



BC Chapter, Pacific Northwest Section, Society for Range Management

Pacific Northwest Section [Website](#)



UPCOMING EVENTS:

- **April 9-12, 2014** – [BC Wildlife Federation Convention & AGM](#) – Kelowna, British Columbia;
 - **May 22-24, 2014** – [BC Cattlemen’s Association Convention & AGM](#) – Creston, British Columbia
 - **June 11-13, 2014** – PNW Summer Workshop and Tour – Grand Coulee, Washington;
 - **October 15-17, 2014** – “*Sedges to Salmon*” – PNW 2014 Fall Workshop, Tour and AGM – Kamloops , British Columbia;
 - **January 30-February 7, 2015** – “*Managing Diversity*” – [2015 International Society for Range Management Conference and AGM](#) – Sacramento, California;
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IN THIS ISSUE:

1. SRM BC Hosts Fall 2014 Pacific Northwest Section AGM and Workshop – “*Sedges to Salmon*”
 2. High School Youth Forum – Report from the Annual Meeting in Orlando Florida, by Makenna Cyr
 3. Experiment: Using Protein Supplement and Herding to Redistribute Livestock
 4. *Stewardship* – SRM’s Ground Level Forum
 5. TICKS! Tiny threats pose big risks to ecosystem and human health: perspectives and personal experiences
 6. Links to Friends of Healthy Rangelands
 7. ADDITIONAL RESOURCES
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**“Sedges to Salmon”
The hydrological science behind BC
Rangelands**

What: Fall 2014 Pacific Northwest Section Workshop, Tour & Annual General Meeting.

When: Wednesday October 15 – Friday October 17, 2014; [Kamloops, British Columbia, Canada](#). The 2014 fall meeting and tour will explore the relationships between our rangelands



and their hydrological processes. The workshop will take place at Kamloops' own Thompson Rivers University, home to one of the premier Natural Resource Science programs in the province. The workshop will draw from the University's researchers as well as local resource managers for a day of investigation, learning and discussion. We will get some insight into the effects of climate change on grassland ecology as well as the effects of local hydrology and rangeland management on one of the largest viewable sockeye salmon spawning areas in North America. The field tour component will take us out to the Adams River Sockeye Run where, as part of the one in four dominant year run, we will help celebrate **"Salute to the Sockeye 2014"** (<http://www.salmonsociety.com/>).



Mark the dates (October 15-17, 2014) and join us for an incredible educational opportunity and awe inspiring Sockeye Salmon experience.

Thompson Rivers University (<http://www.tru.ca/>)
Roderick-Haig Brown Provincial Park
(<http://www.env.gov.bc.ca/bcparks/explore/parkpgs/roderick/>)

High School Youth Forum – BC Chapter SRM Representative Report

Orlando, Florida February 9-12, 2014

Submitted by Makenna Cyr

The 67th annual High School Youth Forum in Orlando, Florida was one to remember agreed delegates, forum leaders and volunteers alike. The busy week began with introductions, presentation practices and some team building games. Who would've known eating skittles and unwrapping gum while wearing gloves could teach high school students leadership and range management knowledge? Every little thing we did during our time at the forum was extremely beneficial, even if we didn't realize it at the time. After a minimal amount of sleep we got ready to head to Merritt Island Wildlife Refuge. We spent nearly an entire day learning and exploring with volunteers that work at the refuge which is owned and managed by NASA. Things such as soil composition and prescribed burns were emphasized during our visit. That evening was spent doing professional interactions. People working in the range management field as well as students studying range took time out of their trip to the forum to help us learn and answer any questions we may have about their jobs, school programs or the field itself. The next day was presentation day, and each of us awoke being nervous about how the day would go. We had no need to worry, as everyone did extremely well. My presentation "Eat, Rotate, Repeat" on rotational grazing placed tenth. The judges and forum leaders, as well as audience members that



