

ZSL

**LET'S WORK
FOR WILDLIFE**



**Fish Net – an update on four
freshwater conservation projects**

What is Fish Net?

“A consortium of zoos, aquariums, universities, research centres, non-government organisations and hobbyists working together to save freshwater fish from extinction.”



ZSL's Fish Net locations



ZSL's Fish Net locations

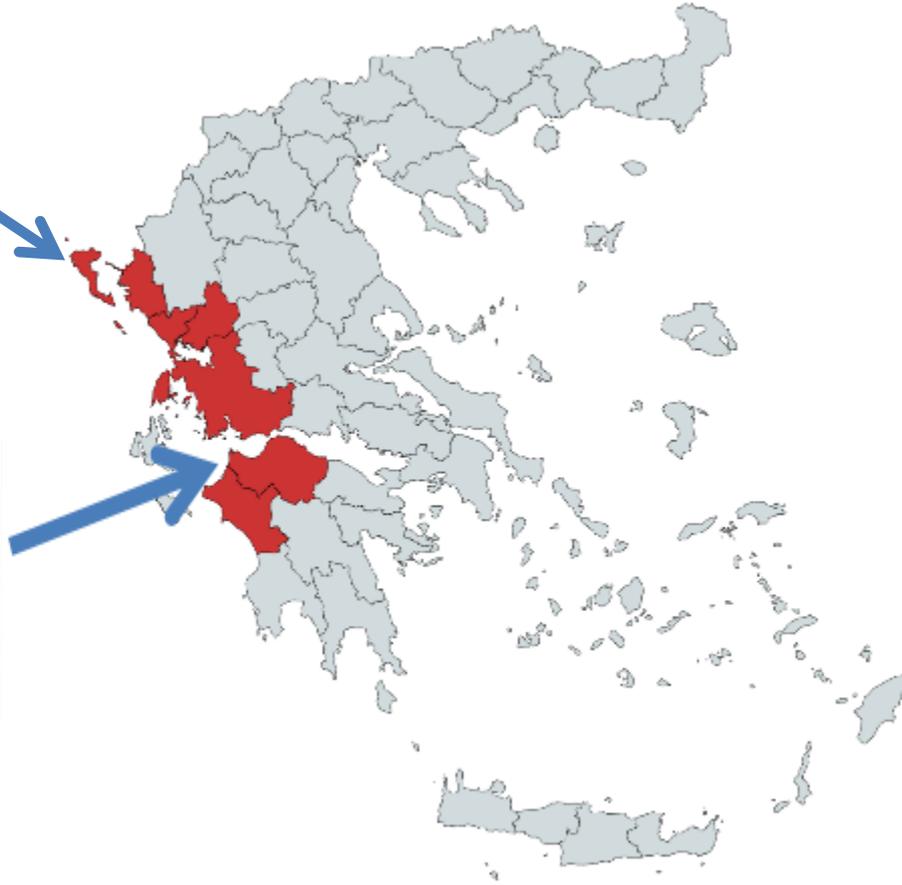


Fish Net Greece

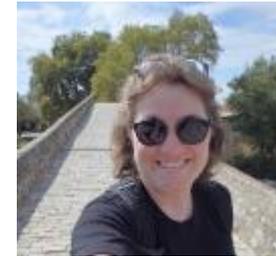
Valencia letourneuxi



Valencia robertae



Partners

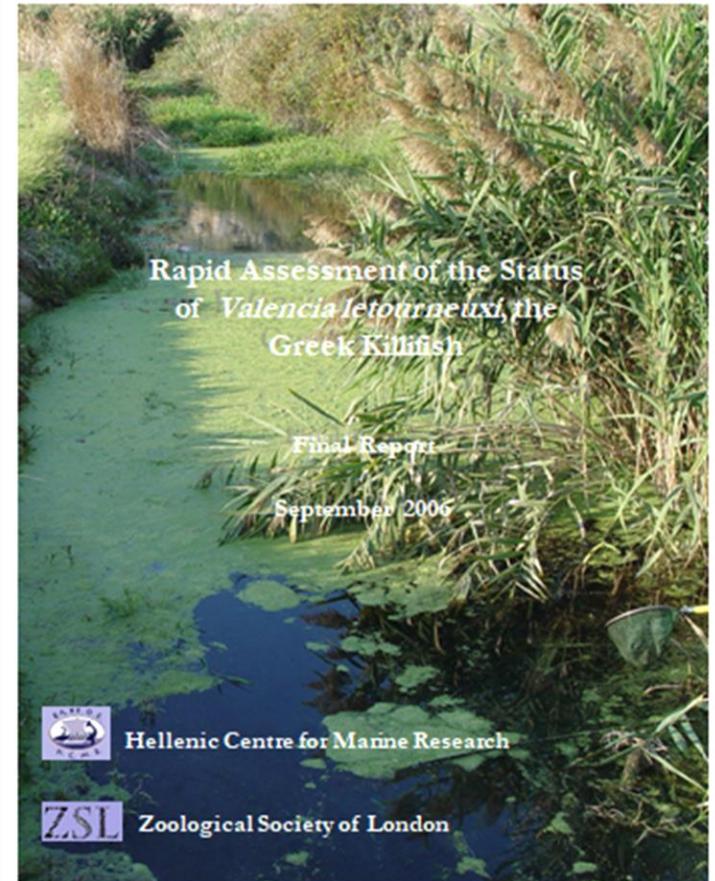


**INSTITUTE OF
MARINE BIOLOGICAL RESOURCES
AND INLAND WATERS**



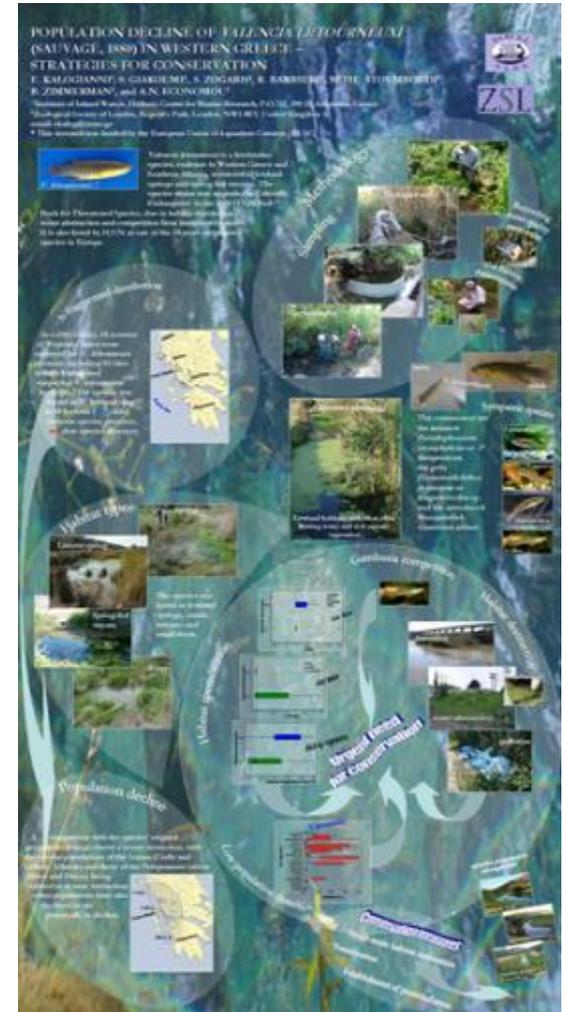
Early activities

- 2005-2006 – Surveyed the full range of *Valencia letourneuxi* in Greece (92 separate sites)
- Prepared a report: “Rapid Assessment of the Status of *Valencia letourneuxi*, the Greek Killifish” (2006)



Outputs

- Poster presented at the European Congress of Conservation Biology, Eger, Hungary (2006)
- **Feeding ecology of the critically endangered Valencia letourneuxi** (Valenciidae) E Kalogianni, S Giakoumi, A Andriopoulou, Y Chatzinikolaou. Aquatic ecology 44 (1), 289-299
- **Current distribution and ecology of the critically endangered Valencia letourneuxi in Greece.** E Kalogianni, S Giakoumi, S Zogaris, Y Chatzinikolaou, B Zimmerman. Biologia 65 (1), 128-139
