

Article



# Accessible Tourism in Protected Natural Areas: An Empirical Study in the Lazio Region

Maria Giovina Pasca <sup>1,\*</sup>, Grazia Chiara Elmo <sup>2</sup>, Gabriella Arcese <sup>1</sup>, Giulio Mario Cappelletti <sup>3</sup>

- <sup>1</sup> Faculty of Economics, Niccolò Cusano University, Via Don Carlo Gnocchi n. 3, 00166 Rome, Italy; gabriella.arcese@unicusano.it
- <sup>2</sup> Department of Economics, Business, Mathematics and Statistics, University of Trieste, Via Valerio n. 4/1, 34127 Trieste, Italy; graziachiara.elmo@units.it
- <sup>3</sup> Department of Economics, Management and Territory, University of Foggia, Via A. da Zara, 10, 71121 Foggia, Italy; giulio.cappelletti@unifg.it
- <sup>4</sup> Department of Business Studies, Roma Tre University, Via Silvio D'Amico n. 77, 00145 Rome, Italy; olimpia.martucci@uniroma3.it
- \* Correspondence: mariagiovina.pasca@unicusano.it

Abstract: The article aims to analyze the state of the art on services provided by protected natural areas in the Lazio region. The paper highlights the strengths and the aspects to improve in these protected natural areas to promote and incentivize accessible and inclusive tourism. An empirical investigation involving the region of Lazio (Italy) was performed, adopting a quantitative research design. First, the authors collected secondary data on the protected natural areas in the region and on the services available. Then, a questionnaire was used to quantitatively investigate the services provided to meet the needs of tourists with disabilities. The findings show that the structures provide essential services, such as marked paths, equipped bathrooms, various aids to overcome obstacles along the visit route and flooring that allows accessible transit. However, there is a need to invest in staff training and continuously update information on the websites. It is important to address the lack of information on the needs and expectations of disabled individuals.

Keywords: accessible tourism; protected natural areas; Lazio; tourism; disability

# 1. Introduction

The presence of disabilities in individuals places them in a condition of continuous challenge that affects the performance of many activities. It follows that people with disabilities also sacrifice tourism, as it requires the association of physical, mental and social abilities that the presence of disabilities compromises [1]. Although regulations have been enacted to meet the specific needs of tourists with disabilities, allowing them greater opportunities to travel, there are still barriers and constraints that hamper the full enjoyment of their rights [2]. In the literature, many studies on accessible tourism highlight the presence of a set of barriers and constraints that hinder people with disabilities [3]. The identified obstacles can be traced back to two macro-categories: physical accessibility and accessibility to information [4]. Restrictions on transport, inaccessibility of accommodation and tourist areas and the absence, inadequacy or incompleteness of information characterize the destination sector. This is mainly the result of lack of awareness or misinformation about the real needs of people with disabilities [4–6]. The first World Disability Report [7] estimates that over a billion people, about 15% of the world's population, live with some form of disability, a trend that is on the rise compared to the past; in the 1970s, in fact, this estimate was around 10%. In addition, about 70% of disabled people are physically and financially fit to travel [8]. Several studies at the international level confirm this economic dimension and at the same time highlight that a good percentage of disabled



Citation: Pasca, M.G.; Elmo, G.C.; Arcese, G.; Cappelletti, G.M.; Martucci, O. Accessible Tourism in Protected Natural Areas: An Empirical Study in the Lazio Region. *Sustainability* **2022**, *14*, 1736. https:// doi.org/10.3390/su14031736

Academic Editor: J. Andres Coca-Stefaniak

Received: 28 December 2021 Accepted: 30 January 2022 Published: 2 February 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). people forgo travel due to inadequate offers and that travel would be more frequent if they had opportunities that would ensure greater accessibility [9–11]. It follows that in order to address accessibility in the tourism industry, tourist destinations should ensure accessibility in their physical environment as well as adequate information [12,13]. Against the context described, the objective of this work is to verify the presence of facilities and equipment, as well as information, that ensure tourism accessibility to individuals with disabilities. Attention has been placed on the accessibility of protected natural areas. Currently, in most of the protected natural areas, there are ecological paths; however, these are often not suitable and practicable for people with a certain degree of disability.

In detail, the analysis was focused on the natural protected areas in the Lazio Region, highlighting three factors: accessibility to information, physical accessibility and the presence of other services that facilitate access.

The research framework comprises the following research questions:

– What is the state of the art on the services provided by protected natural areas in the Lazio region?

– What are the strengths and those areas to be improved for protected natural areas in Lazio to promote accessible tourism?

The paper is organized as follows. The next section presents the literature review. Section 3 illustrates the materials and the methods. Results are shown in Section 4. Section 5 provides discussion and findings, and in Section 6, some conclusions are drawn.

