



AUSTRIAN CONTRIBUTIONS TO UNESCO'S MAN AND THE BIOSPHERE PROGRAMME (MAB)

Summary Report for the Period January 2020 - April 2021



Ship mill on the Mura River near the village of Mureck in the BR "Unteres Murtal" (Photo: WWF A. Vorauer)

Austrian MAB National Committee c/o Austrian Academy of Sciences International Research Programmes Dr. Ignaz Seipel-Platz 2 1010 Vienna Austria

Tel: +43 1 51581 2771

E-mail: guenter.koeck@oeaw.ac.at
WWW: http://www.oeaw.ac.at

Homepage of the Austrian MAB Programme: http://www.biosphaerenparks.at/

1. NATIONAL COMMITTEE ACTIVITIES AND FUNDING:

In 2013 the Austrian MAB Programme celebrated its 40th anniversary. Since 2011 MAB-Austria is part of the new research structure "Earth System Sciences (ESS)". ESS, an initiative of the Austrian Academy of Sciences (ÖAW), financed by the Federal Ministry of Education, Science and Research (BMBWF), aims at studying the physical, chemical, hydrological, biological, social, technological and economic processes of the Earth System and their interaction. ESS is an interface between Austrian science and international research and is directly integrated in international research programmes and cooperation (e.g. UNESCO's MAB, IGCP and IHP programmes, WCRP, UNISDR, LTER, ISCAR, Future Earth) through its three National Committees *Global Change*, *Geo/Hydro-Sciences*, and *Man and the Biosphere (MAB)*. These NCs, made up of renowned scientists and representatives of several ministries and federal organizations, monitor the Austrian research scene, analyse its strengths and knowledge gaps and work out targeted new research foci.

The MAB National Committee supports and advices Austrian biosphere reserves (BRs), develops guidelines and criteria, stimulates and funds research projects and assists research in BRs.

Members of the Austrian MAB National Committee:

Chair:

Assoc. Prof. Dipl.-Ing. Dr. Arne Arnberger, Institute of Landscape Development, Recreation and Conservation Planning, Department of Spatial-, Landscape-, and Infrastructure-Sciences; University of Natural Resources and Life Sciences Vienna. Peter-Jordan-Straße 65, 1180 Vienna Austria. Phone +43-1-47654-85315, Fax +43-1-47654-85309, arnberger@boku.ac.at;

https://www.rali.boku.ac.at/ilen/personen/arne-arnberger/

Vice Chair:

Prof. Dipl.-Ing. Dr. Marianne Penker, Institute for Sustainable Economic Development, Department of Economics and Social Sciences, University of Natural Resources and Life Sciences Vienna, Feistmantelstraße 4, A-1180 Vienna, Austria. Phone: +43-1-47654-73115; marianne.penker@boku.ac.at; http://www.wiso.boku.ac.at/inwe/persoenliche-websites/marianne-penker/

Executive Secretary:

Dr. Günter Köck, Austrian Academy of Sciences, International Research Programmes, Dr. Ignaz Seipel-Platz 2, A-1010 Vienna, Tel. ++43 1 51581-2771; guenter.koeck@oeaw.ac.at; http://www.oeaw.ac.at

Other Members:

Em. Univ. Prof. Dr. Georg Grabherr (University of Vienna), Honorary Member of the MAB Committee

Em. Univ. Prof. Dr. Marina Fischer-Kowalski (University of Natural Resources and Life Sciences Vienna)

A.o. Univ. Prof. Dr. Norbert Weixlbaumer (University of Vienna)

Univ. Prof. Dr. Sigrid Stagl (University of Economics and Business Vienna)

Dr. Elisabeth Haring (Natural History Museum Vienna)

Dr. Harald Pauli (ÖAW - Institute for Interdisciplinary Mountain Research, University of Natural Resources and Life Sciences Vienna)

Dr. Franz Essl (University of Vienna)

Prof. Dr. Volker Mauerhofer (Mid-Sweden University, Östersund, Sweden)

Mag. Patrizia Jankovic (Austrian Commission for UNESCO)

Mag. Ernst-Peter Brezovsky (Federal Ministry of Europe, Integration and International Affairs)

Dr. Karolina Begusch-Pfefferkorn (Federal Ministry of Education, Science and Research)

Dr. Helmut Kudrnovsky (Environmental Agency Austria)

DI Maximilian Albrecht (Austrian Federal Provinces)

Dr. Gerhard Schwach (Federal Ministry of Agriculture, Regions and Tourism)

DI Arno Mohl (World Wildlife Fund for Nature)

Due to the Covid situation only two virtual meeting of the Austrian National Committee for MAB took place in the reporting period. The managers of the Austrian BRs participated in the meeting and reported about activities in their region and discussed future research strategies with the committee members.

