

During the summer of 2014, community members from the Belgrade area conducted *Gloeotrichia* observations at ten sites on Great and Long Pond. Eight observation sites are located across Great Pond while the remaining two are located on Long Pond. The observations were conducted between June and September.

Figure 1.

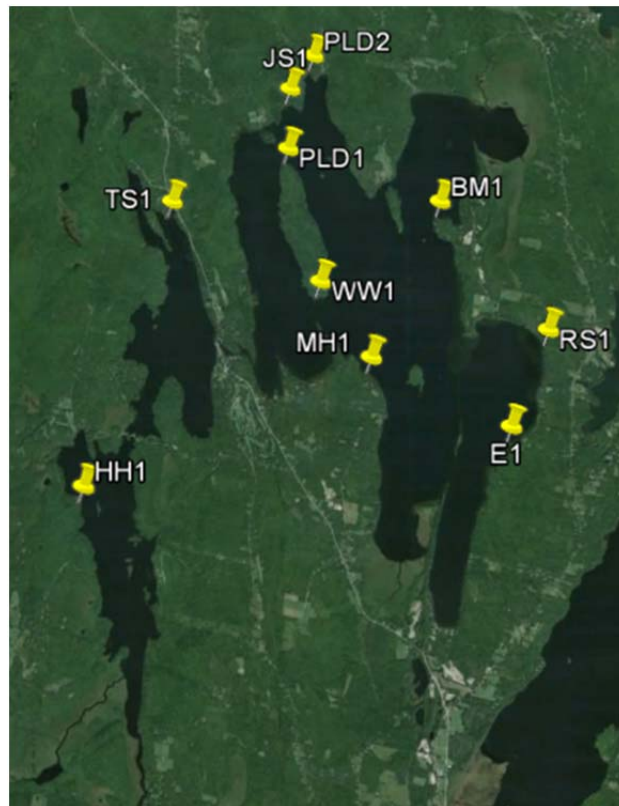


Figure 1. The ten observation sites are spread across Great and Long Pond. The eight sites on Great Pond are spread out to ensure a broad sample set. Of the two sites that reported on Long Pond, one is located on upper Long Pond and the other is located on lower Long Pond. Several other sites were set up for observation but were unable to collect data.

Figure 2.

