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Ecotourism Potential of Gallipoli Peninsula Historical National Park

26

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ABSTRACT



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Ecotourism in protected areas is growing rapidly all around the world. Although the benefits of ecotourism are well described, it is not a panacea for solving the complex human needs and resource-capacity paradox in protected areas, unless it is well planned and managed. The notion of ecotourism in legally protected areas is relatively new in Turkey, and therefore none of Turkey's 39 national parks has an ecotourism master plan. The purpose of this study is to analyze the ecotourism potential and to generate initial recommendations for establishing an ecotourism framework for Gallipoli Peninsula Historical National Park (GPHNP) in Çanakkale, Turkey. Three basic research steps are followed: analysis, evaluation, and synthesis. Natural, cultural, and historical features of GPHNP are presented, and a set of recommendations are provided with respect to ecotourism in the study area. Results indicate that the national park has substantial potential for ecotourism, flora tourism, trekking, and horseback riding through nature; and this potential is not sufficiently utilized in the current context. The recommendations include that the national park's war history, biological diversity, coastal morphology, and climate should be promoted holistically, and awareness of them should be raised. The topography and other landscape attributes of the park must be protected and sustained.

ADDITIONAL INDEX WORDS: Canakkale, ecotourism, Gallipoli Peninsula Historical National Park, Turkey.

INTRODUCTION

As one of the world's largest industries, tourism is associated with many of the prime sectors of the world's economy. According to Yeoman, Munro, and McMahon-Beattie (2006), tourism has had an average annual increase of 6.6% over the last half century, with international travel rising from 25 million in 1950 to over 700 million by 2002. Globally, coastlines are arguably the most important sites for tourist activity and tourism development. The various combinations of sea and shore have become highly popular and successful attractions, and a majority of the world's leisure tourists cling to these liminal spaces at the margins of the land.

National parks and other protected areas related to coastlines are important resources for tourism. Thus, tourism in protected areas of outstanding natural beauty, extraordinary ecological interest, and pristine wilderness has been greatly increasing over the past few decades. Unfortunately, this trend has overwhelmed the ability of many destinations to adequately plan and manage for increasing visitor numbers. There is much literature now available on tourism, but a recent report by Goodwin (1996) describes tourism as "a powerful economic system commercially driven and increasingly impacting on the ecosystems of some of the world's protected areas." With the emergence of such concepts as nature tourism and ecotourism in the 1990s, the range of activities in national parks has varied to encompass different interests in nature without jeopardizing ecological and social values. Globally, tourism in many protected areas has emerged as a development strategy, and ecotourism in particular has been identified as a viable option for achieving sustainable development (Obua, 1997).

Ecotourism is a rapidly growing component of the international tourism industry. The term ecotourism was coined by Hector Ceballos-Lascuarin in 1983 and was initially used to describe nature-based travel with an emphasis on education to relatively undisturbed areas. The concept has, however, developed into a scientifically based approach to the planning, management, and development of sustainable tourism products and activities (Global Development Research Center, 2001). Ecotourism is a sustainable, noninvasive form of naturebased tourism that focuses primarily on learning about nature firsthand and which is ethically managed to be low impact, nonconsumptive, and locally oriented (as measured by control, benefits, and scale). It typically occurs in natural areas and should contribute to the conservation of such areas (Fennell, 2008). Ecotourism was defined by The International Ecotourism Society as "responsible travel to natural areas that conserves the environment and sustains the well being of local people" (Ties, 2003). In Seychelles, it has been further elaborated under Vision 21 (the Seychelles tourism policy) as "a specialty segment of the larger nature tourism or 'eco-travel' market, which covers a variety of travel industry segments,

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including adventure, heritage, culture, educational and sports, all linked together by an emphasis on fun, environmental sensitivity and social responsibility" (MTT, 2002).

National parks are favored for ecotourism due to their legal protection and sustainable management framework (Wallace and Pierce, 1996). National parks benefit from ecotourism in several ways: ecotourism is a way of reconciling economic development and species protection; tours to nature reserves and parks elsewhere in the world call people's attention to the natural beauty of other countries, acquaint them with different habitats, and make them aware of the plight of endangered species; park fees paid by nature tourists help finance anticipated programs, pay for trail maintenance, and cover publication costs for maps and brochures; revenues from nature tourism often go directly into the local economy; interest in ecotourism encourages local landowners to develop lowimpact facilities (Goodwin, 1996).

