Highlights of 2002

Research
Vegetation height study
Becky Ammann studied visual obstruction (VO) heights at 25 grid sites at JWP in May, June, July and August. VO is the height below which one can not see the marks on a Robel pole (from 4 m away with eye 1 m above ground). VO measure the height below which the vegetation is “thick”. VO measurements increased from May thru July, but declined from July to August. The median VO values at JWP for July and August were about 44 cm (1½ feet). Joe Baker studied the biomass of graminoids, forbs and woody vegetation by 10 cm height intervals at 11 of Becky’s study sites. Six sites had forb biomass greater than graminoid, four the reverse and the only site with any woody vegetation was dominated by that type. Total biomass averaged 640 g•m$^{-2}$. Typically 75% of the biomass was below the VO height.

Crayfish
Julie Kaplan and I took both a living and a dead specimen of the JWP crayfish to Dr. Chris Taylor of the INHS and learned that the species is *Procambarus gracilis*. Julie followed the mounds on 7 plots totaling 700 m$^2$. Her study showed that crayfish mounds cover about 0.28% of the prairie and that the amount of material deposited on the surface averages about 300 cm$^3$ per mound. At this rate, in the time since the glaciers disappeared from this area the crayfish could have deposited 1 m of subsoil on the surface. Thus crayfish could have played a very important role in the formation of prairie soil.

New species
During 2002 I detected 7 species that I had not previously seen at JWP, namely, *Capsella bursa-pastoris*, *Ludwigia polycarpa* (a prairie native on the Paintin list), *Oxalis europaea* (a weedy native), *Ornithogalum umbellatum*, *Coronilla varia*, *Cornus stolonifera* (a native shrub, not a prairie species) and *Arctium minus*. The four shown in capitals are exotic.

The prairie cicada
A mark and recapture study was continued in 2002 by a student I support with a research assistantship. Unfortunately I did not get a copy of the data before the student was overwhelmed by personal problems.

Events
There was 139.4 mm of rain on 20-21 August 2002. That is over 5 inches in less than 24 hrs. I was amazed that the prairie absorbed almost all of that water.

Management
Burning
We conducted burns in the spring, but not in the fall this year. The 17 March burn covered the northeast corner and patches along the south fence that did not burn in fall 01. On 1 April we burned the west part of the prairie including the SW corner. Fire breaks were mowed in August 02 with the hope a burn could be conducted in September or October, but the weather did not cooperate.

Workdays
There was a “Special Workday” on 28 September that was attended by 8 people. We sifted soil on that workday as well as gave tours. Monica Miron showed up as a volunteer at the prairie. Her visa does not allow her to work so all her many contributions have been uncompensated. She has helped with a diverse range of projects including seeding on the Greenwood ROW and along the north fence.

IC garden
I continued planting seedlings started at the UIC greenhouse into the southeast part of the IC garden. I am trying to get at least 50% of the prairie species in the garden. I am focusing on species that are rare...
in, or had been lost from, the prairie.

Debris removal
Concrete in the prairie was broken up and carted to the dumpster. I estimated a few hundred pounds were removed. There are still at least ten large blocks north of the IC.

Herbiciding, girdling, pulling & cutting
The effort to reduce exotic and woody vegetation continued in 2002. We continued to girdle and/or herbicide detected woody exotics. Some dogwood were girdled, others moved in August. Teasel continued to be a management focus in 2002. Besides the NW corner a population in the middle of the north fence was discovered as well as individuals along the south fence. Reed canary grass, lily-of-the-valley and daylily were herbicided. Daylily inside the east fence were dug out by hand.

Biomass removal
August is the appropriate time to get rid of giant ragweed and by mowing in August I believe I prevented that species from seeding in 2002. I also removed *Eupatorium altissimum* and *Helianthus grosseserratus*.

Education and outreach
The newly designed website, [http://www.uic.edu/depts/prairie](http://www.uic.edu/depts/prairie) was published. A 5th grade class from the Glenview public schools visited the prairie in October. I testified before a Glenview committee considering zoning JWP as an ecologically significant area by the Village of Glenview.

Building and grounds
A map relating circuit breakers to electrical components was created. The basement was explored and some items were moved into the basement for storage. Piles of soil and other debris were removed from the parking lot. There was extensive damage to the Greenwood parkway during digging that was done by NICOR or a contractor working for them. Woody debris was dumped onto the prairie in the fall from the restaurant parking lot. One of the glass panels in a display case was broken. UIC carpenters came out and fixed it.

On 17 December 2002 I discovered some significant damage to the north end of the fence along Milwaukee Avenue. The damage was obviously (tire tracks, height of damage) done by large truck(s) doing repairs on the former Arby’s restaurant on the west side of Milwaukee. As I did not witness the event, I did not go and talk to the drivers.

Plans for 2003
1) Redo the grid system (YES, same as last year)
2) continue study of crayfish burrows
3) hold open house for the neighbors of JWP
4) Acknowledge the contributions of Drs. Rouffa, Tiedemann, and Hamilton to JWP.

Effort details
From 1 December 2001 through 31 December 2002, I spent 17385 minutes at JWP on 79 different dates (5 dates and 1279 minutes in Dec 2001). Major effort was devoted to 1) planting the prairie garden around the Interpretation Center, 2) removing exotics and planting prairie species along the North fence margin, 3) starting control of tall goldenrod (mowing the species while flowering), 4) research on vegetation height, and 5) starting study of crayfish mound dynamics.

27 December 2002