

Life
PREDATOR

PREVENT, DETECT AND COMBAT THE SPREAD OF
SILURUS GLANIS IN SOUTH EUROPEAN LAKES TO
PROTECT BIODIVERSITY

LIFE21 NAT/IT/PREDATOR
n. 101074458



NEWSLETTER

LIFE PREDATOR



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2023
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*LIFE PREDATOR (2022-2027) aims to combat the spread and further introduction of wels catfish, *Silurus glanis*, in Italian and Portuguese lakes and throughout Mediterranean Europe, where it is an Invasive Alien Species (IAS), thus contributing to the application of the Regulation (EU) n. 1143/2014 on exotic species.*

As part of the project it is tested in 50 lakes (23 in Italy, 25 in Portugal and 2 in the Czech Republic) and developed an early detection method based on environmental DNA, whose information is integrated by the reports collected with the initiatives of Citizen Science simultaneously activated.

In 10 selected lakes where the species is widespread and abundant, different catch methodologies are tested to select the most selective and effective method, which will then be applied to reduce the biomass by 90% in 5 small isolated lakes included in the Natura 2000 network, by at least 10% in large lakes and reservoirs, by 50% in small reservoirs. At least 130 fishermen and 100 anglers will be involved.

Massive awareness-raising campaigns are also planned specifically for fishermen but also for the general public, including at least 12,000 school children.

The project created the Southern European wels catfish Management Group (SEMG). Protocols and Best Practices of Wels Catfish Capture will be transferred to at least 15 local authorities, to be integrated in their management plans, in particular for Natura 2000 sites.

*Finally, but not at least for importance, a virtuous model of circular economy will be developed and promoted to encourage the food consumption of *S. glanis* and therefore the fishing catch. During the project, however, the fish removed with the containment campaigns will be entrusted to social cooperatives for the sale of meals at fair prices to at least 1,000 people in difficulty.*

LIFE PREDATOR

A EUROPEAN PROJECT TO STOP
THE SPREAD OF WELS CATFISH IN
MEDITERRANEAN LAKES

From September 2022 until 2027, the first European project for the contrast and containment of the diffusion of wels catfish in lakes of south-western Europe is ongoing: LIFE PREDATOR. Launched on 1 September 2022, the project is co-funded by the European Union's LIFE programme, the EU's financial instrument for environment and climate action.

WHO WE ARE. Coordinator of LIFE Predator is the Water Research Institute of CNR (IRSA-CNR), in partnership with G.R.A.I.A. srl, the Protected Areas of the Cozie Alps, the Metropolitan City of Turin, the Faculty of Science of the University of Lisbon - Faculdade

www.lifepredator.eu

de Ciências da Universidade de Lisboa (CIENCIAS), the Science Research and Development Association of the Science Faculty of the University of Lisbon - FCIências. ID - Associação para a Investigação e Desenvolvimento de Ciências (FC.ID) and the Biology Centre of the Academy of Sciences of the Czech Republic - Biologické centrum AV ČR.



OUR SUPPORTERS. In addition to the European Union, also Regione Lombardia, Fondazione Cariplo, the Office of Fisheries of Canton Ticino (Switzerland), the Portuguese fish processing company “Conserveira do Interior” and the Portuguese municipality of Vila Velha de Rhodao co-finance the project.

In addition, about 50 associations and cooperatives of fishermen and anglers, environmental associations, museums, educational institutions participate in the project as supporters.

OUR MISSION. The goal of the project is well described by its full title: “Prevent, Detect, Combat the Spread of *Silurus glanis* in Mediterranean lakes to protect biodiversity”, here endangered, among other environmental threats, by the presence of this highly invasive alien species. Combating the spread of invasive alien species has, in fact, long since become a priority in EU and national policies for the defence of native biodiversity. This is particularly true for the Mediterranean area, naturally rich in biodiversity and with many species now threatened with extinction, where wels catfish, introduced by man, represents one of the main threats for the health of the communities and for the conservation of the native fish species, mainly due to the remarkable body size that it can reach, its nocturnal predatory habits and its great ecological adaptability.

