

Title of Project: Survey for Occurrence of Alabama Shad in the White River

Project Summary: Layher et al. (2008) found three Alabama Shad during large river surveys in the White River near Georgetown. We propose to sample some two hundred locations by seining in the White River from above Georgetown to the confluence of the White River with the Mississippi River.

Name of Project Leader/Title: William G. Layher, Ph.D./ President

Affiliation Layher BioLogics RTEC, Inc., 7233 Camden Cutoff Road Pine Bluff, AR 71603

E-Mail address: [layher@earthlink.net](mailto:layher@earthlink.net)

Telephone: 870-692-8689 Fax: 870-879-4808

Project Partners: Tom Buchanan, Professor, University of Arkansas-Ft. Smith for specimen verification

Total project cost: \$82,300

Total SWG money requested: \$34,400

Amount and Source of Matching Funds: \$47,900

Alabama Shad have only been recorded in the Mulberry River (one specimen) and the Ouachita River (two specimens) Layher et al. survey the Saline River system for the species for two years and found no specimens. Recently Layher et al. (2008) discovered the first recorded collections of the species in the White River near Georgetown (three specimens, two of which are archived at University of Arkansas-Ft. Smith.

This proposal addresses one of the large river fishes data gaps and would potentially improve the understanding of the occurrence of Alabama Shad in one of Arkansas' large rivers as well as occurrence of other associated species.. The project area lies in the Mississippi River Alluvial Plain.

We propose to sample some 200 locations by seining sandbars and points in the White River from Georgetown to the river's mouth. Each location would be sampled with two seine hauls. Transport downriver by boat would allow access. Because all previously collected records as well as our recent collection have been made in August, we propose that all sampling be done in the months of July through September.

Fishes of all species would be identified, range in length calculated, reference specimens preserved for positive verification of species and fishes verified at U of Arkansas-Ft. Smith.

Locations for sampling would be done preliminarily by viewing aerial photos to locate sandbars and points and by instream selection while on the river. Physical data such as predominant substrate, velocity, temperature, and turbidity would be collected at each site.

We estimate that five sites per day could be sampled during ten hour work days on the river for a total of 40 field days, twenty laboratory days to identify voucher specimens of all species collected, and 120 hours to write a report with data, maps, and narrative.

Projection duration would be from September 1, 2009 to September 31, 2010. Sampling would begin in September of 2009 and completed during July through September 2010.

Budget:

<b>Salaries</b>	<b>field/lab:</b>				<b>SWG</b>	<b>Matching</b>
PI	60 days	10 hours/day	\$40/hr	\$24,000	\$14,000	\$10,00
Biologist I	60 days	10 hours/day	\$15/hr	\$9,000	\$9,000	0
Technician	60 days	10 hrs/day	\$10/hr	\$6,000	\$6,000	0
PI –report	120 hours		\$40/hr	\$4,800	\$2,400	\$2,400
Operating Expenses						
Mileage	4,000miles	.50/mile		\$2,000	\$2,000	0
Per diem	\$20/dayx3	40 days		\$2,400		\$2,400
Lodging	\$60/dayx3	40 days				\$7,200
Boat gas/oil				\$500	\$500	
Preservative/jars				\$500	\$500	
Field materials: gear/boat/sampling meters/etc/				\$4,000		\$4,000
Overhead				\$7,500		\$7,500
<b>Totals</b>				<b>\$82,300</b>	<b>\$34,400</b>	<b>\$47,900</b>

Matching 58.2% by Layher BioLogics RTEC, Inc.