



Don't Let the Heat Stress Out Your Summer

by Jodi Gustafson

It's hot and humid out there, and everything is just sort of simmering. The sun's brightness is baking everything into a crisp, including your eyeballs. The air is so steamy that sticking your arm out the car window is like stirring hot soup with your bare hand, so you avoid that all costs. Somewhere, a cicada starts buzzing. Now it sounds hot. It's 8:00 am, and you have a group of twenty kids arriving in an hour, eager to be outside and learn about bugs or trees or water quality or any number of environmental educational topics. And it's only going to get hotter out there.

Summertime is the best time to be a naturalist, right? The kids are out of school so there are lots of participants for daytime programs. Daylight is extended at night so evening programs are well attended too.

The opportunities seem limitless. Well, except for mosquitoes and ticks, but slap on a little all natural-safe-for-children-aroma-therapy-insect repellent (ok and maybe a little not-so-safe-for-children, stinks-to-high-heaven-but guaranteed-

to-prevent-the-dreaded-West-Nile-Virus Deet) and you're good to go. Oh, and sunburns. Make sure everyone is slathered in sunscreen. Ok, let's go!

One more thing. In these, the dog days of summer (named after the Dog Star, Sirius), it's a good time to take a minute and brush up on our heat advisory for children safety information.

Children are among those most at risk for heat stress. According to the American Academy of Pediatrics, "exercising children do not adapt to extremes of temperatures as effectively as



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The President's Letter

by April Rust, MNA President

In May, a few board members got together at a coffee shop in West St. Paul to plan an MNA membership committee. We brainstormed ways MNA can best recruit new members, keep current members and bring back past members. We discussed outreach and marketing for MNA. We talked about the membership database and communication. We revisited past MNA successes and failures and shared what we each wanted to get out of being a member of MNA ourselves. We left that meeting with a rough plan for our new membership committee and a list of immediate and long term goals.

Since May, we have recruited several additional members to the committee and have had our first two meetings this summer. Current membership committee members include Secretary Krista Jensen, new member Sue Budd, current and past board members Teresa Root and Sue Dahl, Vice President Hallie Wunsch, and myself.

If you felt your ears burning earlier this summer, it could be because we've been talking a lot about you. We want to know why you're a member and what you most appreciate about MNA. We want to get a better understanding of what we can do to support you and be clear about opportunities you have to support MNA. We'll be sending you a survey this fall to find out more about your needs and suggestions for the organization. In the meantime, we're working on our initial membership goals.



First, we're working on getting all of our membership and event participation information into a better database system that allows us improved tracking and communication information for past, current and potential members. That part isn't the most exhilarating, but it does make all of us on the committee and the board pretty thrilled at the strength of our new member database and possibilities to streamline many tasks and stay current with communications to our members.

Second, we're developing a communication plan for the year and starting to develop a protocol for ongoing membership support to put in place for future years.

Once we've got some of those logistical and basic infrastructure improvements done, then we'll be calling on your help to let us know your membership needs. We hope to make improvements to membership benefits throughout the year, as we're able.

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For mailing addresses and
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www.mnnaturalists.org

President's Letter - continued

In addition to supporting you as an active member, we'll be working with the marketing committee on developing MNA marketing materials and improving support to our new members. Later this year and next year, we plan to talk with past members to find out more about why they are no longer active in MNA and discuss ways to encourage their participation to help mentor in new members in the profession, share their institutional knowledge and to find professional support from MNA themselves.

If you have any suggestions, requests or ideas for us as we try to better serve you, please contact any one of the membership committee individuals listed above. We'd love to have additional people join in our meetings, or just send suggestions our way.

Please help us
make MNA the
best
organization
possible.

- April



Opinion

Please note, the views and opinions expressed in this article do not necessarily reflect the opinions of the Board of the Minnesota Naturalists Association.

In a July 19, 2010 press release, the Minnesota DNR announced Minnesota's first ever Sandhill Crane Hunting Season. The DNR said:

"For the first time in the modern era, Minnesotans will have the opportunity to harvest sandhill cranes in far northwestern Minnesota. The season will run from Saturday September 4, 2010 through Sunday October 10, 2010. Shooting hours are one-half hour before sunrise to sunset until the opening day of duck season. The open area will consist of portions of Kittson, Roseau, Marshall, Pennington, Red Lake, and Polk counties. There will be a daily bag limit of two birds with a possession limit of four. A \$3.50 permit will be required to hunt cranes in Minnesota. No sandhill crane hunting is permitted within 100 yards of surface water through September 22. Sandhill cranes that occur in northwestern Minnesota are part of the mid-continent population, which is estimated at more than 450,000. This number is above the population goal of 349,000. Sandhill cranes have long been considered "recovered" and have been hunted in some states since 1961. "Ten other Central Flyway states have been hunting cranes for years," said Dennis Simon, DNR Wildlife Section Chief.



the public and the legislature, this new stealth "process" employed for Sandhill Cranes appears to be a very calculated move by DNR Commissioner Mark Holsten to by-pass legislative and public scrutiny. Even the timing of the announcement, after the legislature adjourned, in the lazy days of summer when officials and citizens are on vacation and only weeks before the hunting season will begin, appears to be timed to minimize public input.

