

Restoration of lentic habitats and aquatic species of Community interest in high mountains of the Pyrenees

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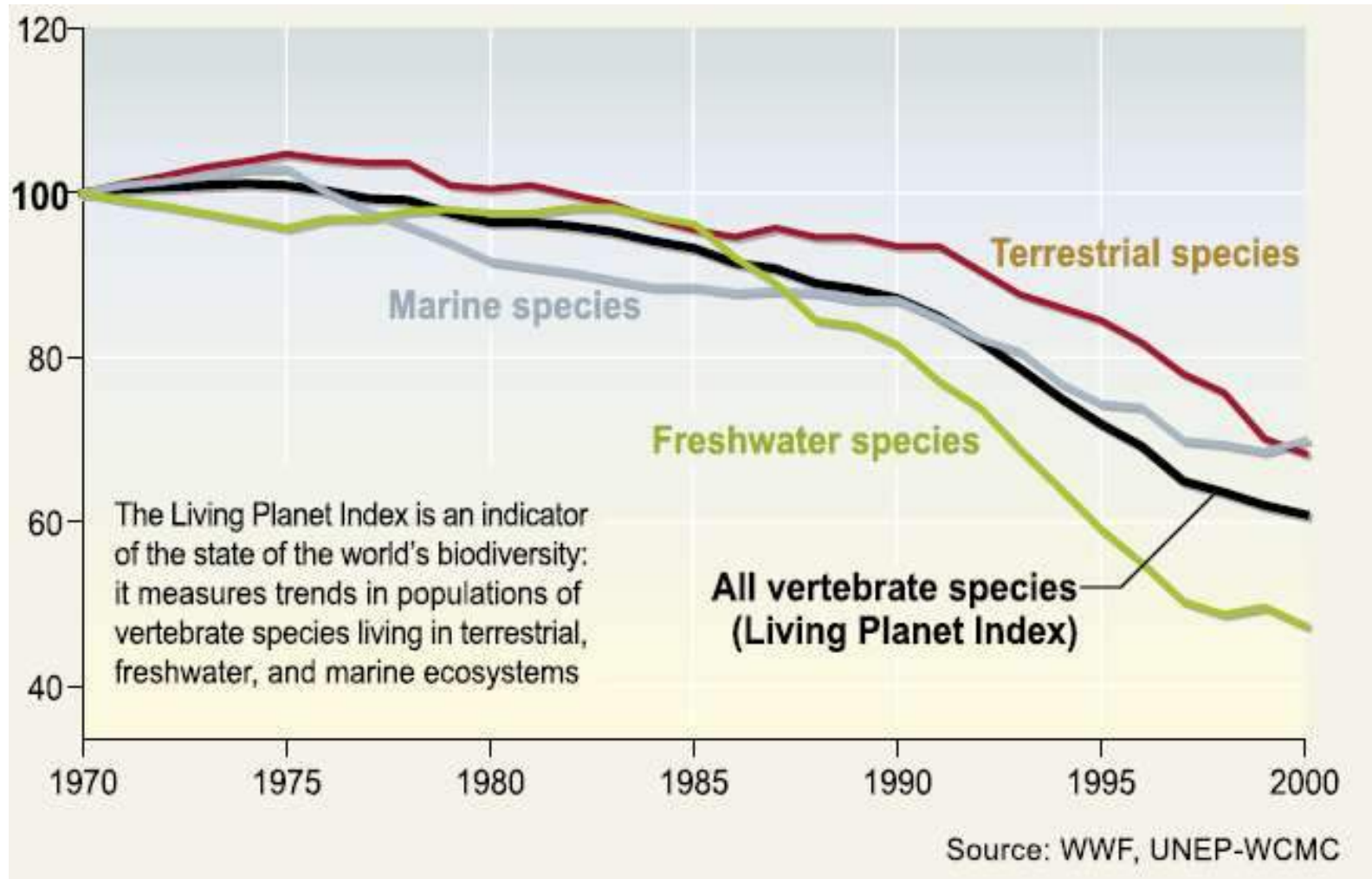
Center for Advanced Studies of Blanes (CEAB-CSIC)

www.lifelimnopirineus.eu



Global change

Biodiversity loss



Global change

Biodiversity value



Pyrenees

Natural heritage – Lakes





Pyrenees

Pyrenean aquatic environments are located at remote sites....

But are really **pristine** natural ecosystems?