Despite all these benefits, ecotourism in protected areas is not a panacea for solving the complex human needs and resource-capacity paradox, unless it is well planned and managed. The relationships between tourism and the environment have been discussed by Butler (1991), Cater (1994), Sherman and Dixon (1991), and Whelan (1991). They have noted that the desire to derive economic benefits from tourism in protected areas often results in environmental degradation, which not only curtails the potential for tourism development but also future development that such environments offer. Sound environmental management by protected-area managers should therefore be an appropriate baseline activity to ensure the success of any ecotourism program (Obua, 1997).

Ecotourism is a growing industry in developing countries (Boo, 1990) and has been identified as an important and sustainable development initiative in Turkey since the 1990s. The initiative is based on nature tourism, green tourism, and soft tourism (Gülez, 1994), though in practice the boundaries between these activities have been vague. The notion of ecotourism in legally protected areas is relatively new in the country. Bal (2002) states that ecotourism activities usually take place in protected areas of Turkey but generate environmental problems in these areas due to unsustainable utilization of the site and to pollution. Turkey has 39 national parks, and none of them currently have an ecotourism master plan. The present work attempts to take the initial step to fill this gap. Subsequently, the purpose of this study is to analyze ecotourism potential and to generate initial recommendations for establishing an ecotourism framework for Gallipoli Peninsula Historical National Park (GPHNP), Canakkale, Turkey.

MATERIALS AND METHODS

The long-term development plan of the GPHMP was obtained from the national park service, along with 1/100,000-scale tourism, transportation, historical sites, forest, and topographical maps. In addition, the 1/1000-scale city master plan of Eceabat, the largest community in the park, was utilized. As ancillary data, climate, flora, fauna, population, history, and settlement information was obtained from various reports and previous studies and was supported by literature review, field observations, and discussions with the park staff.

Three basic research steps were followed: analysis, evaluation, and synthesis. In the first step, natural and cultural features such as climate, flora, fauna, geomorphology, population, and historical importance of the national park are investigated. In the second step, existing cultural and historical landscape elements are investigated. In the final step, a set of recommendations are provided with respect to ecotourism in the Gallipoli area. Even though the recommendations are generated for a specific case, they may be applicable to other protected areas in developing countries and in Turkey.

RESULTS AND DISCUSSION

Site Description

Gallipoli Peninsula Historical National Park was established in 1973 and was included in the UN List of Protected Areas in 1997. Covering a total of 33,000 ha, the park is located at the southern end of Gallipoli Peninsula, on the European side of the Dardanelles (Figure 1).

The 5 km wide (at its narrowest) and 80 km long peninsula is surrounded by the Saros Gulf (one of the least polluted corners of the Aegean Sea) on the NW and the Aegean Sea on the west. The Dardanelles (which is one of the most important waterways in the world), a coastline of ca. 750 km, gulfs, the Aegean Sea, and the Sea of Marmara are the most obvious features of Çanakkale City's natural environment (Kelkit and Ak, 2006). Across the Dardanelles are Çanakkale and the mythological (Homeric) battlefield of Troy. The peninsula is accessible by a main road from Istanbul (ca. 350 km) or by ferry from Çanakkale (where there is an airport) and Lâpseki.

The region is on the "warm climate belt" of the world. The area is very windy (average wind speed is 4.0 m/s). Its average temperature is 14.9°C and average rainfall is 619.7 mm (Anonymous, 2004). The United Nations Environment Programme-World Conservation Monitoring Centre described the park's physical features as follows (UNEP-WCMC, 1988):

It is represented by a rather flat calcareous series of terraces, rising in steps to fairly mountainous terrain in the north. The shoreline varies from sandy beaches and bays to steep rock-faces and cliffs particularly in the vicinity of Saroz bay. Anafarta (Suvla) Bay on the northwest, between the Small and Great Kemikli promontories, is one of the best natural bays along the Thracian sector of the Aegean Sea. The northern and southern sections of the Gelibolu Yarimadasi reveal obvious traces of tectonic movements, while the centre of the region shows signs of having been hollowed out by water erosion at the end of the Pliocene and the beginning of the Quaternary periods. Gently inclined calcareous layers are to be found from the plateau extending towards the west behind Kilitbahir to the furthest extremity of the peninsula. The hilly or mountainous region to the north consists of peaks formed by strata extending in a south-west to north-east direction from Kanlisirt to Ureydag.

