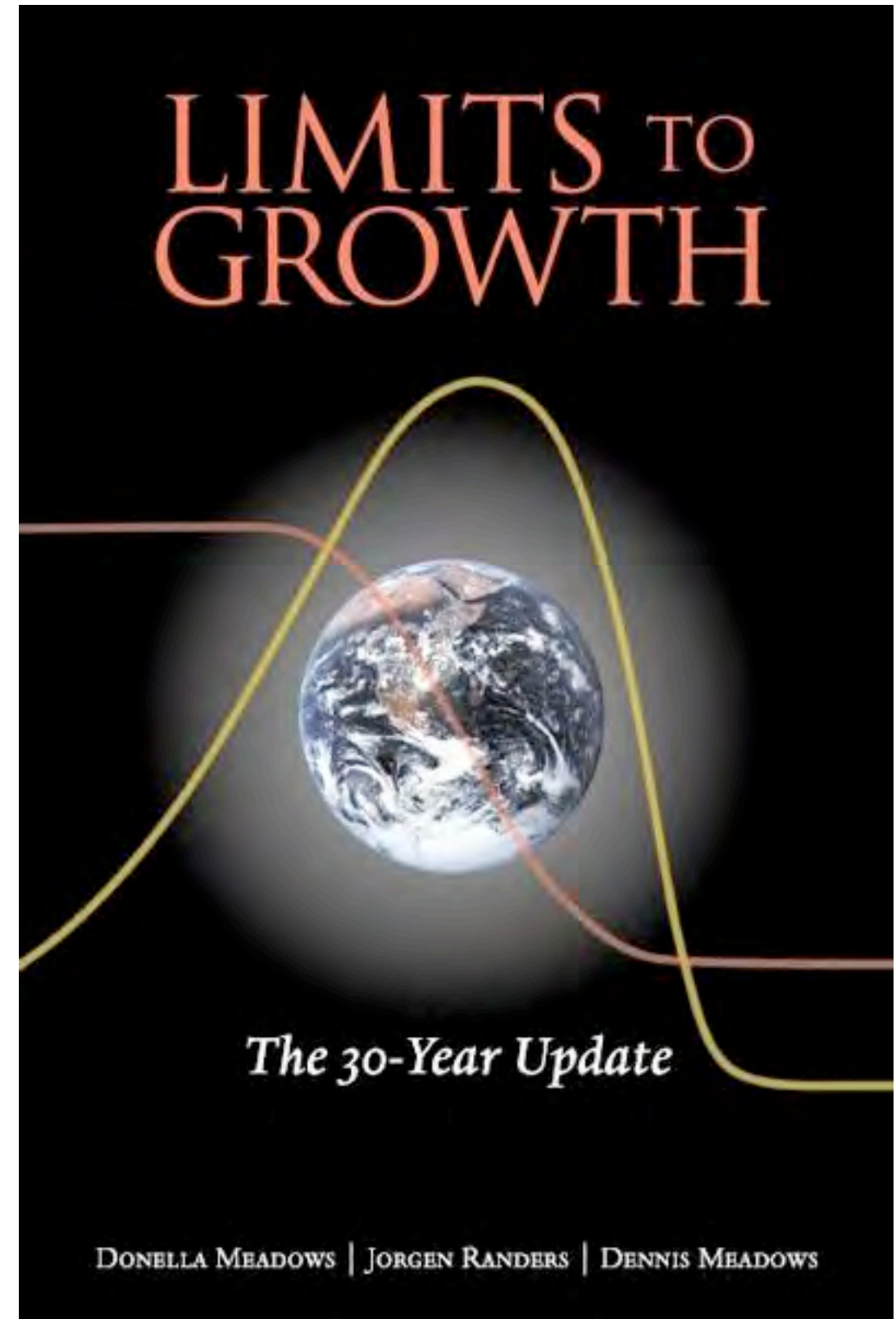
