



Partner Teacher Newsletter

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Fall Phenology:

- **8/6:** Prairie is full of tall grasses like Big Bluestem and Side Oats Gramma, some grow over our heads!
- **8/8:** Rain showers in the morning, 2 male wild turkeys spotted walking through the prairie
- **8/9:** A mink was seen running in front of the Visitor Center as three deer quietly watch at the top of the hill
- **8/10:** A young family of wild turkeys sighted on the Rapids Lake trail
- **8/13:** A meteor shower rains down over the refuge
- **8/14:** Butterflies, dragonflies, frogs, and grasshoppers galore!
- **8/20:** Barn Swallow chicks have fledged (this is clutch number 2!)
- **8/23:** Migration has begun!

Service Learning Keeps on Giving

At the end of every spring field trip season, Minnesota Valley National Wildlife Refuge gears up for the summer camp season where countless Partner School and Partner Teacher students gather for the plethora of fun-filled adventures waiting at their feet.



At the Rapids Lake Unit in Carver, we were delighted to have Sam Stinson, a returning student from East Union Elementary School, join us for our Refuge Explorers Club for his third consecutive summer. Many of our summer campers return year after year to partake in new programs the refuge has to offer. To our delight, Sam hurriedly ran over

to show them a piece of artwork that he and his third grade class had created for a seasonal display. Sam eagerly pointed out which parts were the ones he created. He beamed from ear to ear as we all oohed and ahed at their skillful craftsmanship.

This impressive seasonal display was created through paper mosaics combining art and creative writing to capture the essence of the refuge through the imagination. Each magnetic layer begs a story to be told where the student is the master puppeteer and is allowed to create their own story.

This year's Explorers Club created yet another service learning project through their Nature Photography Day at Explorers where they created a "summer colors of the prairie" quilt. Want to see their handiwork? It's hanging right outside of the classroom!

All Teachers on Field Trips Must Have Training

Please note that there is a re-enforcement of policy that could change the way you do your field trips to the refuge!!! It is our existing policy that we require all of our partner teachers to be trained, which you all know, but there have been a few red flags concerning safety issues this past year with bringing untrained teachers for field trips. Therefore, we will be reinforcing that ALL teachers that come to the refuge be

trained through our orientation and curriculum training. Please tell any other teachers who have not been through orientation or seasonal training that they are **required to attend both the orientation training and seasonal training for whichever fall, winter, or spring field trip season they wish to bring their students in the future.** We want to ensure that everyone receives the full benefits of this fantastic

program - choosing your own field trip day, full access to equipment, CEU's for attending training, meeting new, like-minded teachers, transportation benefits from the Blue Goose Bus Fund (see page 6), and opening your students to a life filled with curiosity, a sense of place and becoming naturalists with a new way of discovering nature in their own backyards.

Q and A: Managing Habitat with Students and Prescribed Fire

On May 7, 2013, three of our partner teachers were at the refuge for their spring field trip when they saw, most of them for the first time, prairie habitat management through prescribed burns. Below are a series of very valid and frequently asked questions about using fire as a management tool.



Q. What is a prescribed burn?

A. A prescribed burn is a scheduled and carefully maintained fire that is managed by refuge staff and partners.

Q. Why are you burning the prairie? I thought this was a wildlife preserve?

A. The mission of the U.S. Fish and Wildlife Service, which administers

the National Wildlife Refuge System, is to conserve, protect, and *enhance* the wildlife habitat for a diverse range of species. Enhancing the habitat sometimes means making changes to the landscape. Prescribed fire recycles nutrients into the soil, burns off dead layers to allow for new growth,

removes woody and invasive species, and helps native prairie forbs and grasses to grow healthy and strong.

Q. What happens to the baby animals when you burn the prairie in the spring?

A. Spring prescribed burns are scheduled to happen before the onset of the greening season, so many baby animals have not been born. Animals will retreat into their burrows, fly away, or move out of the area during a fire.

The growth of new plants provides habitat for the next generation of animals. Historically, plants and animals have adapted to this regular and natural disturbance. Without the prairie plants that benefit from prescribed fire, the animals would not be able to survive.

Read what one of our teachers has to say about the program

"We truly enjoyed our field trip! All of the resources were ready to go and things went smoothly. Every time I take a class to the Rapids Lake Education Center, I find myself realizing how fortunate we are to be there. It really is a great experience! Thank you for making it possible."

~Lanae McClellan, former Partner School teacher who is entering into her 4th year as a Partner Teacher.

It's Not Too Late to Become a Partner Teacher!

Oh no! You missed the fall partner teacher training?! Does that mean that you'll have to wait a whole year to be in the program??? No! There's still plenty of time for you to join us **THIS YEAR** with the partner teacher program. If you missed the fall training day on September 7th, don't worry because we will be offering orientation training **EVERY** season for those of you teachers who are interested in bringing your students to the

refuge. Each field trip can be as immersed in nature as you would like it to be. Students that come to the refuge become naturalists that are curious and full of wonder. The refuge field trip experience integrates hands-on, interdisciplinary subjects with Minnesota state standards.