The annual funding for the MAB Committee, provided by the Austrian Ministry for Education, Science and Research, is

EURO 170.000,- = US\$ 201.661,-1

This funding is entirely used for research projects and additional MAB-related activities.

2. CURRENT RESEARCH PROJECTS WITHIN THE FRAMEWORK OF MAB:

According to the research agenda for the Austrian MAB Programme, and in response to the priorities set by the International MAB Council, the Austrian National MAB-Committee has focused its research activities predominantly on the needs of Austrian BRs. However, to deepen the involvement of Austrian expertise in international MAB research, the MAB Committee is also funding international research cooperations with BRs and BR projects in foreign countries. Some of the projects approved in the last 5 years include international cooperation with BRs or BR candidates in Peru, Brazil, Greece, Spain, Switzerland Germany and UK.

Currently five research projects are funded through the Austrian MAB Programme.

Project Title	Coordinator
Creative approaches for socio-ecological transitions: A comparative study of	M. Coy (University of
rural-peripheral biosphere reserves as driver of social innovations (CRAFT)	Innsbruck)
Land cover classification and -monitoring of the Austrian biosphere reserves	M. Immitzer (University of
based on satellite data (BRmon)	Natural Resources and Life
	Sciences Vienna)
Nature Based Engineering Solution (NABIS) - Management against Invasive	HP. Rauch (University of
Alien Plants (NABIS)	Natural Resources and Life
Allett Flatits (NADIS)	Sciences Vienna)
Transforming grasslands to achieve insect diversity restorative goals and	T. Frank (University of
human well-being (DivRESTORE)	Natural Resources and Life
Human wen-being (Divkestoke)	Sciences Vienna)
Percention and Reality of Recreational User Conflicts in the LINESCO	R. Eder (University of
Perception and Reality of Recreational User Conflicts in the UNESCO	Natural Resources and Life
Wienerwald Biosphere Reserve (UserConflicts)	Sciences Vienna)

3. CURRENT STATUS OF BRs IN AUSTRIA:

Since 2014 and in full accordance with the MAB Programme's "Process of excellence and enhancement of the World Network of Biosphere Reserves (WNBR) as well as quality improvement of all members of the World Network", Austria has reduced the number of its BRs from seven to three. However, the remaining areas are very well functioning BRs with a broad range of scientific and educational activities. In 2019, the new BR "Unteres Murtal" joined the WNBR.

Approved: four sites	
	The steep-side V-shaped valley, situated in Western Austrian, has very little valley floor
Großes Walsertal	and from a geological point of view is divided in two: the northern part is characterized
(approved 2000)	by the soft, green mountains of the Flysch, the southern part by the wildly romantic,
	craggy peaks and scree of the high limestone Alps. Since livestock farming was the main

¹ Exchange rate per 13/07/2021

	source of livelihood for centuries, meadows and pastures dominate the landscape of	
	the BR. Due to the traditional hay harvest, the meadows in the region are the most	
	colourful and species-richest in the country. In 2011 the International Advisory	
	Committee for BRs recommended that the site is considered as a model site, whose	
	practices should be shared within the WNBR.	
Wienerwald (approved 2005)	The Vienna Woods are the largest contiguous area of deciduous woodland in Central	
	Europe. The area is situated in close vicinity to the city of Vienna. The location of such	
	a large area of woodland on the outskirts of a major city is unique.	
Salzburger Lungau und	The area consists of a representative example of inner-alpine landscapes with high	
	mountains and deep valleys. The region is a cultural landscape far removed from large	
Kärntner Nockberge	conurbations and major traffic routes. A large part of the agricultural land consists of	
(approved 2012)	alpine meadows and pastures, and the food specialties of the region – most of them	
	organic and based on local bio-cultural diversity – are of a high quality.	
Unteres Murtal (approved 2019)	The BR is a representative example of a continental lowland floodplain with a rich	
	biodiversity of European significance and comprises the second largest riparian forests	
	in Austria. The BR is the nearly identical reflection of the directly adjacent BR in Slovenia,	
	as the Mura River forms the common border and a length of almost 40 km. The scenic	
	Mura Valley is characterised by a mosaic of outstanding habitats and land use systems.	
	The hydrologic preconditions near the river lead to various forms of valuable inland	
	freshwater types, riparian forests, wetlands, and grasslands.	

