

Golden Township, Oceana County, Michigan

February 2015

Prepared by: Dr. William S. DeJong Friends of Silver Lake

Acknowledgments

We would like to extend our appreciation to all of the persons that assisted in making this study possible. We would like to thank Oceana County Commissioner, Larry Byl, along with Ed DeJong and Bill Bryker for assisting in reviewing documents. Special recognition goes to Charlotte Kiefer, Silver Lake State Park Manage for making Silver Lake State Park data available, as well as Bob Henry, owner of Sierra Sands Family Lodge. We would also like to thank members of the DeJONG-RICHTER staff for contributing their time.

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William DeJong, Ph.D.

Dr. William DeJong is a resident of Silver Lake. He is the former President and CEO of DeJONG Inc. and currently serves as Senior Advisor for DeJONG-RICHTER, LLC. (www.dejong-richter.com). He has been involved in nearly 500 demographic and master planning projects. Bill is also the co-founder of Schools for the Children of the World (www.schoolsforchildren.org) which is a non-profit organization that develops school facility projects in developing countries.

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Introduction

This report was developed to gain a general understanding of the population in the Silver Lake Area located in Golden Township, Mears, Michigan.

The Silver Lake area is a seasonal community where the vast majority of the housing units are occupied primarily during the summer months. As such, information regarding the population of this area is not included in other reports such as the United States Census or in Golden Township reports or documents.

The Silver Lake area, for the purpose of this analysis, includes all property surrounding Silver Lake, including properties on the lake and within approximately one mile of the lake. In this area there are approximately 192 homes/cottages on Silver Lake, 692 homes/cottages in the Silver Lake vicinity, 1,693 camp sites, and 156 hotel rooms. In addition there are approximately 675 homes/cottages in the Upper Silver Lake-Lake Holiday area which are located in close proximity to Silver Lake.

Since the population is primarily seasonal, the estimated number of persons range from less than 1,000 during the winter months to over 14,000 in the peak summer months. With the inclusion of "day users/visitors" the population can swell to well over 20,000 in the summer months and nearly 25,000 on the 4th of July.

The data used in this report was derived from the U.S. Census, Oceana County Department of Equalization, brochures of campgrounds & hotels, web, statistics from the Silver Lake State Park, survey of property owners, along with other sources and programs such as Google Maps and ArcView GIS.

The population figures contained in this report are estimates. These estimates could be further refined by gaining data from additional campgrounds, hotels, businesses, and property owners regarding actual levels of occupancy.

The purpose of this analysis is to provide a greater understanding of the Silver Lake area and to hopefully help guide decisions regarding public services, infrastructure requirements, and to facilitate a more proactive approach to responsible planning and further development of the area.

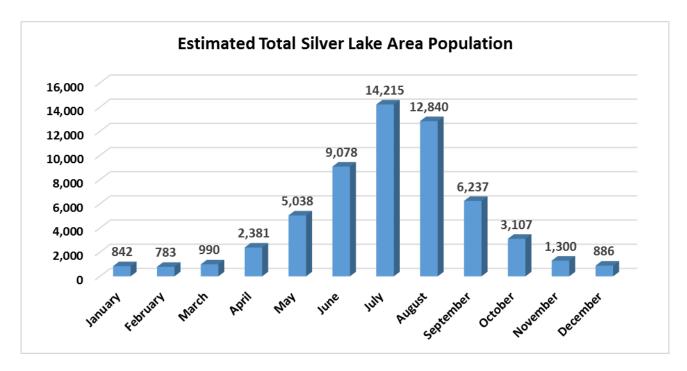
The Friends of Silver Lake is a non-profit 501c3 association of property owners and other parties interested in the betterment of the Silver Lake community located in Golden Township, Oceana County, Michigan.



Summary of Findings

The table below provides a summary of the Silver Lake area population by month. This includes all homes/cottages, campsites, and hotel rooms.

The data indicates there is an average of approximately 14, 215 persons per day in the Silver Lake area in the peak month of July. In the month of February, the data suggests there are approximately 457 persons in the Silver Lake vicinity and 385 persons in the Upper Silver-Lake Holiday vicinity. The actual numbers are likely to be less. The reason the numbers are likely to be less is due to a higher proportion permanent residents completing the on-line surveys than seasonal residents. Also, there is high percentage of permanent residents that are snow-birds and migrate to the south for the winter months.



Demographic Analysis

Golden Township, MI

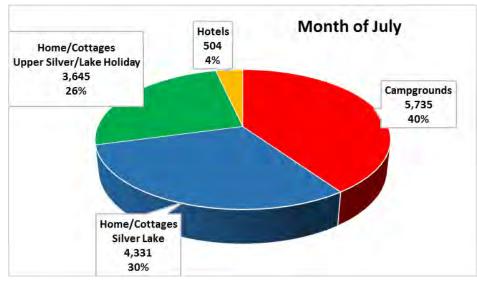
The number of persons staying in homes/cottages, campgrounds and hotels the utilization rates were estimated based on a survey of property owners and data received from the Silver Lake State Park.

Estimated Total Silver Lake Area Population												
		nes & tages	Campgr	ounds	Но	tels	Silver La Sub 1			r Silver- Holiday	Grand	d Total
Month	# Units	Persons	# Units	Persons	# Units	Persons	Sub Total Units	Sub Total Persons	# Units	Persons	Total Units	Total
January	802	457	1,693	0	156	0	2,651	457	675	385	3,326	842
February	802	425	1,693	0	156	0	2,651	425	675	358	3,326	783
March	802	537	1,693	0	156	0	2,651	537	675	452	3,326	990
April	802	1,219	1,693	96	156	41	2,651	1,355	675	1,026	3,326	2,381
May	802	2,149	1,693	994	156	86	2,651	3,229	675	1,809	3,326	5,038
June	802	3,168	1,693	2,952	156	292	2,651	6,412	675	2,666	3,326	9,078
July	802	4,331	1,693	5,735	156	504	2,651	10,570	675	3,645	3,326	14,215
August	802	3,946	1,693	5,125	156	448	2,651	9,519	675	3,321	3,326	12,840
September	802	2,510	1,693	1,472	156	142	2,651	4,124	675	2,113	3,326	6,237
October	802	1,524	1,693	235	156	66	2,651	1,824	675	1,283	3,326	3,107
November	802	706	1,693	0	156	0	2,651	7 06	675	594	3,326	1,300
December	802	481	1,693	0	156	0	2,651	481	675	405	3,326	886

Notes: Some campgrounds could be classified as Upper Silver Lake. Figures do not include "day users/visitors"

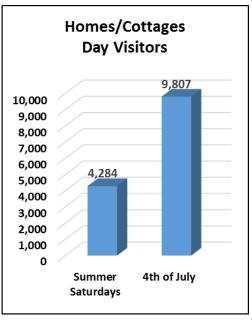
The summer month of July is when most persons are in the Silver Lake area. On a typical day in July there are approximately 14,215 persons in the vicinity plus day users. Estimates would suggest there are approximately 5,735 or 40.3% staying in campgrounds, 4,332 or 30.5% at homes/cottages in the Silver Lake area, 3,645 or 25.6% at homes/cottages in the Upper Silver Lake area and 504 or 3.5% staying in hotels.

Persons Per Day in the Month of July Silver Lake & Upper Silver Lake-Lake Holiday Area						
	Approx # Persons	Percent				
Campgrounds	5,735	40.3%				
Home/Cottages Silver Lake	4,331	30.5%				
Home/Cottages Upper Silver/Lake Holiday	3,645	25.6%				
Hotels	504	3.5%				
Total	14,215	100.0%				



In addition to the population that is residing in the Silver Lake area, there is also a large number of "day users/visitors". These are persons that may be staying outside of the study area or traveling to Silver Lake for day use. Just based on the survey of property owners, it is estimated that there are over 2,000 during the week, over 4,000 on the weekend and likely more than 10,000 on the 4th of July. The number of "day users/visitors" could be significantly higher since these number are reported by home/cottage owners and not factor in the ORV access or persons visiting local business establishments.

Homes/Cottages Day Visitors			
.,	Total		
Summer Saturdays	4,284		
4th of July	9,807		





U.S. Census

The United State Census is conducted every ten years. The 2010 U.S. Census records a total Golden Township population of 1,742 persons. Even though the Silver Lake area engulfs a major portion of Golden Township, geographically the Township is substantially larger than the Silver Lake area.

The reason that the total population, according to the U.S. Census, is only 1,742 and the calculations in the report, at certain times of the year, can be in excess of 14,000 is due to the fact that the U.S. Census only includes the permanent population. Even though this does not include the summer residents, the U.S. Census does provide insights that can be of interest.

Age of Population

The median age of the permanent population in Golden Township is 52.5 years old. This is substantially higher that what is typically found in the general population in the United States. It is also interesting to note that there are only 319 persons under the age of 20 and 436 over the age of 65. Further analysis would be needed but it appears that the Silver Lake area is a retirement community for a substantial number of persons.

2010							
Golden Township							
General Popula							
	Number	Percent					
Total population	1,742	100.0					
Under 5 years	84	4.8					
5 to 9 years	76	4.4					
10 to 14 years	75	4.3					
15 to 19 years	84	4.8					
20 to 24 years	65	3.7					
25 to 29 years	83	4.8					
30 to 34 years	73	4.2					
35 to 39 years	79	4.5					
40 to 44 years	83	4.8					
45 to 49 years	124	7.1					
50 to 54 years	149	8.6					
55 to 59 years	153	8.8					
60 to 64 years	178	10.2					
65 to 69 years	154	8.8					
70 to 74 years	118	6.8					
75 to 79 years	80	4.6					
80 to 84 years	56	3.2					
85 years and over	28	1.6					

Source: 2010 U.S. Census Bureau



Housing

According to the U.S. Census, there are 2,366 housing units in Golden Township, 781 of which are occupied by permanent residents. The remaining 1,475 are classified as seasonal, recreational or occasional use. There were 1,477 homes/cottages included in the study area for this demographic analysis. It should be pointed out that some of these homes/cottages in the Silver Lake area are permanent homes and it should also be pointed out that some of the 1,475 housing units contained within the U.S. seasonal calculations are housing units outside of Silver Lake area.