- **Reduced genetic variation and strong genetic population structure in the freshwater killifish Valencia letourneuxi (Valenciidae) based on nuclear and mitochondrial markers.** E Vogiatzi, E Kalogianni, B Zimmerman, S Giakoumi, R Barbieri. Biological journal of the Linnean Society 111 (2), 334-349
- **Prey utilisation and trophic overlap between the non native mosquitofish and a native fish in two Mediterranean rivers.** E Kalogianni, S Giakoumi, A Andriopoulou, Y Chatzinikolaou. Mediterranean Marine Science 15 (2), 287-301
- **Rapid population collapse of the critically endangered Valencia letourneuxi in Kalamas basin of Northwest Greece.** C Perdikaris. AACL Bioflux 3 (2), 69-76.
- **Characterization of polymorphic microsatellite markers in Valencia letourneuxi (Valenciidae) and cross-amplification in two other cyprinodontiform species.** E Vogiatzi, E Kalogianni, S Giakoumi, A Magoulas, CS Tsigenopoulos. Conservation Genetics Resources 1 (1), 27
- **Current population status of Valencia letourneuxi (Sauvage, 1880) in the Mornos River Delta.** S Giakoumi, B Zimmerman, S Zogaris, A Economou, E Kaloginni
- **Occurrence and effect of trematode metacercariae in two endangered killifishes from Greece.** E Kalogianni, N Kmentová, E Harris, B Zimmerman, S Giakoumi. Parasitology Research, 1-12



Current activities

- Two translocation exercises:
 - Supplementation (Chiliadou springs → Kryoneri springs)



- Assisted migration (Vlychos springs → Priala springs)



