

From the mountains to the sea: The Tepilora Natural Regional Park, Sardinia

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Abstract

Protected areas are no longer focused solely on conservation and protection needs but play a central role in promoting sustainable development in local socio-territorial systems. The Tepilora Natural Regional Park (TNRP) in Sardinia offers an example of this phenomenon. This paper highlights the significance of the TNRP in balancing conservation needs with the sustainable development of local populations – an effort that resulted in the establishment of the Tepilora, Rio Posada and Montalbo Biosphere Reserve.

Profile

Protected area

Tepilora Natural Regional Park & Tepilora, Rio Posada and Montalbo

Biosphere Reserve



Figure 1 – The Rio Posada. © D. Branca

Introduction

The massive growth in the number of protected areas globally since 1980 (Zimmerer et al. 2004), reaching a terrestrial coverage of more than 17% (Rodríguez-Rodríguez et al. 2017; Protected Planet 2023), was accompanied by a paradigm shift from strict conservation and protection towards the consideration of local populations' needs and sustainable regional development. Far beyond being exclusively natural areas, protected areas are manifestations of the inseparable relationship between nature and culture. Protected area managers thus also respond to an area's cultural-historical and social-economic changes (Zupančič-Vičar 2006), including variations in land use, which are increasingly directed towards urban society and its leisure activities (Beltran-Costa 2022). The Tepilora Natural Regional Park (TNRP) in Sardinia is a case in point because it connects cultural-historical and social-economic dimensions with the need for environmen-

tal conservation and protection. Moreover, the TNRP stands out because it connects mountains and coastal areas along an integrated socio-territorial system that follows a river from the mountains to the sea.

This article presents a general profile of the TNRP, showing its natural and cultural characteristics. In particular, it describes the geographical context, the establishment process of the TNRP, and some of the actions taken by the TNRP management regarding issues such as conservation, public and heritage use, and the relationship with local communities (see Martínez-Fernández et al. 2022) – efforts that eventually led to the creation of the Tepilora, Rio Posada and Montalbo Biosphere Reserve.

Between the mountains and the sea

Located in the Mediterranean biogeographic region, in the north-eastern part of the island of Sardinia (European Commission 2016), Italy, the TNRP covers over 7,877 ha and falls within the territory of four municipalities (Bitti, Lodè, Torpè and Posada) (Figure 2). What makes this area stand out is the integration of mountains and coast, from the sea up to the highest peak of Nodu Pedra Orteddu (978 m), across a variety of ecosystems.

The area is characterized by Paleozoic intrusive rocks, particularly granites, and the presence of the so-called *serras* (characteristic ridges). In Crastazza-Tepilora and Sos Littos-Sas Tumbas, the mean annual temperature is 12.9 °C; the mean annual precipitation reaches about 1,050 mm (SardegnaForeste s.d.a; SardegnaForeste s.d.b). While the upland areas are covered by Mediterranean forests (including broad-leaf forest, coniferous forest, maquis and garrigue), the mouth of the Rio Posada – a Ramsar site since 2018 (site number 2452) – represents a complex socio-ecological wetland system (Figure 1), characterized by traditionally used agricultural land, marsh vegetation

Table 1 – Timeline of the establishment of the Tepilora Natural Regional Park and the Biosphere Reserve (BR). MAB – Man and the Biosphere

Date	Event	Remark
07.06.1989	Regional Law on Protected Areas and Parks	Regional Law No. 31/1989
06.12.1991	First Italian framework law on protected areas	National Law No. 394/1991
24.10.2014	The Tepilora Natural Regional Park was officially established	Regional Law No. 21/2014
12.06.2017 –15.06.2017	UNESCO designated the Tepilora, Rio Posada and Montalbo BR	International Coordinating Council of the MAB Programme (29 th session) (UNESCO 2017)
25.02.2021	Designation of the “Foce del Rio Posada” (Posada River mouth) as a Ramsar site	Ramsar Site Information Service

for establishing and managing protected areas. The debate stands as a milestone in the regulatory framework on parks in Sardinia. Two and a half years later, this law was complemented by (national) Law No. 394 (6 December 1991), the first Italian legislation to cover protected areas, concerning the protection of nature. (For a critical analysis of the Parliamentary debate on the framework law, see Paradiso 2022, chapter 5.) Despite this, it took several more years before work on establishing the TNRP started.

