

# A Rapid Assessment of the Corfu Killifish, *Valencia letourneuxi*, in Greece

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# Introduction: *Valencia letourneuxi*



- Found only in Western Greece and Albania.
- Classified as Endangered by IUCN.
- Part Europe's relict fish population that survived the last ice age.
- Has very narrow habitat requirements.



# Background



- Identified as one of four priority species by the Killifish TAG (Taxon Advisory Group).
- A conservation priority within Europe.
- Largely neglected by conservation initiatives.
- ZSL maintains two distinct populations of the species in the Aquarium.



# Timeline



- November 2003 KilliTAG formed.
- May 2004 - TAG identified *V. letourneuxi* as a priority species for conservation.
- September 2004 – TAG contacted HCMR and together agreed to seek funding to assess the species status in the wild.
- February 2005 – Proposal submitted to EUAC for project costs of 7,700 euros.
- April 2005 – Grant awarded for full funding.
- May 2005 – Initial survey undertaken.
- October 2005 – Second survey completed in Greece.



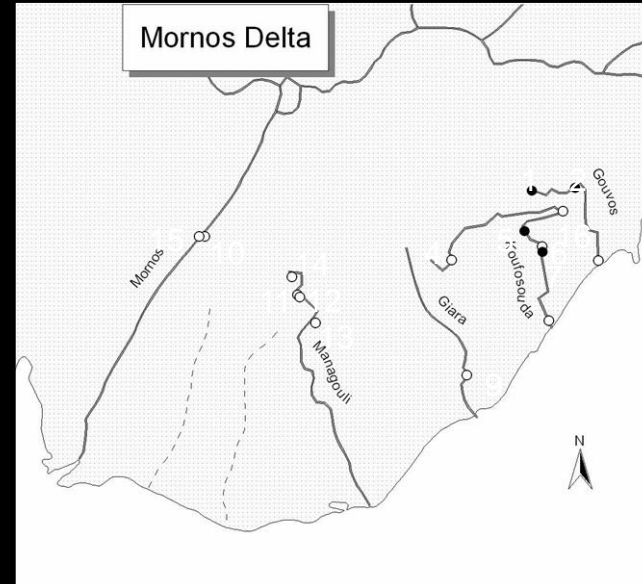
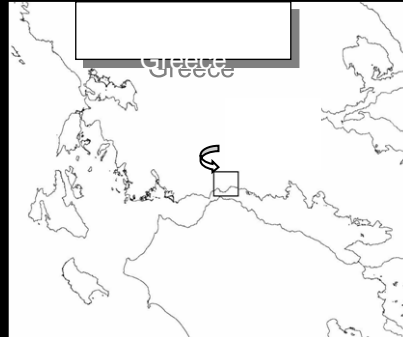
# Objectives



- Complete the first ever comprehensive field survey of known, former and suspected habitats of *Valencia letourneuxi* in Greece.
- Determine worldwide status of *V. letourneuxi*.
- Conduct a preliminary assessment of *V. letourneuxi* habitats including potential threats.
- Provide information to update IUCN Red Book (last revised for this species in 1996).
- Collect information and data to support a conservation management plan for *Valencia letourneuxi* based on the survey's findings.



# May 2005 Mornos Delta, Western Greece



# May 2005 – Establish methodology





# Information collected

ZSL

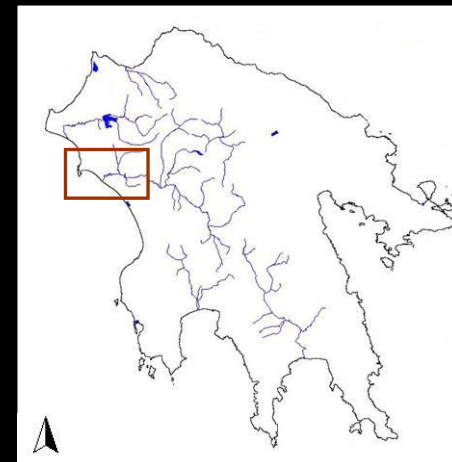




# October 2005 – Completed Greek Survey



- Recorded species' presence or absence.
- Took specimens for genetic work.
- Noted environmental pressures.
- Photographic record of all sites.
- Recorded GPS and other site information such as water quality parameters.



# Results: Area covered



- 11 watersheds in Western Greece and the Peloponnese.
- Over 120 sample sites
- Over 800 kilometres of driving in three weeks.

# Findings: Rapid and massive decline



- Not found at 60% of former sites.
- Sizeable populations in only 3 watersheds: Acheron, Louros and Mornos.
- Extinct from type locality: Corfu

# Findings: Habitat loss and alteration



- Wetland drainage for building.
- Water redistribution for agriculture.
- Damming rivers for hydropower and irrigation.
- Increased water demand for tourism.
- Pollutants including pesticides.
- Introduced species: *Gambusia holbrooki* for mosquito control.
- Soil erosion due to vegetation loss.





# Next Steps:



- Write up findings and present to Greek government.
- Investigate potential for including healthy sites within *Natura* boundaries or other protected area.
- Recommend change of status to IUCN from EN to CR.
- Seek funding to complete survey in Albania.



# At London Zoo



- Maintain populations of *V. letourneuxi* from Corfu and Pinos River.
- Study behaviour, especially reproduction.
- Gather information about disease, nutrition, diets and competition.