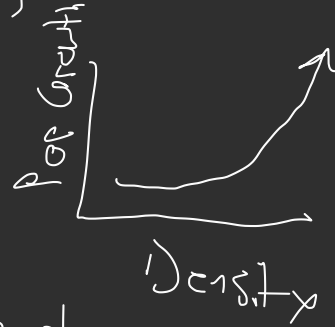


Invasive Species and Invasion Ecology



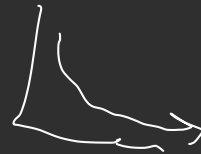
Positive Density Dependence

As density increases, pop growth increases



Negative Density Dependence

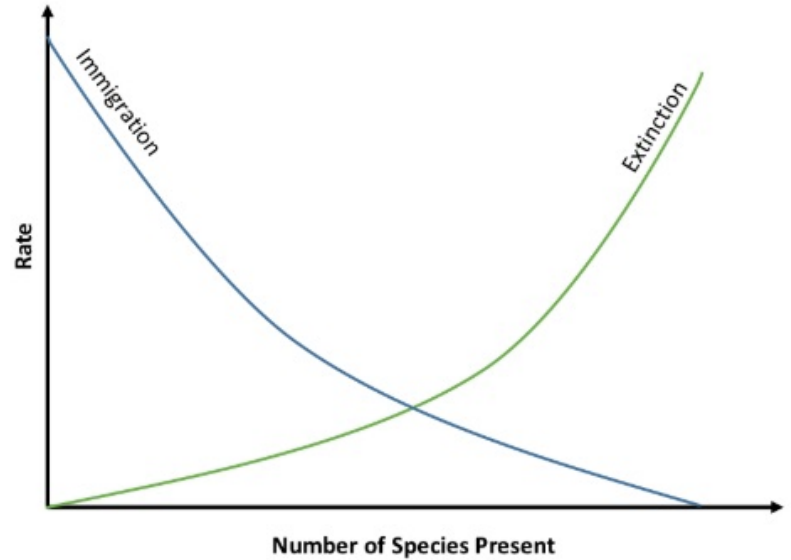
- As a density increase, growth decreases



