

TOURISM FORMS PRACTICABLE IN PROTECTED AREAS

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Abstract. *Forms of tourism practicable in protected areas, scientific tourism, ecotourism, rural tourism, cultural tourism must respect the principles of sustainability of areas, through codes of good practice for tourism at all levels to monitor the impact of these activities and acceptance limits to improve protection management natural and cultural resources and the preservation of floristic and faunal biodiversity. Sustainable tourism development, through its forms in protected areas, reconciles antagonistic interests and objectives, favors partnerships and collaborations between decision-makers, operators and niche tourism consumers, promoting long-term interest, beyond the immediate private one. The practice of these forms of tourism creates numerous opportunities both for conservation and for increasing the quality of life in the communities within which it is the protection of the natural and cultural heritage.*

Key words: *protected areas, tourism, forms of niche tourism*

INTRODUCTION

Protected areas under the current laws are recognized geographical areas, clearly defined as area managed by legal means for the purpose of: [1,3,4,7,9]

- to achieve long-term nature conservation;
- to preserve the biodiversity of floristic and faunal ecosystems;
- to preserve the cultural values associated with these areas.

Respecting the basic principles of sustainable tourism in protected areas, regarding the economic, social and environmental impact, contributes largely to: [2,6,10,11]

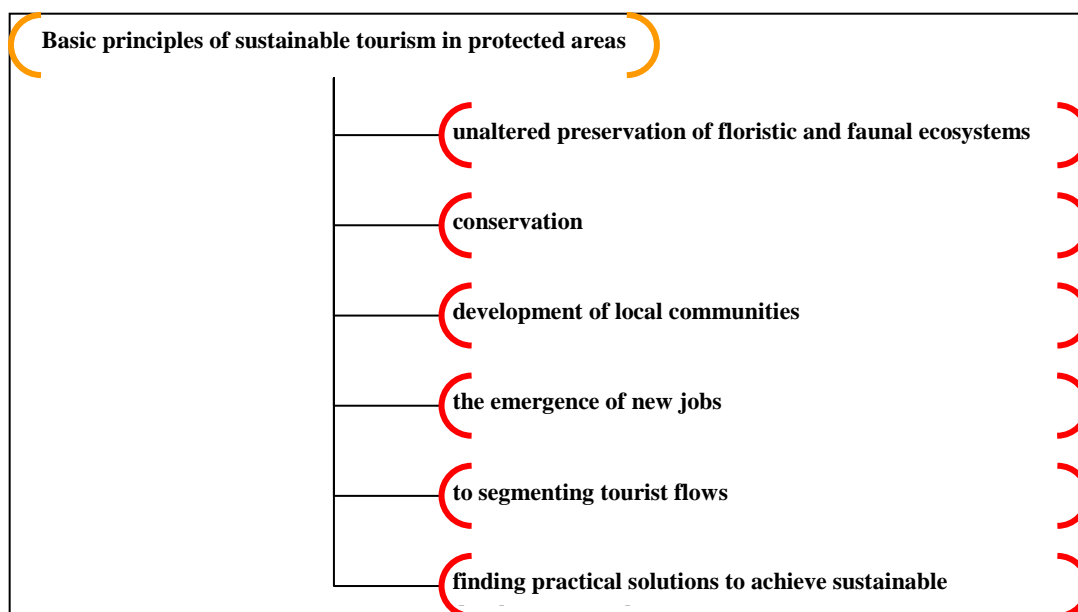


Figure 1. Basic principles of sustainable tourism in protected areas

- unaltered preservation of floristic and faunal ecosystems;
- conservation of natural and cultural heritage;

- development of local communities through forecasting, planning, development and operation activities;
- the emergence of new jobs involving complete and interesting explanations for visitors on the natural, cultural resources and biodiversity of floristic and faunal ecosystems;
- to segmenting tourist flows, especially individual visitors, groups organized by researchers and specialists in the field;
- finding practical solutions to achieve sustainable development goals;
- the elaboration of recommendations on each responsible tourist can be applied for the selection of the stay and the organization of the trip to these destinations.

