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# Protected Areas

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## 1. Introduction

Protected areas are essential for biodiversity conservation. They are the cornerstones of virtually all national and international conservation strategies, set aside to maintain functioning natural ecosystems, to act as refuges for species and to maintain ecological processes that cannot survive in most intensely managed landscapes and seascapes. Protected areas act as benchmarks against which we understand human interactions with the natural world. Today they are often the only hope we have of stopping many threatened or endemic species from becoming extinct (Dudley, 2008).

The original intent of the IUCN Protected Area Management Categories system was to create a common understanding of protected areas, both within and between countries. This is set out in the introduction to the Guidelines by the then Chair of CNPPA (Commission on National Parks and Protected Areas, now known as the World Commission on Protected Areas), P.H.C. (Bing) Lucas who wrote: *“These guidelines have a special significance as they are intended for everyone involved in protected areas, providing a common language by which managers, planners, researchers, politicians and citizens groups in all countries can exchange information and views”* (The International Union For Conservation of Nature [IUCN], 1994).

IUCN defines a protected area as:

*“An area of land and/or sea especially dedicated to the protection of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means”* (IUCN 1994).

Protected areas can be categorized into six types, according to their management objectives (IUCN, 1994; 2003):

### Category I

*Protected area managed mainly for science or wilderness protection (I(a) Strict Nature Reserves, and I(b) Wilderness Areas).*

An area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species available primarily for research and/or environmental monitoring. A wilderness area is a large area of unmodified or slightly modified land and/or sea retaining its natural character and influence without permanent or significant habitation which is protected and managed so as to preserve its natural condition.

### Category II

*Protected area managed mainly for ecosystem protection and recreation (National Park).*

A natural area of land and/or sea designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations; (b) exclude exploitation or occupation inimical to the purposes of the area; and (c) provide foundation for spiritual, scientific, educational, recreational, and visitor opportunities all of which must be environmentally and culturally compatible.

### Category III

*Protected area managed mainly for conservation of specific natural features (Natural Monument).*

An area containing one or more specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

### Category IV

*Protected area managed mainly for conservation through management intervention.*

An area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

### Category V

*Protected area managed mainly for landscape/seascape conservation and recreation (Protected Landscape/Seascape).*

An area with coast and sea, as appropriate, where the interaction of people and nature over time has produced an area with significant aesthetic, ecological and/or cultural value and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

### Category VI

*Protected area managed mainly for the sustainable use of natural ecosystems (Managed Resource Protected Area)*

An area containing predominantly unmodified natural systems managed to ensure long term protection and maintenance of biological diversity while providing at the same time a sustainable flow of natural products and services to meet community needs.

It is sometimes assumed that protected areas must be in conflict with the rights and traditions of indigenous and other traditional peoples on their terrestrial, coastal/marine, or freshwater domains. In reality, where indigenous peoples are interested in the conservation and traditional use of their lands, territories, waters, coastal seas and other resources, and their fundamental human rights are accorded, conflicts need not arise between those peoples' rights and interests, and protected area objectives. Moreover, formal protected areas can provide a means to recognize and guarantee the efforts of many communities of indigenous and other traditional peoples who have long protected certain areas, such as sacred groves and mountains, through their own cultures (IUCN, 2000).

Based on the advice in the protected areas management categories, on established WWF and IUCN policies on indigenous peoples and conservation, and on conclusions and recommendations of the IV World Congress on National Parks and Protected Areas, the two organizations, WWF and IUCN/WCPA, have adopted principles and guidelines concerning indigenous rights and knowledge systems, consultation processes, agreements between conservation institutions, decentralization, local participation, transparency, accountability, sharing benefits and international responsibility. The five principles are as follows (IUCN, 2000):

*Principle 1.*

Indigenous and other traditional peoples have long associations with nature and a deep understanding of it. Often they have made significant contributions to the maintenance of many of the earth's most fragile ecosystems, through their traditional sustainable resource use practices and culture-based respect for nature. Therefore, there should be no inherent conflict between the objectives of protected areas and the existence, within and around their borders, of indigenous and other traditional peoples.

