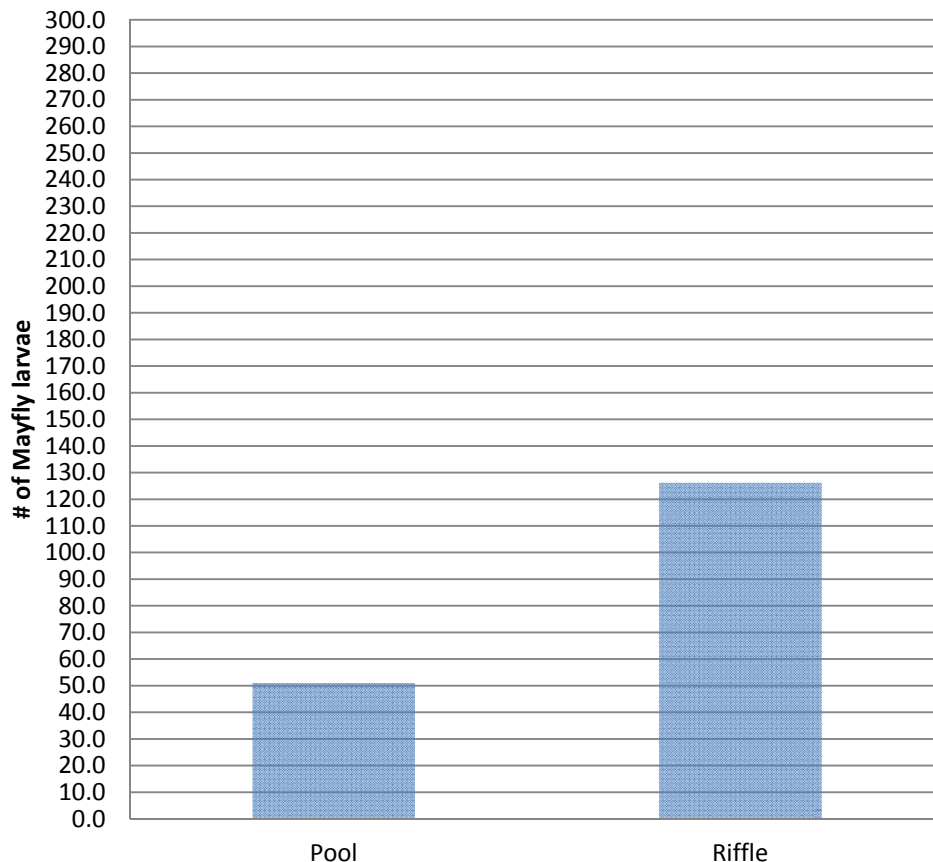


Do pools and riffles differ based on mayfly populations?

Here are the data collected on 4/22/15 by students from Oakwood:

School	Date	Habitat	Sample	# of Mayfly Larvae	Average
Oakwood	4/22/2015	Riffle	Kick 1	233	
Oakwood	4/22/2015	Riffle	Kick 2	60	
Oakwood	4/22/2015	Riffle	Kick 3	86	51
Oakwood	4/22/2015	Pool	Kick 1	27	
Oakwood	4/22/2015	Pool	Kick 2	17	
Oakwood	4/22/2015	Pool	Kick 3	109	126.3

Mayflies in Pools and Riffles - 4/22



1. Plot the raw data onto the graph so that you can see the variability (scatter) of the data points for both pools and riffles.

2. Write a caption for the graph to help answer our question. (Remember to use “hedging language.):

Example of a caption using hedging language:

From the data we collected we found that there were two families of Mayflies in both pools and riffles, and on average more mayflies in riffles than pools. Based on these data we are fairly confident that Family one prefers living in riffles over pools because there is no overlap in the data spread. It is more difficult to draw conclusions from the data about Family 2. There appears to be a difference in the averages in the two habitats. However, the data scatter around Family 2 in pools shows that one sample had a very high number of mayflies, while the other two samples are similar to the numbers found in pools. Taking more samples would help us to understand better the range of numbers of organisms in pools and riffles for Family 2.