## 2. Accessible Tourism

Existing studies show that people with disabilities face a number of obstacles to participation [14–16], which at the same time limit access to many tourism opportunities [1]. In particular, the crucial element on which the tourist experience of people with disabilities is based is having accessible destinations and identifying suitable accommodation during trips [17–19]. Therefore, with reference to tourism and disability, access refers to management, that is, to the management of a multiplicity of constraints [20,21]. Part 2 of the Global Code of Ethics for Tourism [22] states that tourism activities must be carried out in compliance with equality between men and women and must favor the implementation of human rights, in particular of the most vulnerable (children, the elderly, the disabled, ethnic minorities and indigenous peoples). Accessible tourism was defined 'as a process of enabling people with disabilities and seniors to function independently and with equity and dignity through the delivery of universal tourism products, services and environments' [23]. The United Nations World Tourism Organization [24] recognizes accessible tourism as a central and integrated part of responsible and sustainable tourism. For the purposes of this paper, we adopt the definition of sustainable tourism as 'Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities' [25]. It follows that from a responsible and ethical point of view, the fundamental element of accessible tourism, also known as 'tourism without barriers', consists of guaranteeing safe, autonomous and comfortable travel for people with different degrees of disability [23,26–29].

Puhretmair and Buhalis [11] identify three accessibility needs that the tourism sector must satisfy: physical accessibility, information on accessibility, and an information package that is accessible online. Physical accessibility is linked to the physical environment of tourist destinations and represents the main aspect to guarantee the accessibility of goods and services to tourists. In addition, tourism establishments should ensure that they have the reliable information needed to plan and make travel decisions. The lack of reliable information therefore constitutes a major obstacle for people with disabilities, who have unique needs [8]. For individuals, information affects their 'psychological state such as personality, interests and attitude towards leisure' [2,30]; therefore, if they do not receive adequate information, people with disabilities feel at risk when they are outdoors [31,32]. Finally, taking into account the different types of disabilities, the availability of information

online is required. The use of technologies would serve as a support to facilitate efficient access to information online for people with disabilities [8,33,34].

In this direction, there are several contributions in the literature, focusing on the analysis of the accessibility of websites of tourism organizations and their compliance with the guidelines for accessibility of web content [35] as well as the evaluation of the correctness of their design and coding in relation to the use of websites by disabled people [36].

From these scientific contributions, it emerges that information tools not only represent only a marketing or communication channel, but rather are 'transmitter of experiences' that participate in the entire tourism process [35].

## 3. Materials and Methods

The present research is grounded in an empirical study developed in Italy, in particular in the Lazio region. The authors adopted a mixed-methods approach, integrating qualitative and quantitative approaches through a secondary data collection and web survey, to learn about the state of the art of how the natural protected areas in the Lazio Region manage access to their services, focusing on the services and information made available for tourists with disabilities.

The mixed-methods approach combines qualitative and quantitative techniques to provide a more extensive analysis of a phenomenon. In particular, the qualitative phase guides the data collection in the quantitative analysis [37].

First, the authors collected secondary data to analyze the state of the art on the protected natural areas of the Lazio region and what services the region offers. Secondary data was collected in September 2021. Information on accessible tourism in the Lazio region was investigated through published information on the official website of the region.

Then, in order to highlight the strengths and areas to be improved for protected natural areas in Lazio, a quantitative survey with a structured questionnaire was created, considering the following aspects:

- (1) Accessible information presentation: investigate if the routes are signposted, if there is information on the services available (parking lots, toilets, refreshment points), and if these are easily accessible, even for the disabled. In addition, consider whether the staff is trained in welcoming tourists, managing disabled persons and providing information.
- (2) Physical accessibility of the environment and accessibility of tourism services: evaluate physical accessibility in natural protected areas, considering the presence of benches, refreshment points, playgrounds, shuttle services or other services available.
- (3) Accessibility factors for disabled tourists: focus on how the natural reserve areas are equipped for disabled tourists. Evaluate whether the bathrooms are equipped and adequate to allow movement with the wheelchair; if the paths are free of obstacles or if there are aids to overcome any slopes or obstacles; if there are gates or doors that can be easily opened or accessed; if the flooring allows easy passage of wheelchairs; if the structures offer courses dedicated to the blind.

More specifically, the survey was aimed to investigate how these areas guarantee accessibility to services for disabled people.

The questionnaire was composed of three sections, with 18 questions (Table 1). For the questionnaire construction, validated scales in the existing literature were used [8,11]. In addition, the results of the secondary data collection (qualitative phase) were considered in the design of the questionnaire. The survey was developed using a dichotomous scale (no/yes).

A pilot test of the questionnaire was developed, involving 25 individuals, after which the formulations of some questions were modified to guarantee the clarity and consistency of items and dimensions.

