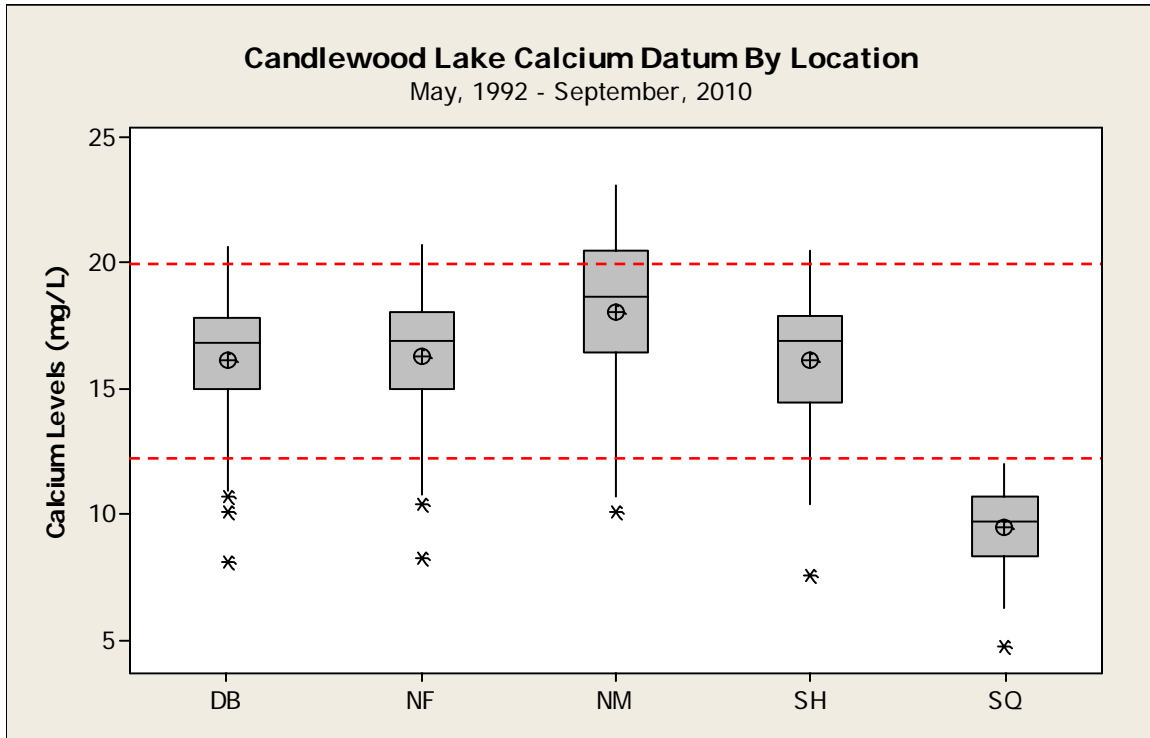


Appendix H: Statistical Analysis of Candlewood Lake Calcium Levels

