

South of the Divide

Access Authorization and Field Work Protocols



Canada

Agriculture and Agri-Food Canada
Environment Canada
Parks Canada Agency



Government
of
Saskatchewan

Ministry of Agriculture
Ministry of the Economy
Ministry of Environment
Water Security Agency



Contact, Communicate and Co-operate

Guidelines for understanding, accessing and
conducting research and other activities in the SOD area

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Background Information

The Milk River Watershed in southwest Saskatchewan, also known as the South of the Divide (SoD), contains large tracts of native prairie. These federal, provincial and private rangelands form the backbone of the agricultural, natural resource and energy sectors in the area. They provide hunting, recreational and educational opportunities for the public to enjoy, and unique research opportunities for scientists studying the prairie ecosystem, which includes nearly two dozen species at risk. But this vast prairie is more than a working landscape or recreational area; it is also someone's home and backyard.

Local producers and land managers have protected and maintained this ecosystem through careful stewardship. As more people visit the area to work or play on the land, the potential for increased conflict, misunderstanding and damage arises. This document was created to foster better understanding and communication between all user groups, in order to protect the long-term ecological health of the grassland for the people and wildlife that live there. It is hoped that by combining and sharing information in a single, user-friendly format, each sector will have a better understanding of the needs and expectations, as well as the limitations, of each other's operations. Of course this would involve actually reading the document; therefore, it is highly recommended that all persons and organizations undertaking field work in the southwest, including federal and provincial government environmental departments, non-government environmental organizations and universities, incorporate the reading of this document into their field training, orientation and/or permitting processes.

The overall concept is simple; positive interactions start with contact and courtesy, and can be maintained through communication and co-operation. The intent of this document is to provide background information and guidelines to help achieve this.

General Things to Know Before You Go to the South of the Divide Area

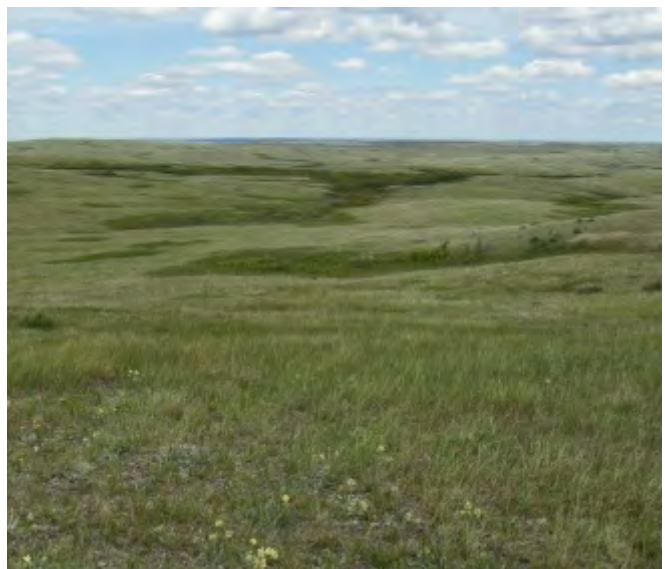
- Cell phone coverage is unreliable and transmission often defaults to USA base stations; a cell booster is recommended.
- Non residents are sometimes unaware or not prepared for things that can go wrong; injury from interactions with livestock or wildlife; severe weather events; vehicle breakdowns; heat and sunstroke.
- Medical facilities are scattered, and services vary widely. Hospitals are located outside of SoD, at Maple Creek, Shaunavon and Swift Current; Eastend, Climax and Ponteix have health centres with limited services.
- Distances to local help can be far if you run into trouble, and there is no guarantee someone will be home due to the nature of the working landscape.
- Individuals are always responsible for their own personal safety. Be prepared. At minimum, read the guidelines outlined in this document regarding personal safety, fire and severe weather protocols and vehicle use. Complete the safety equipment checklist in Appendix 2.

General Protocols for All User Groups

- Remember that as vast as the landscape may appear, it is still someone's home and backyard. Whether you live in the city or in the country, nobody likes to see or hear that someone is snooping around their place. Do not access any land without prior authorization by the occupant – regardless of ownership or management.
- All permits should be carried in the vehicle.
- It is important to respect the business needs of all stakeholders –communication is key.
- Avoid damage to property including public and private infrastructure (see section on Understanding Producer Concerns).
- Removal of flora, fauna, antler sheds, rocks or artifacts is not allowed unless there has been proper authorization.
- Avoid damage to vegetation; always stay on designated trails or follow instructions of the landowner. In the arid climate of the southwest, tracks in native grassland persist indefinitely. Shrubs and trees may not be felled or removed unless part of the permitted activities.
- Avoid damage to soils; do not travel through low lying areas when they are wet – even if they are already impacted by cattle. Do not take soil samples or dig pits unless permission has been secured.
- Litter, including “biodegradables” (e.g., fruit peelings and toilet tissue) must be packed out and field staff must ensure discrete and sanitary disposal of human waste.

