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NE al Parc Adula ils 27.11.2016 / JA zum Parc Adula am 27.11.2016

How can local populations be won over to protected areas?

What can the scientific literature tell us about the social acceptance of large-scale protected areas? Which recommendations for practice does it offer, and how can research help to advance our understanding of the social acceptance of protected areas in the future? These questions were investigated in a synthesis study. A key factor for the acceptance of large protected areas like national parks or nature parks is communication that is tailored to the various target groups and happens through locally anchored people. Clear and transparent information about goals, plans, and opportunities for participation is equally crucial. The aim must be to develop a common vision with which local people can identify. This vision should be incorporated into the objectives of a protected area and implemented through concrete projects.

Numerous studies have addressed the acceptance of large protected areas, such as national parks or nature parks, especially in connection with topics like participation and regional development. Swiss Park Research, a working group of the Forum Landscape, Alps, Parks of the Swiss Academy of Sciences, has worked intensively on this topic and commissioned a synthesis study. In this study, existing scientific literature on the situation in Europe was compiled and evaluated. The present fact sheet summarizes the most important findings for practical application and provides an overview of the state of the art (see Box 1 for methodology).

Diverse discussions on parks

Large protected areas and parks of national importance such as regional nature parks or national parks not only contribute to nature and landscape conservation, but also play an im-

portant role in regional development. Parks are, for example, considered to stimulate the economy and support tourism and agriculture. Cultural values are another important focus. Park managements often encourage cultural activities that help to strengthen regional identity. Economic benefits and social engagement are considered to be key factors in promoting acceptance.

Nevertheless, local populations are often critical of park projects. In Switzerland, for example, since 2016 two prominent initiatives for new national parks, Parc Adula and Parco Locarnese, have failed in municipal votes. Switzerland's strong direct democracy is not the only reason for this, as cases from other European countries show. They, too, are struggling for acceptance of new and existing parks. The reasons why local populations reject new parks are many. Often they fear restrictions, for example on land use and access to certain areas (e.g. due to requirements to stay on official trails). In most

cases, a lack of trust in the park management or in public administration, along with communication that is perceived as inadequate, also play a decisive role.

The synthesis study evaluates 121 publications. Most of them investigate which factors influence the acceptance of large protected areas, in particular national parks and nature parks, and how this acceptance can be promoted. Many of the studies present acceptance as a desirable state (see Box 2) or, in other words, a normative goal: the population should accept parks. Most studies describe the challenges of achieving this goal through planning and management. Recommendations outline possible measures for promoting acceptance.

How can acceptance be promoted?

In-depth analysis of 37 publications made it possible to derive seven factors that promote acceptance (Table 1). Good communication coupled with transparent processes in planning and decision-making was the most frequently cited one, followed by opportunities for public participation. The more actively people can get involved, the greater their acceptance. Acceptance levels also increase if a park is perceived to benefit regional development. In addition, studies conducted over the past decade have increasingly described identification with a park or a region as a central factor for acceptance. How identification and engagement influence acceptance is also discussed in detail in a comparative study of eight biosphere reserves (see Box 3). The main factor reducing acceptance is the fear of restrictions due to the park.

Factors promoting acceptance	Mention in publications
Good communication / transparency	18
Opportunities for participation	14
Identification wirth park / region	9
Regional development régional (e. g. tourism promotion)	7
Consideration of different values / perceptions	6
Gurarantee of resource use / access	3
Management adjustments	2

Table 1: Factors promoting acceptance and the number of publications in which they are mentioned (among the 37 publications included in the in-depth analysis).

Recommendations for practice

Based on the results of the synthesis study, recommendations for practice can be subsumed under three key topics:

1. Tailor communication and encourage participation

Communication and participation are the most important factors influencing opinion on parks. Tailor-made communication is therefore essential. Multiple channels and targeted contents are needed to successfully address the various actor groups. Transparency regarding achieved and planned objectives and implemented projects gives people the feeling that they are well informed and makes a park tangible.

Box 1: Systematic analysis

The acceptance of large protected areas, particularly parks, has been investigated in many individual case studies. Up to now, a systematic overview of their results and of insufficiently addressed issues had been lacking. For this reason, Swiss Park Research, a working group of the Forum Landscape, Alps, Parks of the Swiss Academy of Sciences, commissioned a synthesis study to review and analyse the comprehensive body of existing scientific literature.

