Central to the survival and reproduction of social insect queens is the size of colonies at maturity. The influence of exogenous factors such as predation, food abundance, and seasonal changes in temperature on colony size are well studied. Less well studied are endogenous life history factors such as a queen’s fertility and lifespan, duration of worker development from egg to adult and worker lifespan. Endogenous factors regulating the rate of colony growth and colony size were simulated using the fire ant, Solenopsis invicta. Assuming ideal environmental conditions of no predation, abundant food and uniform temperature, the simulation showed unequivocally that colony size is determined by two endogenous factors: a queen’s egg-laying rate ($R_q$) and worker longevity ($L_w$) (Colony size = $R_q \times L_w$). Thus, we are left with an unanswered question: if worker longevity contributes directly to colony size, why is the lifespan of workers so short—in most cases, a small fraction of a queen’s lifespan?