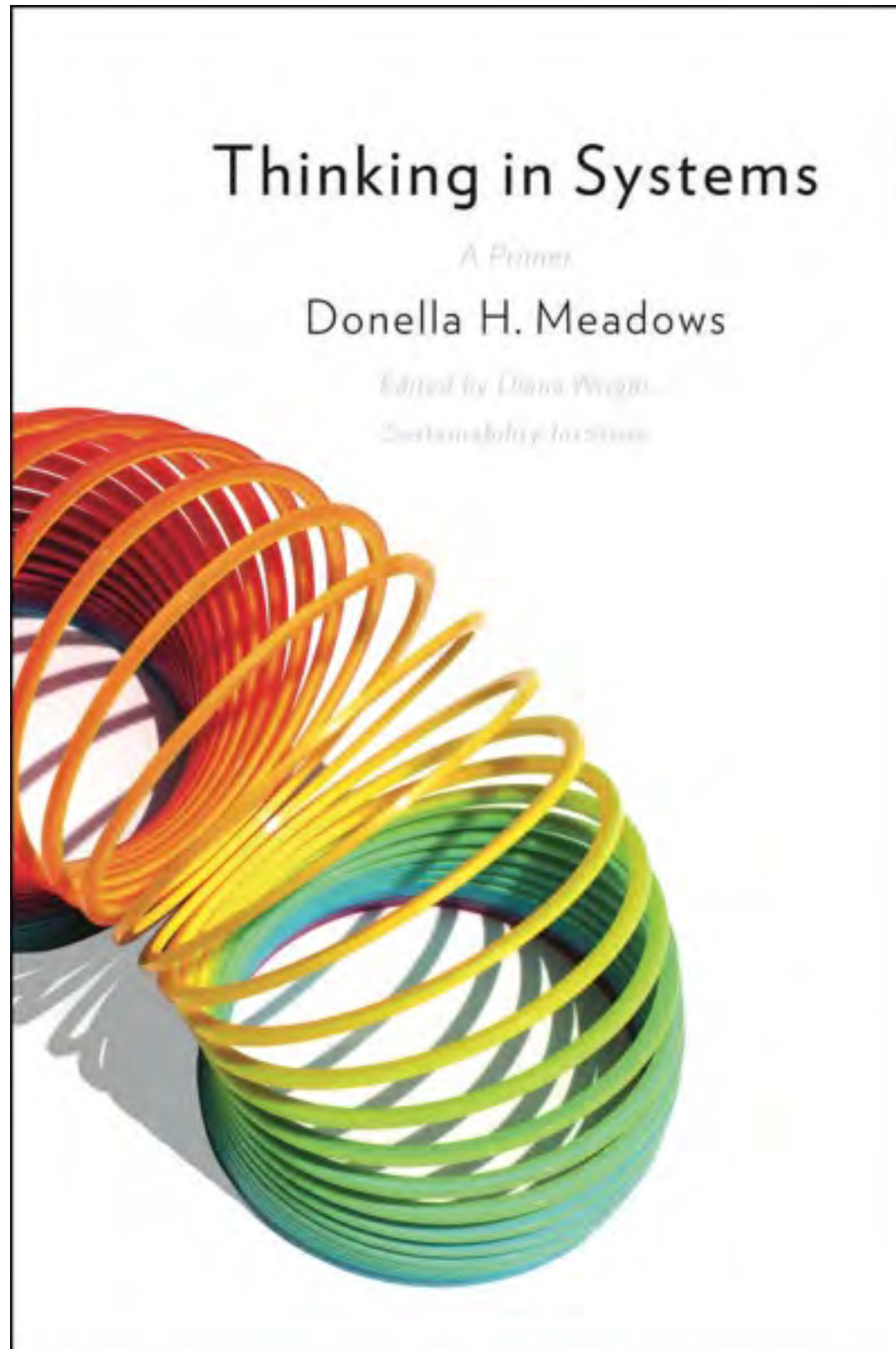