Pyrenees

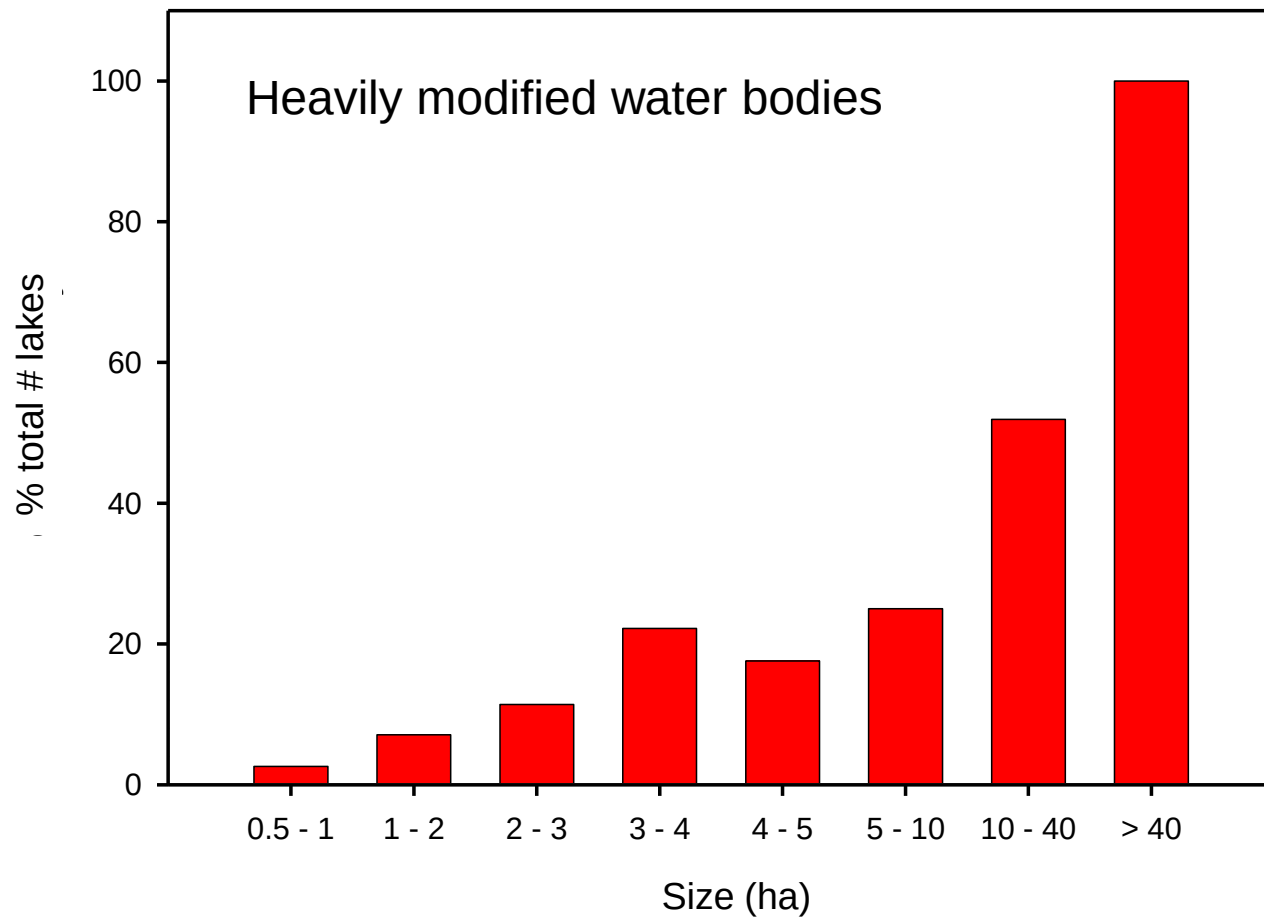
Direct impact

Hydroelectric exploitation

Introduction of allochthonous species

Pyrenees

Hydroelectric exploitation



Pyrenees

Invasive species



Florida Turtle, <http://deanimalia.com>



Area of Origin, <https://www.zoobarcelona.cat>

Pyrenees

Invasive species

Rainbow trout



Brown trout



Brook trout

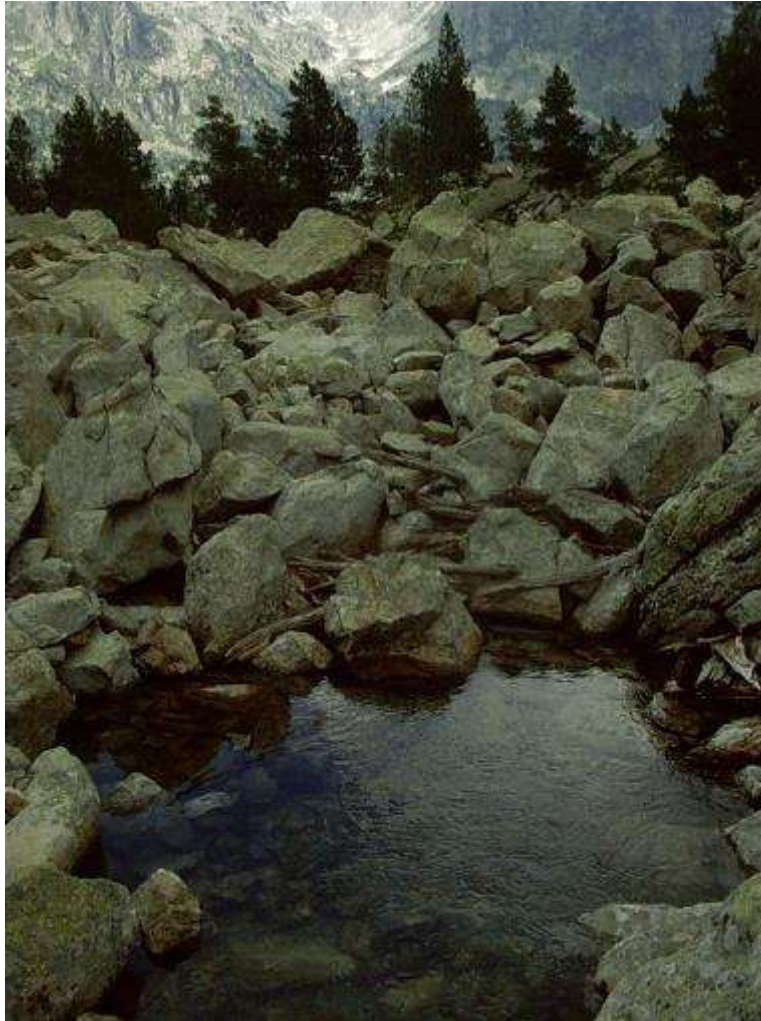


European minnow



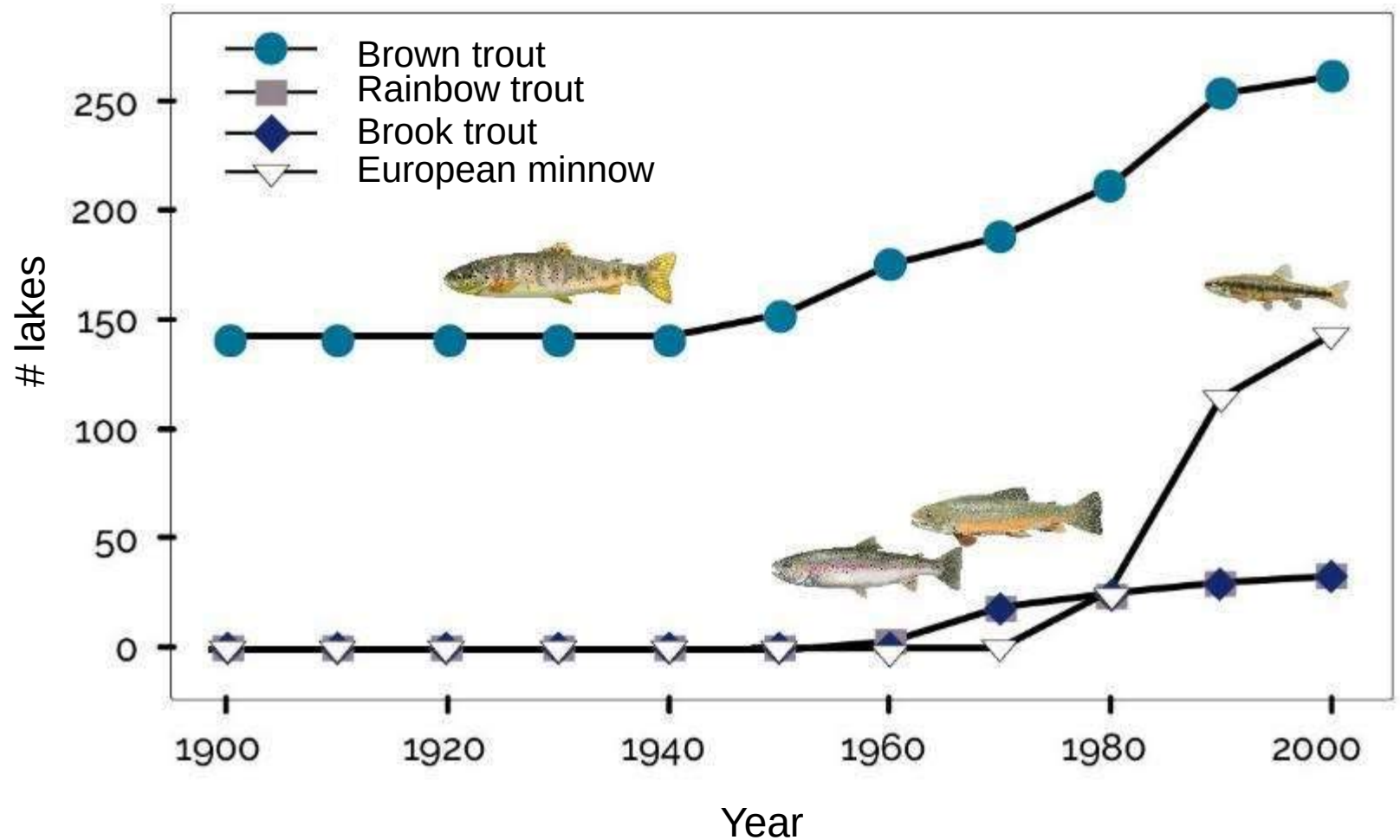
Invasive species - fish

Hydrographic obstacles



