is imperative that every BR actively promotes participatory management, which requires equal collaboration and participation of all stakeholders, including local governments and inhabitants, state administration, representatives of local businesses and conservation groups as well as natural and social scientists. Lower Morava BR is the only BR in the Czech Republic to directly and equally involve various stakeholders in the management and decision-making processes on the platform of a Public Benefit Corporation.

The MAB Programme facilitated the creation of the World Network of Biosphere Reserves, which in 2015 encompassed a total of 651 BRs in 120 countries, six of them on the territory of the Czech Republic (Šumava, Křkonoše, Křižoklátsko, Třebon Basin, Bílé Karpaty and the Lower Morava BR).

## LOWER MORAVA BIOSPHERE RESERVE

The Lower Morava Biosphere Reserve was designated in July 2003 as an extension of the former Pálava Biosphere Reserve (designated in 1986) to encompass the Lednice-Valtice Cultural Landscape (LVCL) and the floodplain forests at the confluence of the Morava and Dyje Rivers.

It is situated in South Moravia, some 35 km south of Brno on the borders with Austria and Slovakia. The Pavlovské Hills, or Pálava, stand out as its dominant feature consisting of limestone cliffs covered with steppes, forests and grasslands, as well as arable land and vineyards. The northern, eastern and southern parts of the biosphere reserve are situated in the flat alluvium of the Dyje River which is subject to intensive, mostly agricultural use. The central part of the biosphere reserve is situated in a depression filled with fishponds and landscape artificially created by people in the 19<sup>th</sup> century, which at present is designated as a UNESCO World Heritage Site. The south-eastern part of the reserve, a triangle marked by the town of Břeclav, village called Týnec and the confluence of the Morava and Dyje Rivers, houses the largest complex of hardwood floodplain forests and alluvial meadows (some 8,000 ha) in the Czech Republic. The Lower Morava BR encompasses a number of sites of both national and international importance, among them Natura 2000 Special Protection Areas, the Pálava Protected Landscape Area, Lednice-Valtice Cultural Landscape, Ramsar Sites and two nature parks (the Dyje Floodplain and the Mikulčice Floodplain Nature Parks) or the Morava Quaternary Protected Area of Natural Water Accumulation.

The Lower Morava Biosphere Reserve, Public Benefit Corporation, was established in 2004 and was entrusted with the provision of activities administered by the Lower Morava Biosphere Reserve as part of the UNESCO World Network of Biosphere Reserves. It was founded by Forests of the Czech Republic, State Enterprise, the Ministry of the Environment of the Czech Republic, MND a.s., the Czech Union of Nature Conservationists

and the Břeclav District Chamber of Commerce. In the context of the Czech Republic it is the only biosphere reserve coordinated by a non-governmental organization which involves representatives of local businesses, state administration bodies, municipalities, professional associations and non-governmental organizations active on the territory of the BR. This management model is unique within the country, as the existing Czech BRs have always been administered by some state nature conservation body, be it a Protected Landscape Area or a National Park. "

**Lower Morava Biosphere Reserve, PBC, provides the following public benefit services:**

- organizational, institutional, factual and personnel provision of activities administered by the Lower Morava Biosphere Reserve (hereinafter BR) as part of the UNESCO World Network of Biosphere Reserves,
- participation in activities relevant to the Lower Morava BR, including the coordination of these activities with state administration bodies, municipal authorities, stakeholders, educational and scientific institutions, businesses, general public and other bodies,
- participation in mediating and procuring advisory, financial and coordinating services which relate to the Lower Morava BR and its development, in accordance with the UNESCO regulations on the World Network of Biosphere Reserves,
- safeguarding the commissioning, development and regular update of an open information database on the Lower Morava BR and on the scientific, economic and development activities relating to the area or existence of the BR,
- participation in publishing both periodic and non-periodic materials and proceedings, including informative and methodological



- publications printed, electronic, audio-visual and multimedia, as well as their presentation, distribution and sale,
- participation in educational activities in a spirit of promoting the principles of sustainable lifestyle, in particular those of nature and landscape conservation and the rational management of natural resources,
- providing information services for the general public,
- participation in organizing scientific conferences, forums, training courses and exhibitions relating to the Lower Morava BR,
- establishment and management of model facilities,
- fostering international cooperation in matters relating to the Lower Morava BR and the World Network of Biosphere Reserves,

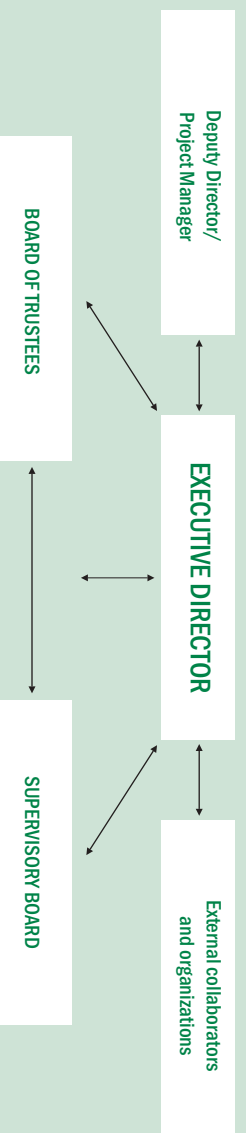
- promoting and enforcing activities aimed at economic and demographic development of the Lower Morava BR and the entire region,
- providing mediatory services in cases of disputes and conflicts arising from the existence and activities of the Lower Morava BR.