- Self-regulating

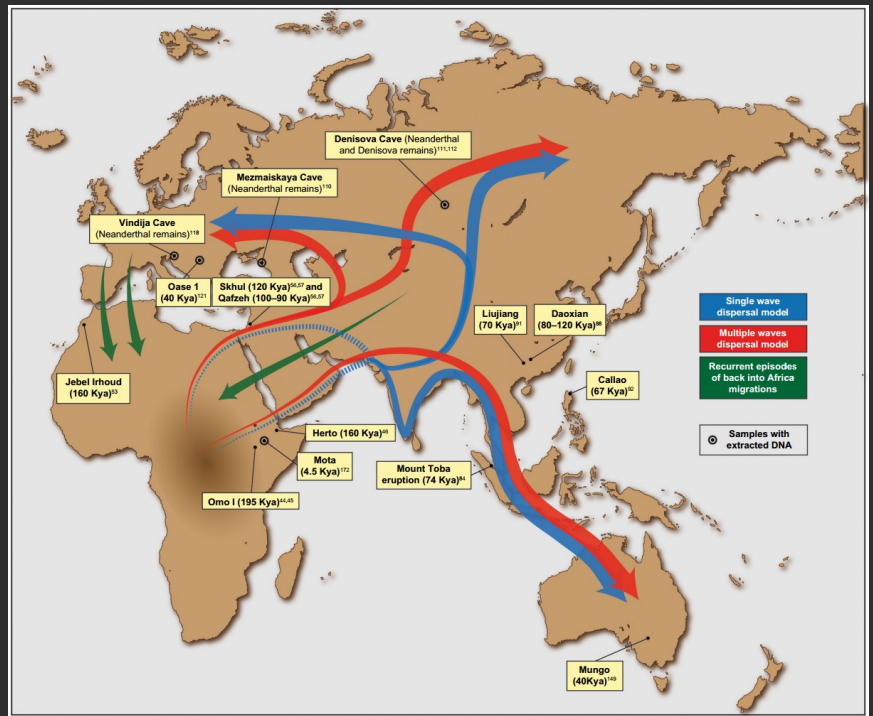
Island biogeography

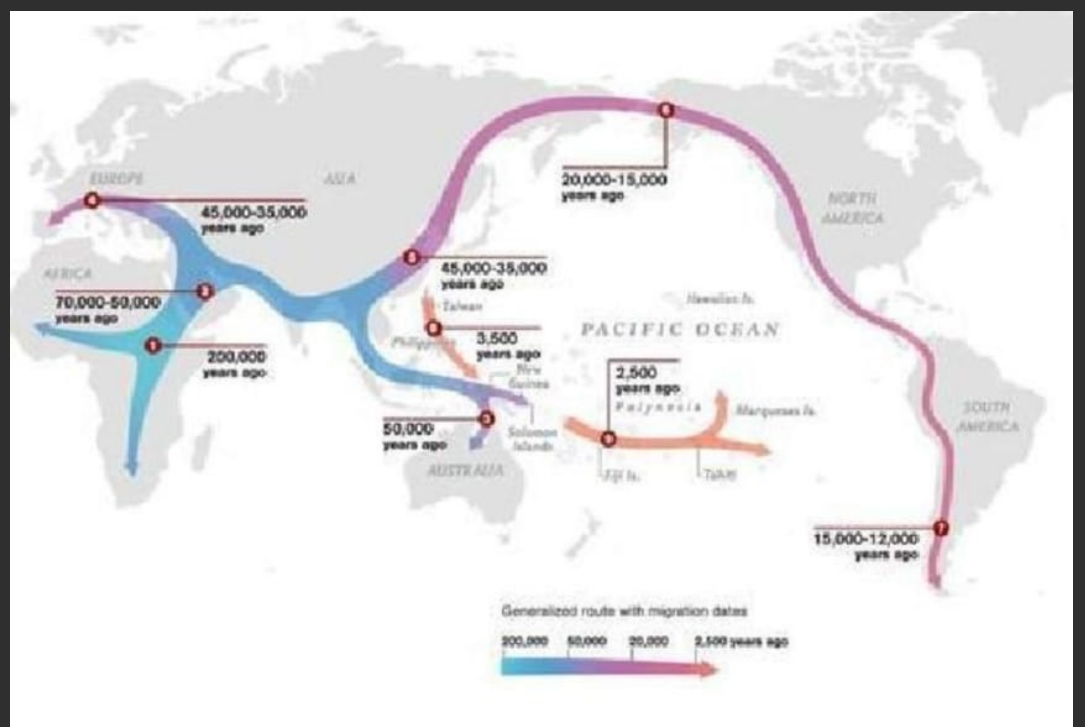
→ When new species arrive to an area; we eventually cause extinctions





Humans are
migratory; we
move all
around the
world.





Humans move
things with
them.



Manure
old world to
new world.



S. H. I. T.



Manure contained
Seed, - -



So the accidental
movement of plants
occurred.

Chance invasion of species

↑
Cheat grass







Adobe Stock | #278105985

Purposeful introductions



~~Qs~~ - Ilex in NM

Salt cedar, tamarisk

→ Eurasian species;

fast growing



Introduced to
stabilize stream
banks.



Tamarisk beetle
as biocontrol



Traits of an Invader

→ Ability to adapt to diverse habitats

→ Fast growth

→ Rapid reproduction

↘ → Cost to ... economics, wildlife/biodiversity, or land use

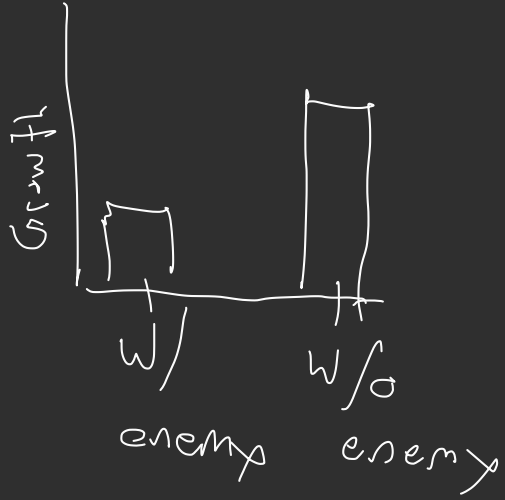
Invaders Invade by ...

