

1035-Z1-1969 **Paul R. Coe*** (coepaul@dom.edu), 7900 W. Division Street, River Forest, IL 60305. *Fishing for Estimates.*

My favorite demonstration in my introductory (and mathematical) statistics course is exhibiting the capture/recapture method for estimating the size of a population using Pepperidge Farms cheddar fish. I always start the semester by talking about how data is and should be collected. We discuss clinical trials (including the original polio vaccine trials) and political polling (including the presidential elections in 1936 and 1948). I then ask my students to think about how to estimate the size of an entire population, whether it be the number of deer in the nearby forest, the number of people in the United States, or the number of fish in a lake. I bring out a large bowl and a big bag of cheddar fish, pour the fish into the bowl, and we work on estimating how many fish are in the ("lake") bowl.

In my presentation I will carry out a capture/recapture process similar to what I do in my classroom. I will talk about extensions and other applications as well as student response to the demonstration. I think that it is important to spend some time at the beginning of the semester talking about data collection before getting caught up in probability distributions and hypothesis testing. This is always one of my students' favorite classes of the semester. (Received September 21, 2007)