



Geo-ecological Values and Sustainable Geotourism Potential of the İğneada Floodplain Forests and Lagoon Lakes, NW Türkiye

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Received: 17 October 2025 / Accepted: 24 March 2026
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Abstract

The İğneada Floodplain Forests, located in Demirköy District of Kırklareli Province, are among the most significant natural heritage areas of Türkiye due to their ecological, hydrographic, and biological values. This study identifies the geomorphological, ecological, and socio-cultural heritage components of the İğneada Floodplain Forests and evaluates the geotourism potential of the region. A qualitative research design was adopted, employing field observations and document analysis methods. The findings indicate that İğneada possesses considerable geoheritage value with its unique lagoon lakes and dune systems, exceptionally high ecological heritage potential with its rich floral and faunal diversity, and a notable socio-cultural heritage dimension shaped by local cultural characteristics. It is understood that geotourism and ecotourism activities in İğneada could contribute both to the conservation of natural heritage and to local development. However, due to the sensitivity of the floodplain ecosystem to external pressures, sustainable management and planning approaches are of vital importance. The study concludes by offering integrated recommendations for conserving the region's values while promoting their assessment within the framework of geotourism.

Keywords Geoheritage · Geotourism · Ecological heritage · Floodplain forests · Erikli Lake · Mert Lake

Introduction

Natural heritage sites are areas that possess both scientific and aesthetic value due to their geological formations, landforms, ecosystems, and elements of biological diversity, and thus must be preserved and passed on to future generations.

The concept of geoheritage refers to the identification, assessment, conservation, and sustainable management of geological and geomorphological features that illustrate the evolution of the Earth and contribute to scientific, educational, cultural, and tourism values (Wimbledon 1996a; Gray 2013; Kazancı 2010; Brilha 2016; Turoğlu 2025).

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