*Principle 2.*

Agreements drawn up between conservation institutions, including protected area management agencies, and indigenous and other traditional peoples for the establishment and management of protected areas affecting their lands, territories, waters, coastal seas and other resources should be based on full respect for the rights of indigenous and other traditional peoples to traditional, sustainable use of their lands, territories, waters, coastal seas and other resources.

*Principle 3.*

The principles of decentralization, participation, transparency and accountability should be taken into account in all matters pertaining to the mutual interests of protected areas and indigenous and other traditional peoples.

*Principle 4.*

Indigenous and other traditional peoples should be able to share fully and equitably in the benefits associated with protected areas, with due recognition to the rights of other legitimate stakeholders.

*Principle 5.*

The rights of indigenous and other traditional peoples in connection with protected areas are often an international responsibility, since many of the lands, territories, waters, coastal seas and other resources which they own or otherwise occupy or use cross national boundaries, as indeed do many of the ecosystems in need of protection.

*Financial Planning In Protected Areas*

A financial plan is a tool which helps to determine the protected area's funding requirements, and to match income sources with those needs. Financial planning differs from a budget in that, in addition to identifying how much money is needed for different types of activities, it also identifies the most appropriate funding sources for short, medium, and long-term needs. (IUCN, 2001)

Seven steps are required to develop a financial plan:

- 1. define protected area goals and objectives;
- 2. identify the existing customer base;
- 3. list financial resources and demands on these resources;
- 4. identify new customers and relative levels of use versus contribution;
- 5. identify mechanisms to capture income from customers;
- 6. evaluate the feasibility of the proposed mechanisms; and
- 7. clearly state the financial plan.

*Protected Area Economic Benefits*

A protected area also provides its customers with a number of goods and services. These could include goods such as thatching grasses, wild berries and genetic materials, and services such as biodiversity conservation, crop pollination, water purification, game viewing and recreational opportunities. Such goods and services provide society with a stream of benefits from the existence of the protected area. The benefits can be divided into two categories: so-called ‘use’ (comprising direct and indirect values) and ‘non-use’ (comprising option, bequest and existence values) benefits (IUCN, 2001).

The structure of an ecosystem includes the species contained therein, their mass, their arrangement, and other relevant information. This is the ecosystem’s standing stock—nature’s free goods. The functions of an ecosystem, on the other hand, are characterized by the ways in which the components of the system interact. They provide nature’s free services, maintaining clean air, pure water, a green earth, and a balance of creatures, enabling humans to obtain food, fiber, energy, and other material needs for survival. Evaluating the contribution of ecosystem functioning to human welfare is a complex task, involving human social values and political factors

*Direct use values* of protected areas derive from the actual use of the protected area for such activities as recreation, tourism, the harvesting of various natural or cultural resources, hunting and fishing, and educational services. Conversely, *indirect use value* sderive from the goods and services not directly provided by visits to protected areas. Notably these include ecological functions such as watershed protection, the provision of breeding or feeding habitat, climatic stabilization and nutrient recycling. Such indirect use values are often widespread and significant, but have been under-valued, if not totally ignored by past economic valuation systems. Indeed, most of the studies that have attempted to value these indirect goods and services have found that they have far greater value than the more easily measured direct values (Figure 1).

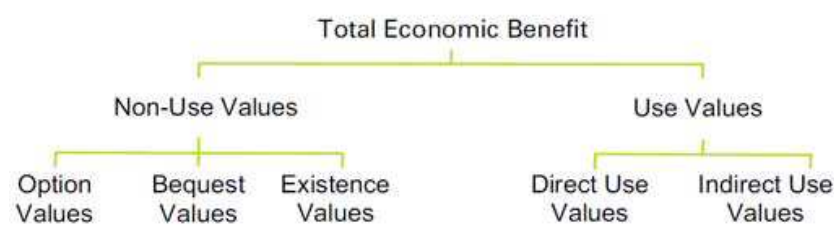


Fig. 1. Total economic benefit of protected areas (IUCN, 2001).

