

## ***Phragmites* Management on Bear River Migratory Bird Refuge**

### **What is *Phragmites*?**

Common reed, *Phragmites australis*, is a tall, warm-season grass. There are two subspecies of the *Phragmites* plant. One is native to North America, slow growing, and not a threat to wetlands. The European subspecies of *Phragmites* has been identified in North America and is proving to be invasive as it displaces native vegetation. This invasive subspecies of *Phragmites* spread rapidly across wetland areas of the Great Salt Lake following the historic floods of the 1980's including the Bear River Migratory Bird Refuge (Refuge).

### **What is the Refuge Management Goal?**

The Refuge completed a *Phragmites* management plan in 2007. The entire Refuge was surveyed: *Phragmites* was found in all areas of the Refuge. The Refuge established a two prong goal for controlling *Phragmites* by 2015. Goals include: reduce amount of area occupied by *Phragmites* to  $\leq$  10% of total area in each wetland management unit and reduce amount of area occupied in water delivery canals and wetland dikes to  $\leq$  5% of linear area.

### **What are the Control Strategies?**

Control strategies include herbicide application in the fall (August-September). Herbicide application is followed by a prescribed burn. The Refuge generally completes prescribed burns during the fall season: water levels are too high in the spring to allow for burning. Treatment effectiveness is being monitored by calculating coverage in acres before and after treatments. Follow-up treatments will be conducted if needed.

### **What is the Current Research?**

The Refuge has been working with biologists from Utah State University to learn more about the ecology of *Phragmites*: this may lead to more effective treatments. Research in Utah has shown that the non-native *Phragmites* reproduces by seed more often than the native sub-species. Based on this information, mowing stands before they set seed may prove effective. Another project is experimenting with a new way to map *Phragmites*, if successful, the time it takes to map and monitor infestations could be reduced.

### **Where can I go for more information on *Phragmites* and Wetland Plant Ecology Research?**

Kettenring Lab Group, Utah State University: <http://www.cnr.usu.edu/htm/facstaff/kettenring>  
*Phragmites*, Common Reed: <http://www.invasiveplants.net/phragmites/default.htm>