# System Dynamics



# System Dynamics



Stocks store stuff



Flows carry stuff in and out of stocks

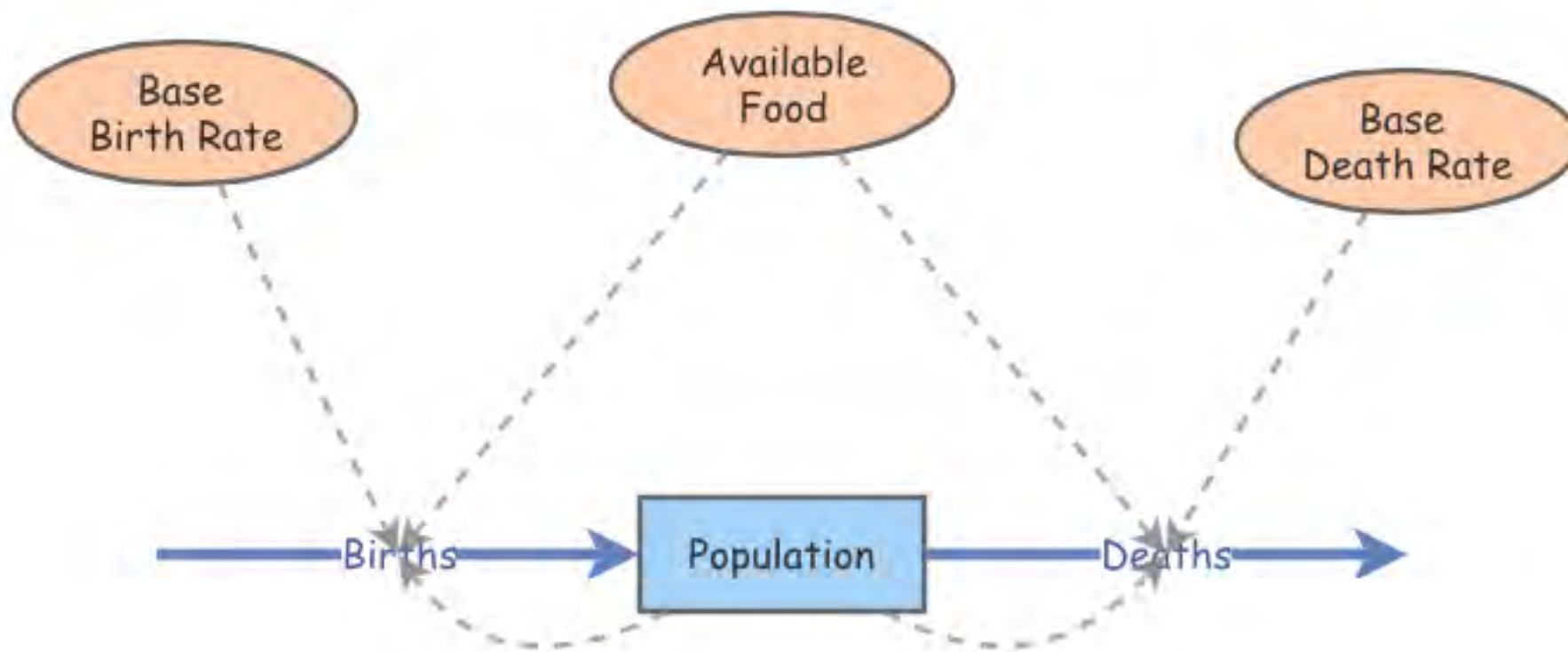


Variables can be constants or equations



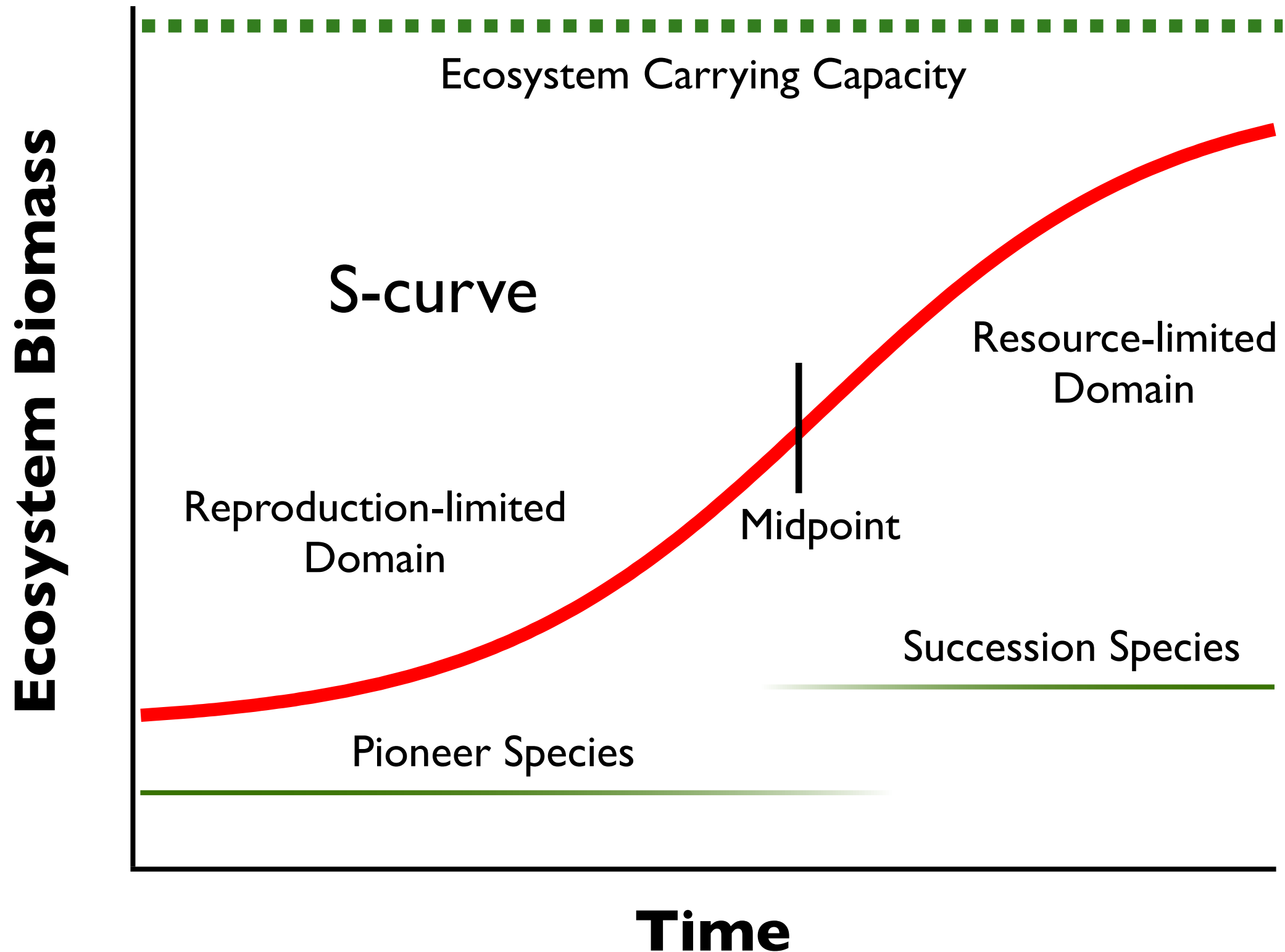
Links transfer information among the other three