Invasive species - fish

Present distribution

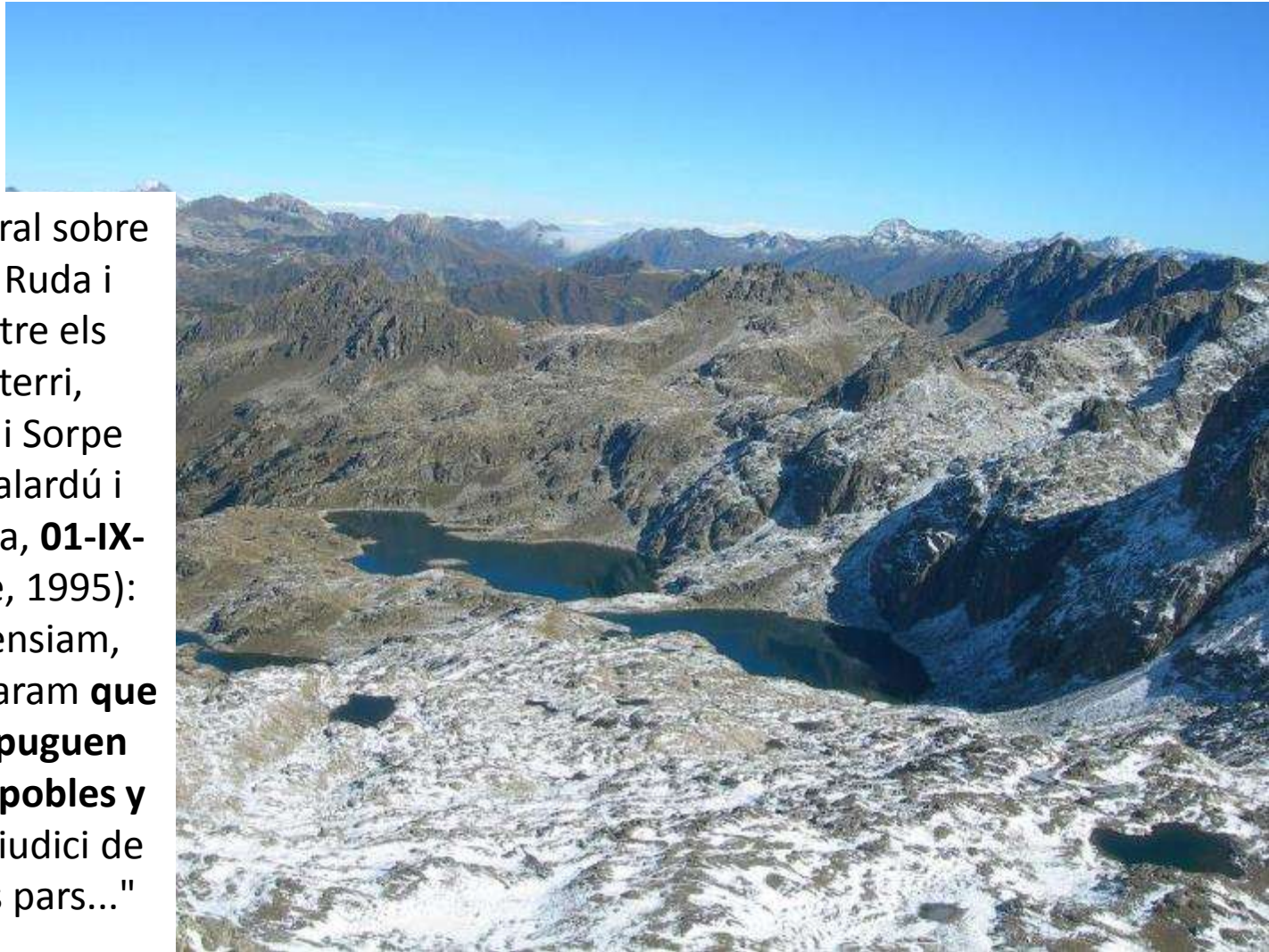


Invasive species - fish

Introduction process

Estanhs de Saborèdo (Val d'Aran)

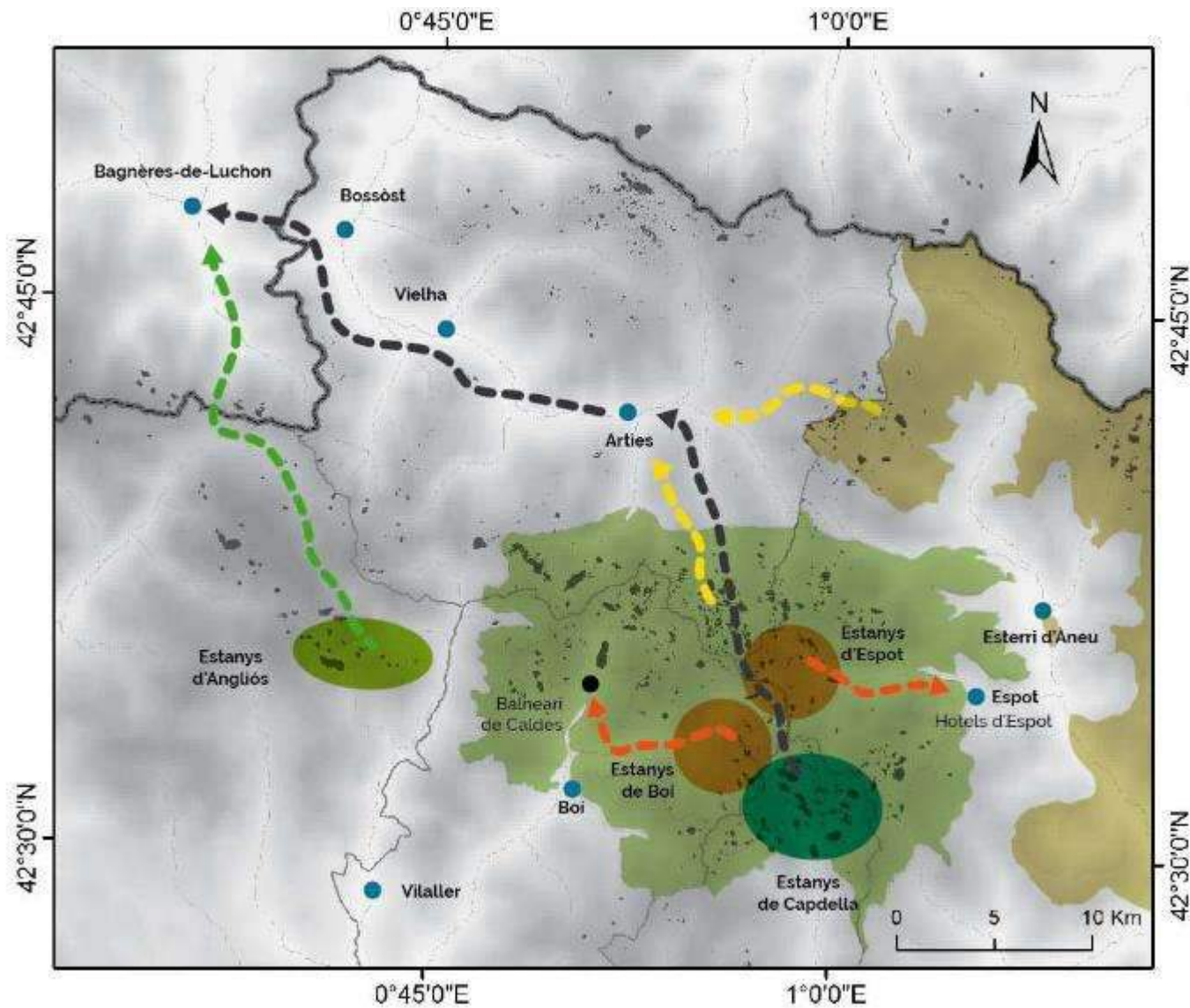
Sentència arbitral sobre les costes de Ruda i Saboredo entre els pobles d'Esterri, València, Son i Sorpe d'una part i Salardú i Tredòs de l'altra, **01-IX-1581**, (Bringué, 1995):
«...Item sentensiam, arbitram y declaram **que en los stanys pугuen pescar los uns pobles y altres** sens perjudici de ninguna de les pars..."