routinely come to watch presentations at the forum agreed that the presentation quality was great this year. Tuesday night consisted of a dance where all of the youth forum participants got to know each other a little better, and I even learned to swing dance. Our final day together included a business meeting and presidential election, Wyatt Wass who also came from the Pacific Northwest section was elected to be president of the 2015 high school youth forum. Next we attended the awards ceremonies where they presented awards to the top 5 high school youth forum presentations, and we also got to learn about the competitions for college and university level students and watch the awards be presented for them. To end the forum we had another dance and social night, followed by a closing session where we traded pins and other items to remember each other. Saying goodbye to the leaders and delegates was very difficult, but we all knew we would keep in touch. It is an amazing thing to know that at such a young age we now have connections with professors and people working in our industry of interest, as well as a group of young people that will be going through the same thing as myself as we grow up and start working in the agriculture and range related industries. The High School Youth Forum was an amazing opportunity. I cannot thank everyone enough for making it possible for all of the students this year. For more information see **ADDITIONAL RESOURCES** section below.

Experiment: Using Protein Supplement and Herding to Redistribute Livestock

Submitted by Matthew Braun

In 2013, Vanderhoof District Range Officer Karen Tabe and Range Practices Agrologist Matthew Braun decided to try something different. They had heard about a trial conducted by Dr. Derek Bailey to move cattle away from their usual grazing areas to less familiar and potentially less palatable forage using gentle cattle herding and protein supplements. One of Karen's range tenure holders seemed like a good fit. His cattle spent a lot of time on familiar ground grazing the same plants year after year, often putting pressure on adjacent, non-tenured land. The tenure holder was a keen rider and interested in participating so the planning began. First several rangeland health inspections were done to identify areas of over-use and potentially sensitive areas. Then potential sites for protein supplement placement were located and a distribution plan was crafted with the rancher. Protein supplements were sourced and transported to the ranch for introduction to the herd and placement on the range. Several cows were outfitted with GPS tracking collars. Placement of supplements began in mid summer and went until roundup in late September. Follow up included monitoring, speaking with the rancher and an intensive discussion with local range agrologists new to the project. Some change was seen in cattle movement, but no big changes in pressure on familiar grazing areas. Modifications will be made to the project in 2014, but it will continue. This is a chance to show what opportunities



Figure 1. Curious cow approaching tub of protein



Figure 2. Protein supplement dissolving into ground near the end of the grazing season (totally not a big pile of . . . poo).

exist on Crown range in central BC. Thanks to Karen and her rancher for sharing their time and effort on this project for the benefit for the rest of the range program.

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Stewardship - SRM's Ground Level Forum

Submitted by Karen Tabe

Hey, did you see the new newsletter from SRM called Stewardship? It is the refreshing creation of Editor, Gary Frasier. Check out the most recent publication, I love the informal, conversational tone!

<http://www.srm.org/stewardship.shtml>

I asked Gary about why SRM wanted to publish a third publication and here is a summary of what he said:

The SRM publication, Stewardship, was started to meet the desires of the SRM membership to have a publication that provided information in a format that was interesting and easy to read.

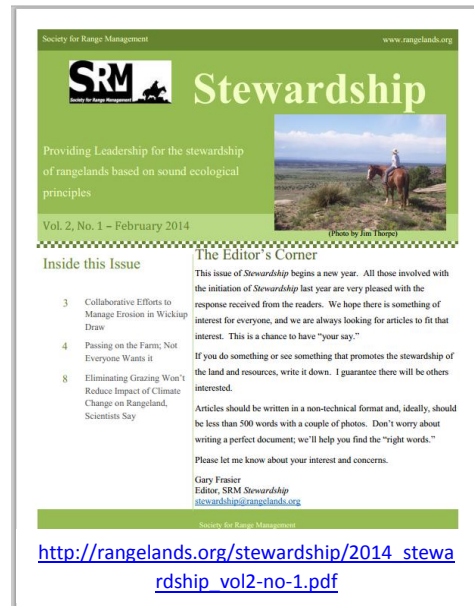
Gary has been involved in the SRM publications since about 1980. Rangelands was originally started to provide a non-technical publication to complement the technical SRM publication, Journal of Range Management (now Rangeland Ecology & Management). With time Rangelands became more technical and was not serving the need for a ground level forum. A publication was needed that dealt with the proper management of range resources in a setting of simple easily comprehended format.

After serving as SRM President, Gary's time commitment to the Society was greatly reduced. In the summer of 2013, he was asked to start a new electronic publication to meet the membership desires.

