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	0.5	0.5	Harvesting efficiency
k	0.17	0.17	Social learning rate
w	1.44	1.44	Conservation cost
c	0.6	0.6	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)

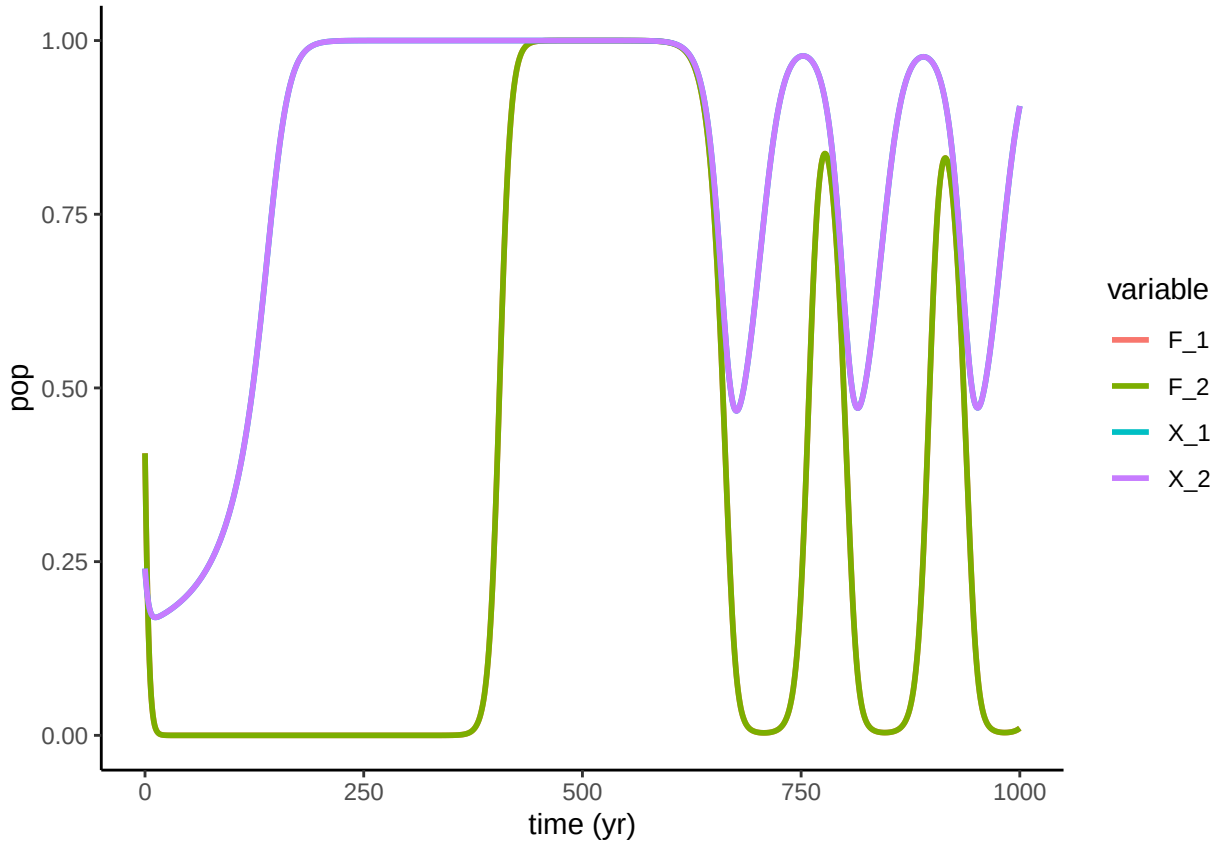
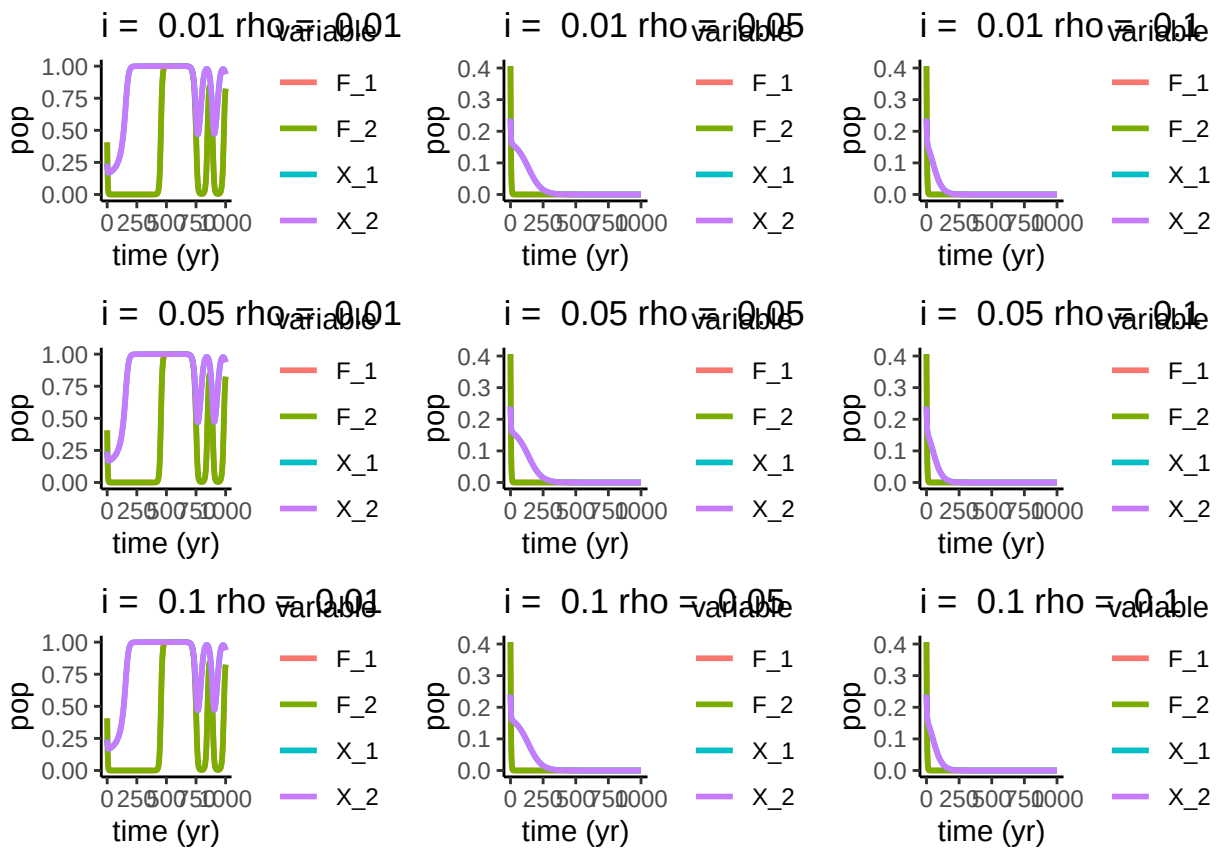