Dimension	Code	Item	References	
	A1	Are the routes adequately marked?		
	A2	Is the information available on the website in easy-to-read mode for the disabled?		
Accessible information presentation	A3	Is there information on the technical aspects of the route, such as services for the disabled (nearby parking lots, toilets, refreshment points, etc.), walking difficulties (slopes, type of flooring, etc.), and the presence of allergenic plants?		
	A4	Is the presence of disabled toilets adequately marked?		
	A5	Is there a satisfaction questionnaire on the structure, dedicated to the disabled?		
	A6	Are there personnel adequately trained in the reception and management of the disabled?		
Physical accessibility of the environment and accessibility of tourism services	A7	Are there suitable benches?		
	A8	Are there any refreshment points?		
	A9	Are there dedicated playgrounds?	[8,11]	
	A10	Are there shuttle services?		
	A11	Specify if there are other services available.		
	A12	Are the bathrooms adequately equipped with a sink, cabinet, toilet, and shower to allow easy use?		
	A13	Are the spaces inside the bathroom adequate to allow movement with a wheelchair?		
	A14	Are the paths free of stairs or obstacles?		
Accessibility factors for disabled tourists	A15 Are there any aids to overcome any s obstacles (ramps, stair lifts, lifts,			
	A16	Are there gates or doors that can be easily opened or are accessible for the disabled?		
	A17	Does the flooring allow for easy transit of wheelchairs?		
	A18	Are there courses dedicated to the blind?		

Table 1. Questionnaire structure.

The final version of the questionnaire was administered online to a sample (90) of people associated with the protected natural areas of Lazio, identified through analysis of secondary data (qualitative phase).

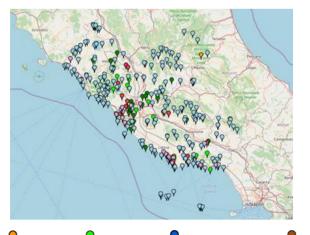
Data collection began in June 2021 and ended in September 2021, with 40 questionnaires completed. The convenience sample used in this study was considered appropriate for addressing the exploratory nature of the research [38,39], and the sample size seemed to be sufficient for the analysis. The descriptive analysis was carried out by SPSS software.

#### 4. Results and Discussion

4.1. State of the Art on Accessible Tourism in the Lazio Region

Secondary data analysis was mainly developed on the Internet. The table in Appendix A and Figure 1 shows the 90 protected natural areas present in the Lazio region. The Ministry of the Environment and the Protection of the Territory and the Sea—Directorate for the Protection of Nature update the list, which gathers all the protected natural areas, marine

and terrestrial, that are officially recognized [40]. In the Lazio region, the surface of the protected natural areas (including national parks, marine protected natural areas, natural reserves, natural reserves of animal populations, integral nature reserves, archaeological parks, natural and suburban parks, provincial nature reserves, marine oases, oases, natural monuments, partial nature reserves, urban parks) extends to 200,656 ha.



National Parks
Regional Parks
Marine protected areas
State Reserves
Regional Reserves
Natural Monuments
RN2000 sites
MAB Biosphere Reserves
Other protected areas

Figure 1. Protected natural areas in the Lazio region [40].

In order to develop inclusive, accessible and sustainable tourism, the Lazio region offers various services. For instance, Superabile INAIL [41] has activated a call center to provide information on the main issues related to disability (aids, job placement, architectural barriers, legislation, etc.) and therefore also on the possibilities of accessible travel and accessibility guides. The service provides reports of sites and guidance on the accessibility, visitability and usability of tourist sites.

Another service is 'Lazio una guida per tutti', a printed or online guide that presents three different itineraries (seas and mountains, art and history, nature and culture) and a section dedicated to services and accommodation facilities that can be used by people with disabilities in the regional territory. The 'Italia Accessibile' website [42], a blog on accessible tourism and accessibility, also organizes various guided tours for people with disabilities, providing information on the itinerary, the duration of the visit and the possibility to rent a car for the disabled.

In addition, the region, in order to promote full social inclusion and equal opportunity, has made efforts to facilitate access and use of the beaches by people with disabilities. The intervention consists of the acquisition of special aids (such as work chairs) to facilitate the movement of disabled people on the beach and in the water.

#### 4.2. Quantitative Results

The sample is composed of 40 respondents who manage the natural protected areas located in the Lazio region. From the analysis of the results (see Table 2), most (75%) of natural areas have their trails marked. However, not all parks provide information on their websites that is easy to find and read for people with disabilities. As emerges from the descriptive analysis, 70% of respondents have no information on the technical aspects of the route, such as services for the disabled (nearby parking lots, toilets, refreshment points, etc.), walking difficulties (slopes, type of flooring, etc.), and presence of allergenic plants. This information would make visits easier and more comfortable for disabled people. Only nine (22%) facilities do not have signs for disabled bathrooms. The study showed that the satisfaction of disabled tourists is not analyzed. It emerges that only 13% of natural areas in the Lazio region have a satisfaction questionnaire on the structures dedicated to

the disabled. Furthermore, 55% of respondents have personnel adequately trained in the reception and management of disabled individuals and can provide them with necessary assistance and information on the services available in the park.