Invasive species - fish

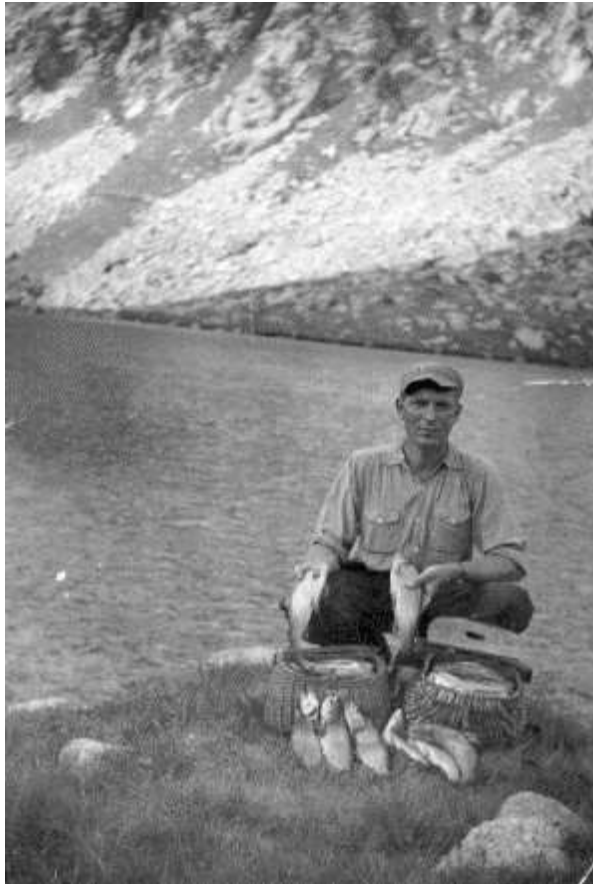
Introduction process

Trade 1845 - 1950



Invasive species - fish

Introduction process



L'estanyola de Dellui (Vall de Boí)
17th August 1957

Rosendo Vila
Casa Simona, Boí



Estany Dellui, 1955

Invasive species - fish

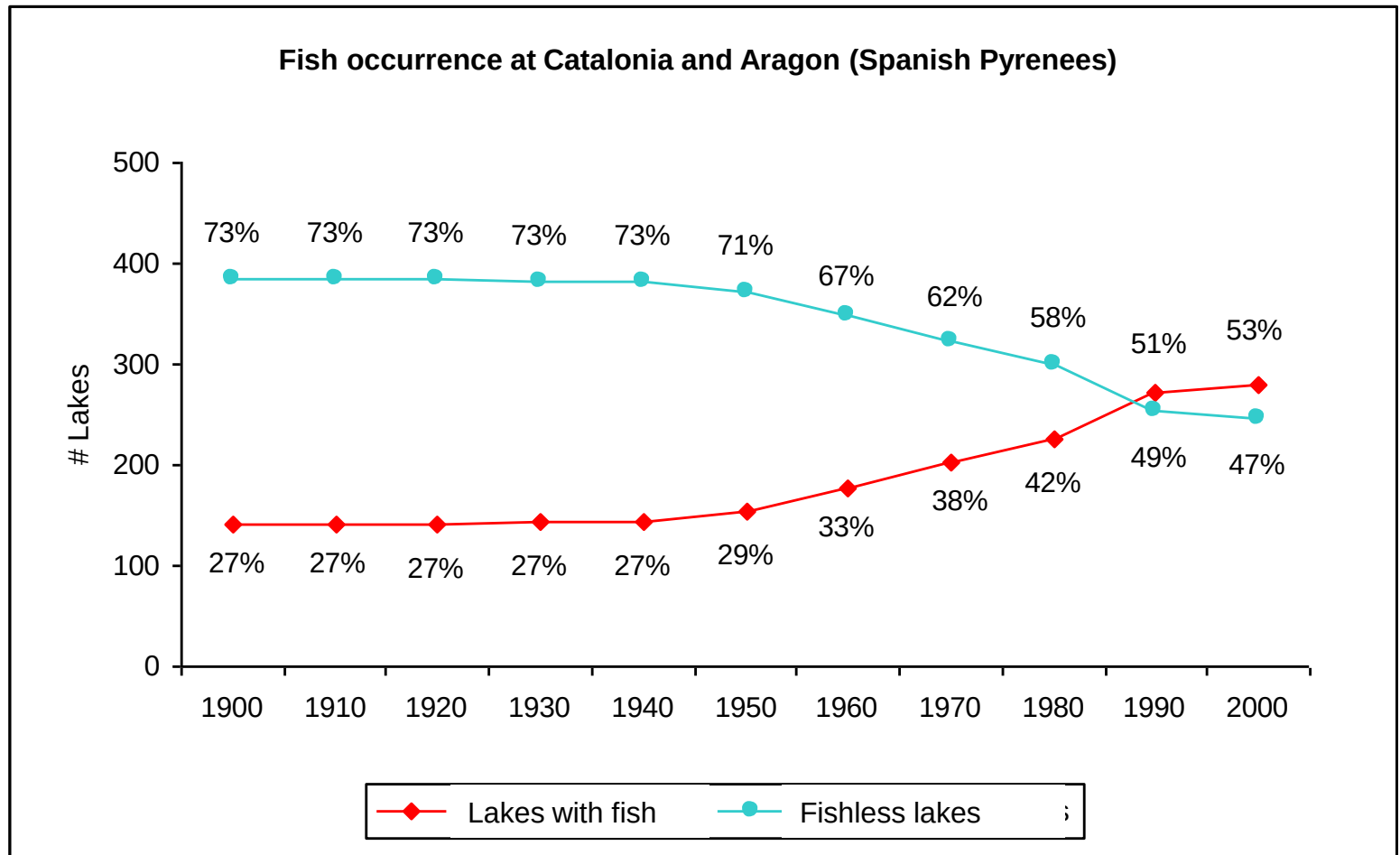
Introduction process

Piscifactoria de Cabdella (Vall Fosca)
1955-1970



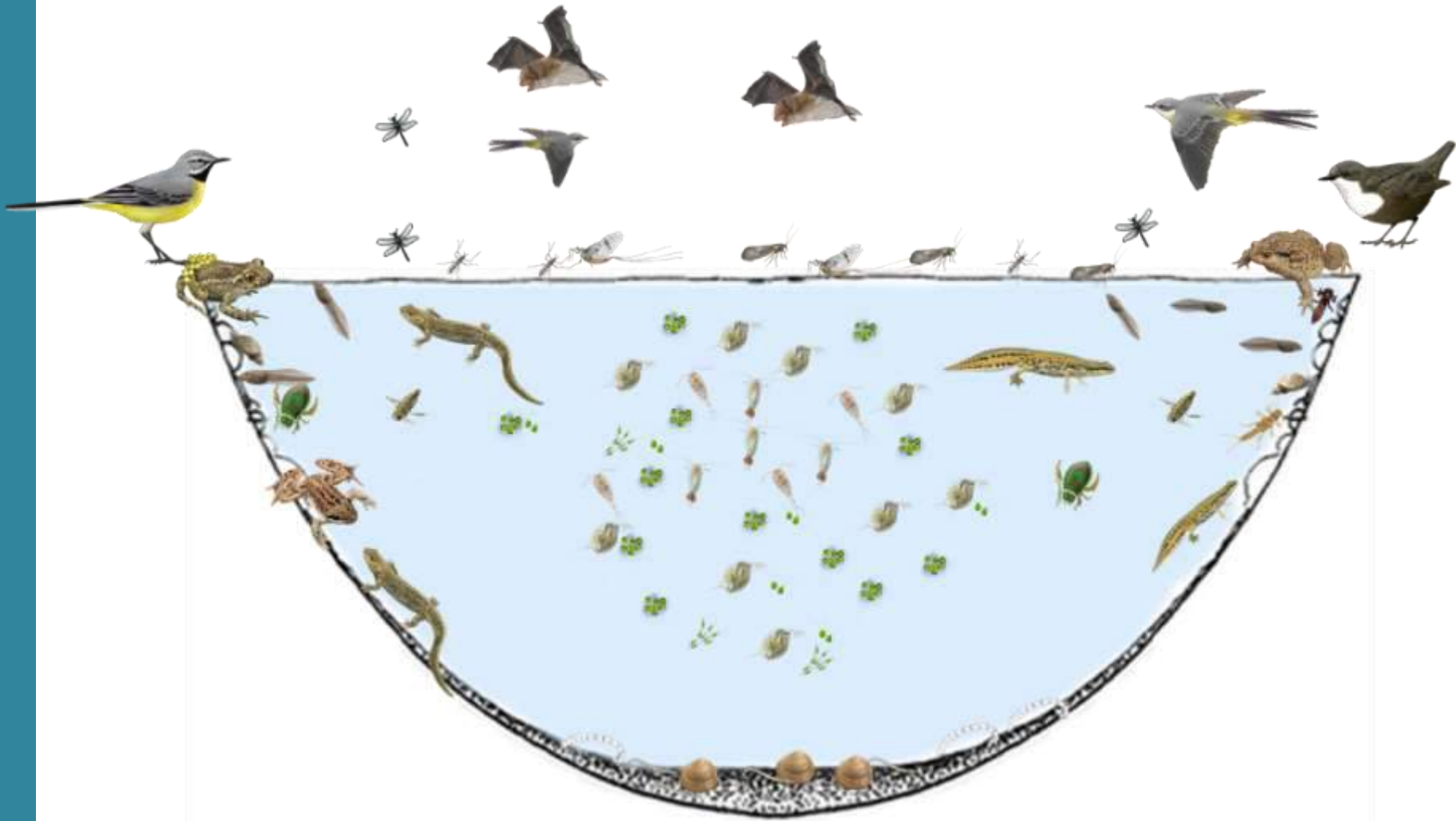
Invasive species - fish

Introduction process

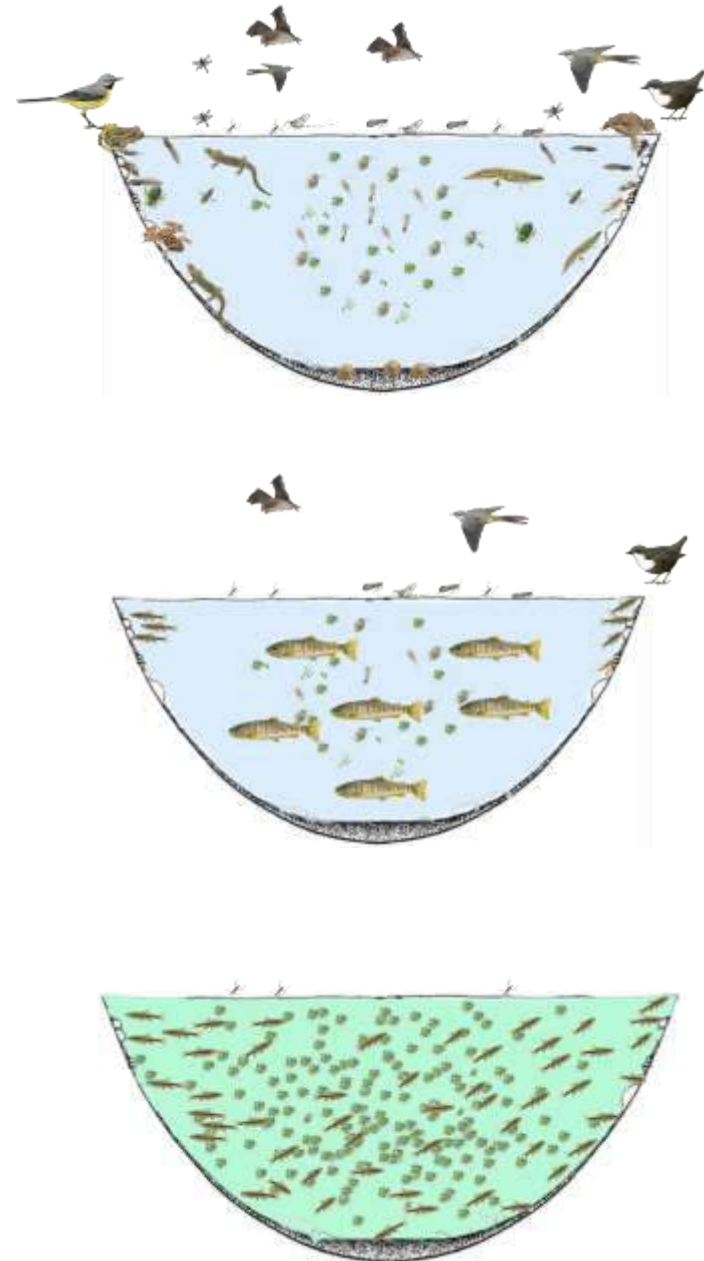


Invasive species - fish

Environmental cost?



Invasive species - fish





Restoration of lentic habitats and aquatic species of Community interest in high mountains of the Pyrenees

LIFE13 NAT/ES/001210



Partners