So what do I do now? Sign up for the winter partner teacher training at Rapids Lake Education and Visitor Center in Carver on Saturday,

January 25, 2013, where you can become part of this fabulous program, and then attend the seasonal training that is offered right after our orientation training.

January 25, 2014

11-12: Orientation training

12-12:30: Bring a bagged lunch!

12:30-3:30: Winter training

RSVP to Chelsi Hornbaker at Chelsi_hornbaker@fws.gov or 952-361-4511 by January 22.

Fall Weather Policy

Fall field trips will not be rescheduled due to weather . . .

and sprinkles will not keep us indoors! Please remind your students and chaperones to come dressed for the weather. Layering with a warm sweater is always a smart idea for unpredictable cool bursts of weather. One classroom set of rain ponchos will be available if needed. An extra sweater is always a good idea! Alternative activities are available in the case of severe weather.

(Picture from www.sheknows.com)



Students Make Summer Discoveries!

By Mara Koenig

This past summer, Partner School students had the opportunity to fill some of their days with adventure and discovery at Minnesota Valley National Wildlife Refuge! FREE summer programming available to students included School's Out: Recreation Camp, Refuge Explorers Club, and Refuge Readers. While the Partner School Program is designed to complement classroom instruction using the outdoors, summer programming is a little less formal. This allowed students to use their curiosity

and enthusiasm to experience what it's like to be a biologist at a national wildlife refuge or explore the outdoors through different recreational activities.

Summer programs were held at both the Bloomington and the Rapids Lake Education and Visitor Centers. Highlights include learning archery, raising tadpoles, building wildlife shelters, fishing, wading into wetlands, and capturing animals on film.

Ask your students if they visited Minnesota Valley National Wildlife Refuge this past summer! If they did, what did they discover?



Nature Journaling teaches you to *observe and notice details* and draws your attention to seasonal changes and patterns. It can be a *source of calm and peace* in a busy day. It helps you keep track of your experiences and memories. It *allows for creativity* yet can be easily integrated with math, science, reading, writing, and art.

Here are a few good resources to learn more about how you and your students can start Nature Journaling:

Keeping a Nature Journal: Discover a Whole New Way of Seeing the World Around You by Clare Walker Leslie and Charles E. Roth Smithsonian in Your Classroom - **Introduction to the Nature Journal:**
http://www.smithsonianeducation.org/educators/lesson_plans/journals/smithsonian_siyc_fall06.pdf -

California Native Plant Society - Opening the World through Nature Journaling:
<http://www.cnps.org/cnps/education/curriculum/request/index.php> - **Nature Sketching video:**
<http://www.youtube.com/playlist?list=PLpcRk9AaBeWgsQNAdYBS37KL31e93vPjr>

Curriculum Update: New for 2013-14



Monarch Tales
Group Leader Guidelines

In this activity students will help locate Common Milkweed, a favorite food source of adult Monarch butterflies and the ONLY food source of their caterpillars. With your help, students will count individual plants and then map the location of milkweed clumps.

FLOWERING

Milkweed Search

1. Look closely at the ground for milkweed plants in the area your team is assigned.
2. Instruct students to make a tally mark on their journal page for each milkweed plant they find.
3. Mark the location of the plants you find with an "X" on your map.
4. Encourage students to make a sketch of one milkweed plant they find. What life cycle stage is the plant in?

SEEDING

Which of these members of the Milkweed Community can you find on your milkweed plants?












Small Milkweed Bug Milkweed Longhorn Beetle Milkweed Leaf Beetle Milkweed Seed Milkweed Weevil Milkweed Flea Beetle Milkweed Aphid Milkweed Caterpillar Milkweed Parasitic Wasp Lacewing

- * This year teachers and chaperones can access **Chaperone Tips** for each curriculum activity directly from the refuge website. Go to http://www.fws.gov/refuge/Minnesota_Valley/for_educators/chaperones.html.
- * Not sure if you have the most current version of the field trip curriculum? Check the footer of the page for **September 2013**. Due to sequestration, we ask that you please print your own hard copies if you would like one. This reduces our administrative costs.
- * **First Grade Students** will help refuge staff collect data on monarch butterflies this fall by participating in the new **MONARCH TALES** activity. Students will map and monitor current milkweed plants, the only caterpillar food source for the monarch butterfly, and record phenological data. This data will be entered into the Nature's Notebook national citizen science program.



Refuge Friends Has a Place for Retired Teachers

Have you ever wondered how the refuge is able to offer such wonderful opportunities free of charge? Behind the scenes at the refuge, there are people who insure we have what we need throughout the year - our refuge friends' group, Refuge Friends Inc. This organization is devoted only to Minnesota Valley NWR to raise money by maintaining, organizing,

and operating the Blufftop Bookshops, where profits are given to the Blue Goose Bus Fund. They also make lasting partnerships with the Minnesota Valley Trust which has matched money that the Friends have raised 2:1! Since 2007, Refuge Friends Inc. has saved school districts \$100,000 in field trip and materials costs.

