

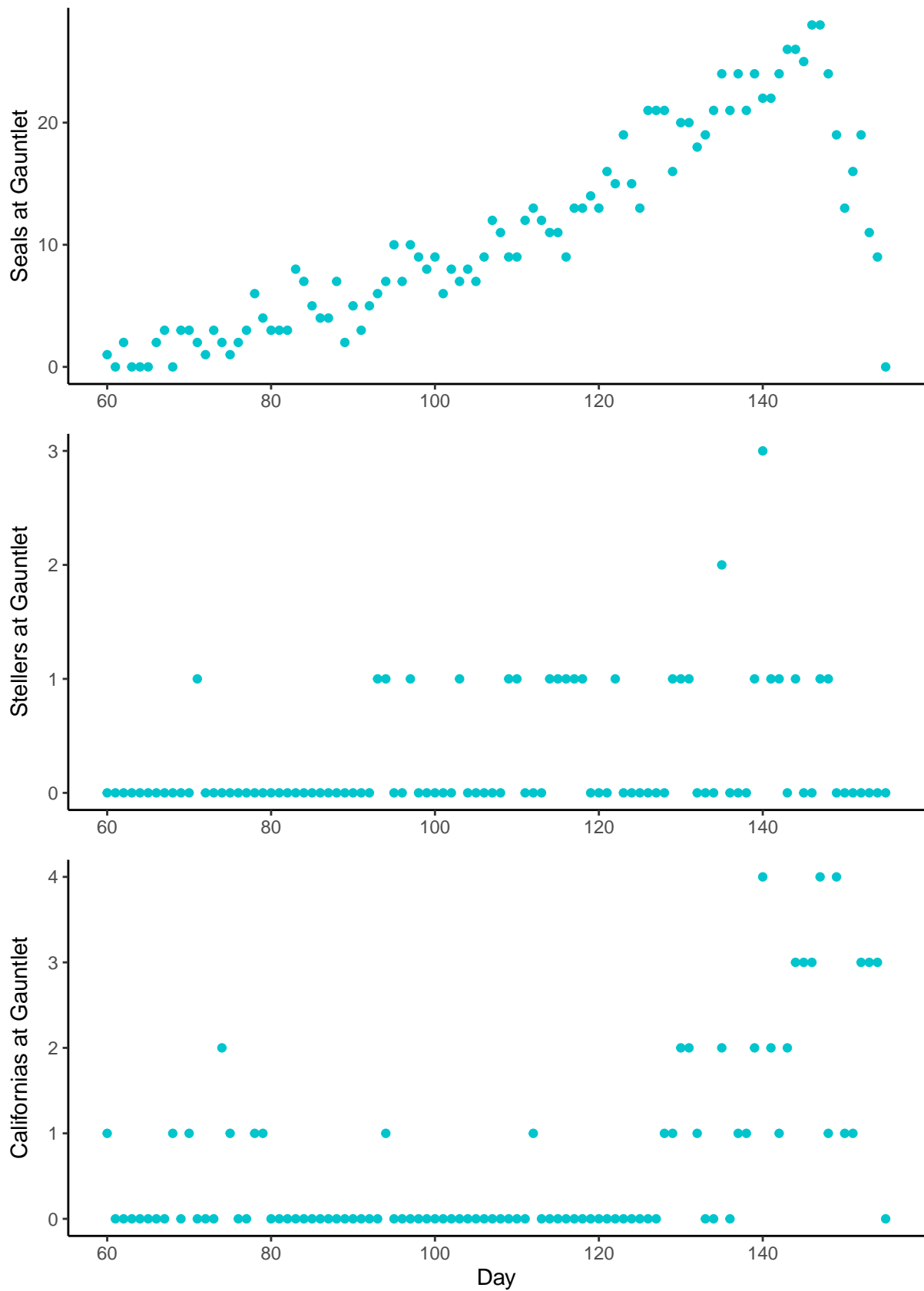
Trying to Illustrate the Cool Stuff

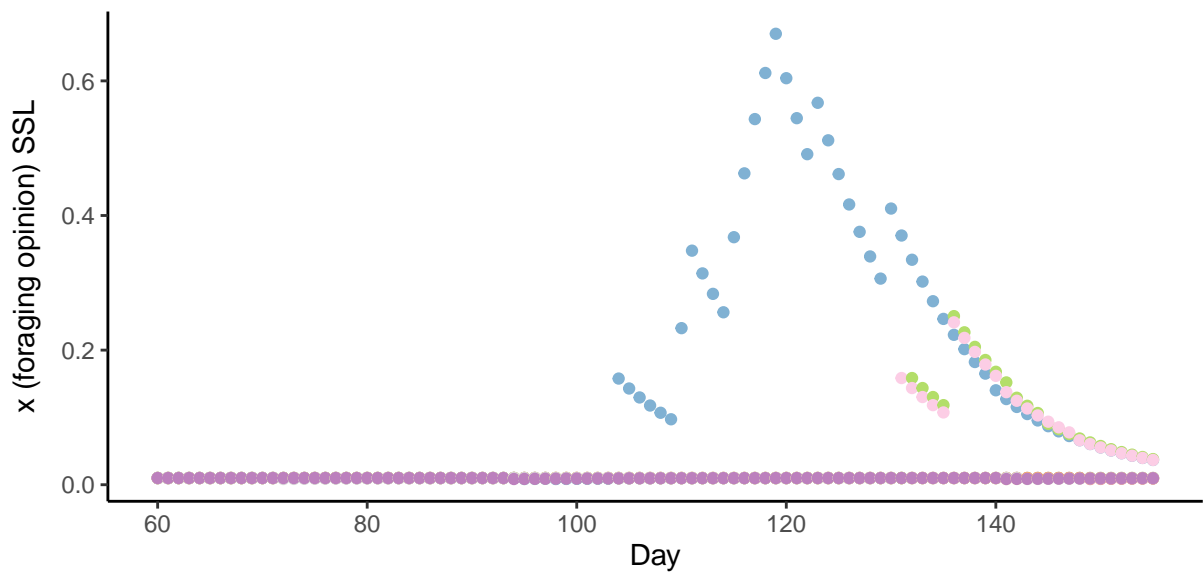
