

Report on the eel stock, fishery, and other impacts in:

Albania

2023

Note to the reader – this document accompanies a series of spreadsheet tables that provide the bulk of the data in a format most suitable for the working practices of WGEEL. Summaries of these data are provided in this document.

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1 Summary of national and international stock status indicators

1.1 Escapement biomass and mortality rates

No available data.

1.2 Recruitment time series

No available data.

2 Overview of the national stock and its management

2.1 Describe the eel stock and its management

The Albanian Eel Management Plan delineates a singular Eel Management Unit (EMU) referred to as AL_total (see Figure 1). This designation is informed by key climatic factors, the geographical distribution of lagoons, lakes, and rivers, the established Ecoregions as per Directive 2000/60/EC, the patterns of eel fisheries, and the positioning of the principal authorities engaged in water and eel management. Management strategies related to fishing limitations and environmental considerations are implemented within the EMU_AL.

The eel fishery in Albania is primarily restricted to the capture of adult eels during their migratory journey to the Atlantic for spawning. Additionally, there exists a very limited fishery for some yellow eels, which occurs alongside the capture of adults, utilizing longlines in the sole lake where this practice is permitted. The majority of fishing activities take place at migration points within the Albanian lagoons. Since 2019, the first Albanian Eel Management Plan (EMP) has been implemented, addressing the fishery of European eels and regulating the annual quantities of eels released. As of now, there is a lack of scientific data regarding recreational fishing for eels in Albania.

The eel fishery is typically conducted using traditional fence traps, which capture eels alive during their reproductive migration that occurs annually from September to January. Fyke nets are also employed in areas where permanent traps are not established; these nets are set up exclusively during the migration season. In all regions where eel fishing takes place, Fishery Management Organizations (FMOs) are present. Under the Albanian Eel Management Plan (EMP), these organizations are mandated to release between 10% and 40% of the annual eel catch. Since the implementation of the Albanian EMP, numerous measures have been enacted to protect and enhance the population of European eels.

The Albanian EMP initially instituted a measure that mandated fishermen to release between 10% and 40% of their total eel catch. This objective was successfully met by the conclusion of 2022, with total releases attaining the 40% mark.



Figure 1. Map of EMUs in Europe and Mediterranean and the Albanian EMU (AL_total).

2.2 Significant changes since last report

This is the first country report for Albania.

3 Impacts on the national stock

3.1 Fisheries

In Albania, a regulatory framework for the collection of eel data was instituted following the ratification of the Albanian Eel Management Plan (AEMP) in 2019. This initiative is overseen by the Directorate of Agricultural Development Programs, Food Security and Rural Development, as well as the Directorate of Fisheries and Aquaculture Services within the Ministry of Agriculture and Rural Development. The National Management Plan serves as the designated instrument at the national level, enabling Albania to align with other European nations, whether EU members or not, in the sustainable utilization of eel resources and to engage in efforts aimed at the recovery of eel stocks.

3.1.1 Glass eel fisheries

Glass eel fisheries are banned in Albania in accordance with the fisheries law and relevant regulations. Historically, glass eels have not been utilized as a food source in Albania, and for several decades, they have not been employed for restocking purposes either.

3.1.2 Yellow eel fisheries

In Albania, there is currently no specific fishery dedicated to yellow eels. The Albanian Environmental Management Plan (EMP) stipulates a complete ban on the capture of eels measuring less than 39 cm, with an anticipated increase in the minimum size requirement to 40 cm by 2024. Following the introduction of the Albanian Eel Management Plan (AEMP), the use of fyke nets in lagoons has been prohibited, resulting in the absence of legal catches of yellow eels. Consequently, it is not possible to assess the fishing effort for this species.

Table. The minimum size of eel that may be captured in the Albanian waters

2019 cm	2020 cm	2021 cm	2022 cm	2023 cm	2024 cm
30	35	36	38	39	40

3.1.3 Silver eel fisheries

In Albania, the majority of eel fishing occurs in a single lake and eight coastal lagoons, utilizing fixed barrier traps. It can be inferred that during certain times of the year, the predominant species captured is the silver eel. Fishery Management Organizations (FMOs) oversee operations at all these eel fishing locations. Fishermen not affiliated with these management structures are prohibited from engaging in eel fishing. The number of fyke nets employed for eel capture at each site is regulated by the EMP to ensure stability in fishing practices.

