

Stewards of Saskatchewan

Editors: Rebecca Magnus, Kaytlyn Burrows, Kristen Martin, and Melissa Ranalli

Fall 2013 / Spring 2014

Stewards of Saskatchewan is a suite of voluntary stewardship programs delivered by Nature Saskatchewan:

- Operation Burrowing Owl
- Rare Plant Rescue
- Shrubs for Shrikes
- Plovers on Shore

Stewards of Saskatchewan

We work with landowners and land managers to conserve prairie habitat for the future.

Through these programs, 620 stewards are conserving over 253,000 acres (102,388 hectares) of prairie and 63 miles (101 km) of shoreline habitat for species at risk and all prairie species.



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Rare Plants and Ranchers Continues in 2013

Kristen Martin, Nature Saskatchewan

After a long winter that seemed like it would never end, spring and summer were welcomed on the prairies with open arms. When the snow finally melted, Nature Saskatchewan's Stewards of Saskatchewan program staff headed out into the field to search for, and monitor prairie species at risk, and to spread the word about prairie habitat conservation to landowners and land managers throughout southern Saskatchewan.

As always, Rare Plant Rescue (RPR) had a busy summer! In 2013, the RPR search crew focused the majority of their efforts on searches for Slender Mouse-ear-cress, Western Spiderwort, and Smooth Goosefoot. All three species are listed as threatened under Canada's Species at Risk Act. Despite the presence of suitable habitat, 2013 appeared to be a poor year for Slender Mouse-ear-cress, with no new occurrences detected, and no plants found at locations where this species has been in previous years. However, for rare plants, even absence data is valuable as we continue to learn about the ecological



Western Spiderwort flower. Each flower opens just once, for a few hours in the morning, then wilts and dies. Photo by Alana Block.

requirements of these rare species. It appeared to be a better year for Western Spiderwort, with one new occurrence found, and Smooth Goosefoot, with seven new occurrences found. The search crew also found seven new occurrences of Beaked Annual Skeletonweed, a provincially-rare species.

Although no new Buffalograss or Hairy Prairie-clover searches were conducted in 2013, six of our RPR participants with these species on their land initiated Rare Plants and Ranchers projects in 2013.

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Thank You to Our Stewards!

We dedicate the Stewards of Saskatchewan newsletter to you, our stewards. Collectively, your individual actions to conserve habitat are of great importance, not only for species at risk and other native plants and animals, but for a healthy prairie. Your appreciation and understanding of the natural world will ensure its beauty and function is preserved for future generations. Thank you for your continued dedication and commitment—without your support our programs would not be possible. Nature Saskatchewan is proud to work alongside you!

TEN Years of Prairie Loggerhead Shrike Habitat Conservation

Rebecca Magnus, Nature Saskatchewan

The Shrubs for Shrikes (SFS) habitat stewardship program is celebrating ten years of shrike conservation in Saskatchewan! The SFS program was initiated in 2003 in response to a sharp decline in the Prairie Loggerhead Shrike (*Lanius ludovicianus excubitorides*) population. The prairie population had declined by more than 80% in less than 30 years.

With Operation Burrowing Owl serving as a model, the SFS program was created to raise awareness amongst landowners, and to work towards habitat conservation for Loggerhead Shrikes. Today, including the 12 new participants that joined SFS this summer, there are 130 participants conserving nearly 19,768 acres (8,000 hectares) of Loggerhead Shrike habitat.

The tenth field season was met with the challenge of reduced summer staffing, but it still proved to be successful. Fewer landowner visits

were conducted (only 12 sit down visits), however, an eight-day grid road search was still conducted. During the search between Val Marie, Govenlock, and Eastend, staff observed 35 pairs and 15 young. The annual SFS participant census also resulted in 22 pairs and 8 young reported. Two news releases also went out this summer, and three presentations were given. One Conservation Awareness Day supper was held in Wood Mountain Regional Park, attracting 23 participants and locals for a delicious meal and lively presentations.

Ten years of habitat conservation for Loggerhead Shrikes is just the beginning. We have reached out to, and had sit down visits with over 600 landowners and land managers, and reached out to thousands more through our presentations, publications and news releases. However, we still have a lot of work to do! There are many shelterbelts and abandoned farmsteads being taken down each year, and many more that are at risk of being lost in the future. Pesticide use on crops is not likely to stop, so it is up to us to work with landowners and raise



Double Diamond Ranch SFS gate sign.
Photo by Irene Wiggins.

awareness about responsible use of these chemicals. We understand the need to put food on the table, but also understand there has to be a balance if we are to maintain our biodiversity.