4. SELECTED ACTIVITIES FROM AUSTRIAN BRs:

Due to the Covid situation, many activities of the Austrian BRs and the MAB Committee had to be changed into a virtual event or had to be postponed to a later date or even cancelled altogether during the reporting period.

One of the activities that was severely affected by the Covid pandemic were the celebrations and events for the 20th anniversary of the recognition of the BR "Großes Walsertal" by UNESCO, many of which unfortunately had to be cancelled or postponed until 2021. A short report (in German language) about the 20th Anniversary of the BR 'Großes Walsertal' can be found at the homepage of the Austrian MAB Committee:

 $\frac{\text{http://www.biosphaerenparks.at/index.php/de/blog/78-20-jahre-unesco-biosph\%C3\%A4renpark-}{\text{\%E2\%80\%9Egro\%C3\%9Fes-walsertal\%E2\%80\%9C-\%E2\%80\%93-20-jahre-modellregion-f\%C3\%BCr-nachhaltiges-leben-und-wirtschaften}$

Furthermore, the EuroMAB Conference planned for September 2021 in Bad Kleinkirchheim had to be postponed to next year due to the COVID situation. The organizers (Nockberge Management, Austrian MAB Committee, Austrian Commission for UNESCO) did not take the decision lightly and weighed many arguments against each other. In the end, however, they came to the conclusion that the medium-term COVID outlook is too uncertain to plan holding such a large meeting. The new date was set for the period from September 13-17,2022.



https://www.euromab2021.at/

However, all BRs have made a big effort to carry out their educational activities and cooperations with schools as virtual events. For example, in the Nockberge region the educational concept for schools "Schlaufux on tour", consisting of visits of BR rangerns in schools with mobile exhibition and "outdoor days" is currently held as a live stream lecture via Zoom Software.



https://youtu.be/N85W3xIKW88

https://www.biosphaerenparknockberge.at/schlaufux-im-netz/

In April 2021, the management of the Nockberge part of the BR "Salzburger Lungau und Kärntner Nockberge" organized the first Nockberge Youth Forum. Due to the Covid situation, the meeting had to be held as an online event. Young people from all four Carinthian BR municipalities participated in the successful event to discuss ways to better involve and actively engage young people in the implementation



of the BR concept. For years, the Nockberge management has been concerned with communicating the contents of the BR concept to the young people of the region and to interest them in participating in the development processes of the BR. Through the new youth forum, ideas and visions of future generations are to be included more comprehensively in the BR development. The next youth forum is to take place already in July 2021.

http://www.biosphaerenparks.at/index.php/de/blog/99-nockberge-management-startet-biosph%C3%A4renpark-jugendforum

Since 2020, the BR Großes Walsertal has been project partner EU-funded research project *HIGHLAND.3* - *Collective Approach of Research and Innovation for Sustainable Development in Highlands*, aimed at promoting inclusive sustainable development in highlands. The project, coordinated by the Austrian Academy of Sciences, is supported by a network of 43 institutions including 31 partners from Europe (~35% non-academic), and skilled and motivated female and male researchers and local stakeholders.

https://www.oeaw.ac.at/en/igf/research/man-and-environment-settlements/highlands3

5. OTHER ACTIVITIES, AWARDS:

February/March 2020:

At the end of February 2020, G. Köck, as representative of the Austrian MAB National Committee, together with Miguel Clüsener-Godt (Director of the UNESCO Division "Ecological and Earth Sciences", Paris) and Guy Broucke (Head of the Division "Natural Sciences" UNESCO New Delhi Office) was in the Kingdom of Bhutan for a one-week UNESCO Fact-Finding Mission. The reason for the mission, which was invited by the UNESCO Commission of Bhutan, was the country's desire to establish its first BR.