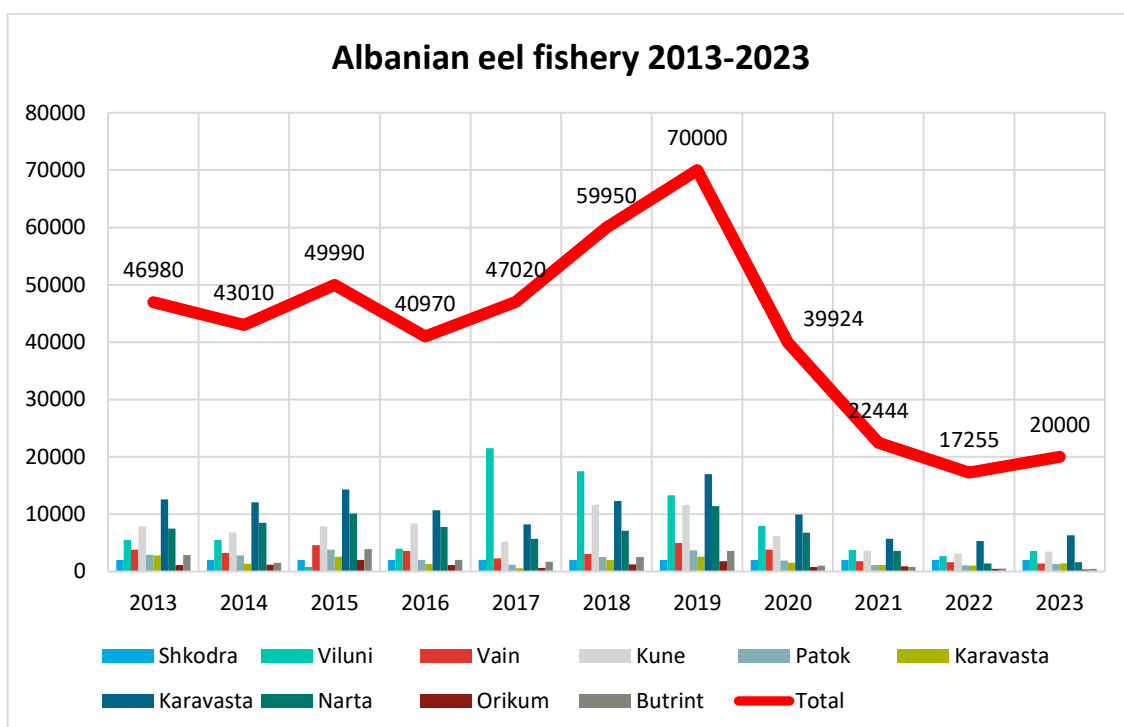


Figure 1. Albanian eel fishery 2013-2022

The illustration above depicts the eel fishery in Albania during the period from 2013 to 2023. The data on total eel landings indicate a persistent decline in the eel fishery since 2020, culminating in a low of 17 tonnes, which is notably lower than the figures recorded over the previous nine years. However, in 2023, there was a reported increase in the catch of European eel, amounting to 20 tonnes.

According to the Albanian Eel Management Plan (EMP), all eel fishing locations released 30% of the silver eels captured in 2022. The total weight of these releases was 10,105 kg, comprising 2,175 kg from freshwater and 7,930 kg from transitional waters. Notably, there have been no releases of European eel in 2023.

3.2 Restocking

There are no restocking programmes for the European eel in Albanian waters.

3.3 Aquaculture

In Albania no exist data for the aquaculture of the European eel. This activity has never been practiced in Albania.

3.4 Entrainment

In Albania, there exist three large-scale hydropower stations, each with a capacity ranging from 600 to 250 megawatts, alongside a minimum of 27 small-scale facilities with capacities between 100 and 5 megawatts. A significant number of these installations feature substantial dams, which obstruct the migration of silver eels to their spawning habitats.

3.5 Habitat Quantity and Quality

No available data.

3.6 Other impacts

No available data.

4 National stock assessment

4.1 Description of Method

4.1.1 Data collection

No available data.

4.1.2 Analysis

No available data.

4.1.3 Reporting

The results of the above-mentioned analysis are reported both in the DCF report and also in the country report submitted to the WGEEL.

4.1.4 Data quality issues and how they are being addressed

No available data.

4.2 Trends in Assessment results

No available data.

5 Other data collection for eel

5.1 Yellow eel abundance surveys

No available data.

5.2 Silver eel escapement surveys

No available data.

5.3 Life-history parameters

Age Distribution

The age of the specimens was established through the examination of otoliths from 112 samples obtained from Shkodra Lake as part of the CSBL project in partnership with GIZ Germany. Although these data have not yet been published, they pertain to samples collected over a single year. Additionally, a separate study initiated in 2022 has involved the analysis of approximately 140 silver eels, with plans to analyse a minimum of 100 individuals annually until 2025.

Length Distribution

A total of 140 eel samples were analysed to create the Length Frequency Histogram. The smallest sample measured 356 mm in total length, whereas the largest reached 634 mm. The size classes that appeared most frequently were 450 mm and 550 mm.

5.4 Diseases, Parasites & Pathogens or Contaminants

Parasites & Pathogens

No Data at the moment.

A study is currently being conducted from 2022 to 2025, which has yielded some preliminary findings regarding the infestation of *Anguillicola crassus*; however, the data has not yet been published.

6 New Information

In Albania, research on the European eel remains insufficient. In 2022, a PhD study commenced to investigate the local population, the silvering process, and the health status of the European eel in the Karavasta lagoon, with a duration of three years. So far, 140 individuals of both sexes have been analysed. Preliminary data indicate that the local population is free from the parasite *Anguillicola crassus*.

7 References