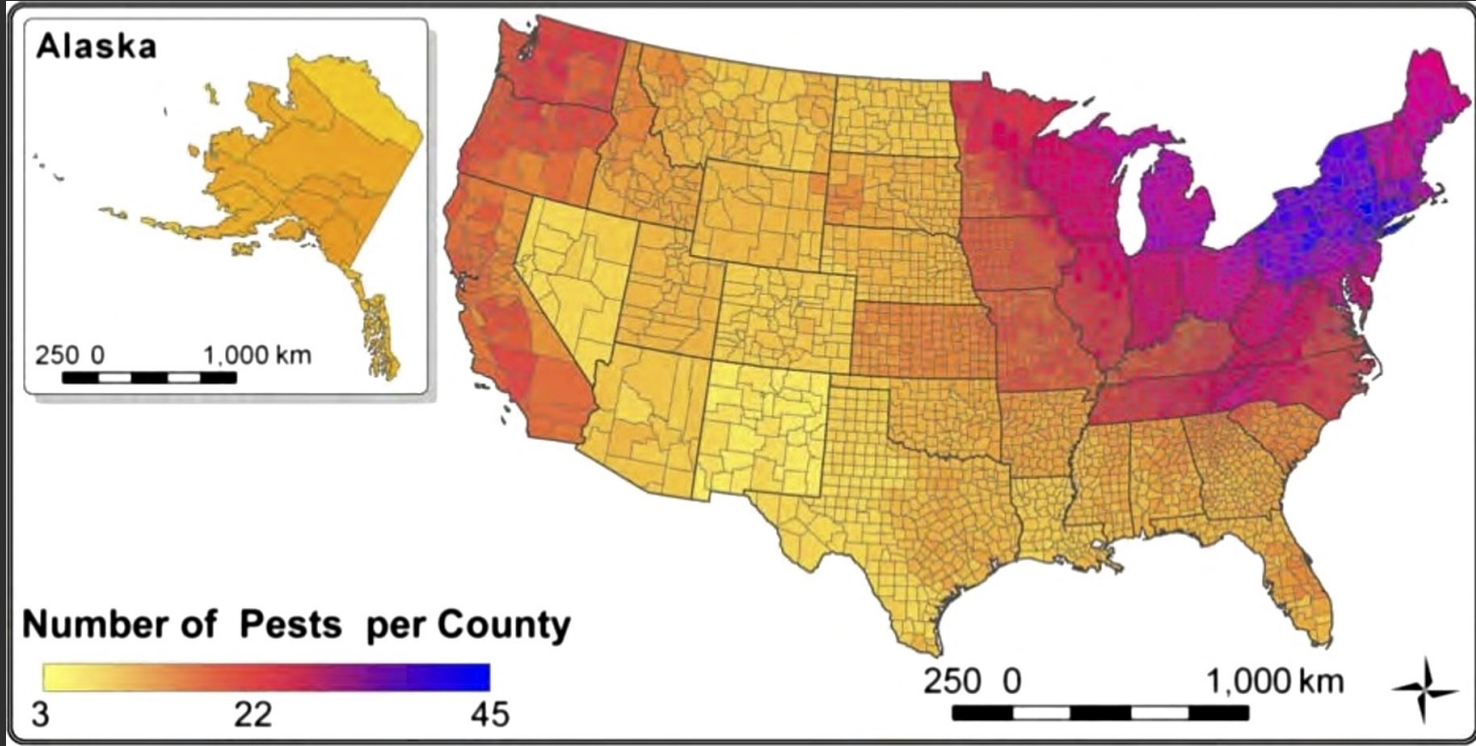
1. Competitive Advantage
- Good at getting resources



2. Enemy Release
- No native predators in the introduced range.







Introduced Forest Pests





Pinus radiata, radiata pine

CO - INVASION!



Suillus luteus, Slippery Jack