

# The Official Newsletter

## of The Wildlife Society, Saskatchewan Chapter



### What's inside:

President's Message	2
Bats	3
Bio-Blitz 2013	4
Conservation News	5
Membership	6

## Announcing the 2013 AGM!

The SCTWS Executive is pleased to announce the **2013 Annual General Meeting and Symposium**, to be held on Saturday, November 16<sup>th</sup> at the Canadian Wildlife Service Building in Saskatoon. We would like to thank our sponsors for this event, AMEC Environment and Infrastructure and the Canadian Section of The Wildlife Society.

The schedule for the day is as follows:

### Morning sessions – 2 options (details on next page):

<b>Moose Radio Tracking Field Trip FULL</b>	7:30 am – 12:00 pm
<b>Workshop: Home Range Tools for ArcGIS</b>	9:00 am – 11:30 am
<b>Poster Session and Complimentary Lunch</b>	12:00 pm – 1:00 pm
<b>Plenary Session (Dr. Arthur R. Rodgers)</b>	1:00 pm – 1:30 pm
<b>Oral Presentations</b>	1:30 pm – 5:00 pm
<b>Chapter Meeting and Election</b>	5:00 pm – 5:30 pm
<b>Complimentary BBQ</b>	5:30 pm – 7:00 pm

The registration deadline for the AGM & Symposium is **November 13, 2013** and early bird registration will be available at a reduced rate until November 1, 2013. To register please complete the attached **registration form** and submit, along with your payment, in one of the following ways:

**E-mail:** [sasktws@gmail.com](mailto:sasktws@gmail.com)

### Mail to:

Gillian Treen  
110-1012 Lansdowne Ave.  
Saskatoon, SK S7H 2C3

**Drop off** to Gillian Treen at the Canadian Wildlife Service building (office: 306-975-5224).

**Pay online** with PayPal- at [sasktws.weebly.com](http://sasktws.weebly.com)

*The Saskatchewan Chapter of the Wildlife Society is dedicated to the conservation and protection of our wildlife and natural resources by providing the opportunity for wildlife professionals and students to exchange ideas and experience while promoting and upholding responsible wildlife stewardship.*



Part of the Saskatchewan Farmland Moose Project, a team of researchers equipped moose along Highway 11, between Regina and Saskatoon, with a collar that will track the animals' movement for two years. On the Moose Radio Tracking Field Trip, you, yes YOU, will be involved in locating collared moose.

## President's Message

My term as President of SCTWS has really flown by! I'd like to thank everyone on the Executive for all of their hard work and dedication this year. You have all been essential to keeping the chapter going and bringing together our big event for 2013, the upcoming AGM and Symposium. It is my hope

that the AGM will bring together many of our current and new members, and give those of us on the Executive a chance to learn more about how we can better serve our membership. I look forward to serving on the Executive next year as Past President. I'm both honoured and excited to be involved with SCTWS

in these early stages and I can't wait to help our chapter continue to grow and develop. Wishing all of our members a wonderful 2014, and the best of luck to next year's President!

Thank you,  
Gill

## Morning AGM Sessions offer tough choice for SCTWS members

Talk about difficult decisions - both morning sessions at the upcoming AGM will make for a fascinating learning experience and time well spent.

Registration for these sessions is \$10, and since they are concurrent attendees are not able to register for both the field trip and the workshop. Enrollment is limited to 18 people per session so sign up now to guarantee your spot!

For more information or to register, please visit <http://sasktws.weebly.com/>

**Moose Radio Tracking Field Trip** led by Dr. Ryan Brook (College of Agriculture and Bioresources, University of Saskatchewan) Dr. Brook will lead the group in locating collared moose using VHF receivers, ground tracking, observing females (and bulls if present), collecting scat samples and counting calves. Participants will meet at the Canadian Wildlife Service Building on campus at 7:30am for coffee and refreshments before heading out in the field. We will be carpooling to site so if you have a vehicle and are willing to drive, please email to let us know. Participants coming from outside Saskatoon have the option to meet us in the field (please email to discuss this option).

**As of Oct. 28, this session is now FULL.**

**Home Range Tools for ArcGIS Workshop** led by Dr. Arthur R. Rodgers (Ontario Ministry of Natural Resources, Centre for Northern Forest Ecosystem Research and Canadian Section Representative to TWS Council) Participants will meet at the Canadian Wildlife Service Building on campus at 9:00 am for coffee and refreshments before beginning the workshop on campus.

The Home Range Tools (HRT) software is an ArcGIS version of the Home Range Extension (HRE) for ArcView GIS. The HRT extends ArcGIS to analyze home ranges of animals. Computers with appropriate software will be provided for the workshop.