Reporting Requirements

Report unsafe road conditions or unusual field incidences (e.g., exposed pipelines, downed fences/gates, dead/sick livestock, etc.) to the battery supervisor and/or to the stakeholder/landowner/manager.



credit: M. Put

Understanding Operations and Concerns

Producer Operations, Limitations and Concerns

Remember: no two operations or operators are the same. Each manager does things differently, and has different levels of tolerance for activities on the land. Livestock behaviour also varies between different herds, breeds, individual animals and at different times of the year. It has to be understood that at certain times, some field areas could be off limits. Flexibility is needed on all sides.

Contact and communication with the landowner/manager prior to accessing any land is essential. You should also determine the degree and type of contact and follow-up the landowner desires thereafter – some like to be very involved, others not so much. (See Pre-season Contact and Communication sections below).

In addition:

Respect the landowner's property and operations:

- All gates are to be left the way they were found unless otherwise directed;
- If keys are provided to enable access to specific fields, they may only be used to gain entry for their approved use; and
- Avoid stretching wire or popping staples out of fence posts by standing on the wires.

Avoid damage to the landscape

- Follow all protocols outlined in this document for:
 - vehicle use;
 - fire hazard management; and
 - weed management.
- Minimize vehicle noise and visual disturbance to the natural landscape and the inhabitants as well.

Avoid stress to livestock

- Avoid interaction with livestock, particularly during the breeding and calving seasons.
- Communicate with the landowner/manager well in advance, about any activities / biological surveys methods etc that might affect livestock directly or indirectly – particularly aerial surveys, or those that will leave markers in the field.

Any death of, or injury to livestock must be immediately reported to the producer.

Rectify and/or compensate as soon as possible any damages that may have occurred due to field research.



credit -M. Curteanu

Research Operations and Concerns

For the purposes of this document, field research refers primarily to the surveying and sampling of plants and animals although sometimes soil and water sampling will be done in conjunction with these studies. It is important to recognize that researchers complete valuable work, often under financial and logistical constraints. Research is integral to understanding the region's ecology, and equally critical for the development of strategic wildlife management plans. Field research seldom disrupts energy sector activities, or a producer's day-to-day activities, livestock or cropping practices, but it can sometimes be disrupted by them. All stakeholders are encouraged to work together to minimize the disruption to all parties working in the field.

When and Why

- Animal and plant research is often confined to narrow seasonal windows when a given species is most easily detected either by sight, sound or sign (tracks, fur and scat). For example, many birds and frogs are surveyed in the spring when breeding calls can be detected. Mammal surveys may take place throughout the year, depending upon the species and the survey method used (e.g., aerial surveys for large mammals, or their tracks, in winter). Plant surveys may be timed to flowering or early seed production periods to assist with identification. As a result of this narrow seasonal window, even minor delays in the field survey season can be problematic for researchers.
- The daily timing of wildlife surveys also varies depending upon the species. Many animals are most active in the early morning and evening when wind and temperature conditions are favourable. Field crews may need to mobilize to sites before sunrise and again before sunset.
- Local weather conditions can also affect the timing of wildlife surveys because conditions not only affect the animal's behaviour, but also the ability of the researcher to detect the animal under certain circumstances. That is why a field researcher must always record weather data at the time of a survey. For example, many wildlife species take cover when it is too cold, too hot, too wet or too windy, making them less active (affects visual surveys and trapping), or less vocal or both. Even if an animal remains active, wind may prevent a researcher from hearing them (bird calls); fog, rain or mist could obviously prevent a researcher from seeing them.
- Negative weather conditions can lead to survey postponement for days or even weeks. This can be devastating for field research if the species being surveyed has a very short detection window and it happens to coincide with poor weather conditions.
- If surveys have been delayed by heavy rain, researchers may need to approach the landowner about alternate access routes or methods if time is of the essence and they cannot afford to wait another day or two for field access conditions to improve/dry.

Where and How

- Research may involve extensive surveys over a large area (i.e. transects) or intensive surveys (e.g. for plants this might involve sampling plots, removal of vegetation or digging of soil pits).
- The type of survey method chosen depends upon the species, its habitat (terrain and size) and also the time and personnel constraints of the study.
 - Surveys may be conducted on the ground – by foot, horseback, ATV, or truck; they can take place directly onsite, or be conducted from the roadside. Roadside surveys can provide valuable data on both plants and animals, especially when pastures are inaccessible or when they contain remnant native grassland habitat. Roadside surveys may include the ditch and/or adjacent land.
 - Surveys may be conducted from the air by helicopter or fixed-wing aircraft.
 - Surveys on or around water may be conducted from a boat or could involve wading in from the shoreline.
- Surveying methods include doing visual counts (using the naked eye, magnifiers, binoculars, spotting scopes, taking video or digital images). Animal surveys may also include listening counts, call playback surveys or collecting hair and scat samples from the field.
- Wildlife research may also involve the use of working animals, such as dogs used in wildlife recoveries (i.e., power-line strikes, waterfowl retrieval, etc). These working animals are kept under control at all times.
- Field research generally requires marking a specific site on the landscape. Recording GPS coordinates is preferable; however, sometimes the use of permanent or temporary markers is required. In the case of markers, landowners will be made aware of the location and notified prior to their placement and removal.