The IUCN (International Union for Conservation of Nature) has established the categories of protected areas: [8,16,17,18]

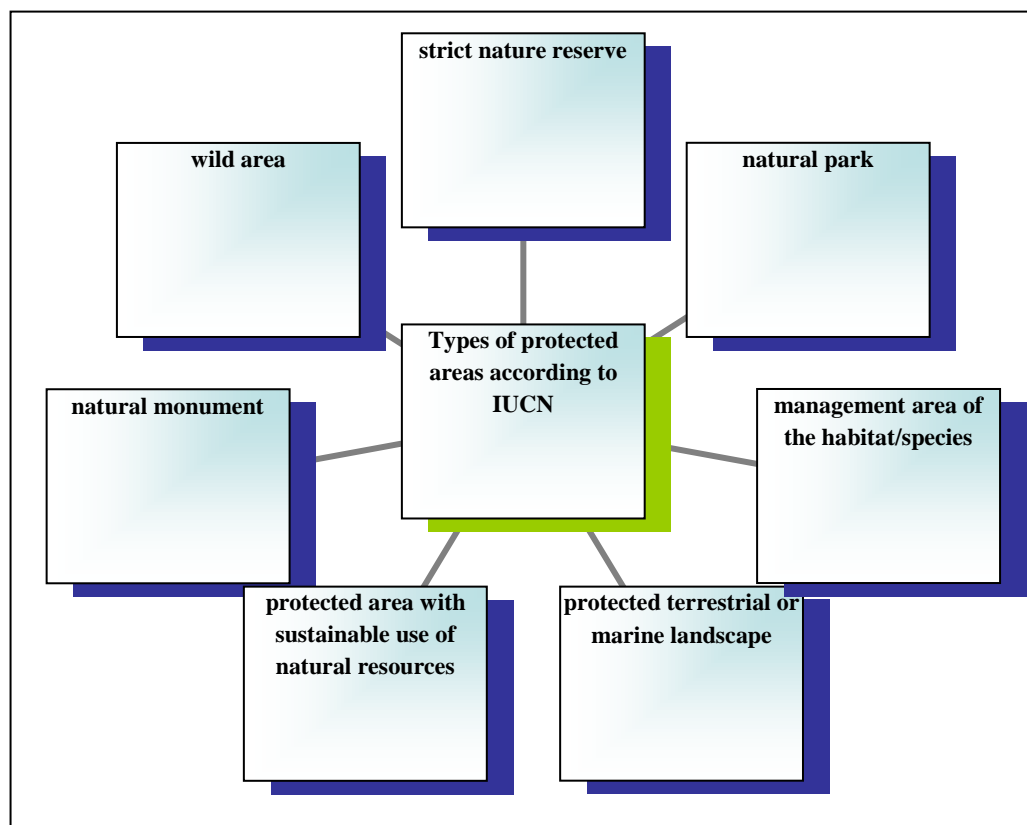


Figure 2. Types of protected areas according to IUCN

- the strict nature reserve is a protected area reserved for the preservation of biodiversity and geomorphological characteristics, in which tourism with its forms and human impact are strictly controlled and limited to ensure the protection of conservation values. The main objectives are the conservation of ecosystems outstanding at regional, national or global level, of species that retain their natural character and influence without permanent or significant human habitation, and which are protected and managed so as to preserve their natural state.

- the wild area is a large unmodified or slightly modified area, which retains its natural character and influence without permanent or significant human habitation, and which is protected and managed so as to preserve its natural state. The objectives are to protect the long-term ecological integrity, which is not affected by significant human activity, without modern infrastructure and where natural forces and processes predominate.

- the natural park is an almost natural area reserved for the protection of large-scale ecological processes, together with the completion of species and ecosystems characteristic of the area, which offers ecologically and culturally compatible educational, recreational, spiritual and scientific opportunities for tourism.

- the natural monument is a small protected area, with great value for the practice of tourism with its forms, withdrawn from the agricultural circuit to protect it as a specific natural monument keeping unaltered their habitats and biodiversity.

- the management area of the habitat/species is an area whose objectives are the protection of certain species or habitats requiring interventions to meet the requirements of certain species or to maintain habitats.