Figure 1: New Model with default paramters

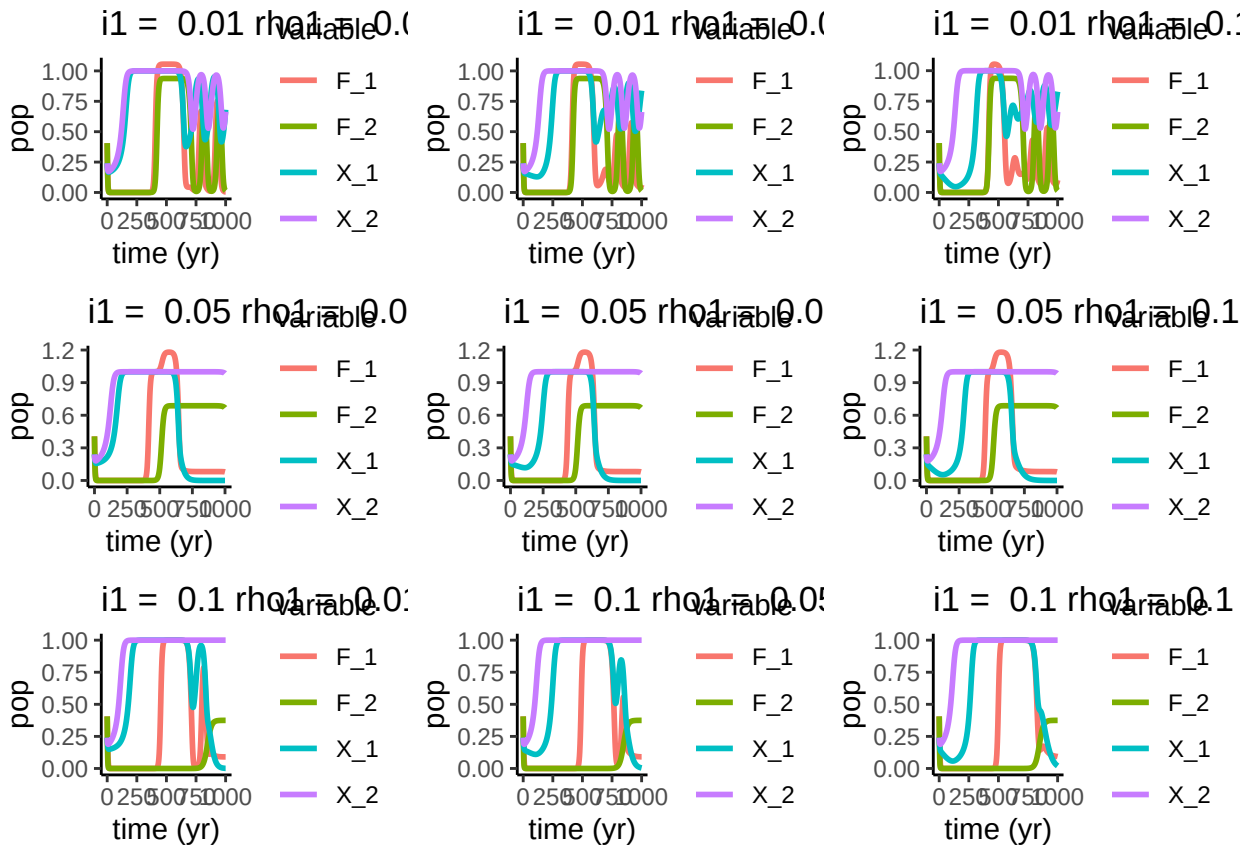


Rho depletes oscillations

I not really affecting anything

Both populations are responding equally. I wonder if the same affect will happen if we changed d in the same way. If you're looking at the other population and they're looking at you, wouldn't you do the same dynamics if you were looking at youself?

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 .

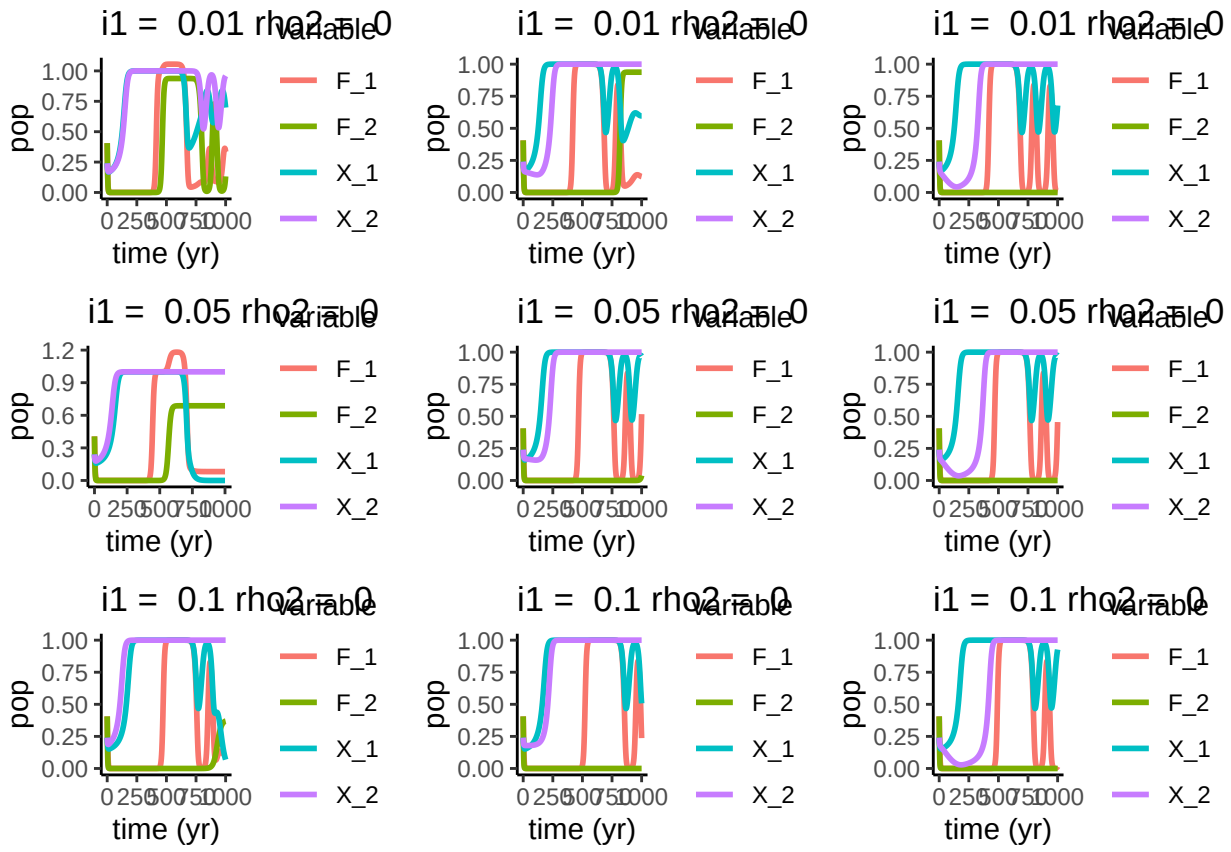


True F1 has an initial spike in all of these but then why does it eventually crash? You'd think that it becomes a positive feedback loop of Pop 2 not fishing bc loss of fish but then for some reason F1 always decreases. X1 still has a higher d than rho, so they're still continuing to fish bc of increased fish pop. whereas F2 and x2 seem to reach an equilibrium with higher levels of fish movement out of that plot

i depletes oscillations

rho not really affecting anything except when there are osiclliations, I think it's decreasing their frequency

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



f1 seems to maintain osicllatory behavior with x1

F2 seems to crash except at some lower levels of immigration in influence. Here, as rho increasese, i has less of an effect on the dynamics. what;s weird is that as rho increases, you'd think x1 and x2 follow one another more closely.

rho seems to have a greater affect on dynamics when oscillations aren't there (see other pdfs). Is that a finding?