The corporation provides public benefit services under equal conditions with the objective to support all stakeholders and activities aimed at the development of the BR territory in accordance with conditions and regulations stipulated by the UNESCO Man and the Biosphere Programme. All activities conducted in 2015 were in accordance with the 2014–2020 Action Plan and in concord with the conditions of the Man and the Biosphere Programme.

## 6

# ORGANIZATIONAL CHART OF THE CORPORATION

Registered seat: Zámecké nám. 69, 691 44 Lednice  
Registration number: 269 38 171  
Legal form: Public Benefit Corporation





## ORGANIZATION CHART OF THE CORPORATION

The governing bodies include the Board of Trustees, Supervisory Board and the Executive Director. The structure of governing bodies reflects the efforts towards the broadest participation of all stakeholders within the Biosphere Reserve. The Executive Director acts as a statutory representative of the corporation.

### Composition of Lower Morava BR, PBC governing bodies in 2015:

#### Board of Trustees

The Board of Trustees is a nine-member managing body of the Biosphere Reserve which encompasses representatives of the founding members along with three representatives of municipalities and regions whose territory the BR covers, a representative of the District Chamber of Agriculture and a representative of Mendel University in Brno, which simultaneously acts as the principal scientific advisory body of the BR.

Libor Kabát	Chairman	the LVCL Region
Miroslav Svoboda	Vice-Chairman	Forests of the Czech Republic, S.E.
Petr Maděra	2 <sup>nd</sup> Vice-Chairman	Mendel University in Brno
František Fabčovic		Břeclav District Chamber of Commerce
Ladislav Straka		Podluží Region
Libor Ambrozek		Czech Union of Nature Conservationists
Antonín Homola		Břeclav District Chamber of Agriculture
Pavel Kotásek		MND, a.s.
Roman Kopřivňanský		Mikulovsko Region

As of 2012, Mr. Stanislav Koukal, Head of the Regional Office of the Nature Conservation Agency of the Czech Republic, has been acting as a permanent guest of the Board of Trustees.

#### Supervisory Board

The Supervisory Board is a six-member supervisory body of the corporation. It includes representatives of the founding members, a joint representative of municipalities of the three regions, whose territory the BR covers, and a representative of Mendel University.

Libor Opluštil	Chairman	Czech Union of Nature Conservationists
Zbyněk Parma		MND, a.s.
Miroslav Volářik		Břeclav District Chamber of Commerce
Václav Lidičský		Forests of the Czech Republic, State Enterprise
Alena Salašová		Mendel University in Brno
Milan Vojta		representative of the Podluží, Mikulovsko and the Lednice-Valtice Cultural Landscape regions

In 2015 the Board of Trustees met four times and the Supervisory Board held one meeting. In 2015 the Public Benefit Corporation employed two employees full-time and as of October a new graduate job subsidized by the Brno Labour Office was created.



## IMPORTANT ACTIVITIES IN 2015

2015 was a year characterized by completion and follow-up maintenance of projects focusing on partial restoration of the formerly diverse landscape structure. The aim of the projects which we prepared in cooperation with local municipalities is to create and complement the Territorial System of Ecological Stability (TSES) and thus enhance biodiversity in the intensively used agricultural landscape. Our key project was called "The Red Book of Woody Plants of the Czech Republic, the Red Book of Threatened Species of the floodplain forests of the Lower Morava BR and The Red List of Threatened Species of the Křtiny Training Forest Enterprise". It is supervised by Mendel University and we participated in it in the role of the main partner. Another important activity was our participation in the EuroMAB 2015 conference in Estonia. During these regular events held every two years representatives of European and North American biosphere reserves meet to discuss relevant issues. We also managed to establish collaboration with the business sphere via endorsing products by a Lower Morava BR Certificate to promote sustainable entrepreneurship and our further activities focused on work with students and stakeholders.

### **Project "The Red Book of Woody Plants of the Czech Republic, the Red Book of Threatened Species of the floodplain forests of the Lower Morava BR and The Red List of Threatened Species of the Křtiny Training Forest Enterprise"**

Lower Morava Biosphere Reserve is an internationally recognized area whose territory encompasses outstanding cultural and natural values. Scientists of different fields often choose this exceptional landscape as their study area. One of the frequent subjects of research projects are threatened plant and animal species. The same issue is studied by a team of experts from different parts of the country which was assembled under the supervision of Mendel University in Brno to implement a project called "The Red Book of Woody Plants of the Czech Republic, the Red Book of

Threatened Species of the floodplain forests of the Lower Morava BR and The Red List of Threatened Species of the Křtiny Training Forest Enterprise". The project partners include Lower Morava Biosphere Reserve (LMBR) and the "Masaryk Forest" Training Forest Enterprise in Křtiny (TFE). The project, inspired by the State Environmental Policy of the Czech Republic, is closely associated with the Concept of Nature Conservation in the South Moravian Region and fulfils selected objectives of strategic and planning documents in the field of nature and landscape protection. The project was launched at the beginning of 2015 and its first stage encompassed an analysis of the occurrence of threatened woody species on the territory of the Czech Republic. Based on the state determined a complete list of threatened woody species was drawn up in the form of the Red Book of Woody Plants of the Czech Republic which will form a basis for legislative amendments. At the following stage a survey of threatened species of different organisms was conducted in two selected areas (TFE Křtiny and floodplain forests in Lower Morava BR). The data obtained were used to draw up the Red List of Plants of LM BR, the Red List of Vertebrates of LM BR, Red List of Invertebrates of LM BR and a map of the biosphere reserve which highlighted small-scale specially protected areas and contained descriptions of selected threatened species. Another output at this stage was The Red List of Threatened Species of the Křtiny Training Forest Enterprise which will be available in an electronic form. All data will consequently be entered in the species occurrence database of the Nature Conservation Agency of the Czech Republic. The project also provides training for employees of state administration bodies, local governments, Forests of the Czech Republic and the Training Forest Enterprise Křtiny in the form of seminars focusing on determination and protection of selected threatened species. The issue of threatened species and their protection is continuously raised during lectures for students and the general public. An integral part of the complex project is the conservation of threatened