The authors searched various online portals (e.g. Google Scholar, ISI Web of Science) and public research databases for studies investigating the acceptance of parks and opinions about such large protected areas in Europe. The analysis included studies published in scientific journals, scientific reports and books, as well as dissertations and master's theses from Swiss universities. To be included in the analysis, the work had to be published in 2000 or later. This period was chosen because the establishment of the UNESCO Biosphere Entlebuch in 2001 enabled more comprehensive park research, especially in Switzerland. The search was conducted in German, English, and French.

The analysis considers 121 publications. They were examined in terms of content and divided into thematic categories, which simplified analysis of the text corpus. The 37 publications in the categories "Acceptance" and "Attitudes" were selected for further in-depth analysis and comparison. They were examined and compared not only with regard to their main statements, but also specifically with regard to their aims, research questions, methods, results, and recommendations.

Furthermore, it is important not only to practise one-way communication, but to establish a genuine dialogue. Active listening on the part of the park management promotes their understanding of local concerns, such as sustainable regional development. Often, supposedly park-specific interests are relevant for a region regardless of the park. Accordingly, they must be given special attention.

The local population should also be addressed at the level of their identification with the region. This requires involving locally anchored and respected people as ambassadors, networkers, and experts. They lend the park a face and encourage people to identify with it – which, in turn, promotes people's willingness to get personally involved. However, opportunities for active engagement must be advertised, and it should also be made clear how the park management intends to show its appreciation of voluntary work. Engagement on behalf of a park project can be amplified by linking its objectives to other voluntary activities in the fields of ecological, economic, or social sustainability.

2. Formulate a shared vision and cultivate differences

A park often spans several municipalities or even regions. A park project must therefore emphasize commonalities, such as similar challenges, a shared history, or the concerns of future generations. This requires a common vision for the entire region. Such a vision promotes identification with the park: it creates a sense of belonging. The vision should become an important part of the park strategy. Concrete projects should make it more tangible and point up the pathway to its implementation. In the rejected Parc Adula, the planning process was complicated by the lack of a common vision for the future and a thematically overly broad argumentation by the proponents.

Nature conservation and sustainable regional development are successful when they are supported by the population. A literature review of 2016, for example, shows that protected areas that enjoy the population's support achieve better biodiversity conservation outcomes (Oldekop et al. 2016). However, populations often perceive a park as something that is independent of them and has little to do with their everyday lives. This hampers their identification with it. In order to overcome this dualism, it is important to present a park as being supported and shaped by the people of the region. The community must be put centre stage, not individual actors such as the park management or the park association.

Furthermore, parks should be planned as heterogeneous and changeable entities that take up diverse demands of municipalities and regions, for example with regard to land use or development goals. In Switzerland, this is provided for by the ten-year operating period. It ensures that the charter (park contract including management plan) is evaluated and adapted at regular intervals. The population votes on each new charter at the municipal level. This makes it possible to respond to changes and incorporate lessons from past experiences into each subsequent park contract.

Box 2: What is acceptance?

Many studies consider acceptance as a state. In reality, however, it is gradual in nature, with the spectrum ranging from reactance (active defensive reaction) to tolerance, approval, and, finally, acceptance in the true sense. The degree of acceptance or rejection is influenced by: (1) a cognitive process, which in turn is influenced by various perceptions and values (e.g. rational approval of environmental protection); (2) feelings (e.g. a feeling of attachment to the region); and (3) behaviour (e.g. active involvement in park activities) (Depraz 2005).

Actual acceptance is closely linked to identification with the park. Very often, however, people remain passive towards a park. Within the above spectrum, this corresponds to tolerance or approval. In this state, citizens base their decision to vote against or in favour of a park primarily on rational considerations. They have no particular feelings and do not engage in helping to shape the park.

3. Encourage a sense of home and strengthen regional identity

When it comes to developing a common vision for the future, people's feelings and concepts of home and identity are crucial. Many people connect feelings of home with specific cultural landscapes, for example. As von Lindern et al (2019) show, a sense of belonging and a sense of home are important elements encouraging the population to identify with a region or a park (Box 3). Park projects should therefore take up aspects of this regional identity and link them to the park objectives. Projects to preserve traditions demonstrate the benefits of a park and make them tangible. This strengthens people's engagement. Traditions are also well suited to convey the idea of sustainable development.

How can future research contribute?

The synthesis study has shown that many of the case studies asked very similar research questions. This section points up questions that have scarcely or not at all been examined, and shows where conceptual approaches might be particularly worth expanding.

