



Iowa Lakes Drive over \$1 Billion in Recreational Spending Each Year

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OUTDOOR RECREATION in natural resource venues, such as state parks, lakes, and trails that accommodate a variety of recreational and wildlife-related pursuits, is one of the most popular forms of entertainment in the United States. As such, it makes large contributions to the nation’s economy. As a result, residents’ recreational usage and how they value water quality improvements are of interest to policymakers and researchers. In 2002, Iowa State’s Center for Agricultural and Rural Development (CARD), Department of Economics, Department of Ecology, Evolution, and Organismal Biology, and



Limnology Laboratory worked together to create the Iowa Lakes Valuation Project to determine use and valuation information for more than 100 in-state lakes over a comparable time period (figure 1).

Iowa Lakes Valuation Project

The program collected the economic use and valuation information for the study via a survey of Iowa households. The Iowa Department of Natural Resources (DNR) and the US Environmental Protection Agency jointly funded previous surveys conducted in 2002, 2003, 2004, 2005, and 2009. Iowa DNR solely funded the 2014 and 2019 surveys.

CARD developed a website portal to summarize the two decades of

work (<http://www.card.iastate.edu/lakes/>). The portal allows interested recreational users and the general public to easily access previous survey questionnaires and project reports. We also added an interactive section to allow users to browse a summary of popular on-site recreation activities, recreationists’ travel patterns, and economic impacts at individual lakes.

The 2019 Iowa Lakes Survey

Using a sample of 2,062 Iowa residents and 411 residents from neighboring states, the 2019 study provides a critical update to the Iowa Lakes Valuation Project on the use of Iowa’s lakes and respondent attitudes toward water quality measures and economic development. The 2019 survey also

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includes a sample of bordering state residents to better understand their usage of Iowa lakes and the value they place on water quality. Figure 1 shows the selected Iowa lakes and top-10 most visited lakes in 2019 Iowa Lakes Survey. The top-10 most visited lakes in 2019 were Clear Lake, Saylorville Reservoir, Ada Hayden Lake, Coralville Lake, Lake Macbride, Grays Lake, Big Creek Lake, Red Rock Lake, George Wyth Lake, and Lost Grove Lake, respectively.

Recreational activities in Iowa lakes

Figure 2 shows that, similar to historical survey years, in 2019, Iowa respondents said they visit Iowa lakes for picnicking (39%), fishing/boating (31%), and nature/wildlife watching (29%) over the summer season. Of all activities that respondents undertook at all lakes, about 23% were boating and about 27% were trail use. In addition, over 70% of respondents made most of their lake trips in June, July, and August. Additionally, approximately 20%–46% of respondents visited Iowa lakes in the fall and about 20% of respondents visited in winter and early spring.

We also collected a sample of neighboring state respondents in 2019 to understand their recreational activities at Iowa lakes. Among these respondents, the top-three activities selected were relaxing and/or picnicking (19%), nature/wildlife watching (12%), and boating (10%), respectively. Over 60% of respondents made most of their lake trips in June, July, and August. Only about 20% of respondents visited Iowa lakes in winter and early spring.

Water quality perception and information sources

Iowa households continue choosing water quality as their most important factor when choosing a lake destination. In figure 3, among other factors, water quality was considered as the most

