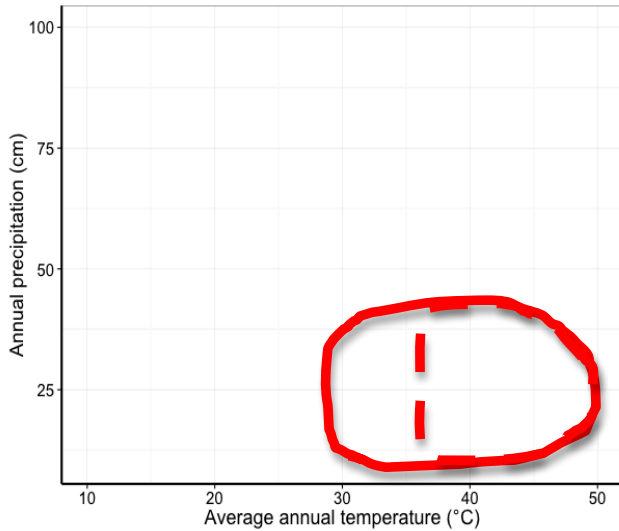


- 1) A niche is best described as:
- the set of locations where an individual organism can live, grow, and reproduce
 - the set of interspecific interactions that have shaped a species' life history strategy
 - the set of conditions in which an type of organism (e.g., a species) can survive, grow, and reproduce**



- 2) Draw the fundamental niche of a hypothetical desert plant (i.e., can withstand high temperatures & low moisture). (Solid line [yes, a solid line for real])
- 3) Draw what the realized niche might look like if the plant experiences very intense competition with other plants in areas with cooler climates. (Dashed line)

- 4) In the logistic model, , which term is influenced by competition?

- r
- K**
- both*

$$\frac{dN}{dt} = rN \left(1 - \frac{N}{K} \right)$$

- 5) Which scenario best illustrates interferences competition?
- A male lion chasing other males from his harem or territory**
 - A female praying mantis eating the male after copulation
 - A coral broadcast spawning (i.e., sending out millions of sperm to fertilize floating eggs)