THE PROJECT AREA. The project involves three European countries: Italy and Portugal, where wels catfish

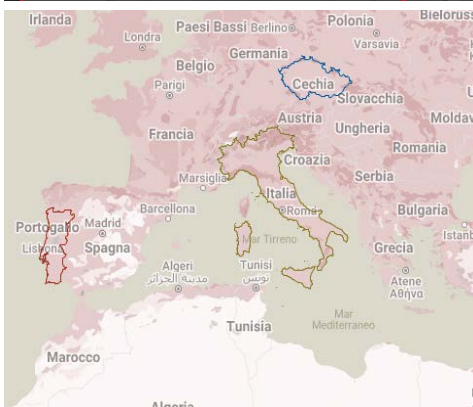
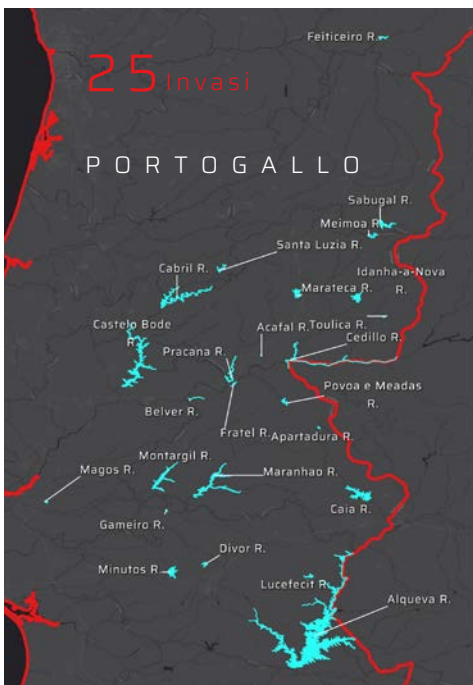
LIFE is one of the “historical” programmes of the European Commission, operating since 1992 and is the main financial instrument of the European Union dedicated to the environment and climate action. The Programme plays an essential role in supporting the development, implementation and updating of Union policies and legislation on the environment, including those on nature and biodiversity, and on climate action, through the financing of projects of various sizes, which aim to demonstrate the technical and economic feasibility of effective solutions (techniques, methods and approaches) to different and complex environmental and climate change-related problems, and aimed at ensuring the conservation and protection of nature and biodiversity. The LIFE Programme contributes fully to the objectives and targets of the European Green Deal.

The financial envelope of the LIFE Programme for the period 2021-2027 is EUR 5,432 million divided between the four Sub-programmes comprising: “Nature and biodiversity”, “Circular economy and quality of life”, “Mitigation and adaptation to climate change”, and “Transition to clean energy”.

Nature 2000 is the organized system of areas for the conservation of biodiversity in the territory of the European Union, and in particular for the protection of habitats (forests, grasslands, rocky environments, wetlands) and rare and threatened animal and plant species. The Nature 2000 ecological Network originates from the European Union Directive 92/43 “Habitats” and is based on the identification of areas of particular environmental value called Sites of Community Importance (SCI) then designated Special Areas of Conservation (SAC), that go to place side by side the Special Protection Areas (SPA) for the avifauna, foreseen from Directive 2009/147/CE “Birds” that replaced the historical directive 79/409.



WELS CATFISH IS
AN INVASIVE ALIEN
SPECIES IN ITALY
AND PORTUGAL.
FOR THIS REASON
HERE WE COMBAT
ITS SPREAD!



is invasive alien species, and the Czech Republic, where the species is native and naturally evolved with the local fish fauna, whose balance also depends on its well-being. As stated by its title, LIFE PREDATOR focuses on lakes: 50 lakes/reservoirs are directly involved in the project: 23 large and small lakes of the Piedmont and Lombardy prealpine area in Italy, 25 reservoirs in Portugal and 2 reservoirs in the Czech Republic, the latter investigated as environmental control systems, where the species is native and will obviously not be targeted by the containment actions.

