Environmental Education for the
City of North St. Paul:
Southwood Nature Preserve

Prepared for
The City of North St. Paul

Prepared by
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OLPD 5204 Designing the Adult Education Program

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Executive Summary

This program-planning project, on environmental education with a focus on Southwood Nature Preserve, was a collaboration of North St. Paul, the Resilient Communities Project (RCP) and three University of Minnesota graduate students. City stakeholders included residents, staff, Parks and Recreation Commission, Environmental Advisory Commission, City Council, Southwood Nature Preserve Task Force, city Master Naturalists, and ISD-622 Community Education. Three stakeholder meetings became the planning table discussions, brainstorming and negotiation, with numerous e-mails and phone calls extending the communication and details further over the weeks.

The first stakeholder meeting resulted in an education plan: four two-hour sessions held at Southwood for North St. Paul adult residents and their families in late spring through autumn. The second meeting solidified the topics of birding, turtles and frogs, trees and invasive species/native species and the need for free, easily planned events; at the third meeting, the date was chosen for the pilot session, on birding.

Each event begins with a city representative providing boilerplate information on the distinguishing characteristics between a park and a preserve. Next, a master naturalist leads a presentation-conversation about the topical flora or fauna. The expert then walks with attendees in 29-acre Southwood, further transferring the learning. In this final part, attendees have a personal experience that will, as Community Education Director Chuck Ericksen puts it, “instill pride and value in Southwood Nature Preserve and make it more real” as they come to know this “jewel in a city that cares about its town.”

At term end, the city received a resource directory, program coordinator training checklist, and final report; a May 17 environmental program was on its events calendar.
Environmental Education for the City of North St. Paul: Southwood Nature Preserve

When the three University of Minnesota students learned about the Resilient Communities Project (RCP) and its 2013-2014 service commitment with North St. Paul residents, they individually found it an intriguing and distinctive way to learn program planning. It offered a means through real-life experiences and for giving to an existing program. The students volunteered to help the city reach its environmental education goal for the Spring 2014 term of OLPD 5204, Designing an Adult Education Program.

The planning project worked with RCP’s Mike Greco and North St. Paul—in particular, Jon Fure. At the first meeting during a class night, the students, Jon and Mike collectively determined that Southwood Nature Preserve—29 acres of trees, lake, marsh and prairie in the city’s southeastern corner—would be the featured environment and ecology. Before this meeting, the students had explored the city website and, through RCP’s online access, reviewed research outcomes and recommendations of University of Minnesota students involved in the RCP-North St. Paul collaboration during Fall 2013. Access to these documents proved an important information advantage for the students and contributed details of a needs assessment.

Taking a field trip to Southwood on a cold February morning, the students saw the preserve first-hand. Although the preserve was snow covered and few creatures were moving, the time there was an excellent beginning to program planning. They could visualize the landscape of the environmental learning—and they had experienced the acknowledged difficulty of finding the preserve for a person not familiar with it.
Goals and Objectives

The students experienced several difficulties narrowing down the project’s goals and objectives. Among them, the students had overlap in what they envisioned. The overall goal was to provide North St. Paul residents with a low-cost environmental education program held at Southwood Nature Preserve that can be set up and facilitated with ease. The following bulleted list encapsulates their ideas and plans.

Goals:
- To increase the environmental knowledge and appreciation of residents for Southwood Nature Preserve
- To increase the public awareness and use of Southwood Nature Preserve
- To increase residents’ knowledgeable stewardship of Southwood Nature Preserve

Objectives and deliverables:
- To create for North St. Paul a directory of naturalist experts and resources for program planning, recommendations, and assistance, helping to design and deliver excellent content to residents
- To deliver a final report of this environmental education initiative to North St. Paul residents, staff, City Council, task forces, Parks and Recreation Commission, and Environmental Advisory Commission
- To provide consultation for the pilot educational event, to get the program started with enthusiasm and participation and to help ensure momentum for future events
- To provide a program coordinator training checklist
- To offer recommendations and feedback based on the pilot environmental education event
Approach and Methods

The approach was the Interactive Model for Program Planning outlined by Cafferella and Daffron (2013). For the negotiation with North St. Paul, the students referenced Cervero and Wilson (2006) and their Chapter 3 in particular.