Coordinator

- CEAB (CSIC)

Project budget
2.7M €

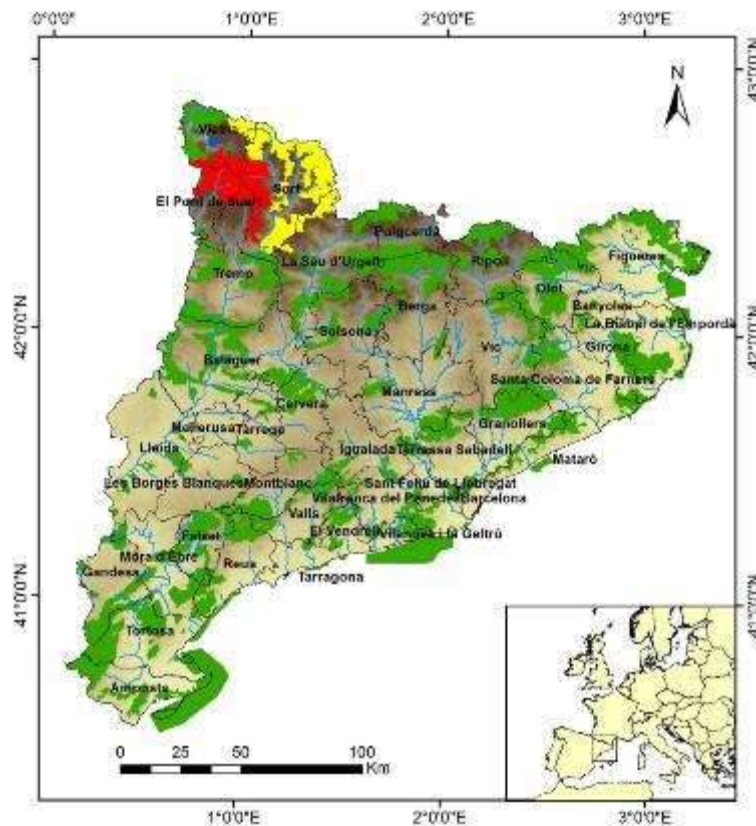
Associated beneficiaries

- Sorelló
- Universitat de Barcelona
- Conselh Generau d'Aran
- Generalitat de Catalunya (DAAM)
 - Parc Nacional Aigüestortes i Estany de Sant Maurici
 - Parc de l'Alt Pirineu
 - Servei Biodiversitat
- Forestal Catalana

Cofinancier

- Diputació de Lleida

Sites of Community Interest



Sites targeted by the project
LIFE+ LimnoPirineus:

► **SCI Aigüestortes ES0000022**

► **SCI Alt Pallars ES5130003**

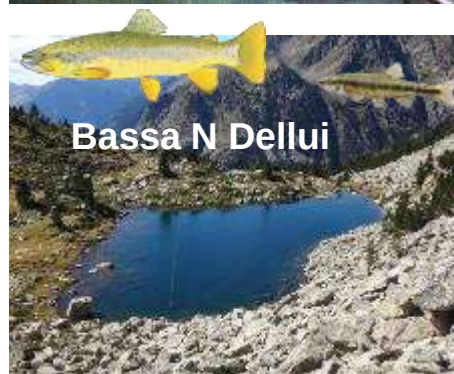
► **SCI Estanho de Vielha ES5130006**

Lakes

Project actions

Recovery of lakes to their natural fishless state

Parc Nacional d'Aigüestortes i Estany de Sant Maurici (àrea estricta)