The initial idea consisted of plans for two different parks: one fluvial, encompassing the municipalities of Alta Baronia, and one mountainous, around Bitti (Parco di Tepilora s.d.). Another critical step in establishing the park coincided with a 2005 bill (*Disegno di Legge*) presented by the then Councillor for Environmental Protection, Antonio Dessì. This bill merged three previous bills on the establishment of three regional parks, including the *Oasi di Tepilora*, approved by the Regional Council between October and November 2005. The bill specified that the Bitti Municipal Council had expressed its support for establishing a regional natural park in the area and that on 3 January 2005 the Municipal Council had made arrangements with the Desertification Research Centre of the University of Sassari to prepare a preliminary study for establishing a park due to the significance of the area from a biodiversity conservation point of view. Hence, Bitti played a central role in the creation of the TNRP, as reflected in the Memorandum of Understanding (*Protocollo d’Intesa*) between the Regional Councillor for Environmental Protection, the President of the Province of Nuoro, the Mayor of the Municipality of Bitti, and the President of the Forestry Authority of Sardinia. The objective was to agree on the establishment of a “Regional Natural Park of the Tepilora Oasis aimed at the conservation and protection of natural resources and the creation of opportunities for sustainable development with positive economic effects on the entire surrounding area.” (Resolution of 27 December 2005, No. 62/76)

In the years that followed, references to the park frequently appeared in the regional press. In 2011, for example, *La Nuova Sardegna* reported on the local debate regarding the establishment of the park and possible effects. Further municipalities – Lodè, Posada and Torpè – joined the project, laying the foundation for linking mountains and coastal areas, which were already connected by rivers, in a single park (Anonymous 2011), a particularity made visible in a logo presented the following year (Merlini 2012; Figure 4). Soon after, the process gathered pace, first with public assemblies in each of the four municipalities and, later, with discussions by municipal councils (Secci 2013). According to the interviews collected about this historical phase, anti-park positions emerged during public meetings, mainly relating to the use of the natural resources of the forest and the traditional practice of hunting (Merlini 2014). The press began to get behind the project and presented the park to the public (Merlini 2013a, b; 2014) when it was officially established by Regional Law No. 21 on 24 October 2014 (Infobox 1).

Following the park’s establishment, preparations began to apply for UNESCO Biosphere Reserve (BR) status. The zoning process for this ended in 2016 (Asproni 2016), with 17 municipalities joining, and the application was submitted in September of the same year (Secci 2016). In June 2017, UNESCO designated the Tepilora, Rio Posada and Montalbo Biosphere Reserve as Sardinia’s first BR (Secci 2022b), with its own governance structure (Infobox 2). As during the establishment of the TNRP, the common thread of this project was the Rio Posada, which connects mountains and coast through a composite socio-territorial system in which the human dimension was and continues to be closely connected with the environmental one (French et al. 2017; UNESCO 2019; see Figure 1). Today, the Park Authority of the TNRP is the administrative authority of the Tepilora, Rio Posada and Montalbo BR, and the TNRP covers a central part of



Figure 4 – Linking mountains and coastal areas connected by rivers. © Parco di Tepilora

the core and buffer zones of the whole BR. In total, the BR encompasses an area of 165,173 ha. According to the administrative authority, “The goal [of the BR] is to consolidate the relationship between the mountains and the sea, the characteristic symbols of the area, and to find a balance between biodiversity, creating awareness in the population, but also enhancing the sustainable growth of the whole area, equally promoting agriculture and crafts, culture and landscape” (Parco Naturale Regionale di Tepilora 2023).

Finally, on 25 February 2021, the Posada River mouth was designated a Ramsar site as a “rare example in the Mediterranean of a near-natural river delta” (Ramsar Site Information Service n.d.; Secci 2021).

Cultural landscape and territorial construction

The connection of mountains and coast by the Rio Posada, and the land uses since the Bronze Age along this gradient have shaped the area of today’s TNRP and the larger BR, creating a particular cultural landscape. Historically, and with altitudinal variations, the area has been created by humans practising agriculture and animal husbandry, especially sheep and goat farming. Until recently, breeders in the inland areas of Bitti (Figure 5) practised transhumance, taking their flocks to the coastal area of Gallura and Baronia (Le Lannou 1979; Mannia 2014). The actual territories of the TNRP and the BR are thus a tapestry of cultural history, social relations and ecological connections between the populations of the different areas – links threatened by societal changes that have emerged over the last six decades.

