

## 2017 Project Update for the UTAH WETLANDS FOUNDATION

### Seeding techniques for restoring native plants following *Phragmites* control

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#### Collaborators

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The broad goals of this project are to restore native plant-dominated Great Salt Lake wetlands following *Phragmites* control. We completed a field experiment at Farmington Bay WMA to evaluate the effectiveness of (a) a tackifier, (b) *Phragmites* litter removal treatments, and (c) a mulch addition for enhancing native plant seedling survival in Great Salt Lake wetlands. We established our research experiment in winter/spring 2017 and monitored the response of *Phragmites* and native plants to our treatments over summer/early fall 2017.

#### Key findings:

- In previous field seeding experiments, we found no native seedlings emerge in our test plots, but in this experiment we were excited to see abundant native seedlings emerging. Our work the past couple years (funded, in part, by Utah Wetlands Foundation), to refine our seeding knowledge, has really paid off!
- The use of a “tackifier” (an adhesive substance sprayed along with the seeds) kept seeds in place in our target areas. This was our first field test of techniques we had developed in the greenhouse (David England’s M.S. thesis).
- The most important treatment driving native plant recovery was the *Phragmites* litter treatment. We found many more native seedlings in the plots where we did the “mow and remove” *Phragmites* litter treatment as opposed to the treatment where we rolled and crushed the *Phragmites* litter (but left the *Phragmites* litter in place).
  - Unfortunately, *Phragmites* seedlings were also more abundant in the “mow and remove” areas as well. This finding tells us that the *Phragmites* control overall was not sufficient, and thus additional years of *Phragmites* herbicide treatment was required.
- The use of a mulch to enhance native seedlings did not have a large effect. Given the costs and logistical constraints of using the mulch, it is likely not worth the effort.