In the course of the one-week trip, the delegation was not only able to visit the area selected by the authorities, but also to discuss in several meetings, among others with representatives of the Nature Conservation Division of Bhutan, the Secretary General of the UNESCO Commission of Bhutan and local stakeholders the possibilities for support for the establishment of the first Bhutanese BP and a MAB National Committee through UNESCO and Austria. G. Köck presented the work of the Austrian MAB National Committee and the Austrian BRs in a lecture to representatives of the "Nature Conservation Division" responsible for the establishment of the BP. In the very lively discussion the colleagues from Bhutan were enthusiastic about the Austrian BR expertise. A special honor for the delegation was the invitation by His Excellency Yeshay Penjor, Minister of Agriculture and Forestry of Bhutan, who was also pleased about the integration of the Austrian MAB expertise

http://www.biosphaerenparks.at/index.php/de/blog/75-unesco-fact-finding-mission-nach-bhutan-zur-einrichtung-des-ersten-biosph%C3%A4renparks-des-k%C3%B6nigreichs



Gott (Director of the UNESCO Division "Ecological and Earth Gott (Director of the UNESCO Division "Ecological and Earth Sciences", Paris), Karma Yeshey (Secretary-General Bhutan National Commission for UNESCO), Guy Broucke (Chief of the Section "Natural Sciences" UNESCO New Delhi Office), Wangchuk Bidha (Bhutan National Commission for UNESCO)



Sonam Wangai (Nature Conservation Division Bhutan), Isnering Pem (Nature Conservation Division Bhutan), Rinzin Dorji (Secretary of the Ministry of Agriculture & Forests, Royal Government of Bhutan), Günter Köck (Austrian MAB National Committee), Yeshay Penjor (Minister of Agriculture & Forests, Royal Government of Bhutan), Miguel Clüsener-Godt (Director of the UNESCO Division "Ecological and Earth Sciences", Paris), Guy Broucke (Chief of the Section "Natural Sciences" UNESCO New Delhi Office), Wangchuk Bidha (Bhutan National Commission for UNESCO)

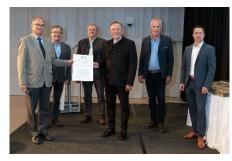
September 2020:

On September 29, 2020, the Director of the UNESCO Division "Ecological and Earth Sciences" Miguel Clüsener-Godt, presented the official UNESCO certificate to the mayors of the four municipalities of the BR "Lower Mura Valley" during a ceremony in Bad Radkersburg (Styria).

Clüsener-Godt congratulated the Province of Styria and the Austrian MAB for the establishment of this new BR. He emphasized that Austria has thus not only received a fourth BR, but has also contributed the last piece of the puzzle for the world's first transboundary BR in the Mura-Drava-Danube corridor connecting five states (Slovenia, Croatia, Hungary, Serbia, Austria).

After the stay in the BR "Lower Mura Valley" Clüsener-Godt also visited the Carinthian part of the BR "Salzburger Lungau und Kärntner Nockberge". During a highly interesting excursion the UNESCO expert was able to get an excellent picture of the implementation of the BR concept in the Nockberge mountains. Clüsener-Godt was impressed by the performance of the Nockberge management and praised the continuing willingness to cooperate internationally and to actively participate in UNESCO's World Network of Biosphere Reserves.

http://www.biosphaerenparks.at/index.php/de/blog/85-unesco-direktor-besucht-zwei-%C3%B6sterreichische-biosph%C3%A4renparks



M. Clüsener-Godt and the mayors of the BR municipalities (Photo credit: Foto Schleich, Bad Radkersburg)



H. Mayer (Nockberger Management) and M. Clüsener-Godt during an excurion in the BR "Salzburger Lungau & Kärntner Nockberge (Photo credit: G. Köck)

October 2020:

The Austrian MAB Committee represented by G. Köck attended the 32nd meeting of the MAB International Coordinating Council (MAB-ICC). The meeting was originally scheduled to take place in Nigeria in June 2020, but had to be postponed due to Covid-19 and was finally held as an online event. Prior to the meeting G. Köck was elected as a member of the MAB Bureau. He also serves as Rapporteur of the MAB-ICC.

