CAS Spring 09 Ant Field Trip Logistics

When: Saturday April 18, 9am to noon, weather permitting
(check your email Friday evening and Saturday morning if the weather looks bad)

Where:
The dirt parking lot to the far west of the Pit (under the electronic sign by my red
Honda CRV)
The PIT is on the South side of Cesar Chavez, West of University, East of I25

Transportation:
Try to arrange carpools by Friday, tell me if you’re without a ride
Alternatively,
You can walk or bike, it’s about a mile from the CS building
16/18 University bus goes from University & Central to University & Cesar Chavez

Bring:
Long pants with socks, closed shoes (eg hiking boots, NOT flipflops), hat, sunscreen, water
Notebook & pen
If you have these: digital or stop watch, tape measure, gps, laptop with SeedCounter loaded, folding chair

Beware of BROKEN GLASS, snakes, ant bites, cacti, climbing on loose ground, people & dogs

What we’ll do: Study *Pogonomyrmex rugosus* (1000's of foragers), *P. Maricopa*
(100’s of foragers), and *P. desertorum* (10's of foragers) in the 'natural environment'
of a vacant lot. For each colony we’ll:

1 Bait the colonies with seeds colored to represent their distribution in sizes/numbers of piles
2 Count the number of foragers leaving the nest & returning to the nest with different seeds
3 Observe the behavior of foraging ants, including measuring ‘travel’ time & distance
and ‘search’ time & distances of individual ants
4 Mark ants to determine how rapidly new recruits arrive at seed piles

The objectives: Understand how real colonies and ants behave, how foraging
differs in different colony sizes & how well ant colony optimization algorithms
represent real ant behavior. (Would you use these ants to solve the traveling
salesman problem?)