I extend my heartfelt thank you to all those conserving habitat for Loggerhead Shrikes and all species. We must continue to support wildlife habitat conservation and threat mitigation, hopefully resulting in the Loggerhead Shrike being downlisted from threatened, and its recovery to a healthy population for future generations to experience and enjoy.

If you have any questions, concerns, or would like to share a story, please feel free to contact me at (306) 780-9832, toll free at 1 - 8 0 0 - 6 6 7 - 4 6 6 8 , or outreach@naturesask.ca.

Rebecca Magnus, Shrubs for Shrikes and Plovers on Shore Coordinator

What a wonderful summer it was! So many landowners reaching out to say hello and share their observations, thank you! Since starting as the Shrubs for Shrikes and Plovers on Shore Coordinator in 2010, I have been truly lucky to learn from every one of you. Prior to 2010 I went through my post-secondary schooling here in Saskatchewan, where I spent two years at SIAST Woodland Campus in Prince Albert obtaining my diploma in Integrated Resource Management and completing my Bachelor of Science degree in Environmental Biology at the University of Regina. I have been working with Nature Saskatchewan since 2007, and have grown fond of the staff, members, and participants. Now, as a wife and mother of a two-year-old, my drive for conservation is stronger than ever! I look forward to visiting with you all in the future and cannot wait to learn all about your conservation stories and practices.



What's New with Operation Burrowing Owl?

Kaytlyn Burrows, Nature Saskatchewan

Operation Burrowing Owl (OBO) had a challenging and interesting field season this year. Because of funding uncertainty, the OBO Coordinator position was vacant for several months and was not filled until mid-July, after Lacey Weekes took on the role of Education and Conservation Manager. The Burrowing Owl had a challenging summer as well, according to this year's census. The number of Burrowing Owls reported by OBO participants is down this year; 21 pairs were reported by 15 participants at 18 different sites, showing a 40% decrease from the 35 pairs reported in 2012. This may be due to relatively low numbers of gophers and badgers, along with the long winter and wet spring. There is some good news though, through the OBO census, participants also reported sightings of two pairs, three singles, and nine young on new sites! Of the 21 pairs reported on previously enrolled sites, nine were reported by habitat enhancement participants. Five pairs were nesting on sites that have been enhanced, and four pairs were spotted in areas near enhanced sites. This seems to indicate that enhanced sites are attracting Burrowing Owls and providing suitable habitat for them.

Due to funding cuts, the habitat enhancement program has been temporarily inactive from 2012-2013, however, we are hopeful that we can bring it back in 2014

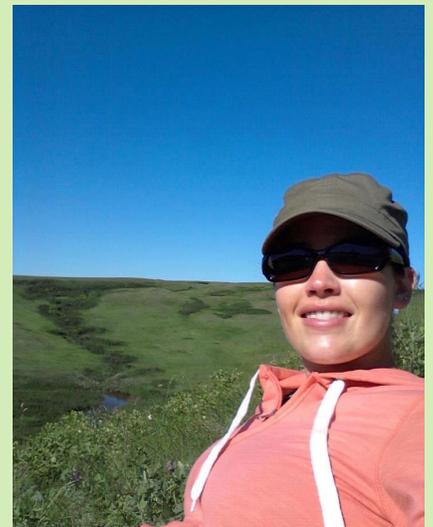
(pending funding). Our habitat enhancement program offers 50:50 cost-sharing opportunities for eligible landowners to improve habitat for the Burrowing Owl, Piping Plover, or Sprague's Pipit. Eligible project sites include areas within 1 km of an active or recently active (within the last three years) owl nest, that currently have nesting plovers or shorelines designated as critical plover habitat, or sites that currently have nesting pipits. All project sites must be adjacent to existing grassland. We can support converting cropland to perennial pasture using a 100% native seed mix, erecting wildlife-friendly fences, and developing alternative water sources for livestock.

OBO has been busy this fall visiting 38 current OBO participants, five potential participants, and signing on three new participants. The number of Burrowing Owl sightings reported through the HOOT line was much lower this year compared to the past. As a result, it has been a challenge to find new participants. However, my co-workers and I had a great time in rural Saskatchewan visiting with those participants, old and new, who graciously allowed us into their home, on their land, and entertained us with their Burrowing Owl stories. It is truly the best part of our job!