## IMPORTANT ACTIVITIES IN 2015

species under which two polycarbonate greenhouses with necessary facilities were built in the forest nursery of TFE Křtiny. The cultivated plants will be planted in the wild to enhance the existing populations, possibly to restore extinct populations. Knowledge obtained in the course of plant propagation may be used in conservation programmes within the entire country. To ensure project sustainability, the data obtained will be used in the process of developing and implementing the management principles for forest stands with threatened species and in management plans for small-scale specially protected areas. Information on the course of the project and its outputs can be found on [www.cerveneseznamy.mendelu.cz](http://www.cerveneseznamy.mendelu.cz).

*The project was funded by the EEA and Norway Grants*



### Public benefit activities supported by MND, a.s.

MND, joint stock company, is a Czech company which for a hundred years has been dealing with **crude oil and natural gas extraction** on the territory of the Czech Republic and in other countries as well. MND are aware of their position, the nature of their business and the ensuing social and environmental responsibility and as such have become one of the major patrons and donors in the South Moravian region supporting projects related to nature conservation and its sustainable development. As one of the founding members of Lower Morava BR, P.B.C., they regularly provide support for public benefit activities and projects implemented by our P.B.C. The funding we received in 2015 was used for implementing projects and for the following purposes:

- provision for activities of the Lower Morava Biosphere Reserve, as part of the UNESCO World Network of Biosphere Reserves,
- participation in activities related to BR, including coordination of the said activities,
- mediation and procurement of advisory and coordinating services related to BR,
- updating the information database on BR,

- participation in educating the general public, procurement of further education and training of young people,
  - organizing conferences, forums and training courses,
  - promoting international cooperation in matters related to BR and the World Network of Biosphere Reserves,
  - promoting and implementing activities aimed at the economic and demographic development of the BR and its region.
- Thanks to the financial support provided by MND, a.s., we were capable of procuring public benefit services to all stakeholders whose primary aim is the development of the area of our BR in accordance with the conditions and regulations of the Man and the Biosphere Programme.

### Activities implemented with the support of Forests of the Czech Republic, S.E.

Forests of the Czech Republic, State Enterprise, are the major manager of forest land in the country and within the Lower Morava BR itself. Sustainable forest management, which is the basis of their long-term business strategy, safeguards the fulfillment of production and non-wood-producing functions of the managed forests. Owing to its scope of activities the company is the most important partner of nature conservation bodies in the Czech Republic, which motivates their efforts to respect the regime set for forest management in protected areas. FCR also hold the certificate issued by the Programme for the Endorsement of Forest Certification Schemes which attests through an independent audit that the company manages its forests sustainably and promotes responsible management practices.

- Forests of the Czech Republic, State Enterprise, are one of the founding members of Lower Morava BR and have traditionally supported our activities both inside and outside the BR via specific thematic programmes:
- a) Conservation of the natural and cultural diversity of cultural landscapes
  - b) Cultural landscape management

#### IMPORTANT ACTIVITIES IN 2015

c) Environmental education and training

d) Information and cooperation with the general public

The focus of our BR activities was designed in compliance with the statutes and the founding agreement of our PBC, and covers a broad scope of activities which promote sustainable development in the region, enhance biodiversity in the intensively managed agricultural landscape and foster partnerships with municipalities or educational activities.

Thanks to the financial support from Forests of the Czech Republic, S.E., in 2015 our BR succeeded in fulfilling all the principal functions of biosphere reserves stipulated by the MAB Programme and UNESCO binding documents and performed activities declared by the founding documents of our PBC.

#### Lower Morava Biosphere Reserve Certificate

The aim of the project is to enhance the development of the Lower Morava BR territory through cooperation with selected businesses as well as to promote local products and services which are produced and delivered sensibly, in a traditional manner and in concord with the cultural landscape interests. The certificate guarantees that that given product comes from the region, that both the product and the producer operate sensibly with respect to the environment and that they are closely associated with activities in the area.

The project drew on existing and well-established certification schemes for the designation of origin for both products and services as well as on experience shared by biosphere reserves from abroad where similar certification schemes already exist.

The certificate guarantees that the producer or service provider:

- a) operates in a way which is sensible to the environment and in concord with the principles of sustainable existence and land use
- b) is related to Lower Morava BR, i.e. operates within the BR territory
- c) endorses the philosophy of Lower Morava BR and MAB Programme and promotes it (e.g. a link on their web page, etc.)
- d) guarantees sustainable quality of their product or service.

In 2015 the certificate was awarded to Vinařství Voláňk (Voláňk Winery, [www.vinarstvirolanek.cz](http://www.vinarstvirolanek.cz)) and its line of Organic wines which offers organically produced variety wines Hibernál, Saphira, Johanner and Solaris.

Mr. Antonín Šesták from the Honey Farm Moravský Soutok ([vcekyhoutok@email.cz](mailto:vcekyhoutok@email.cz)) was the second local businessman to be awarded the certificate for his Honey from the Confluence and Mead from the Confluence.

