

Project Update: May 2013

Summary of Progress

This project aims to gain a basic understanding of ranaviruses, a group of emerging infectious diseases associated with broad-scale mass mortality events in amphibians, to amphibian populations in Costa Rica. Our project aims to sample for ranaviruses throughout Costa Rica, using sites occupied by highly threatened amphibian species as target sites. As of May 2013, we remain ahead of our anticipated schedule on field sampling and will begin the laboratory component of this project in June 2013. We expect to complete field sampling by July 2013, and to complete the laboratory component of this project by August 2013. We expect to begin the educational campaign to raise awareness of the impacts of wildlife diseases pending the return of laboratory results in August 2013.

Research Progress

Field sampling

As of 23 May 2013, we have sampled five of our eight target populations. We have sampled for ranavirus near relict populations of *Lithobates vibicarius* in Bosque Eterno de los Ninos, *Ptychohyala legeri* at Las Cruces Biological Station, *Agalychnis lemur* at the Costa Rican Amphibian Research Center, *Craugastor ranoides* in the Guanacaste Conservation Area, and *Craugastor Taurus* near Golfito, Puntarenas. We have remaining sampling expeditions to sample near populations of *Incilius hodridgei* near Cerro Chompipe, *Agalychnis annae* in the Valle Central, and introduced populations of *Eleutherodactylus coqui* near Turrialba – these remaining sampling expeditions will be completed pending the onset of seasonal rains which to stimulate amphibian activity.

Laboratory analysis (qPCR)

Laboratory analysis (molecular assays for pathogen prevalence and molecular characterization of pathogens) are on track to begin in June 2013, following export of samples to the United States in late May.

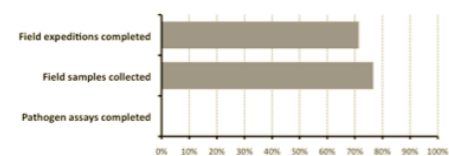
Laboratory analysis (isolation and molecular characterization of ranaviruses)

This component of the project is set to begin following export of tissues from frogs with ranavirus, beginning in July 2013

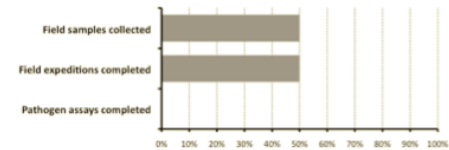
Public awareness campaign

We expect to begin the educational campaign to raise awareness of the impacts of wildlife diseases pending the return of laboratory results in August 2013.

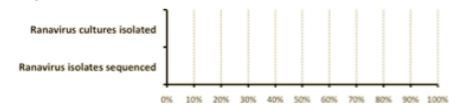
Objective 1: Ranavirus threats to critically threatened amphibians



Objective 2: Examining potential sources of non-native ranaviruses



Objective 3: Isolation and molecular characterization of ranaviruses



Objective 4: Public awareness campaign

