

2004 Report of the Director
James Woodworth Prairie of University of Illinois at Chicago
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Highlights of 2004

Budget changes from UIC

The extreme budget reduction imposed by the LAS college in 2003 has not been ameliorated. The impact of the 50% reduction was reduced because the Department of Biological Sciences provided funds for a minimal operation (5 days a week instead of 7 and only from 1 June until the beginning of fall semester classes at UIC). There was good financial news in 2004. Dr. Albert Rouffa made a donation by which the UI Foundation set up an endowment named after Bernice Popelka. The income from that foundation will be used to improve the prairie. In 2004 the prairie supported Erin Haase as summer research assistant.

Research

Erin continued her research on the effects of sugar and water on soil nitrogen. The 2004 results confirmed those of 2003. Sucrose significantly reduces the amount of nitrate. Water, counter to our expectation, increases the amount of nitrate. Neither treatment affects the amount of ammonium in the soil. Despite the clear effects of these treatments on soil nitrate, we have not generated clear evidence of an effect on the vegetation. Paul Orlando, an undergraduate, studied the crayfish mounds in two 100 square meter plots. He confirmed that a lot of soil was moved about by the crayfish. The mounds were 'remodeled' a number of times during the year. I devoted attention to getting the information when species began and ended blooming. I also kept records of the level of water in the Milwaukee swale and the prairie now has a record of the when the swale had open water from the beginning of 2000 to the present. The manuscript based on Becky Ammann's thesis showing that original prairies have shorter vegetation than seeded reconstructions was accepted by American Midland Naturalist. I presented my research on species gains and losses at the North American Prairie conference in Madison WI. Seven plant species not previously seen by me at JWP were detected 2004: two, *Elymus virginicus* and *Sphenopholis intermedia* are native grasses usually associated with woods, two, *Erigeron canadensis* and *Ranunculus arbortivus* are weedy natives, one *Physalis virginiana* is a prairie species, and the other two are exotic, *Rhamnus frangula*, shrub, and *Scilla siberica*, a bulb that escapes from cultivation. Every year so far I have detected at least one new species. One line of the grid system got new stakes and some other grid stakes were established but that project remains to be completed.

Management

On 28 March 04 the east half of the prairie was burnt (lines 10 and lower through the Greenwood ditch). A small portion of the NW corner was burnt on 17 April as part of Erin's research. The stakes for the plant names were used to secure the bottom of the Milwaukee fence. Securing the fence bottom worked well to reduce the debris that had been accumulating in the NW corner. I picked up the tree debris that had been dumped in the prairie by a crew working on the lines of the utility poles at the north end of the prairie. I should have called about this but I never took the time to do so. Just north of the east edge of the parking lot was a slab of concrete that was associated with a lightpost before UIC ownership. The prairie is not big and I would like every

square meter to have the potential to be quality prairie, so I started removal of that concrete by digging it out and breaking it with a sledgehammer. I spent a lot of days on that project but with the help of Paul Orlando and his 15lb sledge we got all the concrete and metal out and filled the hole with soil I had been saving. Paul also did some work getting the concrete from N of the IC out of the prairie and into the trash. The last section of the garden south of the steps was planted. I was particularly happy to get some individuals of *Prenanthes* growing. The garden also now includes some strawberries, a species common in the prairie. Quack grass and catnip continued to show up in the garden and were removed when detected. I continued to girdle and/or cut and herbicide woody vegetation. Daylilies on the Greenwood parkway were dug out. Continued monitoring will be necessary but I currently believe I have completely eliminated the east fence daylily patch.

Education and outreach

A Chicago Wilderness Restoration Roundtable was held on 14 May 04. Presentations on the nitrogen, vegetation height and effects of burning on rodents were made. Unfortunately it rained heavily and we spent less time in the prairie than had been planned. A volunteer workday on 23 May involved a Girl Scout troop. There was also a young man that worked as part of church community service. There was a spring potluck on 30 May. I gave special tours to the Biological Sciences Department Head, Prof. Howard Buhse, and to a retired colleague, Dr. David Mertz. I also give a tour to the first year graduate students in Ecology and Evolution. The Maine South advanced placement environmental class came to the prairie on 27 Sep with their teacher Rick Myrick. We held a workday on 17 October workday. Bill Eyring and I talked about rain gardens to try to reduce local flooding.

Building and grounds

The telephone connection went bad twice. The problem was at a connection box off site but I had to meet the repairman at the prairie twice. The electric meter was replaced in 2004. The Greenwood parkway was mowed by mistake. I called IDOT and the supervisor was very pleasant and helpful. He confirmed the agreement they had with Dr. Rouffa would be continued.

Effort details

I began a sabbatical leave during the summer. Specifically, I moved to Normal, IL on 20 July, but I am continuing to take care of the prairie while I am Illinois State University. In the second half of the year I visited JWP less frequently but I but in more minutes per visit. From 1 January 2004 to 31 December 2004, I spent 13012 minutes at JWP on 52 different dates.