In the 1960s, Sardinia, like other regions of southern Italy, was affected by rapid socio-economic changes and, in particular, by strong migratory movements – towards the industrial hubs of northern Italy and countries such as Germany, France, Switzerland and Belgium, as well as towards the coastal areas of the island itself. For instance, the population of the TNRP municipality of Bitti – a town in the inland mountainous area – decreased from 5,774 to about 2,500 between 1961 and 2021 (Figure 5). In contrast, during the same period the population of the coastal TNRP municipality of Posada increased from 1,265 to approximately 3,000. In general, there was a substantial population increase in all the island’s coastal areas, partly due to the development of seaside tourism. In the TNRP area, these societal changes had two major impacts on the cultural landscape: on the one hand, there was urban growth of coastal towns and the emergence of holiday resorts (although to a lesser degree than in other areas of Sardinia); on the other hand, there was a steady depopulation of mountain areas and a reduction in the use of pastures, followed by shrub encroachment (Ruiu 2017). Here, it becomes clear that establishing the TNRP and the related BR was driven not only by the need for environmental conservation, but also – and perhaps foremost – by



Figure 5 – Bitti – a town in the inland. © Parco di Tepilora

efforts to preserve the area as a whole as a place worth living in for people.

Conservation and development initiatives

In consultation with the local population, the aims of the TNRP and the BR include spatial interventions of various kinds, from those more closely related to environmental conservation, to those related to the sustainable development, enhancement and enjoyment of the cultural and environmental heritage.

Notable among the conservation actions undertaken within the TNRP and the BR is the AQUILA a-LIFE project, funded by the European Commission, the Italian Ministry of the Environment, and the Autonomous Region of Sardinia, including ISPRA and Forestas, in addition to French and Spanish partners. The project aims to reintroduce and repopulate the western Mediterranean, particularly Sardinia, with Bonelli’s Eagle (*Aquila fasciata*) (Ruiu 2018), a bird of prey whose relationship with humans – like the Golden Eagle – has historically been ambivalent due to competition for resources, specifically lambs. The shepherds suffered attacks from the eagles, which, for this reason, were often killed. Nevertheless, there were

Infobox 1

The management bodies of the Park Authority of the Tepilora Natural Regional Park (adapted from Parco Naturale Regionale di Tepilora 2023).

The President: represents the Body and oversees its smooth operation. He/she is elected by the Assembly and holds office for three years. The President convenes and presides over the Assembly.

The Assembly: the political-administrative policy and controlling body of the park. The Assembly elects its President and formulates the guidelines regarding the technical-administrative activities of the Park Authority.

The Board of Auditors: the supervisory body overseeing the accounts and financial affairs of the Park Authority. The Board assesses compliance with rules and principles, and gives financial feedback on the acts of the Park Authority.



Figure 6 – On the charcoal burners' trail with the Tepilora mountain on the right. © D. Branca 2022

individual people capable of weaving relationships with eagles using various ritual practices, including *sos verbos*, a series of prayers aimed at foiling attacks. Ruiu states, “All these different rituals had in common that the man who used *sos verbos* had in turn to respect both the eagle and the goods of other people” (Ruiu 2017: 89–90), preventing raptors from being killed. The reintroduction of Bonelli’s eagle is taking place within a distinct socio-economic context, thanks to a change in attitude on the part of livestock farmers (Ruiu 2017) and a process of reconstruction of nature (Beltran & Vaccaro 2011) that also aims to enhance environmental heritage.

The TNRP and the BR are particularly active in enhancing and valorizing the natural and cultural

heritage of the municipalities of the park, especially through tourism. In concert with the regional agency Forestas, they are investing in the maintenance of thematic trails, one of the fundamental ways for learning about the TNRP through nature tourism. In December 2022, for instance, the four park municipalities organized *Foreste aperte* (open forests), which consisted of hikes through the municipal areas, tasting regional products, and learning about local traditions (Anonymous 2023). The municipality of Lodè organized hikes along the old charcoal burners’ trails (Figure 6). Numerous other itineraries allow one to visit the TNRP and the BR at different altitudes and, interestingly, offer the possibility of discovering the entire territory via a route connecting the mountains and the sea by following the river.