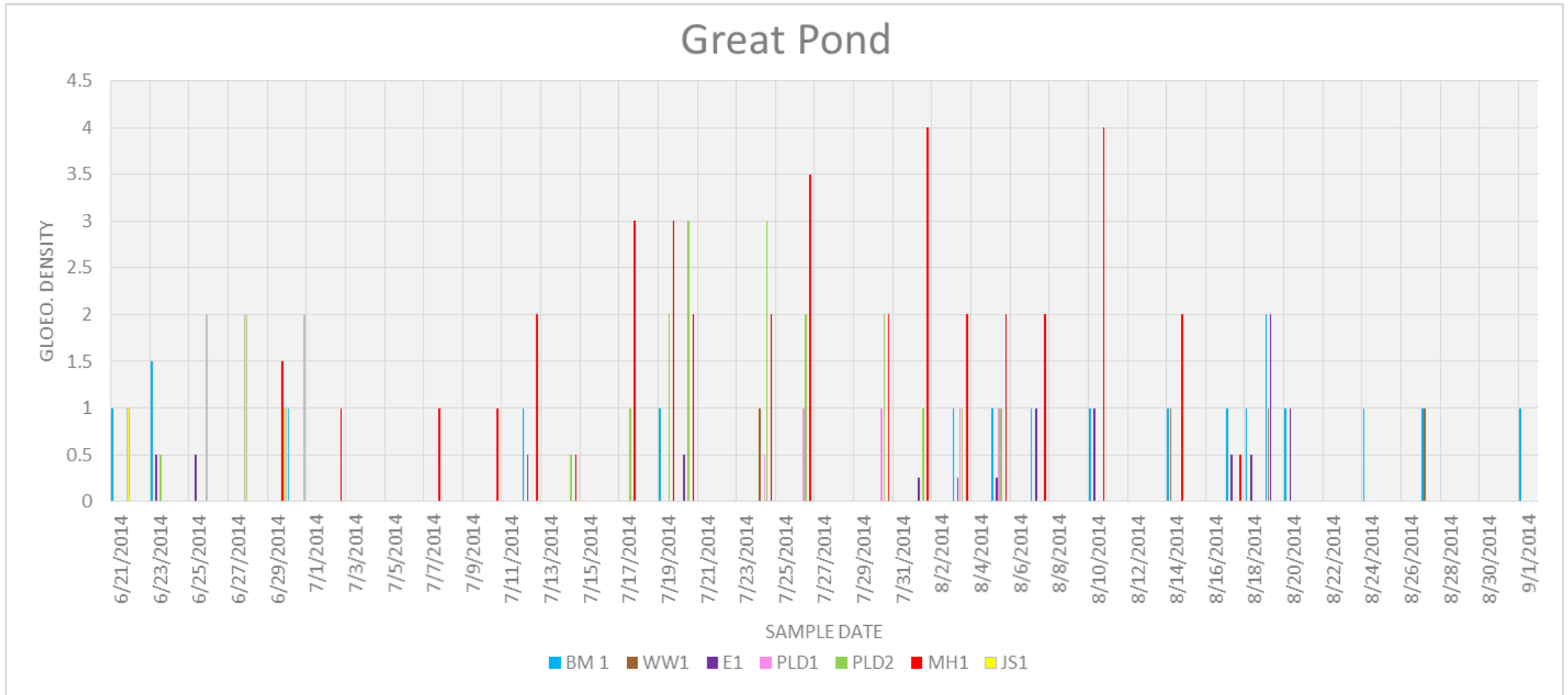


Figure 2. Gloeotrichia densities for seven of the sites across Great Pond are shown between June and September. The remaining site reported gloeotrichia readings of zero for the entirety of the observation season. Several sites reported consistent gloeotrichia readings during the same time periods while others consistently report higher levels of gloeotrichia.

Figure 3.

