Adopt a Rancher
Rancher's Guide
Thank you to Heidi Juul of HJ Bioservices Inc for developing this program. The project was undertaken with the financial support of the Government of Canada through the federal Department of the Environment. Ce projet a été réalisé avec l’appui financier du gouvernement du Canada agissant par l’entremise du ministère fédéral de l’Environnement.

The project was also funded in part by the Saskatchewan Beef Industry Development Fund, as well as partner contributions.

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Reprinting courtesy of:

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This work was carried out with the aid of a grant from the Commission for Environmental Cooperation.
The Saskatchewan Prairie Conservation Action Plan (SK PCAP) Partnership brings together 30 agencies and organizations representing producers, industry, provincial & federal governments, environmental non-government organizations, research and educational institutions working towards a common vision of prairie and species at risk conservation in Saskatchewan.
Welcome to the Adopt a Rancher Program!

Grade 10 students studying the Climate and Ecosystems Dynamics science unit will have an opportunity to combine classroom learning with real-life application thanks to your involvement in this program.

These students are learning about how people’s interactions with ecosystems affect ecological functions and why these functions have value. By examining a ranch ecosystem and finding out how sustainable grazing management can protect native grasslands, students experience firsthand how sustainability is achieved in their own region.
Adopt a Rancher Program Support

Contact the Adopt a Rancher program coordinator if you have questions about the program. If the coordinator is unavailable, please contact the PCAP office at (306) 352-0472 or pcap@sasktel.net.

Program Coordinator

Telephone ______________________   Email ______________________

Teacher

Telephone ______________________   Email ______________________

School

Telephone ______________________   Email ______________________

Notes
Adopt a Rancher Program Structure

Part 1: Program Setup at the Ranch

The Adopt a Rancher program coordinator meets with you in the summer or fall prior to program implementation in the school. The tentative areas for a tour and other activities for the May or June Field Day are selected. Safety issues and any concerns are discussed. The coordinator (and you, if you like) takes pictures for the Rancher's Portfolio. The Ranch Profile form is filled out; see page 5 of this guide for more information.

Part 2: Classroom Studies

During the school year, the Grade 10 teacher will begin the Adopt a Rancher program when the Sustainability of Ecosystems Science Unit is scheduled to be taught. Grade 10 students will develop case studies of your ranch using Google Earth maps and internet resources about ecoregions and ecosites, species at risk and invasive alien plant species. They will personalize the case study with information from the Ranch Profile and Rancher's Portfolio.

Students, working in groups, design projects which examine indicators of range health. They will collect data for their projects on Field Day. They will be in touch with you to let you know what they are planning and perhaps ask you a few questions.

Part 3: Field Day at the Ranch

A date for a Field Day will be set for spring. You are the guide, leading students on a tour of your ranch as they collect data for their case study projects and participate in a Photo Scavenger Hunt. Students bring picnic lunches. A game called “Oh Steer!” rounds out the day.

Part 4: Classroom Wrap up

After Field Day, students will complete their case studies in preparation for a class discussion about how ranching can protect Saskatchewan’s native grasslands while providing economic benefits for Saskatchewan people.
Program Components

Rancher’s Portfolio

Grade 10 students will first get to know your ranch through a set of photos taken when the project coordinator comes to see you. Depending on your interest and time, you may wish to take some of the pictures. The pictures are used by the students to study your ranch ecosystem.

Types of photos needed:

- Landscape views
- Landscape features (plains, hills, coulees, water features, riparian areas, etc)
- Roads and other infrastructure
- Roadside ditches with invasive plants
- Rocks and soil (if exposed)
- Plant communities
- Cattle and cattle operations
- Close ups of plants and lichens
- Close ups of invasive plants
- Any animals encountered
- Plant or animal species at risk
- Yourself, if you want
- Anything else you find interesting or unique

If possible photos of a variety of landscape features on your ranch should be taken, not just of the areas where students will visit. This will provide students with a greater understanding of your ranch ecosystem.

When students are touring your ranch, they will participate in a Photo Scavenger Hunt in which they match some of the photos from the Rancher’s Portfolio with actual objects or views.

The subject matter for these scavenger hunt photos should be kept in mind as you and the program coordinator look at the areas where students will visit. As photos are taken in summer or fall, the vegetation will be different from what is seen on Field Day, an interesting comparison for students to make. Photos of small or large permanent features as well as landscape views should be included.
Ranch Profile

Provide information on the Ranch Profile that will help students develop their case studies. The two-page Ranch Profile form is included in this folder, as well as an example of a completed form.