Maintaining a public presence is a good way of addressing the population. Photo : Argovia Jurapark

1. Overcome the dualism between park and population

Most of the 121 studies included in the analysis focus on the dualism between a park and its local population. "Park" is used in different ways; it usually refers to a large protected area, but often also to the park management. The sometimes vague definition of the term and the separation of park and population make it difficult to examine conceptual and empirical issues in a more nuanced manner. Strikingly, studies from French-speaking areas tend not to focus on acceptance as such. Instead, they investigate different perceptions and how they influence park discussions and the attribution of meanings to places or events. These studies consider a park and its local population not as opposing entities, but as parts of each other. In order to better understand this interplay, conceptual approaches need to be expanded – especially in German-speaking areas – so as to overcome the dualism between park and population, as they are difficult to separate.

2. Include feelings and values

Debates about park projects are often very emotional. Confrontations between different visions, perceptions, and values trigger strong feelings and shape discussions. However, the evaluated publications rarely examined feelings more closely from a scientific perspective. Particularly the relations of feelings to landscapes and places and the ways in which they influence discussions are important topics to investigate. More research is also needed specifically on feelings of home, to investigate the extent to which a park evokes and influences such feelings. Likewise, in addition to feel-ings, the various societal values that influence park discussions require further investigation – both in case studies of individual parks and in larger comparative studies. How are these values expressed? What are these values? How do they influence attitudes towards parks or the implementation of park objectives?

3. Analyse communicated contents and communication channels

Finally, there is also a need for research on communication. While many studies recommend an improved communication strategy, hardly any of them take a closer look at communication channels, communicated contents, and their linguistic representation. Not only the messages are important, but also the way in which they are communicated. Linguistic studies and visual analyses of communication material and media coverage could provide insights into ways in which communication promotes or hinders acceptance. In addition, analyses of communication channels could show how effective individual communication strategies are. This also includes the question of who communicates and to what extent this reflects local or regional power structures and social networks.

Children from Grisons took their folk custom of Chalandamarz to the square in front of the national parliament in Bern as part of the 2019 Swiss Parks Market. Keeping up traditions promotes regional identity. Photo: Janosch Hugi, Swiss Parks Network

Box 3: Acceptance, identification, and engagement – Views and participation of local populations in UNESCO biosphere reserves

Xenia Junge and Eike von Lindern

UNESCO biosphere reserves (BRs) are model regions for sustainable ecological, economic, and social development. Key prerequisites for such a model region's success are that the local population accepts the BR, identifies with its objectives, and engages actively in implementing these objectives.

This study is one of few studies that focus on more than one park. For this project, surveys were conducted in eight BRs in Germany, Austria, and Switzerland to investigate the levels of acceptance, identification, and engagement among the local populations regarding their respective BR. In addition, the study examined the links between the three phenomena, as well as what factors influence them.

All eight BRs show positive levels of both acceptance and identification (the latter being divided into sense of belonging and sense of home). There is a relatively high willingness to engage on behalf of the BR or its goals; the level of actual engagement, however, is fairly low.

The evaluation shows that the levels of acceptance, identification, and engagement increase the better people feel informed about the BR. Events and newsletters had a particularly positive effect. The acceptance of a BR is higher if people perceive it as effective and if it meets their expectations, for example with regard to marketing of regional products or conservation of nature and landscapes. In this respect, communication about whether a BR is achieving its goals, and which goals exactly, is decisive.

Development of a common vision for the future of the entire region promotes identification by creating a stronger sense of belonging. Participation and feedback on what has already been achieved are important components of the process.

Low levels of engagement are linked not so much to lack of willingness as to low awareness of opportunities. Engagement is diminished if people perceive relatively little appreciation for it from the BR management. Local populations see economic and ecological sustainability as the primary goal and task of a BR. Social sustainability seems to be less well known, although people engage on its behalf all the time, for example through voluntary work.

The study results show a strong connection between acceptance and identification: greater acceptance of a BR is associated with stronger identification with it – and vice versa. The connection to engagement is weaker, but here too, higher acceptance and stronger identification tend to be linked to stronger engagement.

Futher reading

Backhaus N, Pleger L, von Atzigen A, Bosello O, Graefe O, Hunziker M, Sager F, Siegrist D (2018) **Parc Adula: Gründe und Hintergründe der Ablehnung in den Gemeindeabstimmungen.** Geographisches Institut der Universität Zürich, Zürich.

