

Trends in recreational watercraft use in Otsego Lake since 1975

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Historically, as in all our inland lakes after the original European settlement, rowboats, canoes, and sailboats capable of carrying a few passengers dominated Otsego Lake. Early on it provided a corridor between the waters of the Mohawk drainage and the Southern Atlantic states via the Susquehanna River and was of national importance. It was used for a diversity of commercial and military activities over that length of time. The first dirt road was built up the east side of the lake by William Cooper in 1787. By 1818 sections of road had begun to be built along the west side of the lake between Cooperstown and Springfield but there was no direct route until about 1917 (MacDougal 2014). Those early roads did not provide access to hotels and residences along the lake since they were constructed along the ridgetops to avoid the necessity of building bridges over the many streams running to the lake. During that period, the lake itself served for commercial as well as recreational transportation. The first steamboat was launched in 1858. The last commercial steam vessel plied the lake in 1933. During the height of those activities in 1894, ten steam-powered vessels were active on the lake. At least two, the “Natty Bumppo” and the “Cyclone”, could carry more than 300 passengers (Ketchel 1963).

The Biological Field Station has been conducting summer censuses of boats on the water, as well as those placed for immediate access and including those involved in rental operations since 1975. Between that time and 2019 the total numbers of boats increased gradually from 864 to 1,366 (Table 1, Figure 1) with the biggest increase from 1991 to 2000 due to a rapid increase in canoes, followed by kayaks and most recently, paddleboards. Personal watercraft (PWCs), Jet Skis and their like, appeared on the scene during that same time. This assessment does not consider boats launched for day use at public or private launches, which have the potential to increase traffic on the water.

Since 1975 sailboats on the lake have undergone a gradual decrease. Early on, the larger day cruisers and recognized classes of larger racing boats were most abundant. The loss of the Star fleet of keelboats at the Cooperstown Country Club and the popularity of boats designed for one individual (Sunfish, Lasers, etc.) changed the character of sailing on Otsego despite activities at the Cooperstown Sailing Club that continue to this day and the popularity of wind surfing between 1991 and 2010. The latter have been recently replaced by paddleboards.

There has been a slight but steady decrease over time of powerboats, despite an increase in pontoon boats powered by outboard engines, since 2000. Changes from low horsepower outboards, primarily smaller fishing boats, in part due to the loss of large commercial rental establishments (Thayer’s Livery with over 200 boats, for example) to larger watercraft brought changes to the character of power boating on Otsego as did the loss of classic inboard runabouts and large cruisers which have now been replaced by inboard/outboard runabouts.

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Boats with Ready Access to Otsego Lake 1975 - 2019

