80-Sites Seed Bank Methods

Between September 18and 20th 2012, (approximately 3 months after the last rainfall event) we collected one soil sample from two opposite sides of each 1x1m plot at each site. We collected an approximately 7.5cm (about 3 inches) diameter by 10cm deep soil sample. All samples from each site (N=10, 2 per plot x 5 plots) were bulked and stored in sealed two Ziploc bags labeled with each site number. Soils were taken back to the greenhouse and each sample was poured out and all rocks and larger roots were removed by hand and all clumps of clay were broken down. From each sample we took a 450g subsample and added 850ml of sand to improve drainage. We then placed the soil/sand mix into half-flats (1 foot square) which were lined with paper towels. The remaining soil from each site was returned to the Ziploc bag for archive. Flats were placed outdoors under cover (the awning at the green house) and were watered weekly. After 8 months we stopped watering and allowed the soil to dry down for 3 months. We then reinitiated watering to re-trigger germination. We continued to monitor the flats for an additional 12 months. All individuals were identified to species and weeded out of the flats as soon as we were able to identify them.