# Food-Limited Population

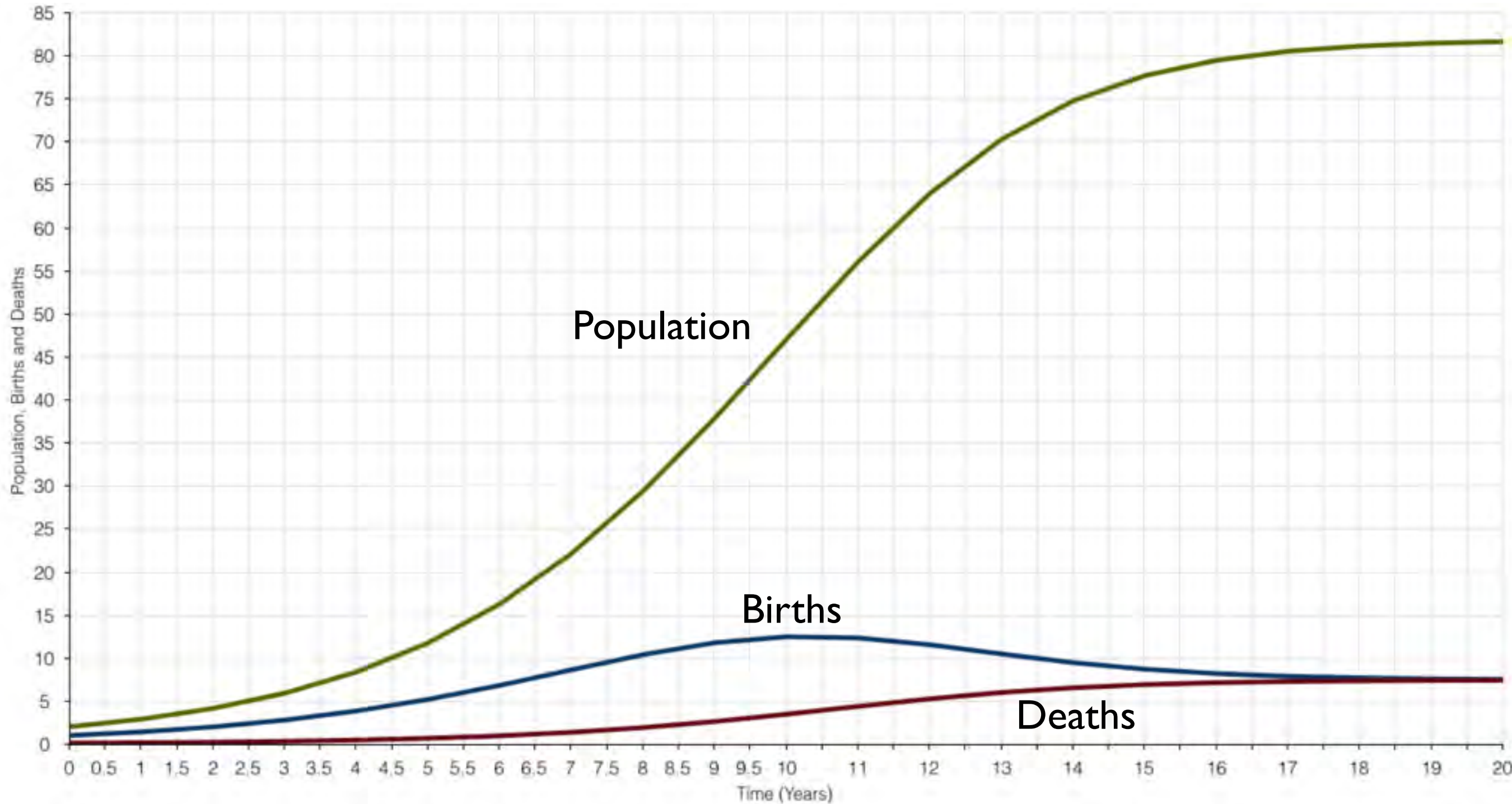


Model 1

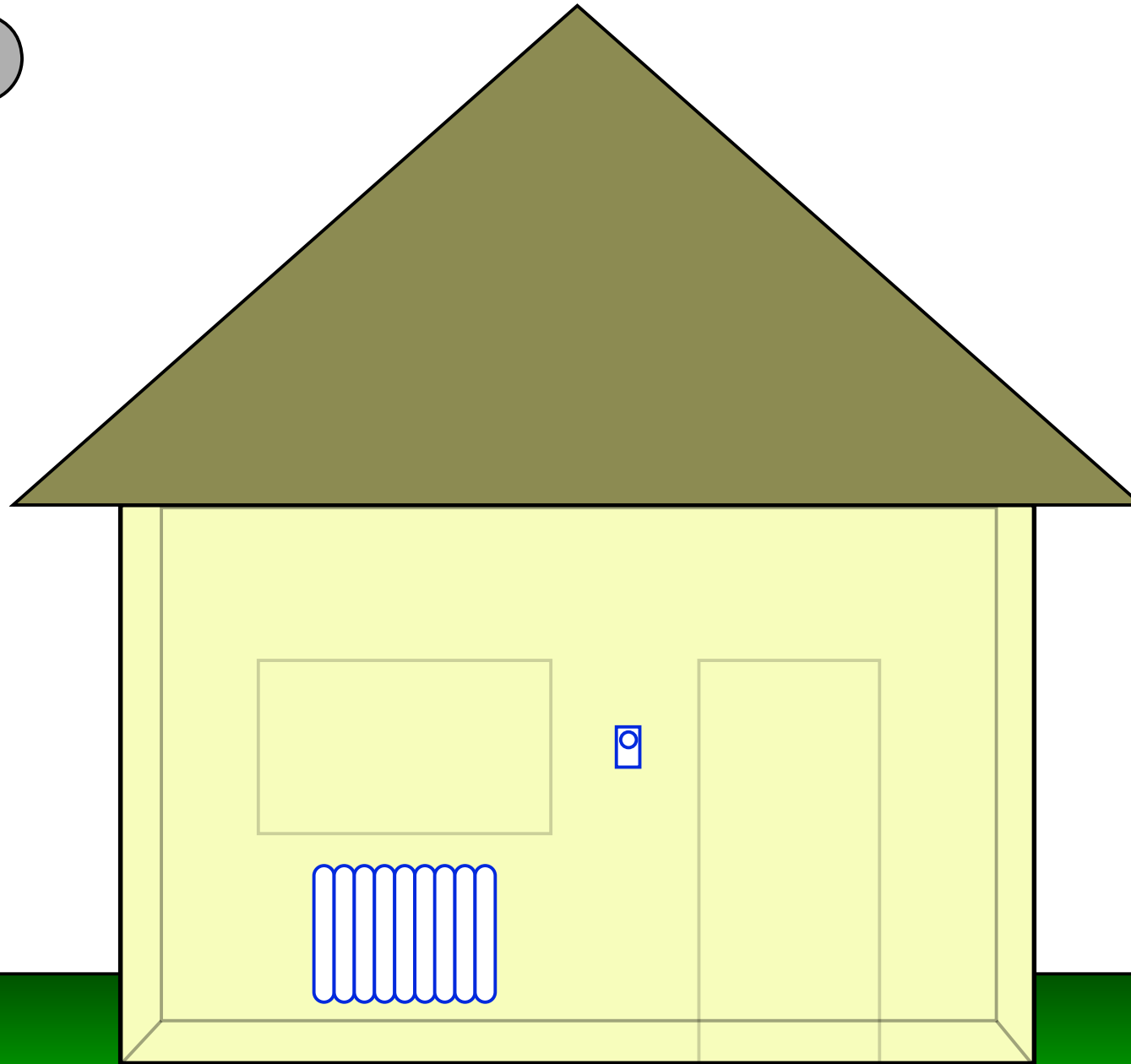