November 2020:

Upon invitation of the MAB National Committee of Ghana, G. Köck (Austrian MAB Committee) and H. Mayer (Nockberge Management) participated in the second national forum on BRs in Ghana. The aim of this forum, which was introduced in 2018, is to raise awareness among the general public about the concept of UNESCO BRs and their role in achieving sustainable development, and to provide a platform for the exchange of ideas and experiences and for cooperation. The theme of 2020 event, held at Songor Biosphere Reserve on November 19th, 2020 with a mix of face-to-face and virtual meetings, was "Ecosystem Services and Benefit Sharing in UNESCO Biosphere



Environmental Protection Agency Ghana)

Reserves: Our Role as Stakeholders". The forum brought together many stakeholders from across Ghana and some foreign guests to discuss the importance of BRs in achieving the Sustainable Development Goals and the role of stakeholders. Key agenda items included the impact of the Covid pandemic on biosphere parks, strengthening scientific research in biosphere parks to achieve the UN Sustainable Development Goals (SDGs), and the establishment of the Ghana MAB Youth Network. H. Mayer underlined in his comment the importance of involving youth in the work of BRs. G. Köck emphasized in his greeting address the willingness of the Austrian BRs to cooperate with Ghana's BR network.

For the Austrian participants it was interesting to see that all over the world the same topics are discussed in BRs: Participation, youth involvement, ecosystem services, strengthening science. It is therefore incomprehensible that still many BRs do not use the opportunities of international cooperation. In other words, they prefer to try to solve the problems themselves instead of exchanging ideas, learning from other BPs and sharing their own experiences.

http://www.biosphaerenparks.at/index.php/de/blog/93-%C3%B6sterreichische-teilnehmer-beimnationalen-mab-forum-in-ghana

November 2020:

The book "Biosphere 4.0", published by Springer Spektrum, is the first comprehensive publication on UNESCO BRs in the German-speaking world.

Edited by A. Borsdorf, V. Braun, K. Heinrich and M. Jungmeier, the book sheds light on the function of BRs and their contribution to sustainable development by using numerous practical examples of BRs from Germany, Austria and Switzerland, thus contributing in a vivid way to a better understanding of this complex concept of nature conservation and sustainability. It is addressed to all those who work or research in or manage BRs, as well as to politicians or business people who are concerned with ways to achieve sustainability.



Front cover Photo credit:S pringer Punblishers

Three members of the Austrian MAB Committee (A. Arnberger, G. Köck and N. Weixlbaumer) also contributed significantly to this book. Moreover, the co-

editor of the book, A. Borsdorf, was a member of the Austrian MAB Committee for many years and also its vice-chair. In addition, several collaborators of projects funded by the MAB National Committee were involved in several arcticles of the books.

http://www.biosphaerenparks.at/index.php/de/blog/90-biosph%C3%A4re-4-0-neues-buch-mit-autor-innen-aus-dem-%C3%B6sterreichischen-mab-programm-erschienen

https://www.springer.com/de/book/9783662607060#aboutAuthors

October 2020 – January 2021

The project "SMART_BR: Transdisciplinary research on virtual participation processes in Austrian UNESCO Biosphere Reserves" used a transdisciplinary approach to explore the implementation and effects of novel designs/tools for multi-stakeholder participation in the management of BRs in Austria. The pilot project included virtual discussion processes with stakeholders from three BRs (Großes Walsertal BR, Salzburger Lungau & Kärntner Nockberge BR and Wienerwald BR). This project was funded by the Austrian Science Fund (FWF). A. Arnberger participated in the project.

February 2021:

The final report of the international Austrian-Peruvian cooperation project "Lessons Learned for the Management Policy of the Biosphere Reserve "Oxapampa-Asháninka-Yanesha" (Peru) based on the inhabitants' local knowledge and available globalscientific knowledge (AGROBIO-K_NOW), has been published as a digital book. The book was published in Spanish out of respect for the language of the primary audience (Latin America and the inhabitants of the BR "Oxapampa-Asháninka-Yanesha (BIOAY)" but contains summaries in German and English (see below).

The aim of the project, initiated by Christian. R. Vogl and Gabriela Albarracín-Llúncor (University of Natural Resources and Life Sciences, Vienna) and funded by the Austrian MAB National Committee, was to better understand and valorize the



role of agrobiodiversity, ways to conserve it, and experiential knowledge linked to agrobiodiversity of smallholder farmers in the Peruvian BR.

The aim is to contribute to the conservation of agrobiodiversity in order to improve the living conditions of rural communities. In the course of the work, it became apparent that experiences of local stakeholders, but also findings of past research in the region were hardly available. It was therefore a concern of the administration of the BR BIOAY to make the knowledge about the BR more visible with the help of the project.

The 542-page book, with many photos, unites the broad expertise of 55 authors and is an exemplary inter- and transdisciplinary contribution to the 10th anniversary of the founding of the Peruvian BR "Oxapampa-Asháninka-Yanesha (BIOAY)". A special point of reference for Austria to BIOAY exists through the town of Pozuzo, located in the region, which was founded in the 19th century by Austrian and German emigrants and where the German language and Austrian culture are still present.