2010		
Golden Towns	ship	
Housing		
	Number	Percent
Total housing units	2,366	100.0
Occupied housing units	781	33.0
Vacant housing units	1,585	67.0
For rent	26	1.1
Rented, not occupied	1	0.0
For sale only	23	1.0
Sold, not occupied	6	0.3
For seasonal, recreational,	1,475	62.3
or occasional use		
All other vacants	54	2.3
Source: 2010 U.S. Census Bureau		

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"Day Users/Visitors"

"Day Users/Visitors" can be defined in different ways. The Silver Lake State Park defines a Day User/Visitor as anyone who enters the State Park. This would include Silver Lake State Park campers as well as persons that are staying in other campgrounds, hotels, local homes/cottages or persons that are visiting the State Park for the day.

Silver Lake State Park estimated there were 772,231 visitors in 2014. Two-thirds of the visitors were in the ORV Dune area.

Silver Lake State Park 2014 Day Users					
Number Percent					
Lighthouse, Campground & Boating Access, Mac Woods	259,573	33.61%			
ORV Dunes	512,658	66.39%			
Total	772,231	100.00%			

Source: Silver Lake State Park

Home-Cottage Visitors

The Friends of Silver Lake conducted a survey of property owners in the Silver Lake area in January 2015. Nearly 50% (270) of the persons surveyed responded. One of the questions asked was the number of persons that visited during the summer months, on weekends and on the 4th of July. In this case, the question asked for the number of persons visiting that were in addition to the number of persons staying at the property. In tables found later in this report, it is estimated that between 4,000 and 10,000 persons are visiting the Silver Lake area during the summer weekends and on holidays.

Local business are also believed to generate a large number of visitors.

Further analysis is needed to gain a better understanding of the exact number of day users/visitors there are in addition to persons staying in cottages/homes, campgrounds and hotels. When calculating day users/visitors there can be a great deal of duplication since the same person can be staying at a cottage or a campground or a hotel and using the ORV area and purchasing services/products from local businesses.



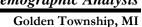
Local Businesses

The Silver Lake Sand Dunes Area Chamber of Commerce lists many business establishments that are located in the Silver Lake Area. There was no attempt to determine the number of "user days/visitors" businesses may generate or other potential impacts.

There is a wide variety of business establishments that have a large impact on the number of persons visiting the Silver Lake area.

- Resturants
- > Take out Food Establishments
 - o Ice Cream
 - o Pizza
 - o Other foods
- Entertainment
 - o Go carts
 - o Miniture golf
- Gas stations
- Dune Rides
- ORV Rentals
- Boat Rentals
- ➤ Bicycle/Moped Rentals
- ➤ Souvienner & Retail Shops
- Bakery
- > ORV Parts & Repair
- Campground Stores
- Events
 - o Apple & BBQ Cook-off Festival
 - o Picnic in the Park
 - o 4th of July Fireworks









Silver Lake Area Homes & Cottages





Introduction

This report was developed to gain a general understanding of the homes & cottages in the Silver Lake Area located in Golden Township Mears, Michigan.

Homes and cottages around Silver Lake range from dwellings that are less than 500 square feet to homes over 4,000 square feet. The dwellings can range from trailers/mobile homes to permanently constructed homes. It is not uncommon to find properties that might have both a permanent home/cottage and a trailer/mobile home on the site.

Many of these dwelling are seasonal and it is common in these cottages for owners to "winterize" their cottages by turning off and draining the water so it won't freeze. A much smaller percentage of homes are permanent. Even though they are permanent it is not uncommon to find the permanent residents that are "snow birds" and spend winters in the warmer southern climate.

The value of the Silver Lake area properties can vary from under \$30,000 to approximately \$1,000,000.

The Silver Lake area is serviced by Great Lakes Energy for electricity. Most residences have septic waste systems. Water is all based on wells, typically each property has a separate well. Heating is usually electric, propane gas, or there is no heating systems in the dwelling. Phone service is provided by Frontier Communications and there is cable service from Golden Communications.

The information contained in this report was derived from:

- Golden Township Parcel Data
- Oceana County GIS Data
- > Friends of Silver Lake Survey of Property Owners

There is wide discussion as to whether Upper Silver Lake and Lake Holiday are part of the Silver Lake area or separate from. For the purposes of this analysis, the data has been kept separate. To estimate the Upper Silver Lake-Lake Holiday area population characteristics, the same ratios were applied that were used to calculate the Silver Lake Area estimates.

Contained in this report are maps for the various areas to further clarify what properties where included in the Silver Lake Area and the Upper Silver Lake areas.

DRAFT

Golden Township, MI Silver Lake Area Homes & Cottages Study Area (See appendix for parcel map for each Section- sub area) W Fox Rd W Fox Rd Silver Dam Dr. W Taylor Rd. W Taylor Rd W.Easy.St Hunter Creek N Raven Ro Silver Lake W Hazel Rd Duna Vista Dr Sandy Dr South Dr ver Creek Duck Rd Spencer Rd5 2 km In Ave



Silver Lake Are Homes & Cottages

Below is a breakdown of the homes & cottages in the Silver Lake Area.

There is no clear definition of the Silver Lake area. In some cases people defined Silver Lake area of just those homes/cottages on the lake itself. The Silver Lake Improvement District is defined as all properties which have deeded access to the lake. However, there are many properties near Silver Lake which are not in the lake improvement district. Others define Silver Lake area as all of the property west of Mears to Lake Michigan including Upper Silver Lake and Lake Holiday. And yet others define the Silver Lake area as the entire area in the Silver Lake water shed.

For the purposes of this analysis the Silver Lake area is defined as the area 14th Ave (Termite Bridge) on the West, Duck Road on the South, 34th Ave on the East and Fox Road on the North. See previous page. For parcel maps of each area, see maps at the end of this section of the report.

Based on a review of the Oceana County parcel maps, there are approximately 192 homes/cottages located on Silver Lake and approximately 610 homes/cottages in the Silver Lake are which are not located on the lake itself. In some cases there are multiple dwellings on the same property which may be separate living areas [condo/cabins, etc.] or in other cases they may be a building where the use could not be verified. Therefore these numbers should be considered approximations.

	Silver Lake Area Homes & Cottages					
	Section	On Lake	Off Lake Cottages/Homes	Vacant		
SL 1.1	14th Ave to Channel Lane	14	14	5		
SL 1.2	Channel LN to Public Access [Sandy Woods]	20	43	3		
SL 1.3	Chanel LN to 18th Ave [South of Silver Lake Rd]	0	100	9		
SL 2.1	18th Ave to 22nd Ave	22	78	15		
SL 2.2	22nd Ave to State Park	18	75	3		
SL 3.1	State Park & Sandy Shores	14				
SL 3.2	State Park to Hazel Road	31	4	1		
SL 4.1	Hazel Road Business District					
SL 5.1	N. Shore Dr [Hazel Road to Hunter Creek]	13	87			
SL 5.2	N. Shore Dr [Hunter Creek to Edgewood]	17	94			
SL 5.3	N. Shore Dr [Edgewood to N. 24th Ave]	23	86	6		
SL 5.4	N. Shore Dr [N. 24th Ave to Dunes]	20	29	6		
	Totals	192	610	48		

Source: Oceana County GIS, Golden Township Parcels



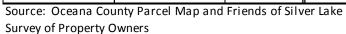
Silver Lake Area Persons by Month

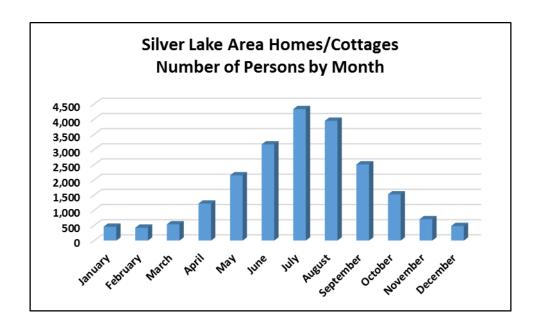
A survey was conducted of property owners in the Silver Lake area. 270 persons responded to the survey. The survey results indicate that there is a wide range in the average number of persons staying at their homes/cottages during various times of the year.

In all months with the exception of June, July and August the occupancy rate of homes & cottages in the Silver Lake are very low, less than two persons per home/cottage. However in the summer months the rate increases significantly.

Based on the estimate of 802 homes and cottages in the Silver Lake Area [see previous section], it is estimated that there are approximately 425 people staying at a home/cottage during the month of February and 4,331 persons that are staying in homes/cottages during the month of July.

Silver Lake Area Homes/Cottages Number of Persons by Month						
Month	# Cottages/Homes	Average # Occupants	Total # Persons			
	<u> </u>	-				
January	802	0.57	457			
February	802	0.53	425			
March	802	0.67	537			
April	802	1.52	1,219			
May	802	2.68	2,149			
June	802	3.95	3,168			
July	802	5.40	4,331			
August	802	4.92	3,946			
September	802	3.13	2,510			
October	802	1.90	1,524			
November	802	0.88	706			
December	802	0.60	481			





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Silver Lake Area Persons by Day During Summer Months

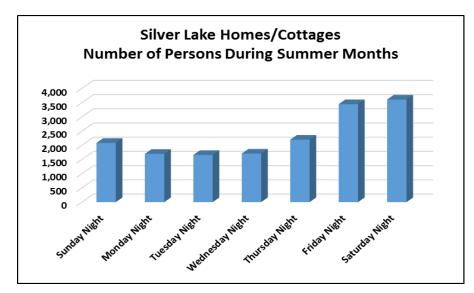
The summer months, especially from mid-June to mid-August is the highest use of homes & cottages in the Silver Lake Area. Survey responses indicated that there were from 2.07 to 2.60 persons occupying their home/cottage during the week in the summer and from 4.30 to 4.50 on the weekends.