The publication came into being in October 2013. What you see is the result of the hard work of SRM staff members Kelly Fogerty, SRM Washington Liaison and Vicki Truijillo, SRM Office Manager. Gary provides the articles and they do the layout and all that involves.

The publication known as Stewardship is a work in progress. Its success will depend upon obtaining the stories to be told. It is a place to learn about other places, people, and their ideas. It will provide a means where ideas pro and con can be expressed. It is hoped that all SRM members can contribute and claim a piece of the action. We can only publish what is submitted.

If you do something or see something that promotes the stewardship of the land and resources, write it down. Its guaranteed that there will be others interested. Articles can be sent to Gary Frasier, Editor SRM *Stewardship* (stewardship@rangelands.org) and should be written in a non-technical



format and, ideally, should be less than 500 words with a couple of photos. Don't worry about writing a perfect document, he'll help you find the "right words".

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TICKS!

Tiny threats pose big risks to ecosystem and human health: perspectives and personal experiences

Submitted by: Sonja Leverkus¹ and Carl Gitscheff²

¹BC Chapter of the Society for Range Management &

²BC Wildlife Federation

A tiny threat with significant ramifications is approaching our grassland ecosystems, wildlife and each of us who frequent the outdoors! They are making their way to a blade of grass or to the coat of your livestock or native wildlife near you. Many of us have had an interaction with them already – some of us unknowingly! Ticks are one of the reasons we tuck our pants into our socks or the reason why our mothers told us not to play in the Caraganas or long grass when we were little. Ticks, like other biting insects, are hosts to a variety of diseases that impact humans, livestock and wildlife. The tick [lifecycle](#) starts as an egg on the ground, developing into a nymph and then continuing as an adult feeding on hosts' blood to gain enough nutrition to lay more eggs and start the cycle again. They are patient little parasites that sit dormant until they feel vibration. That vibration is caused by movement of a much larger species [a cow, moose, deer or human]. Upon feeling the vibration the tick lifts his front legs and waits. If the host species brushes by the tick, it hooks on and then starts its journey. Depending on the host, that journey could be a few hundred yards or a few thousand kilometers. Once the tick starts this journey it focuses on only one thing and that is to bite his host and feed on blood. This tick, if carrying any disease, transmits it directly into the bloodstream of its host. Once there, [Lyme Disease](#) can sit dormant in its new host for a very long time, perhaps many years. Since [Lyme Disease](#) is a relatively new disease, there is much debate about its symptoms, diagnosis and treatment in humans.

In cattle, tick infestations cause stress, reduced weight gains, irritation, pruritus and gotch ear ([Polito et al. 2013](#)). It is possible that similar impacts may occur to wildlife. What will the interactions and impacts be with others who come into contact with livestock and wildlife? There is potential for increased interactions between ticks and other blood sucking insects with those who practice traditional rights on the land including hunting and trapping as well as the use and preparation of furs and hides. We believe it is critical for First Nation and non-First Nation people to be aware of the impacts that ticks may have on human health. Ticks have the ability to live for years in grass, waiting for a host. This buildup of ticks can be reduced by a simple prescription: fire. Studies have shown that fire limits tick abundance. In particular, patch-burn grazing has been demonstrated as a way to help control ticks ([Polito et al. 2013](#)). Patch burning involves the use of fire in



pastures or landscape units to help distribute livestock or wildlife over a certain geographical area. Fuhlendorf and Engle (2004) reported that cattle spent 75% of their time in the most recently burned units. Fire and grazing in these same units may negatively influence tick abundance due to the decreased habitat ([Polito et al. 2013](#)).

****Please see ADDITIONAL RESOURCES section at the end of the Newsletter for more information****

Sonja Leverkus is an Ecosystem Scientist, PhD candidate and a Past President of the BC Chapter of the Society for Range Management. Carl Gitscheff is a Director on the BC Wildlife Federation Board and is a local trapper and hunter in the Peace. For communications with the authors, please contact Sonja Leverkus at sonja.leverkus@okstate.edu or Carl Gitscheff at cowboy@pris.ca. The authors would like to thank Julia O'Shannassy, Bob Gray and J. Derek Scasta for additional technical support in the development of this article and the BC Chapter of the Society for Range Management who have supported, encouraged and enabled discussion on this critically important topic.