Front and back covers (Photo credit: Patricia Reyna Sánchez, Gabriela Zevallos

The book can be downloaded with the following link:

https://doi.org/10.1553/BIOAYMAB

http://www.biosphaerenparks.at/index.php/de/blog/97-umfangreiches-buch-zum-peruanischen-biosph%C3%A4renpark-%E2%80%9Coxapampa-ash%C3%A1ninka-yanesha-bioay-%E2%80%9D-erschienen

6. PUBLICATIONS:

The research projects funded by the MAB National Committee yield not only a series of research reports but also a range of research articles in scientific journals. Based on a successful cooperation with the Austrian Academy of Sciences Press (AASP) almost all Austrian MAB project reports will published online at the AASP homepage. At present, some 35 documents are ready for download from http://epub.oeaw.ac.at/Projektberichte or via the MAB-Austria website http://www.biosphaerenparks.at/.

Project reports:

Erhalt der biologischen und kulturellen Vielfalt. Modelle für nachhaltige Entwicklungsstrategien im 21. Jahrhundert. Orte der Forschung, Bildung und Umweltbeobachtung (doi: 10.1553/ibk; ISBN-13: 978-3-7001-3742-9)

Biosphere Reserves in Austria - Grundlagenerhebung und Stand der Forschung (ISBN-13 Online: 978-3-7001-3599-9)

Nachhaltiges Waldbiomassenmanagement im Biosphärenpark Wienerwald (doi: 10.1553/wald, ISBN-13: 978-3-7001-3839-6, ISBN-13 Online: 978-3-7001-3839-6)

EUROMAB AUSTRIA 2005 Meeting of the Euromab Biosphere Reserve Coordinators and Managers (doi: 10.1553/euromab_austria2005, ISBN-13 Online: 978-3-7001-3715-3)

Leben in Vielfalt (doi: 10.1553/3-7001-3337-5; ISBN-13: 978-3-7001-3337-7 ISBN-13 Online: 978-3-7001-3374-2)

Inspired by diversity (ISBN-13: 978-3-7001-3596-8 ISBN-13 Online: 978-3-7001-3612-5)

Leitfaden für Forschung und Monitoring im Biosphärenpark Wienerwald (doi: 10.1553/lfmbw, ISBN 978-3-7001-3742-9)

Leitfaden für Forschung und Monitoring im Biosphärenpark Großes Walsertal (doi: 10.1553/lfmbgw, ISBN-13: 978-3-7001-3717-7)

Re-designing the Research Agenda of MAB-Austria, in special consideration of BRIM: A Feasibility Study Final Report (doi: 10.1553/rra_mab)

Monitoring von Luftschadstoffen (NOx und SO2, Schwermetall-, Stickstoff-, Schwefel- und PAH-Depositionen) mittels Moosen im "Biosphärenpark Wienerwald" (doi: 10.1553/luft, ISBN-13: 978-3-7001-3852-5, ISBN-13 Online: 978-3-7001-3852-5)

Integrated Sustainable Wildlife Management in the Biosphere Reserve Wienerwald (doi: 10.1553/ISWIMAB, ISBN-13 Online: 978-3-7001-6626-9)

Redesigning the Biosphere Reserve NeusiedlerSee (doi: 10.1553/rbrns, ISBN-13: 978-3-7001-6692-4, ISBN-13 Online: 978-3-7001-6692-4)

Ökologische und soziale Tragfähigkeiten als Managementherausforderungen für suburbane Biosphärenparke am Beispiel Untere Lobau (doi: 10.1553/MAB-OEST, ISBN-13 Online: 978-3-7001-6781-5)

Part_b: Partizipationsprozesse in Biosphärenparks – Interventionstheorie, Strategie-analyse und Prozessethik am Beispiel vom Biosphärenpark Wienerwald, Großes Walsertal und Nationalpark Nockberge (doi: 10.1553/mab-partB, ISBN-13 Online: 978-3-7001-6870-6)

Transboundary Information Exchange for Revision and Functional Improvement of Zonation of the Lower Morava Biosphere Reserve (Czech Republic) (doi: 10.1553/mab-tierafiz-lmbr-2010, ISBN-13: 978-3-7001-7025-9, ISBN-13 Online: 978-3-7001-7025-9)