Considerable importance is given to awareness-raising by the Centres for Environmental Education and Sustainability and their educational work, especially with schools and the general population, since one of the main problems is the identification of the population as a whole with the TNRP and the BR. Schools are a paramount interlocutor for the successful involvement of younger generations. In addition to the more specific environmental dimension, the TNRP and the BR also promote knowledge of the area’s tangible and intangible cultural heritage, which is particularly rich in archaeological evidence (from the Su Romanzesu complex dating from the Bronze Age, in the municipality of Bitti, to the medieval Castello della Fava in the historic centre of Posada, to name but two sites). The presence of very distinctive social and cultural practices – from the *cantu a tenore*, declared a UNESCO Intangible Cultural Heritage, to the bonfires on the feast of St Anthony, carnivals and Holy Week celebrations – represent central elements in the life of local communities, but, at the same time, they also attract tourism. In this regard, the TNRP and the BR are destinations mostly for family tourism. To a much lesser extent, the area attracts sports tourism (e.g., kayaking on the Rio Posada), hiking related to local cultural traditions and gastronomy, or activities such as birdwatching (Secci 2022a). For the most part, visitors come from Sardinia but also, increasingly, from other regions of Italy and Europe.

Some years ago, in the conclusion of an article on the Alta Murgia region in Puglia, Ferdinando Mirizzi pointed out that conservation actions would have to consider the “development of productive activities connected with the vocations of use of the environment [...] and to the living needs imposed by contemporary society” (Mirizzi 1996: 477) – in other words, active participation and exchange between local communities and the park would be required. In the case of the TNRP and the BR, the various municipalities have implemented strategies to improve the population’s identification with the protected area. Budoni, for example, has provided economic operators with the BR’s logo, which they display on their premises. Another example is agritourism

Infobox 2

Bodies assisting the Tepilora Natural Regional Park in the management of the Tepilora, Rio Posada and Montalbo Biosphere Reserve (BR) (adapted from Parco Naturale Regionale di Tepilora 2023).

The Management Committee: a decision-making and operational body of the BR, established immediately after recognition as a BR. Comprises a balance of representatives of the municipalities participating in the BR, and of the socioeconomic sphere, other protected areas (e.g., Tepilora Natural Regional Park, Historical and Environmental Geomining Park of Sardinia, SCI Monte Albo ITB 021107), the regional government and its agencies (Forestas), and educational institutions.

The MAB Office: a technical body supporting the Management Committee, composed of the Centres for Environmental Education and Sustainability. Active in the municipalities of the BR and includes staff members of the Tepilora Natural Regional Park. The MAB (Man and the Biosphere) Office is headed by the park Director.

The Technical Scientific Committee: has the task of supporting and stimulating the Management Committee from a technical and scientific point of view. It represents the BR in international fora organized by UNESCO. *The Consultative Assembly:* aims to ensure the participation of the local community. It is an open body, without defined structure, which is called upon for the most significant of the BR’s decisions, as in 2020 for the definition of the Action Plan (albeit only remotely, due to the pandemic).

in Bitti, which has hosted a photographic exhibition on the TNRP (Deiana 2022).

Conclusion

Worldwide, protected areas are increasingly positioning themselves as central actors in the sustainable development of local socio-territorial systems. The TNRP and the Tepilora, Rio Posada and Montalbo BR are undoubtedly cases in point. The conservation and reintroduction of species within this protected area, the rich material and immaterial heritage, and the relationship with the population demonstrate the connections between actors operating in this composite territory which, through the river, connects the sea to the mountains.