*Option value* refers to the potential for individuals or society to use the protected area in the future. For example, many people value a particular protected area even though they have never visited the park, but feel that at some future date they might like to do so.

*Bequest value* relates to the benefit of knowing that others (e.g. children or grandchildren) benefit or will benefit from the goods and services provided by the protected area. Finally, *existence value* derives from the benefit of knowing that the protected area exists and provides valuable goods and services. Even if they do not plan on ever visiting a particular protected area or protected area system, many people attach value to the mere existence of such sites (e.g. for the indirect benefits they provide or as sources of local or national pride). (IUCN, 2001)

## 2. Protected areas in Turkey

In terms of biodiversity, Turkey is one of the richest countries in Europe and the Middle East, and ranks the ninth on the European Continent in this respect. There are a number of different ecological regions each with its own endemic species and natural ecosystems. The richness of biodiversity in Turkey is expressed in its 120 mammals, more than 400 bird species, 130 reptiles, and nearly 500 fish species. The diversity of the geographic formations of Turkey and its location at the intersection of two important Vavilovian gene centers (the Mediterranean and the Near Eastern) are the reasons for high endemism and genetic diversity (Ministry of Environment, 2002).

There have been various types of habitats formed in the earth since the beginning of the world and existence of the living beings. Human beings, animals, plants and microorganisms have been surviving in the ecosystems together for many years together with the non-living beings, like water, air, soil, rock and climatologically factors. However, due to technological developments starting from 1960's, there have been significant adverse impacts on the nature. Man can survive less dependent on the surrounding factors and has the ability to easily change the environmental factors with his technological power. The ecological balances have been greatly degraded due to increase in populations and rapidly developing technologies. In this regard, Turkey is relatively lucky when compared to the most of the countries in Europe and America. In Turkey, there are still number of ecosystems where natural balance has not been completely degraded and we still have a rich biodiversity throughout Turkey.

Turkey is home to 75% of the plant species that exist on the European continent, and one third of these species are endemic plants. The rich flora of Turkey includes more than 9,000 plant species and more than 500 bulbous plants. This flora, with a high endemism ratio, is also rich in medicinal and aromatic plants (Ministry of Environment, 2002). Most of the endemic plant species are found in the Taurus Mountains, the Nur Mountains and the Eastern Black Sea Coast (Ministry of Environment, 2001).

Located on the migration routes of many birds, Turkey is a key country for many bird species. 454 bird species have been sited. Several of its species are globally under threat (Ministry of Environment, 2002). Turkish wetlands are of crucial importance for many breeding species of birds.



There are 472 fish species in Turkey and 50 of these are at risk of extinction. Some 192 freshwater fish species belonging to 26 different families have been identified (Ministry of Environment, 2002).

Approximately 3,000 plant and animal species have been identified in Turkey's seas (Ministry of Environment, 2001). There are about 20 species of mammals including the Mediterranean monk seal, whales and dolphins with mostly decreasing populations. The Turkish Straits and the Sea of Marmara form a special ecosystem (an ecotone) between the Mediterranean and the Black Sea. The Aegean Sea is especially important for the endangered Mediterranean monk seal (*Monachus monachus*), which is considered to be one of the 12 most endangered species in the world. Less than 50 specimens inhabit the coasts of Turkey (Ministry of Environment, 2001). The Aegean Sea and its islands contain numerous microhabitats (*Posidonia oceanica* and *Cystoseira species*) that play an important role in the sustainability of the ecosystem (Ministry of Environment, 2002).