The survey responses show that approximately 95% of cottage/homes in the Silver Lake Area are occupied on the weekend during the summer months. They are approximately two-thirds occupied during the week.

Based on the manner in which persons responded to the survey when asked the number of persons on typical day of the week was lower than the number of persons on a day during the month of July. This probably is a result of respondents looking at a typical weekday in the summer to include June, July and August and the data in the previous section also shows there are fewer persons in June and August than there are in July.

The data suggests there are approximately 1,700 persons occupying homes/cottages in the Silver Lake Area during the week and approximately 3,600 on the weekends.

Silver Lake Homes/Cottages Number of Persons During Summer Months						
Day of Week	#	%	Average #	Total #		
Day of Week	Cottages/Homes	Occupied	Occupants	Persons		
Sunday Night	802	75.84%	2.60	2,085		
Monday Night	802	65.80%	2.12	1,700		
Tuesday Night	802	65.80%	2.07	1,660		
Wednesday Night	802	65.80%	2.13	1,708		
Thursday Night	802	76.95%	2.74	2,197		
Friday Night	802	94.80%	4.30	3,449		
Saturday Night	802	95.17%	4.50	3,609		



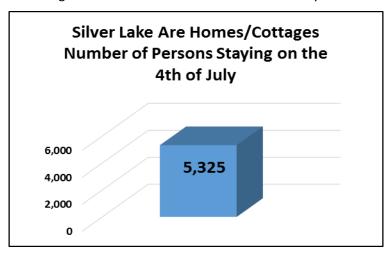
Demographic Analysis

Golden Township, MI

Silver Lake Area Homes/Cottages on th 4th of July

Base on the information collected, there are approximatly 5,325 persons staying at homes & cottages in the Silver Lake area the Fourth of July.

Silver Lake Homes/Cottages Number of Persons Staying on the 4th of July						
	# % Average # Total #					
Cottages/Homes Occupied Occupants Persons						
4th of July	802	95.17%	6.64	5,325		



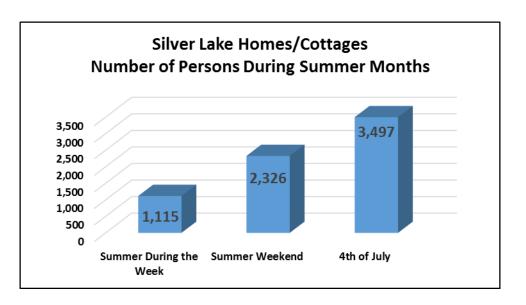


Silver Lake Area Homes/Cottages Visitors

In addition to persons staying at homes/cottages in the Silver Lake Area, there are day visitors. These are persons that might come up for the day but not staying overnight. According to the survey results and applying these averages to the total number of homes/cottages, there are approximately 1,115 day visitors during the week, 2,326 during the weekend and 3,497 on the 4th of July.

These numbers do not inlcude persons that are visiting the lake/dunes for the day (i.e. ORV day users, Lighthouse day users, boat day users, dune climber day users) that are not also visiting homes/cottages.

Silver Lake Homes/Cottages Number of Persons During Summer Months							
Day of Week	Total #						
Day of Week	Cottages/Homes	of Visitors	Persons				
Summer During the Week	802	1.39	1,115				
Summer Weekend	802	2.90	2,326				
4th of July	802	4.36	3,497				





Silver Lake Area Homes/Cottages Summary

When reviewing the homes/cottages in the Silver Lake area there is a very wide range in the number of people that are likely to be staying in the area. During the winter months it appears to be approximately 521 persons and on the 4th of July there could be as many as 8,822 persons staing or visiting homes/cottages in the Silver Lake area.

Total Number of Persons Silver Lake Homes/Cottages						
						Total #
		Occu	pants	Visi	ting	Persons
	#	Average #	Total	Average #	Total	Total #
	Cottages/Homes	Occupants	Staying	Visiting	Visiting	Persons
Winter Months	802	0.65	521	0	0	521
Summer Months	802	4.76	3,818	2.15	1,724	5,542
4th of July	802	6.64	5,325	4.36	3,497	8,822



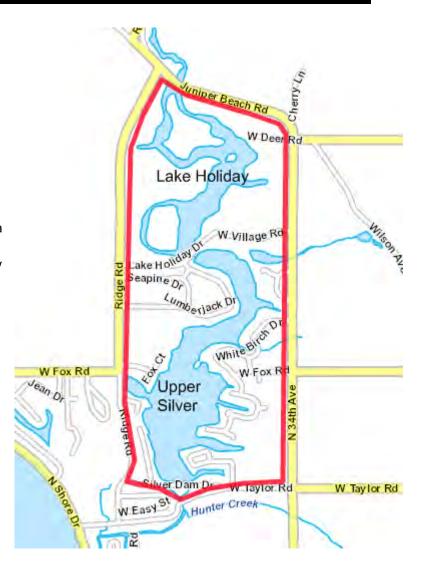
Upper Silver Lake and Lake Holiday Area

In addition to the Silver Lake area there are also two nearby lakes, Lake Holiday and Upper Silver Lake.

As is the situation with Silver Lake, there are home/cottages on Lake Holiday and Upper Silver Lake that are on the lake and there is property in the immediate vicinity that is not located on the lakes. The adjacent map provides the area that is incorporated into this analysis.

Most of the properties in this area are also seasonal and contain a mix of year-round homes, cottages, and mobile homes.

To calculate the approximate population of the Upper Silver Lake-Lake Holiday area the ratios of occupancy that were used to calculate the Silver Lake are were applied. These ratios could be high or low but for the purposes of this analysis they provide a general understanding of the population in the area at different times of the year.





Upper Silver Lake and Lake Holiday Area Estimated Number of People

There are approximately 89 properties in the Lake Holiday area and 586 in the Upper Silver Lake area.

Upper Silver Lake-Lake Holiday Homes/Cottages			
Section	Approx #		
Section	Cottages/Homes		
Lake Holiday Area	89		
Upper Silver Lake Area	586		
Total	675		

Source: Oceana County Parcel GIS Maps

The rate of occupancy for Upper Silver Lake and Lake Holiday are likely to be similar to what was found at Silver Lake. The following tables were generated using the same formulas. Based on these formulas there are less than 400 persons in the winter months and over 3,600 in the month of July.

During the summer months there are approximately 200 additional persons staying at Grace Adventures youth camp.

Upper Silver Lake-Lake Holiday Homes/Cottages Number of Persons by Month					
Month	Approx # Cottages/Homes	Approx # Occupants	Approx Total # Persons		
January	675	0.57	385		
February	675	0.53	358		
March	675	0.67	452		
April	675	1.52	1,026		
May	675	2.68	1,809		
June	675	3.95	2,666		
July	675	5.40	3,645		
August	675	4.92	3,321		
September	675	3.13	2,113		
October	675	1.90	1,283		
November	675	0.88	594		
December	675	0.60	405		

Source: Oceana County Parcel Map and Friends of Silver Lake Survey of Property Owners

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Upper Silver Lake-Lake Holiday Homes/Cottages Number of Persons During Summer Months						
Day of Week	#	%	Average #	Total #		
	Cottages/Homes	Occupied	Occupants	Persons		
Sunday Night	675	75.84%	2.60	1,755		
Monday Night	675	65.80%	2.12	1,431		
Tuesday Night	675	65.80%	2.07	1,397		
Wednesday Night	675	65.80%	2.13	1,438		
Thursday Night	675	76.95%	2.74	1,850		
Friday Night	675	94.80%	4.30	2,903		
Saturday Night	675	95.17%	4.50	3,038		

Source: Oceana County Parcel Map and Friends of Silver Lake Survey of Property Owners

Upper Silver Lake-Lake Holiday Homes/Cottages Number of Persons Staying on the 4th of July						
	#	Total #				
	Cottages/Homes	Occupied	Occupants	Persons		
4th of July	675	95.17%	6.64	4,482		



Upper Silver Lake-Lake Holiday Homes/Cottages Number of Persons During Summer Months					
Day of Week	#	Average #	Total #		
Day of Week	Cottages/Homes	of Visitors	Persons		
Summer During the Week	675	1.39	938		
Summer Weekend	675	2.90	1,958		
4th of July	675	4.36	2,943		