Whether you favor hunting cranes or are opposed, the Commissioner's unilateral move to approve hunting and setting regulations for a long-protected species sets a dangerous precedent. The DNR is requiring no hunting license and soliciting no public involvement in the management of this much-watched species whose populations are slowly recovering.

Sandhill Cranes:

On Sale Now from Your DNR

By Mark R. Peterson
Executive Director,
Audubon Minnesota

Minnesota's long tradition of public involvement in the development of game laws and regulations took a giant backward step on July 19 when the DNR issued a short press release announcing the establishment of the state's first hunting season for Sandhill Cranes. Unlike virtually all other new game regulations developed in consultation with

Equally perplexing is the Commissioner's eagerness to give away the privilege to hunt cranes. After decades of public and private investments to restore these populations and their habitats, the DNR is requiring only a \$3.50 "administration fee" for the right to kill up to four cranes. That's right. For less than \$1 apiece, people can now "harvest" these grand creatures in northwestern Minnesota whether you're a Minnesota resident or out of state. No hunting license required. By not requiring a hunting license and by requiring only a very modest fee to recover transaction costs, the DNR avoided the need to engage the legislature, and thus the public.

We all lose when public involvement in government decisions is compromised. Regulation by fiat leaves the public in the dark on what's being proposed, and mistrustful of the DNR. In this case, what is the science behind this hunt? Why aren't we working to recover the public's investment in habitat and crane recovery? Is it in our collective interests to manage cranes like Nebraska, where a booming eco-tourism industry thrives on the people who travel long distances to experience seeing and hearing thousands of cranes during migration? Why sell this experience short for a hunt generating only a few bucks for the required paperwork?

Once common, the Sandhill Crane was considered rare by 1900. Hunting cranes was prohibited in 1918 but with low reproductive rates, crane recovery was slow. Biologists estimate that only 10-25 pairs were nesting in Minnesota in the mid-1940s. With considerable public

What are Sandhill Cranes?

Sandhill Cranes stand about five feet tall, with a wingspan of nearly seven feet. The males have a distinctive red crown, otherwise they are primarily grey in color. They feed in fields or marshes, consuming frogs, small mammals, insects, snakes, and also small grains. They have a memorable mating dance. Sandhill mating grounds attract visitors who are drawn to watch the bowing and swooping males as they court females.

Sandhill cranes are closely related to the federally endangered whooping crane, and have been used in migration experiments guiding young whooping cranes to wintering areas in the southern U.S.

investments to secure habitat, protect wetlands and monitor the species, crane populations have made a steady recovery in Minnesota with strong public support. This magnificent bird offers thrilling viewing experiences. The sight and sound of a flock of these "gargling journeyers" gracefully floating above a prairie, makes for a treasured memory.

Minnesotans deserve better wildlife management than a cheap hunt announced by a surprise press release. This proposed hunt should be withdrawn and a public process engaged. Sandhill Cranes should be afforded the same care in management we give to our ducks, deer and fish.

Mark Peterson, Ph.D., is Director of Audubon Minnesota and Vice-Chairman of the DNR Commissioner's Advisory Council.

Do you have an opinion about this or any other nature, environmental, or conservation issue in Minnesota? We'd love to hear it. Please send your comments, opinions, or articles to MNANewsletter@gmail.com. We'll print your comments in the next issue of the MNA Newsletter.

2010 MNA Naturalist & Volunteer Trainings - Overview and Outlook

By Crystal Wold
Three Rivers Parks District
Eastman Nature Center

Minnesota Naturalists Association's Naturalist & Volunteer Trainings are professional development and networking opportunities held three times a year in the metro area and twice in greater MN at environmental education centers and partnering facilities. Trainings are always free and are especially welcoming to interns and volunteers. Topics can range from fungi to sustainability (and everything in between). These trainings allow members and non-members to strengthen their career skills and provide further educational opportunities.