Cala		Frequency/	Percentage	
Code -	Ν	No	Y	′es
A1	10	25%	30	75%
A2	21	52%	19	48%
A3	28	70%	12	30%
A4	9	22%	31	78%
A5	35	87%	5	13%
A6	18	45%	22	55%
A7	23	57%	17	43%
A8	21	52%	19	48%
A9	36	90%	4	10%
A10	30	75%	10	25%
A12	14	35%	26	65%
A13	10	25%	30	75%
A14	15	37%	25	63%
A15	17	42%	23	58%
A16	17	42%	23	58%
A17	14	35%	26	65%
A18	27	67%	13	33%

Table 2. Descriptive results of the questionnaire.

Regarding the physical accessibility of the environment and accessibility of tourism services, the results evidenced that only 17 natural protected areas have benches for disabled people. On the survey, 48% of the respondents stated that they have a refreshment point in their area but not a playground to entertain the children (90%). Ten respondents said they provide a shuttle service to facilitate access to their natural protected areas.

Other services available in the parks include information panels in Braille (two natural protected areas) and Joelette services and accompaniments carried out by a guide (four respondents). Five respondents had installed barriers for the blind and information signs in the Braille language in their parks. One protected area has a pitch for sport fishing for people with disabilities. Other services available include observation areas with unique positions for wheelchairs or benches with backs (two respondents).

The survey indicated that 65% of structures have equipped bathrooms (sink, cabinet, toilet and shower) to allow easy use for people with disabilities. Most of the respondents (75%) stated that their areas had bathrooms with adequate dimensions to allow movement with a wheelchair.

In recent years, natural protected areas have made efforts to remove obstacles along routes (25 respondents). In addition, 58% of natural areas have various aids (such as ramps, stairways and lifts) to overcome any slopes or obstacles. Indeed, most respondents (26) indicated their areas had flooring that allows for easy transit for wheelchair users and easily opening or accessible gates or doors (58% of respondents). However, only a few natural protected areas (13) have dedicated paths for the blind.

# 5. Discussion

Greater attention to the complex problem of disability is reflected in Agenda 2030, in particular in sustainable development goals (SDGs) 9 and 10. In general, these goals concern, respectively, the development of quality, reliable, sustainable and resilient infrastructure in support of economic development and for the well-being of people, with particular attention to equitable and affordable access for all; and the strengthening and promotion of the social, economic and political inclusion of all, regardless of age, gender, disability, race, ethnicity, origin, religion, economic status or otherwise.

The results of our study showed that although the paths and bathrooms are signposted, the websites of the parks in Lazio do not provide sufficient and easy-to-find information for people with disabilities. Furthermore, the owners of the protected natural areas have highlighted that in their structures there is no information on the technical aspects of the route, such as services for the disabled (nearby parking lots, toilets, refreshment points, etc.), information on walking difficulties (slopes, type of flooring, etc.), and presence of allergenic plants. This highlights how the issue of accessible tourism is not yet addressed in many situations. This emerges, for example, as the structures do not provide a questionnaire to disabled tourists for assessing the visit, thus not identifying their needs and expectations.

However, as emerges in several studies, it is crucial to involve the categories of disabled people in the definition of policies, giving the opportunity to communicate needs and expectations to optimize the tourist experience [2,17]. It is essential to give tourists a voice in order to understand and satisfy their needs and to improve their service by constantly investing in training staff [23]. In light of this, many structures in the Lazio region are investing in training their staff to manage tourists with disabilities.

Websites of protected natural areas must provide information that is easy to find and read, even for people with disabilities [35]. Furthermore, it is necessary to improve the websites of the structures according to the clients' needs and to create a direct dialogue with disabled tourists to be able to provide information promptly [19,34].

Findings showed that essential services are available, such as bathrooms equipped with adequate dimensions to allow movement with a wheelchair. The structures have provided their areas with various aids to overcome obstacles along routes or with flooring that allows accessible transit. However, regarding the physical accessibility of the environment and accessibility of tourism services, the results evidenced that the structures in the Lazio region still need to equip themselves with benches for disabled people and provide refreshment points and shuttle services. These services make the experience more accessible. Furthermore, few protected natural areas in Lazio have a route for the blind.

The results of our analysis show a provision of basic services, such as bathrooms equipped with adequate dimensions to allow movement with a wheelchair, various aids to overcome obstacles along the route of the visit or flooring that allows accessible transit.

The research enriches the empirical literature on inclusive and responsible tourism by analyzing the state of the art on the services provided by protected natural areas in the Lazio region, highlighting the strengths and the aspects to be improved in protected natural areas in Lazio to promote and incentivize accessible tourism.

The study confirms the existing literature on the need to generate more awareness on the issue of sustainable tourism management by all stakeholders involved in order to identify and overcome the barriers that can hinder access for people with disabilities [29,43].

### 6. Conclusions

The research highlighted the importance of improving and investing in accessible and inclusive tourism. In recent years, areas have shown a commitment to improving their services and making them more accessible to all.