#### EuroMAB Estonia 2015

The international EuroMAB network encompasses all biosphere reserves in Europe and North America under the MAB programme. A conference attended by representatives of biosphere reserves and national committees is organized every two years to evaluate the activities of the past period and set the priorities and further direction of the MAB Programme in the upcoming period. The international EuroMAB 2015 conference took place on 19–23 May 2015 in Haapsalu in Estonia. The motto of this year's conference was "Biosphere Reserves: from heritage to sustainable innovation", referring to the possibility of combining local traditions with modern economies and local communities while using latest scientific findings. Individual conference sessions focused on discussions related to the implementation of recommendations of EuroMAB 2013 in Canada, preparation of a new MAB strategy 2015–2020 and the EuroMAB contribution to the preparation of the World Congress of Biosphere Reserves that will be held in Peru in March 2016.

Lower Morava Biosphere Reserve, PBC, its founding members, partners and projects were introduced in a presentation called "Coping with challenges related to sustainable development education – experience from the Lower Morava Biosphere Reserve" which was delivered during a workshop on "Education for Sustainable Development and Biosphere Reserves". It was the only public presentation of BRs and the MAB Programme in the Czech Republic at the conference. The next EuroMAB conference will be held in 2017 in France.

### Establishment of biocenters and TSES elements in the vicinity of Pohořelice and Nová Ves, Brno-venkov District

In the course of the year our PBC supervised the completion of planting and follow-up maintenance, which encompassed protection of the plants, watering and replacement of plants damaged by drought, under a project implemented in 2014 whose recipient is the Pohořelice municipality. The territory where the project was implemented had comprised vast stretches of arable land with minimum ecological stability and susceptible to wind erosion. With this in mind, tree alleys and groves along with two biocentres were established to complement the existing biocorridors (a windbreak and the Jihlava River). Vast stretches of farmland were intersected by interaction elements which enhanced the biodiversity as well as the landscape's stability.

Our PBC initiated the project, prepared project documentation, applied successfully for funding and provides implementation project management. The area planted with trees and shrubs combined with grassy areas covered 54 ha and the implementation cost of the project was CZK 33 mil. It probably represents the most extensive implemented project focusing on the establishment and complementation of the South Moravian territorial system of ecological stability to date.

*The project was funded by the State Environmental Fund of the Czech Republic and Operational Programme Environment.*

### Tourism infrastructure at Soutok (Confluence)

At the time when totalitarian regime ruled the country, the area of Soutok was subject to a strict management regime of the so-called Iron Curtain due to its immediate vicinity of the Austrian state border. Free access and economic activities were limited. Since 1989 the territory has been open to tourists whose numbers have been increasing steadily.

The area is highly attractive, encompassing the Lower Morava Biosphere Reserve (UNESCO), part of the Lednice-Valtice Cultural Landscape (World Heritage Site), two national nature reserves (Raňšpurk, Cahnov) and is part of Natura 2000, due to which the entire area is subject to strong

tourism impact. In 2007 our PBC in collaboration with stakeholders proposed a strategy of sustainable tourism development in the area of Soutok but due to a number of reasons this strategy was not fully implemented. In 2014 our PBC updated the project thanks to funding provided by Forests of the Czech Republic, State Enterprise and its Židlochovice Forest Enterprise, and designed a project of mitigating the tourism impact on the area of Soutok to prevent possible devaluation, particularly of its natural potential. The outputs included a proposal of tourist movement in the area of Soutok, including the infrastructure to support and control this movement.

In 2015 the South Moravian Region (SMR) took initiative and based on measures proposed by our PBC launched activities to support cyclo-tourism in particular. In 1945 seven bridges spanned the Dyje River between Pohansko and Soutok but after WW2 they were intentionally destroyed. In relation with the project mentioned above, the possibility of connecting the cycle paths on the Czech and Austrian sides by a pedestrian and cycle bridge across the Dyje in the vicinity of the Morava-Dyje confluence was revived. In collaboration with the Lanžhot municipality SMR pledged to commission a research study, which is the initial stage prior to possible commissioning of a preparatory study. The Town of Lanžhot was also asked to present the project proposal to its partner municipalities on the Austrian side.

A field inspection of sites selected for installation of benches and other tourist facilities along the main tourist trail to Soutok took place in September. Experts from SMR, the Morava River Basin, Židlochovice Forest Enterprise along with PBC employees assessed the suitability of selected sites for the installation of specific types of facilities. This specification launched the final stage of the project whose aim is to provide standard comfort for tourists, mark trails clearly, particularly for cyclists, and connect the trail to the Soutok-Lanžhot route along the crest of the right-bank flood control dam at the Morava River.

### **Establishment and restoration of biocenters and TSES elements near Vlasatice**

The key objective of this landscape project is the establishment of a new system and enhancement of the existing TSES system functions along with the restoration of a number of habitats in the originally diverse cultural landscape which has been subject to long-term intensive farming, particularly in the 1960s – 1970s during the socialist transformation of rural areas, and was transformed into an area with low biodiversity. Its biodiversity has been enhanced through improving the environmental characteristics of the landscape. The implemented measures will decrease the amount of soil loss and improve moisture retention characteristics of the landscape. It is expected that the newly established basic TSES structure will be complemented by related measures, such as the establishment of transitions between field crops and linear elements, bird watering places and wetlands, which in turn will increase e.g. hare and partridge populations as important bioindicators of environmental quality of the rural landscape.

Our PBC initiated the project, prepared project documentation, applied successfully for funding and has supervised the works. The project was concluded in 2015 and maintenance of the planted cultures and their protection were started. In autumn parts of plantings damaged by extreme drought were replaced. Throughout 2016 follow-up maintenance will take place.