Turkey has accepted the Action Plan (1989 and 1999) for the conservation of Mediterranean marine turtles within the framework of the Barcelona Convention. Several breeding habitats of marine turtles, including Dalyan, Fethiye, Patara, Goksu Delta, and Belek, were declared as Specially Protected Areas in 1988 and 1990. The Ministry of Environment established the Marine Turtles National Commission and the Marine Turtles Scientific Commission for the coordination of activities towards the protection of the two species. Turkey also accepted the action plan for the conservation of the Mediterranean monk seal, again developed in the framework of the Barcelona Convention (Ministry of Environment, 2002). In this context, Turkey has signed many international conventions and agreements.

In this context, Turkey has signed many international conventions. These conventions are;

#### International Conventions and Protocols on Nature Protection Ratified by Turkey

- Convention on Biodiversity Conservation (Rio Convention) (1997)
- Cartagena Protocol (2004)
- CITES (1996)
- Barcelona Convention (1988)
- Bucharest Convention (1994)
- Protection of Cultural and National Heritage (1983)
- Convention on Combating Erosion (1998)
- European Landscape Convention (2000)
- Bern Convention (1984)
- Ramsar Convention (1994)
- Kyoto Protocol (2009)

Depending on these conventions, by 2011, nearly 1800 sites had been identified by the Ministry of Forest and Water as warranted protection under the 1983 law (Table 1), by 2003, nearly 6 400 sites had been identified by the Ministry of Culture as warranted protection under the 1983 law (Table 2).

Conservation Status	Number	Related Law
National park	41	Law on National Parks
Nature conservation area	31	Law on National Parks
Natural monument	106	Law on National Parks
Nature park	41	Law on National Parks
Wild life reserve areas	79	Law on Terrestrial Hunting
Conservation forest	57	Law on Forest
Genetic conservation areas	214	Law on Forest
Seed stands	339	Law on Forest
Specially protected areas (SPAs)	14	Law on Environment
Natural sites	947	Law on Conservation of Cultural And Natural Heritage
Ramsar sites	13	Ramsar Convention By-law on Conservation of Wetlands
Biosphere Reserve	1	Law on National Parks -Law on Forest

Table 1. Protected areas which identified by the Ministry of Forest and Water.

Conservation Staus	Number
Archaeological Site	4,920
Natural Site	787
Urban Archaeological Site	182
Historical Site	121
Other Sites	371
Total Number	6,381

Table 2. Protected areas (especially cultural areas) which identified by the Ministry of Forest and Water.

National Parks

A national park refers to an plot of land set aside by a national government and usually designated as an area free of development. Often, national parks include pristine wilderness areas or other pieces of environmental heritage which the nation has deemed worthy of preservation. In the United States, national parks also include historic areas and monuments to scientific achievement.



Prepared by the IUCN classification of protected areas, national parks are in Categories 2. Definition of this category is below;

*'Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.*

#### *Management Objectives of This Category*

- To protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational or tourist purposes
- To perpetuate, in as natural a state as possible, representative examples of physiographic regions, biotic communities, genetic resources, and species, to provide ecological stability and diversity;
- To manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will maintain the area in a natural or near natural state
- To eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation;
- To maintain respect for the ecological, geomorphological, sacred or aesthetic attributes which warranted designation; and
- To take into account the needs of indigenous people, including subsistence resource use, in so far as these will not adversely affect the other objectives of management.

#### *Guidance for Selection*

- The area should contain a representative sample of major natural regions, features or scenery, where plant and animal species, habitats and geomorphological sites are of special spiritual, scientific, educational, recreational and touristic significance
- The area should be large enough to contain one or more entire ecosystems materially altered by current human occupation or exploitation.

National parks are natural areas that provide transcendental, adventure and educational experiences. One management goal, however, is to take into account the needs of indigenous people. In this way, parks serve multiple constituencies that have sometimes been at loggerheads (Weeks and Mehta, 2004).

National Parks Law in Turkey, scientific and aesthetic terms, national and international rare, natural and cultural resource values and conservation, recreation and tourism will have the values of nature.

