Part 3: The Effect of Sample Size

The size of our sample can also affect how reliable our sample is for predicting the population parameters.

We will use the Kiwi Kapers dataset again to investigate this. Using the Sampling module of NZGrapher do 5 sampling repetitions for each sample size and record the lower quartile, median and upper quartile.

Instructions on sampling: http://students.mathsnz.com/nzgrapher/nzgrapher_a_4.html

You can put the dataset back to the original by pressing the reset dataset button.

Use the same sampling method (either simple random or stratified each time.

Sample Size 15

Sample	Lower Quartile	Median	Upper Quartile
1			
2			
3			
4			
5			

Sample Size 30

Sample	Lower Quartile	Median	Upper Quartile
1			
2			
3			
4			
5			

Sample Size 60

Sample	Lower Quartile	Median	Upper Quartile
1			
2			
3			
4			
5			

What do you notice as the sample size increases?

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