

Michigan's St. Clair System Lake Sturgeon Fishery: Results of an Angler Postal Survey

Gary L. Towns¹

Michigan Department of Natural Resources, Southfield Operations Service Center,
26000 W. Eight Mile Road, Southfield, Michigan 48034-5916

Michael V. Thomas

Michigan Department of Natural Resources, Lake St. Clair Fisheries Research Station,
33135 S. River Road., Harrison Township, Michigan 48045

Abstract.—Lake sturgeon, *Acipenser fulvescens*, is the only species of sturgeon endemic to the Great Lakes. The largest population of this species in Michigan exists in Lake St. Clair and the St. Clair River. In 1999, lake sturgeon anglers were required to obtain a harvest tag in order to fish for lake sturgeon in Lake St. Clair and the St. Clair River (St. Clair System). This provided the opportunity to evaluate the fishery by contacting anglers who were interested in lake sturgeon fishing with a questionnaire sent through the US Postal Service. The objectives of this survey were: 1) to quantify the fishing effort, catch, and harvest for the St. Clair System lake sturgeon fishery in 2006 and 2007; 2) to characterize the demographics of the anglers participating in the St. Clair System lake sturgeon fishery in 2006 and 2007; and 3) to quantify angler opinions regarding lake sturgeon harvest and the fishing regulations for the St. Clair System lake sturgeon fishery. We mailed a questionnaire and a letter explaining the purpose of the survey to 458 anglers in 2008. Three hundred anglers returned a questionnaire and thirteen addresses were reported as undeliverable, resulting in an adjusted response rate of 67.4%. Lake sturgeon anglers were predominantly male (90%), with an average age of 40.7 years. They resided in 16 Michigan counties, but St. Clair, Macomb, and Oakland counties accounted for about 84% of the anglers. Of the 300 respondents, 156 reported they fished at least one time for lake sturgeon in 2006, while 188 reported fishing for lake sturgeon at least once in 2007. Anglers reported catching 683 lake sturgeon in 2006, and 573 in 2007. The average catch per active angler was 4.4 and 3.1 lake sturgeon in 2006 and 2007, respectively. Angler effort was reported as 979 fishing trips targeting lake sturgeon in 2007. Lake sturgeon caught by anglers in 2007 ranged from 12 inches to 88 inches in total length, with 22% (124) legal-sized (42-50 inches). Anglers reported keeping (harvesting) only four, or roughly 3% of the legal-sized lake sturgeon caught during 2007. Most lake sturgeon fishing activity took place during dark hours and from boats. Nearly half of the anglers that responded indicated they had little or no interest in keeping a lake sturgeon and practiced catch-and-release. Most lake sturgeon anglers were satisfied with the current tag and fish registration system, with over 92% of the responding anglers indicating they were satisfied. When combined with all other known sources of fishing mortality for lake sturgeon in the waters from Port Huron south to Lake Erie during 2006 and 2007, we estimate total fishing mortality remained well below the recommended threshold in the Michigan Lake Sturgeon Rehabilitation Strategy. The St. Clair system lake sturgeon sport fishery and associated regulations appears to provide anglers with a unique fishing opportunity while protecting and conserving a unique fishery resource.

¹ Retired