



## GENEVA LAKE AND BOATING

### INTRODUCTION

Over the last decade lakes throughout the country have faced unprecedented boating pressures. Due to its size, aesthetics, and proximity to several large metropolitan areas, Geneva Lake is no exception. As development in the area has increased, so has boating and the number of boats being used. Boating, one of the most popular activities on Geneva Lake, can have the biggest impact both ecologically and socially on *user conflict*. Since Geneva Lake is such a highly valued resource, management for minimal *user conflict* and limiting frustration and disappointment in water recreation activities should be a high priority.

### GENEVA LAKE AND BOATING

Geneva Lake has a rich history of boating. From the steam



yachts of the late 19th century to the large houseboats of the late 20th century, the size, water quality, and depth of Geneva Lake have made it an ideal lake for boating of all types. A lake-use survey by the Geneva Lake Environmental Agency in 1999 found that more than three-quarters of the 589 respondents indicated they boat on Geneva Lake. The same survey found boating to be the third most popular reason, behind peace and tranquility and entertaining for using Geneva Lake. Yet 89 percent of them felt boating contributes to the pollution problems of Geneva Lake. The survey also showed that many feel boating during the week is still an enjoyable experience, but boating on the weekends is not.

For simplicity, boating enthusiasts are categorized into two groups, *transient* and *ambient*. *Transient* boaters are boaters who bring their boats to Geneva Lake and launch them at one of the numerous launch sites. *Ambient* boaters have their boats docked or moored on Geneva Lake.



### WISCONSIN DNR RECREATIONAL BOATING STUDY

During 1989-90, the DNR conducted a statewide county-by-county survey of recreational boating. As expected, the survey found primary boating times were on weekends between 11 a.m. and 4:30 p.m. Geneva Lake was found to be the state's fourth most visited surface water behind the Mississippi and Wisconsin rivers and Lake Winnebago.



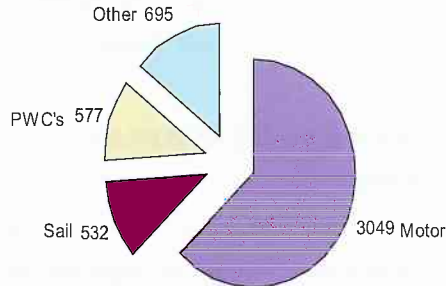
Fontana Bay on a Fourth of July

The survey also found Walworth County had the fourth highest boat engine horsepower of all counties with an average of 102.3 h.p. Walworth County had the lowest mean boater satisfaction, and the highest level of crowdedness of all counties in the state.

## ANNUAL BOAT SURVEY

For the last 25 years, the Geneva Lake Environmental Agency and the Geneva Lake Water Safety Patrol have conducted an annual boat count of all boats docked or moored on Geneva Lake. These counts have shown that the number of crafts counted has increased, with a gradual leveling off in the last couple of years. Overall, the number of sailboats has decreased, with the difference being made up by increases in the number of motorboats and personal watercrafts. Total number of boats counted as docked or moored on Geneva Lake in 2005 was 4,853, with powerboats representing 63%, sailboats 11%, personal watercraft 12%, and others 14%. (Figure 1)

Figure 1  
Boats Types Docked or Moored on Geneva Lake  
WI, August 2005, Total Boats 4,853



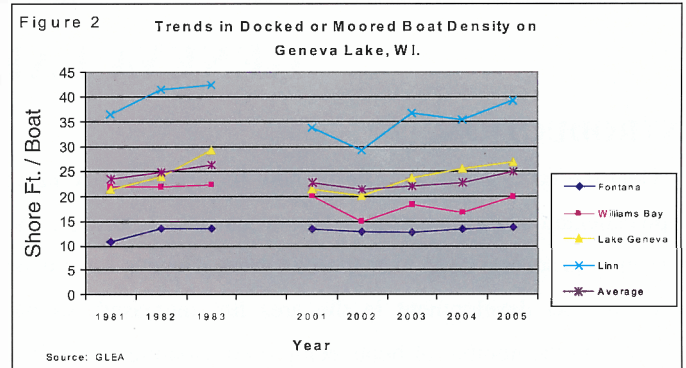
The recent increase in the use and number of off-lake *dry storage* facilities has changed the nature and number of docked and moored boats. It has also made inventorying boats more difficult.

