

1. The population mean would have no effect on the width of the CI. We use the CI to make approximations of the mean, but have no way of knowing the true value, so it does not affect the creation of the CI.
2. The population SD would not have an effect on the CI width. The population values are unknowable, so they don't come into our calculations for the CI.
3. The population size does not influence the width of the CI. Because we have no knowledge of the true value of the population size, we can only estimate through our process, and this does not factor in to working with the CI.
4. The sample size does effect the width of the CI. Sample size factors in to the standard error calculation which is used to build the CI. A larger sample size would decrease SE and in turn create a narrower CI.
5. Using our running in class examples, with 6 forest plots, and the expectation that you find birds on a plot 50% of the time.

The Confidence Interval is a range of values that is a means of estimating a value for a population. With a CI of 95%, the range of values you generate through the analysis will contain the true population value in 95 out of 100 experiments (95% of the time). If you were to go on many bird observing trips, and each time create a confidence interval, 95% of the time, the interval you create would contain the true value of how many plots you would expect to find birds at.