The park displays characteristics of the Mediterranean Floristic Region, which is mainly dominated by Pinus brutia,

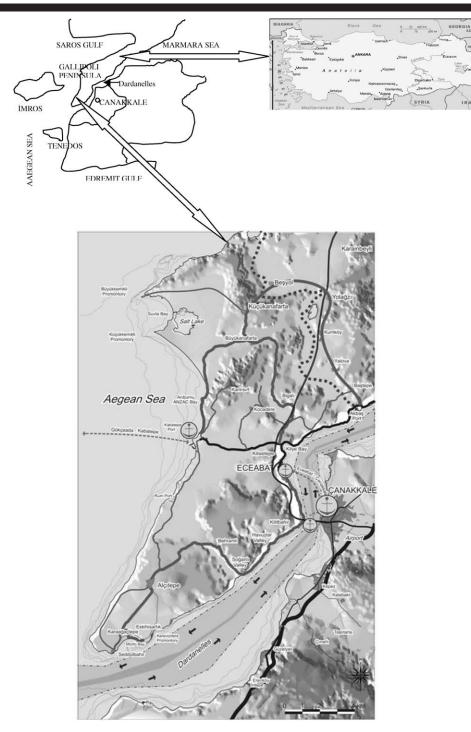


Figure 1. Location map of the study area.

Olea europae var. oleaster, Phillyrea latifolia, Quercus coccifera, and Arbutus andrachne. In a survey done between 1984 and 1986, 520 plant species belonging to 80 families and 313 genera were recorded in the park. The most economically important native vegetation species in GPHNP are Cardamine impatiens, Cappairs spinosa, Silene otites, Salicornia europaee, Amaranthus albus, Medicago coronata, and Hedysarum spinossissimum (Ilarslan, Çırpıcı, and Malyer, 1990).

There are many wild animals in GPHNP. It is a part of the Mediterranean Faunal Region, but at the same time it is separated from the main body of this fauna by some straits from the Balkans and others from SW Asia. The park is a shelter to

Table 1. Population of current settlements in the study area (Anonymous, 2007b).

Name of Settlement	Population
Eceabat	4778
Alçıtepe	585
Behramlı	417
Bigalı	228
Büyük Anafarta	444
Kilitbahir	1148
Kocadere	82
Küçük Anafarta	331
Seddülbahir	369
otal	8382

Erinaceus concolor, Talpa europea, Lepus capensis, Sciurus vulgaris, Myomimus roachi, Meles meles, and Sus crofa.

The peninsula is situated on one of the major migration flyways of the Western Palearctic. Some birds in the peninsula include Ardeola ralloides, Earetla garzetla, and Lainus collurio. Amphibians are scarce and only found at wet areas. The amphibians include Cyrtopodion kotschyi, Hemidactylus turcicus, Ophisaurus apodus, Lacerta praticola, Podarcis muralis, Podarcis taurica, Eryx jaculus, Coluber caspius, and Telescopus fallax. Fish include Dentex dentex, Obloda melanura, Sparus auratus, Clupea pilchardus, Mugil saliens, and Scorpeana porcus. The Saros Gulf, which extends along the northern part of Gallipoli Peninsula, constitutes one of the most important fish breeding grounds in the Aegean Sea (Aktar, 1984).

Some 20,000 ha of the park is federal land and is controlled by the Ministry of Forestry. The other 13,000 ha is private ownership subject to certain governmental controls. The park encompasses the municipality of Eceabat and eight villages (Table 1). The population of the area was 7563 in 1970, 7900 in 1990, and 8382 in 2000. Even though the numbers indicate a 0.94% population increase in the last decade, this rate is very low compared to the national average (13.3%).

These inhabitants are not sufficiently integrated into the Park's activities. The majority of these people pursue a rural lifestyle dominated by agriculture and animal husbandry. In Eccabat and Kilitbahir, however, people mainly work in the service and fisheries sectors. Some of the villagers of Eccabat run a minibus service for locals and tourists. As a result of the expansion of Çanakkale, these two settlements have become the suburbs of the city, primarily as retirement communities.

