

Outputs of Interest

Type	Variable	What It Tells Us
Temporal	Spawned?	Indicates if and how many times a fish has spawned.
	Time-Since-Spawning	Tracks recovery and overwintering likelihood after each spawn.
	Overwintering Probability	Estimates likelihood that a fish will overwinter based on energy, age, and spawn timing.
Spatial	Spawning-Species	Location of patches repeatedly used for foraging.
	Spawning-Encounters	Which species have used a patch for reproduction.
	Overwintering Probability	Tracks the spawning areas with highest overwintering likelihood across agents.

The model tracks where, when, and how fish spawn to identify reproductive hotspots, timing bottlenecks, and recovery or overwintering risks.