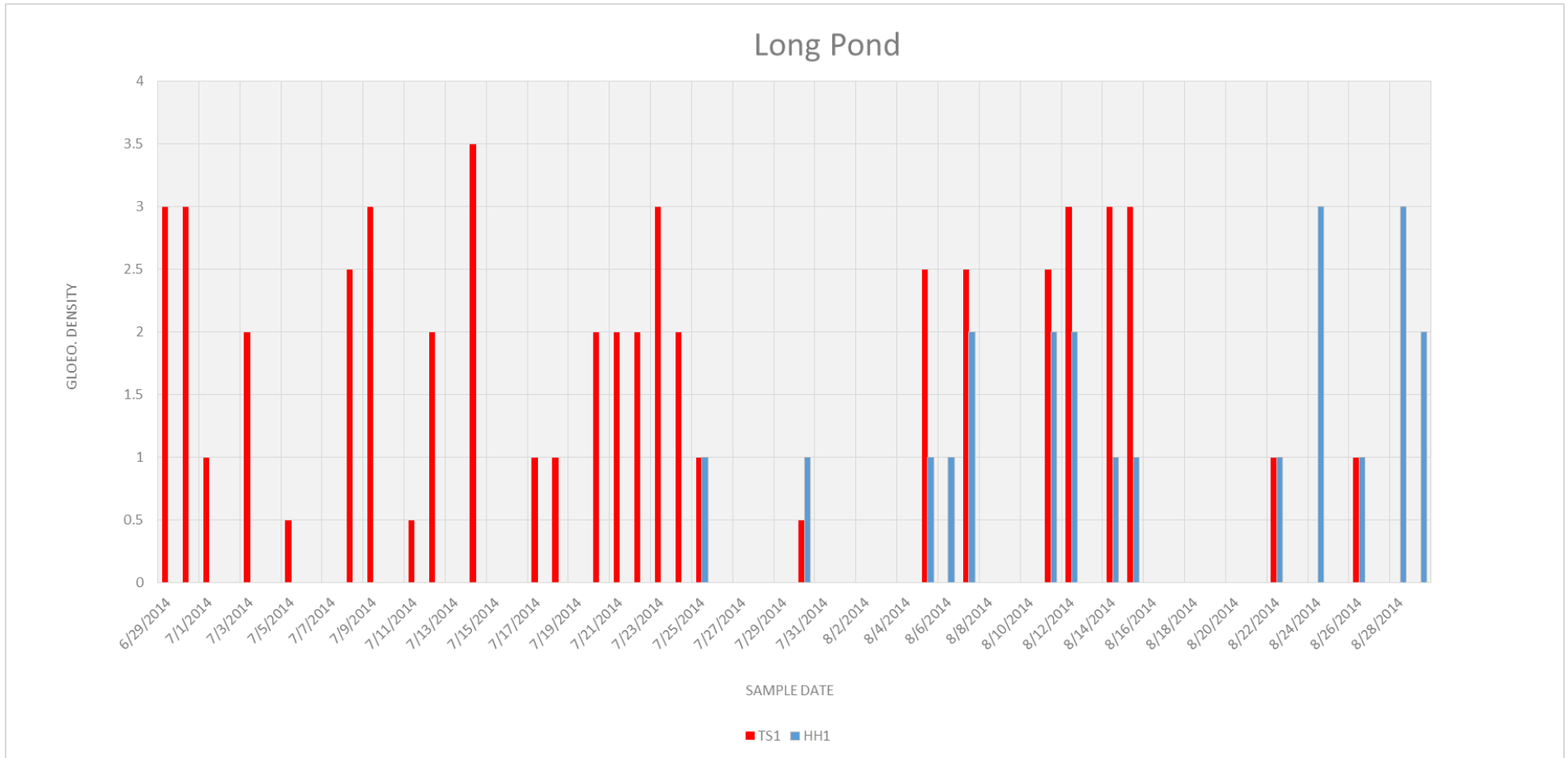


Figure 3. Gloeotrichia densities recorded at the two sites located on Long Pond are shown for the months of June through September. Sample site TS1 which is located on upper Long Pond reported higher gloeotrichia levels for the beginning of the season while site HH1 reported readings of zero during that time period. During the later part of the season, both sites reported elevated levels of gloeotrichia. The average gloeotrichia density for Long Pond for all observations from the 2014 season is 1.17.

Figure 4.