WHAT WE DO. The project implements actions on several fronts, from that of the contrast and direct control of the diffusion of the torpedo in the lakes where it is invasive alien species to that of the promotion, the use of the torpedo as a food resource in Italy, where the alien species is abundant but not exploited by the local gastronomic culture,, encouraging the development of a virtuous model of circular bioeconomy with high added value in terms of supporting biodiversity and reducing the environmental footprint. Project key actions are:

- the development of effective and selective methods for the capture of wels catfish in the different lake types (large and small lakes and reservoirs);



Foto: Mattia Nacciola

- the selective capture of wels catfish and its demographic control aimed at reducing its abundance in 10 lakes, some belonging to the Natura 2000 network in Italy and Portugal;
- the development of an early warning system based on environmental DNA, to detect the presence of the torpedo in a body of water from a few drops of water, investigating the presence of its DNA. This technique will also be accompanied by a surveillance of citizens (citizen science), fishermen and any volunteer who wants to be involved, which will have the task of monitoring and promptly reporting the possible appearance of the torpedo where to date it is still absent;
- the contrast to wels catfish in Lake Maggiore by promoting its use for food. To such purpose a social cooperative operating in the field of the catering on the territory of Verbania and the hotel institute "Maggia" of Stresa will be involved in the plan;
- last but not least, the awareness and involvement of local population and in particular of fishermen on the need to combat the spread of this invasive alien species (in the specific case of the project, in Italy and Portugal).

With a monitoring activity that involves the verification of the situation before and after the interventions, the effectiveness of the project actions will be evaluated and an after-LIFE plan will be drawn up for the project, defining a strategy aimed at making its interventions lasting and effective over time. In particular, an evaluation of fish biomass will be carried out, for example, in Lake Maggiore and Lake Iseo, in support of fish fauna management policies of these lakes.

THE PROJECT LOGO. The logo design, through shapes and colors, tells the main features:

- the silhouette of the target species wels catfish;
 - the profile of Mediterranean Europe, that is the intervention area;
 - the shape of a fisherman, as the main stakeholder;
 - the profile of the double helix of DNA, an indicator of the early detection technique based on environmental DNA;
 - hexagonal forms, symbolically representing life and, by transposition, the LIFE Programme;
 - the colour blue, evocative of the water element;
 - the grey colour, which recalls the shadow of the impact of the alien species and at the same time the balanced approach of the project;
 - the orange colour, indicating the threat given by the *Silurus*, invasive alien species in the lakes of Mediterranean Europe.
- Since January the official project website is active on the web:

WWW.LIFEPREDATOR.EU

BEST PRACTICES

NATURE 2000 NETWORK

ENVIRONMENTAL DNA

CIRCULAR ECONOMY MODEL AS A FOOD RESOURCE

CITIZEN SCIENCE INVOLVEMENT OF FISHERMEN AND ANGLERS

MONITORING AND AFTER-LIFE PLAN

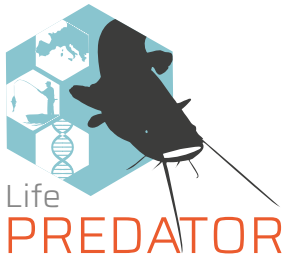
Entra nella squadra LIFE PREDATOR!

If you are an angler or a fisherman or simply a citizen sensitive to the project topics and if you share our goals, please, join our invitation! We ask you to share information, nothing more. To be part of the team, fill out the online form that you can find on this page of the project official website: "HELP US!" (www.lifepredator.eu). You will find the survey in Italian and Portuguese. Or choose one of the options below and go directly to the survey:

- if you are an angler, [CLICK HERE](#);
- if you are a fisherman, [CLICK HERE](#);
- if you are a simple citizen, [CLICK HERE](#).

THANK YOU FOR YOUR KIND COOPERATION!





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2022 - 2027
PREvent, Detect and combAT
the spread Of *Silurus glanis* in
south european lakes to protect
biodiversity

Partnership:



CNR-IRSA
G.R.A.I.A. Srl

Città Metropolitana di Torino
Ente di Gestione Parchi Alpi Cozie



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Ciências



Biologické Centrum AV ČR, v. v. i.

Co-financers:

LIFE Programme



È You can also follow us through the Facebook page
[@LIFEPREDATOR.EU](#), the Instagram profile [LIFEPREDATOR.EU](#) and
the YouTube channel [LIFE PREDATOR](#).

Stay connected and we'll update you step by step on the progress of our project!
Meanwhile, to learn more, consult on our website the monographic page on
Silurus glanis and explore the project area with the list of all the lakes involved.
You can also subscribe to the project newsletter and, if you like, join our call to
actively participate in LIFE PREDATOR as an environmental sentinel (see the
page: [HELP US!](#)).

For any additional information, please contact us and we will be happy to
answer: info@lifepredator.eu



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