C. Characteristics Common to All Ant Types

~~1. Each ant should be identified by a unique integer ID. The queen ant should have an ID value of 0. Other ants should be numbered in ascending order as they are hatched.~~

~~2. All ant types (except for the queen) have a maximum life span of 1 year.~~

~~3. Dead ants should be removed from the simulation.~~

~~4. All ants are limited to one action per turn, with some exceptions that will be discussed later.~~

5. All ants except Bala ants may only move in squares that have been revealed by scout ants; Bala ants may also move into squares that have not been revealed by scout ants.

~~6. When moving, all ant types should move no more than 1 square per turn.~~

D. The Queen Ant The queen ant is responsible for hatching new ants. The specific requirements for the queen ant are:

~~1. The queen never moves from her square (i.e., she remains in the same square for the entire simulation).~~

~~2. The queen's maximum lifespan is 20 years.~~

~~3. The queen hatches new ants at a constant rate of 1 ant/day (i.e., 1 ant every 10 turns~~).

~~4. New ants should always be hatched on the first turn of each day.~~

~~5. The type of ant that is hatched should be determined randomly according to the initial frequencies listed below. You may change these frequencies as you see fit — these are simply suggestions for a starting point.~~

~~a. Forager - 50%~~

~~b. Scout - 25%~~

~~c. Soldier - 25%~~

~~6. The queen should consume 1 unit of the food in her chamber on each turn, including the turn in which she hatches a new ant.~~

~~7. If the food level in the queen's square is zero when the queen tries to eat, the queen dies of starvation.~~

~~8. If the queen dies, either by starvation or by a Bala attack, the simulation should end immediately.~~