Evaluating the zonation for the Biosphere Reserve Wienerwald: How well does the conversation zone contribute to biodiversity conservation? (doi: 10.1553/mab_biosphere_wienerwald, ISBN-13 Online: 978-3-7001-8136-1)

ChecKid - Kids entdecken die Kernzone (doi: 10.1553/Checkid2010, ISBN-13 Online: 978-3-7001-7038-9)

Geophysikalische Messungen in Tulum (Mexiko) - 2010 (doi: 10.1553/mab-geophys-tulum-2010, ISBN-13: 978-3-7001-6971-0 ISBN-13 Online: 978-3-7001-6971-0)

Biokulturelle Vielfalt: Biokulturelle Vielfalt – Vom lokalen Erfahrungswissen zu Pflanzen im Biosphärenpark Großes Walsertal (doi: 10.1553/MAB-MOBDIBRGW; ISBN-13 Online: 978-3-7001-7347-2)

Perspective Lobau 2020: Exploring management options of a heavily used urban biosphere reserve confronted with new urban developments in its neighbourhood considering a restricted potential for ecosystem development (doi: 10.1553/Lobau2020, ISBN-13 Online: 978-3-7001-7288-8)

Biodiversity and Ecosystem Services as scientific foundation for the sustainable implementation of the Redesigned Biosphere Reserve "Neusiedler See" (doi:10.1553/bioserv-neusiedler-see, ISBN-13 Online: 978-3-7001-7289-5)

Integrative Sustainable Wildlife Management - Principles, Criteria and Indicators for Hunting, Forestry, Agriculture, Recreation (doi: 10.1553/ISWIMAN, ISBN-13 Online: 978-3-7001-7216-1)

IESP - Towards Integrated Ecological Spatial Planning for the Wienerwald Biosphere Reserve (doi: 10.1553/IESP-Wienerwald, ISBN-13 Online: 978-3-7001-7292-5)

Biosphärenpark School-Twinning (doi: 10.1553/MAB-BST, ISBN-13 Online: 978-3-7001-7691-6)

Reservas de la Biosfera de Chile Laboratorios para la Sustentabilidad (doi: 10.1553/ReservasBiosferas1, ISBN-13 Online: 978-3-7001-7624-4)

Biosphere Reserve Integrated Monitoring – Salzburger Lungau & Kärntner Nockberge (doi: 10.1553/MAB-BRIM, ISBN-13 Online: 978-3-7001-7753-1)

REPAnext - Regional Economic and Perceptional Analyses in an UNESCO Biosphere Reserve. Future strategies for regional development in the BR Großes Walsertal against the background of demographic change: What comes next? (doi:10.1553/MAB-REPA-Next, ISBN Online 978-3-7001-7992-4)

Biosphere People - Local residents' views on the Wienerwald Biosphere Reserve (doi: 10.1553/mab biospherepeople, ISBN Online 978-3-7001-8083-8)

HealthSpaces - Biosphere Reserve Landscapes and Human Health Benefits: Analysing the Potential of the Biosphere reserve Wienerwald on life quality and psychological well-being (doi: 10.1553/mab_healthspaces, ISBN Online 978-3-7001-8056-2)

Healthy Alps - Alpine landscapes under global change: Impacts of land-use change on regulating ecosystem services, biodiversity, human health and well-being (doi: 10.1553/ESS-HEALTHY-ALPS, ISBN-13 Online 978-3-7001-8460-7)

SamoMAB – Samothraki as a Biosphere Reserve (doi: 10.1553/SamoMAB, ISBN-13 Online 978-3-7001-8498-0)

BRIMSEN - Biosphere Reserve Integrated Monitoring based on Social and Environmental ecosystem services (doi: 10.1553/MAB-BRIMSEN, ISBN-13 Online: 978-3-7001-8617-5)

AkldEn - Akzeptanz, Identifikation und Engagement: Ansichten und Mitwirkung der Bevölkerung in UNESCO Biosphärenreservaten (doi: 10.1553/MAB-AkldEn, ISBN-13 Online: 978-3-7001-8476-8)

ENESUS – Experimental Networks for Sustainability (doi: 10.1553/MAB-ENESUS, ISBN-13 Online: 978-3-7001-8362-4)

BIOAY - Diez años de la reserva de biosfera Oxapampa – Asháninka – Yánesha (doi: 10.1553/BIOAYMAB, ISBN-13 Online: 978-3-7001-8507-9)

