

2005 Report of the Director  
James Woodworth Prairie of University of Illinois at Chicago  
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Highlights of 2005

The weather in 2005 was exceptional and worth commenting upon. It was the driest year since 1988. Some of the few rain events missed JWP and based on my looking at radar images of precipitation JWP got less than O'Hare. No individuals of either lily species bloomed. Flowering was suppressed and I believe flowering stalks were distinctly shorter. I did not make measurements of the flowering stalk height (an independent study student doing this project quit shortly after starting) or the biomass. The lysimeter was completely dry below 119 cm much of the year. I was surprised that the prairie genetians did bloom. Hardly any of the smooth blue aster bloomed. The drought continued thru Jan and Feb of 2006. Wyatt Gaswick was supported in the summer. He got a new OPEN sign for the prairie. The sign seemed to have a small positive effect on the number of visitors.

### Research

1. Erin Haase completed her research on the effects of sugar and water on soil nitrogen and vegetation of the prairie. Despite her observation that sucrose significantly reduces and water significantly increases nitrate in the soil, no evidence of effects on total vegetation cover, species richness, average C value, or on particular species was found.
2. Wyatt Gaswick began his MS research attempting to do a complete inventory of invertebrates that use the ephemeral wetlands of the prairie. The extreme drought of 2005 resulted in abnormally early disappearance of the water, but Wyatt identified about two dozen species using the Milwaukee swale. Wyatt's study will continue in 2006.
3. Paul Orlando, an undergraduate, continued his study of crayfish and their mounds. He caught a number of crayfish and I was able to take a movie of some excavation activity. Because the Milwaukee swale was dry in early October no crayfish moved to the swale. Paul presented his work at the Prairie Invertebrate Conference on 29 Oct 05 in Chicago. I presented a cicada talk.
4. Despite my sabbatical I continued to devoted attention to getting the information when species began and ended blooming. The manuscript based on Becky Ammann's MS study of vegetation height was published by American Midland Naturalist (154: 55-66).
5. Five plant species not previously seen by me at JWP were detected 2005: one, *Trillium recurvatum*, is a native forb most often associated with savannas, one, *Rhus radicans*, is a native woody that was found in the IC garden, one, *Echinacea purpurea*, is believed to have entered from gardens of neighbors, one *Juniperus virginiana*, is a woody species widely used in landscaping, the last was *Helianthus annuus*, an annual that is often weedy along roadsides. The sunflower is not regarded as native to Illinois prairies.
6. All of the grid system west of line 13 got new stakes and some rows to the east were completed as well.
7. Erin Haase did a vegetation cover inventory of all the grid stakes in July 2005.

### Management

1. On 3 April 05 the west half of the prairie was burnt. On 3 November 2005 the center part of the prairie was burnt.
2. Prior to the April burn I discovered that crews from Commonwealth Edison had cut off my

lock, driven into the prairie to replace utility poles N of the fence, and had dumped the top of the utility pole into the prairie. I complained to the ICC. Edison sent out a supervisor who promised the dumping would not happen again. I filed reports with UI legal counsel, the LAS Dean and others.

3. Max Palmer dug out 4 chunks of concrete holding cut-off metal posts, 3 north and one east of the parking lot. The holes were filled with soil and seeded.

4. I got 24 *Asclepias meadii*, Mead's milkweed, a Federally Endangered species, roots from Marlin Bowles of Morton Arboretum. Marlin is on the recovery team for this federally endangered species. The 24 plants were dispersed at Woodworth, some being planted in each quarter (NE,NW,SW,SE) of the prairie. Growth was observed at 13 of the planted rootstocks, but by Oct only 3 plants were still green. Obviously it will be exciting to see how many are growing in 2006.

5. I planted 98 individuals in the IC garden. The replanting of the area around the building is almost complete. I continued digging of quack grass and field bindweed from the IC garden, and worked on getting the slope to be from the IC toward the outer wall by taking shovelfuls from high spots and transporting them near walk. The slope adjustment was a big part of the 2005 effort.

6. I tried a new technique for getting rid of buckthorn. I dug out about a dozen with a shovel. I left them where they were so soil could dry and fall off the roots.

7. I directed major effort to reducing the dogwood patches east of parking lot and throughout the prairie by cutting them. The staff participated fully in that effort. I did not use herbicide.

8. I dug the Reed Canary grass out of the Milwaukee swale. I continued to herbicide this species.

Not directly related to Woodworth *per se*, I dispersed seeds from JWP into the CmEd ROW behind the Syms store. Bill Eyring had persuaded CmEd to plant native species under their power line. It seemed only appropriate to get some of the Woodworth seeds there.

### **Education and outreach**

There was a spring potluck on 28 May 05. Dr. Rouffa came and so did Moira and Howard Buhse, Dr. Buhse was the Biological Sciences Department Head at that time.

I hosted a Northwestern University class for retired persons on 3 August 05 that had about two dozen members. We did not have a fall potluck.

### **Building and grounds**

The Greenwood parkway was mowed (one swath) by mistake for the second year in a row.

### **Effort details**

I completed a sabbatical leave at Illinois State University returning to Chicago on 23 July. From 1 January 2005 to 31 December 2005, I spent 16902 minutes at JWP on 47 different dates, 23 while on sabbatical and 24 after I returned to Chicago.