

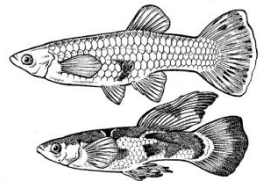
Day 10. Life history evolution

1. For each of the following cases, predict the life history based on r- vs. K-selection.

Species	# & size of offspring	length of life	semelparous or iteroparous?	r or K selection?
a weedy plant that colonizes disturbed sites				
a fish living in a small, nutrient-poor lake				

Evolution of life history traits in guppies with different predators

C = *Crenichichla alta* = adult predator R = *Revlus hartii* = juvenile predator
 A = *Aequidens pulcher* = very low predation



Would you expect big or small guppies to be most vulnerable to *C. alta*? Why?

Would you expect big or small guppies to be most vulnerable to *R. hartii*? Why?

Based on your answers above, we'll make predictions about each of the following traits for guppies living in ponds that have different predators.

Predator	Trait		
	Adult size at 1 st reproduction (big or small)	Size of offspring (big or small)	Allocation to current reproduction (high or low)
<i>C. alta</i>			
<i>R hartii</i>			
<i>A. pulcher</i>			

Evaluate the data! You'll get a handout of graphs after you're done with your predictions.