Final Report for US Forest Service *Urspelerpes brucei* sampling

Todd W. Pierson
University of Georgia

Objectives: We sought to use environmental DNA (eDNA) to survey Forest Service property in South Carolina for new populations of the patch-nosed salamander (*Urspelerpes brucei).* This assay allows for the reliable recognition of *Urspelerpes* populations through the detection of their DNA in the environment.

Results and Report: We sampled ten streams on Forest Service property, taking three 1L water samples and one negative control from each site. Samples were filtered, extracted, and cleaned. All samples were analyzed using a qPCR assay validated to amplified only *Urspelerpes* DNA and run alongside a negative control and *Urspelerpes* DNA standards.

Urspelerpes DNA was recovered from zero of the ten streams sampled. Because *Urselerpes* DNA has been recovered from all five known localities at each visit (i.e. the detection rate of *Urspelerpes* using eDNA is very high), we are confident that *Urspelerpes* does not occur at or upstream of the sampled localities.

Stream	Latitude	Longitude	qPCR results
M01	34.68628	-83.27274	0/3
M02	34.70448	-83.28323	0/3
M03	34.69028	-83.30209	0/3
M04	34.69143	-83.29407	0/3
M05	34.71066	-83.26246	0/3
M06	34.72103	-83.26293	0/3
M07	34.70507	-83.22349	0/3
M08	34.70667	-83.20805	0/3
M09	34.70880	-83.22862	0/3
M15	34.68991	-83.32733	0/3

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