List of selected articles in books, scientific journals and conference/workshop papers:

Ammering, U., Coy, M., Kindl, L., Kratzer, A., Töpfer, T.; Mello-Théry, N. A. d. (2020): Am Rand großer Städte – Urbane Biosphere Reserves zwischen Konzept und Umsetzung. In: Biosphere 4.0. - UNESCO-Biosphärenparks als Modellregionen einer nachhaltigen Entwicklung. A. Borsdorf, V. Braun, K. Heinrich, M. Jungmeier (Eds.), p. 185-202, Springer Spektrum, ISBN 978-3-662-60706-0, 334 pp.

Braun, V., Diry, C., Mayer, H., Weber, A., Köck, G. (2020) Conservation, development and logistical support: How are these three functions incorporated in Austrian Biosphere Reserves? eco.mont - Journal on Protected Mountain Areas Research 12(2), 52-57. https://austriaca.at/0xc1aa5576%200x003b9f73.pdf

Köck, G. (2019). MAB Research in Austria. Zweites Österreichisches Forum zu Biodiversität & Ökosystemleistungen 2019, December 18th, 2019, Vienna (Austria).

Köck, G., Arnberger, A., Möller, L. (2020). Agenda 2030 und Lima-Aktionsplan – Anpassung der Biosphere Reserves für die Zukunft. In: Biosphere 4.0. - UNESCO-Biosphärenparks als Modellregionen einer nachhaltigen Entwicklung. A. Borsdorf, V. Braun, K. Heinrich, M. Jungmeier (Eds.), p. 61-83, Springer Spektrum, ISBN 978-3-662-60706-0, 334 pp.

- Köck, G. (2020). New UNESCO biosphere reserves approved. eco.mont Journal on Protected Mountain Areas Research 12(1), 72. https://austriaca.at/0xc1aa5576%200x003b2a2e.pdf
- Köck, G., Kranjc, D., Lazar, I., Debevec, V. (2020) From a research vision to a state-of-the-art research strategy: UNESCO experts' meeting in the Karst and River Reka Basin Biosphere Reserve. eco.mont Journal on Protected Mountain Areas Research 12(2), 58-63. https://austriaca.at/0xc1aa5576%200x003b9f75.pdf
- Köck, G. (2020). Book review: UNESCO Biosphere Reserves Supporting Biocultural Diversity, Sustainability and Society. M.G. Reed & M.F. Price (eds.), eco.mont Journal on Protected Mountain Areas Research 12(2), 65. https://austriaca.at/0xc1aa5576%200x003b9f77.pdf
- Köck, G. (2021). New UNESCO biosphere reserves approved. eco.mont Journal on Protected Mountain Areas Research 13(1), 73. https://www.austriaca.at/0xc1aa5576%200x003c211e.pdf
- Kratzer, A. (2020): "Netzwerk Biosphärenreservat Einblicke in die Innovationspotentiale der Peripherie am Beispiel Entlebuch (Schweiz) und Großes Walsertal (Österreich)". In: Biosphere 4.0. UNESCO-Biosphärenparks als Modellregionen einer nachhaltigen Entwicklung. A. Borsdorf, V. Braun, K. Heinrich, M. Jungmeier (Eds.), p. 139-158, Springer Spektrum, ISBN 978-3-662-60706-0, 334 pp.
- Kratzer, A., Unthan, N., Coy, M. (2020): Linking actors to promote sustainable development in rural areas: Großes Walsertal. In: Wymann von Dach, S.; Ruiz Peyré, F.: Vibrant mountain communities. Regional development in mountains: Realizing potentials, tackling disparities. Bern: Centre for Development and Environment (CDE) / Bern: Universität Bern., ISBN 978-3-03917-015-9, S. 34 36. https://www.cde.unibe.ch/unibe/portal/fak_naturwis/g_dept_kzen/b_cde/content/e65013/e542846/e916439/e1010211/e1010495/Linkingactorstopromotesustainabledevelopment_eng.pdf
- Walcher, R; Hussain, RI; Karrer, J; Bohner, A; Brand, D; Zaller, JG; Arnberger, A; Frank, T (2020). Effects of management cessation on hoverflies (Diptera: Syrphidae) across Austrian and Swiss mountain meadows. WEB ECOL. 20(2): 143-152.

Vienna, 21/07/2021 (G. Köck)