*The project is funded through the State Environmental Fund of the Czech Republic and Operational Programme Environment.*

### **Restoration of landscape vegetation in Lužiče by Hodonín**

The key objective of this project was to establish an interesting natural site in the vicinity of the municipality which would work as a space for leisure time activities of local residents as well as a biocentre enhancing the development of plant and animal species. The measures were implemented in an area partly degraded by illegal dumps and overgrown with non-native species. A forest steppe site with a natural character was created, with soft field roads, paths and groves of forest trees, native

shrubs and mowed cultural "butterfly meadows". The establishment of this element based on TSES biocentre principles has triggered a number of positive changes in the surrounding cultural landscape.

Our PBC initiated the project, prepared project documentation, applied successfully for funding and provides supervision, which in 2015 encompassed supervision of maintenance of the planted cultures and their protection, watering and replacement of plantings damaged by extreme drought.

*The project was funded through the State Environmental Fund of the Czech Republic and Operational Programme Environment with the support of MMD, a.s.*

### **Establishment and restoration of biocenters and TSES elements in Drnholec**

The key objective of this complex landscape project is the establishment of a TSES system along with restoration of a number of habitats in an originally diverse cultural landscape which is subject to intensive farming and its vast stretches have been transformed into a cultural steppe with severely limited biodiversity. Among other things the implemented measures have improved biodiversity, reduced erosion and improved the soil moisture conditions. An important follow-up project focused on cultivation and harvesting measures taken in the municipal forest stands. Under this project the municipality of Drnholec took the decision to create refuges enabling the development of invertebrate and fungi species in ancient and rotting trees and stumps, and to eliminate the danger of non-native tree species spreading into the newly established TSES.

Our PBC initiated the project, prepared project documentation, applied successfully for funding and has provided supervision, which in 2015 focused on supervision of planting, maintenance of the planted cultures and their protection, watering and replacement of dry plants.

*The project was funded through the State Environmental Fund of the Czech Republic and Operational Programme Environment.*

### Landscaping of the historic greenery on the south bank of

#### Hlohovecký Fishpond

The project may serve as an example of practical management of a historical cultural landscape. The implemented measures, whose aim was to restore the habitat diversity of a park landscape on the bank of Hlohovecký Fishpond, one of important elements of the Lednice-Valtice Cultural Landscape, have helped to restore the character of a well-kept nature park with ancient solitary trees, groves of forest stands of various age classes and herb-rich meadows. The biological function of permanent high and low vegetation as overlapping habitats with a number of ecotone zones was restored and enhanced.

Our PBC initiated the project, prepared project documentation, applied successfully for funding and has provided supervision, which in 2015 focused on supervision of planting, care of the planted cultures and their protection, watering and replacement of dry plants.

*The project was funded through the State Environmental Fund of the Czech Republic and Operational Programme Environment.*

### Performing Site Managerial duties in the Lednice-Valtice Cultural Landscape, World Heritage Site

Based on a mandate awarded by the Interdisciplinary Workgroup for LVCL, our PBC continued to perform all Site Manager duties in 2015, including coordination of activities within LVCL and working as a platform for coordination and interdisciplinary exchange of expert information which was safeguarded through the application of participatory management in our PBC and our direct participation in the Interdisciplinary Workgroup for LVCL. Owing to the fact that cultural landscape management is a complex issue, which is highly specific particularly on the territory of LVCL, ensuring interdisciplinary coordination, communication and continuous awareness of all the stakeholders in the area represents a particularly demanding task.

The Site Manager's (SM LVCL) activities are conditioned by the obligation to ensure protection, management and sustainable development upon

preserving the outstanding value of the LVCL landscape inscribed on the World Heritage List in 1996.

In 2015 the Interdisciplinary Workgroup held three sessions to discuss the issues of Site Manager funding, territorial planning in LVCL, conflicts with monument conservation bodies and Natura 2000 conservation, the survey of a ring road around Mikulov and Valtice as well as information on important projects within LVCL. Site management, namely the issue of its funding, was subject to several independent negotiations with the Deputy Minister of the Environment.

As SM LVCL we participated throughout the year in discussions related to various projects, such as the restoration of Zámecký Fishpond in Lednice and sludge removal from the Lednické Fishponds network, assessment of the existing condition of historical tree avenues, preparation of a grant proposal for the restoration of catacombs, Maori Waterworks, power plants, bringing of the Černá Dyje behind the minaret, construction of a car park for cyclists in the vicinity of the minaret, restoration of Ovčárna, the road network, French garden and other things.

Sadly, despite the efforts of the Ministry of the Environment sustainable funding of LVCL Site Manager operations was not secured in 2015 either. We also failed to secure a change in the conditions of the Operational Programme Environment to reflect the specific conditions of a World Heritage Site which must be observed but which put it at a disadvantage in the grant application process when compared with "regular" landscapes.

#### Mount of Olives in Mikulov

Stavý kopeček (or Holy Hill) in Mikulov represents a unique example of a cultural landscape blending natural and historical treasures where the work of man dutifully respects the surrounding nature. In a spiritual sense it was composed as the Way of the Cross. Its south-western slope bears the name Mount of Olives. At its foot is situated a site known as Dolní palouček (the Lower Clearing), which is part of a rocky steppe. These are characteristic by the occurrence of rare protected plants. It is on the Holy Hill where we find rare remnants of native thermophilic oak forests with



## IMPORTANT ACTIVITIES IN 2015

pubescent oak, European cornel and mahaleb cherry. The forests are notable for their open character with sparsely stocked forest clearings and forest edges. This type of open forests, or Pannonian groves (commonly referred to as forest steppes), represent one of Mikulov landmarks and attract large numbers of researchers and visitors.