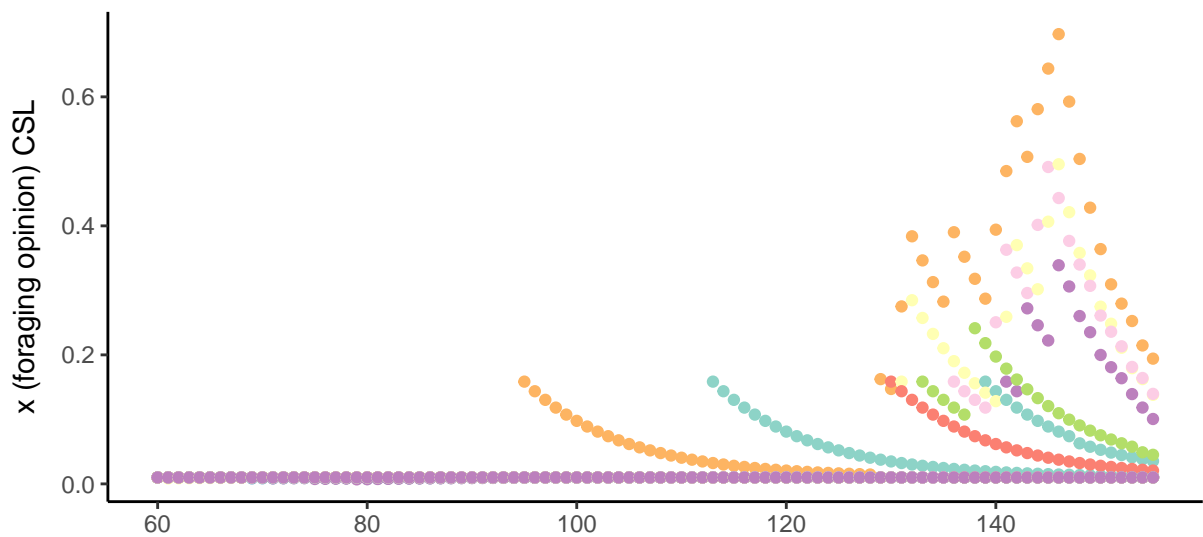
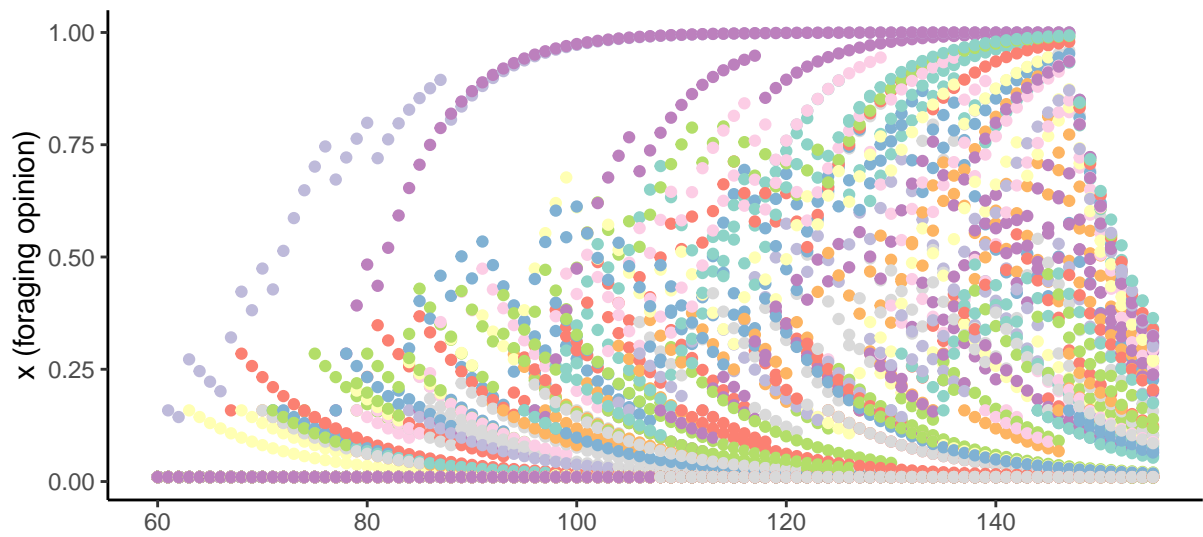
2025-03-11