Berr K, Jenal C (2016) **Landschaftskonflikte.** In Kühne O, Kinder S, Schnur O (Hrsg.) RaumFragen: Stadt – Region – Landschaft. SpringerVS, Wiesbaden.

Claeys C, Hérat A, Barthélémy C, Deldrève, V (2015) **Quand les Calanques deviennent Parc National: disputes autour de la définition et de la répartition des efforts environnementaux et urbains induits.** Norois 238–239, 71–84.

Depraz S (2005) **Le concept d'« Akzeptanz » et son utilité en géographie sociale.** L'Espace Géographique 34(1), 1–16.

Frick J, Hunziker M (2015) **Hintergründe der Akzeptanz von Regionalen Naturpärken.** WSL Berichte 30. Eidg. Forschungsanstalt für Wald, Schnee und Landschaft, Birmensdorf.

Hammer T, Mose I, Siegrist D, Weixlbaumer N (2016) **Parks of the Future. Protected Areas in Europe Challenging Regional and Global Change.** Oekom, München.

Humer-Gruber A (2016) Farmers' Perceptions of a Mountain Biosphere Reserve in Austria. Mountain Research and Development 36(2), 135–161.

Imhof F (2018) **Akzeptanz des Landschaftsparks Binntal in der lokalen Bevölkerung.** Berner Fachhochschule, Zollikofen.

Job H, Fließbach-Schendzielorz M, Bittlingmaier S, Herling A, Woltering M (2019) **Akzeptanz der bayerischen Nationalparks.** Baumhauer R, Hahn B, Job H, Paeth H, Rauh J, Terhorst B (Hrsg.), Würzburger Geographische Arbeiten, Band 122. Würzburg University Press, Würzburg.

Knaus F, Backhaus N (2014) **Touristische Wertschöpfung in Schweizer Pärken.** Swiss Academies Factsheets 9(3). Bern.

Mayer M, Stoll-Kleemann S (2016) **Naturtourismus und die Einstellung der lokalen Bevölkerung gegenüber Großschutzgebieten.** Natur und Landschaft 91(01), 20–25.

Michel AH, Backhaus, N (2019) **Unravelling Reasons for the Non-Establishment of Protected Areas: Justification Regimes and Principles of Worth in a Swiss National Park Project.** Environmental Values 28(2), 171–190.

Michel AH, Bruggmann A (2019) **Conflicting Discourses: Understanding the Rejection of a Swiss National Park Project Using Data Analysis Triangulation.** Mountain Research and Development 39(1), R24–R36.

Oldekop JA, Holmes G, Harris WE, Evans KL (2016) **A global assessment of the social and conservation outcomes of protected areas,** Conservation Biology 30(1), 133–141.

Von Lindern E, Knoth R, Junge X (2019) **Akzeptanz, Identifikation und Engagement: Ansichten und Mitwirkung der Bevölkerung in UNESCO Biosphärenreservaten (AkIdEn).** Forum Landschaft, Alpen, Pärke – Akademie der Naturwissenschaften Schweiz (SCNAT) und Österreichisches Nationalkomitee für das UNESCO-Programm «Man and the Biosphere», Bern/Wien. doi: 10.1553/MAB-AkIdEn, ISBN: 978-3-7001-8476-8.

von Lindern E, Knoth-Letsch R, Häring V, Klenovec C, Hunziker M, Wallner A, Knaus F (2020) **Akzeptanz, Identifikation und Engagement: Ergebnisse und Implikationen aus einer Bevölkerungsumfrage in acht UNESCO Biosphere Reserves in der Schweiz, Deutschland und Österreich.** In Borsdorf A, Jungmeier M, Braun V, Heinrich K (Hrsg) Biosphäre 4.0. – UNESCO Biosphere Reserves als Modellregionen einer nachhaltigen Entwicklung: 123–140.

SDGs: the international sustainable development goals of the UN

With this publication, the Swiss Academies of Arts and Sciences make a contribution to SDG 17:
"Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development"

> sustainabledevelopment.un.org
> eda.admin.ch/agenda2030/en/home/agenda-2030/die-17-ziele-fuer-eine-nachhaltige-entwicklung.html

References are included in the online version at landscape-alps-parks.scnat.ch/acceptance

List of studies included in the evaluation

1 Arnberger A, Eder R, Allex B, Sterl P, Burns RC (2012) **Relationships between national-park affinity and attitudes towards protected area management of visitors to the Gesaeuse National Park,** Austria. Forest Policy and Economics 19, 48–55.