The context was North St. Paul residents and their desire to lead the town thoughtfully and purposefully into a successful future. Support was solid from the city and its task forces, commissions, and staff, who worked with enthusiasm. As RCP’s 2013-2014 service city, North St. Paul had identified more than 20 goals, one being the students’ present charge of environmental education. The students were confident that the city and RCP were committed to this outcome. Both gave support, with Dr. Catherine Twohig, OLPD 5204 professor. Early on, Jon encouraged the team not to focus too much on the costs of implementing any of their ideas, even though North St. Paul does not have money allocated for environmental education. If the ideas are supported by the public, it is possible that money could be authorized for that purpose in the future, either through fundraising activities, or by requesting appropriations from the City Council or other partner organizations.

To learn about North St. Paul, its ideas, and its needs, the team reviewed maps, US census data and previous student-led RCP reports for the city and Southwood Nature Preserve; scoured the city website; spoke with Jon and Mike about primary focus points; and had in-person discussions with residents and other stakeholders. Jon provided stakeholder names, such as the Parks and Recreation Commission, Environment Advisory Commission, North St. Paul master naturalists, City Council, and ISD-622
Community Education. Jon and other staff were instrumental in sending out targeted meeting announcements and invitations.

Communication also flowed among Jon, Mike, and the student team through ongoing e-mail and phone calls. Initial marketing strategies pointed to advertising the sessions through the monthly newsletter delivered to residents with their utility bill, PTA newsletters, and a community education listserv.

Findings

The team’s research quickly showed that residents take great pride in their town. North St. Paul is highly committed to its RCP goals as a means to educated plans to take the town into its future, starting now. Through conversation with residents and at stakeholders meetings, the team gathered their ideas for environmental education and collectively determined that a two-hour event led by an expert (ie, a master naturalist) would work! The first half would involve a topical presentation-conversation with attendees; the second half, a personal experience for attendees, within the preserve with the expert (e.g., identifying trees in its deciduous forest). Transfer of learning would be facilitated; for example, learning about trees would come to life in the forest, under its canopy, observing its ecological characteristics such as soil and sunlight and its provision of habitat for the resident great horned owls.

Southwood has no covered facility or designated parking area. Logistics would need to include 1) comfortable seating, 2) signage for ease of parking and navigation to the program, 3) refreshments, 4) notice to potential attendees to bring an umbrella, and 5) both attendee handouts and instructor materials. Logistics also would include considerate, thoughtful use of funds and resources, including marketing avenues.
Recommendations

The team recommends four environmental education sessions a year, held during the spring-summer-fall seasons and for free (or an optional suggested donation). The events would take place on Saturday morning for 2 hours—or a duration that makes sense for the topic—at Southwood Nature Preserve, located in the southeastern corner of the city. Each session, a city representative would welcome attendees and introduce boilerplate information of Southwood, defining the characteristics of a preserve versus a park such as Casey Lake Park. In the first half, the expert leads a presentation-conversation about the selected topic; in the second half, the expert leads attendees on a personal experience in the preserve, such as a visit to its marshland and lake to spot turtles and hear frogs.

Experts decide content and the materials for their session, and a session may have the same or a different expert than the other events. The events are to be held at the same site in the preserve for ease and continuity. Topics for the 2014 season are birding, trees, turtles and frogs, and invasive species/native species.

Program evaluation will entail attendee numbers and participation, the expertise and teaching style of the master naturalist, a short survey (Appendix 1 [PowerPoint, which also contains a preserve map]), and an evaluation form to collect both attendee and resident general information, ideally gathering information for a listserv.

The Environmental Advisory Commission will make environmental education a standing agenda item for its sustainability and continuity. Representatives of Southwood Nature Preserve Task Force and Parks and Recreation Commission will contribute their
perspectives and energy. Data from the Southwood naturalist events will be housed centrally at North St. Paul to inform and guide future planning.

**Deliverables**

The University team will deliver to North St. Paul a directory of experts and resources (Appendix 2), a program coordinator checklist (Appendix 3), consultation for the first, pilot session, and a final report. The students have developed a poster that they will present at RCP’s end-of-year celebration on May 9 and may present their findings for North St. Paul residents at a future date as well. The students intend to be on-site for this first education event and to assist with its coming to fruition and its evaluation. They look forward to it!

