

# Economic analysis of Les Cheneaux Islands sport fishery

Expansion factor for equating ground count method to the more accurate aerial estimation method is ---->

2.50 times

Ratio for estimation missing winter estimates is ----> 30.53 % of summer trip total

0.3053

Economic activity per Great Lakes fishing trip estimate is ---->  
numbers in red are extrapolated

\$73.50 / trip

Year	Time period	Reported			Aerial based estimate		
		Summer trips	Winter trips	Total trips	Summer trips	Winter trips	Total trips
1979	precollapse	22100	7700	29800			62950
1980	precollapse	12300	6200	18500			36950
1986	precollapse				133900	8600	142500
1991	precollapse	50445	15401	65846			141513
1995	precollapse	21679	6619	28298			60816
2000	post collapse				5003	1527	6530
2001	post collapse				12625	6246	18871
2002	post collapse				23665	749	24414
2010	post collapse						23791

Precollapse mean total trips ---->

88946

Post collapse mean total trips ---->

16605

Precollapse total economic activity---->

\$6,537,523.02

Post collapse total economic activity---->

\$1,220,477.69

Total estimated loss of economic activity---->

\$5,317,045.33

This analysis indicates that a total of \$5.3 million dollars in economic activity has been lost each year since the collapse of the sport perch fishery in the Cedarville / Hessel area (\$6.5 million total activity).

In a separate analysis done in 1986, Diana et al. (1987) estimated that the tourist segment of the fishery (not counting locals) generated between \$2.2 & \$4.4 million/Yr in expenditure.

This would be approximately \$3.4 to \$6.9 million/Yr in 2001 dollars (allowing 3% inflation/yr.). This compares closely with the estimates generated here.

**Important notes:** \*These estimates are all in 2001 dollars. \*These are estimates of economic activity which is not the same thing as "value" or "worth" of the fisheries. The "value" of the fishery is more difficult to estimate as it transcends mere economic activity and generally "value" or "worth" of a fishery is much greater. \*Some economists like to expand expenditure estimates by a factor of 3 or 4 to estimate how many times an expenditure may "turn over" in a community. While not new dollars, it sometime indicates how the expenditure may affect the local economic base via intercommunity cash flow. \*Economic expenditures for a Great Lakes fishing trip includes equipment, fuel, lodging, meals, bait, etc. Not all these expenditures would necessarily take place locally as visiting anglers may bring some supplies with them from home. \*It is impossible to determine from this data if anglers not fishing in the Les Cheneaux Islands would fish other locations or not. Consequently, it is not possible to determine (from this analysis) how much economic activity may have been lost from the entire State of Michigan.

This analysis was compiled by Dave Fielder (MDNR) based on MDNR and USFWS data.

## References:

2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation in Michigan, U.S. Department of Interior, U.S. Fish & Wildlife Service, U.S. Department of Commerce.

Diana, J. S., C. A. Jones, D. O. Lucchesi, and J. C. Schneider. 1987. Evaluation of the yellow perch fishery and its importance to the local economy of the Les Cheneaux Islands area. Final report for Grant LRP-8C-7 of the Coastal Management Program, Michigan Department of Natural Resources. p.58.