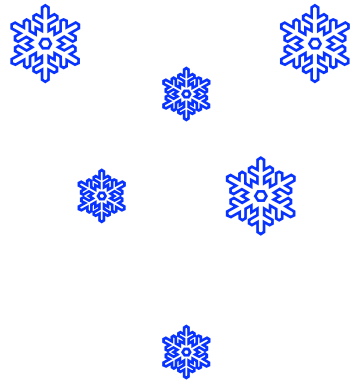
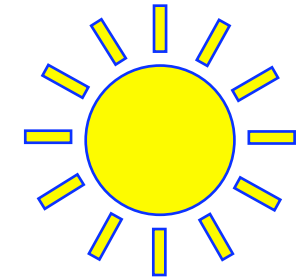
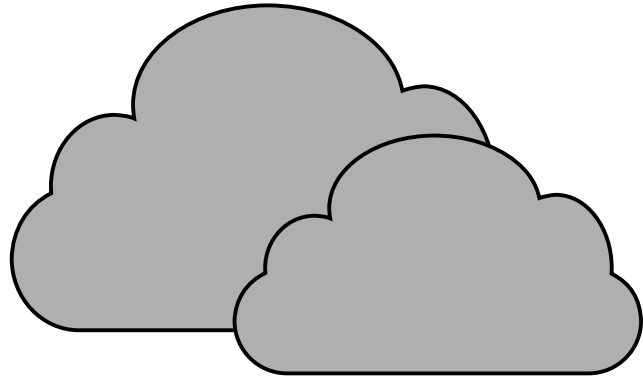
# Ecosystem example (from FS1)



