TIMING OF HERBICIDE APPLICATION FOR *PHRAGMITES AUSTRALIS* (COMMON REED) CONTROL. Ryan E. Rapp* and Stevan Z. Knezevic, Graduate Student and Associate Professor, Department of Agronomy and Horticulture, University of Nebraska, Concord, NE 68728.

Herbicides are typically used as the primary method of weed control. Since Phragmites infestations are relatively large in the State of Nebraska, determining the most appropriate timing of herbicide application is critical for developing weed management programs. Various control methods for common reed have been suggested, including mowing, burning, drainage, and herbicide application. Therefore, field studies were conducted in 2007 and 2008 along the Platte River on three locations with the objective to determine the effect of herbicide timing on weed control. Each experiment was setup as a randomized complete block design with three replications with 3 by 9 meter plots. Visual ratings were done to determine level of control. ANOVA of plant growth responses to the control methods was performed using PROC GLM to test data normality and significance ($P < 0.05$). Three herbicides (glyphosate, imazapyr and imazamox) with two different rates were applied at three different timings (1 meter tall, flowering and half through seedfill. In general, Phragmites showed more tolerance to applications during earlier timings, with control ratings increasing with later timings. Glyphosate provided the highest levels of control (>85%) after 30 days after treatment. Imazamox provided the lowest level of control throughout all timings and rates (60%) 30 days after treatment. Imazapyr and glyphosate provided the highest levels of control by the end of the growing season (90%) and into the next growing season. Imazamox provided the least amount of control (<50%) at the first application time with both rates, but improved with later timings (>68%). rappr@huskers.unl.edu