Talk Title: Are Restoration Seed Pools Evolving Under Commercial Propagation?

Abstract: Due to widespread habitat degradation, we are unable to harvest enough wild seed to meet the demand for restoration material. One candidate to address this resource gap, propagation farming of native seed, has emerged in recent decades. However, few studies have tested whether farmed plants are experiencing reductions in genetic diversity or unintentional domestication through the propagation process. To test this, we grew the eighth generation seed of farmed *Clarkia pulchella* Pursh (Onagraceae) alongside seeds from the wild populations that established the farm in a common greenhouse experiment. Farmed seeds had markedly low fitness, demonstrated by an inability to flower and a high mortality rate, in addition to several phenotypic differences from wild plants. Finally, wild plants under low water treatments significantly out-performed farmed plants in even benign conditions. Based on these results, modifications must be made to propagation practices to ensure that native seed farms produce seed that will persist in a restoration setting.