Translocations





Sorting the catch



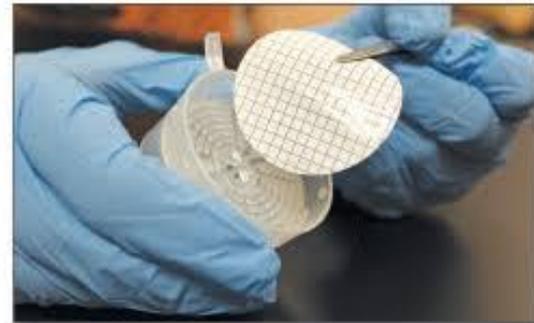
Packing fish for transport



Releasing



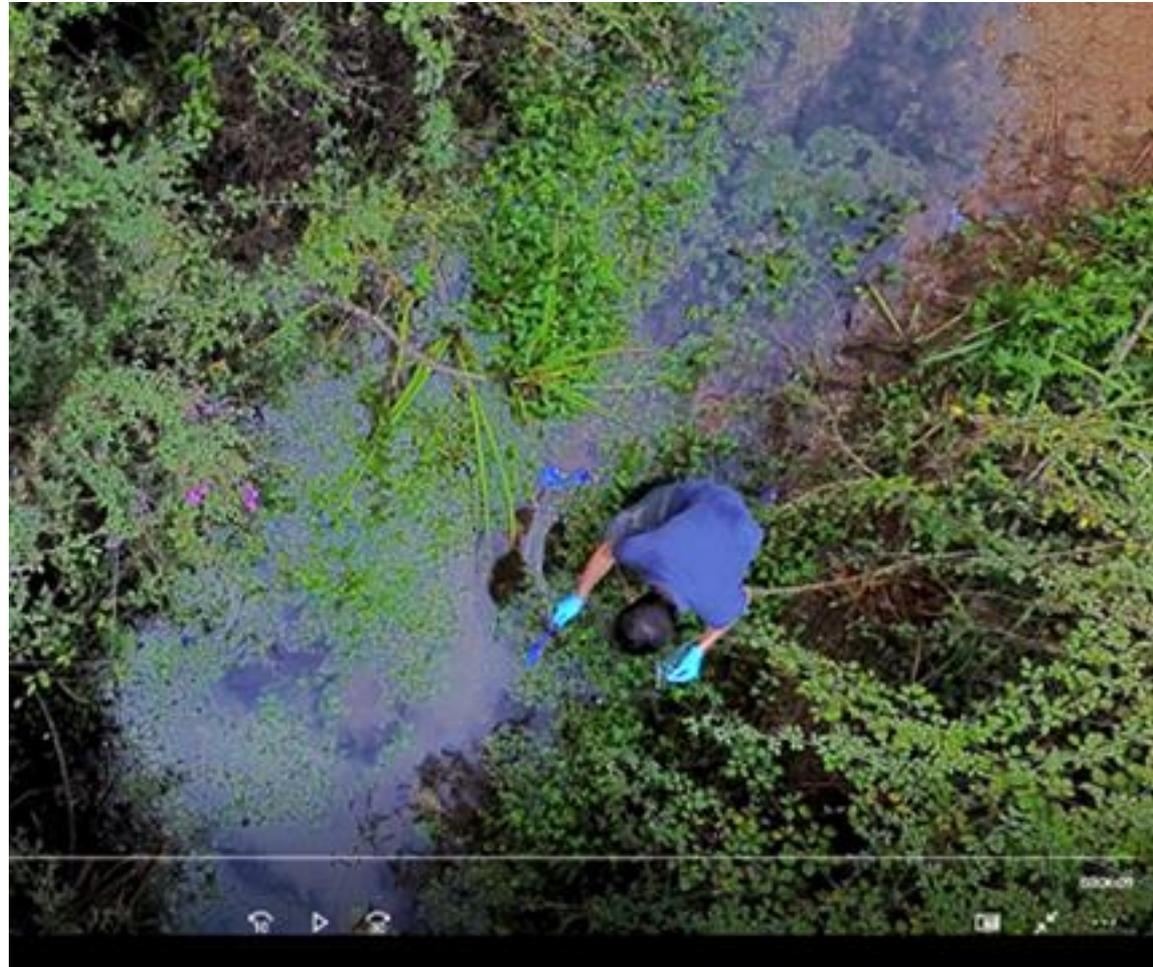
eDNA for monitoring



Surveying with a drone



“Spriridoula”



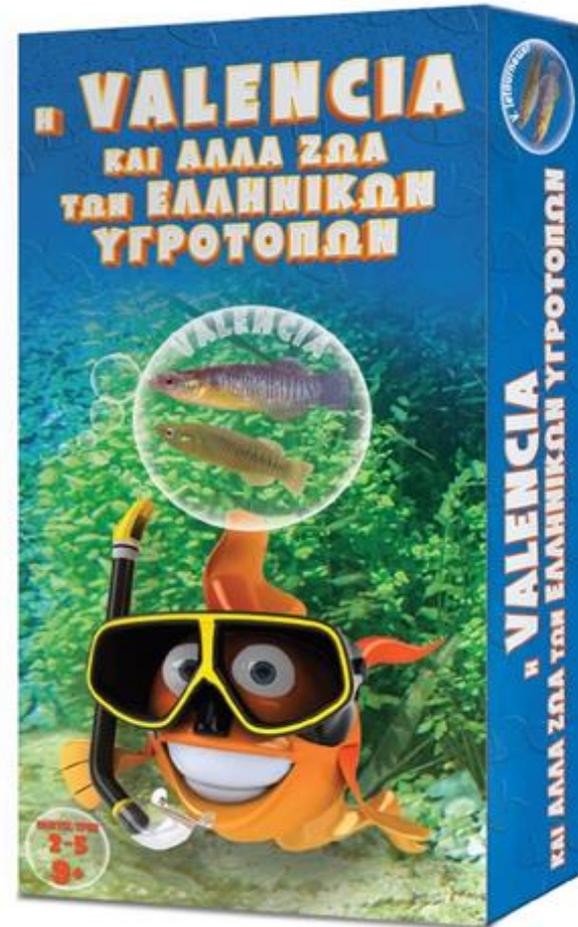
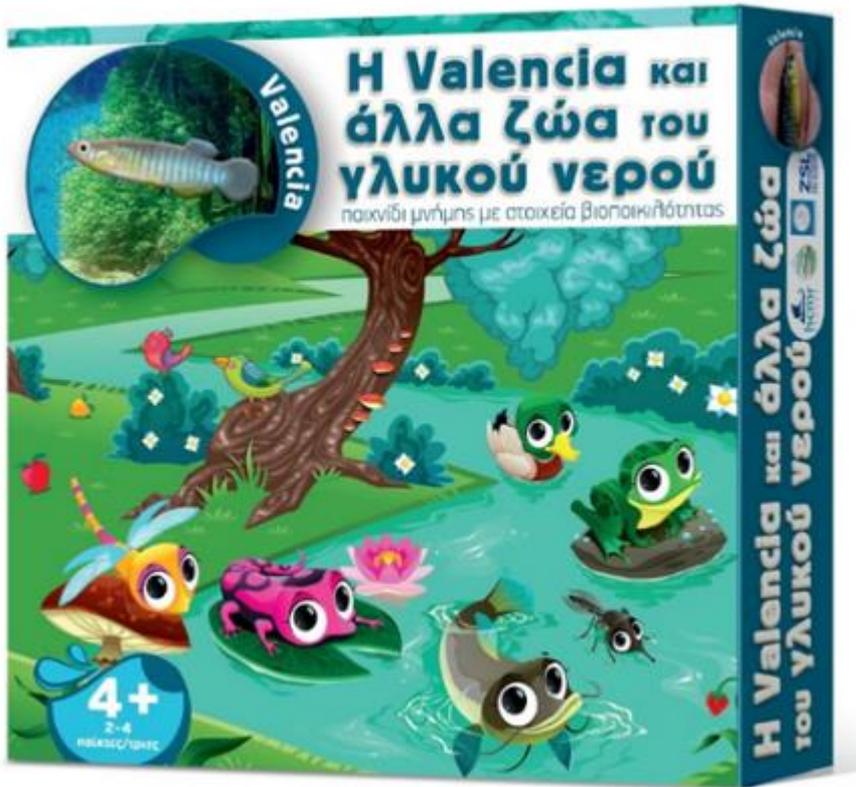
Kastoria Aquarium