2 Backhaus N, Pleger L, von Atzigen A, Bosello O, Graefe O, Hunziker M, Sager F, Siegrist D (2018) **Parc Adula: Gründe und Hintergründe der Ablehnung in den Gemeindeabstimmungen.** Geographisches Institut der Universität Zürich, Zürich.

3 Braun V, Bendler G, Haller A, Heinrich K (2018) **Timelines of Tension: Trajectories of Protected-Area Creation in the Austrian Alps.** Revue de Géographie Alpine 106(4), 1–19.

4 Butticaz M (2013) **Vor- und Nachteile eines Regionalen Naturparks aus der Perspektive der Landwirtinnen. Am Beispiel des Regionalen Naturparks Gruyère Pays-d'Enhaut.** Geographisches Institut, Universität Zürich.

5 Claeys C (2014) **Créer un parc national des Calanques: Préserver, partager ou confisquer un patrimoine socio-naturel ?** Annales de Géographie 698(4), 995–1015.

6 Debril T (2014) **De la connaissance des espèces à la gestion des espaces: l'action territorialisée d'un parc national.** Natures Sciences Sociétés 22(1), 23–32.

7 Deldrève V, Claeys C (2016) **Are National Parks Inherently Unequal? The 2006 French Park Reform and its Initial Implementation in Mainland France.** Desenvolvimento e Meio Ambiente 38, 21–35.

8 Demmer C (2013) **Grands propriétaires face à la gestion publique de la biodiversité au sein du parc naturel régional de Camargue.** Natures Sciences Sociétés 21(4), 416–427.

9 Depraz S (2010) **Protection de la nature et développement rural en Europe centrale Par-delà le conflit local, un conflit entre paradigmes?** Revue d'études Comparatives Est-Ouest 41(3), 91–106.

10 Engen S, Runge C, Brown G, Fauchald P, Nilsen L, Hausner V (2018) **Assessing local acceptance of protected area management using public participation GIS (PPGIS).** Journal for Nature Conservation 43, 27–34.

11 Frick J, Hunziker M (2015) **Hintergründe der Akzeptanz von Regionalen Naturpärken.** WSL Berichte 30. Eidg. Forschungsanstalt für Wald, Schnee und Landschaft, Birmensdorf.

12 Grando S, (2007) **A Garden or a Laboratory? Conflicting Views about Nature Preservation and Local Development in the Aspromonte National Park, Italy.** International Planning Studies 12(4), 327–342.

13 Hernes MI, Metzger MJ (2017) **Understanding local community's values, worldviews and perceptions in the Galloway and Southern Ayrshire Biosphere Reserve, Scotland.** Journal of Environmental Management 186, 12–23.

14 Hillebrand M, Erdman K-H (2015) **Die Entwicklung der Akzeptanz des Nationalparks Eifel bei der lokalen Bevölkerung.** BfN-Skripten 402. Bundesamt für Naturschutz, Bonn.

15 Hirschnitz-Garbers M, Stoll-Kleemann S (2011) **Opportunities and barriers in the implementation of protected area management: A qualitative meta-analysis of case studies from European protected areas.** Geographical Journal 177(4), 321–334.

16 Huber M, Arnberger A (2016) **Opponents, waverers or supporters: the influence of place-attachment dimensions on local residents' acceptance of a planned biosphere reserve in Austria.** Journal of Environmental Planning and Management 59(9), 1610–1628.

17 Humer-Gruber A (2016) **Farmers' Perceptions of a Mountain Biosphere Reserve in Austria.** Mountain Research and Development 36(2), 135–161.

18 Imhof F (2018) **Akzeptanz des Landschaftsparks Binntal in der lokalen Bevölkerung.** Berner Fachhochschule, Zollikofen.

19 Job H, Fließbach-Schendzielorz M, Bittlingmaier S, Herling A, Woltering M (2019) **Akzeptanz der bayerischen Nationalparks.** Baumhauer R, Hahn B, Job H, Paeth H, Rauh J, Terhorst B (Hrsg.), Würzburger Geographische Arbeiten, Band 122. Würzburg University Press, Würzburg.

20 Karthäuser JM, Filli F, Mose I (2011) **Perception of and attitudes towards a new Swiss biosphere reserve – a comparison of residents' and visitors' views.** eco.mont 3(2), 5–12.