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Kaytlyn Burrows, Operation Burrowing Owl Coordinator

Greetings stewards of Saskatchewan! My name is Kaytlyn Burrows (strange coincidence, I know!) and I am the new Operation Burrowing Owl (OBO) Coordinator. I have been with Nature Saskatchewan for well over a year now, and couldn't be happier! I started as a member of the Rare Plant Rescue search and monitoring crew in the summer of 2012, and I have been fortunate enough to stay on full-time since then, first as Office Coordinator and now as the OBO Coordinator. I knew from a young age that I wanted to pursue a career in conservation, and began my journey in 2010 when I enrolled in the Conservation and Restoration Ecology diploma at Lakeland College in Vermilion, Alberta. It was there that my passion for conservation really began to grow, and I knew I was on the right track. As a self-proclaimed 'city kid', I was able to experience and learn so much during my years at Lakeland College, that I now bring into my position here at Nature Saskatchewan. I have had the privilege to meet and visit with many of you, the landowners, since I began as OBO Coordinator. In that time, I have gained a greater appreciation for our rare and delicate prairie. I am so thankful to you for giving me that opportunity. I look forward to what this position has in store for me, and I cannot wait to meet more of you in the coming year!



Important Bird Areas Summer Adventure

Gabriel Foley, Nature Saskatchewan
Summer Assistant

I spent June and July travelling to 26 different Important Bird Areas, or IBAs, in Saskatchewan. This had, very literally, taken me on a tour of the whole province. I had covered over 14,000 kilometers and spent more than 300 hours in my truck. The northernmost border of Saskatchewan was the only border I hadn't seen. I saw a total of 151 species in those six weeks and added four new species to my list of birds I have seen in Saskatchewan (Pileated Woodpecker, Great Gray Owl, Great Egret, and Orchard Oriole). I had been hired by Nature Saskatchewan to count whatever birds could be found at these IBAs, to look for any potential conservation threats, and to meet with IBA caretakers.

An Important Bird Area is essentially just what it sounds like; an area that is important to birds. Areas become IBAs because there are endangered species using a site regularly (such as shoreline used by Piping Plovers), or large numbers of birds (like Sanderlings at Chaplin Lake). There is no protection afforded to a site simply by virtue of being an IBA, but it does help begin the conservation process by identifying sites that are critical to birds. Most IBAs have a caretaker, a volunteer who goes out to an IBA two to three times annually to survey for birds and look for threats. Of the 53 Saskatchewan sites, there are still a handful without a caretaker, particularly in the north or southwest

part of the province where there are fewer residents.

Please contact Lacey Weekes for more details or information on becoming a caretaker, by email at lweekes@naturesask.ca, or by phone at (306) 780-9481 in Regina or 1-800-667-4668 in the rest of Saskatchewan. Thank you for your interest.



Surveying East Block of Grasslands National Park. Photo by Ioanna Salvarina.

Weed Notes – “The Marsh Monster”

Kristen Martin, Nature Saskatchewan

The spread of invasive, non-native plant species is a common threat to many of Saskatchewan's species at risk. Purple Loosestrife (*Lythrum salicaria*) can be identified by its spikes of bright purple/magenta flowers that appear in late June to September, its reddish-purple square stems, and hairy, linear, leaves. This species was introduced from Europe in the 19th century, and has spread throughout North America. You may have seen it in your own garden. Common as an ornamental plant, garden cultivars of Purple Loosestrife such as “Morden Pink”, “Morden Gleam”, and “Dropmore Purple” can still be purchased at some greenhouses today.

Purple Loosestrife Facts:

- It spreads quickly and grows in dense stands that displace native wetland vegetation.
- Leads to a decrease in biodiversity, a reduction in habitat and food for wildlife, and can have negative impacts on nutrient cycling.
- EACH mature plant can produce MILLIONS of seeds.
- Greenhouse cultivars, once thought to be sterile, can produce and spread viable seeds.

What can you do?

Do not plant garden varieties of Purple Loosestrife, and remove it from your garden; dig up plants and roots, and burn the plants or bag them and take them to the landfill (removal is best done in the spring before seeds are produced).



Purple Loosestrife invading wetland habitat. Photo by Laurie Johnson.

Native Prairie Restoration/ Reclamation Workshop

“Stretching Our Boundaries”

**January 29-30, 2013
Regina, SK**

Please go to the PCAP website at www.pcap-sk.org for more information, or contact Natasha Wilkie at (306) 352-0472 or at pcap@sasktel.net.