Bringing nature to the classroom



Killifish board games



Fish Net Turkey



Aphanius transgrediens



Aphanius saldae



Aphanius fontinalis



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**TIERGARTEN
SCHÖNBRUNN**



Doğa
Derneği

yaşamak
için
yaşat



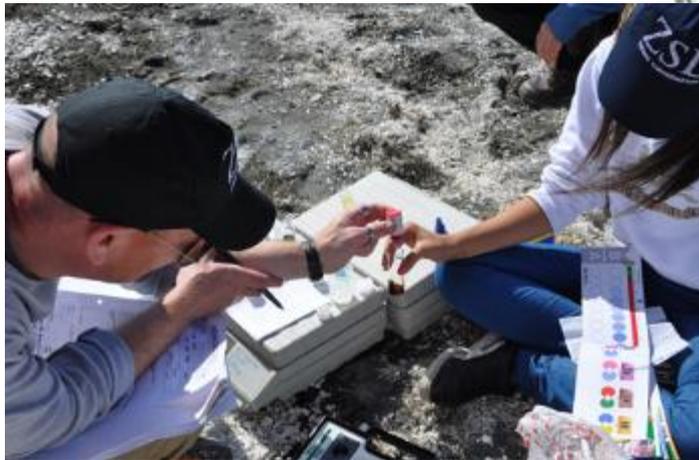
HAYVANAT BAHÇESİ
VE BOTANİK PARKI



**HACETTEPE
UNIVERSITY**



Early activities



Early activities



Current activities

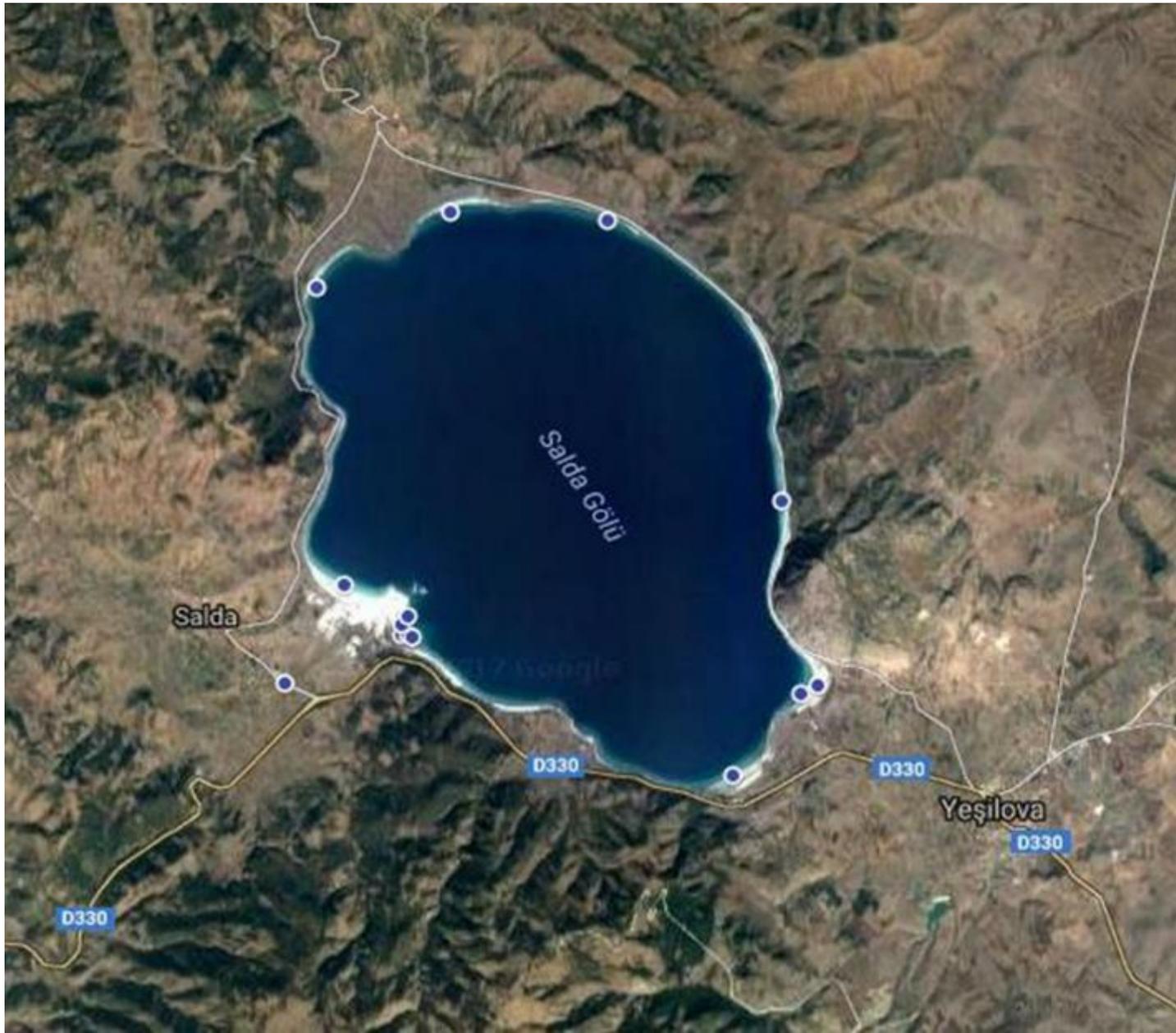


Killifish of Lake salda

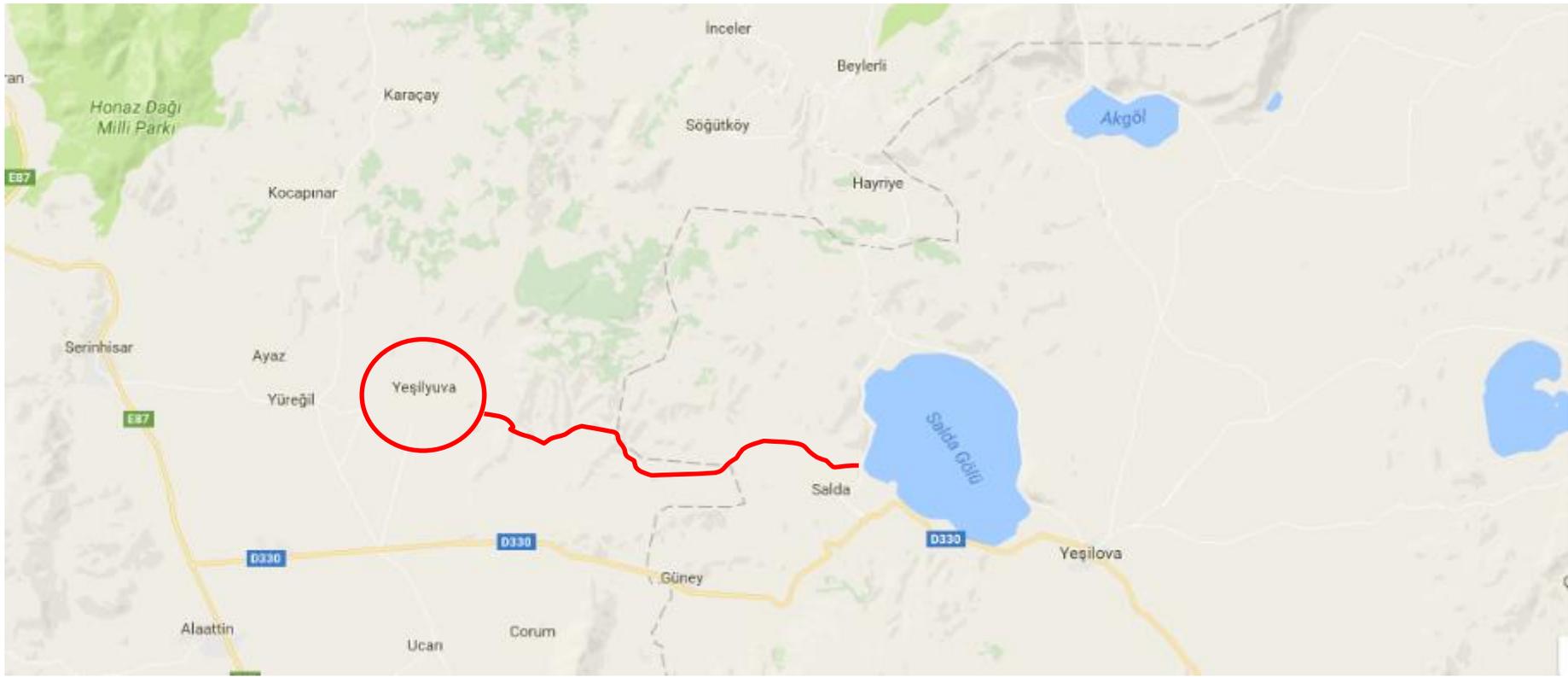
Aphanius fontinalis

Aphanius saldae





Hydroelectric dam



What's next?