- protected terrestrial or marine landscape is an area in which the interaction between humans and nature over time has produced a area with a distinct character, with a biological, cultural, ecological and picturesque value and where the protection of the integrity of this interaction is vital for protecting and sustaining the area and the conservation of associated nature and other values.

- protected area with sustainable use of natural resources is a large protected area, in its natural state where:

- part is under a sustainable management of natural resources;

- the non-industrial use of natural resources is at a low level compatible with nature conservation;

- ecosystems and habitats are preserved, together with the associated cultural values;

- uses traditional resource management systems.

MATERIAL AND METHOD

Within this scientific approach, the Satchinez Swamps Nature Reserve from Timis County, Romania was analyzed for the impact of tourism forms on floristic ecosystems and avifauna, in order to redirect tourist flows according to the capacity of the area and period. This research takes into account the principles of biodiversity conservation in order to reduce the negative effects due to the expansion and development of communities that may lead to habitat fragmentation or the decline of the area's terrestrial and aquatic biological diversity.

RESULTS AND DISCUSSIONS

Practicing tourism with its forms in the Satchinez Swamps Nature Reserve will allow the consumer of such services to enjoy through simple, quiet and non-intrusive means of travel:

- an area with a high degree of ecosystem integrity;

- without modern infrastructure, development and industrial oil extraction activity;

- traditional agriculture only sheep grazing, fishing;

- limiting the traditional processing of wicker, reed;

- observation of avifauna and species of hunting interest in the observatories.

Among the specific roles of the Natura Reserve is the provision of limited space for a small number of tourists who want to practice the following forms of tourism that are suitable in this area:

- cycling tourism - on the marked routes arranged;

- ethological tourism: tracking the migration of birds, hatching, raising chickens, behavior in certain physiological conditions, calving, mating, feeding chickens;

- scientific tourism: research on the negative impact of anthropogenic action on the biodiversity of the reservation, assessment of species, assessment of morphological

parameters of chicks, marking and ringing of species considered monuments of nature, combating poaching;

- ecotourism:

a. responsible tourism for attracting the attention of the population regarding the exploitation/non-exploitation of natural resources;

b. conscious tourism of understanding nature, people and place;

c. alternative tourism, the use of the traditional in the exploitation and processing of resources;

d. geotourism to support the reduction of wetlands and ecosystem degradation.

- thematic hiking: nest protection, identification of plants and species of birds, animals in their natural habitat;

- rural tourism: participation in community celebrations, prayer, gastronomy, combined with conservation actions, recreation in the reservation;

- historical cultural tourism: mastering occupations, fishing with traditional tools, wicker processing, reed weaving;

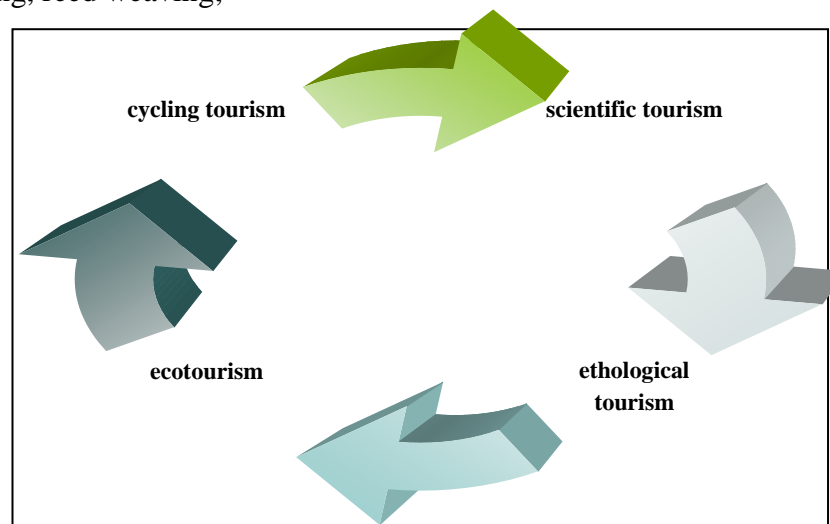


Figure 3. Forms of tourism practicable in the reserve

The reserve provides a pool of permanent and transient species of avifauna and game species that find refuge by providing opportunities for climate change responses, reducing wetland area, including biome changes, protecting some ecological communities that require relatively large areas of undisturbed habitat. Tourists visiting the reservation must know that the management objective is:

- protection of natural processes that have shaped the physical-biological character of the landscape;

- prohibition of mechanized access than cycling on marked routes;

- carrying out ethological tourism only from the observatory;

- prohibition of cutting wicker and reed but also intensive grazing;

- practicing recreation by keeping quiet and not disturbing the species;

- the protection of some protected avifauna species and of hunting interest, some considered natural monuments in this humid area called the Banat Delta:

a. the order Ciconiiformes with the families:

- ardeidae: herons and oxen nesting in the colonies, *Ardea purpurea*, *Egretta alba*,

Egretta garzetta, *Ixobrychus mitus*, *Ardeola ralloides*;

- ciconiidae: storks, *Ciconia nigra*, *Ciconia ciconia*;

- threskiornithedae: gypsies and shovels, Plegadis falcinellus, Platalea leucorodia;
- b. order suidae with family:
 - ferus sow: European wild boar;
- c. order artiodactyla with families:
 - capreolus capreolus - deer;
 - cervus elaphus - Carpathian deer;
 - dama dama - shovel deer;
- d. order galliformes with family:
 - perdix perdix - potârniche;
 - phasianus colchicus – colchicus - common pheasant;
 - coturnix coturnix - quail.
- e. order anseriformes family:
 - cygnus olor - summer swan
 - wild ducks;
 - fabalis goose - wild geese;

Practicing tourism with its forms in the avifauna reservation and buffer hunting interest, Satchinez Swamps has the following major benefits on:

- quality of life by increasing:
 - a. the level of education of the locals;
 - b. improving intercultural understanding, rediscovering wood processing and reed weaving, preserving fish;
 - c. promoting aesthetic and spiritual values related to well-being;
 - d. establishing attractive natural environments for the reservation;
 - e. supporting ecological education for tourists and locals.
- increasing the number of economic opportunities through:
 - a. financing for route arrangements, observation pavilions;
 - b. new jobs;
 - c. acquiring new professional skills;
 - d. facilities for new tourist markets;
 - e. improving the living standards of the population;
 - f. stimulating new investments in services;
 - g. diversification of the local economy.
- the natural and cultural heritage of the area through:
 - a. conservation of species and ecosystem biodiversity;
 - b. contribution to the communication and interpretation of the values of the natural and built heritage;
 - c. interpretation of the visitors' patrimony;
 - d. the emergence of responsible consumers by contributing to the development of self-financing mechanisms for protected operations in the area;
 - e. protection of ecological processes and river basins in Lunca Ierului;
 - f. protecting resources through the behavior of environmental tourists;
 - g. transmission of conservation values through education and interpretation.

Despite the benefits brought to the reservation by practicing the listed forms of tourism, there are also environmental risks caused by direct or indirect tourist activities: [14,15]

- destruction of the vegetal carpet by fires, compaction of the soil by non-observance of the movement through the marked areas;
- noise, which disturbs the species during the breeding period of the chicks;

- air: motorized transport can cause pollution caused by emissions (from boats, cars, planes, trains);
- visual or harassing behavior with the species from the reserve;
- hunting near the reserve which can change the population dynamics;
- uncontrolled fishing;
- habitat by building observatories, research centers or access roads;

CONCLUSIONS

The wet reserve Satchinez Swamps from Timis County stands out through a rich fund of species of hunting interest that find refuge here during the breeding season due to the quiet and unobtrusive, but especially through the avifauna pond species that are permanently stagnant or passenger because they find appropriate habitat conditions. Due to the multitude of humid ecosystems and faunal biodiversity, the reservation is an important tourist destination that is suitable for modern forms of niche tourism. In order to preserve the habitats and keep the ecosystems humid, it is necessary to redirect the tourist flows, especially in the critical periods of caring the babies when the presence of a large number of tourists creates discomfort to the species. Practicing with discernment of tourism forms, compliance good visiting practices for educational purposes, of research or recreational purposes can have beneficial effects on the quality of the population's life from reservation area, by increasing the number of economic activities to protect and preserve the natural heritage through conservation of the biodiversity of the wetland and of the habitats of the species that permanently or temporarily cohabit in the reservation.