Despite the fact that in recent years facilities have tried to improve their services, our results show the various obstacles still to be overcome in terms of accessible tourism.

In addition, our study shows the necessity of training staff and the provision and continuous updating of information on websites by the different structures in support of

disabled people. Indeed, the study shows the lack of information and communication about needs and expectations of disabled persons.

Our study highlights how it is crucial to build a solid network between local administrations, third sector bodies, cultural organizations and companies in the tourism sector to develop inclusive, accessible and sustainable tourism [42].

To pursue this goal, the Italian Voluntary Associations Movement and Laziocrea SpA of the Lazio region have organized a series of seminars to explore the accessibility of the artistic, cultural and tourist heritage of the area to people with different abilities and particular needs. These seminars culminate with a certification issued to organizations that make the tourist/cultural experience entirely usable and accessible, without any barriers to complete autonomy.

The main limitation of the study was that only one region was examined. In addition, the sample size is consistent with the proposed study's explorative nature, even if in future research, the sample will have to be enlarged to enrich the proposed findings. Future research should investigate the phenomenon of accessible tourism in other Italian regions and in different cultural contexts. Hence, future research may propose a theoretical model to investigate and compare the factors that promote the phenomenon of accessible tourism through structural equational modelling.

**Author Contributions:** The authors contributed equally to this work and to its development. G.A., G.C.E. and M.G.P. developed the research design. M.G.P. and G.C.E. analyzed the source material and literature and conducted the analysis. G.A. and G.M.C. coordinated the study. G.M.C. and O.M. supervised the research project and carried out detailed revisions. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by the "E-Parks-Environmental and Administrative Knowledge Networks for a Better Tourist Attractiveness in Protected Natural Areas" research project-Interreg V-A Greece-Italy Programme, MIS CODE 5003237.

**Institutional Review Board Statement:** The study was conducted according to the research guidelines approved by the Ethics Committees of Authors Institutions.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Acknowledgments: We acknowledged Luca Pulcini for promoting the data collection.

Conflicts of Interest: The authors declare no conflict of interest.

#### Appendix A

Table A1. Protected natural areas in the Lazio region.

Denomination	Typology	Year	Surface (ha)
Circeo National Park	National Park	1934	5616
Marine protected natural area of Ventotene and Santo Stefano islands	Marine protected natural area	1997	2799
Protected marine natural area Secche di Tor Paterno	Marine protected natural area	2000	1387
State nature reserve Roman coast	Natural reserve	1987	16,327
Ventotene and Santo Stefano Islands state nature reserve	Natural reserve	1999	174
State nature reserve Tenuta di Castelporziano	Natural reserve	1999	5892
Pantani dell'Inferno nature reserve	Natural reserve of animal population	1979	40
Salina di Tarquinia nature reserve	Natural reserve of animal population	1980	170

Denomination	Typology	Year	Surface (ha)
Circeo State Forest nature reserve	Integral nature reserve	1977	3070
Lestra della Coscia nature reserve	Integral nature reserve	1971	42
Circe Ruins Nature Reserve	Integral nature reserve	1971	46
Natural Reserve of the Gattuccia Pool	Integral nature reserve	1971	46
Natural Reserve Piscina delle Bagnature	Integral nature reserve	1975	57
Parco dell'Inviolata	Archaeological park	1996	535
Regional Natural Park—Monti Simbruini	Natural Park	1983	29,990
Monti Lucretili Regional Natural Park	Natural Park	1989	18,204
Appia Antica Regional Natural Park	Natural Park	1988	3296
Velo Natural Park	Natural Park	1997	14,985
Natural Park of the Aurunci Mountains	Natural Park	1997	19,374
Regional natural park of the Bracciano—Martignano lake complex	Natural Park	1999	16,682
Castelli Romani regional park	Suburban park	1984	9108
Gianola and Monte di Scauri Regional Park	Suburban park	1987	285
Marturanum Regional Park	Suburban park	1984	1240
Valle del Treja suburban park	Suburban park	1982	628
Urban park of the ancient city of Sutri	Urban park	1988	7
Monte Orlando Regional Urban Park	Urban park	1986	58
Pineto urban regional park	Urban park	1987	240
Partial nature reserve of the Lungo and Ripasottile lakes	Natural reserve	1985	2942
Macchiatonda Nature Reserve	Natural reserve	1983	244
Natural reserve of Nazzano, Tiber—Farfa	Natural reserve	1979	705
Lago di Posta Fibreno nature reserve	Natural reserve	1983	345
Monte Navegna and Monte Cervia nature reserve	Natural reserve	1988	3563
Monte Rufeno nature reserve	Natural reserve	1983	2893
Selva del Lamone partial nature reserve	Natural reserve	1994	2002
Natural Reserve of the Casali Valley	Natural reserve	1997	466
Insugherata Nature Reserve	Natural reserve	1997	740
Valle dell'Aniene nature reserve	Natural reserve	1997	650
Marcigliana nature reserve	Natural reserve	1997	4729
Natural Reserve of Laurentino Acqua Acetosa	Natural reserve	1997	168
Decima Malafede Nature Reserve	Natural reserve	1997	6107
Natural reserve of the Tenuta dei Massimi	Natural reserve	1997	868
Monte Mario Nature Reserve	Natural reserve	1997	206
Natural Reserve of the Acquafredda Estate	Natural reserve	1997	254
Valle dell'Arcionello regional nature reserve	Natural reserve	2008	438.87
Tuscania nature reserve	Provincial nature reserve	1997	1901
Monte Soratte nature reserve	Provincial nature reserve	1997	444
Monte Catillo Nature Reserve	Provincial nature reserve	1997	1319
Nomentum Nature Reserve	Provincial nature reserve	1997	824

