

## **RESTORED AND MARGINAL PRAIRIES: BIGGER IS BETTER BUT NOT NECESSARY**

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*Abstract:* The next generation of prairie enthusiasts is to be found in our colleges and universities today. If students can be exposed to prairie ecosystems, the beauty of a large original or restored prairie will capture their imagination. This is important to the future of prairie conservation efforts because prairies are preserved and restored when people value them. Unfortunately, this is a challenge in today's increasingly urban and suburban society. However, small, restored prairies, remnant prairies along railroads or roadways, or abandoned areas with a few prairie plants can be found in suburban and even urban settings. An opportunity to experience even a depauperate prairie ecosystem may spark a passion for prairies. We describe three projects that use these "prairie-like" environments to engage students at a suburban community college in undergraduate research and to introduce ecological concepts. A morphologically indistinguishable non-native strain of *Phragmites australis* has invaded wetland prairies in the Midwest. This invasive haplotype represents a significant risk to wetland ecosystem structure and biodiversity in Minnesota. In first project, we used a PCR-RFLP technique to determine native/non-native status of *Phragmites australis* populations in prairie wetlands. A second project addresses issues of sexual selection, sexual dimorphism, mate choice, and geographical variation in a common, easily handled insect, the ambush bug *Phymata americana*. Ambush bugs are present on a wide range of prairie flowers that bloom in late summer. Finally, a third project available throughout most of the year exploits the well-known goldenrod – insect community, allowing for studies of interactions among all trophic levels.