# Food-Limited Population

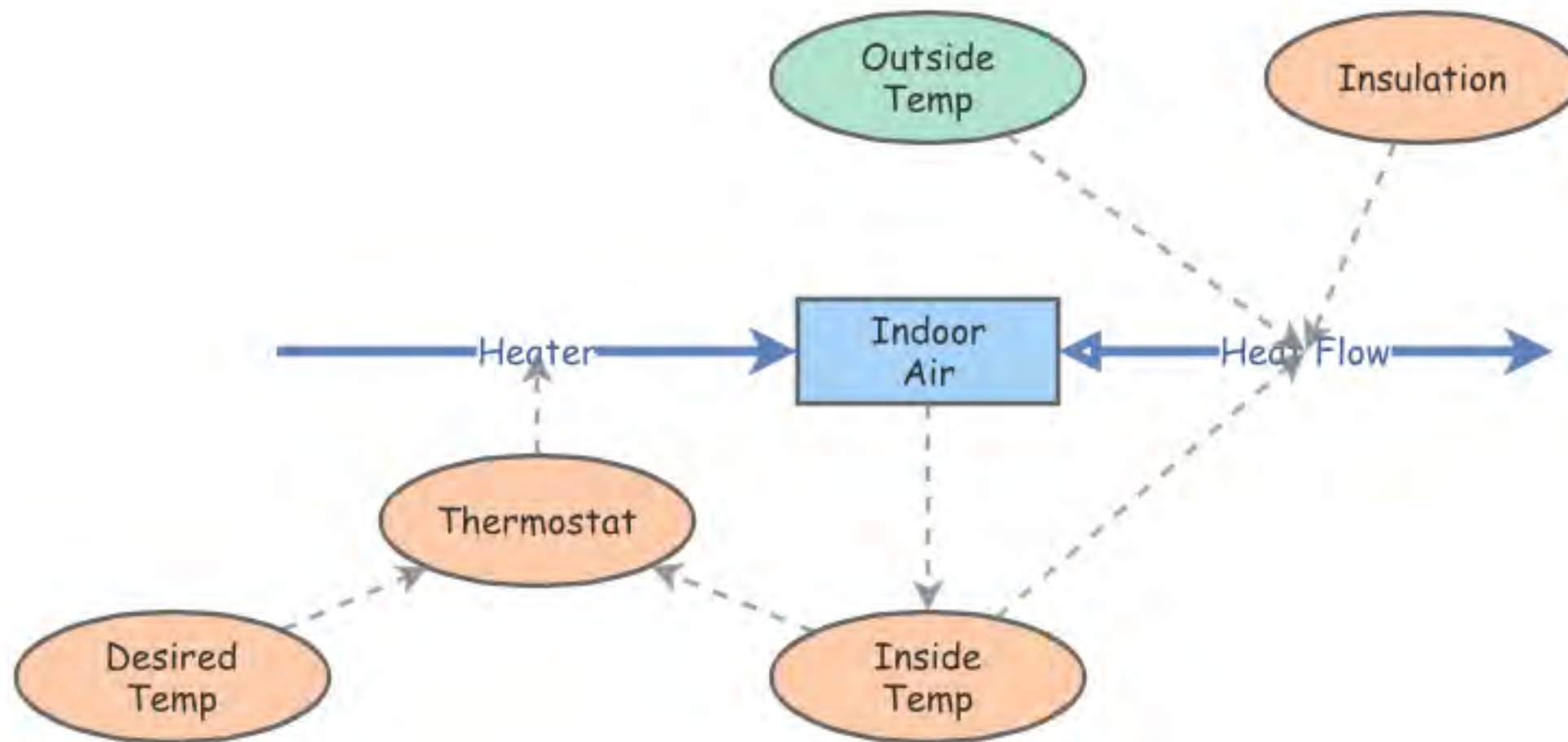


# Home Heating

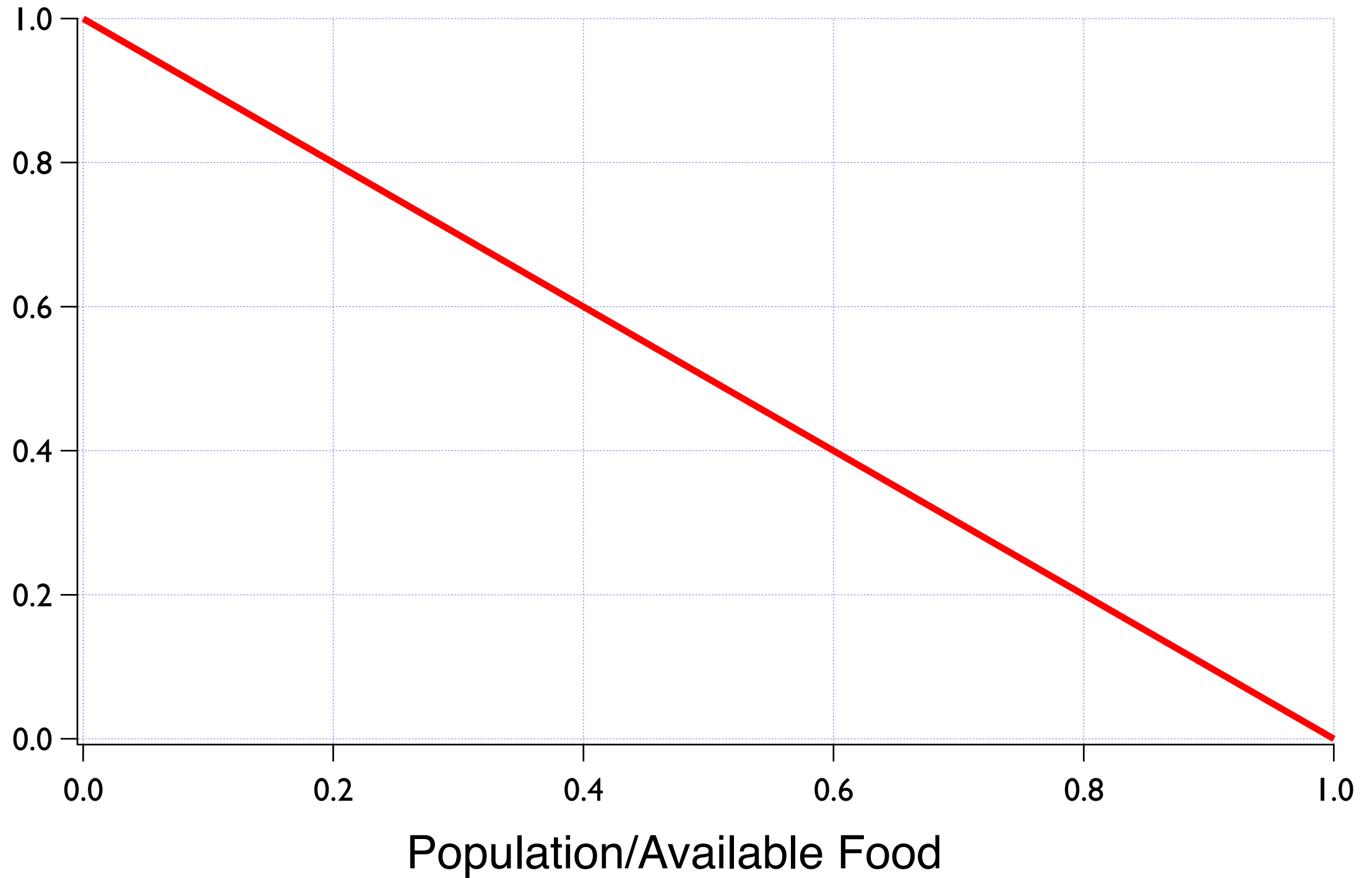




# Home Heating

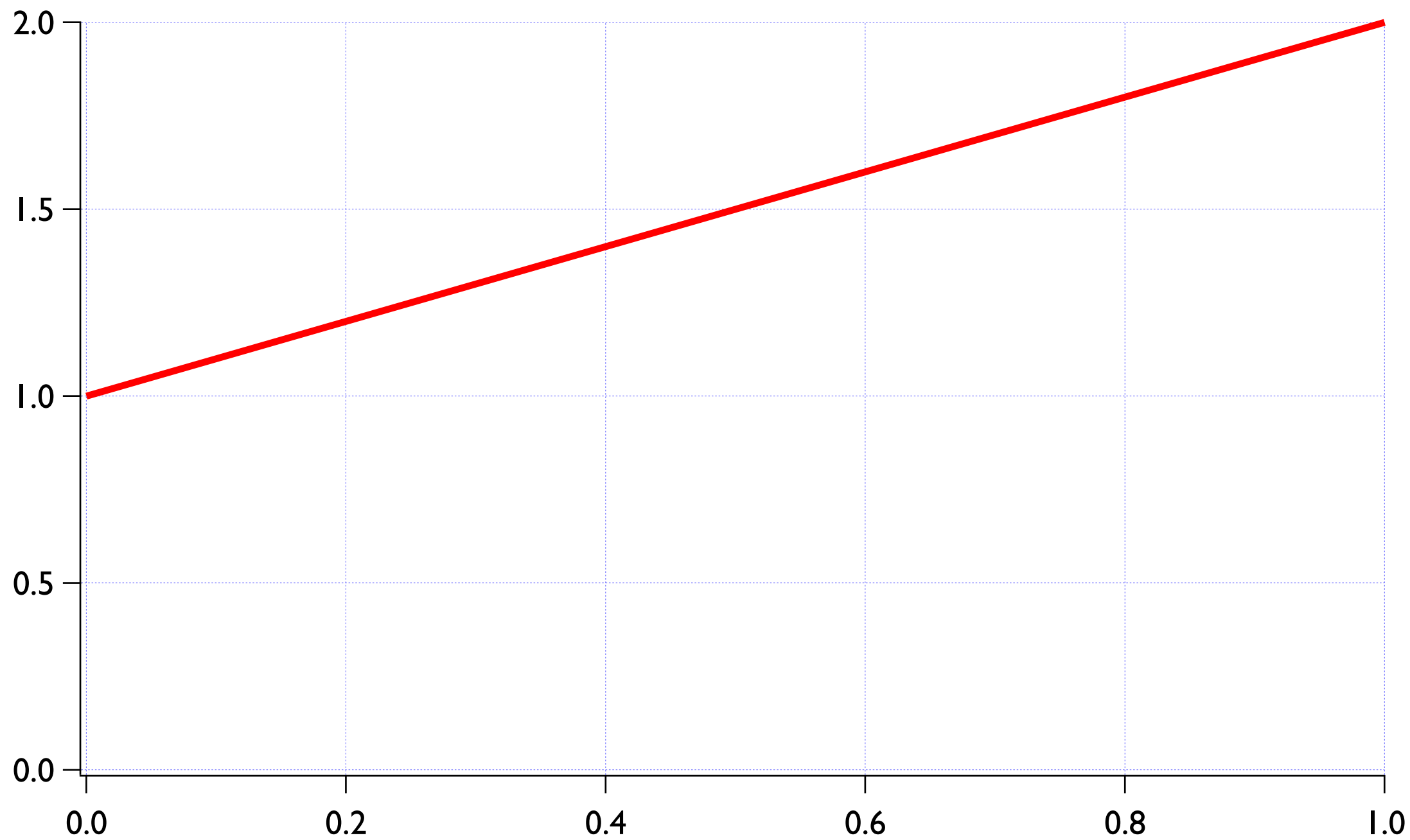


$$1 - [\text{Population}]/[\text{Available Food}]$$