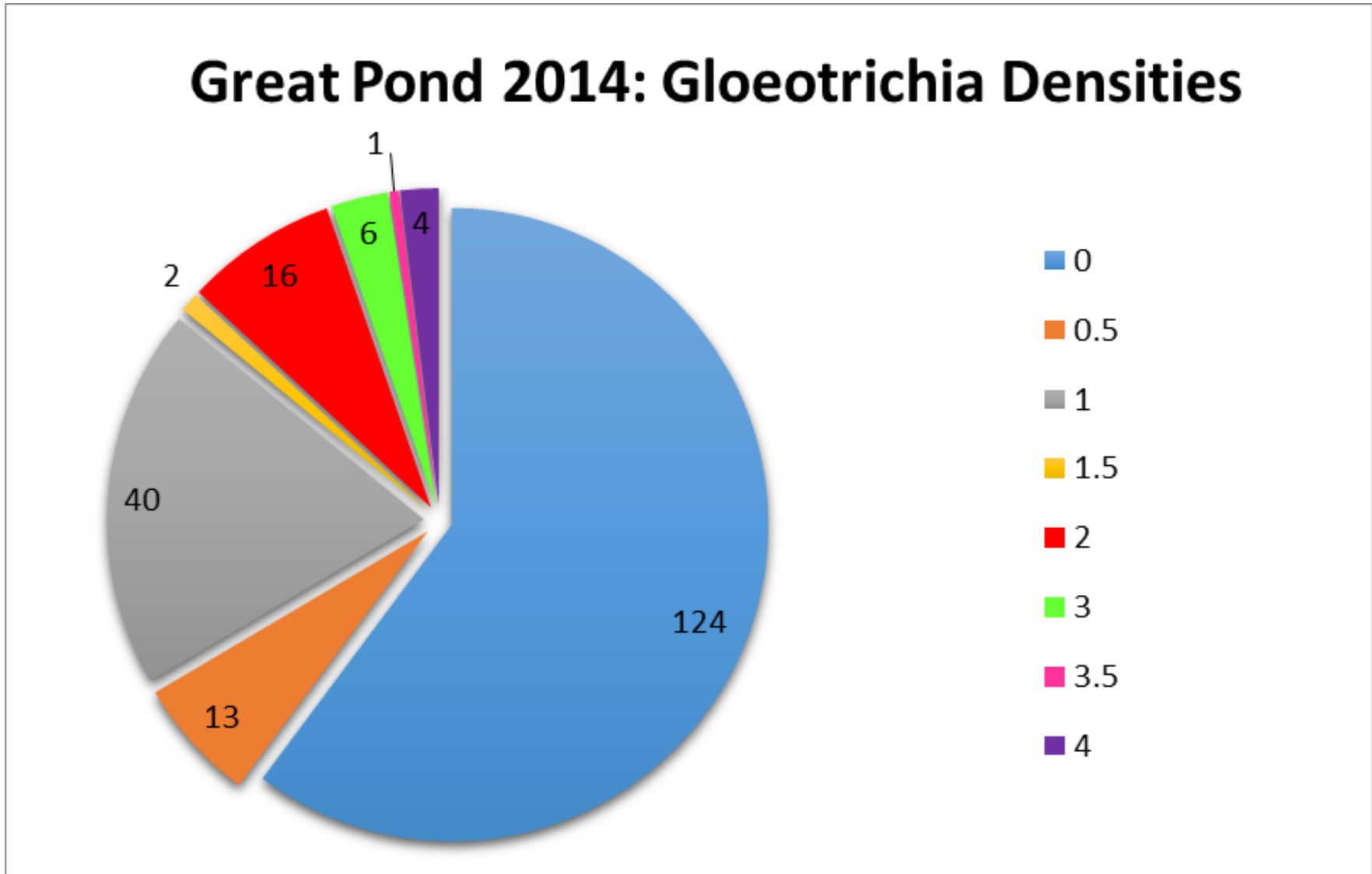


Figure 4. The distribution of gloeotrichia densities for Great Pond span from zero to four. A majority of the reported gloeotrichia density observations are below one. The average gloeotrichia density for Great Pond for all 206 observations from the 2014 season is 0.57.

Figure 5.