Source: Oceana County Parcel Map and Friends of Silver Lake Survey of $\,$

Property Owners

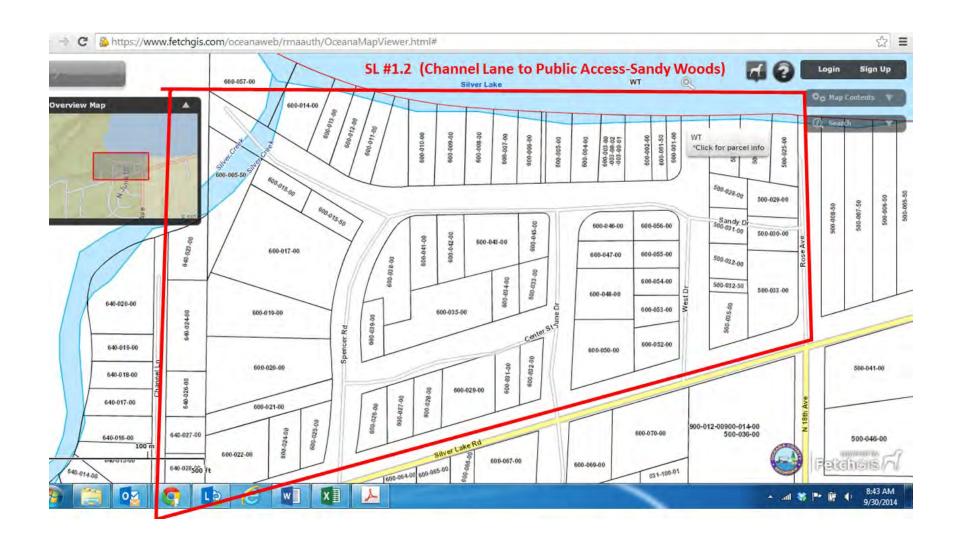
Upper Silver Lake-Lake Holiday Summary

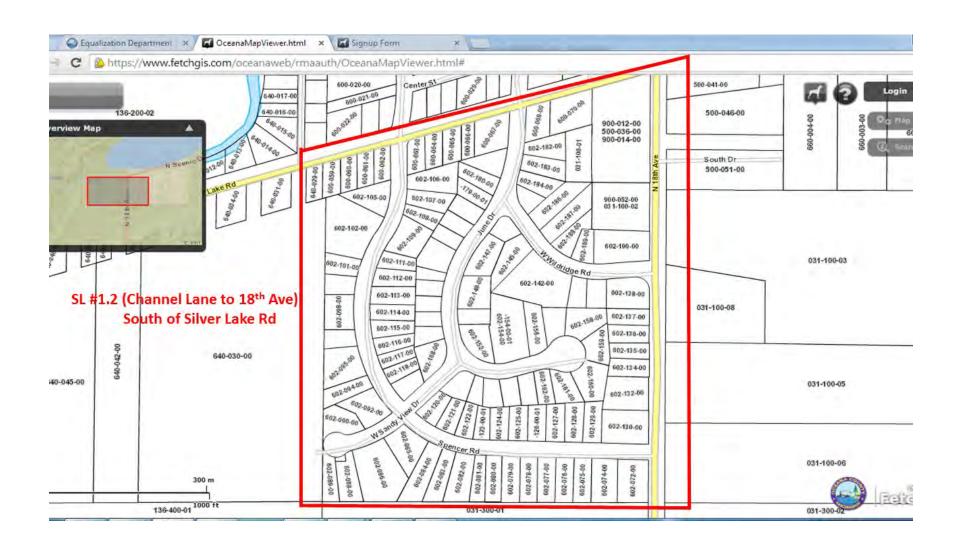
Total Number of Persons Silver Lake Homes/Cottages						
		Occu	pants	Visi	ting	Total # Persons
	# Cottages/Homes	Average # Occupants	Total Staying	Average # Visiting	Total Visiting	Total # Persons
Winter Months	675	0.65	439	0	0	439
Summer Months	675	4.76	3,213	2.15	1,451	4,664
4th of July	675	6.64	4,482	4.36	2,943	7,425