The MNA Naturalist and Volunteer Trainings have been very successful for the fourth year in a row. In 2010 we have already hosted three sessions, and two more are planned. Below is an overview of this year's trainings and outlook to the future.

The first training on January 11, at Eastman Nature Center was about Herpetile Care. Around 78 people attended to hear presentations from Tony Gamble, Ph.D., University of Minnesota, Madeline Linck, Natural Resource Wildlife Technician for Three Rivers Park and Jim Gerholdt with Remarkable Reptiles. Gamble helped us understand the animals we work with in an Evolutionary Physiology aspect. Linck talked about wintering strategies of native MN reptiles and amphibians. She also gave us instructions on turtle rearing from egg to hatchling. Gerholdt covered herpetile care from housing and diseases, to handling in-

structions. We learned about snake tubing, and had the opportunity to see how the sex of a live timber rattlesnake is determined—very carefully! Thank you, Lee Ann Landstrom and Kim Nowicki for putting together such an outstanding training.

The second training on June 7, at St. John's Arboretum was our very first out of the "Metro" training. This site, only sixty minutes from the Metro area, allowed an opportunity for people of greater Minnesota regions to attend a Training. About 25 people attended on a hot summer day to learn about Habitat Restoration and Plant Identification. There were three session choices. One choice was Habitat Restoration Projects with Tom Kroll, Arboretum Director and Land Manager. The group took a trip through history and learned how Saint John's turned crop fields into a habitat with their very own restoration projects, including fifty acres of prairie, sixty acres of wetland, and forty acres of oak savanna. We experienced Kroll's unique ability to combine history and ecology while he brought to life the process of restoration. The second choice was Plant Identification with Steve Saupe, CSB/SJU Biology Professor and Botanist. The group traveled along a mile and a half loop through prairie, wetlands, forest, and oak savanna, keeping their eyes to the ground for plants to identify. Botanist Saupe used his vast knowledge of plants to both inform and entertain the audience with natural history stories about native plants and dissections of

bird's tick trefoil. The third training was Nature Sketching with Jim Poff, CSB/SJU Biology Professor, Entomologist, and Artist. A new appreciation of the natural world was gained when the group put down their field guides and picked up pencils. Poff offered tricks and tips for drawing to all experience levels. After lunch there were two options. Option one was a tour of Bailey Herbarium with Steve Saupe, who introduced the collection of plants preserved in one of the largest private college herbariums in Minnesota. Option two was a discussion of Saint John's Arboretum 'Buy a Seat on the Bus' Campaign with Jenny Kutter, Department Coordinator. This was a great opportunity to see how Saint John's Arboretum removed bussing fund barriers with a transportation reimbursement program. Thank you to Sarah Gainey for all her coordination efforts and to the outstanding presenters!!

The Third Training was June 14, at Lowry Nature Center in Victoria. About 40 people attended the Technology in Interpretation training. The morning started out with an introduction to the topic, and a large group discussion. Discussion questions included: What exactly is "technology in interpretation"? Can technology enhance our interpretive efforts? How much technology is enough; how much is too much? When is it effective?

The answers relate to comfort levels and goals for each individual programmer and facility. The short training offered two dynamic sessions. The first session was about audio tours: Allison Neaton, Supervisor, Lowry Nature Cen-

ter showed everyone step-by-step how to get a Cell-Phone Audio Tour up and running. Three Rivers launched their pilot program two years ago after Neaton attended a national interpretation conference. If you have any questions about the program feel free to contact her at Lowry Nature Center. The second session, lead by Tom Moffatt, Supervisor of Silverwood Park, was a discussion about various Social Media applications. Moffatt set up a Facebook page from this training. There is a link to this page on the Minnesota Naturalist Association's page on Facebook. However, you do have to be a member of MNA's Facebook group to link to the MNA Technology and Interpretation page. Please visit the site for more info about the training and to discuss this topic further. Thank you, Allison Neaton for hosting the training and coordinating and to Tom Moffatt for leading the training session.

The next two trainings are in September. In the Twin Cities, Maplewood Nature Center in Maplewood, MN is hosting a Rain Gardens and Storm Water session on September 13, which is co-hosted with the Ramsey Washington Metro Watershed District. There will be three sessions, including:

- 1) Links between Carp and Water Quality: Learn about Dr. Peter Sorensen's carp research project at Kohlman Lake, sponsored by Ramsey Washington Metro Watershed District.
- 2) Discovering your inner rainwater pathway, generating lightening bolts of ideas. After a tour of Ma-

plewood's artistic new rainwater structures, spend some creative envisioning time coming up with your plan.