The purpose of this Law is specified as the “identification of areas which possess values of national and international importance, as national park, nature park, nature monument, and nature protection area, and the protection, enhancement and management of these areas without degrading their values and characteristics” There are 43 national parks in Turkey (Figure 2)



Fig. 2. National parks in Turkey.

The first national park in Turkey was established in 1958 (*The Yozgat Pine Grove National Park*) (Figure 3). Some of these parks, which were initially established for archaeological and historical purposes, are at the same time rich habitats where biological diversity is being protected.



Fig. 3. The Yozgat Pine Grove National Park, Turkey ([www.milliparklar.gov.tr](http://www.milliparklar.gov.tr)).

National Parks are defined as recreation and tourism areas which are rare in terms of scientific and scenic perspective in nature and are important for the conservation of the

natural and cultural resource values (Yücel, 1995). These areas are in different regions of Turkey and were assigned as national parks at various dates and with various purposes; they are now under protective control and are kept open for public use (Güçlü and Karahan, 2008).

Some information and resource values of these national parks are given below (Table 1).

National Park	Area (ha)	Date	Resource Value
The Yozgat Pine Grove National Park	264	1958	Natural <i>Pinus sp.</i> (residual forest)
Karatepe Aslantaş National Park	7715	1958	Flora, visual landscape, historical value
Soğuksu National Park	1195	1959	Geological and geomorphologic value, thermal water
Bird Paradise National Park	24047	1959	Fauna, especially bird species
Uludağ National Park	12372	1961	Flora and fauna
Yedigöller (Sevenlakes) National Park	2019	1965	Lakes, flora, recreation
Dilek Peninsula National Park	27675	1966	Flora, fauna, wetlands
Spil Mountain National Park	6693,5	1968	Geological value, flora, historic and mythological value
Kızıldağ National Park	59400	1969	Geological value, flora
Termessos National Park	6702	1970	Ancient city, geological value, biodiversity
Kovada Lake National Park	6534	1970	Geological value, flora, karstic lake
Ilgaz Mountain National Park	1088	1976	Flora, winter sports, alpine flora
Munzur Valley National Park	42000	1971	Streams, flora, fauna, geomorphologic value
Olympos National Park	34425	1972	Archeological residual, flora
Gelibolu Peninsula Historical National Park	33000	1973	Historical war, geological and geomorphologic value
Köprülü Canyon National Park	36614	1973	Archeological residual, geological value
Başkomutan Historical National Park	40742	1981	Cultural and geological value
Göreme Historical National Park	9572	1986	Historical settlement, geomorphologic value
Altındere Valley National Park	4800	1987	Cultural value, landscape,
Boğazköy-Alacahöyük Historical National Park	2634	1988	Archeological residual



Nemrut Mountain National Park	13850	1988	Historical open air museum, landscape
Beyşehir Lake National Park	88750	1993	Historical residual, geomorphologic value, wetlands, fauna especially bird species
Kazdağları National Park	21463	1993	Flora, fauna, biodiversity,
Kaçkar Mountain National Park	51550	1994	Geological and geomorphologic value, flora and fauna
Hattıla Valley National Park	16988	1994	Geological and geomorphologic value, flora and fauna
Altınbeşik Cavern National Park	1156	1994	Geological and geomorphologic value
Karagöl – Sahara National Park	3766	1994	Hydrographic structure, vegetation
Aladağlar National Park	54 524	1995	Landscape, waterfall
Honaz Mountain National Park	9616	1995	Geological and geomorphologic value, flora
Troya Historical National Park	13350	1996	Geomorphologic value, historical residual
Marmaris National Park	33350	1996	Geomorphologic value, flora and fauna
Saklıkent National Park	12390	1996	Flora, fauna, hydrological geomorphologic value
Küre Mountain National Park	37000	2000	Natural forest, biodiversity, geological and geomorphologic value
Sarıkamuş-Allahuekber Mountain National Park	22980	2004	Historical value, fauna
Ağrı Mountain National Park	87 380	2004	Geomorphologic value
Gala Lake National Park	6090	2005	Wetland and forest ecosystem, bird species
Sultan Sazlığı National Park	24523	2006	Wetland ecosystem, bird species
Tek Tek Mountain National Park	19335	2007	Geomorphologic and historical value, fauna
İğneada Longos Forest National Park	3155	2007	Wetland and alluvial forest ecosystem, lagoon, flora, fauna
Yumurtalık Lagoon National Park	16 430	2008	Lagoon, swamp, sand dune
Nenehatun National Park	387	2009	Historical value