Appendix: Silver Lake Area Parcel Maps

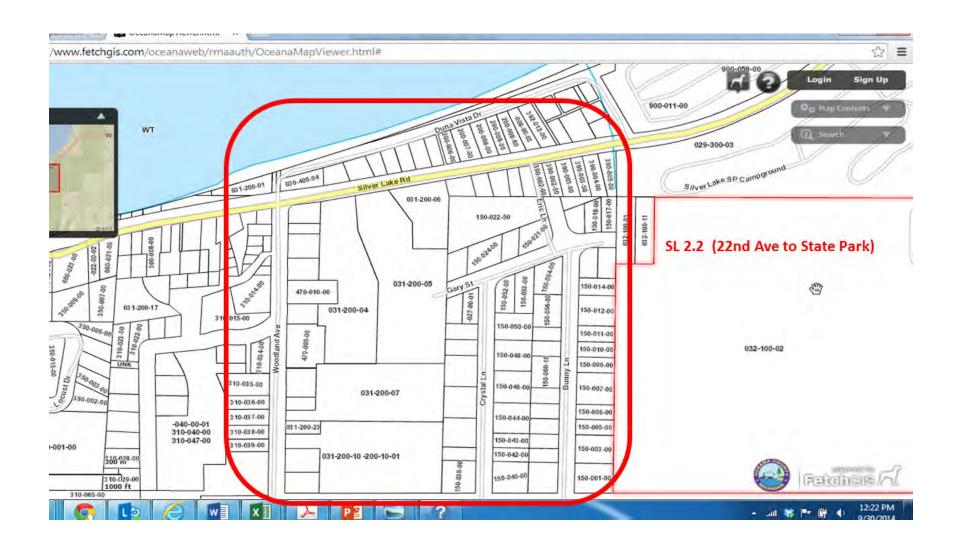






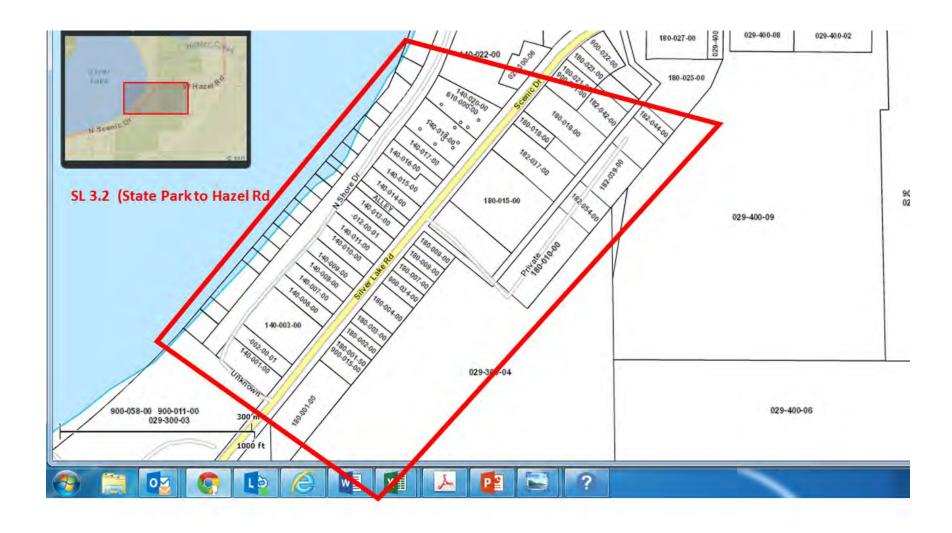


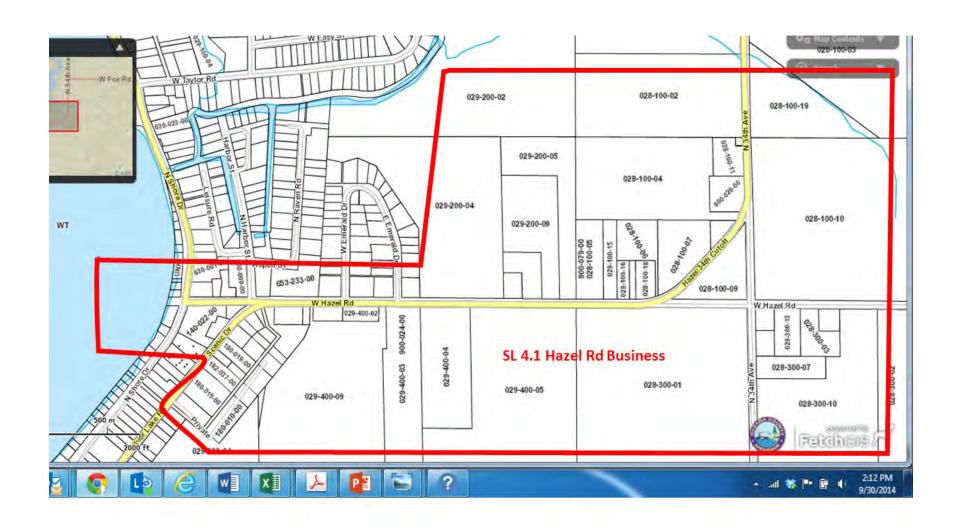




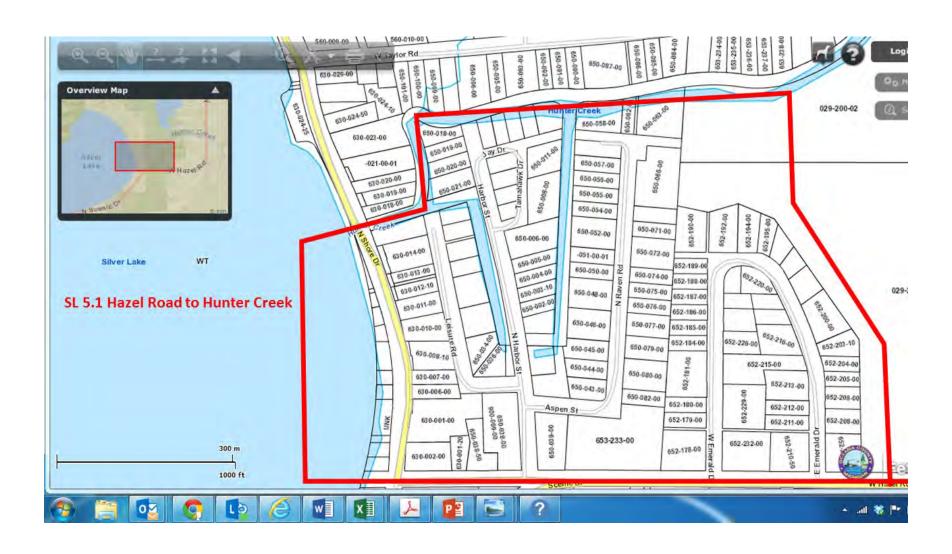




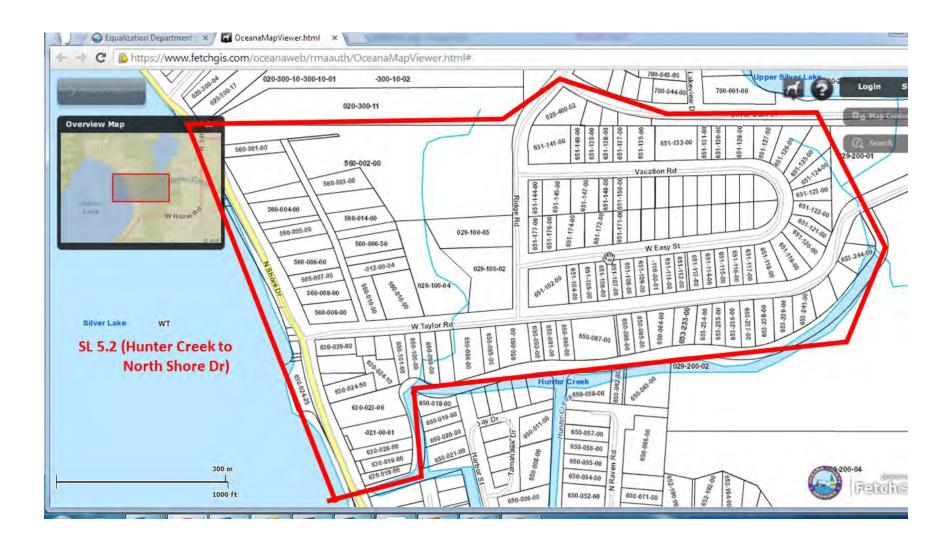




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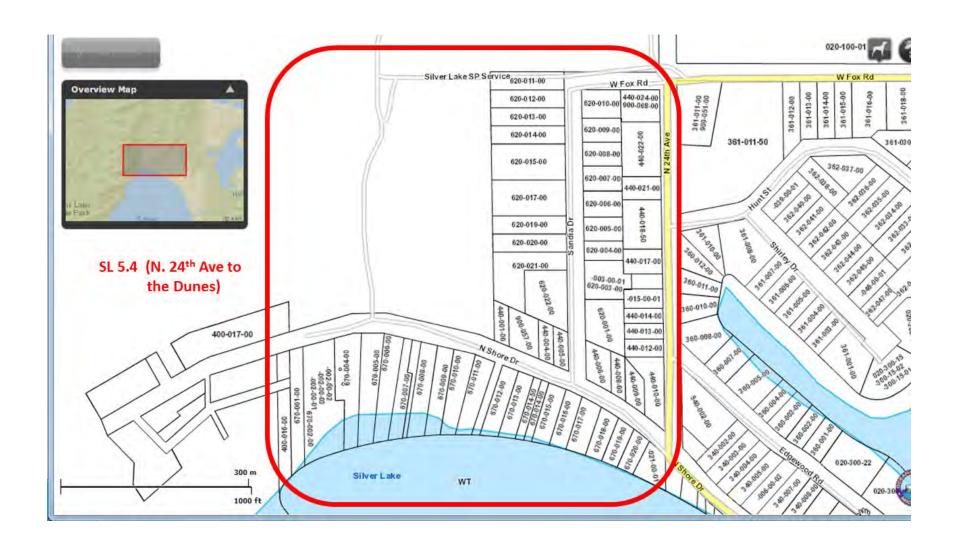


















Silver Lake Area Campgrounds





Friends of Silver Lake February 2015

Silver Lake Area Campgrounds

This section of the report was developed to gain a general understanding of the campgrounds in the Silver Lake Area located in Golden Township Mears, Michigan.

There are nine campgrounds in the Silver Laker area with approximately 1,693 camp sites. All of the campgrounds are located within 1.5 miles of Silver Lake. The camping experience ranges from sites with no utilities to mobile/modular homes that are more or less permanently located on the site.

There is a wide definition of campgrounds. In several cases these establishment are more accurately defined as RV parks, resorts, or modular home parks. Their common definition is that the equipment located on the sites are not to be permanent. In most cases the "campgrounds" are not exclusively one or the other. Most have a combination of sites with a wide variety of equipment that is used.

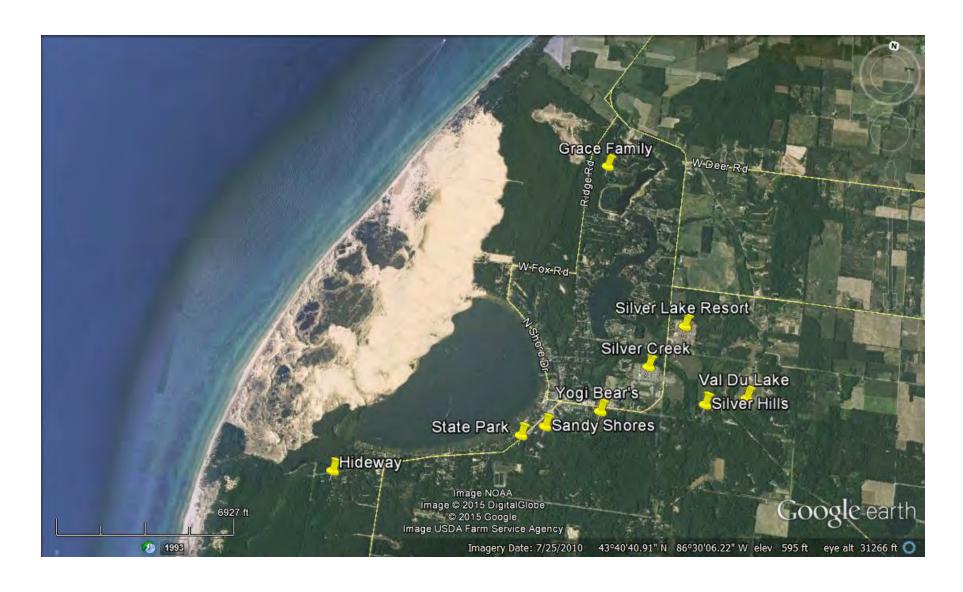
The Silver Lake area campgrounds have a wide range of other amenities including bathhouses, swimming pools, playground equipment, stores and in some cased the ability to purchase food.

Campgrounds in the Silver Lake area are open from April through October. There are no campgrounds open from November through March. In general there are very few campers in April, May, September and October. Most of the usage of the sites occurs from Memorial Day through the BBQ & Apple Fest which is usually held the second weekend in September.

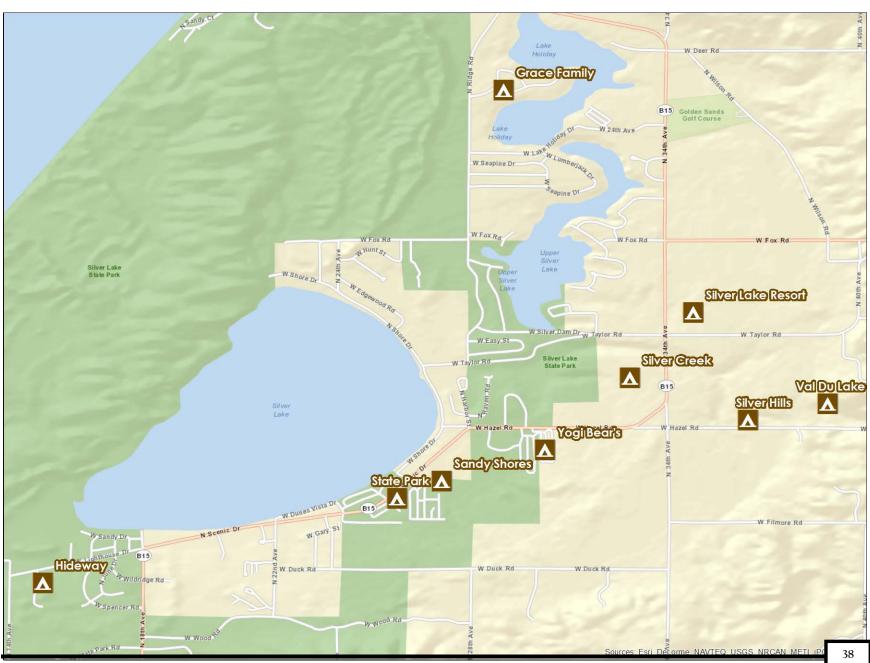
The information contained in this report was derived from:

- Brochures obtained from the area campgrounds
- Campground web sites
- Silver Lake State Park statistic of use
- Visitations in 2013 & 2014











Camprounds

Below is the list of campgrounds in the Silver Lake Area.

Silver Lake Area Campgrounds									
	Public/				Full	Water &			
Campground	Private	Address	# of Sites	Seasonal	Hookup	Electric	Electric	Rustic	Cabins
Silver Lake State Park	Public	8650 W Silver Lake Rd	200				200		
Hideaway	Private	9671 W Silver Lake Rd	205	90	17	59		39	
Sandy Shores	Private	8595 W Silver Lake Rd	212	143	14	55			
Silver Creek	Private	1441 N 34th Ave	258	153	105	0	0	0	
Silver Hills	Private	7594 W Hazel Rd	105	0	9	28	14	54	
Silver Lake Reort	Private	1786 N 34th Ave	206	70	53	55	4	8	16
Val Du Lake	Private	1573 N Wilson Rd	98	0	0	12	86	0	
Yogi Bear's	Private	8239 W Hazel Rd	241	22	66	151		0	2
Grace Adventures Family	Private	2100 N Ridge Rd	168		138	30			
Total			1693	478	402	390	304	101	18

Note: The Grace Adventures Family Camp is under construction and is scheduled to open in 2016.

Definition of terms:

- > **Seasonal** typically have larger trailers, RVs, or mobile homes that persons rent for the season, typically April through October. In many cases the equipment stored on the site year-round.
- Full Hookups are sites that have electric, water and waste disposal. These sites are typically rented by the day, week or month.
- ➤ Water & Electric are sites that have water and electric only with no waste disposal. Bathing is typically done in bathhouses.
- **Electric** are sites which only have electricity and bathing is typically done in bathhouses
- > Rustic are unimproved campsite
- **Cabins** are permanent structures, typically less than 500 square feet that have water, electricity and waste disposal.



Equipment

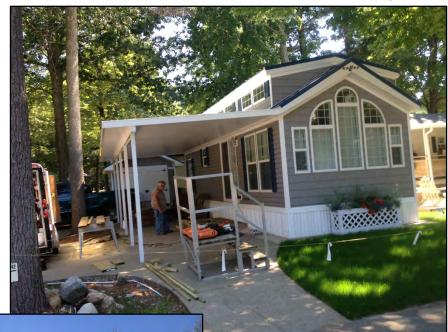
There is a wide range in the type of equipment that is used on "camp sites". Camping often entails the image of tents and small trailers which people use for a vacation for a week or two or a weekend. There definitely is this form of camping at Silver Lake, however in many cases the equipment that is used are larger trailers, 5th wheels, RV and even modular homes. Many campgrounds have a combination of different tents, trailers, RVs, 5th wheels, and modular homes. Many of the campgrounds also have a wide range of rental arrangements with persons staying for a day, weekend, week, month, summer or entire season.