## Research in Saskatchewan:

### Bats with thermostats? Submitted by Jody Rintoul

Bats are a largely misunderstood and therefore feared group of mammals. Everyone benefits from these unique mammals due to their pest control services. Recently there has been a devastating decline of bats in Eastern North America due to white nose syndrome, a fungal infection causing mortality in millions of bats. With this decline in bat populations, it is essential to understand more about temperate bat biology to potentially aid in maintaining populations as white nose syndrome continues to devastate North American bats. The bat lab at the U of R has begun a project identifying the distribution of bat species in Saskatchewan using a combination of acoustic monitoring (Anabat detectors) and mist netting (Figure 1). In addition to assisting in describing current bat distributions in Saskatchewan, I recently completed an MSc at the U of R focussing on thermal and foraging ecology of big brown bats in southwest Saskatchewan.

Producing and raising young is energetically expensive for mammalian females and seasonality often limits the amount of time available to successfully reproduce. Temperate mammals often have methods to cope with time constraints, such as thermoregulatory and foraging flexibility, but often at a cost. Bats in

Saskatchewan have the ability to lower their energy expenditure during the resting hours of the day by entering a reduced metabolic state called daily torpor (can be thought of as short term hibernation). By doing this, the females are effectively halting fetal development and milk production but save energy in doing so. In most species, it has been suggested that females will only use torpor when food availability is low and they cannot obtain sufficient energy. One of the knowledge deficits in this area of research is what relationship exists between saving energy (torpor) and gaining energy (foraging) because these two questions are typically studied separately. The purpose of my research then was to determine how thermoregulation and foraging patterns are related and vary during pregnancy and lactation in big brown bats (*Eptesicus fuscus*).

I equipped pregnant and lactating bats with temperature sensitive radiotransmitters in southwest Saskatchewan to record skin temperature during the day (Figure 2). I also used these transmitters to triangulate the location of foraging bats throughout the night using telemetry (Figure 3). I found that thermoregulatory patterns remained similar between reproductive conditions, although there appeared to be more

flexibility in thermoregulation for lactating bats. In terms of foraging, bats spent similar amounts of time in the same areas in both pregnancy and lactation. Due to the constraints of having to feed young during the night, lactating bats often returned to the roost several times throughout the night. When coupled together, I found that foraging and thermoregulation were not directly related during pregnancy, but had a tendency for an inverse relationship during lactation. These data provide support that the relationship between thermoregulation and foraging is not constant throughout reproduction, which may be due to the trade-off between slowed development of young through torpor use and risky foraging for the female during suboptimal conditions. This study provides information on the trade-offs that might exist for females and possible ways female bat colonies may be benefited. Because it is known that using torpor is likely at least partially detrimental for females in terms of immediate reproductive success, maintaining areas with proper access to water resources as well as a heterogeneous landscape may benefit females. Having resources nearby may reduce the amount of energy required to obtain energy, making more energy available for thermoregulation and development of young.



Figure 1. The author extracts a hoary bat from a mist net as part of SK bat survey.

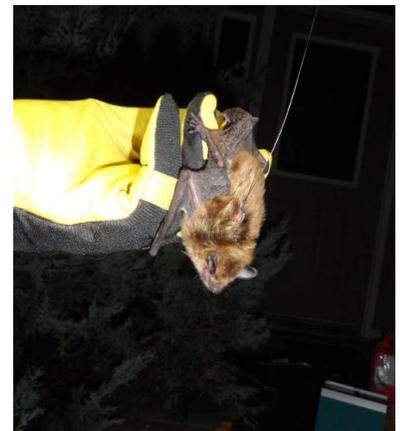


Figure 2. Big Brown bat equipped with temperature sensitive radiotransmitter.



Figure 3. E Boutilier and L Messet using telemetry to locate foraging bats.

## Canadian Section of The Wildlife Society (CSTWS) News



Stacey was awarded the CSTWS Student Travel Award.

Stacey Elmore, a PhD student at the University of Saskatchewan, will be representing Canadians and the University of Saskatchewan at the upcoming TWS Conference in Milwaukee in mid-October. Stacey was a deserving recipient of the Canadian Section of The Wildlife Society's student travel award. Stacey is researching the

occurrence and detection of endoparasites in an arctic terrestrial food web. Specifically, Stacey's research focuses on arctic fox, snow and Ross' geese, and lemmings and she is using occupancy modeling to answer main questions about what parasites are in the food web. One main parasites of concern is *Toxoplasma gondii*, and results from

Stacey's research will help inform researchers and surveillance programs about what tissues are best to test to maximize detection of the parasite. These results are important for public health as well as to guide testing protocols.

Congratulations Stacey!

## Research in Saskatchewan: RSM Bio-Blitz 2013



RSM's Dr. Ray Poulin with a really big snake.

This summer, staff at the Royal Saskatchewan Museum undertook the largest wildlife survey ever conducted in Saskatchewan with the Bio-Blitz Project.