Unfortunately, unprofessional interventions conducted in the past disrupted their natural structure. That is why a project called "Pannonian grove under Mount of Olives – Reminiscences of the Garden of Gethsemane" was drawn up with the objective to at least partly restore the original character of the site. The project of restoring close-to-nature conditions in a former limestone quarry took inspiration and information from a Diploma Thesis of Ms. Františka Šatná of the Faculty of Horticulture at Mendel University published in 2012.

The project was implemented by Lower Morava Biosphere Reserve, PBC, in collaboration with Mgr. Miliada Rigasová, Ph.D., a botanist from the Regional Museum in Mikulov, and other experts from the Pálava Protected Landscape Area Administration and the Mikulov municipality. It involved the removal of ill and unsuitable tree and shrub species, along with planting of new trees, shrubs and grass-herbaceous formations corresponding to the natural habitat of the site. The implemented measures are aimed to create an open pubescent oak forest with admixed European cornel and mahaleb cherry on limestone outcrops with their unique rocky steppe vegetation. The project took visitors into account by placing benches and information panels with important historical and natural science information at the site which already attracts crowds by the unique views of Mikulov and the surrounding landscape south of the town. As project manager our PBC has provided technical supervision, which in 2015 focused on supervision of planting, care of the planted cultures and their protection, watering and replacement of dry plants.

*The project was supported by MND a.s.*

### **Restoration and planting of interactive TSES elements in Lednice and Nejdek by Lednice**

The territory of Lower Morava BR and its immediate surroundings house more than 600 ha of windbreaks which were planted in the 1950s. They are made up from different woody species, most of them Eastern cottonwood cultivars which have reached the upper limit of their life span. To ensure that windbreaks work as efficient components of TSES, long-lived woody species with admixed native shrub species need to be used. A fully operating windbreak protects farmland from wind erosion within a distance which is up to twenty times its height, it is capable of intercepting horizontal precipitation, decreasing wind speed, reducing temperature in the surrounding landscape and at the same time enhance its biodiversity by providing space for a number of animal and plant species. In 2014 a project focusing on the restoration of a windbreak covering 0,8 ha and planting a new windbreak covering further 0,7 ha, in the total length of 934 m, was launched in the Lednice cadastre.

Our PBC initiated the project, prepared project documentation, applied successfully for funding and has provided supervision, which in 2015 focused on supervision of planting in selected parts and restoring other parts of the windbreak.

*The project was funded through the State Environmental Fund of the Czech Republic and Operational Programme Environment.*

### **PEFC membership of Lower Morava BR, PBC**

There are several international certification schemes of sustainable forest management. The Programme for the Endorsement of Forest Certification Schemes (PEFC), whose Council is an independent, non-profit international organization registered in Geneva, represents a framework for creating and mutual recognition of independent national certification systems. The Czech Republic is one of the 11 founding member states which formed PEFC Council in 1999.

Lower Morava BR has always supported sustainable forest management

## IMPORTANT ACTIVITIES IN 2015

and its positive role in enhancing the environment, which is why it has been a member of PEFC Czech Republic since 2012. This organization is in charge of the Czech system of forest certification and unites representatives of forestry, wood processing industry, educational and research institutions, trade unions, environmental organizations, state administration and other interest groups.

In November 2015 a meeting of the PEFC CR technical committee took place in Kostelec nad Černými lesy; its agenda focused on co-ordinating the internationally binding document PEFC-ST 1003 with the national standard CFCST 1003 Criteria and Indicators of Sustainable Forest Management. Representatives of all types of forest owners, contractors, operators and

other stakeholders elaborated the proposals to ensure unambiguous control over the process of meeting the endorsement criteria.

### **Facebook profile of Lower Morava BR**

Facebook is a vast Internet-based system providing social networking service, enabling communication between users and sharing multi-media data. The current generation uses both traditional web pages and Facebook profiles for information searches. Our PBC therefore created its own user profile to share information with younger users. The information will be continuously added to the profile.

<https://www.facebook.com/www.dolnimorava.org/?ref=hl>



## OTHER ACTIVITIES

Out of the activities which representatives of our PBC launched or participated in throughout 2014 we would like to mention the following:

### LECTURES, PRESENTATIONS AND FIELD EXCURSIONS

On March 18<sup>th</sup> a lecture "The important role of biosphere reserves in sustainable development" was delivered for 25 international students. The presentation focused on the MAB Programme, World Network of Biosphere Reserves and LM BR. Specific case-studies of projects implemented by PBC and its partners demonstrated the contribution of BR to sustainable cultural landscape management. On April 4<sup>th</sup> a lecture "Cultural forests of Central Europe and virgin forests in Madagascar (or what do they have in common?)" was delivered for another 23 students. Following a request from Austrian organizers of the international youth event River Jump in late April we organized a cycling trip to Soutok. In the course of a tour between Lanžhot, Pohansko and Soutok we delivered basic information about the MAB Programme, LM BR, floodplain forests, sustainable forest management, nature conservation and our PBC activities focused on the floodplain ecosystem and cultural landscape. The trip itself was preceded by a volunteer event aimed at collection of garbage.

On April 24<sup>th</sup> we organized an excursion themed "Lower Morava BR and cultural landscape management" for 36 international students of the Faculty of Forestry and Wood Technology of Mendel University. The excursion opened at the Lower Morava BR expo in the Lednice Chateau Riding Hall and continued to the chateau park.

