

African Catfish Campaign Report

Towards an 'Exotic Fish' Free Periyar Tiger Reserve

With an aim to eliminate the exotic fish species that have invaded the Periyar Lake Stream System (PLSS), one of the most critical freshwater fish habitat in South Asia (PLSS), a campaign was organized on 30th May 2013 by Department of Forest and Wildlife Kerala State and Conservation Research Group, St. Albert's College, Kochi, India in organization with many national and international partners including the IUCN SSC/WI Freshwater Fish Specialist Group (FFSG). The program was supported by Rufford Small Grants (RSG- 10811-1). One genus (*Lepidopygopsis*) and eight species are currently known to be endemic to the PLSS. These include two species each within the Genus *Garra* (*G. mlapparaensis* and *G. periyarensis*) and *Nemacheilus* (*N. menoni*, *N. periyarensis*), and species of *Homaloptera* (*H. silasi*), *Hypselobarbus* (*H. periyarensis*), *Crossocheilus* (*C. periyarensis*) and *Lepidopygopsis* (*L. typus*).

Biological invasion is one of the major threat in this ecosystem with the presence of four alien species, *Clarias gariepinus*, *Cyprinus carpio*, *Oreochromis mossambicus* and *Poecilia reticulata*. Two alien species, *C. carpio* and *O. mossambicus* now dominate the fishery in the PLSS and compete for food with endemic species such as *Hypselobarbus periyarensis*, and *Lepidopygopsis typus*.

A two-step strategy was devised to manage alien species in this landscape. This included both eradication of existing populations and developing and implementing education and awareness campaigns to stop future introductions and escapes. As the first step, the campaign to eradicate the most important alien species *Clarias gariepinus* in the Periyar Lake resulted in the capture of 92 individuals ranging in size from 190mm to 425mm. The event was attended by 45 volunteers, 15 officials of the State Forest and Wildlife Department, and 20 members of the indigenous tribal communities. The catfishes that were caught were subsequently euthanized and removed from the landscape. The success of this initiative has resulted in continuation of the activity by the forest department, by deploying forest watchers to collect and remove as many as African catfish from the canal before monsoon outbreak in Kerala, plans are being developed to provide incentives to collect more African catfish from the canals.