What will the future impacts by ticks and other insects to fur-bearing animals like Fisher (L) and northern ungulates like caribou (R). Photo credits: C.M. Gitscheff (L) and S.E.R. Leverkus (R).

Literature cited

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Fuhlendorf, S.D. and Engle, D.M. 2004. Application of the fire-grazing interaction to restore a shifting mosaic on tallgrass prairie. *Journal of Applied Ecology*. (44) 604-614.

Polito, V.J., Baum, K.A., Payton, M.E., Little, S.E., Fuhlendorf, S.D. and Reichard, M.V. 2013. Tick abundance and levels of infestation on cattle in response to patch burning. *Rangeland Ecology and Management*. (66) 545-552.

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Trollope, W.S.W. 2011. Personal perspectives on commercial versus communal African fire paradigms when using fire to manage rangelands for domestic livestock and wildlife in Southern and East African ecosystems. *Fire Ecology*. (7:1) 57-73.

Links to Friends of Healthy Rangelands:



<http://www.bcgrasslands.org/> - Grasslands Conservation Council of BC



<http://bcinvasives.ca> – Invasive Species Council of British Columbia

ADDITIONAL RESOURCES:

1. Find us on Facebook: <https://www.facebook.com/#!/BCChapterofSocietyforRangeManagement>
2. Society for Range Management, Pacific Northwest Section: <http://rangelands.org/sections/pnw/index.shtml>
3. BC Wildlife Federation AGM & Convention: <http://www.bcwf.net/index.php/2013-agm>

4. BC Cattlemen's Association Convention & AGM: <http://www.bccaagm.com/>
5. Society for Range Management Conference & AGM 2015: <http://rangelands.org/events/>
6. High School Youth Forum: <http://rangelands.org/HSYForum/index.shtml>
7. Society for Range Management Publications: <http://rangelands.org/publications.shtml>
8. Ticks & Lyme Disease:
 - a. Tick Removal: <https://www.healthlinkbc.ca/healthtopics/content.asp?hwid=tp23585spec#tp23586>
 - b. Tick Removal Devices: <http://www.tickedoff.com/>;
<http://www.coghlan.com/products/tick-remover-0015>; <http://www.tickkey.com/>;
<http://www.otom.com/how-to-remove-a-tick>;
 - c. BC Provincial Government Tick Information: <http://www.agf.gov.bc.ca/cropprot/ticksbc.htm>
 - d. Tick Lifecycle: http://www.cdc.gov/ticks/life_cycle_and_hosts.html
 - e. Canadian Lyme Disease Foundation: <http://canlyme.com/>
 - f. International Lyme and Associated Diseases Society: <http://ilads.org/>
 - g. A recent article in the New York Times brings forward concern about ticks in moose populations and can be found at
http://www.nytimes.com/2013/10/15/science/earth/something-is-killing-off-the-moose.html?_r=1&
 - h. Bill C-442 – Petition for a Canadian Lyme Disease Strategy: <http://elizabethmaymp.ca/lyme-disease>
 - i. “Ticked Off” – CBC documentary about ticks and Lyme Disease
<http://www.cbc.ca/natureofthings/episodes/ticked-off-the-mystery-of-lyme-disease>
 - j. B.C. Centre for Disease Control suggestions on prevention
<http://www.bccdc.ca/dis-cond/a-z/1/LymeDisease/default.htm>
 - k. Polito, V.J., Baum, K.A., Payton, M.E., Little, S.E., Fuhlendorf, S.D. and Reichard, M.V. 2013. Tick abundance and levels of infestation on cattle in response to patch burning. Rangeland Ecology and Management. (66) 545-552. <http://www.bioone.org/doi/full/10.2111/REM-D-12-00172.1>

NEWSLETTER brought to you by the Executive of B.C. Chapter, PNW Section, Society for Range Management contact us for more information on becoming a member **or visit:** <http://rangelands.org/membership.shtml>

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First VP:	vacant
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2013-2014:	
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4. 2014-2015:	Anne Skinner (anne.skinner@gov.bc.ca)
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	Bob Fowler (nishka1958@gmail.com)