Ptychochromis insolitus



Paretroplus nourissati

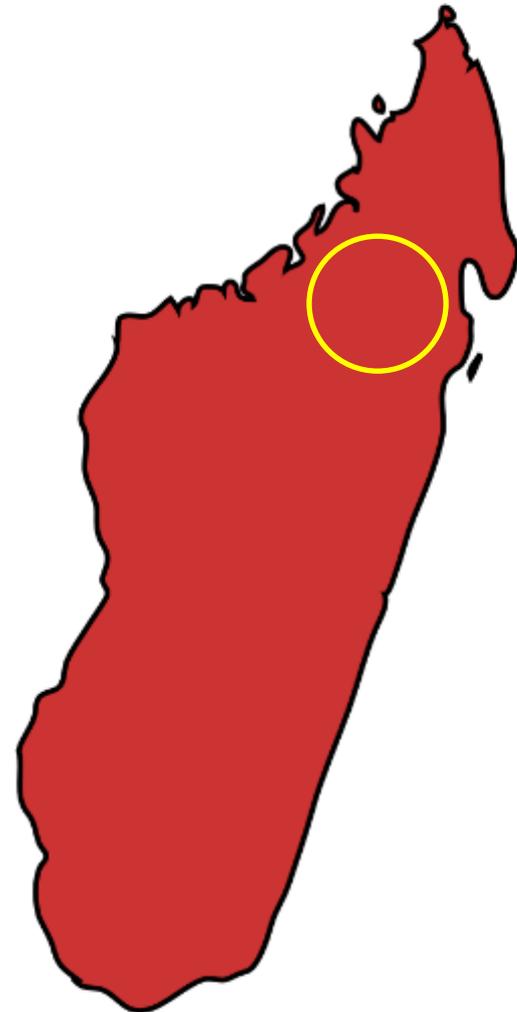


Rehocles derhami

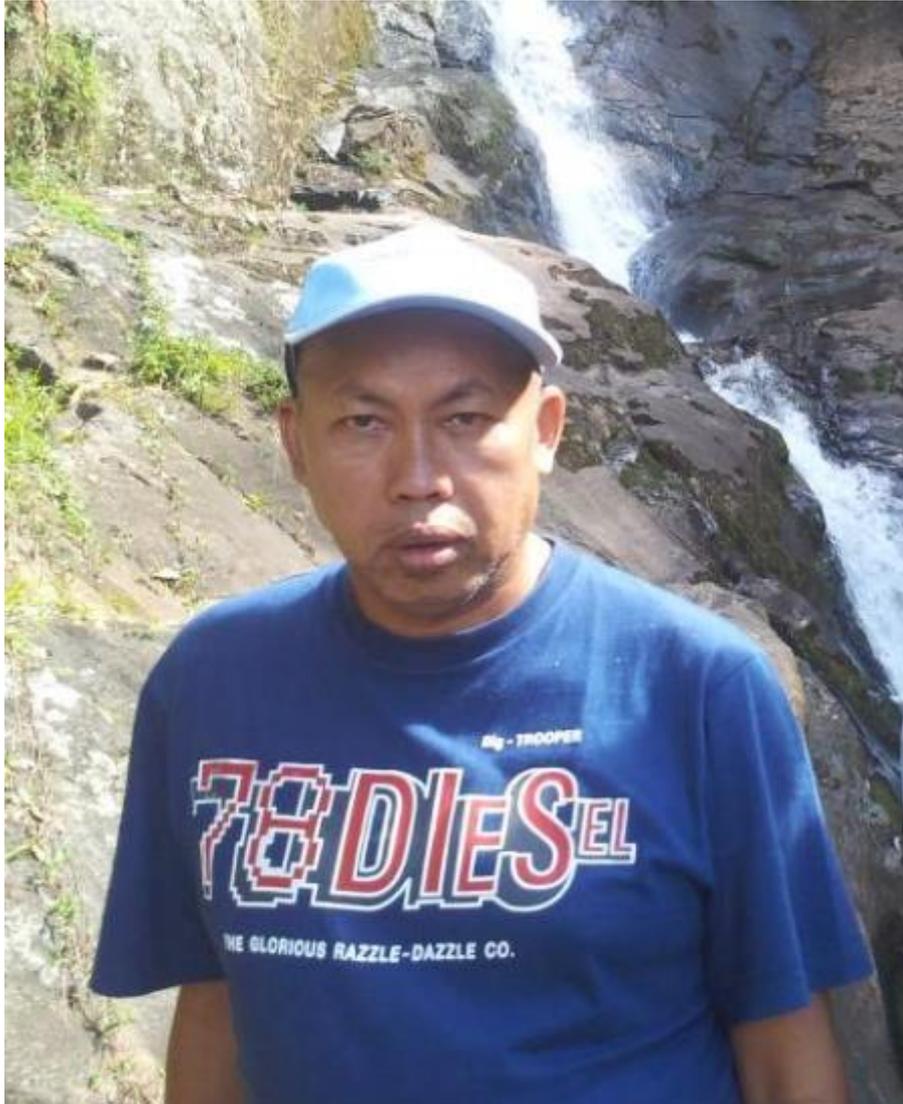


Pachypanchax cf. sofiae

Fish Net Madagascar



Partners