Number of Campsites Occuppied

Silver Lake State Park

The Silver Lake State Park has 200 camp sites. The campground is closed from November through March. The sites occupied are the total number of sites "rented" for each month. The percentage use is based on adding up all of the sites available in each month and dividing the number by the number of sites used.

This table states that there was low use in April, May, and October. The highest use was in July and August.

Even though the State Park did not have available the breakdown by day, according to the State Park Manager, nearly every weekend from mid-June through mid-August was fully occupied.

Silver Lake State Park Camp Site Use 2014						
Month	Month	Available	Occupied	% Use		
April	30	6,000	92	1.53%		
May	31	6,200	952	15.87%		
June	30	6,000	2,828	47.13%		
July	31	6,200	5,493	91.55%		
August	31	6,200	4,909	81.82%		
September	30	6,000	1,410	23.50%		
October	30	6,000	225	3.75%		
Total	213	42,600	15,909	37.3%		

Source: Silver Lake State Park

Estimating Total Campground Usage

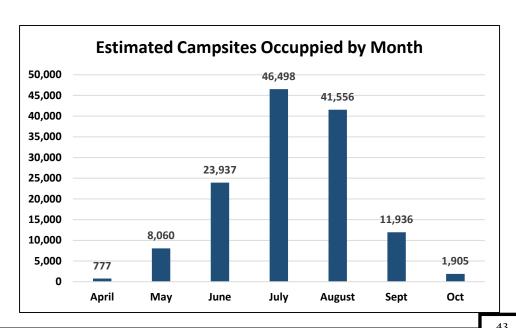
The table below applies the percentage of utilization at the Silver Lake State Park to all campgrounds in the area. This was done to determine the approximate number of sites occupied per month. Applying this methodology suggests there are upwards of 45,000-50,000 campsites occupied in the peak month of July.

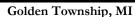
The estimates below could be improved by obtaining data on the actual number of sites used each day from April through October from other campgrounds in the area.



	Campgrond Utilization Based on Appllying State Park Percentages									
Campground	# of Sites	Total Sites Available Per Month	April	May	June	July	August	Sept	Oct	Total
State Park % Utilization			1.53%	15.87%	47.13%	91.55%	81.82%	23.50%	3.75%	
Silver Lake State Park	200	6,000	92	952	2,828	5,493	4,909	1,410	225	15,909
Hideaway	205	6,150	94	976	2,898	5,630	5,032	1,445	231	16,307
Sandy Shores	212	6,360	97	1,009	2,997	5,823	5,204	1,495	239	16,864
Silver Creek	258	7,740	118	1,228	3,648	7,086	6,333	1,819	290	20,523
Silver Hills	105	3,150	48	500	1,485	2,884	2,577	740	118	8,352
Silver Lake Reort	206	6,180	95	981	2,913	5,658	5,056	1,452	232	16,386
Val Du Lake	98	2,940	45	467	1,386	2,692	2,406	691	110	7,795
Yogi Bear's	241	7,230	111	1,147	3,407	6,619	5,916	1,699	271	19,170
Grace Adventures Family	168	5,040	77	800	2,375	4,614	4,124	1,184	189	13,364
Total	1693	50,790	777	8,060	23,937	46,498	41,556	11,936	1,905	134,670

Source: Based on Percent Utilization of Silver Lake State Park campground applied to all campgrounds in area





Number of Persons Occuppying Campgrounds

The previous tables provide information as to the number of campsites occupied each month of the year. The discussion below is an attempt to estimate the capacity of the campgrounds if they are fully utilized.

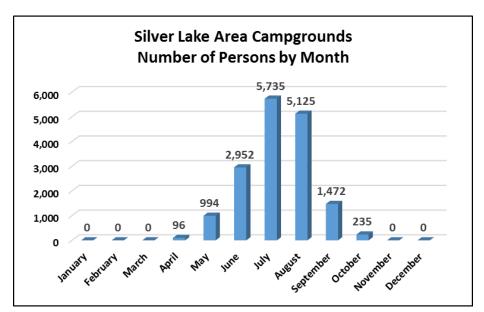
The Silver Lake State Park estimates that 3.7 persons, on an average, occupy a campsite. Applying this ratio to the other campgrounds would suggest that if all of the campgrounds are 100% occupied there would be 6,264 persons.

Estimated Campground Capacity					
Campground	# of Sites	Persons/ Site	Total Persons		
Silver Lake State Park	200	3.7	740		
Hideaway	205	3.7	759		
Sandy Shores	212	3.7	784		
Silver Creek	258	3.7	955		
Silver Hills	105	3.7	389		
Silver Lake Reort	206	3.7	762		
Val Du Lake	98	3.7	363		
Yogi Bear's	241	3.7	892		
Grace Adventures Family	168	3.7	622		
Total	1,693	_	6,264		

In reviewing the occupancy rates from the Silver Lake State Park, it would suggest that during the months of July and August, the campgrounds are 80-90% occupied. Information derived from the Silver Lake State Park Manager and personal observation would suggest that on weekends from mid-June to mid-August along with the Memorial Day, 4th of July and Labor Day holiday weekends, the campgrounds are operating near or at capacity.

Silver Lake Area Campgrounds Number of Persons by Month					
Month	#	Based on State	Average #	Total #	
WOILLI	Sites	Park Utilization	Per Site	Persons	
January	1693	0%	3.70	0	
February	1693	0%	3.70	0	
March	1693	0%	3.70	0	
April	1693	1.53%	3.70	96	
May	1693	15.87%	3.70	994	
June	1693	47.13%	3.70	2,952	
July	1693	91.55%	3.70	5,735	
August	1693	81.82%	3.70	5,125	
September	1693	23.50%	3.70	1,472	
October	1693	3.75%	3.70	235	
November	1693	0%	3.70	0	
December	1693	0%	3.70	0	

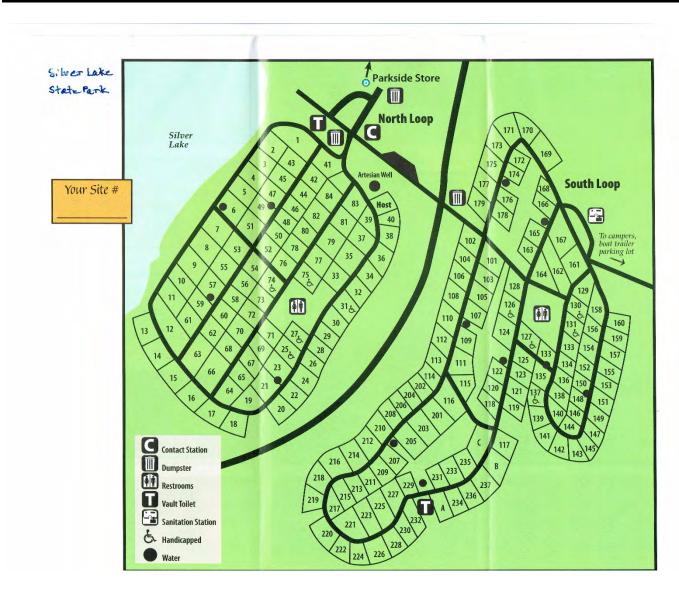
Source: Campground Brochures and Silver Lake State Park utilizaiton



Data on occupancy from additional campgrounds would help to further validate these estimates.