Lakes

Threats– Fish introductions

Recovery of lakes to their natural fishless state

Parc Natural de l'Alt Pirineu



Conservation in action

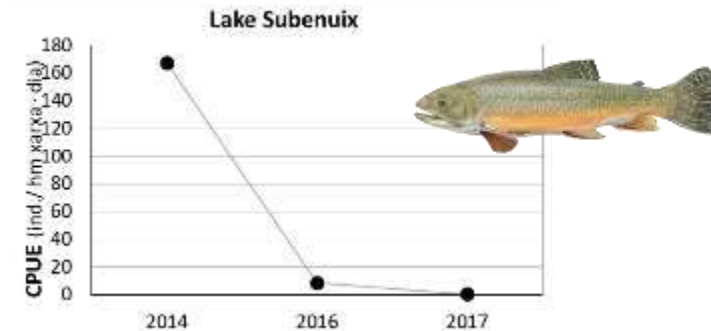
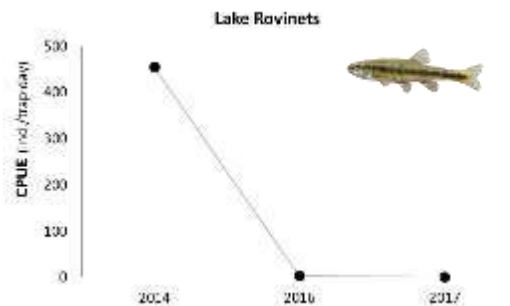
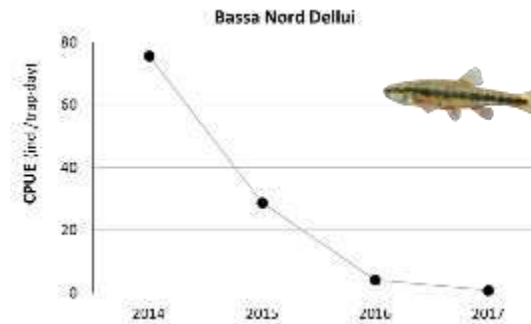
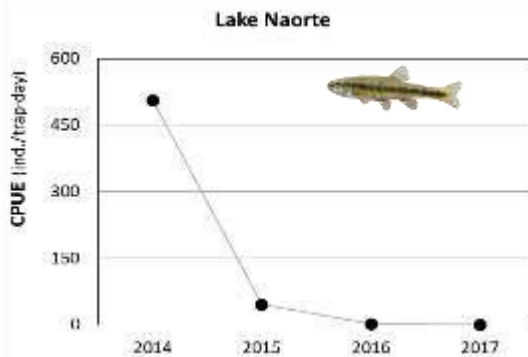
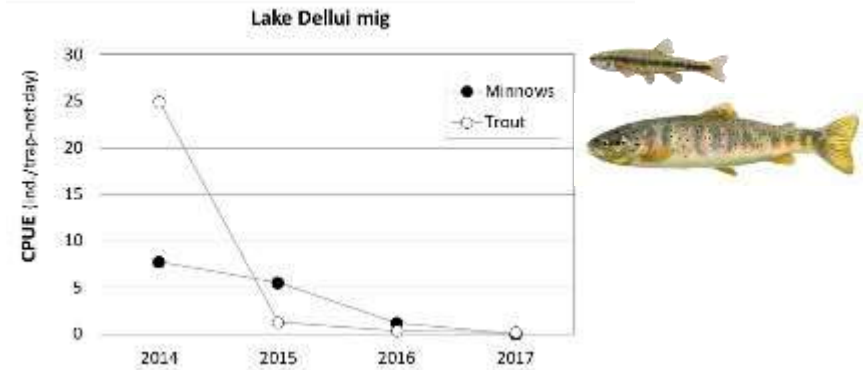
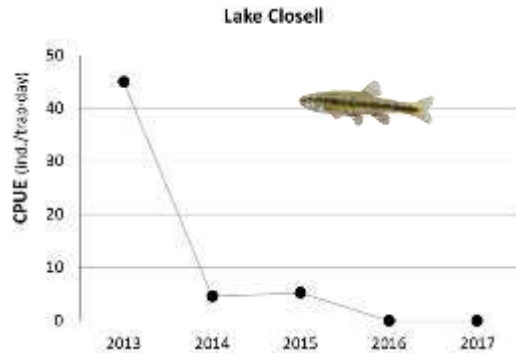
Project actions

5. Monitoring of targeted species and habitats with specific methodologies and standardized protocols.



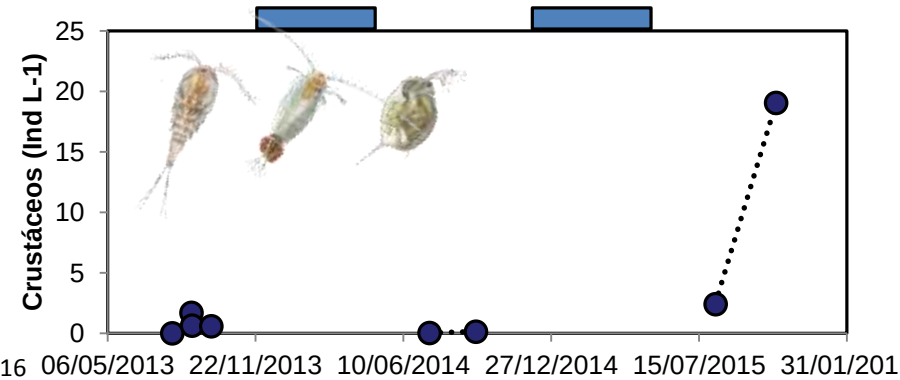
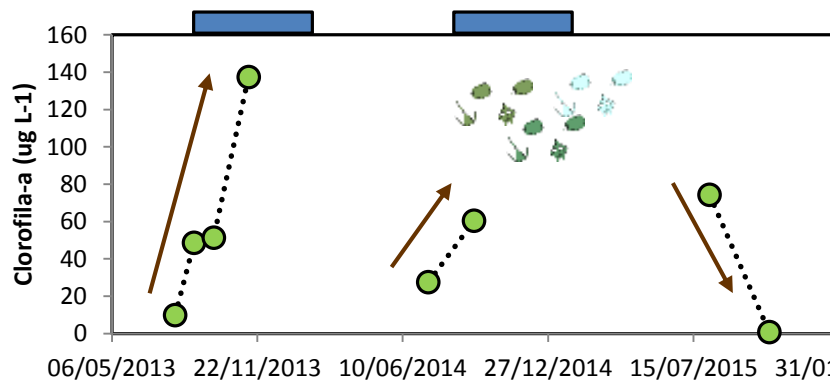
LimnoPirineus

Fish removal actions



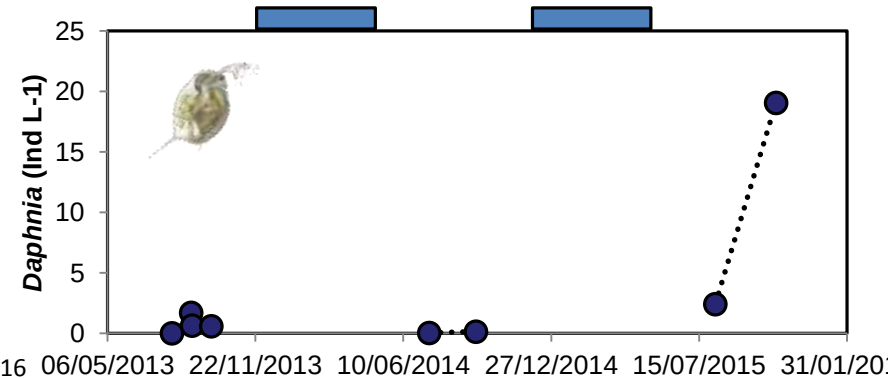
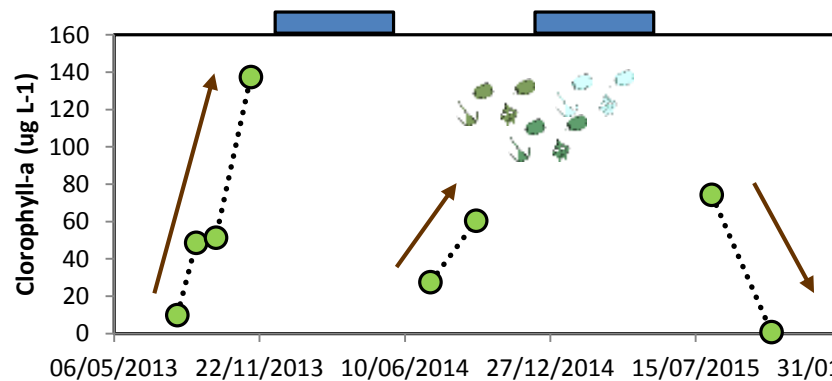
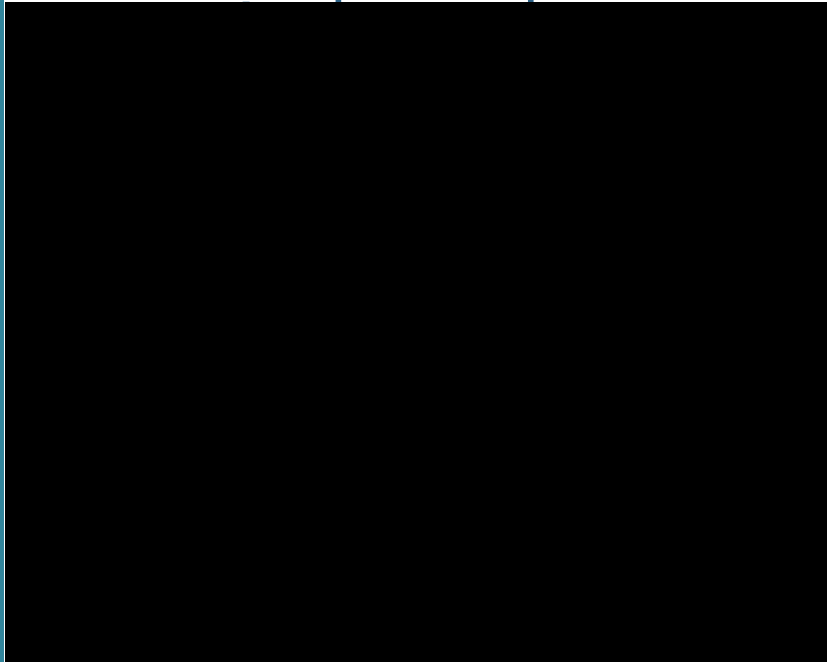
LimnoPirineus

Lake recovery?



