



FISH AND FISHERIES

Biodiversity for livelihoods



THREE COUNTRIES, TWO LAKES, ONE FUTURE

ТРИ ДРЖАВИ, ДВЕ ЕЗЕРА, ЕДНА ИДНИНА

ΤΡΕΙΣ ΧΩΡΕΣ, ΔΥΟ ΛΙΜΝΕΣ, ΕΝΑ ΜΕΛΛΟΝ

TRE VENDE, DY LIQENE, NJË E ARDHME



www.prespapark.org

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Our **VISION** is Prespa lakes basin managed jointly by the three countries, for the preservation of natural and cultural heritage and the wellbeing of its peoples.

Our **MISSION** is to offer ways to restore and keep this balance.

Prespa Park Coordination Committee





Due to the geographic isolation of the Prespa Lakes from all other water bodies, except for the inflowing rivers, the number of endemic fish species is very high. The maintenance of the endemic species in the Prespa Lakes basin is of central ecological importance because their local extinction would mean global extinction. Despite that, not all of the endemic fishes in the basin are given legal protection.



Otesevo, Fishermen's village
Photo by Nehru Suleyman

Biodiversity for Livelihoods

Curiously enough, even the eel can be found in Prespa, despite the fact that the lakes have no direct connection to the sea.

The wider area is also a home to not one, but two endemic trout species. The Pelister stream trout belongs to the Braycinska River

in the Prespa Lakes Basin, while the Pelagonian stream trout belongs to the Maloviska River and the Crna River basin (ie the Axios/Vardar basin).

Nearly one third of all the fish species are classified as endemic – seven. The total of 23 species

and two hybrids includes 12 indigenous fish species. The rest – exotic species – have been introduced by humans, deliberately or by accident.

Species found in the Prespa lakes only and in no other place in the world: Prespa bleak (*Alburnus belvica*), Prespa nase (*Chondrostoma prespense*), Prespa barbel (*Barbus prespensis*), and Prespa loach (*Cobitis meridionalis*). In addition, the Pelister stream trout (*Salmo peristericus*) may only be found in the rivers in the basin, such as River



Photo UNDP archives



Fisherman's boat by the reedbeds on Micro Prespa, Aghios Achillios
Photo by Sonja Seizova

Braychinska and its tributaries, Aghios Germanos stream, and others. The Prespa roach (*Rutilus prespensis*) and the Prespa minnow (*Phoxinellus prespensis*) are considered Balkan endemics.

The Prespa barbel is protected by the Habitat Directive of the European Commission, (Annex V), whereas the protection for the Prespa bleak is provided by the I the Bern Convention (Annex III).



Managing Fisheries and Fish Biodiversity

Fishing is reported to be one of the most important sources of income for the Albanian part of the basin, contributing more than 15% of the annual per capita income. In the Greek share of the basin, approximately 13% of the labor force is currently involved in fishing.

Statistical data on fishery production and the species caught in the Prespa lakes basin are, nevertheless, fragmentary. In Micro Prespa, from 1960 onwards, production has been

Prespa fisherman building traditional hut on water
Photo by Nehru Suleyman

steadily decreasing due to different factors, including initial overfishing, habitat change, and socio-economic change. Data on fish production in Macro Prespa are even less accurate and vary greatly over the years. In general, fish production in the basin has suffered a serious decrease over the last two decades or so due to a combination of ecological, social and economic factors.



Asamati, Ezerani Strict Nature Reserve
Photo by Alvin Lopez

The reported decline of the fishery in the basin is but one indicator of the ongoing changes in the lake ecosystems. The fish biota in the Prespa lakes basin has been under an increasing pressure from different human activities such as water abstraction, pollution, over fishing of certain species in the past, but also introduced species. For instance, the populations of some of the indigenous fishes have been apparently decreasing

Prespa carp - local specialty
Photo UNDP archives



A man and the Lake
Photo UNDP archives

due to overlapping diets with introduced species. Moreover, predation on endemics' eggs and fry has caused reduction in the size of, and change in the structure of the populations of some indigenous species, such as the carp, chub, Prespa barbel, and Prespa nase. Ultimately these changes have altered the entire biological community and possibly trophic structures of lake ecosystems. In other words,

changes in fish biodiversity have affected other species, higher (birds) and lower (plankton) on the food web, resulting in disturbances in the lake ecosystem functioning.

