1. Put out initial food and midden for day
2. Nest patrollers go out (and check that it’s not the apocalypse)
3. Nest patrollers return after a certain amount of time and mill around in the anty-chamber for a different set amount of time.
4. While in the anty-chamber, nest patrollers stimulate nest maintenance workers.
5. Nest maintenance workers exit nest, begin day’s work
6. After set amount of time milling around in anty chamber, nest patrollers become trail patrollers and go out and trail patrol, just as before.
7. Trail patrolling (mostly) remains the same as before—when they come back and mill around in the anty-chamber, they only stimulate foraging. They still set direction, etc.
8. After set amount of time wandering in anty-chamber stimulating foraging, trail patrollers become day patrollers (yes, this is a new breed).
9. Day patrollers walk around in the anty-chamber and nest mound (and exclusively in these two areas). They take information from every ant they encounter in these areas (nest maintenance and foragers) and relay this information to ants inside the nest. Just as before, this happens through chemical concentration with exponential decay. We make day patrollers walk randomly (within the nest mound and anty-chamber) at all times.
10. Day patrollers stimulate BOTH more foraging AND more nest patrolling.

Note—Nest maintence workers become successful when they move a piece of wood somewhere. They remain successful or a certain amount of time.

WHEN

Day patroller encounters inactive ant—

Inactive ant reads chemical signal of patroller. If NM scent of Foraging scent is above threshold, inactive becomes NM or forager (whichever signal she gets), and leaves inside of nest. If NM and foraging are both above threshold, inactive becomes whichever scent is higher.

Day Patroller encounters successful forager

Day patroller’s foraging scent is increased

Day Patroller encounters unsuccessful forager

Nothing

Day Patroller encounters successful Nest maintenence

1. Day patroller’s NM scent increases
2. NM worker reads patroller. If foraging scent is really high (higher than inactive threshold), NM becomes forager. Goes out and forages.

Day Patroller encounters unsuccessful NM

NM worker reads patroller. If foraging scent is really high (higher than inactive threshold), NM becomes forager. Goes out and forages.

Nest patrollers still go out and check that it’s not the apocalypse

Nest patrollers come back and futz around in the anty-chamber,

Foragers now exclusively relay information to Patrollers. Foragers no longer enter the anty-chamber and walk around. They now drop food at the nest entrance and turn around.