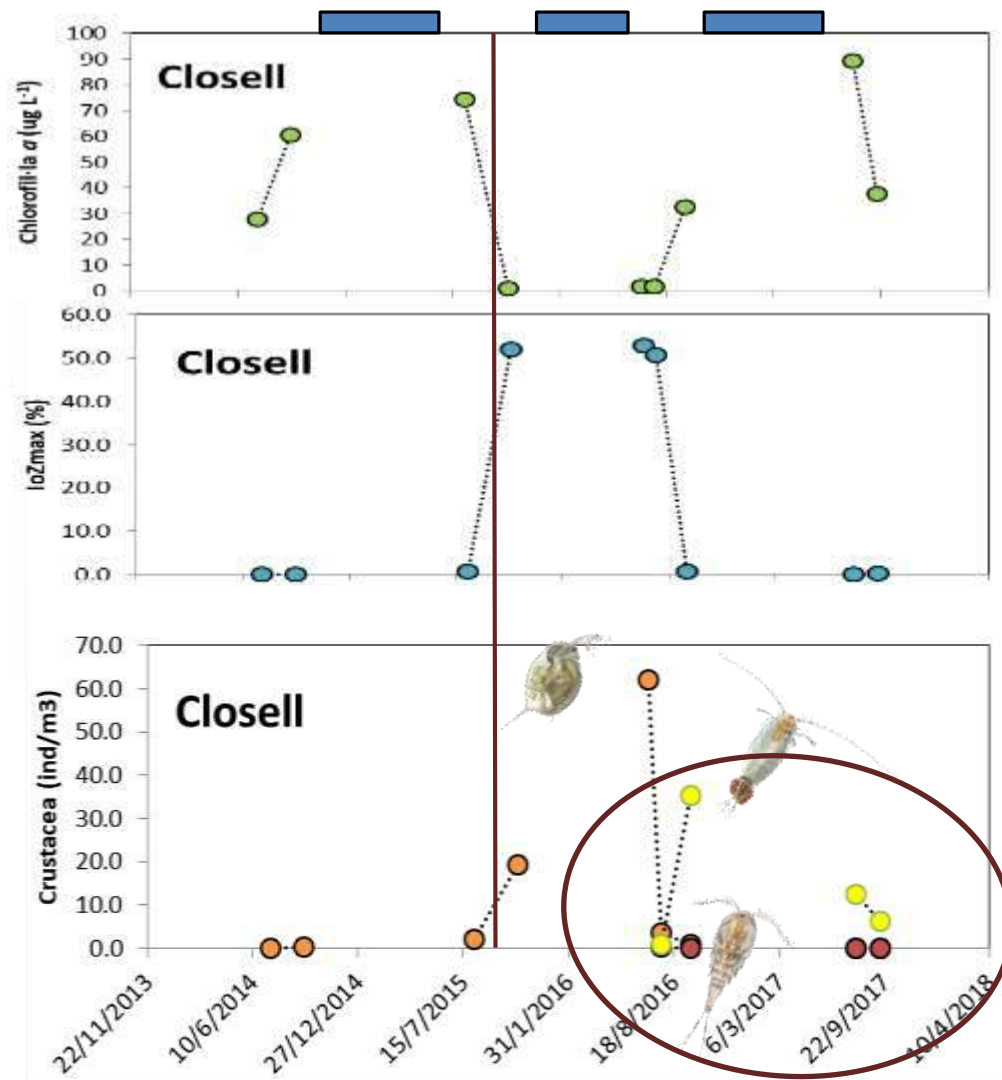
Conservation in action

Lake recovery?



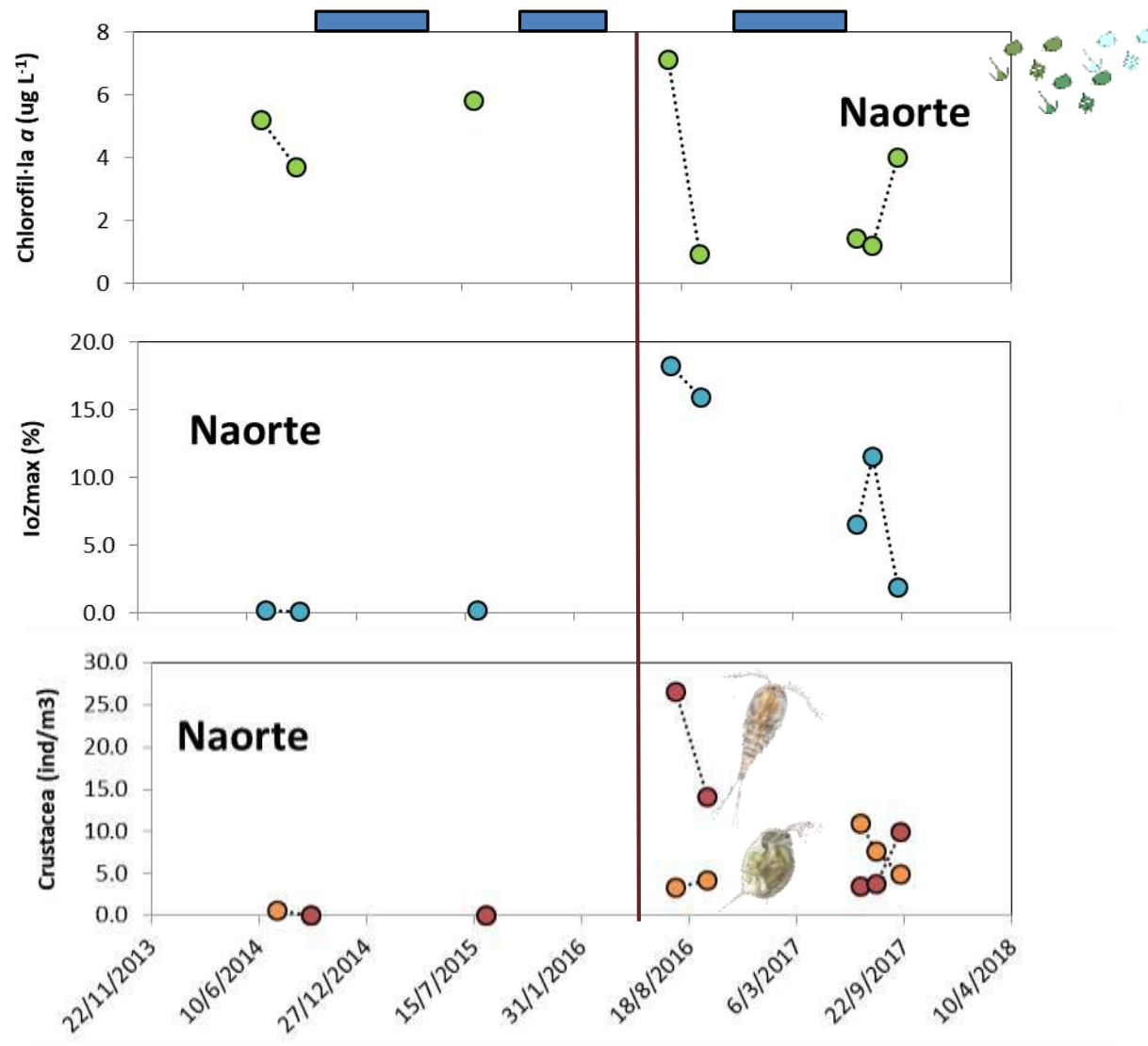
LimnoPirineus

Lake recovery?



