A Kick in the P(ants)

by Robert R. Dunn

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As a child, I did not lie patiently on my belly to watch insects. I never had a beetle or butterfly collection. I was a reptile kid – snakes, salamanders, and turtles filled my dreams, days and terrariums. Like many entomologists, my early entomological forays consisted mostly of "the foot experiment." To conduct this experiment, one inserts a foot into an ant nest, mucks it up a little, then removes said foot and surveys the ensuing chaos. As we are all well aware, most of us having participated in such experimentation, the ants emerge in force to attack the offending foot (which, with any luck and/or skill, is long gone). With time, the ants return to work, the dent is repaired, the wound healed. The experimenter walks on momentarily self-satisfied, and if he or she is like me, grows up to regret such indiscretions.

Whereas most adults could leave the foot-experiment behind them, I have not. Although I regret my earlier experimentation, I seem fated to repeat it "in the name of science." Versions of the foot experiment often represent the only way of understanding aspects of social insect biology. I once worked an entire summer as a "simulated anteater (good work if you can get it)" hacking off bits of termite nests to see whether termites produced more soldiers when repeatedly disturbed (they do). Such experiments are the equivalent of a doctor performing a partial lobotomy to understand the working of the brain, "What happens if we cut here"? When it comes to understanding much about insects we are often such doctors, equipped only with the primitive paraphernalia of the trade and a persistent interest in how it is that the parts of nature work.

In recent years, I have been able to avoid poking too intrusively into the colonies of ants. I tend to establish lab colonies and where necessary take a few individual ants from the field rather than disturbing whole colonies (I even leave the offended colonies food when I can, as recompense). Now that I have moved to Australia and begun a new project with new ants, however, I have been tempted once again to wiggle the proverbial foot. I am studying the seeds ants carry home. A third of all plant species in Western Australia are dispersed solely ants. Ants carry the seeds home, rip off a fleshy appendage produced by the plant for the ants, and throw the seed in their garbage, where if everything goes right the seed germinates, fertilized by ant garbage. I follow the ants carrying seeds up to the nests and then watch them disappear with their treasures down tunnels meters into the ground. It is unfulfilling, akin to watching a cartoon character disappear off a ledge and not knowing what happens next. The temptation to look over the ledge, to chase the ant carrying the seed into the dark and dirty, is great.

One night as I went about my ant watching business, I could harness my inner digger no more. It was not exactly the call of the wild, but maybe the call of the unknown, (a slighter, stranger call). As I bent over the unsuspecting colony watching one more seed disappear, I felt the need to excavate. Where were the ants putting the seeds?

How many seeds had they collected? Were some of them germinating? Were there special chambers in which the seeds were being placed? I would find out. I would dig for the answers, for the good of botany!

I grabbed my small trowel, and as I was poised to begin my excavation (digging down beside the nest and then inward), I was, to my great surprise, consternation, and later humiliation delivered a hefty smack on the backside that splayed me onto the pyramidal ant nest, face first. As the ants started in on me (a fleshy offering to the true rulers of the planet), I turned ready to slug whoever had slugged me. I grabbed for a stick, but came up wielding only my tiny trowel. In front of me, eyes glowing in the light of my headlamp stood Raymond, the Caravan Park's pet kangaroo. He looked what I can only describe as smug, "Raymond, defender of the ants." I pushed him away and bent down again. He kicked me again. I pushed him away again. He kicked me again. Finally, I pushed him away again and then followed him, making sure he hopped off into the distance. I bent down again. He kicked me again, this time leaving me flat, my wind knocked out, my motivation slowly draining into the warm sand.

The ants would be spared my shovel that night. I limped home to nurse my wounds, or at least to nurse my wounded ego, keeping an eye behind me as I walked. Raymond, my conscience in roo form, followed me all the to my door. I could only smile. I recognized the foot-experiment when I saw, or rather felt, it. One good kick deserves another.