21 Leitinger G, Walde J, Bottarin R, Tappeiner G, Tappeiner U (2010) **Identifying significant determinants for acceptance of nature reserves: A case study in the Stilfserjoch National Park, Italy.** eco.mont 2(1), 15–22.

22 Ludwig M, Grüninger F, Rothfuss E, Heurich M (2012) **Discourse Analysis as an Instrument to Reveal the Pivotal Role of the Media in Local Acceptance or Rejection of a Wildlife Management Project: A Case Study from the Bavarian Forest National Park.** Erdkunde 66(2), 143–156.

23 Mayer M, Stoll-Kleemann S (2016) **Naturtourismus und die Einstellung der lokalen Bevölkerung gegenüber Großschutzgebieten.** Natur und Landschaft 91(01), 20–25.

24 Michel AH, Backhaus, N (2019) **Unravelling Reasons for the Non-Establishment of Protected Areas: Justification Regimes and Principles of Worth in a Swiss National Park Project.** Environmental Values 28(2), 171–190.

25 Michel AH, Bruggmann A (2019) **Conflicting Discourses: Understanding the Rejection of a Swiss National Park Project Using Data Analysis Triangulation.** Mountain Research and Development 39(1), R24–R36.

26 Müller U, Kollmair M (2004) **Die Erweiterung des Schweizerischen Nationalparks.** disP-The Planning Review 40(159), 44–51.

27 Nastran M (2015) **Why does nobody ask us? Impacts on local perception of a protected area in designation, Slovenia.** Land Use Policy 46, 38–49.

28 Niedziałkowski K, Blicharska M, Mikusiński G, Jędrzejewska B (2014) **Why is it difficult to enlarge a protected area? Ecosystem services perspective on the conflict around the extension of the Białowieża National Park in Poland.** Land Use Policy 38, 314–329.

29 Sacher P, Mayer M (2019) **Regionalökonomische Effekte als Argument in gesellschaftlichen Aushandlungsprozessen über Großschutzgebiete – Eine diskursanalytische Betrachtung der Nationalpark-Debatte im Steigerwald.** In Berr K, Jenal C (Hrsg.) Landschaftskonflikte, S. 331–356. Springer VS, Wiesbaden.

30 Sandell K (2005) **Access, tourism and democracy: A conceptual framework and the non-establishment of a proposed national park in Sweden.** Scandinavian Journal of Hospitality and Tourism 5(1), 63–75.

31 Seeland K, Moser K, Scheuthle H, Kaiser FG (2002) **Public acceptance of restrictions imposed on recreational activities in the peri-urban Nature Reserve Sihlwald, Switzerland.** Urban Forestry & Urban Greening 1(1), 49–57.

32 Stoll-Kleemann S (2001) **Opposition to the designation of protected areas in Germany.** Journal of Environmental Planning and Management 44(1), 109–128.

33 Toscan U (2007) **Akzeptanz von Regionalen Naturpärken bei der lokalen Bevölkerung in der Schweiz.** Geographisches Institut der Universität Zürich, Zürich.

34 Von Lindern E, Knoth R, Junge X (2019) **Akzeptanz, Identifikation und Engagement: Ansichten und Mitwirkung der Bevölkerung in UNESCO Biosphärenreservaten (AkIdEn).** Forum Landschaft, Alpen, Pärke - Akademie der Naturwissenschaften Schweiz (SCNAT) und Österreichisches Nationalkomitee für das UNESCO-Programm «Man and the Biosphere», Bern/Wien. doi: 10.1553/MAB-AkIdEn, ISBN: 978-3-7001-8476-8.

35 Von Ruschkowski E, Nienaber B (2016) **Akzeptanz als Rahmenbedingung für das erfolgreiche Management von Landnutzungen und biologischer Vielfalt in Großschutzgebieten.** Raumforschung Und Raumordnung 74(6), 525–540.

36 Wallner A (2005) **Biosphärenreservate aus der Sicht der Lokalbevölkerung. Schweiz und Ukraine im Vergleich.** Eidgenössische Forschungsanstalt für Wald, Schnee und Landschaft WSL, Birmensdorf.

37 Weixlbaumer N, Coy M (2009) **Selbst- und Fremdbild in der Gebietsschutzpolitik. Das Beispiel des Biosphärenparks Großes Walsertal/ Vorarlberg.** In Mose I (Hg.) Wahrnehmung und Akzeptanz von Grossschutzgebieten, S. 37–81. BIS-Verlag der Carl von Ossietzky Universität Oldenburg, Oldenburg.