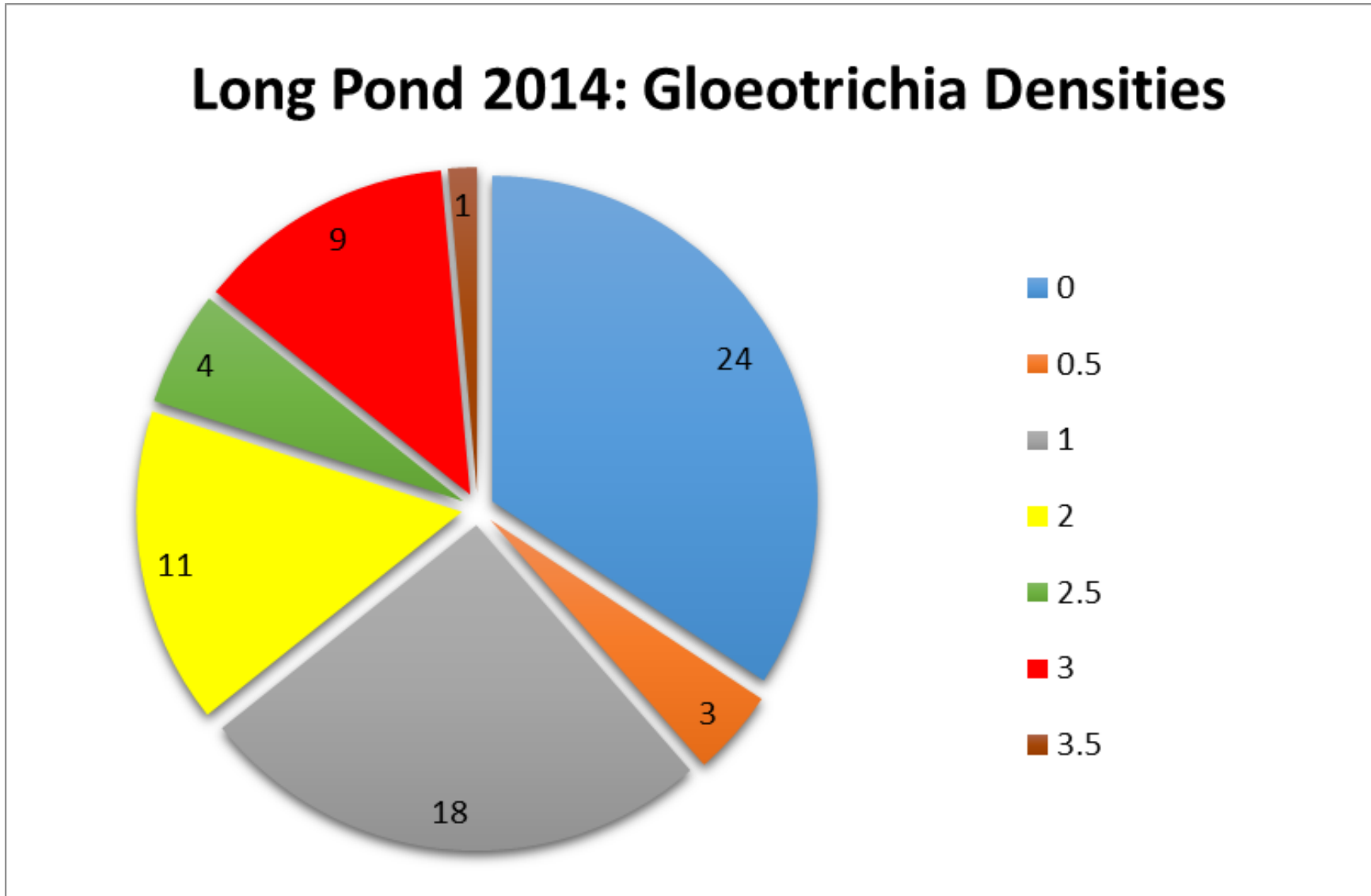


Figure 5. The distribution of gloeotrichia densities for Long Pond span from zero to three and a half. A majority of the reported gloeotrichia density observations are equal to or below one. The average gloeotrichia density for Long Pond for all 70 observations from the 2014 season is 1.17.

Figure 6.