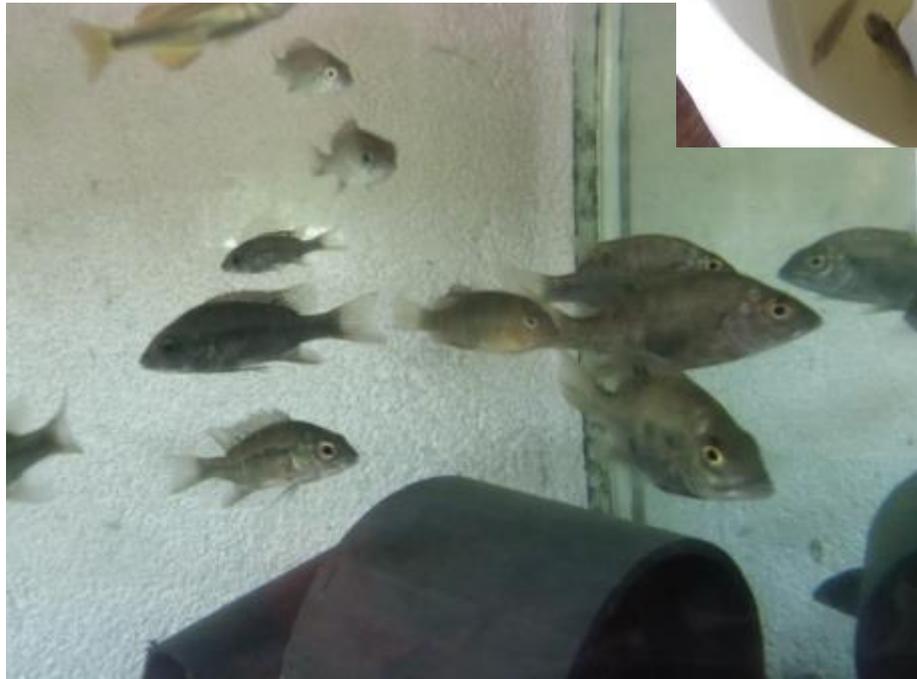
toronto
ZOO



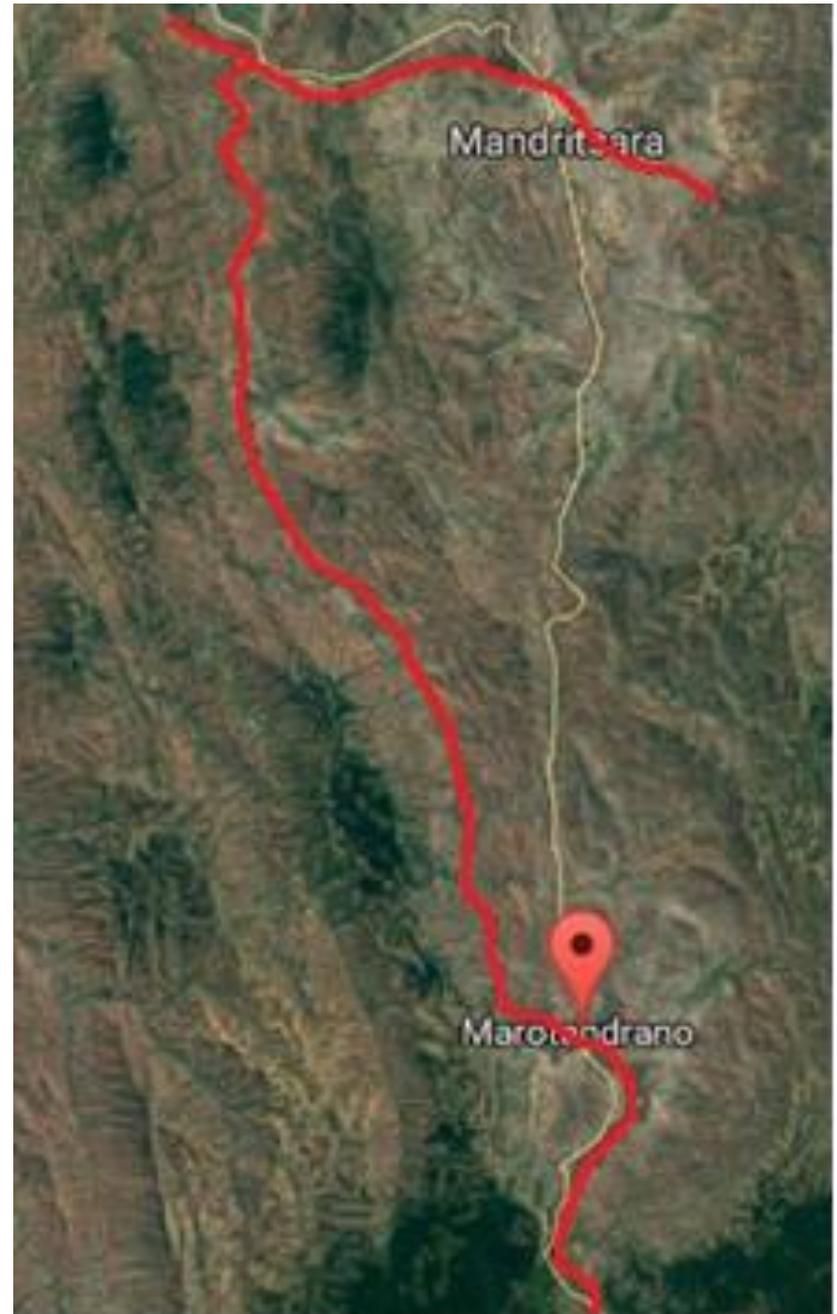
Early activities



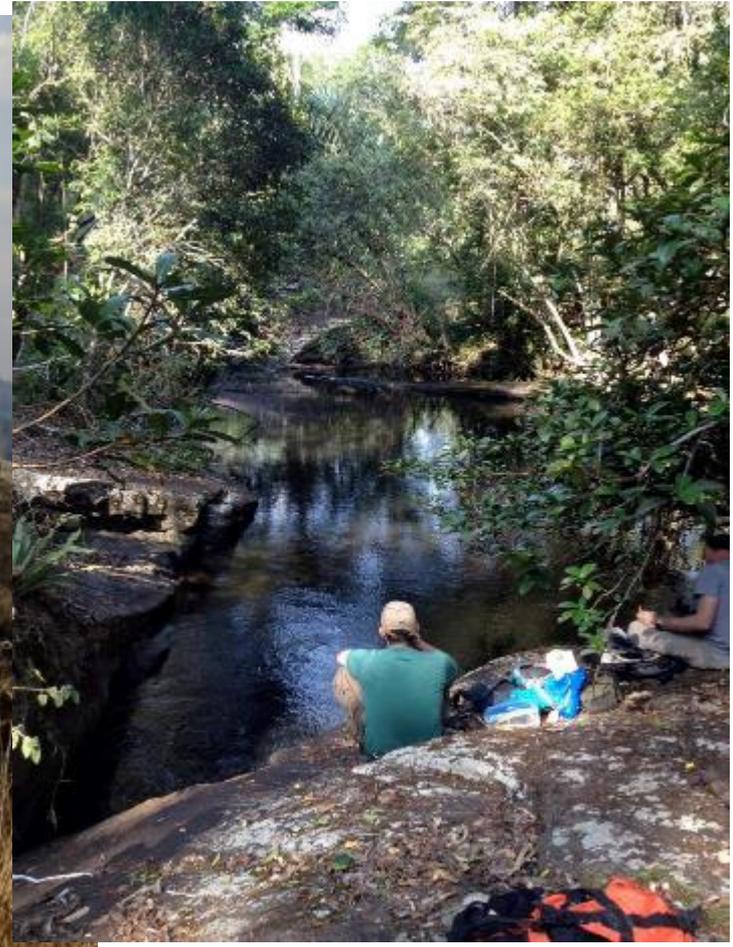
Establishing secure populations *ex-situ*