$$1 + [\text{Population}]/[\text{Available Food}]$$

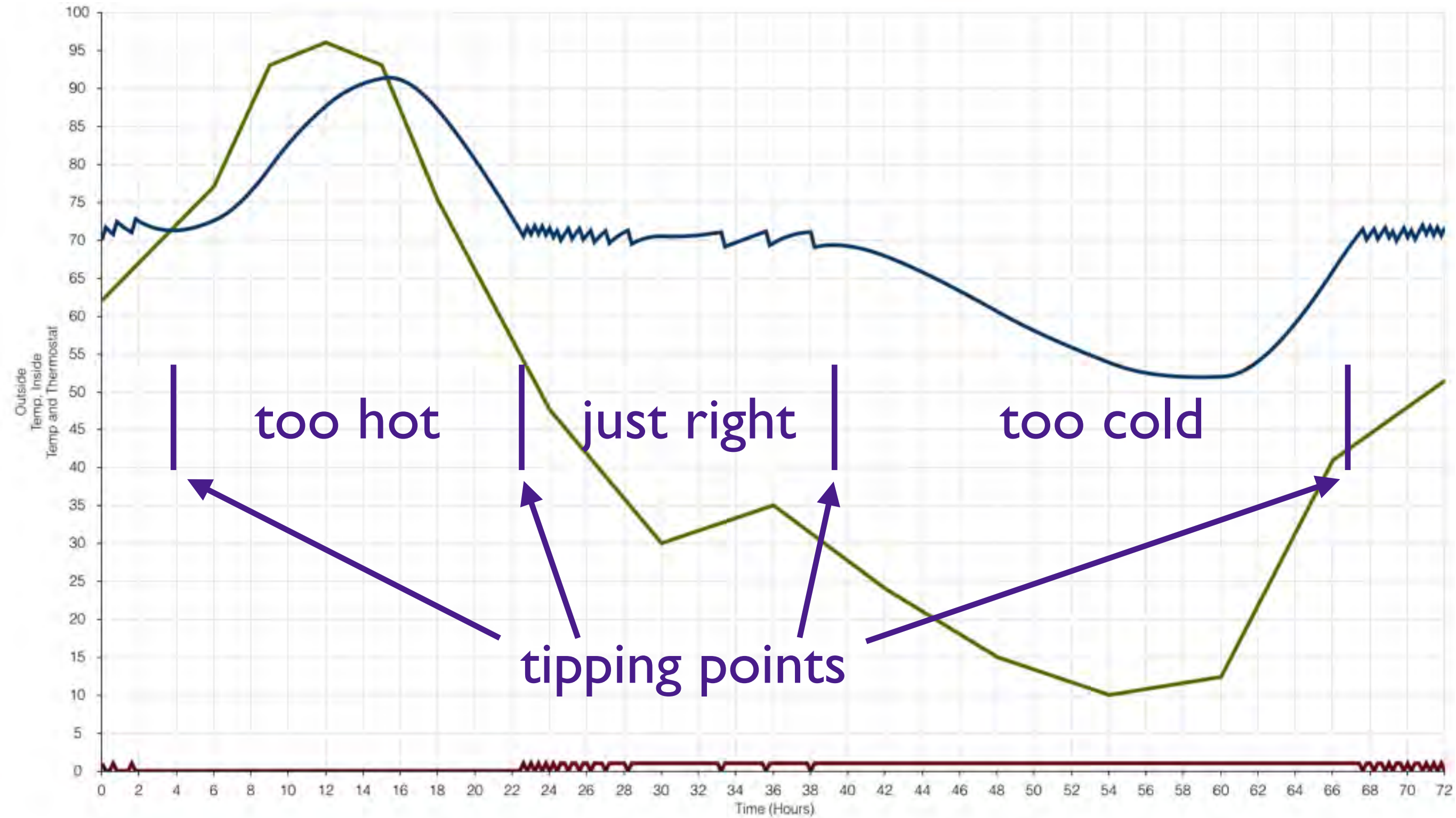


Population/Available Food

# Home Heating



# Home Heating





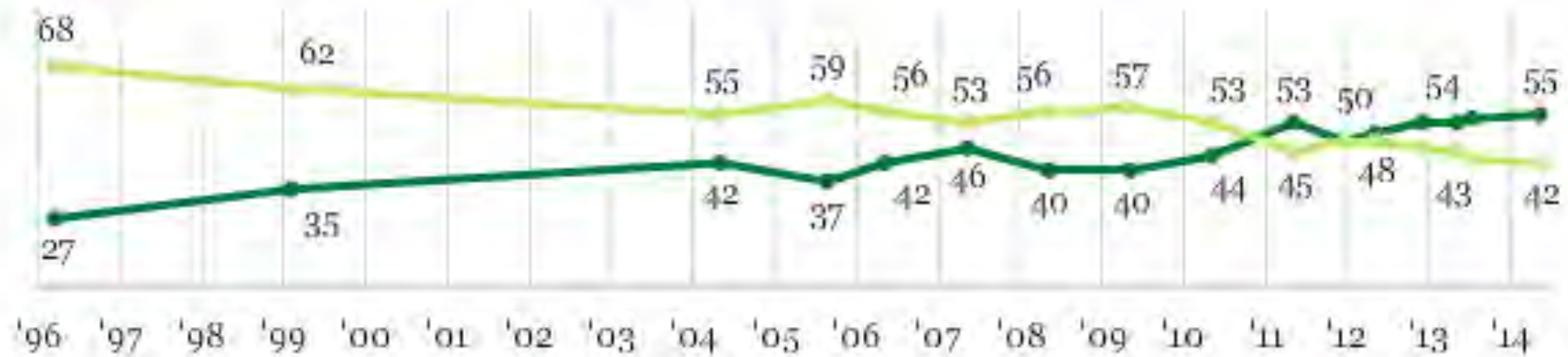
# Tipping Points



# Tipping Points

*Do you think marriages between same-sex couples should or should not be recognized by the law as valid, with the same rights as traditional marriages?*

■ % Should be valid    ■ % Should not be valid



1 1 2 1 2 5 18

State law changes



# Tipping Points

