UPLAND SEDGE (*CAREX* SPP.) PROPAGATION FOR SEED INCREASE

*GREG HOUSEAL, Tallgrass Prairie Center, University of Northern Iowa, Cedar Falls, IA 50614-0294, USA

DARYL SMITH, Tallgrass Prairie Center, University of Northern Iowa, Cedar Falls, IA 50614-0294, USA

Abstract: Sedge species may comprise as much as a quarter of the above ground biomass in tallgrass prairies, yet are seldom included in seed mixes for prairie restorations. Commercial sources and quantities of upland cool-season graminoids, in general, are currently limited to a few native grass species. A larger component of native cool season graminoids in prairie restorations would help occupy an important niche otherwise open to invasion by non-native cool season species. Commercial development of native upland sedge species would provide an important and needed component for improving the quality and long-term stability of prairie restorations. Challenges to sedge production include selecting appropriate candidate species, proper identification of *Carex* species in the field, and developing propagation protocols for germination and commercial production. The initial candidate list included prairie sedge (*Carex bicknellii*), plains oval sedge (*C. brevior*), heavy sedge (*C. gravida*), and yellow foxsedge (*C. brachyglossa*). Fruits from populations of these species were collected summer of 2006 from remnant prairies across northern and central Iowa for propagation and evaluation purposes. Seedlings were greenhouse propagated and out-planted into nursery beds in spring 2007. Information will be presented on germination and propagation outcomes; seed cleaning, production, and quality; and potential establishment of these species in prairie restorations.