

**ECOTOURISM AND VERNACULAR ARCHITECTURE IN  
KOPRULU CANYON**

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**Abstract:**

It is necessary and inevitable that tourism develops in places where historical and natural beauties exist. However, because it is important to maintain not only the natural landscape but also the vernacular culture while utilizing their benefits, one should adopt a selective and plan-oriented attitude towards tourism. Therefore, expertise is required to design tourism buildings and attractions that are compatible with the natural ecosystem. Ecotourism is a concept describing tourism that is developed on the basis of ecological criteria. In this study, the ecotourism opportunities in the Koprulu Canyon Sanctuary in Antalya were examined. We have defined a proposal based on the existing vernacular architecture.

**Key words:** Ecotourism, Vernacular Architecture, Koprulu Canyon.

**Introduction**

Tourism enables everyone to discover the natural and cultural resources of a region and therefore contributes to the economical growth of an area. However, an important problem for the investors, planners, and designers responsible for developing the tourism industry is the means by which tourists can be attracted to particular regions and experience vernacular cultures while preserving the cultural and natural values.

The International Ecotourism Society (TIES) defined ecotourism as “the travel which is sensitive about the natural places and protects the environment and pays attention to the welfare of the locals”. According to the World Tourism Organization, several issues must be considered when bringing ecotourism to various regions, such as protection of biological diversity, attention to the welfare of the locals, increased awareness of the tourists, enable small-sized enterprises to offer services to small tourist groups, ensure that tourists and locals act responsibly with regard to the tourism industry, allow only minimal consumption of irremovable resources,

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manage tourism at the local level, and improve job opportunities in favor of the locals (UNWTO, 2011). B. Cicin Sain summarizes the concept of ecotourism with four criteria: minimize environmental effects, minimize effects on and maximize respect for the vernacular architecture, maximize economical benefits for the host country, and maximize recreational benefits for the tourists (Ozturk, 1997; Ozkan, 2005).

In the 1990s, several designers (architects, landscape architects and industrial designers) wanted to produce sustainable, ecological products but encountered difficulties in finding the appropriate technologies and materials, as well as their great expense. In the 2000s, the situation had not changed. “Sustainability” was used for the first time in 1987 in a report prepared by the World Commission on Environment and Development, but it is a difficult concept to define. Next, terms such as “green”, “ecological”, and “environmentally friendly” were used to describe products and activities (Strongman, 2007). However, ecological design criteria may sometimes conflict with common design approaches and, as a result, it may be necessary to go beyond common and popular design approaches. Individuals involved in ecological design and planning are concerned with the orientation of the building forms and settlements and their integration with environmental elements, the types of energy systems used in the buildings or the materials, and the reutilization of old buildings and environmentally friendly designs (Filik, 2004).

The Koprulu Canyon National Park is a rich sanctuary in terms of nature and culture. Although administrators in Koprulu Canyon have put measures in place to ensure that ecotourism is maintained in this region in the future, the ecotourism model utilized could be improved. At Koprulu Canyon National Park, which is the subject of this study, we encourage the reutilization of the existing traditional buildings for the purposes of tourism, emphasizing the traditional lifestyle of the region.

### **1. Koprulu Canyon**

Koprulu Canyon National Park is 63 kilometers northwest of Manavgat district and 85 kilometers northeast of Antalya, Turkey (Figure 1). The area was accepted as a national park in 1973 (MPAVGM, 1992).

Koprulu Canyon National Park is an extremely diverse geomorphologic structure, with an altitude that ranges from 110 meters above sea level at Beskonak to 2500 meters at the summit of Bozburun Mountain. Except for Beskonak, which is located at the lowest altitude, the rest of the National Park is composed of high, rough, and rugged mountains which extend along the two sides of Koprulu Canyon. The Koprucay River flows between the Toros Mountains and the Egirdir and Beysehir lakes, and then flows into the Mediterranean Sea, creating an extremely wide and

beautiful 12-kilometer long canyon within the boundaries of the National Park (OSB, 2006).



*Figure 1.* Location of the Koprulu Canyon (Anonymous, 2011)

In this region, the Mediterranean climate prevails. The average annual precipitation is 1727 millimeters. The highest temperature in July is 28 degrees Celsius and the lowest temperature in January is 6.2 degrees Celsius (MBM, 2011).