RSM scientists and several teams of summer students fanned out over southwest Saskatchewan for this summer-long project to find and capture as many different species of insects, reptiles and small mammals as they could. The main focus of this project was to find and identify species of native bees and other pollinators, and establish a baseline for monitoring how animals respond to changes in the landscape.

"Compared to other provinces, there is a pretty significant gap in our knowledge about Saskatchewan's native species, and this survey will go a long way toward closing that gap," RSM Chief Curator Dr. Ray Poulin said. "The scope of this survey makes it one of the most comprehensive ever undertaken in Canada. We fully expect to find many species that are new records for Saskatchewan, and quite possibly species new to science."

Scientists and students carried out the fieldwork from five base camps. The surveys focused on some of the more unique areas of the grasslands

region including the Big Muddy Valley, Killdeer Badlands, Great Sand Hills, Saskatchewan Landing Provincial Park and a number of locations in the Cypress Hills. The survey didn't focus on well-known wildlife species, but instead on the vast diversity of insects and other invertebrates and smaller animals that call Saskatchewan home.

A large amount of material was collected during the summer and it will keep researchers busy for years to come.

From the RSM website, [www.royalsaskmuseum.ca](http://www.royalsaskmuseum.ca).

## Conservation News:

### Emergency Protection Order issued for the Greater Sage-Grouse

On September 17, 2013, the Government of Canada announced its intention to introduce an Emergency Protection Order for the Greater Sage-Grouse in the coming months.

The Greater Sage-Grouse is an endangered bird that depends on the unique prairie ecosystem of southeastern Alberta and southwest Saskatchewan. The Sage-Grouse population in Canada has declined by nearly 98% since 1988, with less than 150 birds now remaining in Alberta and Saskatchewan.

An Emergency Order under the *Species at Risk Act* (SARA) can be used when a species faces imminent threats to its

survival, and current protection measures are deemed inadequate. An Emergency Order for Greater Sage-Grouse would protect the habitat necessary for the survival of the species.

The Order would impose obligatory restrictions designed to protect the Sage-Grouse and its habitat on provincial and federal crown lands in Alberta and Saskatchewan with no restrictions on activities on private land, nor on grazing on provincial or federal crown lands.

This would be the first time since the Act's inception that this mechanism is being invoked.

The announcement followed a successful legal challenge by Ecojustice, representing a number of conservation organizations (Alberta Wilderness Association, Western Canada Wilderness Committee, Nature Saskatchewan and Grasslands Naturalists).

While this announcement is good news and an important step forward, the all-important details of when the order will be formally issued and what conservation measures will be required are still unknown.

*"The Sage-Grouse population in Canada has declined by nearly 98% since 1988, with less than 150 birds now remaining in Alberta and Saskatchewan."*



### Saskatchewan Conservation Data Centre Factoids:

Manages more than 4,500 species records

Contains more than 11,000 Element Occurrences

Consists of more than 300,000 wildlife observations

Actively collects and maintains data for more than 1000 species at risk in Saskatchewan

## WANTED: Newsletter submissions

We are always looking for people to submit content for the following newsletter sections:

- Research
- Trivia
- Job postings
- Upcoming events or activities

In future newsletters we'd like to highlight publications with a Saskatchewan connection. Please let us know about any recent publications you've been involved with, or are aware of, that feature wildlife research conducted within the boundaries of our lovely province.

So go on, don't be shy! Send your ideas for future submissions, or heck, just go ahead and send your submissions to our newsletter editor, Suzanne Joyce, at:

s.joyce@sasktel.net

Thank you!

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*Members of The Wildlife Society manage, conserve, and study wildlife populations and habitats. They actively manage forests, restore wetlands, restore endangered species, conserve wildlife on private and public lands, resolve wildlife damage and disease problems, and enhance biological diversity.*

## Purchase or Renew Your Membership!

It's only \$5 per calendar year!

Here's how to get yours:

### Online

Through <http://store.wildlife.org> (only applicable for full members of TWS)

### In person

In Saskatoon: Contact Jennifer Sheppard (phone 306-975-4791)

In Regina: Contact Yeen Ten Hwang (phone 306-787-5079)

### Mail In

Fill out the form below and mail cheque (payable to: "Saskatchewan Chapter of TWS") to:

SCTWS, c/o Al Arsenault  
423 Carr Cove  
Saskatoon, SK  
S7S 1M2

NAME: \_\_\_\_\_ YEARS TO RENEW (up to 4)?: \_\_\_\_\_

New member?      Need to update address or add TWS membership #?

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_

PROVINCE: \_\_\_\_\_ POSTAL CODE: \_\_\_\_\_

PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

TWS MEMBERSHIP # (if applicable): \_\_\_\_\_



Now you can find us on facebook too! Search for "Saskatchewan Chapter of The Wildlife Society" and give us a "like" to keep up-to-date with SCTWS happenings!