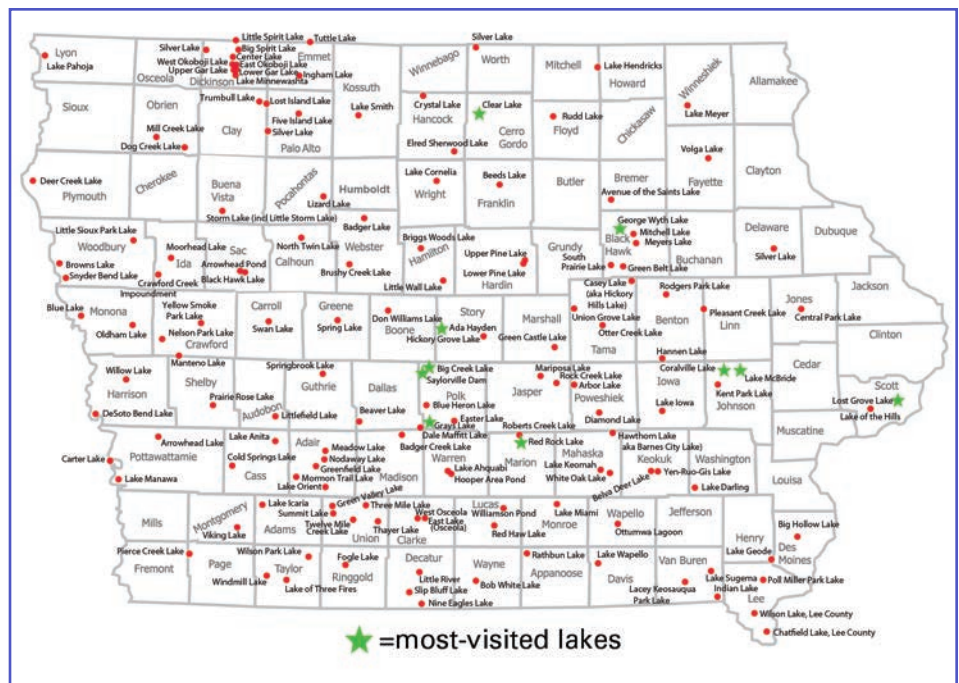


Figure 1. Map of Iowa lakes surveyed in 2019.

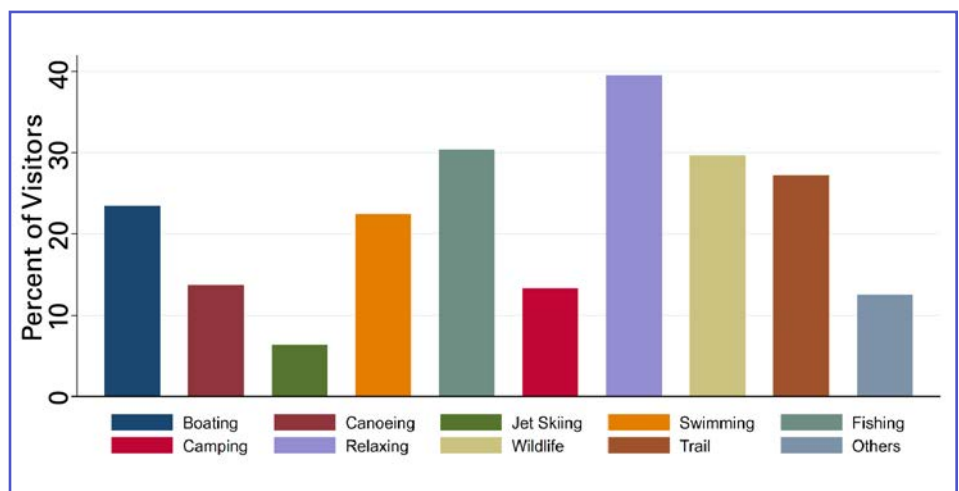


Figure 2. Lake activity distribution for Iowa respondents.

important factor for both Iowa’s and neighboring states’ respondents when visiting a lake in 2019. Proximity and park facilities were of similar importance across years.

Visitors mainly used the DNR website to find information about lakes and to check water quality information. For the Iowa sample, 47% of respondents indicated they used the DNR website to find information about Iowa lakes and 83% of respondents checked the DNR website when they

looked for water quality information. Similarly, 37% of neighboring state respondents indicated they used the DNR website to find information about Iowa lakes and 78% of neighboring state respondents checked the DNR website when they looked for water quality information.