The purpose of this document is to illustrate all the dynamics and functionality of this model that makes it so cool and useful. Chapter 2 will deal with all things specific to pinniped-salmon dynamics, politics, and management. Chapter 1 is just focusing on this sweet-as tool and what it can do.

Mayonnaise Version

This version of the model run features no social learning (by setting max receptivity height = 0), and no specialist behaviors (all steps, learning rates = 0.15; all x_{base} = 0.01). Boring.

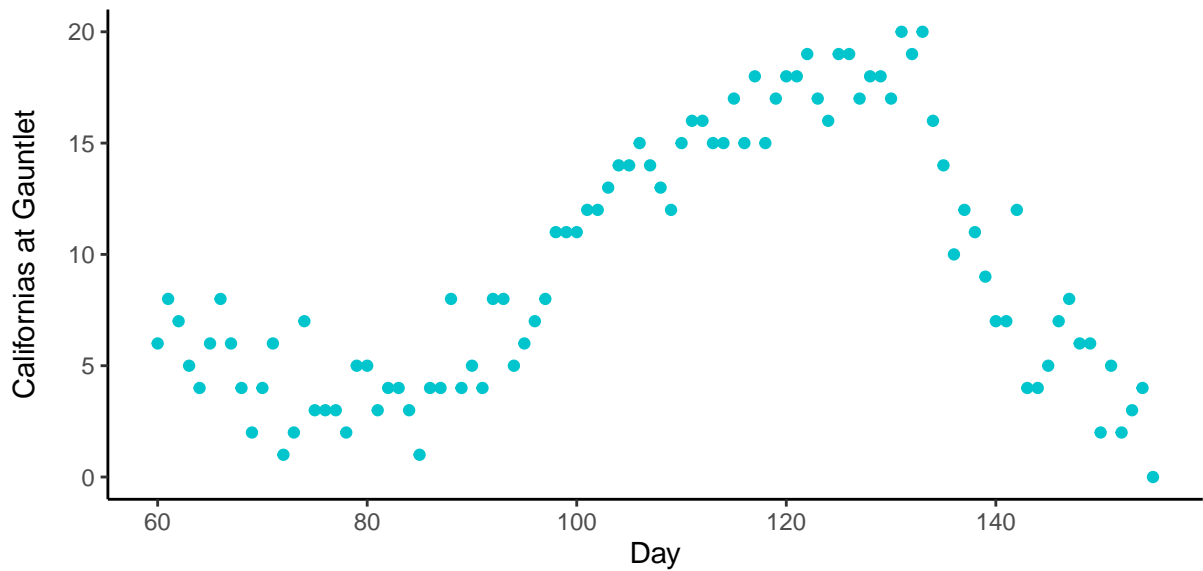
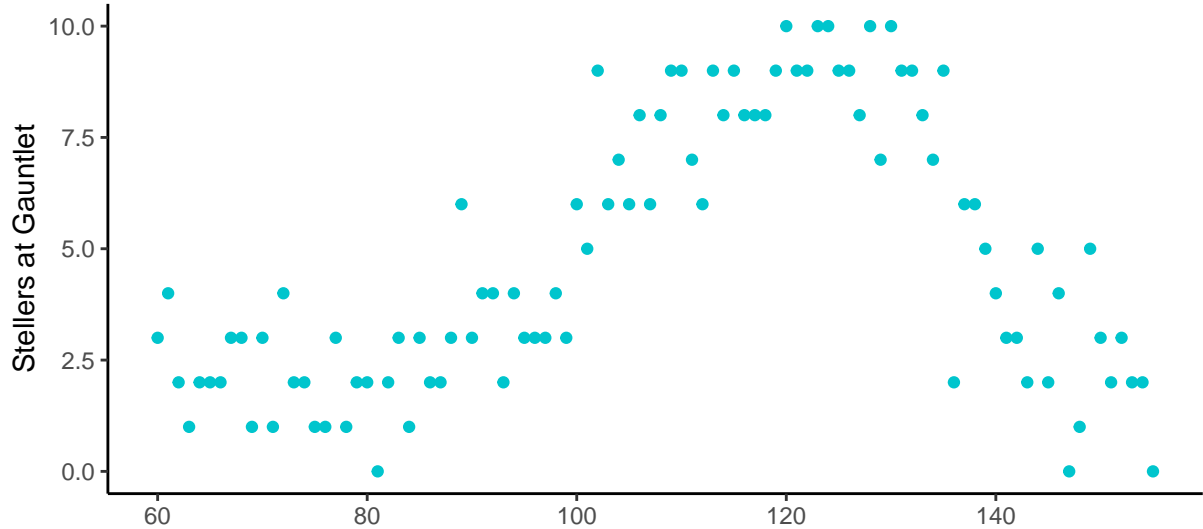
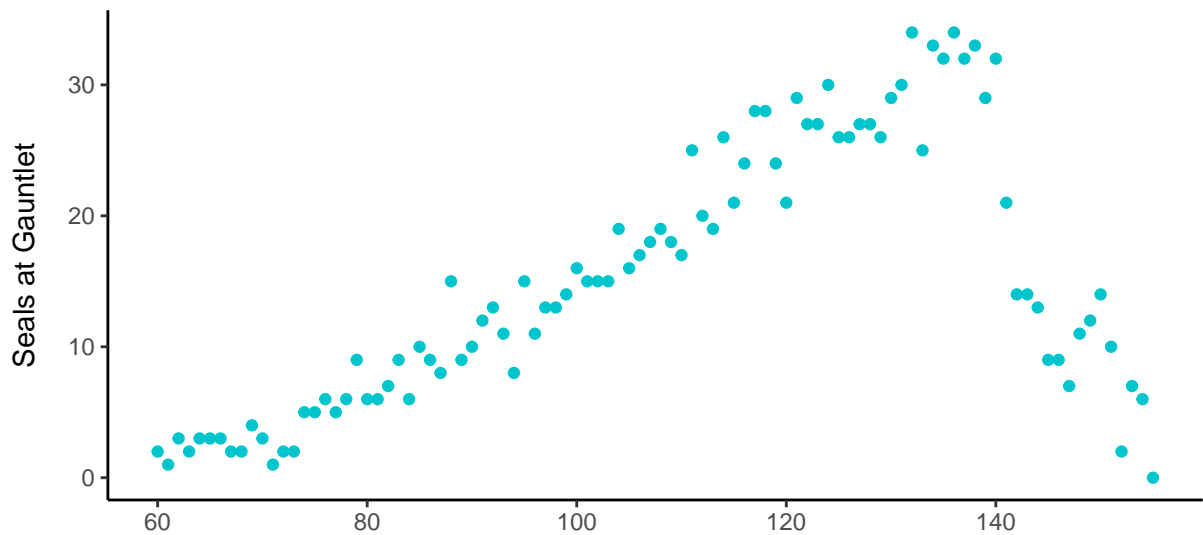