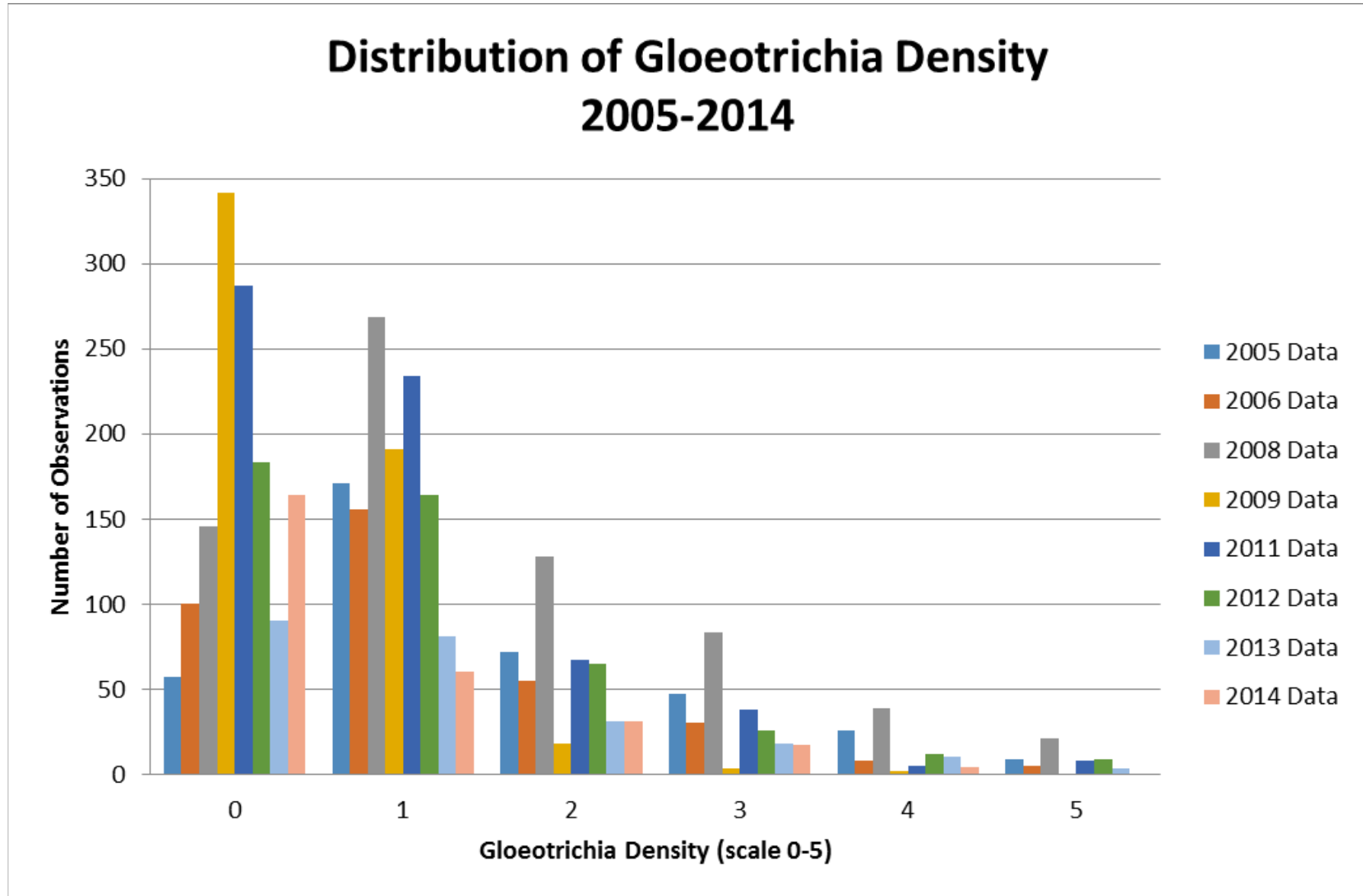


Figure 6. The distribution of gloeotrichia densities between the years 2005 and 2014 shows a higher number of observations between zero and one. The number of gloeotrichia density observations between two and five shows a consistent decline for all years. The number of recorded observations from the year 2014 is less than that of previous years.

Figure 7.