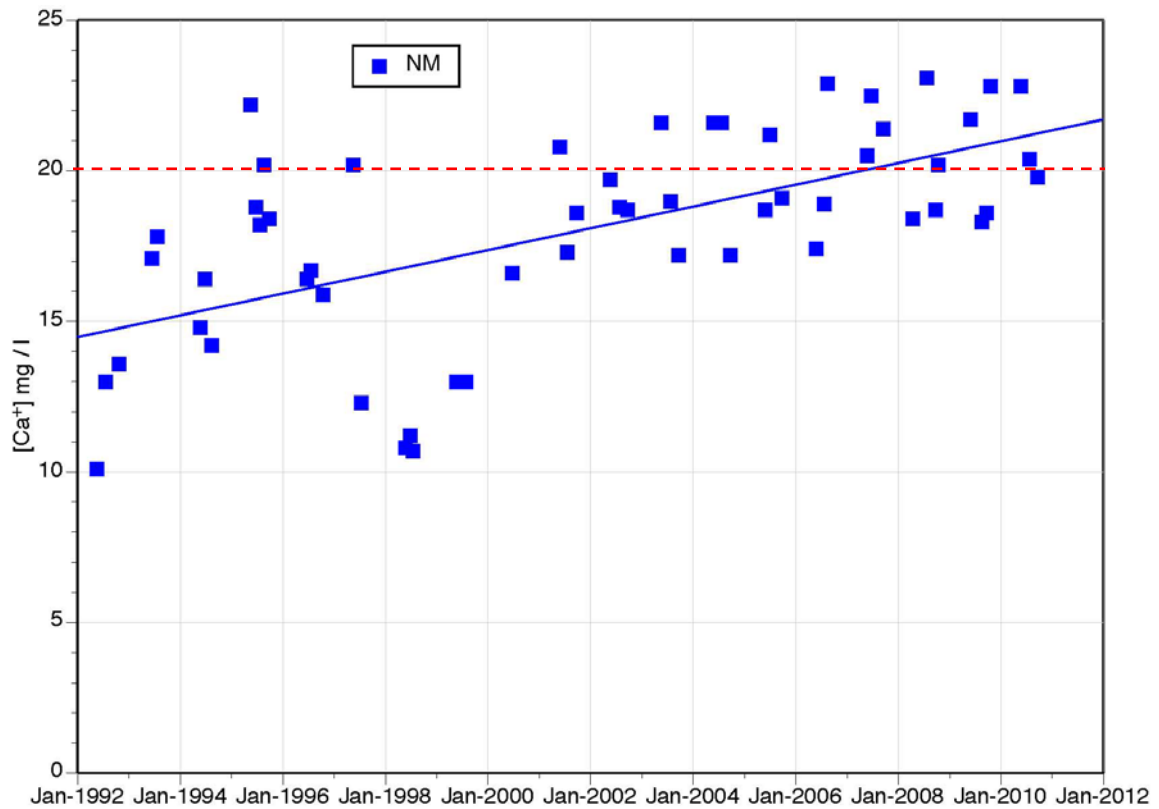
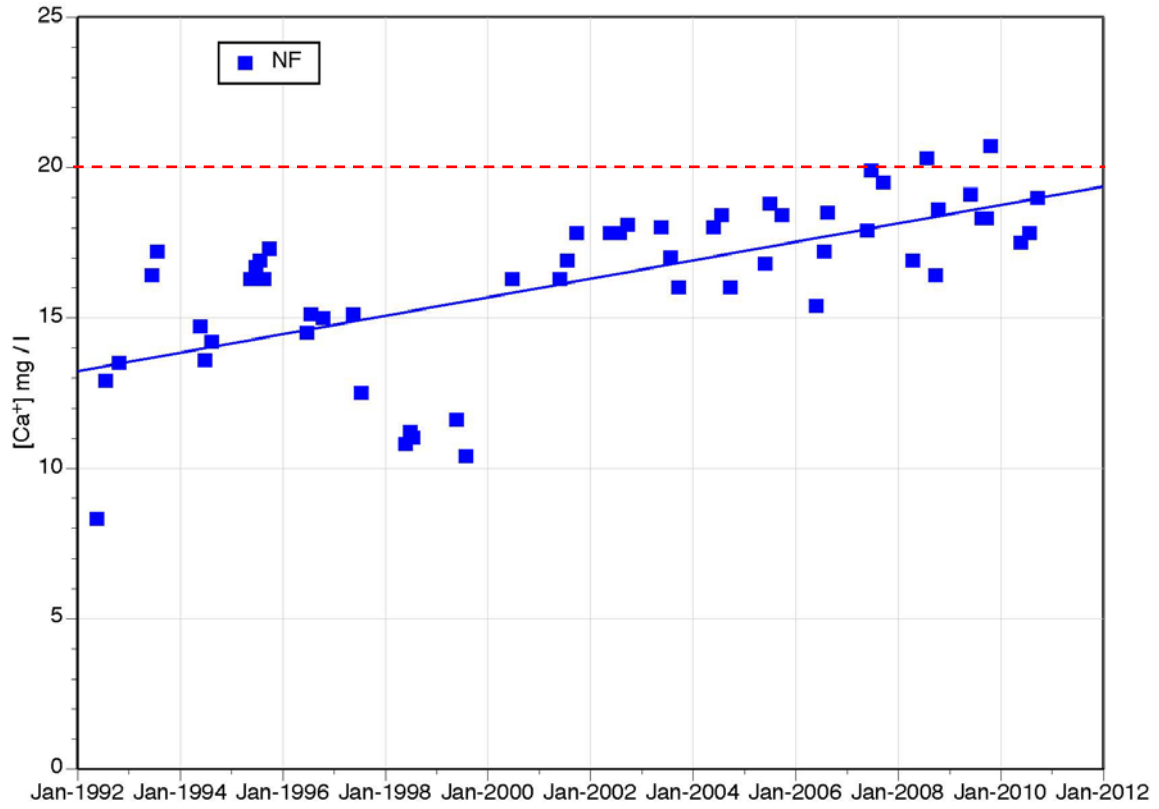


