

BauchRhoMFig

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Table 1: Parameter values used in this analysis

Parameter	Population_1	Population_2	Def
r	0.16	0.16	Fish net growth
s	0.8	0.8	Supply and demand
h	0.25	0.25	Harvesting efficiency
k	0.17	0.17	Social learning rate
w	1.44	1.44	Conservation cost
c	0.5	0.5	Rarity valuation
d	0.3	0.3	Social norm strength (within pop)
i	0	0	Fish immigration (from opposite patch)
rho	0	0	Social norm strength (opposite pop)

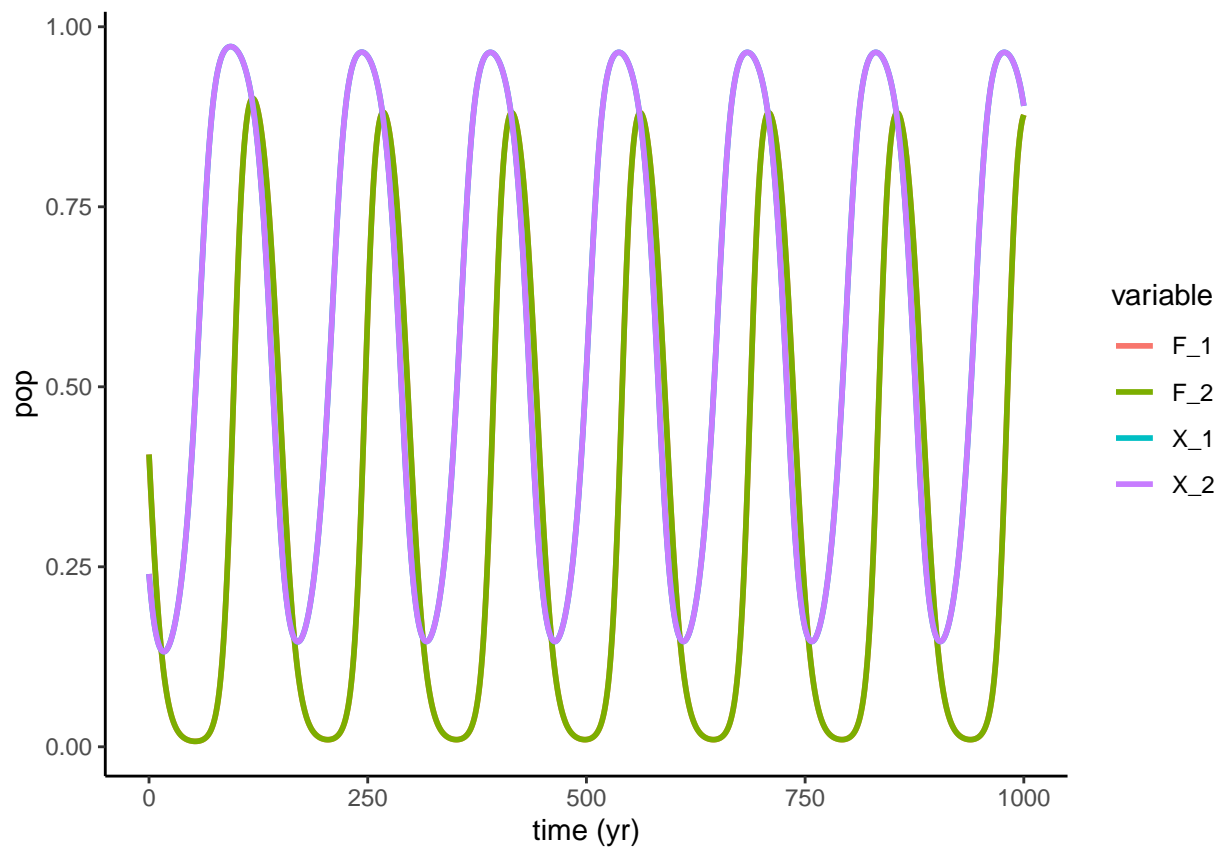
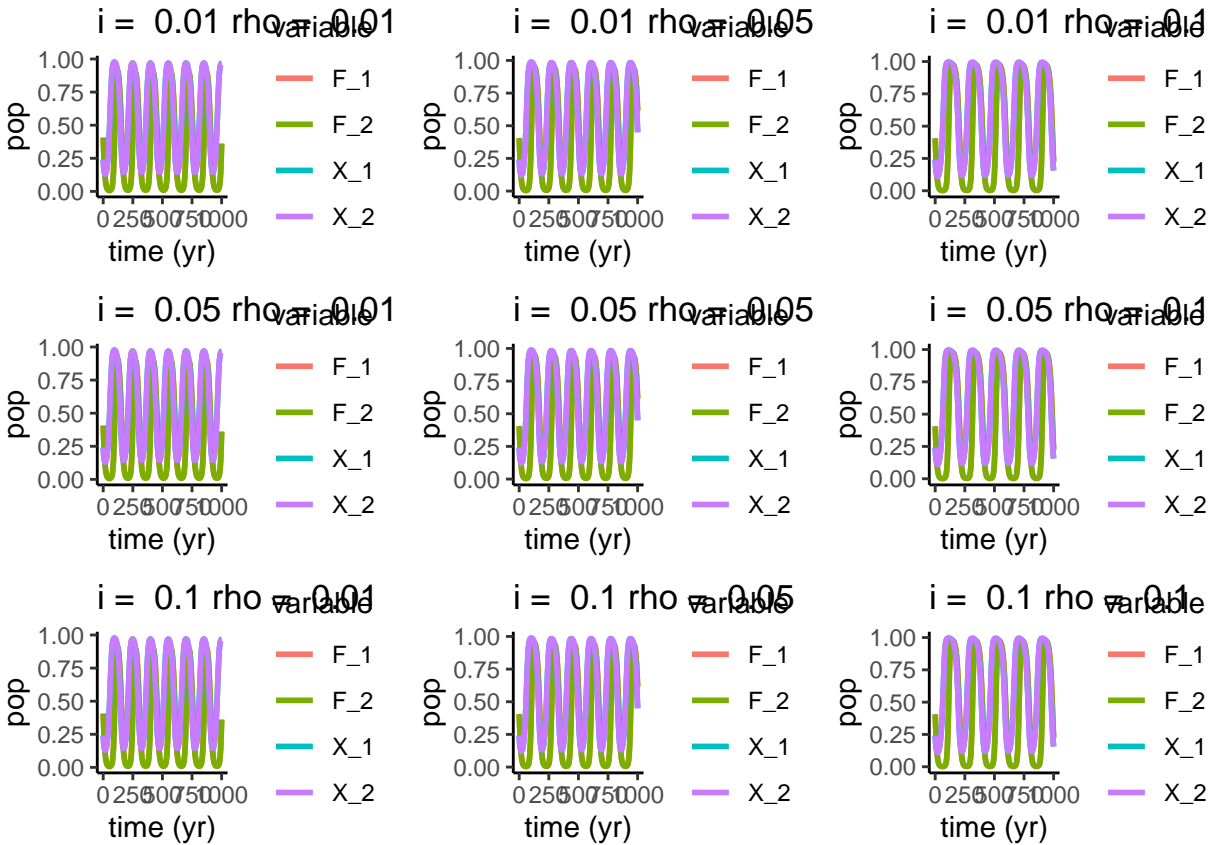
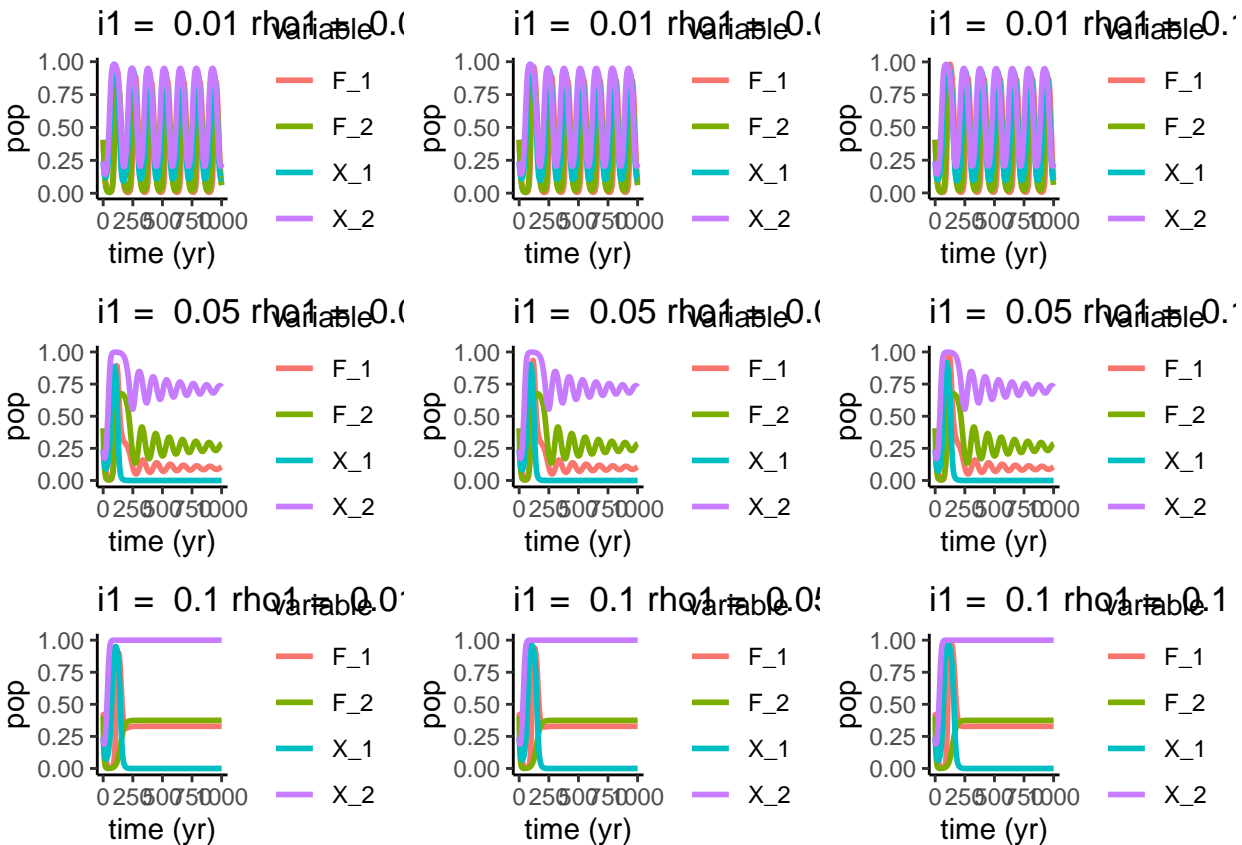