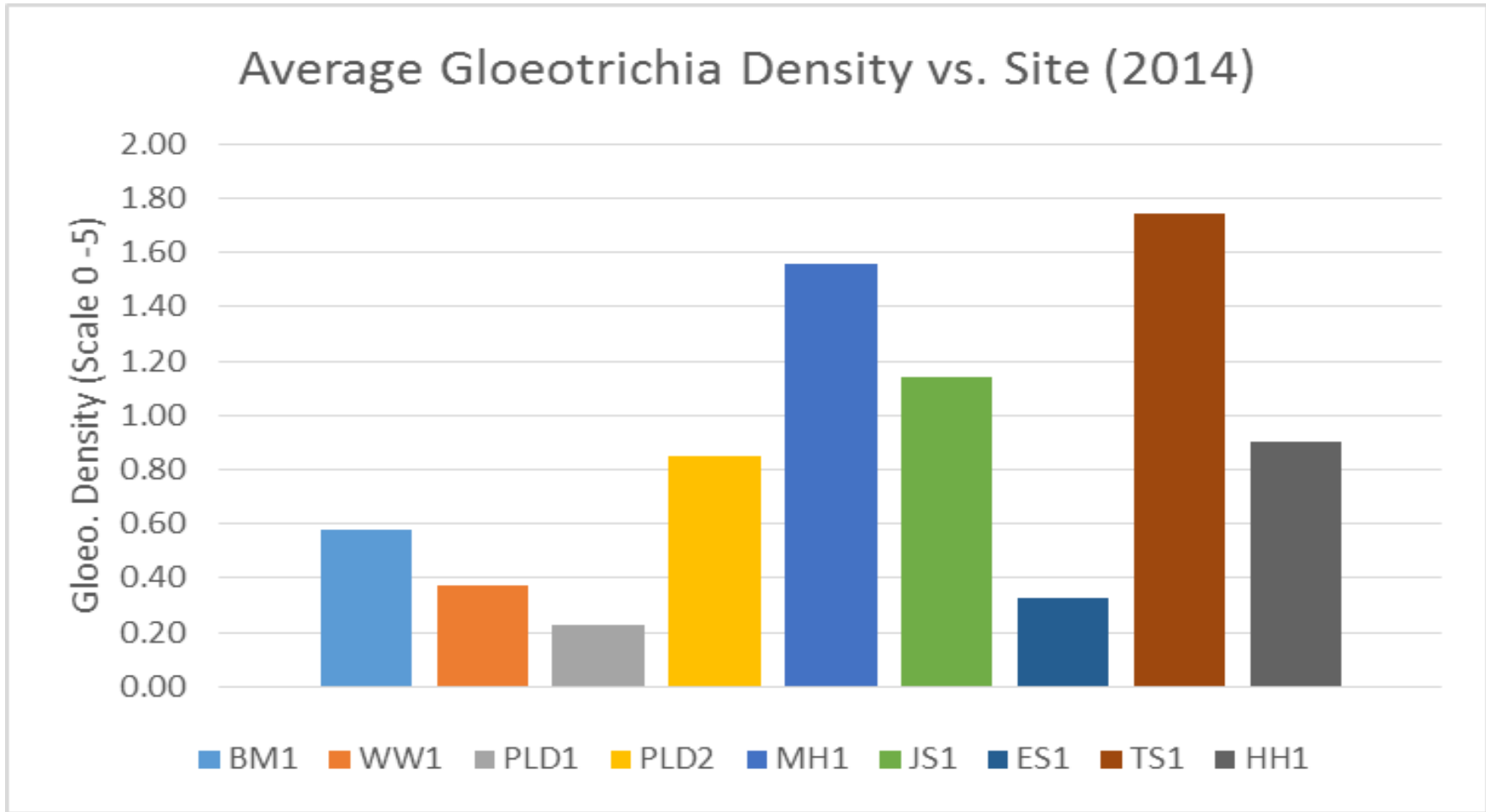


Figure 7. The average gloeotrichia density for each observation site for the 2014 season ranged from 0 to 1.74. The observation site with the highest average (TS1) was located on upper Long Pond. The site with the lowest average was located on Great Pond. The average gloeotrichia density of all 276 observations in 2014 is 0.77.

Figure 8.