Silver Lake State Park



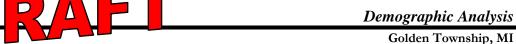




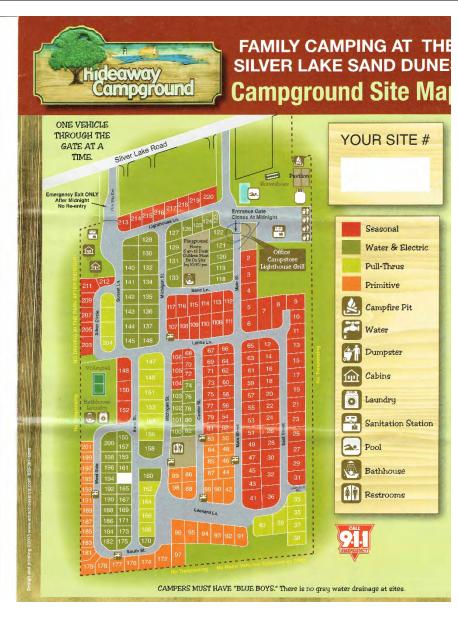








Hideaway Campground



Friends of Silver Lake February 2015





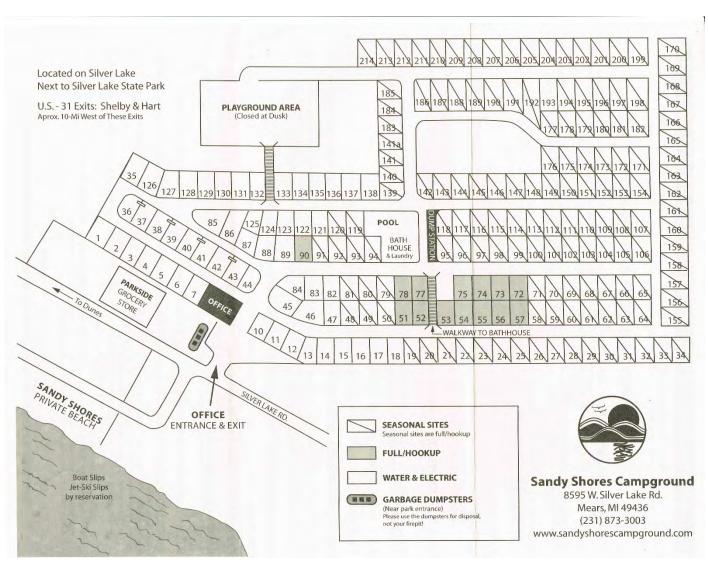


Hideaway Campground





Sandy Shores Campground



Silver Lake Area

Demographic Analysis





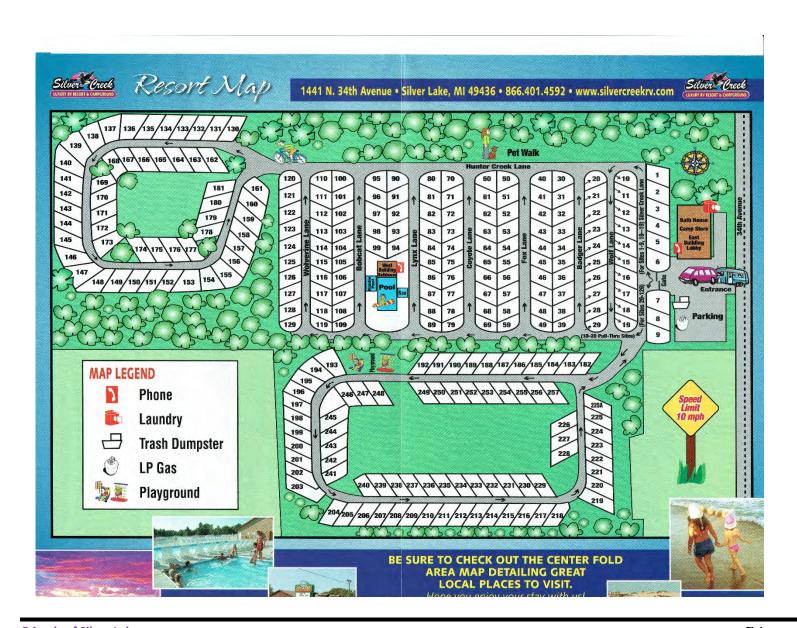






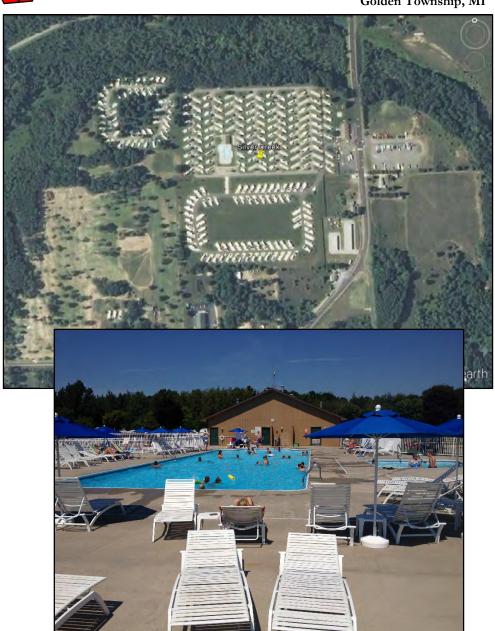


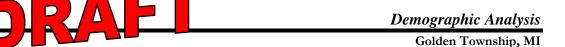
Silver Creek RV Resort



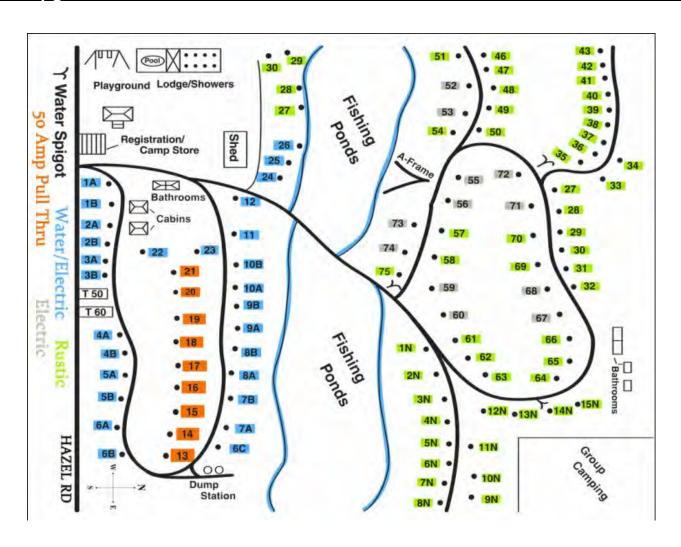








Silver Hills Campground



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Golden Township, MI











Silver Lake Resort & Campground



Silver Lake Area





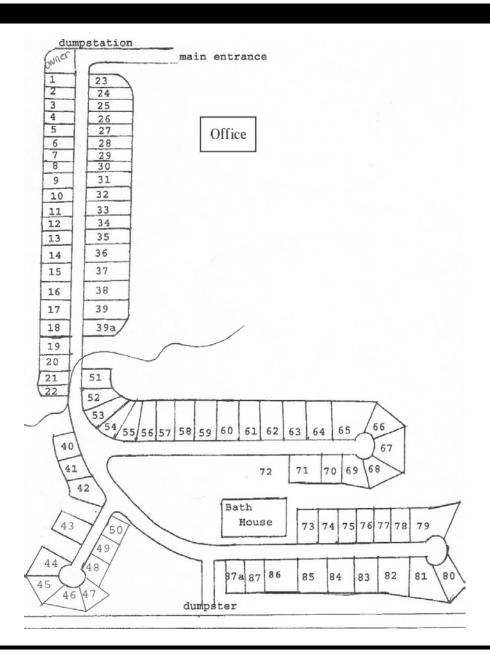








Val Du Lake



Silver Lake Area Demographic Analysis



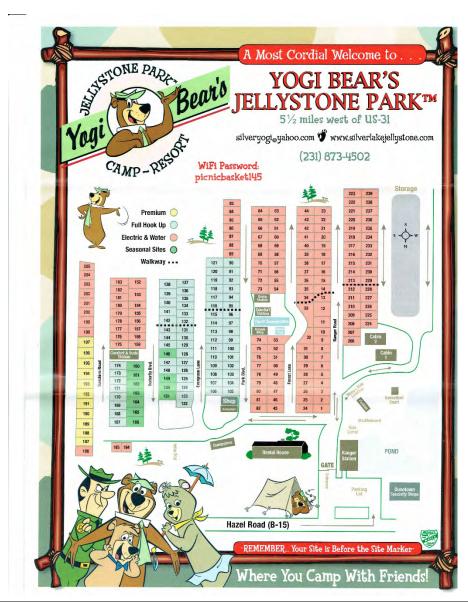




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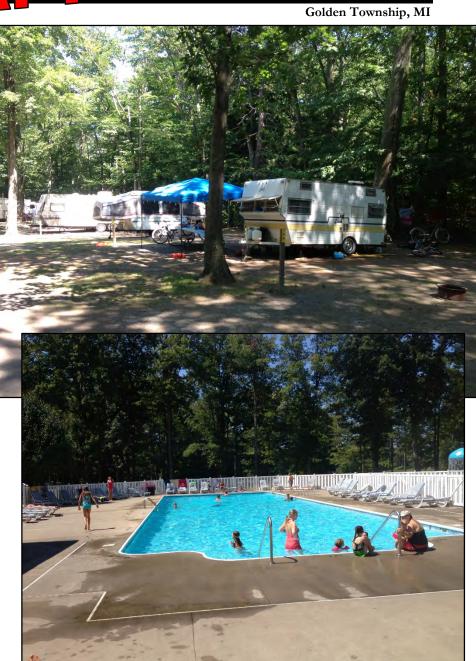
Yogi Bear's Jellystone Park











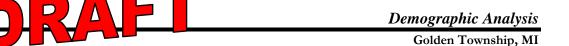
Demographic Analysis

Golden Township, MI

Grace Adventures Family Camp

The Grace Adventures Family Camp is under construction. Due to open in 2016. This is being developed to support family camping.

In addition, Grace Adventures operates a youth camp which accommodates approximately 200 youth. The youth camp has not been included in the campground estimates.







Silver Lake Area Hotels





Friends of Silver Lake February 2015

Silver Lake Area Hotels

This section of the report was developed to gain a general understanding of the Hotels in the Silver Lake Area located in Golden Township Mears, Michigan.

There are three Hotels in the Silver Laker area with approximately 150 rooms and six cabins. All of the hotels are located less than one mile from Silver Lake. The three hotels are:

- Dunes Waterfront Resort
- Sierra Sands Family Lodge
- Silver Sands Resort

All of the local hotels are closed during the winter months [November – March]. They begin their seasonal operations in April and close down in October.

In general there are very few persons staying in the hotels in April, May, September and October. Most of the usage of the rooms occurs from Memorial Day through the BBQ & Apple Fest which is usually held the second weekend in September.

In addition to the hotels located near Silver Lake, but not included in this study, are four hotels located in Hart, Michigan. Many of the persons that stay in these hotels are "day users" of Silver Lake dunes or waterfront.

- American Host
- Comfort Inn
- Gateway Motel
- Hart Motel & Suites

The information contained in this report was derived from:

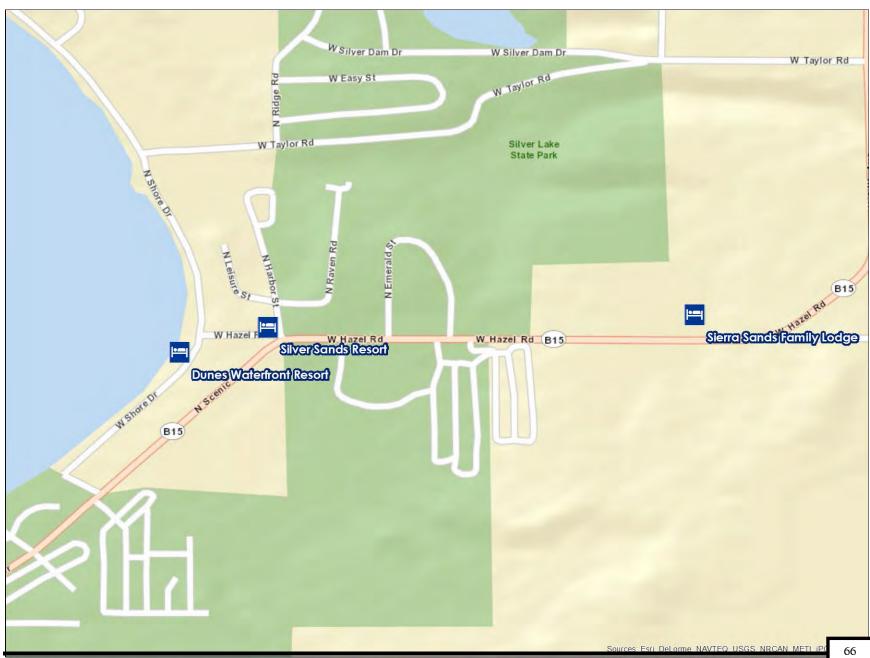
- Brochures obtained from the area Hotels
- Hotel web sites
- > Other related websites from the Silver Lake Sand Dunes Chamber of Commerce, Trip Advisory and others



Silver Sands Resort Sierra Sands Family Lodge Dunes Waterfront Resort Google earth Image USDA Farm Service Agency

Imagery Date: 7/25/2010 43°40'07.16" N 86°29'09.82" W elev 617 ft eye alt 15370 ft 🔘







Hotels

Below is the list of Hotels in the Silver Lake Area.