REFERENCES

- [1]. **BUSHELL ROBYN, BRICKER KELLY**, 2016, Tourism in Protected Areas: Developing Meaningful Standards. *Tourism and Hospitality Research*, 17(1), pp. 1-16
- [2]. **CHRISTOV I., STRAUSS E., GAD A.-A., CUREBAL I.**, 2018, Science, Ecology and Engineering Research in the Globalizing World. Sofia: St. Kliment Ohridski University Press
- [3]. **EAGLES P.F.J., MCCOOL S.F., HAYNES C.D.**, 2002, Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. Gland: IUCN-The World Conservation Union
- [4]. **LEUNG Y.F., MARION J.L.**, 2000, Recreation Impacts and Management in Wilderness: A State-of-Knowledge Review, *USDA Forest Service Proceedings*, 5, pp. 23-48
- [5]. **MCCOOL S.F., MOLSEY R.N.**, 2008, Tourism, Recreation, and Sustainability: Linking Culture and the Environment. Cambridge, MA: CABI Publishing
- [6]. **MARIN DIANA, PETROMAN CORNELIA, PETROMAN I., BĂLAN IOANA, CIOLAC RAMONA, DINCU ANA MARIA, DUMITRESCU CARMEN, LOZICI ANA**, 2013, The role of non-agricultural activities in rural area development, *Lucrări Științifice Management Agricol, Seria I*, 15(4)
- [7]. **NEWSOME D., HUGHES M.**, 2016, Understanding the Impacts of Ecotourism on Biodiversity: A Multiscale, Cumulative Issue Influenced by Perceptions and Politics
- [8]. **PATTISELANNO F., RAHAYU E. & WANGGAI J.**, 2007, Varanus Species at The Arfak Strict Nature Reserve. *Biodiversitas*, 8(1), pp. 114-117
- [9]. **PETROMAN CORNELIA**, 2015, Typology of tourism destination, *Scientific Papers Animal Sciences and Biotechnology*, 48(1), pp.338-342

- [10]. **PETROMAN CORNELIA**, 2010, Procesarea materiilor prime agricole, Editura Eurostampa Timișoara
- [11]. **PETROMAN I., MARIN DIANA, PETROMAN CORNELIA**, 2015, Bazele turismului, Editura Eurostampa, Timișoara
- [12]. **PETROMAN I.M., PETROMAN I.**, 2013, Conservarea autenticității prin activități agroturistice, Editura Eurostampa Timișoara
- [13]. **RAȚĂ GEORGETA, PETROMAN CORNELIA, PETROMAN I.**, 2008, Eco-Tourism Terms: A Hybrid Vocabulary, Proceedings of Taal 2007: The 12 th World Lake Conference, pp. 1197-1199
- [14]. **TĂUT I.F., ADAMOV TABITA, PETROMAN CORNELIA, DUMITRESCU CARMEN, MILIN ANDA, MERCE IULIANA, VĂDUVA LOREDANA, PETROMAN I.**, 2018, The role of hunting tourism in preserving the sustainability of fauna habitats, Journal of Biotechnology 280, S37-S38
- [15]. **SUCIU CODRUȚA, PETROMAN I. PETROMAN CORNELIA, MARIN DIANA, BENK A.**, 2016, Managing protected areas, Lucrări Științifice Management Agricol 17(4), pp.69
- [16]. **VĂDUVA LOREDANA, PETROMAN CORNELIA, ADAMOV TABITA, IOSIM IASMINA, MARIN DIANA, PETROMAN I.**, 2018, Types of non-conventional tourist transports. Agricultural Management/ Lucrări Științifice Seia I, Management Agricol 21(1)
- [17]. **VĂDUVA LOREDANA, PETROMAN CORNELIA, ADAMOV TABITA, MARIN DIANA, PETROMAN I.**, 2019, Factors influencing the attractivity and popularity of rural tourist destinations, Lucrări Științifice Management Agricol, 21(3), pp.251
- [18]. ***International Union for Conservation of Nature, <https://www.iucn.org/>