**Conclusion**

Through a free environmental education series at Southwood Nature Preserve, residents and families of North St. Paul learn about the environment, habitats, and native creatures and plants of their city and thereby gain increased respect for their natural environment. The pilot birding class will led by master naturalist Ruth Alliband of Stillwater on May 17, 2014. With this on-site series showcasing the preserve’s avian resources, residents will experience Southwood—for some, learn that it exists—and gain appreciation of this small preserve as a “jewel” of North St. Paul. Ideally, this knowledge will bring greater and respectful use of Southwood by residents. In the ultimate outcome, residents and their families are informed, dedicated stewards of the city’s natural environment and wildlife, in this city with big pride for its small-town history and with hopes for its future as a most livable place.
This program planning experience with North St. Paul has been a rewarding, exciting, and fun educational experience for the three students—dubbed the Orange Team—who appreciate all that the city, its residents, RCP, and Professor Twohig have given throughout the course.
References


Environmental Education
Southwood Nature Preserve

By: Hannah Carney, Phitz Nantharath, Colleen Sauber

EXECUTIVE SUMMARY

North St. Paul has many unique, natural features and amenities including several nature reserves and wetland complexes that offer opportunities to educate residents about environmental and natural resource issues. The primary goal of this project is to provide North St. Paul with recommendations for educational opportunities related to Southwood Nature Preserve, a 29-acre nature reserve that currently has minimal programming.

This project is a collaboration between North St. Paul, the Resilient Communities Project (RCP), and three University of Minnesota graduate students enrolled in OLPD 5204, Designing the Adult Education Program, for Spring 2014.

Recommendation includes offering four educational sessions this summer.
PROGRAM GOALS

To provide North St. Paul with recommendations for opportunities in environmental education related to Southwood Nature Preserve.

To increase knowledge and appreciation of the preserve’s attributes

To enhance the preserve’s use by the public

To encourage and support stewardship of SNP

STAKEHOLDERS

North St. Paul residents

Environmental Advisory Commission

Parks & Recreation Commission

Southwood Task Force

ISD-622 Community Education

North St. Paul Master Naturalists
STAKEHOLDER SURVEY

Please check all educational topics that interest you:

- Habitat needs of turtles & frogs
- Bird identification
- Ecological services provided by trees and how to care for them
- Managing native and invasive species to maximize biodiversity
- Ecological services provided by bats
- Ecological services provided by wetlands
- Managing water quantity and quality
- Managing plant communities to attract pollinators
- Other ________________________________

STAKEHOLDER INPUT

Free or low cost

Easy to coordinate
RECOMMENDATION

Four Environmental Education Sessions this Summer

Birding

Trees

Turtles & Frogs

Invasive & Native Species

DELIVERABLES

Final Report

Directory of Experts

Program Coordinator Checklist

Powerpoint Presentation

Poster Presentation
PLANNING TIMELINE

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
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<tr>
<td>Identify &amp; Train Coordinator</td>
<td>Identify Topic, Date of event, &amp; Expert</td>
<td>Develop Marketing Plan</td>
<td>Discuss Logistics</td>
<td>Host Session</td>
<td>Evaluate</td>
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Southwood Nature Preserve

1) Carpenter Nature Center, Mayme Johnson, on-staff naturalist, 651-437-4359
   One of 2 naturalists. Mayme visited with CNC’s master naturalist volunteers but abt 1 person doing all 4 programs. We spoke 4-15 that 1 person could do a sole program. Worth a follow-up call to Mayme.

2) Amy Rager, University of Minnesota Extension Service, director, master naturalist training
   rager001@umn.edu, 320-589-1711. Amy put a shout-out to MNats about North St. Paul’s programs, and volunteers are stepping forward!
   Claire Kiewel, Master Naturalist, clairekiewel@gmail.com. Her note said, “I am a MN Master Naturalist and I interested in volunteering with No St. Paul's interpretive programs this summer on Saturday's. Please let me know I need to do!”
   Rob Daves, rob_daves@yahoo.com, 612-822-0085. He wrote,” I'd be happy to lead birding walks -- family, beginners or those with a lot of experience -- for the N. St. Paul folks on some selected Saturdays” Contacted -- interested in the Trees program
   Maddy Papermaster, mpapermaster@usfamily.net. Her note added, “I could possibly do some of these. I will need to know dates, times, etc. I can’t pull weeds or plant.”
   Ruth Alliband, Stillwater, 651-439-2498, allib001@umn.edu Contacted, will do the Birding program on May 17
   Samantha Goforth, samgo4th@gmail.com

