Carly/Erik’s ant pseudo-code:

Patrollers:

-low density=>straight lines, high density=>random walk/squiggles

-find food, avoid neighboring colonies

-if successful, return, else return after 20 minutes

If find food,

Return

After 20 minutes, return

Bias random walk

if encounter,

turn away

else,

walk straight-ish

Foragers:

-random walk/squiggles

-follow each other/foraging paths

if close to successful ant,

walk towards it

else,

random walk

if find food,

walk back

success is true

return after 5 minutes

if dp/dt patrollers || df/dt successful foragers return-(time between returns)

foragers leave-3per patroller

assume set foraging trail (bias)-follow trail of returning patroller

Food:

Decrement as ants take it

Clustered

interactions α 1/encounters

if interaction,

wait t seconds before next interaction

t α encounters