In the last few years, the number of summer houses and pensions has increased in Seddülbahir, once a quiet fishing town. This has brought an increase in the related service businesses. Alçıtepe village is the center of olive production, olive oil processing, and animal husbandry. In Behramh, agricultural labor and animal husbandry are important activities. Bigalı, Kocadere, Büyük Anafarta, and Küçük Anafarta are agricultural communities. However, because the agricultural land in Kocadere is relatively less fertile and the fertile parcels are smaller, the villagers have been selling their land to the people from Çanakkale. Similarly, the purchase of land by outsiders has been prevailing in Behramlı as well. Tomato farming is growing among the Bigalı, Büyük Anafarta, and Küçük Anafarta villagers. Wheat, barley, pea, sunflower, sesame, cotton, tomato, and eggplant are primary agricultural products in the study area. In addition, 370,000 olive trees exist in the park, yielding over 4000 tons/y of olives. Of this amount, 370 tons are consumed unprocessed, and the rest is used to obtain olive oil (600 tons/y). Agricultural machinery, fertilizers, and high-quality seed are commonly used by the villagers. This implies an entrepreneurial and innovative side of the locals (Anonymous, 2003).

Animal husbandry is not an economically sufficient activity as only a small portion is provided to the local market. Most of the animal is being grown to meet household consumption. Half of the 1000 cows and two-thirds of the 7000 goats are being milked in the park. Approximately 6000 sheep are grown for their meat.

More than 50 families, mainly living in Kilitbahir and Seddülbahir, earn their living with fishing. Boats of deep-sea fishers from other areas of the Çanakkale region utilize Kabatepe harbor and its amenities on the west of the peninsula (Anonymous, 2003).

Because traditionally the area has been an agricultural community, the inhabitants were mostly unfamiliar with tourism and its related activities until the last five years. With the announcement of the national park as one of the tourism hotspots established by the government in 2005, major changes have occurred in the perception of tourism of the locals.

Historical Description of the Site

Gallipoli Peninsula has been a bridgehead, a barrier, and a meeting place for different cultures over the centuries. The peninsula, with its unique geographic setting enriched by a beautiful coastline, undulating terrain, and diverse scenery, reveals interaction and continuity between different cultures and displays uninterrupted settlement from the Neolithic Age on. Vulnerable to the impacts from Europe on the west and Asia on the east, the peninsula was close to Troas, which has a major impact on the region's culture. The Prehistorical Achaeans Age is the only period when political unity was established in Troas. Starting with the reign of King Priamos, Troy was the greatest power in the region. Together with Troy, which was an administrative center surrounded by fortification walls, modern Karaagactepe, Bastepe, and Kilisetepe were the most important Bronze Age centers of the peninsula.

The study area contains the sites of a number of ancient cities, such as Prostesileion near Karaagactepe, Elaus (Eski Hisarlik), Arrhianei (Havuzlar), and Alapeconnessos (Büyükkemikli) (Aktar, 1984). The region was strategically important for the Greeks, Romans, Byzantines, and later generations, as exemplified in the Dardanelles battles of World War I.

Here the European allies attempted to push through the Dardanelles in 1915 to support Russia. The Ottoman Empire resisted the allies on Gallipoli Peninsula. This is when the future founder of the modern Turkish Republic, Lieutenant Colonel Mustafa Kemal (Ataturk), rose to distinction. Memorials have been erected for the Turkish soldiers as well as those of the English, French, Australian, and New Zealand forces who lost their lives at Gallipoli, a total of 200,000 soldiers (Bilbasar, 1984). Commemoration ceremonies are held every

year on March 18 for the Navy, April 25 for the battle of Seddulbahir, and August 10 for the battles of Anafartalar.

In 1973, the Republic of Turkey decided to show that no war is a cause for permanent hostilities but can serve as a basis for friendship. In the spirit of this, the area has been designated as a national park.

Ecotourism Potential of the Site

Çanakkale has always been an attraction point for domestic and international tourism with its natural and historical beauties. Gallipoli Peninsula Historical National Park has recently been one of the most attractive locations in the Çanakkale region. People come here for the following reasons (in order of importance):

- (1) For the 1915 Çanakkale land and sea wars, and for the historical cultural resources
- (2) For the natural resources of the national park
- (3) For the ceremonies of March 18, April 25, and August 10

The number of foreign and domestic tourists visiting the area was 230,249 in 2004, while it was 100,628 in 1994 (Anonymous, 2007a). These do not represent the exact numbers because there are multiple entrance and exit gates at the national park, and they are difficult to control. The National Park Service estimates that nearly one million people have visited the park since its establishment. This number includes those people coming for the ceremonies (GPHNP staff, personal communication). Seasonal intensification of park usage causes problems in terms of transportation, infrastructure, and environment quality.