Docked and moored boat density for 2005 varied from community to community, with Fontana having the highest density (13.8 feet of shoreline/boat) and the north shore of Linn Township having the lowest density (47.9 feet of shoreline/boat). Even when the north and south shores are combined, Linn Township has the lowest density of all communities. (Table 1).

Community	shoreline ft.	Boats	Shore ft / boat
Lake Geneva	17,900	664	27
Linn - N. Shore	20,200	422	48
Williams Bay	20,900	1,045	20
Fontana	20,700	1,494	14
Linn - S. Shore	32,500	1,228	26
Lake wide	112,200	4,853	23

source: GLEA

The density of docked and moored boats has decreased slightly from the early 1980s to the present. It appeared density was increasing in the early 1980s but dropped in the 1990s. (Figure 2)



In recent years, docked or moored boats appear to be increasing in numbers again. That may be due to *dry storage* facilities being included in recent counts.

## MUNICIPAL LAUNCHES

There are five public *municipal launch* sites and numerous

*private launch sites*

around Geneva Lake. For the most part, the



use and access of private sites are restricted, yet they do contribute some boats to the lake. With the help of the local municipal records and staff, the GLEA inventoried the approximate number of launches that took place from the municipal launch sites. They represent the major source of *transient* boats to Geneva Lake. In some cases, the numbers of launches were not recorded, so the number of passes sold and the total daily revenue were used to estimate the number of launches.

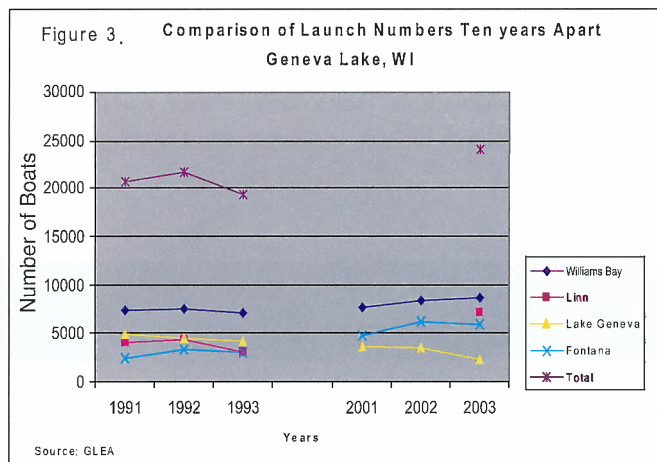
In 2003, the last year the data was reviewed, the number of estimated launches at the five municipal launch sites was 24,057 (Table 2).



Municipality	Launches
Williams Bay	8647
Town of Linn	7084
Lake Geneva	2378
Fontana	5948
<b>total</b>	<b>24057</b>

The majority of these launches took place between May and September. A review of the launch data shows the average annual total estimated launches from the early 1990s and the early 2000s are similar (Figure 3).

The portion of the total launches contributed by each community has changed slightly.



**LAKE FLYOVERS**

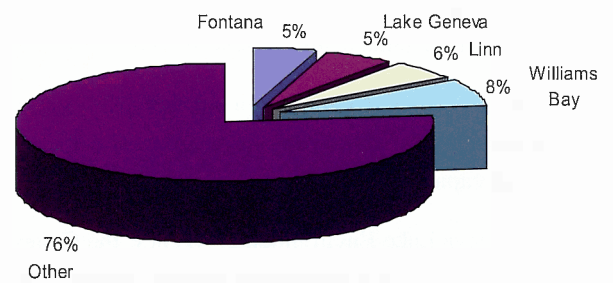
*Flyovers* were used to gather instantaneous boat-use numbers and to assess which portions of the boats in use were *transient* or *ambient*. Data from *flyovers* was collected in 1977, 1988, and 2003. Although the methods used for the different counts varied, general conclusions can be drawn from the three flyovers. All three counts included numbers collected on the Fourth of July, one of the busiest boating days of the year. The 1988 and 2003 counts also included weekday and weekend counts.

The Fourth of July aerial surveys conducted in 1977, 1988, and 2003 counted 650, 1120, and 512 boats respectively. In general, the 1988 counts for weekends, weekdays, and the holiday were higher than the 1977 and 2003 counts.

