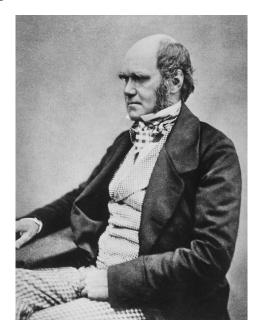
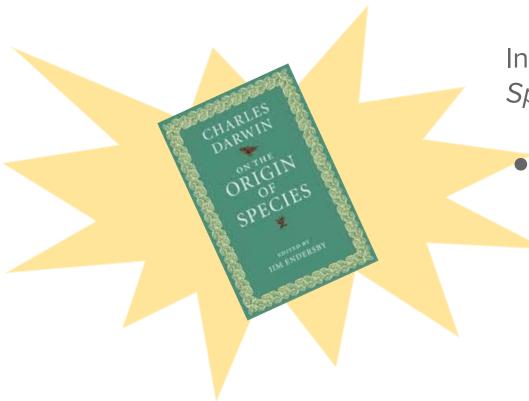
## CHAPTER 15.3 DARWIN PRESENTS HIS CASE

Darwin returned to England in 1836 (Beagle set sail 1831) with his new ideas about species' diversity.

"It was evident... that species gradually became modified..."

However, Darwin did not publish his work… instead he filed away his notebooks and told his wife to publish it in case he died before doing so.

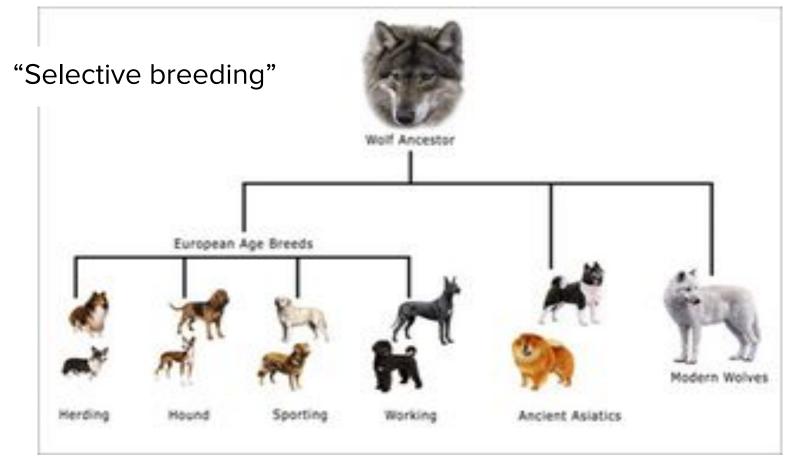


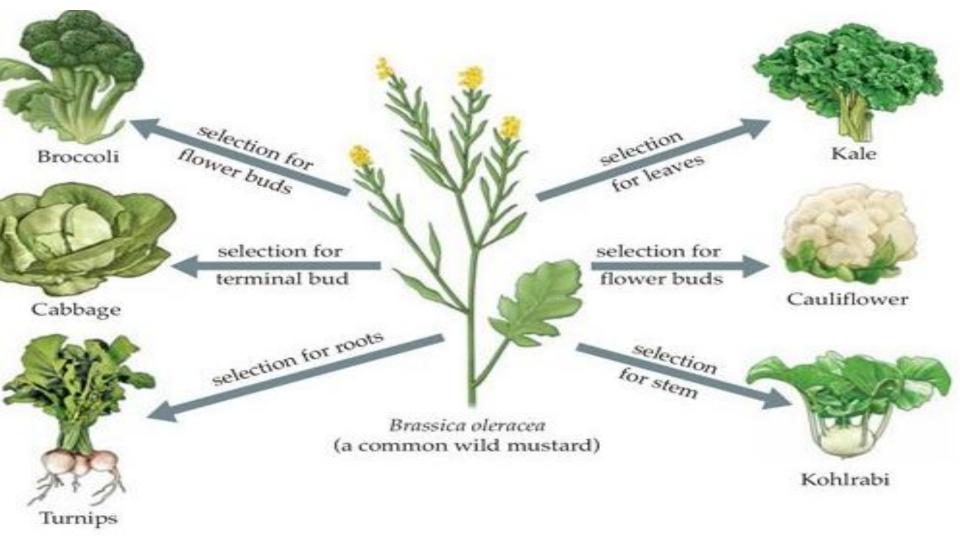


In 1859, On the Origin of Species was published

Darwin proposed a mechanism for evolution he called natural selection.

## <u>Artificial Selection:</u> Nature provides variation (genetically), after humans select the variations we find most useful

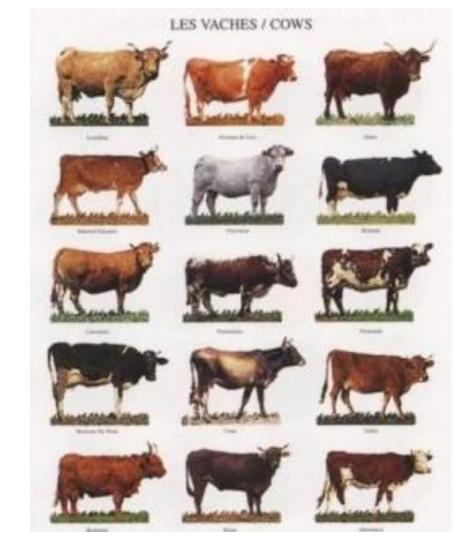






## Sheep





## Factors for Evolution to occur by natural selection:

1. <u>Competition</u>: members of each species must compete and struggle for existence



2. <u>Fitness:</u> the ability of an individual to survive & reproduce "Survival of the Fittest"



3. <u>Adaptation</u>: an inherited characteristic that increases an organism's chance of survival