Unlike some other national parks in Turkey, there is no entrance fee for GPHNP. The national park includes sites intimately associated with Turkish national pride, where approximately 250,000 young people, including a large portion of the finest troops of the Turkish intelligence unit, were lost. Also in the park, the World War I Dardanelles naval and Gallipoli land battles took place. The park shelters an extensive range of sunken ships, guns, trenches, forts, bastions, and a myriad of other war-related artifacts together with Turkish, Australian, New Zealand, English, and French war graves, most of which are registered as historical sites and objects.

The national park has 47 Turkish memorials (such as Turkish Memorial, Sergeant Yahya Memorial, 57th Regiment Memorial, and Havuzlar Memorial), 33 Commonwealth and French memorials and cemeteries (such as Helles Memorial, Lone Pine Memorial and Cemetery, French Memorial, and ANZAC [Australian and New Zealand Army Corps] Cove Memorial). There are also many castles, such as Kilitbahir, Seddülbahir, Çamburnu, Kilye, and Bigali, in the national park. Furthermore, the park comprises 21 first-degree, 3 second-degree, and 2 third-degree archeological sites (Figure 2).

The park offers a range of activities, from excursions to the battlefields and war memorials to sightseeing in the countryside and at local ruins. Lodging may be found in villages within the park boundary. There are also camping facilities. Hotel accommodations exist at Çanakkale, Gallipoli, and the Saros Gulf. There are outdoor exhibits, reconstructed trenches, and

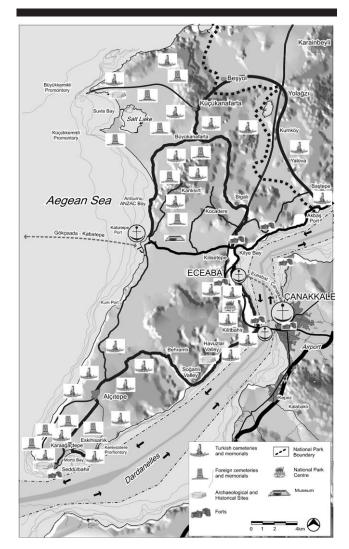


Figure 2. Map of historical and cultural features in the study area.

museums of World War I battles such as Cimenlik Fort at Çanakkale.

The Ministry of Environment and Forestry and the National Park Service have decided, in 2007, that Gallipoli Peninsula should benefit more from tourism than only offering daily activities. The master plan prepared by the National Parks and Gaming Management group envisages places for visitors to stay, but provision of hotels, motels, and educational establishments by the private sector is not permitted. Hunting activities that formerly occurred in the area are completely forbidden. Also, privately operated marble and stone quarrying is prohibited.

With its natural, historical, and cultural resources, GPHNP is an important resource exclusively for ecotourism. To help improve ecotourism in the villages, we suggest that boardinghouse establishments should be encouraged. Subsequently, accommodation spots within the national park's Eceabat, Kabatepe Camping, Kum Port, and other village settlements should be dedicated in a timely manner. Eceabat would become the center for coordinating the ecotourism activities in the study area. The other villages would function as centers of boardinghouses. Also, local farmers should be persuaded to grow indigenous agricultural products such as wheat, barley, peas, sunflowers, corn, olives, tomatoes, eggplants, and fruits (peaches, apples, cherries, grapes, and pears). Local tour companies should be encouraged to improve their service quality. Restorations are needed to preserve the architectural heritage of Turkish baths, mosques, fountains, cemeteries, and so on.

Museums focusing on the battles of 1915 and the ethnographic values of the region should be established. In order to further diversify tourism activities within the national park, more-specialized and new tourism types such as battlefield tourism, sunken tourism, scuba tourism, health tourism, conference tourism, photography, gaming, and sea sports should be promoted. Scrutiny of climatic data shows that the climate of the region is suitable yearround for ecotourism activities. Seasonally, the activities could include bird-watching, photo safari, wildlife watching, sportfishing, bicycling, scuba diving, farming tourism, trekking, and horseback riding in the spring and summer seasons; bird watching, photo safari, wildlife watching, scuba diving, flora tourism, and trekking in the fall; and finally, scuba diving in the winter. However, in its current state, only sportfishing, scuba diving, and trekking activities are conducted in the national park. The sites for these activities are easily accessible as the national park has a sufficient network of roads (paved and unpaved).