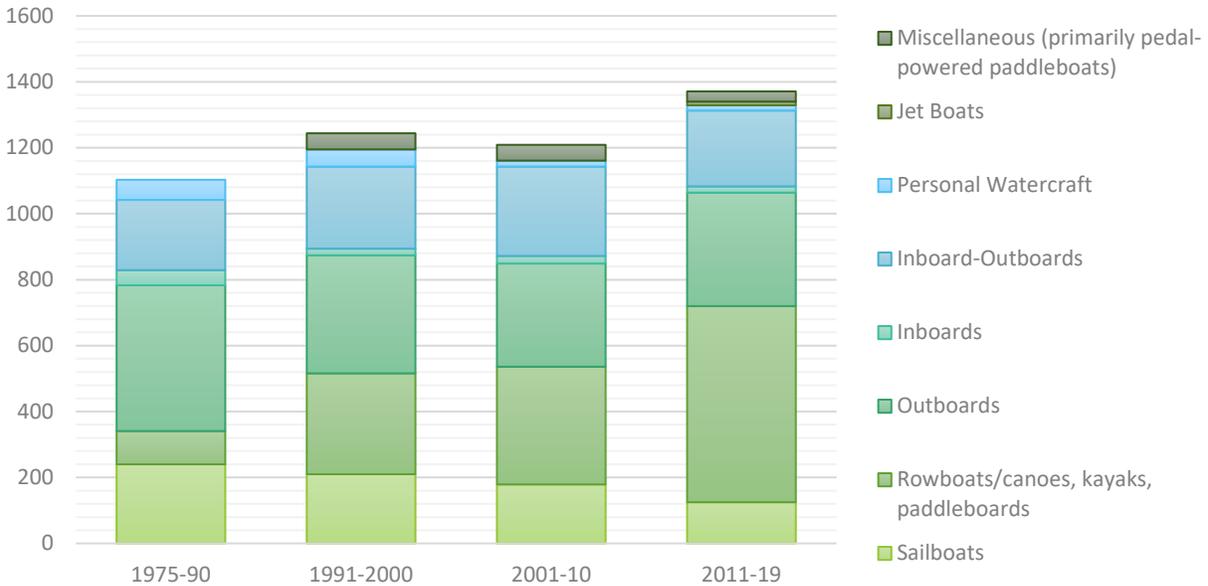


Figure 1. Average number of watercraft with ready access to Otsego Lake in 10-year periods between 1975 and 2019, in total and by watercraft type.

PWCs, which were not documented before 1991, have moved from stand-up to sit-down models that have become quieter, somewhat larger and are now less of a concern than when they were first introduced. Larger jet boats were not documented on Otsego before 2011 -2019. As would be expected, some commercial vessels and unique specialized watercraft are placed in the Miscellaneous category. None were recorded before 1991 (Figure 9). Recently, small sit down, non-powered vessels (e.g., paddle boats,) have been noted, both as motel rentals and at private residences. Because of the lack of capacity and seaworthiness of the latter there has been consideration of not including them in our censusing.

Changes in recreational boating on Otsego Lake since 1975 have reflected increasing population densities and users that have become more affluent operating larger, higher powered vessels while many of those same individuals and their families also use small sailboats, kayaks and paddleboards. These changes can be interpreted with the potential lake impacts in mind, as the types of watercraft in use have implications for the degree of shoreline disturbance experienced; various types of watercraft generate different stressors and impacts due to their mode of operation, size of wake generated, typical use patterns (single trips, slow speed, continuous operation, etc.). Boats capable of generating larger wakes for water sports (e.g. wakeboarding) cause stronger wave action on the shoreline than smaller boats; these boats also tend to operate continuously for longer periods of time. Therefore, while the number of motorized boats may be a smaller percentage of the total boats, the impact that they have in terms of shoreline disturbance may well be greater than the typical motorized craft of previous

decades. Non-motorized craft are not associated with shoreline disturbance in this way, though there are risks of conflicts with motorized traffic and safety concerns during high traffic periods.

The above statements are validated by intensive studies in 1993 by France and Albright (1994a) that showed a correlation between the intensity of cruising boats traveling within 500ft of the shoreline, phosphorus concentrations and turbidity in the water column. High amounts of sediment turnover and deposition attest to more serious impacts in areas protected from the prevailing winds (France and Albright (1994b). These data provided much of the information that led to the development of Otsego Lake’s 200ft no-wake zone along the shorelines.

Table 1. Average number of watercraft with ready access to Otsego Lake in 10-year periods between 1975 and 2019, in total and summarized by type and functional group (motorized vs. non-motorized craft).

	1975-90	1991-2000	2001-10	2011-19
Number of Watercraft (10-year averages)	864	1259	1299	1366
Sailboats	240	210	179	125
Rowboats/canoes, kayaks, paddleboards		306	357	595
Outboards	442	358	313	344
Inboards	46	20	23	19
Inboard-Outboards	213	249	271	230
Personal Watercraft	61	52	18	16
Jet Boats				11
Miscellaneous (primarily pedal-powered paddleboats)		49	48	31
Motorized Craft	762	679	625	620
Non-Motorized Craft	240	565	584	751

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