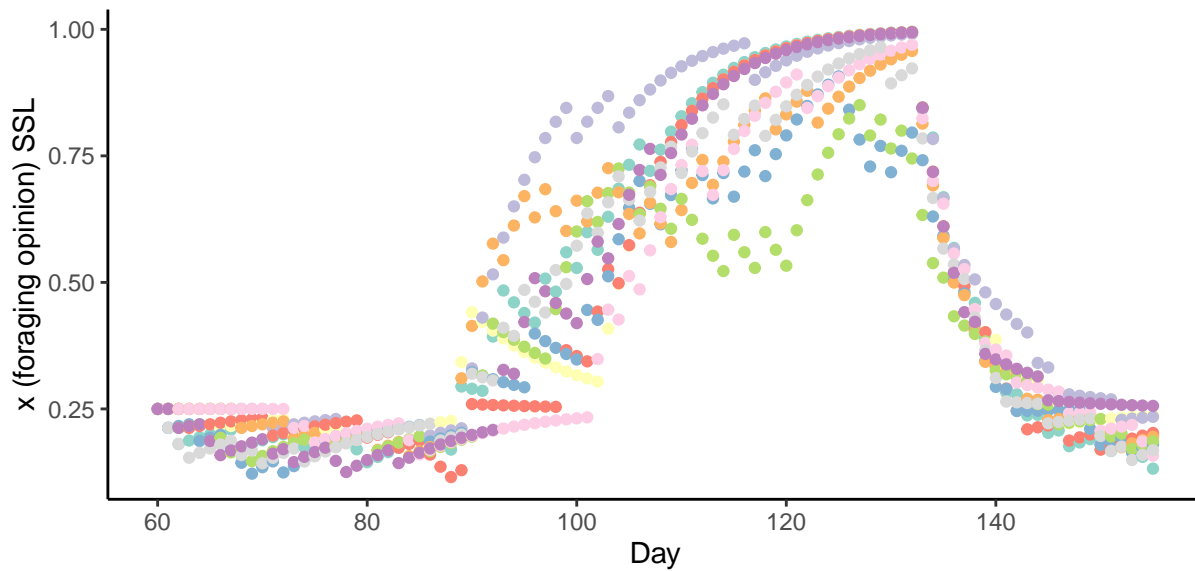
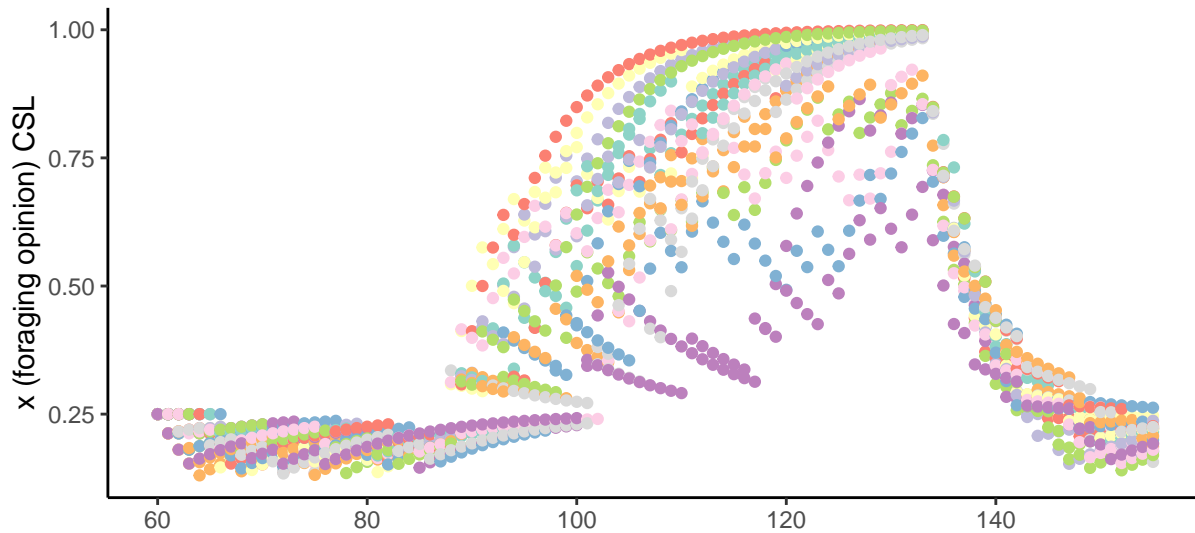
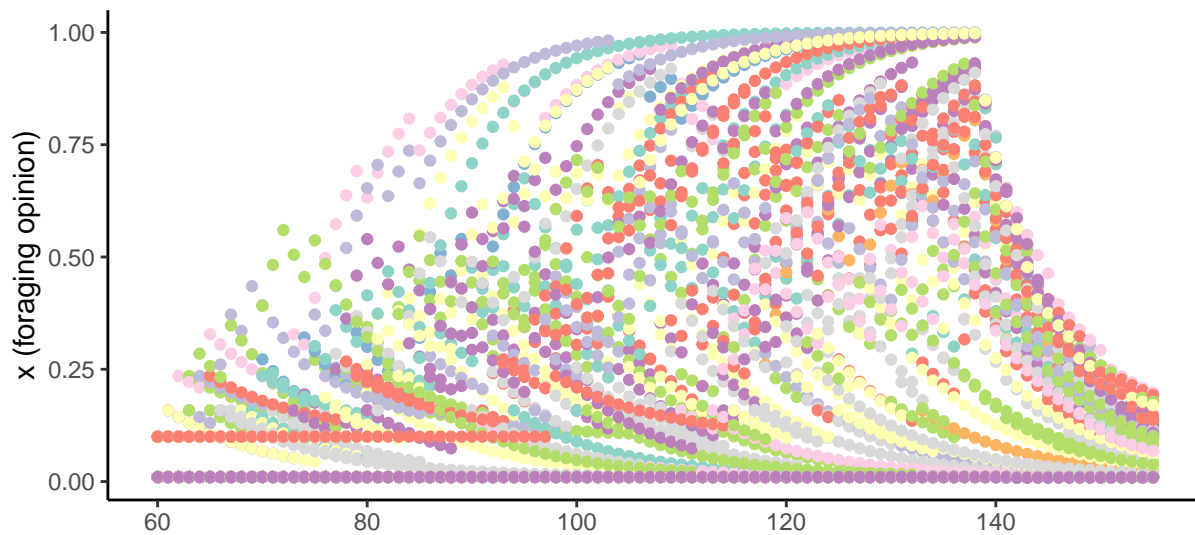