Denomination	Typology	Year	Surface (ha)
Macchia di Gattaceca and Macchia del Barco nature reserve	Provincial nature reserve	1997	996
Nature Reserve Ancient Cities of Fregallae and Fabrateria Nova and the Lake of San Giovanni Incarico	Provincial nature reserve	1997	715
Natural reserve of the Canterno lake	Provincial nature reserve	1997	1824
Monte Casoli di Bomarzo provincial nature reserve	Provincial nature reserve	1999	175
Villa Borghese Provincial Nature Reserve	Provincial nature reserve	1999	36
Tor Caldara Regional Nature Reserve	Regional nature reserve	1988	43
Natural Reserve of the Duchess Mountains	Partial nature reserve	1990	3543
Vico Lake Nature Reserve	Partial nature reserve	1982	3546
Monterano partial nature reserve	Partial nature reserve	1988	1076
Blue oasis of Gianola	Marine oasis	1988	5
Blue oasis Villa of Tiberius	Marine oasis	1995	10.4
Blue oasis of Monte Orlando	Marine oasis	1995	3
Macchiagrande Oasis	Oasis	1987	280
Vulci Oasis	Oasis	1989	174
Natural monument Villa Clementi and Fonte Santo Stefano	Natural monument	2002	6
Viscogliosi Green Area—former Trito Paper Mill	Natural monument	2004	6
Campo Soriano natural monument	Natural monument	1985	974
Acquaviva—Cima del Monte—Quercia del Monaco	Natural monument	2004	240
Natural monument Promontory Villa Tiberio and Costa Torre Capovento-Punta Cerarola	Natural monument	2002	84
Bosco del Sasseto natural monument	Natural monument	2006	61
Natural monument of the Cellulose Park	Natural monument	2006	100
Natural Monument Lake of Fondi	Natural monument	2002	1723
Valle delle Cannuccette natural monument	Natural monument	1995	20
Natural monument Swamp of Torre Flavia	Natural monument	1997	43
Natural Monument Quarter of the Jews and Mazzalupetto Estate	Natural monument	2000	160
Galeria Antica natural monument	Natural monument	1999	40
Pian Sant'Angelo natural monument	Natural monument	2000	254
Natural monument Temple of Jupiter Anxur	Natural monument	2000	23
Garden of Ninfa natural monument	Natural monument	2000	106
La Selva natural monument	Natural monument	2000	25
Natural monument Mola della Corte-Settecannelle-Capodacqua	Natural monument	2001	4
Giulianello Lake natural monument	Natural monument	2007	167.81
Torrecchia Vecchia natural monument	Natural monument	2007	447.47
Corviano natural monument	Natural monument	2007	45.52
Natural monument Caves of Falvaterra and Rio Obaco	Natural monument	2007	133
Natural monument Madonna della Neve	Natural monument	2007	3
Natural monument of the Farfa Gorges	Natural monument	2007	64.48
Natural monument of the Fibreno River and Rio Carpello	Natural monument	2008	41

Denomination	Typology	Year	Surface (ha)
Forre di Corchiano natural monument	Natural monument	2008	42
Bosco Faito natural monument	Natural monument	2009	336
Pineta di Castel Fusano urban park	Urban park	1980	916
Urban regional park of Aguzzano	Urban park	1989	57

