

Project Update: May 2012

Project main goals:

Goal I. Clarify and improve the systematic knowledge of *Gambusia* fishes in 25 localities along the Cuban archipelago.

Activities related to goal I, completed so far:

1. We carried out two field trips to western part of Cuba and we collected *Gambusia* fishes in seven localities (28 % of total proposed). Finally, we carry out the caught of fishes in a total of 27 localities of a total of 25 localities proposed in the original idea. We include two new keys localities that we consider important to take in account in this study.
2. Samples of collected specimens of *Gambusia* (20-30 individuals) belonging to different sampled localities was preserved in alcohol 96% to DNA analysis.
3. Water parameters like pH, salinity, temperature, conductivity was recorded again in each sampled point.
4. Natural habitats and living individuals were photographed in each sample point.
5. We continue extraction of total DNA and amplification of mitochondrial genes in our lab (completing near 90% of total) and we started the amplification of some nuclear genes (completing near to 20% of total)

Goal II. Generate an updated distribution map of relevant species and populations useful to health and conservation authorities for successful management strategies of this fishes.

Activities related to goal II, completed so far:

1. We finished the distribution map of populations of *Gambusia* fishes identified in our field work.
2. We finished the writing of a concise manuscript to inform to authorities for conservation management in the National System of Protected Areas of Cuba about the preliminary results of our project.
3. Local authorities of health and wildlife conservation have been informed about preliminary results in each sampled point for successful management of this fishes in the immediate future.

Other activities (carried out thanks to the project)

- Collected fishes were including in the collection of freshwater fishes of the Museum of Natural History Felipe Poey in the University of Havana for future studies by other researchers.
- A photography exhibition relating to native and introduced freshwater fishes in Cuba was showed to public in the exhibition hall in the Museum of Natural History Felipe Poey, University of Havana.



Distribution Map of Gambusia



Left to right: Image sampling using hand nets near the shoreline in western part of Cuba (Pinar del Rio province). Appear in this image MSc. Jose Luis Ponce de Leon (wearing a green peaked cap) and a student named Sergio Ramirez; Image showing a rural human community located near to a natural stream where inhabit both *Gambusia puncticulata* and *G. punctata* & Image showing our work field team and our car. We working here in a lowland biotope in western Cuba.