**...Rare Plants and Ranchers
Continues in 2013,
continued from page 1**

Through Rare Plants and Ranchers program, delivered in conjunction with the Native Plant Society of Saskatchewan, a Professional Agrologist conducts an ecological health assessment of participants' native prairie and riparian areas. A short interview is also conducted with participants to gain a better understanding of their ranching operation. A personalized report is then drawn up, providing participants with the results of the assessments, as well as specific recommendations of beneficial management practices that would improve habitat for rare plants on their land, and benefit their ranching operation and bottom line. An example of a beneficial management practice would be controlling the spread of invasive

weeds such as Leafy Spurge. Dollar-for-dollar matched funding is then available through the program if participants choose to implement any of the suggested beneficial management practices. Any RPR participant who has signed a Voluntary Stewardship Agreement and who has plant species at risk on their land is eligible for this program, with 5 to 10 participants being accepted into the program each year.

In 2013, RPR welcomed four new landowners to its growing community of participants. Together, 74 RPR participants are now conserving over 80,000 acres of native prairie habitat, all while continuing to use the land in the same way they always have.

We would like to extend a big thank you to everyone who attended our Conservation Awareness Days this year. It was wonderful to visit with all of you, and we would like to extend our gratitude and appreciation to all

Stewards of Saskatchewan landowners and land managers for their continued support of conservation in Saskatchewan.

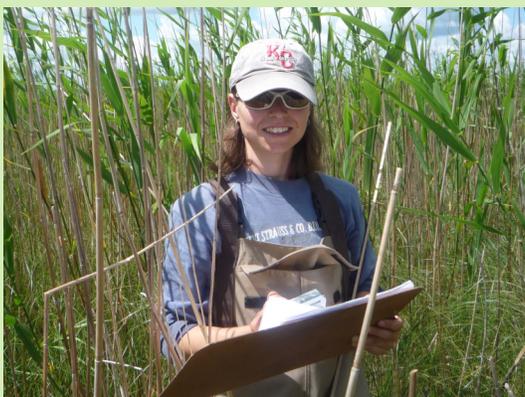
As always, if you have any questions or comments about the RPR program, rare plants in general, or to get involved with the Rare Plants and Ranchers program, please feel free to give me a call at (306) 780-9417 or email me at rpr@naturesask.ca. I would love to hear from you!



Laurie Johnson conducting field work near Burstall, SK. Photo courtesy of Nature Saskatchewan.

Kristen Martin, Rare Plant Rescue Coordinator

Despite growing up as a “city kid” in Regina, some of my fondest childhood memories are of spending time outdoors. However, it was not until mid-way through university, after spending a summer working as a field technician on a Piping Plover research project, that I discovered my true love of nature, research, and conservation. After graduating from the University of Regina with a Bachelor of Science Honours Degree in Biology, I spent several years working on various research projects, studying grassland songbirds, waterfowl, and prairie snakes. With each new project, my fascination with the diversity of prairie ecosystems, plants and wildlife grew. I went on to pursue a Master's Degree in Natural Resources Management from the University of Manitoba, graduating in the Fall of 2012. Now living on a farm near Edenwold, Saskatchewan, with my husband and young twin boys (and a herd of goats!), I continue to enjoy exploring the natural areas around me, and observing and studying the amazing diversity of plants and animals that call Saskatchewan home. I am thrilled to be taking on the role of Rare Plant Rescue Coordinator, and I would like to thank all of the landowners for their participation and interest in Rare Plant Rescue – your dedication is key to the success of the program! I look forward to meeting and visiting with many of you next spring and summer.



Conservation Awareness Days: Showing Our Appreciation

Each year, Nature Saskatchewan hosts several Conservation Awareness Days to show our appreciation for our Stewards of Saskatchewan participants. These gatherings allow us to meet and mingle with our participants, share stories, highlight various conservation topics, and enjoy a delicious meal. One of our Conservation Awareness Days was held on July 18, 2013 (November 28, 2013 in Milestone), Nature Saskatchewan hosted a fantastic event in Wood Mountain Regional Park, with 23 local participants in attendance. The evening started off with a lovely meal catered by Jackie Wolfe and her team that we all enjoyed while chatting and catching up. Following supper, the Stewards of Saskatchewan



Conservation Awareness Day supper held in Wood Mountain Regional Park hall July 18, 2013. Photo courtesy of Nature Saskatchewan.

summer staff, Kayla Hatzel and Steve Abbott, gave an informative presentation on our stewardship programs and what we have been up to. Gabriel Foley, Nature Saskatchewan's Important Bird Areas (IBA) Assistant, gave a lively and energetic presentation on the IBA's in Saskatchewan and their importance to bird conservation. Finally, the Saskatchewan Burrowing Owl Interpretive Centre gave a presentation on their activities and brought along a friend... a live Burrowing Owl! She was the

highlight of the evening and quite the charmer.