Current activity: 110 kilometre hike



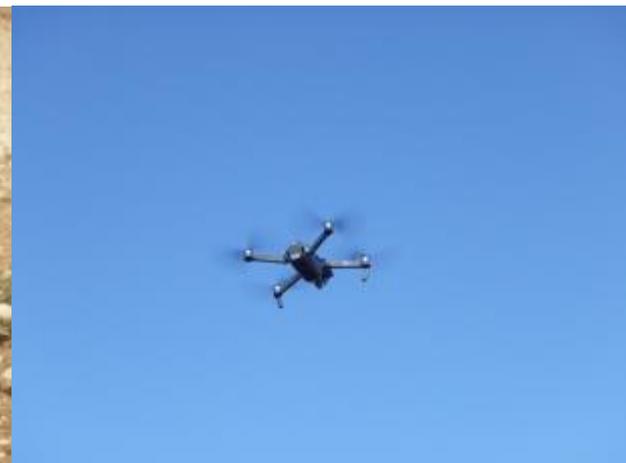
Current and planned activities



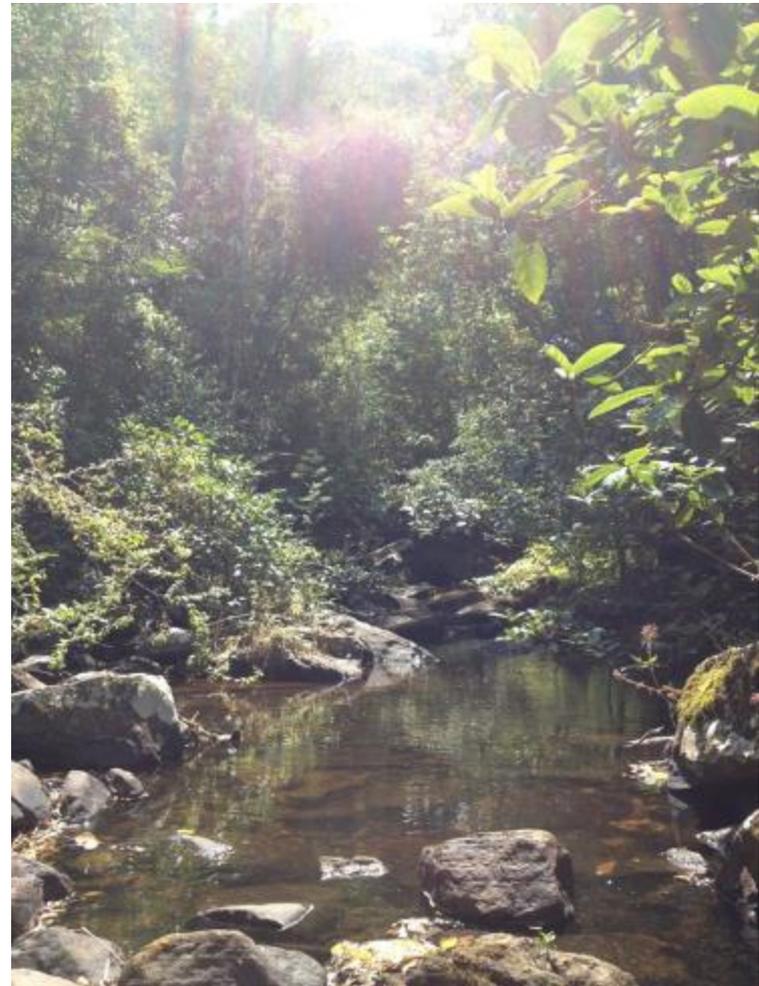
Map of water availability and habitat quality



Spiridoula returns...