In this run, it takes all three species a while to learn about the Gauntlet as a foraging location. The baseline probability that any of them discover the Gauntlet is low (0.01) and they don't learn from each other, so it takes a long time for this behavior to catch on.

Fry Sauce

This version of the model adds specialists to the Harbor seal population and lets the sea lion x_{base} also be larger. Still no social learning though. No pizzazzz.

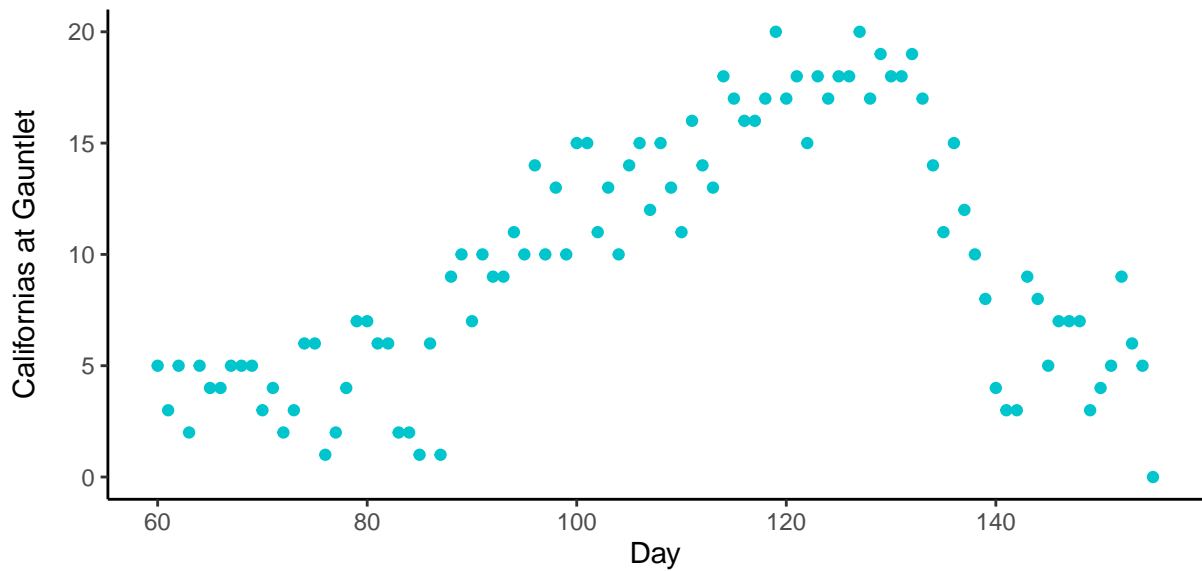
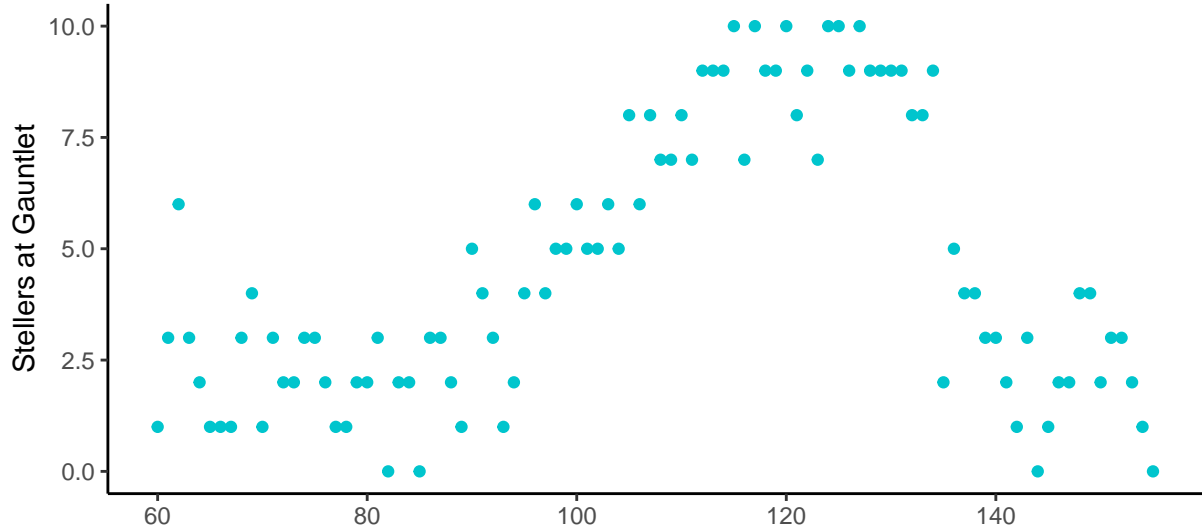
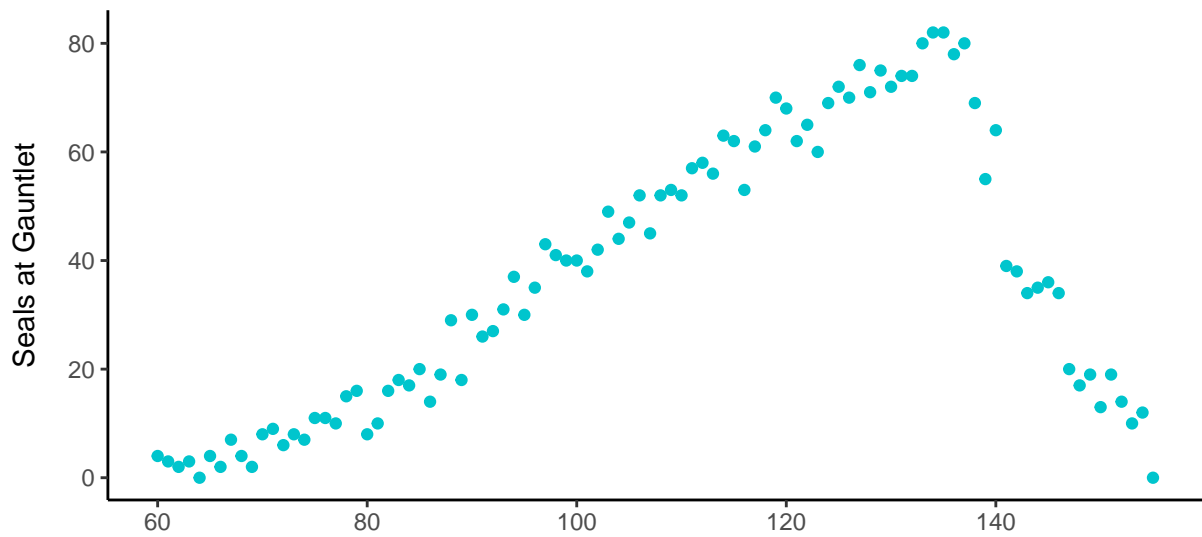