Thank you to Wood Mountain Regional Park for providing us with a beautiful venue, Jackie Wolfe and her team for the delicious meal, and the local landowners who came out and participated in our Conservation Awareness Day. These events are only a small token of our appreciation for what you do, and we cannot thank you enough for your support and dedication to our programs and stewardship of the Saskatchewan prairie!

Melissa Ranalli, Species at Risk Manager

While both of my parents come from farming communities, I grew up in Regina. As a child I spent my summers outside, exploring the fields and creek behind my house, and helping out with my parents' over-sized garden. However, it wasn't until I was in university that I began to fully appreciate the magnificence and beauty of the prairies, and the species they support. I developed an interest in many topics, which has led me to a variety of work and research streams; most recently species at risk conservation.



I feel very fortunate to be working for Nature Saskatchewan as the Species at Risk Manager. I've been in this role for more than two years now, and I think I'm finally getting the hang of it! My career with Nature Saskatchewan first began in 2009, when I was a member of the Rare Plant Rescue (RPR) search crew. I returned to Nature Saskatchewan the following summer, then took on the role of RPR coordinator for a year before starting in my current position. I now have a more behind-the-scenes role; my main contributions are in program planning, fundraising, and oversight. While I don't get out of the office and interact with our participants nearly as much as the program coordinators, I try to sneak out now and again to help out as needed. These outings always renew my motivation, and gratitude to you, the stewards. The breathtaking beauty of our wide open spaces, rolling hills, and unique plants and animals, reinforces my desire to conserve these special places and reminds me that we work with such dedicated stewards.

What's the Difference? Short-eared Owl vs. Burrowing Owl

It is not uncommon for a Short-eared Owl to be mistaken for a Burrowing Owl. The Short-eared Owl nests on the ground unlike most other owls, and the Burrowing Owl nests underground; therefore, the Short-eared Owl is often mistaken for a Burrowing Owl, but there are several big differences between the two species. The information and pictures below will help you distinguish between them. If you see a Burrowing Owl, please report it to Operation Burrowing Owl!



Photo by Randy McCulloch

Short-eared Owl

- Medium-sized owl, approximately 15 inches tall
- Boldly streaked breast
- Light facial disks with dark black patches around the eyes
- Small 'ear' tufts that are not always visible
- Black 'wrist' marks on the underside of the wings



© Brian K. Jeffrey

Burrowing Owl

- Small owl, approximately 9 inches tall
- Long featherless legs
- Mottled brown and white feathers
- Bushy white 'eyebrows' and 'chin' with large yellow eyes

...What's New with Operation Burrowing Owl?, continued from page 3

I would like to thank each and every one of you for your dedication to OBO. Your passion and desire to conserve our beautiful prairie is admirable.

I would also like to thank Lacey Weekes for all of her hard work as OBO coordinator. I wish her the best in her new position as Nature Saskatchewan's Conservation and Education Manager, and I cannot express enough how grateful I am for her help and guidance as I begin my journey as OBO coordinator.

As always, if you have any questions or comments regarding OBO, or if you would like more information on our habitat enhancement funding, please do not hesitate to give me a call at (306) 780-9833, toll free at 1-800-667-4668, or email me at ofo@naturesask.ca. I would love to hear from you!



Native seeding project in second year with OBO participant Julie MacKenzie and her son Matthew. Photo by Rebecca Magnus.

Funding Available for Habitat Enhancement Projects

Nature Saskatchewan's habitat enhancement program offers 50:50 cost-sharing opportunities for eligible landowners to improve habitat for Burrowing Owls, Piping Plovers, and Sprague's Pipits.

For more information or to apply for funding, please contact Nature Saskatchewan at ofo@naturesask.ca or toll-free at 1-800-667-4668.

New Stewards of Saskatchewan Banner Program for All Species at Risk!

Rebecca Magnus and Kayla Hatzel,
Nature Saskatchewan

Stewards of Saskatchewan (SOS) staff are happy to share the launch of the new SOS banner gate sign! Our SOS conservation programs have primarily focused on protecting habitat for target ambassador species, such as the Burrowing Owl and Loggerhead Shrike. The SOS banner program, which currently has six participants, is unique in that it recognizes the land stewardship of landowners and managers with any species at risk (SAR) on their land, and not only our target species.

Nature Saskatchewan's recognition of habitat stewardship for species at risk was initiated through Operation

Burrowing Owl (OBO) in 1987. Since then, the SOS suite has evolved to include Shrubs for Shrikes (SFS), Rare Plant Rescue (RPR), and Plovers on Shore (POS). With the addition of three new OBO, twelve new SFS, six new POS, and four new RPR participants in 2013, these programs have engaged a total of 620 participants who are conserving over 253,000 acres (102,388 hectares) of prairie, and 63 miles (101 km) of shoreline habitat for species at risk. The SOS banner program will focus on all of the other SAR that may be present on privately owned or leased Crown land.