- 3) Following the Water: Neighborhood to Shore. Find out what's up in Stormwater Town! You will visit some of Maplewood's city raingardens and explore some educational techniques used to teach about stormwater and raingardens.

During the training there will be an on-going demonstration of live "Fish by Fin" from the Minnesota Department of Natural Resources. Look for the flier for more information and to register.

Another opportunity for training will be on September 20 at Ney Nature Center in Henderson. That session will cover more water quality issues, as well as discussing different aspects of the Minnesota River. Look for more information about the upcoming training schedule in future MNA e-newsletter updates, and on the website at mnnaturalists.org.

I am very proud to be a Member-at-large on the MNA board and serve as the chair for the Naturalist and Volunteer Training Committee. It has been a pleasure coordinating each event and I really enjoy volunteering and networking opportunities. I hope to continue to serve you for another two years!!

There will be a Naturalist and Volunteer training at the MNA annual conference this year. You will be able to join me, your "Naturalist and Volunteer Training" Coordinator, Crystal Wold, to

look back on the 2010 trainings, look ahead to 2011 and plan 2012. The date and time of the trainings will be announced with the conference registration. If you have a topic, partnering, and hosting ideas please plan to attend. At the meeting I also hope to discuss the expectations and guidelines of this very successful program and identify some of the newer challenges.

If you are interested in hosting, co-hosting or have ideas, thoughts or comments and can not make it please **contact me via email:** cwold@threeriversparkdistrict.org or by phone: 612-759-4444

Here is a sneak preview of what is to come in 2011. With more in the making. . .

January 10, 2011

Topic: SOS – Survival Of Outdoor Science Standards
Host: Valley Branch ELC
Location: Afton, MN

January 2011

Topic: TBA
Host: Hartley Nature Center
Location: Duluth, MN

June 13, 2011

Topic: Wetland BOGS
Host: Warner Nature Center
Location: Marine on St. Croix, MN



HELP WANTED:

- 2010 MNA Elections -
Board Positions
Available This November

- Secretary
- Newsletter Editor
- Three At-Large Board Members

You can nominate yourself or a colleague, although consent will be requested of those individuals not self-nominated.

The deadline for nominations is **Friday, September 10, 2010.**

Have you ever thought about becoming more involved in MNA? Have you ever served on a Board of Directors, or wanted to serve on a Board of Directors?

One excellent way to engage yourself more is to run for the Board this fall. We've just moved to staggered board elections to help ensure continuity in leadership, so half of the board is elected each year.

These positions are up for election this year:

If you would like to submit a nomination, please send the name of the individual, the board position sought, a bio, and a write-up for the ballot (your "pitch" or reasons why they would make a good board member, qualifications to serve, etc.) to April at: april.rust@state.mn.us.

Do you have editing or desktop publishing experience? Do you enjoy writing? Do you have experience producing documents with Microsoft Publisher software? Do you want to have a say in what gets published in the MNA Newsletter?

If you answered yes to any of these questions, then please consider running for the MNA Newsletter Editor position, Newsletter Editor Tim Boyle will be stepping down this fall.

If you have any questions about the duties involved in this position, please contact Newsletter Editor Jodi Gustafson at jodi.gustaf@gmail.com



adults when exposed to a high climatic heat stress." This is because children have a greater surface area-to-body mass ratio than adults, which causes a greater heat gain from the environment on a hot day, and greater heat loss on a cold day. Children also produce more metabolic heat than adults during physical activities such as walking or running. Additionally, sweating capacity is considerably lower in children than adults. Since sweating is the body's method of regulating heat by dissipating body heat through evaporation, that means that children feel the heat and are more affected by it than adults. Combine this with the fact that children don't always know when they feel too hot, and sometimes don't always feel like drinking plain water, and you have a recipe for really dangerous health risk on hot, humid days.

"Children do not feel the need to drink enough to replenish fluid loss during prolonged exercise," says the AAP, this may lead to severe dehydration. "Although water is usually available and free, a flavored beverage may be preferable because the child may drink more of it." If you don't want to go out and buy sports drinks, carefully monitoring the beverage intake of the children in your classes before leading them outside might be necessary, along with periodic drink breaks during the activity. In other words, letting children choose not to drink water is not an option.