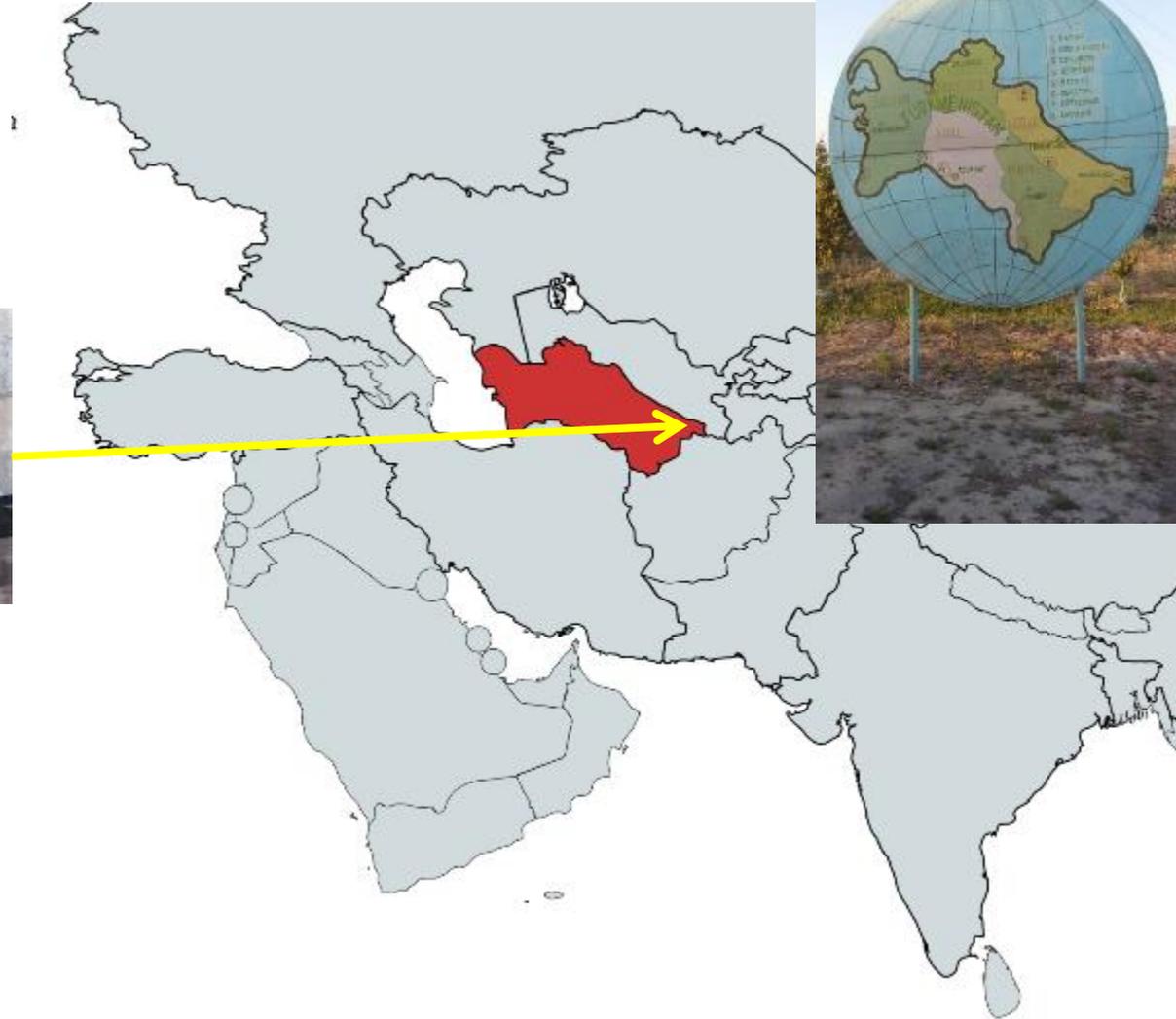
The future: community fish ponds & possible translocation



Fish Net - Turkmenistan



Nemacheilus starostini





Partners



Activities





ΚΟΥΤΕΝ-ΔΑΓ







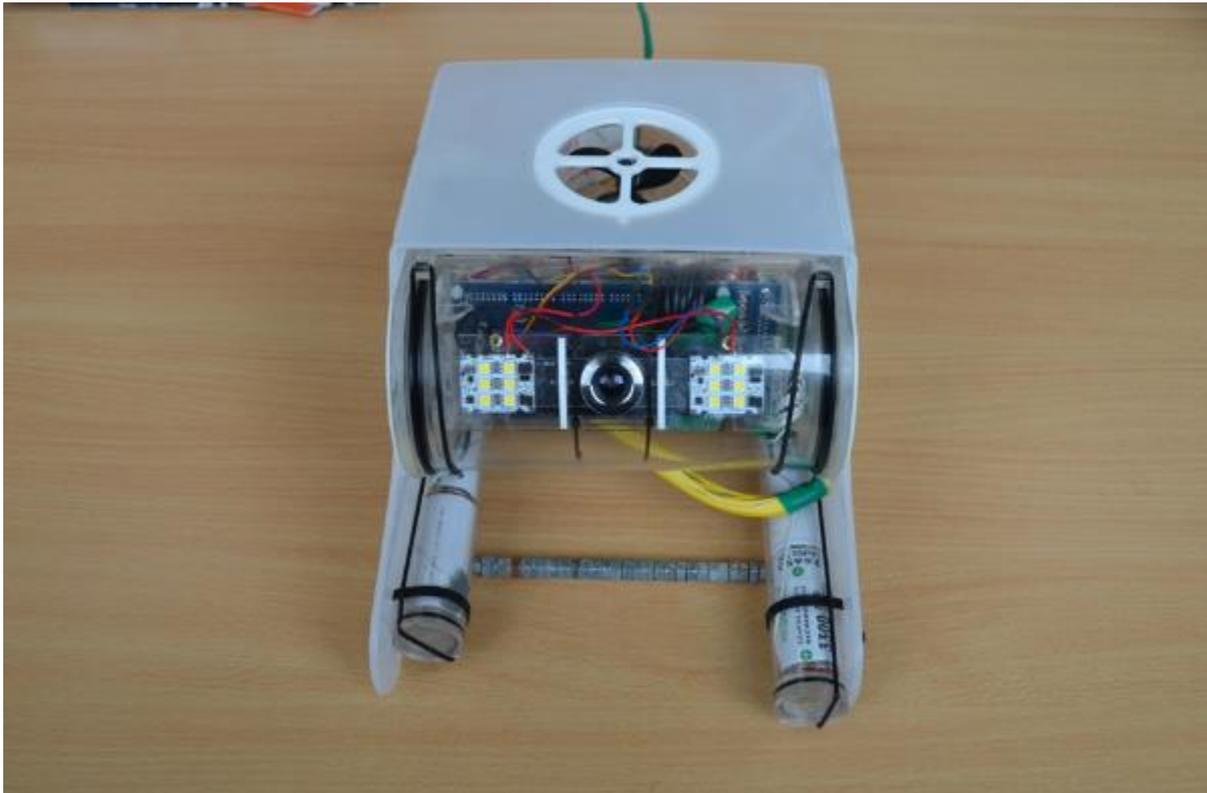




Water quality analysis & training



Naught-EE, the ROV



Snorkelling



Catching, measuring and photographing



Other sites, other species



Outputs

- DNA extracted from all species sampled
- Report submitted to Turkmen government
- Staff at nature reserve trained in water quality analysis and continued monitoring of the sinkhole
- Application submitted to UNESCO for World Heritage nomination





Thank you!