Silver Lake Area Hotels						
Hotels	Address	# of Rooms	Cabins	Total		
Dunes Waterfront Resort	1180 N Shore Dr	74	0	74		
Sierra Sands Family Lodge	7990 W Hazel Rd	40	0	40		
Silver Sands Resort	8446 W Hazel Rd	36	6	42		
Total		150	6	156		

Occupancy Ratios by Month

The hotels located near Silver Lake are open from April through October. The table on the right is the ratio of guests per night divided by the number of room days per month. These ratios were provided by Sierra Sands Family Lodge.

As can be seen the ratios are very low for April, Many, September and October. Even though these ratios were calculated based on the total number of room nights available each month, in reality, during the shoulder seasons the ratios are likely to be significantly higher on the weekends and lower during the week.

Ratio of Guests Staying in Hotel Rooms			
Month	Ratio of Guests/Room/ Day		
April	0.26		
May	0.55		
June	1.87		
July	3.23		
August	2.87		
September	0.91		
October	0.42		

Source: Sierra Sands Family Lodge



Number of Persons Occupying Hotel Rooms

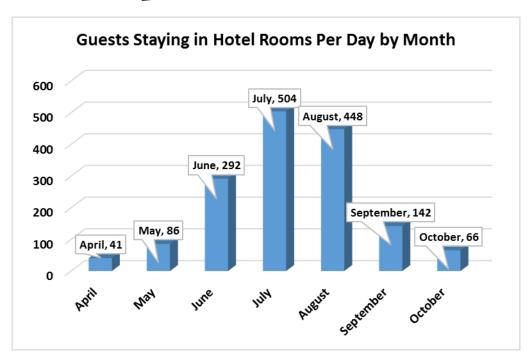
The previous table provide information of the ratio of persons per day in the months of April through October. Applying these ratios to each of the hotels in the Silver Lake area, the table below provides the approximate number of persons per day staying at hotels.

This would suggest that, on an average, there are less than 100 persons per day staying in hotels in April, May and October. During the peak summer season of July, there would be approximately 500 persons staying in hotels.

The information available as to the number of persons staying in hotels on the weekends versus during the week was not available. Other data in this report would suggest that weekends from Memorial Day through Labor Day would likely resemble the estimates for the number of persons that are staying in hotels during the month of July.

Guests Staying in Hotel Rooms Per Day by Month								
		Dunes Waterfront Resort		Sierra Sands Family Lodge		Silver Sands Resort		
Month	Ratio of Guests/Room/ Day	Rooms	Guests/ Day	Rooms	Guests/ Day	Rooms	Guests/ Day	Total/ Day
April	0.26	74	19	40	10	42	11	41
May	0.55	74	41	40	22	42	23	86
June	1.87	74	138	40	75	42	79	292
July	3.23	74	239	40	129	42	136	504
August	2.87	74	212	40	115	42	121	448
September	0.91	74	67	40	36	42	38	142
October	0.42	74	31	40	17	42	18	66

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Appendix

Silver Lake Population Study

Owners Survey

Please fill out 1 survey per property. If you own more than one property, fill out a survey for each one.

Q1 When you stay at / near Silver Lake, do you stay: 200 At / near Silver Lake (74.3%) 42 At / near Upper Silver Lake or Holiday Lake (15.6%)25 At / near Lake Michigan (9.3%)Other (2.6%)

Do you or a family member own property in the Silver Lake Q2 vicinity? (on or near Silver Lake, Upper Silver Lake, Lake Michigan near Silver Lake) 268 Yes (99.3%) No (0.7%)



Q3

What type of dwelling is on the property? (Check all that apply)				
100 (37.2%)	Year round home			
151 (56.1%)	Summer home / Cottage			
27 (10.0%)	Mobile home			
3 (1.1%)	RV / Trailer			
1 (0.4%)	Tent			
5 (1.9%)	Other			

Q4

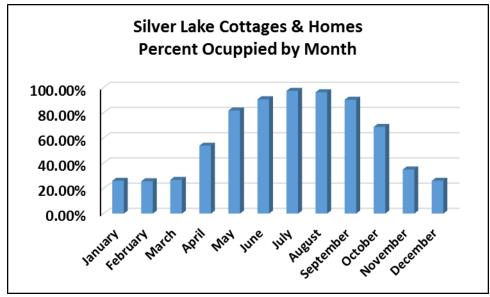
Is the property:				
71 (26.4%)	A permanent residence			
179 (66.5%)	Season residence for your personal use			
6 (2.2%)	Rental Property			
25 (9.3%)	Combination of seasonal residence & rental property			
8 (3.0%)	Other			

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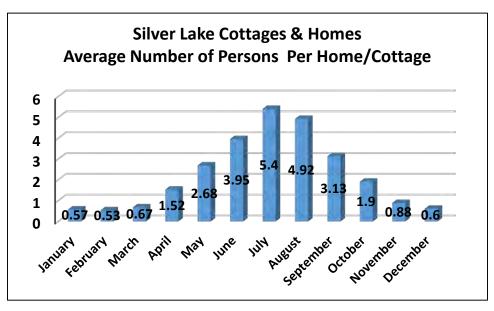
Q5

On an average night in the month of _____, how many people stay at your place?

Month	Occupied	Occupied	Average # of Persons per Place
January	70	26.02%	0.57
February	69	25.65%	0.53
March	72	26.77%	0.67
April	145	53.90%	1.52
May	220	81.78%	2.68
June	244	90.71%	3.95
July	262	97.40%	5.40
August	259	96.28%	4.92
September	243	90.33%	3.13
October	185	68.77%	1.90
November	94	34.94%	0.88
December	70	26.02%	0.60





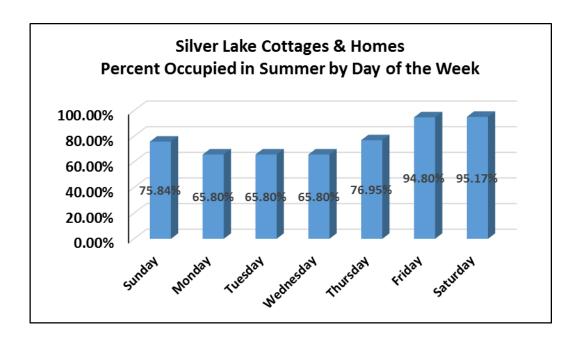




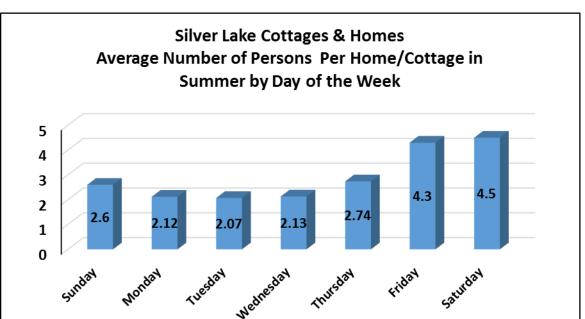
Q5

During the Summer months, on an average, how many people are typically staying at your place during the week?

Occupied	Occupied	Average # of Persons per Place
204	75.84%	2.60
177	65.80%	2.12
177	65.80%	2.07
177	65.80%	2.13
207	76.95%	2.74
255	94.80%	4.30
256	95.17%	4.50
	204 177 177 177 207 255	204 75.84% 177 65.80% 177 65.80% 177 65.80% 207 76.95% 255 94.80%





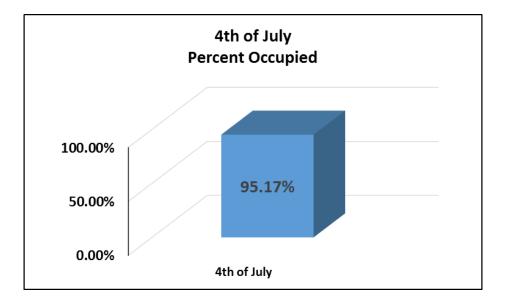


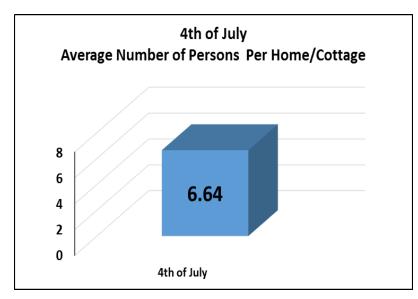
7.5



Q5

On the 4th of July, how many people are staying at your Cottage/Home?					
	Occupied	Occupied	Average # of Persons per Place		
4th of July	256	95.17%	6.64		





Friends of Silver Lake

Golden Township, MI



Q5

In addition to the persons staying overnight, on an
average day, how many additional day visitors are
at your place during the Summer time?

	Average # of Additional Persons per Cottage/Home
Summer During the	
Week	1.39
Summer Weekend	2.9
4th of July	4.36