## References

- 1. Yau, M.K.; McKercher, B.; Packer, T.L. Traveling with a disability: More than an access issue. *Ann. Tour. Res.* **2004**, *31*, 946–960. [CrossRef]
- Bianchi, P.; Cappelletti, G.M.; Mafrolla, E.; Sica, E.; Sisto, R. Accessible tourism in natural park areas: A social network analysis to discard barriers and provide information for people with disabilities. *sustainability* 2020, *12*, 9915. [CrossRef]
- 3. Daruwalla, P.; Darcy, S. Personal and societal attitudes to disability. Ann. Tour. Res. 2005, 32, 549–570. [CrossRef]
- 4. Eichhorn, K.C. Soliciting and providing social support over the Internet: An investigation of online eating disorder support groups. *J. Comput.-Mediat. Commun.* **2008**, *14*, 67–78. [CrossRef]
- Bianchi, P.; Cappelletti, G.M.; Sica, E.; Sisto, R. Stakeholder involvement to improve accessibility in a protect natural area: A case study. In *Le scienze merceologiche nell'era* 4.0; *Atti del XXIX Congresso Nazionale di Scienze Merceologiche* 2020, *Salerno*, 13–14 *febbraio*; Esposito, B., Malandrino, O., Sessa, M.R., Sica, D., Eds.; Franco Angeli: Milano, Italy, 2020; pp. 53–61, ISBN 978-88-351-0527-5.
- Di Noia, A.E.; Nicoletti, G.M.; Cappelletti, G.M. Italian Protect Natural Areas Registrered Under EMAS: Role of Interested Parties. In *Le scienze merceologiche nell'era* 4.0; Esposito, B., Malandrino, O., Sessa, M.R., Sica, D., Eds.; Atti del XXIX Congresso Nazionale di Scienze Merceologiche 2020, Salerno, 13–14 febbraio; Franco Angeli: Milano, Italy, 2020; pp. 281–288, ISBN 978-88-351-0527-5.
- 7. World Health Organization. *World Report on Disability* 2011; World Health Organization: Geneva, Switzerland, 2011.
- Somnuxpong, S.; Wiwatwongwana, R. The ability to support accessible tourism in Chiang Mai, Thailand. *Afr. J. Hosp. Tour. Leis.* 2020, 9, 1–16.
- 9. Buhalis, D.; O'Connor, P. Information communication technology revolutionizing tourism. *Tour. Recreat. Res.* 2005, 30, 7–16. [CrossRef]
- 10. Neumann, P.; Reuber, P. Economic impulses of accessible tourism for all. In *Study Commissioned by the Federal Ministry of Economics and Labour (BMWA)*; The Federal Ministry of Economics and Labour: Berlin, Germany, 2004.
- 11. Pühretmair, F.; Buhalis, D. Accessible tourism introduction to the special thematic session. In *International Conference on Computers for Handicapped Persons*; Springer: Berlin/Heidelberg, Germany, 2008; pp. 969–972.
- 12. Cappelletti, G.M.; Bianchi, P.; Russo, G.; Strizzi, C. Accessibility and Facility of the Disabled: The Consorzio di Bonifica Montana del Gargano and Parco Nazionale del Gargano Cases Studies. In *Fifth International Scientific Conference ERAZ-Knowledge Based Sustainable Development, Budapest, Hungary*; SKRIPTA International: Belgrade, Serbia, 2019; pp. 337–346, ISBN 978-86-80194-20-2.
- Cappelletti, G.M.; Di Noia, A.E.; Nicoletti, G.M. Best Practices for People with Disabilities Adopted in Italian National Parks. In Proceedings of the 3rd International Scientific Conference on Recent Advances in Information Technology, Tourism, Economics, Management and Agriculture–ITEMA 2019, Bratislava, Slovakia, 24 October 2019; Association of Economists and Managers of the Balkans: Belgrade, Serbia; SKRIPTA International: Belgrade, Serbia, 2019; pp. 179–186, ISBN 978-86-80194-23-3, ISSN 2683-5991. [CrossRef]
- 14. McGuire, F.A. A factor analytic study of leisure constraints in advanced adulthood. Leis. Scienc. 1984, 6, 313–326. [CrossRef]
- 15. Murray, M.; Sproats, J. The disabled traveller: Tourism and disability in Australia. J. Tour. Stud. 1990, 1, 9–14.
- 16. Smith, R.W. Leisure of disable tourists: Barriers to participation. Ann. Tour. Res. 1987, 14, 376–389. [CrossRef]
- 17. Darcy, S. Marginalised participation: Physical disability, high support needs and tourism. J. Hosp. Tour. Manag. 2002, 9, 61–73.
- 18. Darcy, S. Inherent complexity: Disability, accessible tourism and accommodation information preferences. *Tour. Manag.* **2010**, *31*, 816–826. [CrossRef]
- 19. Israeli, A.A. A Preliminary investigation of the importance of site accessibility factors for disabled tourists. *J. Travel Res.* 2002, 41, 101–104. [CrossRef]
- 20. Cavinato, J.L.; Cuckovich, M.L. Transportation and tourism for the disabled: An assessment. Transp. J. 1992, 1, 46–53.
- Linderová, I.; Janeček, P. Přístupný cestovní ruch-Současný stav v podmínkách České republiky. E A M Ekon. A Manag. 2017, 20, 168–186.
- 22. GCET. Global Code of Ethics for Tourism. 1999. Available online: https://www.unwto.org/global-code-of-ethics-for-tourism (accessed on 20 December 2021).
- Darcy, S. Setting a Research Agenda for Accessible Tourism. Sustainable Tourism CRC. In STCRC Technical Report Series; Cooper, C., LacY, T.D., Jago, L., Eds.; Sustainable Tourism CRC: Queensland, Australia, 2006; Available online: https://www.researchgate.net/profile/SimonDarcy/publication/235993179\_Setting\_a\_Research\_Agenda\_for\_Accessible\_Tourism/links/5edcb89045851529453fc8aa/Setting-a-Research-Agenda-for-Accessible-Tourism.pdf (accessed on 20 December 2021).
- 24. UNWTO. Ethics, Culture and Social Responsibility. 2019. Available online: https://www.unwto.org/accessibility (accessed on 20 December 2021).

