

University of Wisconsin-Madison Lakeshore Nature Preserve Committee Monday December 5, 2016 12:30-2:00PM Memorial Union, Council Room APPROVED Minutes

Present

Janet Batzli, David Drake, Sara Hotchkiss, Kelly Ignatoski, Rhonda James, Gisela Kutzbach, August Mcginnity-Wake, Brooke Nelson, Donna Paulnock, Glen Stanosz

Also Present

Kris Ackerbauer (FPM), Ann Burgess (Friends), Adam Gundlach (Preserve), Roma Lenehan (Friends), Emily Nettesheim (Student Engagement Grant recipient), Bryn Scriver (Preserve), Laura Wyatt (Preserve)

Minutes

A motion to approve the minutes from November 14, 2016 was made by Drake and seconded by Mcginnity-Wake. The motion was approved unanimously.

Student Engagement Grant Presentation – "Exploring the Wisconsin Prairie Ecosystem: Studying Cold Tolerance of Forbs"—Emily Nettesheim

The cold tolerance project is based in the Damschen Lab with mentoring provided by Drs. Damschen and Ladwig. Field work was conducted in the Biocore Prairie.

The purpose of the project is to gather data on the ability of native prairie plants to gain and lose cold tolerance as a measure of how future prairie community composition might change as winters continue warming. In Wisconsin winters are becoming warmer leading to less snow fall. Without the insulation provided by snow below ground plant tissues can be more exposed to the freezing temperatures of winter. When the water in plant cells freeze, the cells can break, lose their contents, and die. If enough cells die the entire plant can die. If plants cannot adapt to warming winters, prairies can lose plant diversity.

Nettesheim studied Rigid golderod (*Solidago rigida*) and Rosinweed (*Silphium integrifolium*), two plants common across Biocore Prairie and Wisconsin. Both plants have fibrous root systems.

Five individuals of each species were studied in Biocore Prairie. Once a month, a soil corer was used to collect root samples from each plant. The samples were then subjected to different cold temperatures (5°C, -5°C, -10°C, -26°C, and -40°C). Cell damage was measured through electrical conductivity.

Temperature loggers were used to explore the difference in temperatures at various depths above and below the surface of the prairie. The temperature loggers collected the temperature every 4 hours at the surface, below the leaf litter, at 3cm and 10cm below the ground. As expected, the air above the surface of the soil was coldest, but the buried temperature loggers were almost as cold. However, there were fewer fluctuations in temperature below ground.

Nettesheim concluded that: 1) cold tolerance was more variable than anticipated; 2) rosinweed seems to be more sensitive to shifts in temperatures than goldenrod and may be more likely to be lost from the prairie over time; and 3) snow pack is an important temperature stabilizer.





Staff Reports

1. Director Report

See Preserve Staff Reports - December 5, 2016

2. Program Manager Report (Laura Wyatt)

See Preserve Staff Reports - December 5, 2016

Discussion:

Gift funds are administered by the UW Foundation. We have several types of funds: The Preserve Stewardship Fund from which funds are immediately available for our use, and the Preserve Endowment Fund and various other donor directed funds from which we can only spend the interest accrued on the fund.

The Preserve and UW Arboretum have similar missions and could potentially identify some of the same potential donors. There are opportunities to work together to leverage support for both organizations.

3. <u>Capital Projects Report</u> (Rhonda James)

See Preserve Staff Reports – December 5, 2016

4. Field Activities Report (Adam Gundlach)

See Preserve Staff Reports - December 5, 2016

Discussion:

Roma Lenehan reported that herbicide use signs in Eagle Heights Woods were up over the long Thanksgiving holiday weekend even though the stay-out date had passed. She thought the area was well signed, but noted the signs lacked the herbicide information.

A recommendation was made by Stanocz to include signage that states why herbicide is being used (as a tool to restore natural ecology). Hotchkiss suggested adding wording to the signs that indicate "spot applications." Wyatt said the new website which will include a land management section could be used as a place to refer people to for more information on why and how we use herbicides.

5. Volunteers and Outreach Report (Bryn Scriver)

See Preserve Staff Reports - December 5, 2016

Friends of the Lakeshore Nature Preserve report (Gisela Kutzbach)

See Friends of the Lakeshore Nature Preserve report – December 5, 2016

Review of 2017 Draft Work Plan and Budget

Wyatt highlighted changes in the work plan from 2016 to 2017:

- Preserve staff will work with UW Housing and other stakeholders to 1) develop a vegetation
 management plan for the area of Muir Woods north of Elizabeth Waters Residence Hall, and 2)
 develop a management plan for compost piles in the Eagle Heights Community Garden and
 University Houses Gardens.
- Work in Eagle Heights Woods will continue with brush removal in the South zone and initial vegetation monitoring in the West zone.





- We will implement year two of a 4-year initiative focused on manual control of weedy herbaceous plants.
- A planting plan for the Picnic Point kiosk will be developed and planted in the spring by staff and volunteers.
- Fire circles 1, 4 and 5 will be studied for possible improvements and associated costs.
- Improvements will be made to fire circle 3 this spring with funds from a donor.
- Interpretive panels will be installed on all 3 kiosks.
- A gateway sign will be installed at Raymer's Cove along Lake Mendota Drive.

A look at changes between the projected Fiscal Year 2016 budget and the proposed Fiscal Year 2017 budget:

- Under *Ecological Restoration-Vegetation management contractor*, 1) \$26,000 of the money spent is for the Eagle Heights Woods project, and 2) more money will be spent next year to remove hazard trees from the tree line between University Houses Gardens and private properties.
- Funding for *Plants* increases for the Picnic Point kiosk planting.
- Due to changes in personnel this year not all funds were spent under *LTE gardener*.
- In 2016 we had the Picnic Point kiosk fabricated and installed for \$20,000. In 2017 we expect to install the 3rd panel for all kiosks and the Raymer's Cove sign.

The Preserve Committee will be asked to vote on the 2017 work plan and budget at the February meeting. Please contact Laura or Gary with any questions.

Adjournment

A motion was made by Mcginnity-Wake and seconded by Batzli to adjourn the meeting. The motion was approved unanimously.

Submitted by Bryn Scriver, Preserve Outreach Specialist