Figure 1: New Model with default paramters



i and ρ have no affect except they seem to be decreasing the frequency of oscillations. See if this is universally true by extending this experiemnt past $i = .1$ and $\rho = .0$

THIS IS WHERE FISH MOVEMENT IS INCREASING TO POP 1 AND SOCIAL INFLUENCE OF PUPULATION 2 ONTO 1. POP1: GAINING MORE FISH BUT LISTENING TO POP 2 MORE. Listening to pop 2 more means that as they lose fish, they will fish less but influence pop 1 to fish less so I assume F1 will increase while X1 decreases .

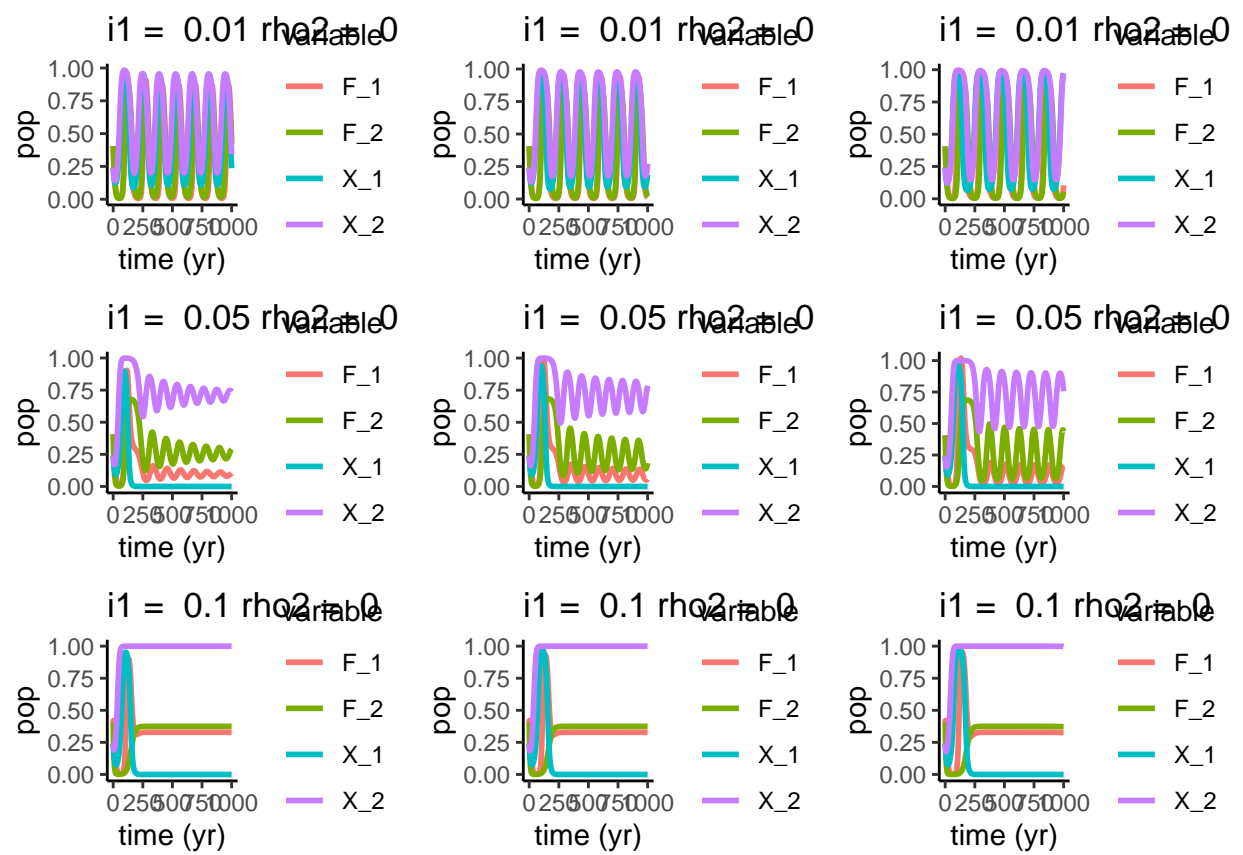


Rho no affect

i dampens oscillations

Due to immigration, eventually all of X_1 can be fishers while maintaining stable F_1 pops. X_2 eventually all become conservationists as they lose fish to immigration which actually increases the amount of fish between the second and third rows. Sometimes losing a resource fast enough can make you preserve it better?

THIS IS WHERE FISH MOVEMENT IS INCREASING TO POP 1 AND SOCIAL INFLUENCE OF PUPULATION 1 ONTO 2. POP1: GAINING MORE FISH AND ISNT LISTENING TO POP 2 BUT POP 2 IS LOSING FISH WHILE COPYING THE PRACTICES OF POP 1. Listening to pop 1 more means that as they lose fish, they will actually fish more because that's what pop 1 is doing so should crash



i dampens oscillations

Oice again, F2 seems to be fine which is weird given immigraiton and influence shouldn't be helping

rho decreasing frequency of oscillations. in row 2 also seems to be increasing their amplitude in F2 and X2. Why is that?