

**TWENTY FIVE YEARS OF MONITORING THE WESTERN PRAIRIE  
FRINGED ORCHID IN MINNESOTA**

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*Abstract.* Western prairie fringed orchid (*Platanthera praeclara*) is a federally threatened Midwestern species also listed as endangered in Canada. Minnesota harbors 92 locations and over 40% of plants in the United States. Counts of flowering plants are the standard for data collection across the species' range. Since 1991, MN DNR and TNC have annually counted flowering plants in approximately 80% of Minnesota populations, 20 of which have been consistently counted for the last 17 years. In 1985 and 1991 MN DNR established demographic transects across the species' latitudinal gradient to assess recruitment, mortality, dormancy, and age to first flowering. The number of Minnesota flowering plants vacillates. Statewide, counts of flowering plants peaked over 10,000 in 1994. Average counts from 2006-2009 are 15% of counts from the four high years between 1993 and 1996. In a preliminary analysis of data from 1986 to 1994, up to 12% of plants in demographic plots were dormant each year, with over 30% experiencing dormancy of 1-3 years. Annual mortality rates prior to 1994 were as low as 1 % and as high as 14%. Several individuals have lived much longer than previous reports in the literature, with one plant persisting 22 years with two periods of dormancy. The shortest time from recruitment to flowering was 5 years. Phenological observations indicate that plants may emerge as early as April and can become senescent before normal monitoring dates in dry years.