LimnoPirineus

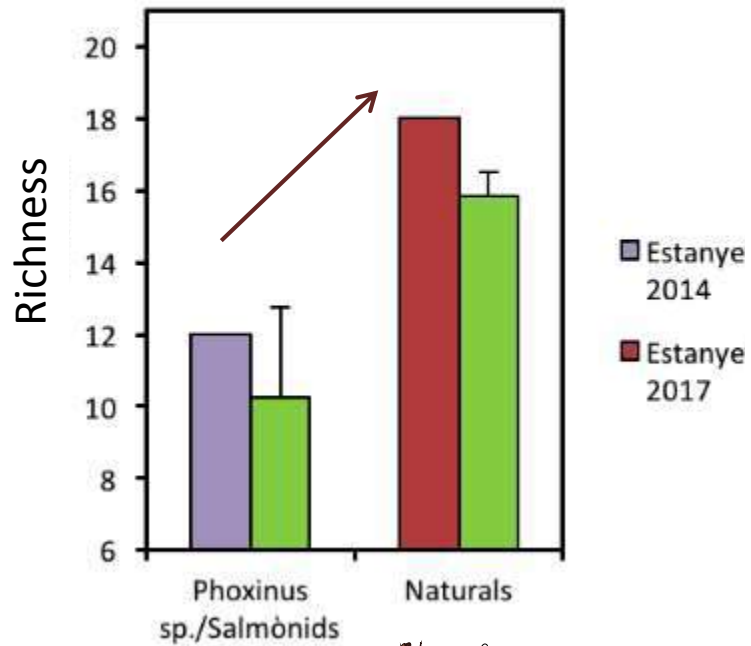
Lake recovery?



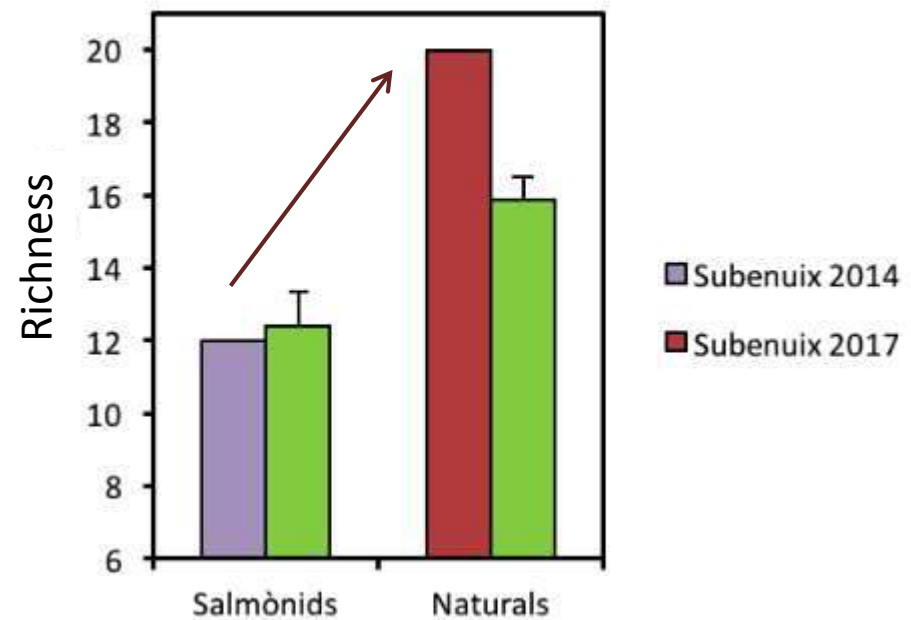
LimnoPirineus

Lake recovery?

Estanyet Delluï

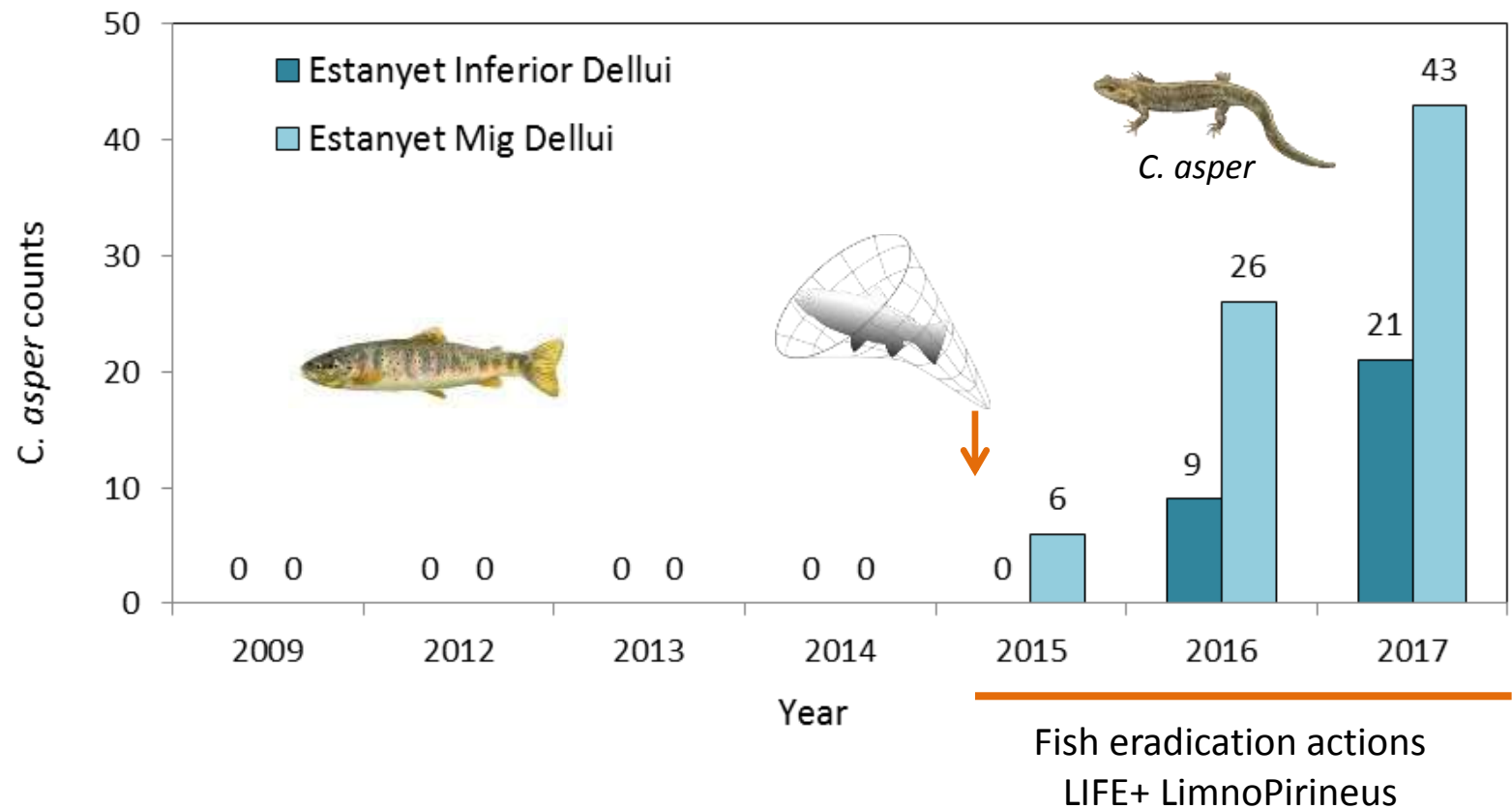


Subenuix



LimnoPirineus

Lake recovery?



Project actions

- ▶ Information board

Sant Maurici, Aigüestortes

Tavascan

[illegible]

Conservation in action

Project actions

- Travelling Exhibition



Conservation in action

Project actions

- Environmental education