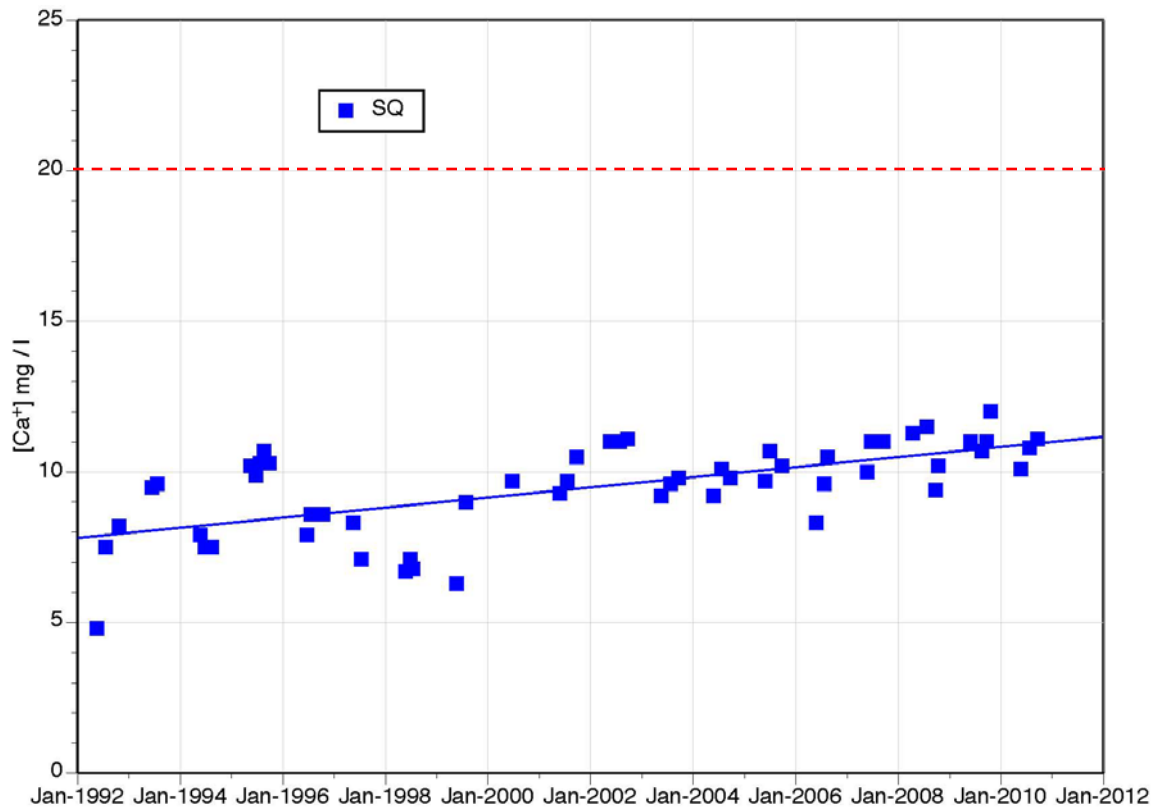
A boxplot of calcium data collected at four sites on Candlewood Lake (DB, NF, NM, and SH) and one site on Squantz Pond (SQ).

A boxplot, also called a *box-and-whisker* plot, divides all the data analyzed into quartiles and outliers. The actual box represents the middle 50% of the data points. The line in the middle of the box represents the median or the number that lies directly in the middle of the dataset. The lower “whisker” extending down from the bottom edge of the box represents the lower 25% of the data; and the “whisker” extending from the top of the box represents the upper 25% of the data. Any values that are exceptionally large or exceptionally small as determined statistically are outliers and identified on the plot as the asterisks. The circle cross-hatch symbol represents the mean or average of values in the dataset.

The red dotted lines denote calcium concentration of 12 and 20 mg L⁻¹. These concentrations are the estimated minima for low colonization potential for zebra mussels (Whittier et al., 2008) and reproduction (Cohen & Weinstein, 2001), respectively.

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Trends in calcium concentrations measured over time since 1992 at the New Fairfield (NF) and New Milford (NM) monitoring sites on Candlewood Lake, and the one site on Squantz Pond (SQ).

The preceding three charts show calcium concentrations measured at the New Fairfield and New Milford monitoring sites on Candlewood Lake and the site on Squantz Pond over time, since 1992. The solid blue lines represent the line that best fits each set of points. The dashed red lines denote the 20 mg L⁻¹ calcium levels. Trends in calcium concentrations at the Danbury and Sherman monitoring sites were similar to the New Fairfield trends.