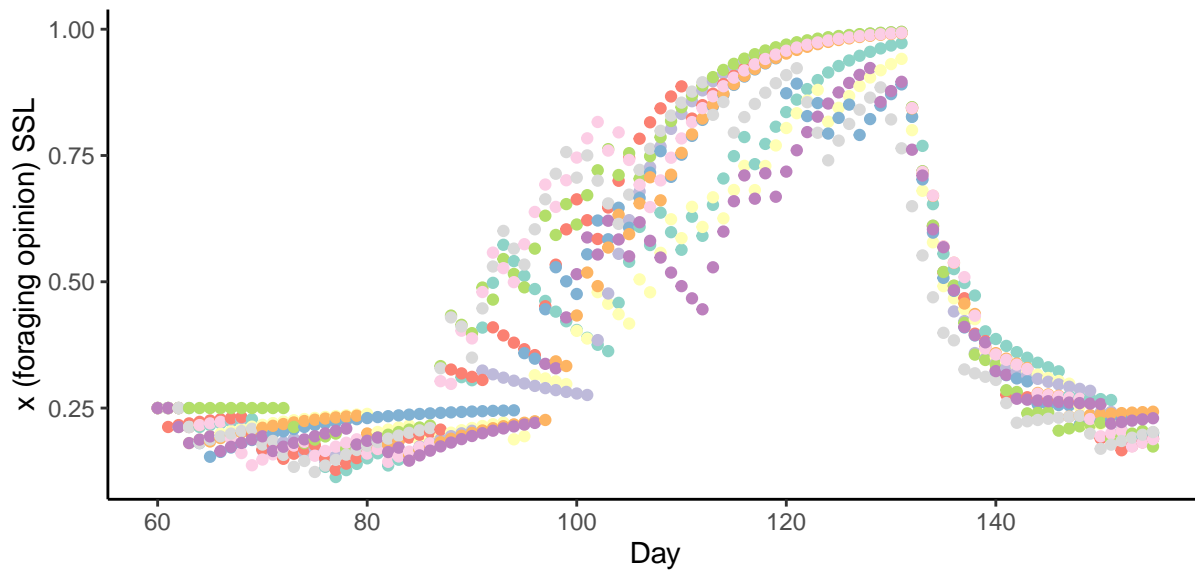
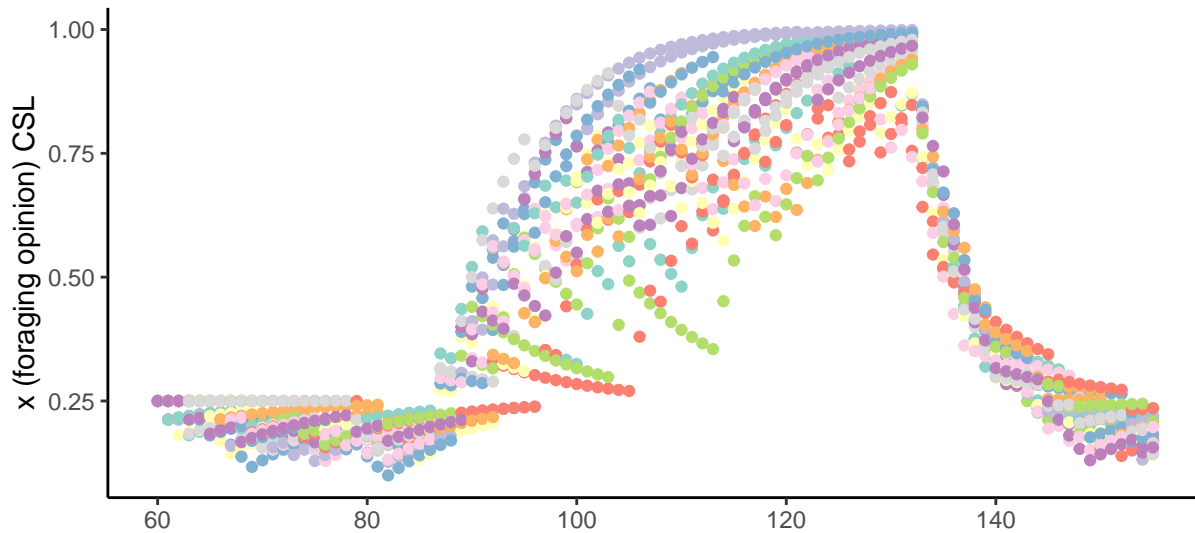
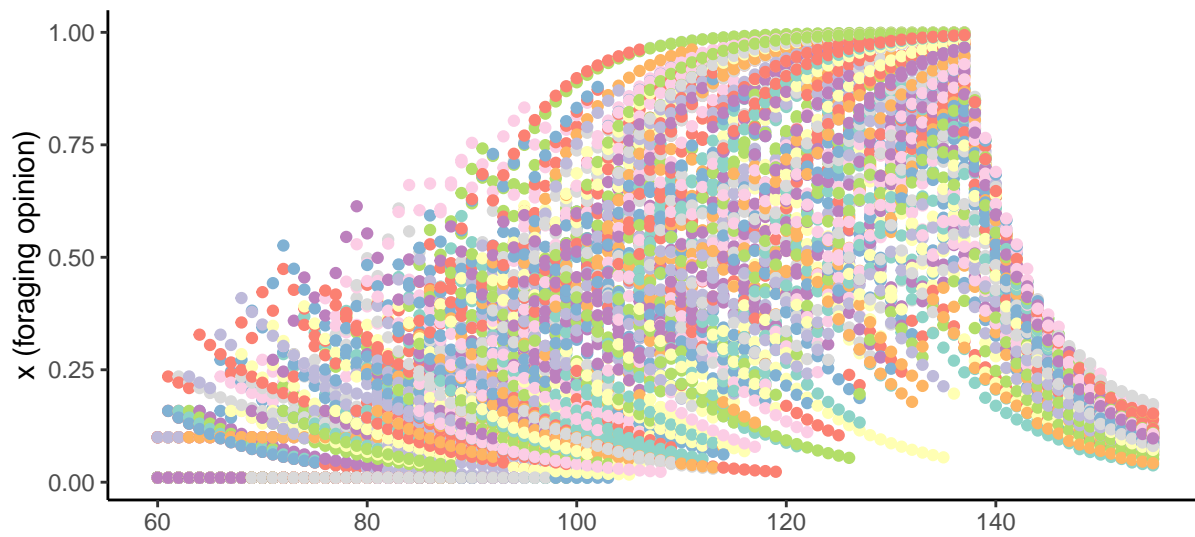


The sea lions are hugely impacted and their attendance at the Gauntlet goes way up. The seals somehow learn to leave the Gauntlet faster, which is confusing...

Garlic Aioli

This version of the model keeps specialists to the Harbor seal population and lets the sea lion x_{base} also be larger. And adds social learning so max receptivity is 0.5 composite.





Sea lions surprisingly aren't that impacted by this, but seals are hugely impacted. Their attendance more than doubles and they learn to leave the gauntlet faster.