Those with SAR on their land (other than our ambassador species) are invited to participate in this new blanket program. Benefits of becoming a participating habitat steward include: gaining recognition through a gate sign, receiving an informational conservation toolbox, the annual SOS newsletter and species at risk calendar, graduated rewards for continued participation, inclusion in a like-minded group of landowners and land managers, an invitation to our Conservation Awareness Day events, accessing funding opportunities to enhance species at risk habitat, and much more. The new SOS gate sign (artwork by Paule Hjertaas) boasts a Northern Leopard Frog, Monarch Butterfly, Ferruginous Hawk, Sprague's Pipit, and Long-Billed Curlew in

a natural rural landscape.

For a complete list of SAR in Saskatchewan or to discuss the program further, please call our toll-free number at 1-800-667-4668, or email outreach@naturesask.ca. By reporting a SAR sighting, you are helping to monitor SAR, and providing information that contributes to the conservation of these species. Information reported is not shared without permission.

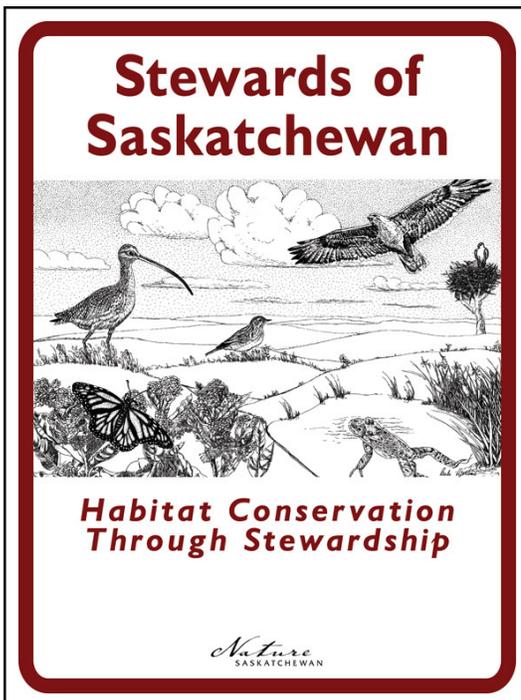
PFRA Community Pastures Update

Lorne Scott, Nature Saskatchewan

In the infamous Omnibus Budget Bill in the spring of 2012, the federal government announced it was phasing out the very successful PFRA Community Pasture Program. Over the next five years, the pastures will be turned over to the Government of Saskatchewan to manage. The 62 pastures consist largely of provincial Crown land, and involve some 1.6 million acres.

The 70-year-old PFRA Pasture Program has served livestock producers by providing grazing opportunities for hundreds of individuals. These pastures, consisting largely of native grasslands and aspen parklands, contain some of the best managed large tracts of natural landscape in southern Saskatchewan, and are vital to the survival of our native flora and fauna.

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Stewards of Saskatchewan gate sign. Artwork by Paule Hjertaas.

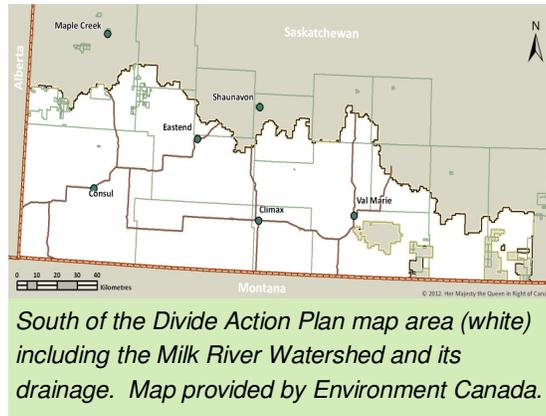
South of the Divide: Stewardship in Action

Wendy Eskowich, Project Coordinator for South of Divide

The mixed-grass prairie in the Milk River region is home to 23 species at risk such as the Burrowing Owl and the Mormon Metalmark butterfly. These species, and hundreds of others, are found here because their habitat--the large tracts of native prairie--still exists, providing them with food, water, shelter, and the space they need to survive and raise their young. This prairie habitat remains intact due to years of careful stewardship. If species at risk are to survive and recover, then this landscape will continue to require stewardship into the future.