The goal of the first conference on "Remarkable Trees" organized by Mendel University in collaboration with our PBC and the Ministry of the Environment was to create a working platform for those interested in champion trees growing in the Bohemian and Moravian landscape. The conference facilitated interdisciplinary discussions about remarkable trees seen from various perspectives – inventory and evaluation of

occurrence, care and protection, popularization, their importance for preserving genetic diversity, their role as cultural heritage or source of inspiration for literary and art works. The conference was concluded by a day trip to Lower Morava BR.

A traditional field excursion was organized for 42 final-year students and teachers from the Vocational School of Forestry in Trutnov on September 25<sup>th</sup>. It focused on the issue of cultural landscape management in LVCL, the Mikulov and Podluží regions as well as the important role which Lower Morava BR plays in the concept of the region's sustainable development. The excursion was traditionally concluded by a crossing of the Pálava Hills from Kientnice to Pavlov.

Following a request from the SMR in early October we delivered a presentation "Lower Morava BR – an outstanding area within the South Moravian Region" for official Russian delegation from the Irkutsk Region. The presentation was extremely well received, stimulating discussion about participatory management, participation of local governments in LMBR management, collaboration with nature conservation bodies and many related topics. The SMR Regional Authority acknowledged the presentation as a representative delivery of information about a SMR area.

In November we delivered presentations "Lower Morava Biosphere Reserve – a modern tool of sustainable landscape management" for students of Mendel University in Lednice, for participants of an international workshop on "Restoration of the Přitvuky polder", and for experts from the Institute of Forestry Management.

### MEETINGS WITH LOCAL GOVERNMENTS

#### Meeting with the mayor of Mikulov (20. 3. 2015)

An informative and coordination meeting held to discuss joint activities,

## OTHER ACTIVITIES

possible involvement in important development projects in the Mikulov cadastre. Assessment of mutual coordination and collaboration under the "Mount of Olives" project was made. Top priority projects for 2015 were identified, namely the project of implementing erosion control measures between Mikulov and Klenčice.

### **Meeting discussing experience with intelligent waste management system (25. 3. 2015, Klenčice)**

Intelligent waste management system (IWMS) allows households to separate waste easily and control their waste disposal bills. The system makes waste sorting as comfortable as throwing waste into a regular bin, yet more economical and ecological. The system encompasses production and sale of certified compost made from separated organic waste. The ensuing discussion focused on Klenčice experience with IWMS, as it is one of the municipalities which adopted this system. It appears to have a highly positive effect on the environment and local inhabitants alike by motivating people to separate and recycle waste.

### **Negotiation with the mayor of Breclav (14. 4. 2015)**

Spheres of possible and important cooperation between the municipality and our PBC were identified: coordination and facilitation in the issues of municipal forests in the sites "Za zimmim stadionem" and "Pod nemoonic", cycle paths, jogging trails in the vicinity of Charvatská Nová Ves, leisure time activities within the entire urban space, town greenery and many others.

### **Meeting at the Přibůtky Municipal Office (5. 5. 29. 6. 2015)**

The agenda focused on sites in the Přibůtky cadastre which could be restored as wetlands, water bodies and sites with high vegetation due to the long-term water logging of arable land by high groundwater table. We agreed to jointly look into the possibilities of getting funding from the planned grants administered by Operational Programme Environment. Our PBC offered direct assistance in finalizing project documentation, processing

and submitting the application for funding, as well as our expertise in organizing tenders and administering the project implementation.

### **Participation in a council meeting in Pavlov (25. 6. 2015)**

Following a request of the mayor, one part of the agenda was devoted to providing information on the current state of the SMR concept of "Principles of territorial development of the South Moravian Region" with special focus on the issue of the supra-regional biocorridor number K 161 and its boundaries on the right bank of the Nové Mlýny Reservoirs in the Dolní Věstonice and Pavlov cadastres. Its revised version requested by the Ministry of the Environment states clearly that the supra-regional biocorridor is situated primarily in the backwater of the reservoir. This enables the municipalities to apply for a change in territorial planning and thus solve long-standing development issues and accusations of "illegal" use of the banks in the given municipalities.

### **Inauguration of the implemented project "Slope stabilization in Bulhary" (29. 9. 2015)**

In the presence Michal Hašek, Governor of the South Moravian Region, other official guests and the media, the project whose successful funding application was administered by Lower Morava BR and the Regional Office of the Nature Conservation Agency in Brno was inaugurated. Thanks to our joint efforts the project was accepted and supported by the State Environmental Fund. The total cost of the project was CZK 86 mil., eligible costs amounted to CZK 82.7 mil. The contractor was company Sviatetský a.s.

## **MEETINGS WITH OTHER STAKEHOLDERS**

### **Meeting with representatives of the Palava PLA and Regional Office Brno (20. 2. 2015, Lednice)**

A coordination and informative meeting discussing projects prepared in LVCL and Lower Morava BR which may be implemented in the joint

## OTHER ACTIVITIES

interests of nature conservation bodies, Lower Morava BR and municipalities. It was agreed that after rules for obtaining subsidies from the Operational Programme Environment in the new planning period have been published, new projects important for the harmonious development of cultural landscape will be prepared operatively. Agreements on regular maintenance of meadows on the banks of Lednické Fishponds, finalizing the restoration of the nature trail along the fishponds, reinforcement of the tourist and cycle paths and placement of benches and information tables on selected sites are underway.

### **Coordinating meeting of the Morava River Basin, Regional Office of the Nature Conservation Agency in Brno, Židlochovice Forest Enterprise and PBC (10. 4. 2015)**

The Morava River Basin expressed its dedication to support restoration projects in selected parts of the Morava and Dyje floodplains, to participate in transboundary projects with Austria and help optimize the tourism infrastructure in the vicinity of Soutok. Participants in this work meeting raised the issue of specific projects (Židlochovice Forest Enterprise - restoration of the lower part of the Tvrdonice forest district, PBC - connecting the Czech and Austrian side of the border by a pedestrian and cycling bridge, Morava River Basin - restoration of a cut-off Dyje river arm).