For the first time, the 2019 study also asked about respondents’ knowledge of and experience with harmful algal blooms (HABs). For the Iowa sample, about 58% of respondents

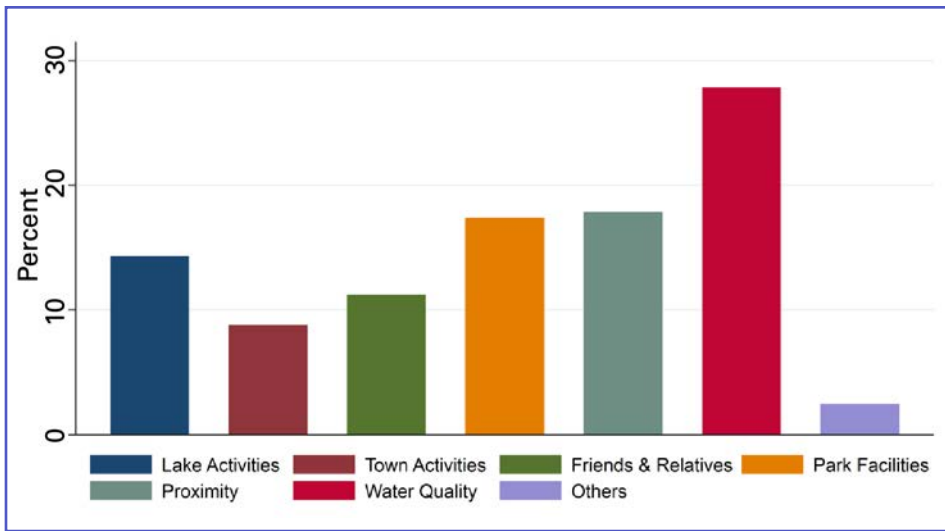


Figure 3. Important factors for choosing a recreational lake for respondents.

stated that they had heard of HABs and 32% of respondents had observed a large algal bloom while fishing or visiting a lake in 2019. In contrast, about 30% of neighboring state respondents have heard of HABs and 22% had observed a large algal bloom while fishing or visiting a lake in 2019.

Lake usage and estimated expenditure

Iowa residents' usage and expenditures on Iowa lakes are stable over the last two decades. Compared to an average of 60% of trip takers in the historical surveys, in 2019, 65% of Iowa respondents reported at least one single-day trip or overnight trip, with an average of 7.8 single-day trips and 2.13 overnight trips to Iowa lakes in 2019. The estimated total household single-day trips across Iowa lakes is also stable across years—an estimated 8.9 million trips in 2019, which is about the same as 2014 estimates.

The recreational opportunities from Iowa lakes continue to have a significant impact on local economies. The average self-reported expenses of single-day trips to a particular lake among Iowa respondents were \$35, while the average overnight trip expenses were about \$135. Compared to the \$983

million dollars of direct spending in 2014 (\$1.059 billion in 2019 dollars), the estimated total direct spending associated with Iowa's 139 lake single-day trip visits in 2019 increased to \$1.023 billion dollars, with an average total expense per lake of \$7.4 million dollars.

We also find that Iowa lakes provide recreational opportunities to neighboring state residents. A significant number of neighboring state residents visited Iowa lakes for recreational use, especially residents of the Omaha metropolitan area. The new section on neighboring states' respondents reveals that approximately 22% of respondents reported at least one single-day trip, while about 9% reported taking at least one overnight trip, with an average of 1.7 single-day trips and 0.7 overnight trips. The top-five most visited lakes by neighboring states' respondents were Lake Manawa, Carter Lake, West Okoboji Lake, Clear Lake, and East Okoboji Lake, respectively. A closer look at the state distribution of neighboring states' respondents reveals a large proportion of respondents in the Omaha metropolitan area contributed to the heavy lake visitations to Carter Lake, Lake Manawa, and DeSoto Bend

Lake. In addition, compared to Iowa respondents, the average expenses of single-day trips to a particular lake among respondents from other states were \$44, while the average expenses of overnight trips were \$137.

Overall, our results provide an empirically based estimate of household trips and expenses for 139 Iowa lakes. We find both Iowa and neighboring states' residents are willing to travel a long distance to Iowa lakes for recreational use, and the lake expenditure of Iowa residents has been steady in recent years. Future studies could work more on the historical surveys to understand how lake visitors' preferences, rural and urban migration, and survey quality affects lake visitations.

Suggested citation

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