Be aware of the symptoms of heat stress when leading tours and activities outside on hot days. The most dangerous condition is heat stroke. According to the AAP, "Heat stroke occurs when the body is unable to regulate its temperature. The body's temperature rises

rapidly, the sweating mechanism fails, and the body is unable to cool down. Body temperature may rise to 106 degrees or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided." If these symptoms are apparent, the treatment is to get the victim to shade, cool them off with water, but immediately giving the victim water is not recommended. Cooling the body externally is the first and foremost concern. Heat stroke is a medical emergency that can be fatal if not treated properly and immediately. Call 911 if heat stroke is suspected.

- Signs of Heat Stress - Heat Stroke

Symptoms: Red, hot, and dry skin, with no sweating. May be accompanied by: Rapid strong pulse, throbbing headache, dizziness, nausea, confusion, unconsciousness.

Treatment: Get the victim to a shady area, cool them using whatever methods you can find, immersion in water, cool shower. Get medical assistance ASAP. Give the victim water, if they are able to drink.

Heat Exhaustion

Symptoms: Heavy sweating, paleness, muscle cramps, tiredness, dizziness, headache, nausea or vomiting, fainting.

Treatment: The same as for heat stroke, but calling for medical assistance is not necessary unless the symptoms last for more than an hour.

Conference 2010 Update

Another heat-related condition to be aware of is heat exhaustion, which is a milder form of heat stress that results from heat and inadequate or unbalanced intake of fluids. Heat exhaustion can lead to heat stroke, if the symptoms are not addressed.

Other symptoms that the body is not regulating heat well during high temperatures are heat rashes and heat cramps. A heat rash is a skin irritation caused by excessive sweating during hot humid weather. It is most common in young children. It looks like a red cluster of pimples or small blisters. And is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creases. Fortunately, the rash usually goes away within a few hours, after cooling and drying the skin.

Heat cramps affect muscles that are not accustomed to exercise, and usually occur during work or exercise during hot temperatures. They can occur in legs, arms, back, and abdomens. Gently massaging the muscles helps, but the cramps usually go away by themselves after a few minutes. Drinking water to rehydrate the muscles also helps.

Keep an eye on the weather, and listen to (and heed!) heat advisories from your local weather station. Remember, the children in your groups are counting on you to keep them safe, even if they don't know it. Beverages with a little salt and sugar will encourage children to drink more, as well as providing electrolytes that the body loses in hot conditions.

Think of children as little plants, and water them more than you (or they) think is necessary. And enjoy the last few weeks of summer!

Mark your calendars now, because the 2010 MNA Conference is right around the corner and you do not want to miss this year's conference!

The deadline for speakers and concurrent session leaders has already passed, and the conference committee is determining who will be presenting. The theme for this year's conference is Life in the River Valley, and it will be held at Camp St. Croix in Hudson, Wisconsin.

**Dates for the 2010 MNA Conference:
November 12-14, 2010**

The conference committee is actively working on the schedule of events for the conference, and selecting presenters. Tentatively, they have planned an optional pre-conference field trip for Friday November 12, during the day. This field trip will have a limited amount of space. Possible speakers and presenters could include sessions on Geology, Cultural heritage of the St. Croix River Valley, Mammals, Birds, and Herps of the St. Croix River Valley, Leadership and Administration, Interpretive Program Planning, Water, Watersheds, and Hydrology, and So Much More!

Look for program registration materials to appear in your e-mail inboxes sometime around Labor Day (September 6, 2010).

The Conference Committee meets monthly. The next meeting is planned for Monday August 23. For more information, contact Hallie Wunsch at hallie.wunsch@gmail.com

MINNESOTA NATURALISTS' ASSOCIATION
PO Box 75127
St. Paul, MN 55175



This newsletter was printed on recycled paper materials.

MNA Membership Form

Name _____

Address _____

City, State, Zip _____

Phone (hm) () _____

(wk) () _____

Fax _____

E-mail _____

Organization _____

(This information will appear in the membership directory, unless otherwise noted)

How did you hear about MNA?

How long have you been a member?

Membership runs one year from payment of dues.
Please make checks payable to **MNA** and mail to:
**MNA Membership, c/o Krista Jensen, Lebanon Hills
Visitor Center, 860 Cliff Road, Eagan, MN 55123**

I am a:

- NEW MEMBER
- RENEWAL
- MAEE MEMBER

Membership Level:

- \$25 Professional
- \$20 MAEE Member (Prof.)

Please check if applicable:

- Please do NOT include me in the membership directory
- Please do NOT include me on mailing lists

*Our Mission:
"The Minnesota Naturalists' Association exists to advance natural and cultural resource interpretation for the purpose of fostering wise stewardship of all resources. The MNA offers its members growth opportunities in skill and career development and serves as a forum for interpreters to pool knowledge, share ideas, and establish contacts with colleagues."*