Since early 2012, the governments of Canada and Saskatchewan have been working with more than a dozen groups on a plan to conserve and recover species at risk within this working landscape. The project is called **South of the Divide (SoD): Stewardship in Action**. With the support of stakeholders, a unique, multi-species Action Plan is being developed that lists, among other things, measures or actions necessary to help recover a species at risk from becoming endangered, threatened, or extinct. The following nine focal species are included in the SoD Action Plan: Black-footed Ferret (extirpated), Burrowing Owl (endangered-EN), Eastern Yellow-bellied Racer (threatened-TH), Greater Sage-Grouse (EN), Loggerhead Shrike (EN), Mormon Metalmark (TH), Mountain Plover

(EN), Sprague's Pipit (TH), and Swift Fox (TH). The Plan will also include management considerations for the following four species of special concern: Black-tailed Prairie Dog, Long-billed Curlew, McCown's Longspur, and Northern Leopard Frog (boreal/prairie populations).



Local ranchers, farmers, land managers, Aboriginal peoples, industry, and others have been involved in the development of the SoD Action Plan from the beginning. They have discussed cost-effective, pragmatic approaches that will help to conserve species at risk and their supporting habitats while respecting cultural, traditional, and economic values of the people who work and live on the land.

One recommendation resulting from these discussions is to recognize and support proven stewardship actions that achieve desired outcomes. Governments and other agencies with an interest in conserving species at risk may know what type of habitat conditions the species need, but ranchers and other land managers know how best to achieve those conditions in ways that are compatible with how they currently manage their land. Such input from stewards will be

critical to the development of unique multi-species management approaches. This will be especially important when species' habitat needs may conflict with one another. For example, Burrowing Owls require nesting habitat consisting of short grass with good visibility for predator detection, while Sprague's Pipits need taller grass for cover. Similarly, Loggerhead Shrikes require grassland interspersed with shrubs to perch on, while other SoD species might actually benefit from prescribed fire to maintain the prairie and remove shrubs. Thus, the development and implementation of this multi-species Action Plan will require different approaches depending upon which species are present, what their habitat needs are, and how the land is actually being used.

The public will have opportunities to discuss and provide input into the Action Plan before it is finalized early next year. The support of all project partners, interested parties, and local communities will continue to be critical to the success of this initiative once we begin to implement the plan. The South of the Divide: Stewardship in Action project is your opportunity to get involved in conserving our natural heritage.

For more information, contact **Environment Canada** at 1-855-245-0331 or by email at SOD@ec.gc.ca or **Saskatchewan Ministry of Environment** at 1-800-567-4884 or by email at SOD@gov.sk.ca.

Got Gophers? Call Your Friendly Neighbourhood Hawk!

Janet Ng, University of Alberta

Hawks and owls are natural pest exterminators because they eat rodents, but how much can they tackle?

When our group of researchers at the University of Alberta started studying Ferruginous Hawks (a.k.a. the Rusty Hawk or White Hawk) in 2010, we knew they ate gophers (a.k.a. Richardson's Ground Squirrels), but there were a lot of unanswered questions. How much do they eat? Where do they hunt? And how do these dynamics affect a family of hawks?

These questions were put under the spotlight when Ferruginous Hawks were designated a threatened species under the Species at Risk Act. Their population had suffered a 64% decline in population from 1992 to 2005, and farmers and ranchers were not seeing hawks return to their old nest sites. Understanding food and nesting ecology could give important clues for their



Male Ferruginous Hawk with gopher.
Image by Janet Ng.

conservation and recovery.

Hawk research has some unique tools -of-the-trade. Each summer we install small video cameras near hawk nests to answer our first question: how much food do they eat? Turns out hawks eat a lot of gophers because on average, hawks bring five gophers to the nest every day. One busy hawk delivered twelve gophers in a single day! Gophers make up the majority of their diet, but we also observed hawks eating birds, rabbits, and mice.

Ferruginous Hawks can produce anywhere from one to six young each year, but can parents bring enough food home to feed everyone? We used video footage to compare the amount of food delivered to each nest and the number of fledged hawks (i.e., young hawks that naturally leave the nest). We found that nests with more food would fledge more young, which means that parents would have a tough time raising young in years with little food.

Lastly, we also tracked where hawks roamed by using tiny satellite transmitters that record their location, speed, and elevation. We found that most hawks hunted within 3 km of their nest and sometimes flew out as far as 5 km. If you have hawks nesting on your land, they probably hunt gophers across several sections of land.

