

## INVASION

appearance of a species in  
a new habitat (usually  
outcompeting native species)

exotic vs invasive.

↙ 'natural enemy'  
hypothesis

→ PARASITES!  
(bottleneck)

lab examples.

[ parasites on tip comp. balance  
(moose/deer example)  
→ fruit flies (*D. melanogaster*,  
*Simulans*)

+ parasitoid wasp

DM wins in absence of wasp  
+ wasp, *Simulans* wins

]

I ancestral habitat:

parasite present, invader present

novel habitat:

parasite absent, invader  
outcompetes  
native

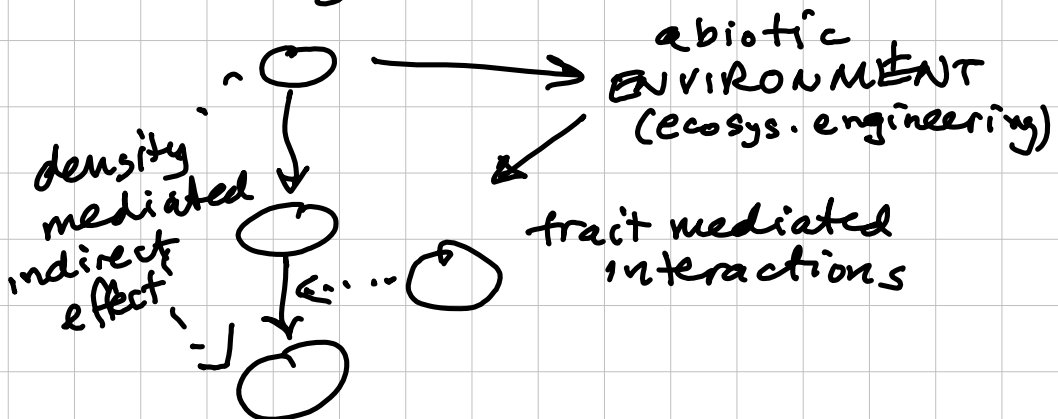
ENEMY RELEASE

II :

invader brings its parasite  
wins by APPARENT competition

... many examples  
parasite-mediated invasion

• ecosystem engineering



cockles + parasites

parasites infect feet

↳ encourage trophic transmission

→ parasites stay at surface  
- reduces bioturbation  
(stirring)

- creates a hard surface  
→ environment for  
other organisms