Table 3. National Parks in Turkey.

3. The case study, İğneada Longos forest national park

The İgneada Longos Forests National Park, located on the Black Sea coast 15 km from the Turkish-Bulgarian border, is positioned between the northern latitudes 41° 44' 43" and 41° 58' 27" and the eastern longitudes 27° 44' 52" and 28° 3' 17". The İgneada area includes different kinds of ecosystems (sand dunes, wetlands, longos (flooded alluvial) forests, deciduous forests, and many streams) and a wide range of biodiversity; these characteristics make it one of the most important areas in Turkey (Ozyavuz, et al., 2006) (Table. İgneada and the surrounding environment have unique characteristics; these types (İgneada Longos Forests) of wild forest in other parts of Turkey and in Europe have been damaged due to anthropogenic effects (Figure 4).



Fig. 4. General view of this area.

Typically, flooded alluvial forests have high biological diversity, high productivity, and high habitat dynamism (Hughes et al., 2003). The surface area of these forests is around 3000 ha. İgneada alluvial longos forests are part of the Istranca forests; they are indeed “natural treasures” that have been formed by several ecosystems over thousands of years (Özyavuz and Yazgan, 2010).

Resource Value	Area (ha.)	Main Characteristic
Longos forest	1400	Alluvial flooded forest, rarity, sensitivity, flora, fauna
Wetlands and marshes	Wetlands (lagoon lake 52) (other 28) Marshes (315)	Geomorphological structure, flora, fauna,
Sand dunes	131	Geomorphological structure, flora (especially endemic plants)
Streams	-	Naturalness, flora
Deciduous forests	-	Naturalness, plant diversity, fauna

Table 4. Resource values of İğneada Longos forests National Park.

There are five lakes in the area. Lake Erikli Lagoon (43 ha) is adjacent to the northern part of Igneada subdistrict, which is not linked with the sea during the summer period. Lake Mert (266 ha) is located at the southern part of the subdistrict, where the stream reaches the Black Sea. Lake Saka, which is the smallest (5 ha), is at the southernmost part of the study area between the forest and sand. Lake Hamam (19 ha) and Lake Pedina (10 ha) are located in the inner part. The coastal dunes and the longos forests of Igneada constitute the most sensitive ecosystem in the study area. Most of the known endemic plants (*Silene sangaria*, *Crepis macropus*, *Centaurea kilaea*) in Igneada and its vicinity are found in the coastal dunes; other species found here, though not endemics, are of national and international concern (*Aurinia uechtritiziana*, *Cakile maritima*, *Cionura erecta*, *Crambe maritima*, *Cyperus capitatus*, *Elymus elongatus* subsp. *elongatu*, *Eryngium maritimum*, *Euphorbia peplis*, *Eu. paralias*, *Jurinea kilae*, *Leymus racemosus*, *Otanthus maritimus*, *Pancratium maritimum*, *Peucedanum obtusifolium*, *Stachys maritima*) (Figure 5-10) (Özyavuz and Yazgan, 2010).



Fig. 5. *Cianura erecta*.



Fig. 6. *Eryngium maritimum*.





Fig. 7. *Jurinea kilae*.



Fig. 8. *Leymus racemosus*.



Fig. 9. *Otanthus maritimus*.



Fig. 10. *Pancratium maritimum*.