- 25. UNEP and UNWTO. Making Tourism more Sustainable-A Guide for Policy Makers; UNWTO: Madrid, Spain, 2005; pp. 11–12.
- 26. Darcy, S.; Dickson, T. A Whole-of-Life Approach to Tourism: The Case for Accessible Tourism Experiences. *J. Hosp. Tour. Manag.* **2009**, *16*, 32–44. [CrossRef]
- 27. United Nations. Environmental Accessibility and Its Implications for Inclusive, Sustainable and Equitable Development for All. Prepared by Mr. Clinton E. Rapley. 2013. Available online: https://www.un.org/disabilities/documents/accessibility\_and\_ development\_june2013.pdf (accessed on 20 December 2021).
- 28. United Nations. Accessibility and Development-Mainstreaming Disability in the Post-2015 Development Agenda. 2015. Available online: https://www.un.org/disabilities/documents/accessibility\_and\_development.pdf (accessed on 20 December 2021).
- 29. Sisto, R.; Cappelletti, G.M.; Bianchi, P.; Sica, E. Sustainable and accessible tourism in natural areas: A participatory approach. *Curr. Issues Tour.* **2021**, 1–18. [CrossRef]
- 30. Aitchison, C. Exclusive discourses: Leisure studies and disability. Leis. Stud. 2009, 28, 375–386. [CrossRef]
- 31. Burns, N.; Watson, N.; Paterson, K. Risky bodies in risky spaces: Disabled people's pursuit of outdoor leisure. *Disabil. Soc.* 2013, 28, 1059–1073. [CrossRef]
- 32. Hemingway, L. Taking a risk? The mortgage industry and perceptions of disabled people. Disabil. Soc. 2010, 25, 75–87. [CrossRef]
- 33. Darcy, S.; Cameron, B.; Pegg, S. Accessible Tourism and Sustainability: A Discussion and Case Study: Sistema de Descoberta Para FCCN. J. Sustain. Tour. 2010, 18, 515–537. Available online: https://vpn.uab.pt/+CSCO+0h75676763663A2F2F626368662E79766 F2E6867662E7271682E6E68++/bitstream/10453/12593/1/2009004829.pdf%5Cnhttp://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?vid=1&sid=cc75ab63-d3b8-4d4b-9468-b4a0b109bcfb%40sessionmgr120&hid=117 (accessed on 20 December 2021). [CrossRef]
- Mayordomo-Martínez, D.; Sánchez-Aarnoutse, J.C.; Carrillo-de-Gea, J.; García-Berná, J.A.; Fernández-Alemán, J.L.; García-Mateos, G. Design and development of a mobile app for accessible beach tourism information for people with disabilities. *Int. J. Environ. Res. Public Health* 2019, 16, 2113. [CrossRef] [PubMed]
- 35. Domínguez Vila, T.; Alén González, E.; Darcy, S. Website accessibility in the tourism industry: An analysis of official national tourism organization websites around the world. *Disabil. Rehabil.* **2018**, *40*, 2895–2906. [CrossRef] [PubMed]
- Gonçalves, M.J.A.; Camarinha, A.P.; Abreu, A.J.; Teixeira, S.; da Silva, A.F. Web accessibility in the tourism sector: An analysis of the most used websites in Portugal. In *Advances in Tourism, Technology and Smart Systems*; Springer: Singapore, 2020; pp. 141–150.
- 37. Venkatesh, V.; Brown, S.A.; Bala, H. Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Q.* 2013, *37*, 21–54. [CrossRef]
- Grewal, R.; Mehta, R.; Kardes, F.R. The role of the social-identity function of attitudes in consumer innovativeness and opinion leadership. J. Econ. Psychol. 2000, 21, 233–252. [CrossRef]
- O'Cass, A. A psychometric evaluation of a revised version of the Lennox and Wolfe revised self-monitoring scale. *Psychol. Mark.* 2000, 17, 397–419. [CrossRef]
- 40. Parks. Available online: http://www.parks.it/mappe/ap.php?reg=12 (accessed on 20 December 2021).
- 41. Superabile INAIL. Available online: https://mysuperabile.inail.it/cs/superabile/home (accessed on 20 December 2021).
- 42. Italia Accessibile. Available online: https://www.italiaccessibile.it/ (accessed on 20 December 2021).
- 43. Sica, E.; Sisto, R.; Bianchi, P.; Cappelletti, G.M. Inclusivity and Responsible Tourism: Designing a Trademark for a National Park Area. *Sustainability* **2021**, *13*, 13. [CrossRef]