

Project Title: Control of Asian Carp in the Arkansas-Red-White River Basin

Geographic Location: The Arkansas River from Pine Bluff to Oklahoma state line, White River from the confluence of the Little Red River to the first Dam at Batesville.

Lead Agency: Arkansas Game and Fish Commission (AGFC), Jimmy Barnett (jimmy.barnett@agfc.ar.gov)

Participating Agencies: N/A

Statement of Need:

Asian Carp populations have been increasing in most of Arkansas's big rivers. Bighead carp occurrence records span the Arkansas River from the Mississippi River to the Oklahoma state line and from the Mississippi River to Batesville in the White River. Silver Carp have not been documented above Dardanelle Lock and Dam on the Arkansas or above Dam 2 on the White River. Grass Carp are abundant in both the Arkansas and White Rivers. Black Carp have been documented in the White River up to the Devall's Bluff area. The ranges of invasive carps has expanded since first discovery in these river systems, suggesting that populations have increased and will likely invade large tributaries of these rivers. In addition to occurrence records, reports of sightings by the public are increasing in the Arkansas and White Rivers. Asian Carp populations threaten recreational activities and is likely negatively impacting the native fishery.

The activities reported in this document were designed to reduce Asian Carp population numbers in the Arkansas and White Rivers. Additionally, harvest data should increase our knowledge of Asian Carps, reduce the population size, explore possible deterrent locations, and reduce the chance for upstream range expansion.

Project Objectives:

- 1) Remove Bighead, Silver, Grass and Black Carp from the Arkansas and White Rivers.

Project Highlights:

- Removal efforts can be accomplished without the use of commercial fishers.
- Data is being collected that will aid in future management decisions and help establish where removal efforts should focus.

Methods:

This project originally proposed hiring commercial fishers to remove invasive carp at key locations. Letters were sent to commercial fishing permit holders in September 2020 notifying them of the opportunity. If fishers were interested, the letter asked them to request an RFP (request for proposal) opportunity from AGFC. Nineteen fishers requested the RFP, but AGFC received no proposals by the submission date.

Since no fishers were removing carp, the grant was amended so that AGFC could hire two seasonal employees (Invasive Carp Removal Specialist), purchase a boat (with outboard and trailer), and supplies to remove invasive carps. The jobs were advertised in August 2021. Interviews were conducted in September 2021 and two candidates were selected. The new employees started on October 11, 2021. They were trained on procedures and began removal efforts on October 13, 2021. The format that our agency has to follow for seasonal employees allows them to work 40 hours/week for two months, and then not more than 79 hours during the third month. This schedule is then repeated.

The Invasive Carp Removal Specialists have increased removals (pounds) after an initial learning period. They have adjusted methods to better avoid native fishes, improved locating Invasive Carp (e.g., with sonar), and refined a method, using the boat and outboard, to herd invasive carp into the nets.

Results and Discussion:

The removal crew was able to work the ARW Basin for a total of 13 days between October 13 and December 31 of 2021. They captured and removed 346 Silver Carp and 1 Grass Carp. These fish weighed 4,829.5 pounds.

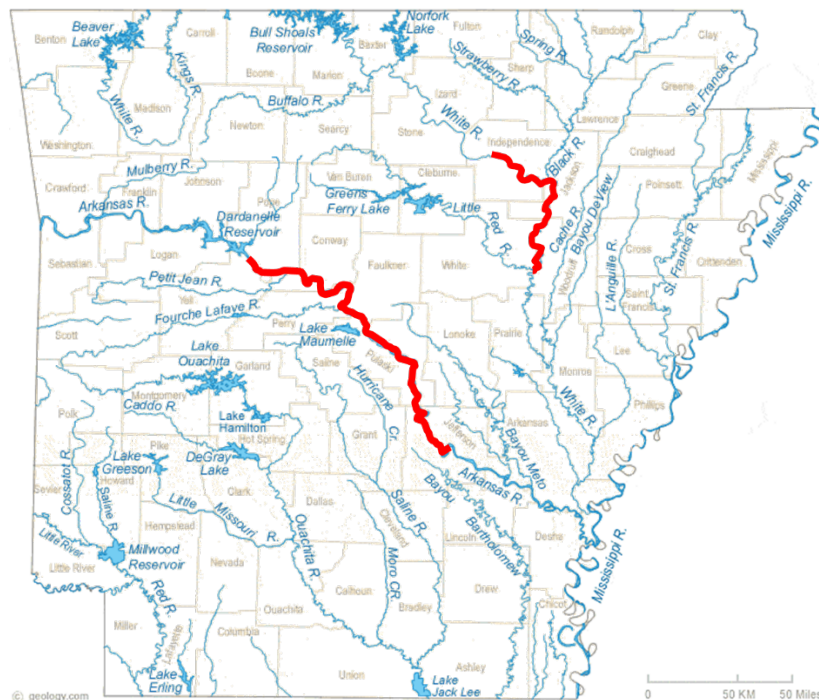


Figure 1. The red areas on the map are the project boundaries.

Recommendation:

Removal will continue in 2022, and with the increased experience of the crew the total number and pounds of invasive carp should be greater than in 2021. Removal efforts are affected most by hydrology (e.g., river gauge heights and flow rates). The reaches of the Arkansas and White rivers within the Arkansas–Red–White sub-basin (area to which ARW Invasive Carp Partnership funds can be applied) have lower abundances of invasive carp compare to the lower reaches nearer the Mississippi River (i.e., Lower Mississippi River sub-basin).