Natural predators, like hawks, can be part of an integrated pest management strategy. Our research has shown that Ferruginous Hawks can be dependable and effective gopher hunters. Hawks work all summer compared to a single dose of rodenticide. One study found that a



Ferruginous Hawk female. Photo by Janet Ng.

family of Ferruginous Hawks will eat over 500 gophers in a summer! Plus hawks often return to the same nest year after year, resulting in long-term pest management.

If you would like to learn more about being a habitat steward for Ferruginous Hawks, contact Nature Saskatchewan for more information.

...PFRA Community Pastures Update, continued from page 8

The pastures have been managed for livestock production and biodiversity values; some 31 species at risk have been recorded in the pastures.

The first pastures reverting to the provincial government are being leased to existing patrons. It appears that no pastures will be sold in the near future. The Government of Saskatchewan has committed to protecting the natural landscapes in the pastures, and recognizing biodiversity values.

Greater Sage-Grouse Conservation and Population Assessment in Saskatchewan

Beatriz Prieto, Saskatchewan Ministry of Environment

The Saskatchewan Ministry of Environment, through the Fish and Wildlife Branch, is implementing an updated Conservation Plan for Greater Sage-Grouse in the province (February 2012) with priorities on mitigating potential threats (e.g., habitat loss, degradation or fragmentation, invasive species, direct mortality, disturbance, etc.) and collaborating with partners to develop broad conservation efforts. For habitat conservation and improvement, the ministry has identified oil and gas wells within Sage-Grouse habitat, and has been improving internal processes to make sure actions like reclamation of wells are done first in areas of important habitat for the species.

During the spring of 2012, the Ministry of Environment, with support from Nature Saskatchewan, put together an enormous effort to survey the entire range of Greater Sage-Grouse in the province with both aerial and ground survey components.

In 2013 the objective was to test different methods to maximize the chances of detecting birds through a long-term monitoring program in Saskatchewan using non-intrusive and passive surveillance methods

that require less effort with improved results.

Seven sites were selected in southeast Saskatchewan based on evidence found in 2012 of the birds' presence. Three high resolution trail cameras (Rekonix) and two omni-directional song meters (Wildlife Acoustics) were set up within the perimeter of each site.

From a preliminary analysis of the methods: the microphones look more promising than the cameras for this kind of monitoring, as they are easier to set up when not knowing exactly what the accuracy of the historical point location is; the microphones can go lower in the ground reducing the risk of being used as a perching site for raptors or other predators; and once the bird signature is defined, the analysis of



One of the song meters used in 2013 in Saskatchewan. Photo by Beatriz Prieto.

the sound is simpler than that of the pictures.

Hopefully our efforts to ensure that a Greater Sage-Grouse population persists in Saskatchewan will be successful, so future generations can still enjoy this iconic prairie species. Stay tuned for the research results!

PFRA Tree Nursery Update

Lorne Scott, Nature Saskatchewan

Despite an ambitious and comprehensive campaign to keep the PFRA Tree Nursery at Indian Head operating, our widespread efforts have been in vain. For the first time in 110 years, there will be no tree seedlings available in the spring of 2014. The federal government rejected a detailed business plan prepared by western Canadian farm organizations, whereby the coalition of farm groups would lease and manage the nursery until the federal government was in a position to sell the facility.

Some 14,000 post cards were sent to the Prime Minister asking for funding to be restored to the Prairie Shelterbelt Program and the Agroforestry Centre, and over 10,000 names were presented on petitions in the House of

Commons. Many meetings were held with federal Agriculture staff, and Members of Parliament including Minister Gerry Ritz.

Since 1902, some 620 million trees have been provided to landowners across western Canada. In recent years, about four million trees have been provided to 7,000 landowners annually, which shows there is still a strong demand for trees. About half of the trees go to Saskatchewan landowners, while the rest are sent to Manitoba, Alberta, and British Columbia.

Our fear is that the Tree Nursery will be dismantled and sold off piece by piece. A sad and unnecessary end to a very successful and worthwhile prairie icon.

Stewards of Saskatchewan, Operation Burrowing Owl, Rare Plant Rescue, Shrubs for Shrikes, and Plovers on Shore are programs of:



Nature Saskatchewan is a conservation and cultural organization of naturalists. Our vision is "Humanity in Harmony with Nature."

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Prairie Piping Plover Recovery Team
Recovery Team for Plants at Risk in the Prairie Provinces
Saskatchewan Burrowing Owl Interpretive Centre
Saskatchewan Conservation Data Center
SaskPower Shand Greenhouse
Sprague's Pipit Recovery Team

A special thank you goes out to our participating landowners and volunteers!

Check out our Stewards of Saskatchewan YouTube video at:

<http://www.youtube.com/watch?v=6JbPF0QZi10>



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