3) Audubon Society Minnesota
   Joanna Eckles, state office, suggested we contact the St. Paul chapter directly.
   St. Paul Audubon Society, general@saintpaulaudubon.org, 651-291-2596. Chapter checks e-mails on Monday

4) Warner Nature Center. Sent e-mail on 4-7-14 to Ron Lawrenz, director, at lawrenz@smm.org and to the center general address at wnc@smm.org.
   15375 Norell Ave. N, Marine on St. Croix, MN 55047; (651) 433-2427 ext. 10 (phone), (651) 433-2430 (fax)
   Krista Billerbeck, outreach naturalist; is interested in learning more

5) University of Minnesota and Master Naturalist Work Group. List of these experts can be found at www.extension.umn.edu/environment/fwce/program-team and several are included here.
   i. Karen Oberhauser, PhD, Associate Professor, Department of Fisheries, Wildlife and Conservation Biology, oberh001@umn.edu, 612-624-8706
   ii. Rob Blair, Associate Professor, blairrb@umn.edu, 612-624-2198
   iii. Stephan Carlson, Professor/Extension Educator, Forest Resources, carls009@umn.edu, 612-624-8186
   iv. John Loegering, Associate Professor, Natural Resources, Crookston, jloegeri@umn.edu, 218-281-8132
   v. Darren Lochner, Program Coordinator, Minnesota Master Naturalist Program Coordinator, dlochner@umn.edu, 612-626-2690

6) Minnesota Department of Natural Resources, St. Paul
Dawn Flinn, Education Coordinator, dawn.flinn@state.mn.us, 651-259-5344; DNR works through master naturalists as its volunteer corps. Following are resources Dawn suggests:

Here is a list of resources from DNR that may be helpful. You should also check out www.mndnr.gov/education for additional ideas and links. And take a look at SEEK (Sharing Environmental Education Knowledge) www.seek.state.mn.us for other EE related resources.

Trees – Forest Treasures Poster and others forestry-related resources
http://www.dnr.state.mn.us/forestry/education/posters.html
Glen Olson (Environmental Advisory Commission): glen@sstree.com or 651-451-8907

Birds – Bird stories and activities
http://www.dnr.state.mn.us/young_naturalists/birds/index.html, interactive bird poster
http://www.dnr.state.mn.us/volunteer/bird_songs_interactive.html

Turtles & Frogs – poster and other resources
http://www.dnr.state.mn.us/reptiles_amphibians/frogs_toads/index.html

Native/invasive species – we have a lot of information on this topic so search on our website for the specific plants you are looking for. The general invasive species page is
http://www.dnr.state.mn.us/invasives/index.html
Simba Blood (Environmental Advisory Commission): simba@rwmwd.org

DNR Information Center
651-296-6157
info.dnr@state.mn.us
Might also see:
-- http://dnr.state.mn.us/education/index.html
-- http://www.seek.state.mn.us/res_dir.cfm
-- http://files.dnr.state.mn.us/education_safety/education/dnr_ed_brochure.pdf
Environmental Education at Southwood Nature Preserve
Program Coordinator Checklist

- Program coordinator is responsible for following this process and serving as the contact person for the session

- Work with the Environmental Advisory Commission to choose a topic

- Work with City Personnel (call 651-747-2411) to find a date without conflicting events to assist with publicizing the event

- Use the Directory of Experts to find an instructor with expertise and availability for the session

- Discuss how the expert plans to lead the session. Identify equipment, materials, seating, food, water, etc. that participants need to bring (e.g. binoculars) or that need to be provided by the city (e.g. water) for the session. This information may need to be included in the marketing/promotional materials.

- Create a sign-in sheet and an evaluation form for attendees

- Choose a gathering place at SNP and provide signs that direct people where to park

- Marketing (car show, yard signs, story hour at Maplewood and NSP libraries, schools, churches, NSP Notes, utility newsletter, ribbon on Channel 16, nature centers nearby, City website, welcome wagon, Pioneer press, flyers, youth sporting events, digital signs for Anchor and Premium banks, Snowman facebook, Earth Day clean up, fire department, Ramsey county, watershed district, community education, City newsletter, Lillie News, other methods)

- If there is an unanticipated incident that requires the attention of a City staff person, please call the City Public Works/Electric Utility Emergency line, 651-747-2417. Examples include fallen trees or other storm damage, evidence of vandalism or garbage the needs to be removed, etc.

- After the event collect all sign-in and evaluation forms

- Submit materials to City personnel - information should be saved centrally