There are three longos forests in the area. The conserved natural longos forests in the study area are the Lake Mert longos (316 ha), Lake Erikli longos (456 ha), and Lake Saka longos (624 ha) forests (Figure 11-13) This type of ecosystem is unique and rare in Turkey and the world because these ecosystems are sensitive to environmental conditions. In general, deciduous mixed forest vegetation is found in the area outside of the longos forests, and in this area the forests have similar floristic composition to the longos forests. However, slopes are rather steep in the area where these forests are found, and therefore the water table is well below the surface. The different ecosystems in the area provide a diverse living environment for the fauna in the region. Nearly half (194) of the 454 bird species constituting the bird diversity of Turkey are seen in this area during the year (Özyavuz and Yazgan, 2010).





Fig. 11. Lake Mert.



Fig. 12. Lake Erikli.



Fig. 13. Lake Saka.

#### 4. References

- Dudley, N. (Editor) (2008). *Guidelines for Applying Protected Area Management Categories*, *International Union for Conservation of Nature and Natural Resources*, 86 pp., ISBN 978-2-8317-1086-0, Gland, Switzerland.
- Güçlü, K., Karahan, F. (2004). A review: the history of conservation programs and development of the national parks concept in Turkey, *Biodiversity and Conservation* 13: 1373–1390, 2004.
- IUCN (1994). *Guidelines for Protected Area Management Categories*, *IUCN Commission on National Parks and Protected Areas with the assistance of the World Conservation Monitoring Centre*, pp. 5-7, ISBN 2-8317-0201-1, Switzerland and Cambridge, UK.
- IUCN (2000). *Indigenous and Traditional Peoples and Protected Areas*, IUCN, Gland, Switzerland and Cambridge, UK.
- IUCN (2001). *Guidelines for Financing Protected Areas in East Asia*, *World Commission on Protected Areas (WCPA)*, IUCN, Gland, Switzerland, and Cambridge, UK.
- IUCN (2003). *Guidelines for Management Planning of Protected Areas*, IUCN, Gland, Switzerland and Cambridge, UK.
- Ministry of Environment (2001). *The National Strategy and Action Plan for Biodiversity in Turkey*''.
- Ministry of Environment (2002). *National Report on Sustainable Development 2002*, Ministry of Republic of Turkey.
- Özyavuz, M. and Yazgan, M. 2010. Planning of Igneada Longos (Flooded) Forests as a Biosphere Reserve, *Journal of Coastal Research*, (26)6:1104-1111.

- Weeks, P. and Mehta, S. (2004). Managing People and Landscapes: IUCN's Protected Area Categories, *J. Hum. Ecol.*, (16) 4: 253-263.
- Yücel M. (1995). Protected Areas and Planning. Publication No. 104, Çukurova University Press, Adana, Turkey, 255 pp. (in Turkish).

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## **Landscape Planning**

Edited by Dr. Murat Ozyavuz

ISBN 978-953-51-0654-8

Hard cover, 360 pages

**Publisher** InTech

**Published online** 13, June, 2012

**Published in print edition** June, 2012

Landscape architecture is the design of outdoor and public spaces to achieve environmental, socio-behavioral, and/or aesthetic outcomes. It involves the systematic investigation of existing social, ecological, and geological conditions and processes in the landscape, and the design of interventions that will produce the desired outcome. The scope of the profession includes: urban design; site planning; town or urban planning; environmental restoration; parks and recreation planning; visual resource management; green infrastructure planning and provision; and private estate and residence landscape master planning and design - all at varying scales of design, planning and management. This book contains chapters on recent developments in studies of landscape architecture. For this reason I believe the book would be useful to the relevant professional disciplines.

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Murat Özyavuz (2012). Protected Areas, Landscape Planning, Dr. Murat Ozyavuz (Ed.), ISBN: 978-953-51-0654-8, InTech, Available from: <http://www.intechopen.com/books/landscape-planning/protected-areas>

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