

Research in protected areas funded by the Austrian National Committee for UNESCO's 'Man and the Biosphere' programme

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Abstract

The Austrian Man and the Biosphere (MAB) Programme is financed by the Ministry for Science, Research and Economy (BMWFW) and administered by a National Committee established at the Austrian Academy of Sciences (ÖAW). The MAB Committee, responsible for Austrian biosphere reserves (BRs), was endowed with a separate research budget from its start in the year 1973. This budget allows the Committee not just to identify research gaps in BRs but to fill them with appropriate research projects. Overall, the Committee, has funded countless research projects in the four decades of its existence.

Keywords

Man and the Biosphere, UNESCO, biosphere reserves

MAB National Committee

In 2013, the Austrian MAB Programme, funded by the Federal Ministry for Science, Research and Economy (BMWFW) and coordinated by a national committee at the Austrian Academy of Sciences (ÖAW), celebrated its 40th anniversary, making it one of the longest existing national MAB committees (KÖCK 2014).

From the start, the National Committee was endowed with a separate research budget. This budget allows the committee not just to identify research gaps but to fill them with appropriate projects. The committee, made up of acclaimed scientists, plus representatives of ministries and federal organizations, the Austrian UNESCO Commission and NGOs, monitors the Austrian research scene, analyses research needs, formulates new research strategies and encourages as well as funds research projects. The Committee advises and supports biosphere reserve managements on scientific and technical issues and provides the link to the MAB Secretariat in Paris. It is also responsible for any submission to UNESCO of an area as a biosphere reserve as well as for enforcing the UNESCO standards.

The evolution of the MAB Programme made a revision of the 'National Criteria for BRs in Austria' necessary. Ten years after the launch of the criteria catalogue in 2006 the Austrian MAB Committee has updated the catalogue in line with the new MAB Strategy 2015-2025. In December 2015 the updated version of the National Criteria was adopted by the members of MAB Committee (<http://www.biosphaerenparks.at/index.php/en/national-criteria>).

Biosphere Reserves (BRs) in Austria

Until 2014 Austria had a total number of seven BRs (including four pre-Seville sites). However, after non-successful 're-designing' initiatives for the four 'first-generation' sites, the Committee decided to remove four BRs ('Gossenköllesee' and 'Gurgler Kamm' in 2014; 'Untere Lobau' and 'Neusiedlersee' in 2016) from the World Network of Biosphere Reserves (WNBR) because of their non-compliance with the Statutory Framework of the WNBR (KÖCK & ARNBERGER 2017). At present, Austria has three well-functioning BRs which comply with the Seville Strategy.

BR Großes Walsertal

(approved 2000)

Size 19.200 hectares

Population: 3,400

Zonation: 20 % Core zone, 65 % Buffer zone, 15 % Transition area

BR Wienerwald

(approved 2005)

Size 106.645 hectares

Population: 815.000

Zonation: 5 % Core zone, 19 % Buffer zone, 76 % Transition area

BR Salzburger Lungau und Kärntner Nockberge

(approved 2012)

Size 151.969 hectares

Population: 34,000

Zonation: 5,6 % Core zone, 37,8 % Buffer zone, 56,6 % Transition area

Research

For the last 15 years, the Austrian MAB Committee has focused its research increasingly on studies in and for national BRs. Since 2005 some 3 million euros have been invested in research projects. In October 2016 the MAB Committee has launched a new call for research projects including cooperative projects with foreign partners.

Currently five research projects are being funded:

- A. KRATZER (University of Innsbruck): Experimental networks for sustainability: Urban Biosphere Reserves as engines of transitions (ENESUS)
- T. WRBKA (University of Vienna): Biosphere Reserve Integrated Monitoring based on Social and Environmental ecosystem services (BRIMSEN)
- R. EDER (University of Natural Resources and Life Sciences Vienna): Perception and Reality of Recreational User Conflicts in the UNESCO Wienerwald Biosphere Reserve (UserConflicts)
- P. PETRIDIS (Institute of Social Ecology Vienna): Samothraki as a Biosphere Reserve: Securing continuity of science-civil society collaboration in a systemic design (SamoMAB)
- C. R. VOGL (University of Natural Resources and Life Sciences Vienna): Lessons Learned for the Management Policy of the Biosphere Reserve 'Oxapampa-Ashaninka-Yanesha' (Peru) based upon the inhabitants' local knowledge and available global scientific knowledge (AGROBIO-K_NOW)

Two of these new projects include cooperation with BRs or BR candidates in Peru, Brazil, Greece, United Kingdom and Spain.

An additional MAB research project is funded through the ESS research initiative:

- T. FRANK (University of Natural Resources and Life Sciences Vienna): Alpine landscapes under global change - Impacts of land-use change on ecosystem services and human health and well-being (Healthy Alps)

Nearly all project reports from research projects funded by the MAB National Committee are published online in successful cooperation with the Austrian Academy of Sciences Press. At present, some 28 MAB project reports can be downloaded from the homepage of the Austrian Academy of Sciences Press (<http://epub.oeaw.ac.at/Projektberichte>). Moreover, numerous scientific papers are created within research projects funded by the MAB National Committee and published in scientific journals and in books. A selection of the open access publications can be downloaded here: <http://www.biosphaerenparks.at/index.php/en/selected-open-access-papers>.

Additional Activities

The Austrian MAB Committee financially supports various research-related UNESCO-MAB activities, e.g. additional MAB Young Scientist Awards and the production of the MAB Activity Reports 2013 - 2014 and 2015 – 2016 (CÁRDENAS TOMAŽIČ et al. 2015, 2016). The Committee also produces acclaimed books, e.g. the White Paper of Austrian BRs, Inspired by Diversity (LANGE 2005), the award-winning volume on Austrian environmental research, Planet Austria (KÖCK et al. 2009), the Austrian contribution to the 40th anniversary of the international MAB programme, Biosphere Reserves in the Mountains of the World: Excellence in the Clouds (AUSTRIAN MAB - NC 2011), the book on Chilean BRs, Reservas de la Biosfera de Chile Laboratorios para la Sustentabilidad (MOREIRA-MUÑOZ. & BORSODORF 2014), as well as the cookbook of Austrian BRs, A Connoisseur's World – The Austrian Biosphere Reserves (KÖCK et al. 2011, 2013), which also won an award (KÖCK & GRABHERR 2014).

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