Students, in groups, will be communicating with you as they develop projects to examine range health on Field Day. Indicate on the Ranch Profile how you wish to communicate and provide contact information such as surface mail or email addresses.

The history notes can be cultural (settlement, family involvement in the ranch) or ecological (areas that have been altered, improved or maintained).

The descriptions of your cattle operations should include rotations, watering, rest periods for range and other management processes that you think are important. A few notes are all that’s needed.

Decide where you want the Field Day activities to take place. You may decide to use a few different sites or be focused in one area, depending on your location.

The description of field day sites in the Ranch Profile is important as it helps define the type of projects students will attempt. What features will students see (native grasslands, riparian areas, roadside ditches with invasive plant species, etc.) while visiting your ranch? What are the dominant plant species in these areas?

Projects

As students at school develop their case studies of your ranch’s ecosystem, they learn about the indicators of range health used to assess grasslands.

Included in the Adopt a Rancher program kit for schools is PCAP’s Native Grassland and Forest Rangeland Health Assessment Field Workbook. Students use this resource to design projects that examine some aspect of the indicators. A lot of flexibility is given to students’ interpretations of projects so be prepared for some creativity!

You will know what students will be doing for their projects from the correspondence they send. If any project concerns you, contact the program coordinator. Students are told to use ethical sampling or measuring methods that do not harm the grassland. You may get questions about looking at soil or roots or collecting specimens. As students are working in groups, the volume of correspondence that you reply to shouldn't be too great.

The main objective of the project is to provide students with some skills that allow them to look at native prairie and form an opinion about its health.
Field Day

You have already planned where activities will take place when the program coordinator came on the first visit. You have decided where you want students to eat their packed lunches and discussed washroom protocols with the program coordinator.

How you wish to conduct the tour is up to you. You know the things you want to show or tell the students. Students will be collecting data for their projects and participating in the Photo Scavenger Hunt during this portion of the day.

They’ll probably have questions as you take a look at their projects and perhaps offer a little assistance. Collecting data should take no more than one hour.

The program coordinator will lead “Oh Steer!” after lunch. Students learn about the carrying capacity of rangeland for cattle and the limiting factors that control it.

This fast-paced game involves running between two lines 18 metres apart so a reasonably flat area free of ground squirrel holes or other hazards is needed.

Evaluation

Please fill in the program evaluation form found in this folder. Your comments are valued and important to the success of this program.
Rancher __________________________________________________________________________

Ranch __________________________________________________________________________

Legal Land Description(s) __________________________________________________________________

Preferred communication method(s)
Letters  Emails  Texts  Skype  Telephone

Contact information

Brief history of ranch

Herd size and breeds

How the stocking rate is determined
Grazing management practices
Important native grasses used for forage

Some native prairie plants (forbs or shrubs - not grasses) growing on ranch

Prairie animals seen on the ranch

  Mammals

  Birds

  Reptiles and amphibians

  Species at risk

  Other

Invasive alien plants on the ranch

Description of Field Day site(s)

Concerns about native grassland sustainability
Message to class
Thank you for participating in the Adopt-a Rancher program. Our goal is to provide an educational program that is fun and promotes sustainable grazing management. To help us achieve our goal, please complete this program evaluation.

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<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tbody>
<tr>
<td>The Rancher’s Guide contains the information needed to participate in the program.</td>
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<td>The program coordinator provided the support I needed.</td>
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<td>The Rancher’s Portfolio was a quick and easy way to showcase the ranch.</td>
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<td>The Ranch Profile was quick and easy to complete.</td>
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<td>The communication methods used with the class worked well.</td>
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<td>Communicating with the students was not too time-consuming.</td>
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<td>Students learned a lot about native prairie and sustainable grazing management.</td>
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<td>I enjoyed hosting the Field Day for Grade 10 students.</td>
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<td>The time required to participate in the program fit my schedule.</td>
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<td>I would participate in this program again.</td>
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<td>I will encourage other ranchers to become involved in this program.</td>
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</table>
1. How have students benefited by participating in the Adopt a Rancher program?

2. What did you like the most about the Adopt a Rancher program?

3. What did you like the least about the Adopt a Rancher program?

4. What changes would you make to the program?

5. Other comments:

Thank you for filling out this evaluation!