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References

- Anonymous. 2011. *Tepilora, il parco deve ancora nascere*. Available at: <https://www.lanuovasardegna.it/regione/2011/04/12/news/tepilora-il-parco-deve-ancora-nascere-1.3411378> (accessed 03/02/2023)
- Anonymous. 2023. *Foreste aperte al parco di Tepilora tra bellezze ambientali ed eventi*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2022/12/26/news/foreste-aperte-al-parco-di-tepilora-tra-bellezze-ambientali-ed-eventi-1.100210248> (accessed 03/02/2023)
- Asproni, B. 2016. *Mab Unesco, passi avanti per il Parco di Tepilora*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2016/07/06/news/mab-unesco-passi-avanti-per-il-parco-di-tepilora-1.13779063> (accessed 03/02/2023)
- Beltran-Costa, O. 2022. El parc natural del Alt Pirineu: Biodiversidad y patrimonialización. In: Vicente-Rabanaque, T., S. Sierra-Ferrero, Á. Calero-Valverde & B. Santamarina-Campos (eds.), *Antropología pública de la conservación. Gestión y gobernanza en áreas protegidas*: 69–87. València.
- Beltran-Costa, O. & I. Vaccaro. 2011. Especies invasoras vs. protegidas. Políticas de fauna en los Pirineos. *Avá* 19: 49–77.
- Deiana, G. 2022. *Un parco fluviale in quaranta fotografie*. Available at: <https://www.unionesarda.it/3-minuti-con/un-parco-fluviale-in-quaranta-fotografie-y69oxj1p> (accessed 03/02/2023).
- Delibera del 27 dicembre 2005, n. 62/76. Available at: <https://delibere.regione.sardegna.it/protected/33433/0/def/ref/DBR33434/> (accessed 03/02/2023)
- European Commission 2016. *The Natura 2000 Biogeographical Regions*. Available at: http://ec.europa.eu/environment/nature/natura2000/biogeog_regions/ (accessed 03/02/2023)
- French, C., F. Sulas, R.T. Melis, F. Di Rita, F. Montis, S. Taylor, D. Redhouse & G. Serreli 2017. Evoluzione del paesaggio e insediamento nel bacino del Rio Posada: Indagini geoarcheologiche. In: Serreli, G., R.T. Melis, C. French & F. Sulas (eds.), *Sa massaria: Ecologia storica dei sistemi di lavoro contadino in Sardegna*: 81–116. Cagliari.
- Legge Regionale n. 31 del 7 giugno 1989. Available at: <https://www.regione.sardegna.it/j/v/1271?v=9&c=72&s=1&file=1989031> (accessed 03/02/2023)
- Le Lannou, M. 1979. *Pastori e contadini di Sardegna*. Cagliari.
- Mannia, S. 2014. *In tràmuta. Antropologia del pastorale in Sardegna*. Nuoro.
- Martínez-Fernández, E., Á. Calero-Valverde, S.M. Cruzada & O. Beltran-Costa. 2022. Hacia una etnografía de la gestión conservacionista. In: Vicente-Rabanaque, T., S. Sierra-Ferrero, Á. Calero-Valverde & B. Santamarina-Campos (eds.), *Antropología pública de la conservación. Gestión y gobernanza en áreas protegidas*: 29–47. València.
- Merlini, P. 2012. Tepilora, un parco per quattro Comuni. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2012/11/28/news/tepilora-un-parco-per-quattro-comuni-1.6108786> (accessed 03/02/2023).
- Merlini, P. 2013a. *Tepilora, il parco e i suoi protagonisti*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2013/06/03/news/tepilora-il-parco-e-i-suoi-protagonisti-1.7189968> (accessed 03/02/2023)
- Merlini, P. 2013b. *Tepilora, dal Montalbo al rio Posada*. <https://www.lanuovasardegna.it/nuoro/cronaca/2013/06/04/news/tepilora-dal-montalbo-al-rio-posada-1.7196426> (accessed 03/02/2023)
- Merlini, P. 2014. *Parco Tepilora, i sindaci: «È un risultato storico»*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2014/10/24/news/parco-tepilora-i-sindaci-e-un-risultato-storico-1.10177462> (accessed 03/02/2023).
- Mirizzi, F. 1996. L'Alta Murgia come polo naturale e culturale. *Lares* 62(3): 469–479. <https://www.jstor.org/stable/44629396>
- Paradiso, C. 2022. *Un archipel de relations socio-écologiques. Le cas du Parc National de l'archipel de la Maddalena (Sardaigne). Une analyse anthropologique des politiques environnementales* (PhD dissertation). Paris: EHES.
- Parco Naturale Regionale di Tepilora. 2023. *Storia del parco*. Available at: <http://www.parcoditepilora.it/pagina.php?id=13> (accessed 06/05/2023)
- Protected Planet 2023. *Achievement of 17% target for protected and conserved areas now reflected in official data*. Available at: <https://www.protectedplanet.net/news->