Work alongside like-minded volunteers to continue making these fantastic

programs a success by being a part of fun, annual programs like No Kids Left Indoors banquet, Making Connections breakfast and Eagle Nest Van Tours. To see how you can become a member or contribute to the Refuge Friends Group, check out their website [here](#).

If you have any questions for the Refuge Friends Group, please call Steve Sutter at 952-858-0737.

November 15: GIVE to the MAX DAY

Every year MN Non-profit organizations compete for ten tiers of prize grants based on the amount they raise during their Give to the Max campaign. **Refuge Friends Inc** will participate for the second year to raise dollars for the Blue Goose Bus Fund. Money raised may be matched 2:1 by the Minnesota Valley Trust and will be used to bring your students to the Refuge. Please help us get the word out!



giveMN.org
Click. Contribute. Change Your World.

Staff Updates: Comings and Goings



Congratulations to Katie Laughlin as she embarks on the final stage of her journey to become a classroom teacher!

Katie will be student teaching this fall at one of our very own Refuge Partner Schools: Vista View Elementary in Burnsville. She will be working with Mrs. Plaschko's 2nd grade students.

We are very thankful to have had Katie with us at the Rapids Lake Education and Visitor Center for over two years as she worked on her graduate education towards teacher licensure. We benefited greatly from her insight, curiosity, and enthusiasm. We can't wait to have her return with her class!



Minnesota Valley National Wildlife Refuge is happy to announce the arrival of our new Refuge Manager, Tim Bodeen!

A native to Wisconsin, Tim grew up along the south shore of Lake Superior, where he spent endless hours exploring its backwater sloughs, rivers, and forests. This was the place where Tim developed his passion for nature and the great outdoors. This foundation propelled him to explore the world by joining the Navy as well as the Peace Corps. After receiving his degree, he began his wildlife career with the U.S. Fish & Wildlife Service at several refuges around the country.

Tim and his wife Stephanie have two young daughters in college, and he spends his free time gardening, hunting waterfowl and pheasants, watching the Packers and Badger games and enjoying family. He is very excited about the Partner School and Partner Teacher programs, so be sure to say hello and welcome him to your national wildlife refuge.



Recycling at the Refuge

Classes that stay at the refuge for lunch are encouraged to recycle!

New 3-Dimensional posters above our trash and recycling containers explain what can be recycled.

- ◆ Please remind your students to empty any unconsumed liquids from plastic bottles.
- ◆ Rinse out plastic containers before placing them in the recycling bin.

Thanks for your help! One person really can make a difference, so just imagine what a whole class could do for this beautiful world of ours!

Minnesota Valley National Wildlife Refuge

U.S. Fish & Wildlife Service
Minnesota Valley National Wildlife Refuge

Rapids Lake Education and Visitor Center
15865 Rapids Lake Road
Carver, MN 55315
(952) 361-4500

Bloomington Education and Visitor Center
3815 American Blvd. East
Bloomington, MN 55425
(952) 854-5900

Visit our website to learn more about
your refuge [here](#).

Like us on Facebook [here](#).

Follow us on Twitter [here](#).

Check out our photos on Flickr [here](#).

The Blue Goose Bus Fund

Did you know that a fund has been established to help schools absorb the cost of busing their **Refuge Partner School** and **Refuge Partner Teacher** students to Minnesota Valley NWR for educational field trips? This fund was established and is managed by **Refuge Friends Inc.**, a 501 (C) 3 non-profit.

To learn how you can be involved, please contact:

President Steven Sutter, Refuge Friends Inc.

3815 American Blvd. East

Bloomington, MN 55425

952-858-0737



*Did you know that we
have a new address?*

If you're a partner teacher at the Rapids Lake Unit, be sure to send your bus invoices directly to the Rapids Lake Education and Visitor Center at :

15865 Rapids Lake Road
Carver, MN 55315

Be a Nature Hero: Including Nature into Everyday Life

Welcome to the inspirational corner of this year's first newsletter edition. It is my aim to include further reading that will inspire any and all people to become a nature hero in their own right. Each one of you and your students inspire me with every field trip, so it is only fair that we at the refuge try to inspire you as well. In this article is a series of links to other articles written by a past co-worker of mine who had the phenomenal opportunity of hearing Richard Louv, a monumental speaker and proponent of getting children outside through his breakthrough book, ***Last Child in the Woods***. In his most recent talk, he spoke of tips and tricks to becoming a nature hero. I won't spoil it for you, so please read on if you are in need of an inspiration.

Anybody can be a nature hero, who will you inspire next?



Read the article that inspired the column:
<https://www.youthgo.gov/news/richard-louv-naturally-my-hero>

<http://blog.childrenandnature.org/video/>

Here is another fabulous resource at your fingertips written by the New Nature Movement featured through the Children and Nature Network. Learn tips and tricks from other teachers on how to get your students outside and meet state standards or how small partnerships can grow into large community support systems. To read more about these articles mentioned, visit the Children and Nature website here at <http://us1.campaign-archive2.com/?u=84bc8aed7ef3c95d84fa1e04b&id=1130d56fb1&e=205391210c>