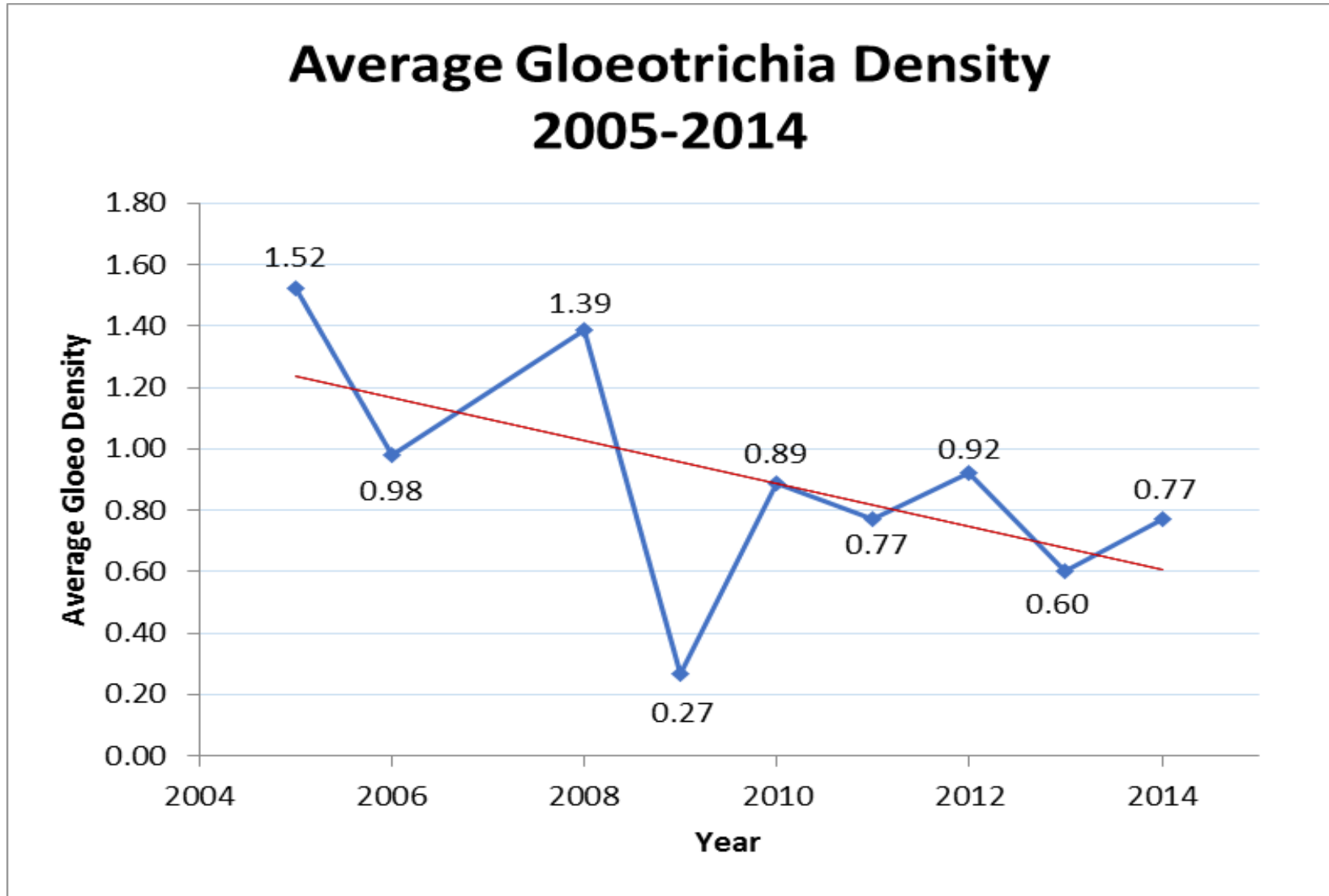


Figure 8. The average gloeotrichia densities from 2005 to 2014 show a declining trend in gloeotrichia density. The average of 0.77 in 2014 shows an increase from 0.6 average in 2013 but the data shows a declining pattern.