- and-stories/achievement-of-17-target-for-protected-and-conserved-areas-now-reflected-in-official-data (accessed 06/05/2023)
- Ramsar Site Information Service 2021. *Posada River Mouth*. Available at: <https://rsis.ramsar.org/ris/2452> (accessed 03/04/2023)
- Rodríguez-Rodríguez, D., B. Bomhard, S.H.M. Butchart & M.N. Foster 2017. Progress towards international targets for protected area coverage in mountains: A multi-scale assessment. *Biological Conservation* 144(2): 2978–2983. Doi: 10.1016/j.biocon.2011.08.023
- Ruiu, D. 2013. *Ali sul fiume. Vita nella foce del Rio Posada*. Fabula.
- Ruiu, D. 2017. Status of Golden Eagle *Aquila chrysaetos* nesting pairs in Sardinia. *Avocetta – Journal of Ornithology* 41(2): 89–91. Doi: 10.30456/AVO.2017215
- Ruiu, D. 2018. Benetorratta abbila vaglia. *Il Miracolo* 2: 12–13. Available at: http://www.parcotepilora.it/public/pdf_su_miracolu.pdf (accessed 03/04/2023)
- SardegnaForeste. s.d.a. Crastazza-Tepilora. <https://www.sardegnaforeste.it/foresta/crastazza-tepilora>
- SardegnaForeste. s.d.b. *Sos Littos-Sas Tumbas*. Available at: <https://www.sardegnaforeste.it/foresta/sos-littos-sas-tumbas> (accessed 06/05/2023)
- SardegnaForeste s.d.c. *Sant'Anna*. Available at: <https://www.sardegnaforeste.it/ugb/santanna> (accessed 06/05/2023)
- SardegnaNatura. s.d. *Foresta di Usinavà*. Available at: <https://www.sardegnanatura.com/esplora-la-sardegna/foreste-sardegna/1077-foresta-usinava.html> (accessed 06/05/2023)
- Secci 2013. *Parco Tepilora, la legge in consiglio comunale*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2013/04/21/news/parco-tepilora-la-legge-in-consiglio-comunale-1.6927503> (accessed 06/05/2023)
- Secci, S. 2016. *Mab Unesco, formalizzata la candidatura*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2016/09/16/news/mab-unesco-formalizzata-la-candidatura-1.14108771> (accessed 03/02/2023).
- Secci, S. 2021. *La foce del rio Posada diventa un'area Ramsar. La foce del rio Posada diventa un'area Ramsar La Nuova Sardegna*.
- Secci, S. 2022a. *Birdwatching nel parco Tepilora*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2022/04/02/news/birdwatching-nel-parco-tepilora-1.41346281> (accessed 03/02/2023).
- Secci, S. 2022b. *Biosfere d'Italia: Tepilora caso unico nell'isola*. Available at: <https://www.lanuovasardegna.it/nuoro/cronaca/2022/11/21/news/biosfere-d-italia-tepilora-caso-unico-nell-isola-1.100160134> (accessed 03/02/2023).
- Sulas, F. 2017. Verso un'ecologia storica del paesaggio rurale in Sardegna. In: Serreli, G., R.T. Melis, C. French & F. Sulas (eds.), *Sa massaria: Ecologia storica dei sistemi di lavoro contadino in Sardegna*. 23–80. Cagliari.
- UNESCO. 2019. *Tepilora, Rio Posada and Montalbo Biosphere Reserve, Italy*. Available at: <https://en.unesco.org/biosphere/eu-na/tepilora-rio-posada-montalbo> (accessed 03/02/2021).
- Zimmerer, K.S., R.E. Galt & M.V. Buck. 2004. Globalization and Multi-Spatial Trends in the Coverage of Protected-Area Conservation (1980-2000). *Ambio* 33(8): 520–529. <https://www.jstor.org/stable/4315541>
- Zupančič-Vičar, M. 2006. Application of the Protected Areas Management Categories of IUCN. In: Simonič, P. (ed.), *Ethnography of protected areas. Endangered habitats – endangered cultures*: 11–18. Ljubljana.

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