The 2003 aerial survey confirmed, not surprisingly, that the numbers of boats in use on the lake was highest during weekends and on the Fourth of July. Instantaneous trailer counts at the municipal launch sites while conducting the 1988 and 2003 flyover surveys showed that during holiday weekends, weekends, and weekdays the majority of boats on the lake came from places other than municipal launch sites.

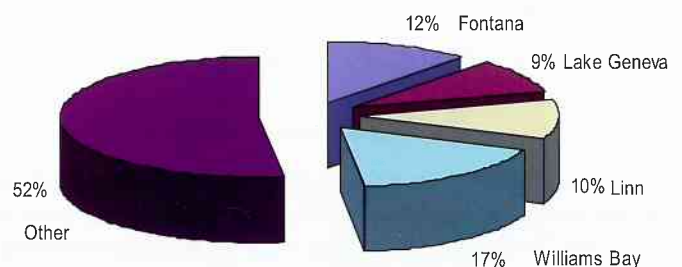
During the 2003 holiday weekend more than 75 percent of the

Figure 4 Source of Boats on Geneva Lake WI on a Holiday Weekend, July 4, 2003, Total Boat 512.



boats on the lake accessed the lake from places other than the municipal launch sites. (Figure 4). During the weekday flyover the number of boats on the lake was about half of what it was during the holiday weekend, with just more than half of the boats at that time having accessed the lake from places other than the municipal launch sites (Figure 5). These other sources can include riparian boats, boats launched from private launch ramps, and *dry storage* facilities.

Figure 5 Source of Boats on Geneva Lake WI, on a Weekday August 5, 2003, Total Boats 211



## SUMMARY AND CONCLUSIONS

- Geneva Lake is the fourth most visited surface water in Wisconsin.
- Walworth County boaters experienced the lowest mean boater satisfaction with a high level of crowdedness of all 72 counties in the state.
- The number of boats launched at the municipal launch sites has showed a slight decrease in the last 10 years.
- The number of boats docked or moored on Geneva Lake has increased slightly over the last 25 years, with a gradual increase in the number of motorboats and “others,” including personal watercraft.
- The majority of boats on Geneva Lake during past flyovers were from sources other than the municipal launch sites.
- The variability in record-keeping and the increase of in-out services challenge boat inventories and categorizing.
- Geneva Lake is required by the State to have a minimum of 100 car-trailer parking areas. As of 2003 there were 156 located at various public launch sites around the lake.
- Using 10-15 acres per boat as a conservative safe density for all types of boating activities, during 2003 the number of boats in operation on the lake during three different degrees of use was close to exceeding the recommended boating densities for optimal boating capacity.
- The Geneva Lake Environmental Agency, the Geneva Lake Use Committee, the Geneva Lake Water Safety Patrol, and the Geneva Lake Law Enforcement Agency should jointly prepare a recreational use plan to include management of boating activities to minimize conflicts of use.

## GLOSSARY

*Ambient boat* – Boats that are docked or moored on Geneva Lake.

*Dry storage* – Storage of a boat out of the water, generally in a structure or area either close to or close enough to be launched at private launch sites.

*Flyover* – Instantaneous boat counts from pictures taken while flying over the lake.

*Municipal launch* – Launch site owned and operated by one of the four Geneva Lake municipalities: Town of Linn, Village of Williams Bay, Village of Fontana

and the City of Lake Geneva.

*Private launch* – Launch site owned by an individual or a group of people and has access limited to those owners only.

*Transient boats* – Boats that are brought to the lake and launched at one of the municipal or private launch sites.

*User conflict* – Disagreement or differences arising from different types of lake use.

This Summary Information Sheet is the sixth in a series of information flyers about Geneva Lake and its management. These information sheets are educational publications that summarize larger, more detailed reports on Geneva Lake. These summaries are prepared by the Geneva Lake Environmental Agency with the assistance of the original authors. SIS #6 is made possible financially by the generosity of the Lake Geneva Garden Club and the WDNR Lake Planning Grant. Copyediting and proofing have been donated by Fred Noer. Additional copies are available by writing us at the Geneva Lake Environmental Agency, P.O. Box 914, Williams Bay, WI 53191, calling 262-245-4532, or e-mailing [glea@genevaonline.com](mailto:glea@genevaonline.com).