

The Oriental Weatherloach – within Melbourne’s Waterways

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by Joanne Kearns The oriental weatherloach has been classified as a noxious fish species in three Australian states and has established self-sustaining wild populations throughout inland waters of Australia. Information regarding the movement and activity patterns of weatherloach in Australia is sparse. A study is currently underway to investigate the ecology and movement patterns of a weatherloach population in an urban Melbourne waterway. A mark-recapture technique using Visible Implant Elastomer (VIE) was used to tag fish from five locations within the Darebin Creek, located approximately 7km from Melbourne CBD. Body measurements and fin clippings were taken from all fish collected. These fish were tagged according to one of four size classes and the location where they were originally caught before being re-released at their site of capture. Subsequent collections of these fish via electrofishing allowed monitoring of their migration. In addition to determining movement patterns on weatherloach in their natural environment, this study also aims to:(1) determine growth rates of weatherloach; (2) to estimate the population size within the sampling area and (3)to estimate mortality rates. To date, over 900 individuals have been collected and tagged with detection of VIE tags evident 10 months after release. An average recapture rate of 26% has been recorded during this sampling period and indicates limited movement of these recaptured fish within the sampling area, with only 5% being found away from their initial site of release. Body and weight measurements of recaptured fish allowed growth increases to be calculated through time which revealed that juveniles only take approximately 6 months to reach sexual maturity. Determining the habitat affiliation and movement/colonization patterns of the oriental weatherloach is a vital first stage towards developing effective control or eradication strategies for this pest species. This is a 3 year PhD research project, with expected completion in August, 2007. Assistance Required. There is continuing work to investigate the genetics of oriental weatherloach, which requires the collection of weatherloach from as many water-bodies as possible throughout south-eastern Australia. I would be most grateful if any weatherloach or their fin clippings could be stored in 100% ethanol and sent to me for this research project. All sampling equipment will be provided (containers, ethanol, labels etc) to all collectors. If you are able to participate in collecting weather loach for this project, or if you have any queries, please do not hesitate to contact me on 0407 232 082 or email: J.Kearns@pgrad.unimelb.edu.au This e-mail address is being protected from spam bots, you need JavaScript enabled to view it Joanne Kearns (PhD Student)Centre for Environmental Stress and Adaptation Research (CESAR)Department of Zoology University of Melbourne Victoria, 3010Australia.