### **Židlochovice Forest Enterprise, presentation of a project of horse grazing in the area of Soutok (28. 7. 2015)**

Following the initiative of Ing Filip Šálek (Civic Association Lužánek), a representative of the University of South Bohemia presented a project of large mammal conservation (European bison, wild horse) which involves using areas suitable for grazing. According to Filip Šálek the so-called Důlný hrud in Soutok may be a suitable site. The presentation was interesting but the ensuing discussion revealed that it will be easier to look for better (larger) sites in different regions, e.g. in the Šumava National Park/BR.

### **Meeting with the director of the Křtiny Training Forest Enterprise (5. 9. 2015)**

A meeting with Mr Dolejský, Managing Director of the Křtiny Training Forest Enterprise (TFE), was held to discuss possibilities of a joint partnership between TFE, Brno Municipal Forests and Lower Morava BR to establish a Model Forest in South Moravia and submit an application for membership in the International Model Forest Network. Mr Dolejský has been a long-standing supporter of the idea and is prepared to join the drafting group of stakeholders.

### **Meeting at the State Land Office in Břeclav (7. 9. 2015)**

A meeting with Mr Haar, director of the State Land Office in Břeclav, to analyze the land intended for flood-control measures and enhancement of biodiversity, which is owned by the Přítulky municipality, and to remove the risk of paying tax for withdrawal from farmland classification.

### **Participation in the XVIII International Conference of Land Consolidation "Interconnecting functions in a land consolidation landscape" (14-15. 10. 2015)**

Upon the request of Ministry of Agriculture, Lower Morava BR delivered a presentation on "Experience with implementing TSES elements during land consolidation on the territory of Lower Morava BR" at an international conference held in Mikulov. The event was attended by 250 participants from the Czech Republic, Poland, Slovakia and Austria. Our presentation was highly regarded by organizers from the Ministry of Agriculture as well as participants.

### **Work seminar on opportunities for Local Action Groups in organizing activities supporting sustainable development in regions (22. 10. 2015, Židlochovice)**

PBC employees took part in a seminar given by RNDr. Jaroslav Bokůvka from Moravská brána Local Action Group. Upon agreement he provided LMBR with a completed strategy of Šumperský venkov Local Action Group

## OTHER ACTIVITIES

“From spas to forests and mountains, our region abounds in beauties” to draw inspiration from. The thought-provoking seminar will help us implement expertise of Lower Morava BR in the LAG strategies which are being prepared in our region. The deadline for submitting processed LAG strategies was postponed to February 28, 2016, which will allow us to apply our expertise and suggestions (as external experts) in our LAGs.

### **Meeting at the Pálava Protected Landscape Area to discuss stand regulations in the vicinity of Lednické Fishponds (4. 11. 2015)**

A work meeting to harmonize parameters of the project “Stand regulation on the northern slopes of Lednické Fishponds”. The project was drawn up by Ing. Jan Machovec in the past and is being updated based on the agreed parameters.

### **Roundtable discussion of TSES experts in Brno (9. and 12. 11. 2015)**

The environmental institute Veronika Brno organizes regular seminar focusing on TSES. The discussed topic was “Updating TSES methodology” which is prepared for the Ministry of the Environment by RNDr. Martin Culek, CSc. Following the extremely dry periods of this year, proposals were drawn up by Lower Morava BR for the municipalities and the Association of Establishment and Maintenance of Greenery in case the Ministry of the Environment decided to release reserve funds for elimination of draught damage, which is extreme in the TSES plantings.

### **Coordinating work meeting to discuss the LVCL Local Action Group Strategy (18. 11. 2015)**

A meeting was held to agree collaboration in drawing up the Strategy of the LVCL Local Action Group.

## EXPECTED COURSE OF OUR ACTIVITIES IN 2016

In 2016 Lower Morava BR, PBC, will focus on expert and logistical assistance for municipalities and other stakeholders in implementation of projects whose aim is to enhance biodiversity in the agricultural landscape. It will continue to select suitable areas and draw up projects which are eligible to Operational Programme Environment funding. A major share of our work will focus on completing the project "The Red Book of Woody Plants of the Czech Republic, the Red Book of Threatened Species of the floodplain forests of the Lower Morava BR and The Red List

of Threatened Species of the Křtiny Training Forest Enterprise". Our PBC will continue to perform the LVCL Site Manager duties and strive to create a sustainable system for performing this function. Other planned activities will encompass optimizing the tourism infrastructure in the southern part of the Lower Morava BR, renewing cooperation with the International Model Forest Network and foster relationships with Local Action Groups and other stakeholders within Lower Morava BR.

## DONORS AND PARTNERS

Lower Morava Biosphere, Public Benefit Corporation as a non-profit entity is striving to secure long-term and multiple-source funding for all its activities. Part of the necessary funding is generated by our own activities but fulfilment of BR functions and implementation of the different projects would not be

possible without the funding of grant and support programmes, nor without the contributions from individual donors and project partners. We wish to express our thanks to all those without whose financial support we would not be able to fulfil our mission.

**MND, a.s.**

**Forests of the Czech Republic, State Enterprise**

**Alca Plast, s.r.o.**

**Zahrada Olomouc, s.r.o.**

**Voluntary Association of Municipalities of the LVCL Region**

**Vinařství Volářík, s.r.o.**

22