It is worth noting that the adverse effects of the human activities are aggravated by the increasing effects of climate aridity.



UNDP assistance
to local fishermen, Albania
Photo by Ardit Konomi / UNDP

Prespa Park Helps Restore Prespa's Fishery

The restoration of fisheries in the basin is high on the Prespa Park priority list. Serious efforts are being invested into increasing the transboundary cooperation on:

- Basin-wide assessment of fish resources, related habitats and biological demands;
- Development of common sustainable fisheries plan, including a common licensing system, and uniform fishing regulations; and
- Monitoring the ecological impacts of the introduction of exotic species, and other.

In addition to this, the joint Strategic Action Plan for the Sustainable Development of the Prespa Park proposes a number of specific actions at the national level, such as:

- The introduction of a fishing ban during the spawning period for selected species, and the modernization of the basic fishing infrastructure in Albania.

Fishermen on Macro Prespa
Photo by Nehru Suleyman



A boat
Photo by Nehru Suleyman

- The achievement of the optimum lake level to permit fish spawning and the promotion of the management of wet meadows in Greece.

- The protection of River Golema - a spawning habitat for a significant portion of Prespa fishes, in the FYR of Macedonia.



Otesevo - Fishermen's village

Photo by Nehru Suleyman



Traditional fishing in shallow waters

Photo by Nehru Suleyman



Sun-dried fish "cironki", FYR of Macedonia

Photo UNDP archives





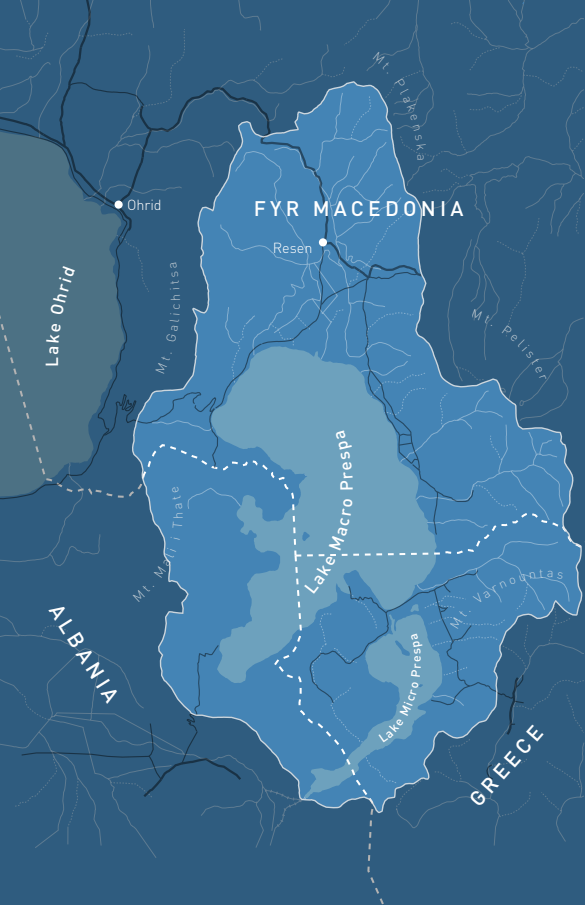
Traditional wooden boat
Photo by Nehru Suleyman



Waterfowl on Prespa
Photo UNDP archives



Fishing on the Lake
Photo UNDP archives



Prespa Park boundaries

*Adapted, courtesy of the Society
for the Protection of Prespa*

The Prespa Lakes basin (Southeast Europe) is a globally significant ecological and cultural landscape comprising four National Parks and several protected areas with unique habitats, flora and fauna.

In 2000 the Governments of Albania, FYR Macedonia and Greece agreed to work together to maintain the natural values of the area and introduce environmental management practices in the Prespa Park by integrating ecological, economic and social goals.

Two Wetlands of International Importance, designated under the Ramsar Convention on Wetlands, lie within the Transboundary Prespa Park boundaries. The area has been acknowledged as a Gift to the Earth by WWF-International, and European Union has included Prespa Lakes in its policies on water and species protection.

The Prespa Park Coordination Committee is a trilateral body representing governments, local authorities and civil society. It supports environmental protection and sustainable development in the Prespa Park for the preservation of natural and cultural heritage and the wellbeing of its peoples.

Since 2006 a GEF/UNDP Project supports Integrated Ecosystem Management in the transboundary Prespa Lakes Basin, to last until 2011.



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