CONCLUSIONS

National parks are accepted as more-suitable areas for ecotourism in Turkey and other parts of the world. The conservation of biodiversity and natural and cultural resources is the underlying goal of protected-area management. Even though national parks have certain legal conservation status, they have been used for different recreational activities at an increasing rate each year. This could have a negative impact on the park's ecosystem. For example, in a study on vegetation of GPHNP, Ekim and Akman (1988) have noted a decline in the forest vegetation and concomitant spread of shrub and low trees like Phillyrea latifolia, Quercus coccifera, Arbutus andrachne, and Cistus creticus. Celik et al. (2003) conducted a study in Dilek Peninsula-Great Menderes Delta National Park during the period 1998-2001. They argued that demographic pressures, land clearance, fires, and tourism may effect land degradation.

Ecotourism is known to promote low-impact, nature-friendly tourism activities in protected areas. These activities may sometimes involve unnatural applications and lead to alterations of landscape structure and function. Even though ecotourism was ideally seen as understanding of and respecting sensitive ecosystems, environmental degradation may occur due to the arrangements of less-suitable landscape elements such as extended concrete pavements (Booth and Jackson, 1997) or the introduction of exotic plants (Livingston, Shaw, and Haris, 2003)—and the use of chemicals (insecticides and pesticides); environmental pollution and destruction may escalate further in camping and picnic areas in the form of trampling and removal of some vegetation (Estabrook, 1981). All these undesirable actions contradict the concept of ecotourism. There are too many examples of this in many countries, particularly in developing countries such as Maldives, Nepal, Peru, Kenya, Costa Rica, Ecuador, South Africa, Botswana, Mexico, Zimbabwe, Nairobi, Guatemala, Jamaica, the Dominican Republic, Bolivia, and Brazil (Wood, 2002).

Gallipoli Peninsula Historical National Park is the most important historical, natural, cultural, touristic, and recreational area of Canakkale. Its administration, protection status, visiting rules, and applications were defined in the GPHNP Law (No. 4533, enacted February 20, 2000). Nevertheless, in the case of Gallipoli, private establishments responsible for managing the camping and picnic areas generate harmful effects to nature by developing incorrect strategies for their operation. Thus it is necessary to adopt management and planning approaches that balance economic, social, and environmental benefits to minimize the adverse effects of tourism. In order to prevent possible environmental problems generated by ecotourism activities (i.e., erosion, pollution, alteration of fauna and flora, security, and cultural degradation), selection of the most suitable sites and stabilization of the balance between visitor use and resource quality is crucial. Therefore, cultural and natural assets of the site should be evaluated holistically. Because nowadays the historical and cultural sites are more favored as tourism destinations, developing an efficient visitor management strategy becomes a challenging but crucial task in that the activities should be allocated within a conservation and use framework and in a manner that does not harm natural qualities. Otherwise, the areas taken into custody for their resource value will be greatly damaged for the sake of providing financial gains.

The following recommendations were developed to help the National Park Service in their endeavor to promote ecotourism activities in GPHNP:

- (1) The activities of other public institutions that affect the dynamics in the national park should be orchestrated by the National Park Service and nongovernmental organizations also could be an active participant in park management.
- (2) Innovative approaches to sustainable ecotourism applications and to effective park management should be developed with active citizen participation. The national park and its surroundings are not only rich in culture and history but also in natural beauty. The topography and other landscape attributes of the park must therefore be protected and sustained, undisturbed by humans.
- (3) The national park, with its war history, biological diversity, coastal morphology, and climate is a strong candidate for ecotourism in Çanakkale. These aspects should be promoted holistically and awareness of them should be raised.
- (4) In addition to historical assets of GPHNP, all resource attributes (geological, floristic, archeological, *etc.*) also should be investigated in greater detail.
- (5) Ecotourism activities currently conducted in the park should be increased in variety.

- (6) Focal sites for current and proposed activities and their routes should be displayed in detail on the maps. The existing road network could be used for the routes.
- (7) Carrying capacity of each activity should be determined before it is allowed in order to prevent the negative impacts pf the activity on sensitive plant and animal communities.
- (8) With leadership of the National Park Service, tour guide courses must be arranged for local people. Engagement in this activity should be based on a license granted after a certification program.
- (9) Park administrators should arrange meetings with local people frequently and enable participation of local people in projects to improve the decision-making process.
- (10) To prevent environmental hazards that result from visits on the memorial days of the year, visitor and resource carrying capacities should be defined. Effective monitoring could also help maintain the balance between meeting human needs and protecting the environment.

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