Traditional lifestyle and architecture, authentic natural formations, and special and precious species of fauna belong to the area, including redwood forest, the ancient city of Selge, ancient Roman path, the Koprucay ecosystem, natural forests (black pine, cedar, and juniperus), men rocks, and canyon cave systems, that may be counted among the valuable resources of the area. There are 11 villages in Koprulu Canyon National Park and approximately 7500 people inhabit these villages. Sources of income of the locals include animal breeding based on pasturing; farming; beekeeping; picking thyme, chestnuts, and cotton; working temporarily out of the village; harvesting forest products except for the wood; and revenue from partial tourism. Due to the scarcity of land suitable for cultivation, very little vegetation can be produced. The tourism activities in the Koprulu Canyon National Park are mostly limited to rafting, with the annual number of visitors comprising only 7% (600 000 people) of the visitors to Antalya. The number of the visitors to the ancient Roman city of Selge within the park

comprises only 1% of the visitors to the park, which is only 0.06% of the total visitors to Antalya (OSB, 2006). Therefore, young locals must work seasonally at the tourism facilities on the coasts of Antalya, Manavgat, and Serik (Akıllı, 2004).

## 2. Ecotourism based on Vernacular Architecture

“Vernacular” is used to describe characteristics that are native to a particular region. Jukka Jokilehto has emphasized the worldwide importance of preserving the vernacular and ethnicity, intangible traits of heritage (Heath, 2009). Koprulu Canyon Sanctuary is a living cultural landscape and is highly appropriate for ecotourism, according to the criteria set by the World Tourism Organization for protected regions. However, for ecotourism to be possible, structural elements are needed to meet the needs of the visitors in terms of accommodations and access to food and beverages.

Most of the dwellings located in the Koprulu Canyon Sanctuary are common to rural areas of the Mediterranean (Figures 2 and 3). They are one- or two-story buildings made of pitch-faced stone walls connected with bonding timber, with hipped-gable roofs. Barns, furnaces, and storerooms usually comprise the first floor. The upper floor is usually comprised of two rooms, which are partitioned by wood beams, and generally lead onto a timber terrace. The doors and window-frames are also made of wood, and there is usually an adjacent garden. Apart from the archeological structures, the examples of traditional architecture are no protected structures. However, some nontraditional dwellings exist in some of the villages, built from reinforced concrete, in order to provide services for rafting activities.



*Figures 2 and 3.* The traditional dwelling and settlement pattern in Koprulu Canyon (Original, 2008).

In addition to utilizing the existing villages, vernacular dwellings that have been abandoned will be may be furnished in accordance with the traditional lifestyle and rented to tourists, but small bathrooms made of PVC

material will need to be installed on the upper floors. Attendants may be scheduled to come at certain hours of the day to provide the housekeeping needs of the tourists and to deliver traditional meals that the tourists order ahead of time. By preventing the abandonment of vernacular architectural buildings, it is possible to increase tourism while preventing extinction of the living cultural landscape.

### 3. Conclusion and Evaluation

Ecotourism has been discussed in terms of protecting the canyon area and meeting the needs of the locals (Ayasligil and Duhme, 1993). Ceylan (2004), by mentioning that Koprulu Canyon Sanctuary had extremely rich touristic attractions in terms of unique natural and cultural beauties and suggesting that it was necessary to make these characteristics well known on local, regional, national, and international levels, the opportunities for creating recreational tourism activities in the area while preserving the ecosystem were examined. However, recent studies have highlighted the importance of proper governance of the natural resources in this area (Kemer, 2009) as well as preservation of endemic plant and animal species (Tavsanoğlu and Cosgun, 2009; Karahalil et al., 2009). Akıllı (2004) and Nayir (2009) evaluated the possibility of ecotourism in terms of environmental, sociocultural, and economic factors, discussing the environmental risks of the existing tourism activities, problems with deficiencies in the infrastructures of the buildings, and the attitudes of the locals. The Ministry of Forest and Water Affairs published a report, "Management of Cultural Resources Plan of Koprulu Canyon National Park I and II", detailing the cultural and landscape values of the area in socio-economic terms and discussing the advantages and disadvantages of establishing ecotourism in the area. Based on the environmental and especially the socioeconomic data obtained from these studies, a limited ecotourism model, which means that the tourists would voluntarily live under the same conditions as the locals, is suitable.

In this study of Koprulu Canyon National Park, we propose a model for ecotourism that attracts attention to the vernacular architecture and the natural assets of the area.

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