credit Al Dailey

Wildlife Research

- Could include capture, marking and release of animals (netting, live trapping) or the humane collection of wildlife specimens, for various research purposes.
- The individual animal may have an identification tag, leg band or neck collar attached to it. In some cases a tracking device may also be attached. These things help collect data on population size and distributions, habitat use and home range size.
- For any work involving capture and handling, researchers must have an animal care certificate from an accredited University. This requires review by veterinarians and other qualified persons and a commitment to best practices in the care and handling of wildlife. Successful handling is methodical with minimal interaction. Careless treatment is not acceptable; however, methodology is not fail-proof and there is always a risk of death or injury when animals are captured and released.
- Producers who find tagged animals that are deceased or injured are asked to immediately report their findings to a Conservation Officer or a Saskatchewan Ministry of Environment office.

Example of a Road-side Survey in SoD

One of the longest running bird surveys is the North American Breeding Bird Survey (BBS). It was initiated in 1966 and is designed to collect long-term data on the population status and trends of breeding birds throughout North America. In Canada, Environment Canada coordinates over 300 volunteers who run close to 500 BBS routes between 28 May and 7 July. Volunteers are encouraged to run their routes during the peak of the breeding season, (when the males are actively singing or displaying) usually the first two weeks of June. There are a couple of BBS routes in the SoD, so you may see volunteers pulled over on the side of the road “bird watching”. The starting point and starting direction of routes are selected randomly in order to sample a range of habitats. Each participant runs his or her individual route for as many consecutive years as possible. Routes consist of 50 stops spaced 0.8 km apart along a 39.4-km route. Participants record the total number of individual bird species heard or seen within 0.4 km of each stop during a three-minute observation. Data on starting and finishing times, as well as weather conditions, are also recorded.

Energy Operations and Concerns

Active oil and gas fields can be dangerous places to work; certain wells release toxic levels of H₂S (“sour gas”). Access is prohibited or at the battery supervisor's discretion, for all non-industry field staff. Strict safety adherence is mandatory (See Safety Protocol for Oil and Gas sites). These “No trespassing” rules also apply to parking or unloading equipment/quads for all well site access roads, pads and pipelines areas. These areas are leased to the energy companies and as such, you must obey all rules and regulations that are in place to ensure the safety of all field staff. Contacting the Lead Operator or Oilfield Supervisor is an excellent way to determine if any of these conditions may apply and to ensure you are informed when they do.

You should also be aware that:

- Multiple energy companies may operate in a pasture resulting in increased traffic and activity, which could have an effect upon some field studies.

- Drilling activity may be much higher in winter than in the spring or fall when road bans are in effect and drilling rigs are shut down. Other types of oil and gas operations take place year round.
- If a field study area can only be reached via oilfield access routes– you must obtain permission to use these. Access ranges from well-developed gravel access, to grass trails, to foot/ATV only.
- With limited access routes on these sites, there is a high potential for field researchers to interact with the energy sector. Stay alert, and make sure you have your access authorization and all other permits with you at all times.



Guidelines for Contact, Communication and Cooperation

Pre-season Project Approval and Permits

Since authorized access on any land is subject to fulfillment of all permits and approvals, the first step is to ensure that any field activity is in compliance with applicable legislation, policy and guidelines. Depending on the project, the following permits and approvals may be required:

SARA Scientific Permit, Migratory Bird Convention Act Permit (both issued through Environment Canada in a joint permit process if both are required), Fisheries Act permits (provincial and federal), Parks Canada Agency permit, Saskatchewan Ministry of Environment permits, Bio-survey protocol approval, Animal Care Protocol approval.

Contact Protocol for Authorization Access

General Guidelines

- All landowners and lessees (whether federal, provincial, First Nations, Industry or private) must be contacted prior to accessing any lands. Each land tenure has a different protocol for contact and access authorization (see section below for specifics and contact information).
- Interactions amongst all stakeholders should be consistently courteous and professional, whether you are field staff representing an agency, or an individual.
- On multi-year projects, you need to get permission each year as landownership, lessees, attitudes or management objectives may change.
- Remember that Permission does not imply access to the entire property – the right of access has clear restrictions. If a study area can only be reached by crossing a parcel owned by another stakeholder, then all affected stakeholders must be contacted, and all must be in agreement.
- Landowners and managers typically operate independent of their neighbour, so it is imperative that anyone going into the field become familiar with individual as well as local customs, and do so as part of their field preparation.
- Aerial surveying has unique challenges. To minimize conflict and disturbance to the local communities and livestock producers in the survey area, researchers should engage the entire community as early as possible. (See p. 20 Change as required after formatting for suggested communication protocols for aerial surveys).
- A checklist for tracking landowner/manager contact and communication requests for access authorization is included in Appendix 1. The procedure (outlined below) for contacting agencies or private landowners was recommended by stakeholders in SoD.

Contact by Letter to Request Authorization for Access

General Information on Access Authorization Requests

- At least one month in advance of field work and earlier if possible, contact all stakeholders in the project area in writing, to request authorization for access. This advance notice is particularly important when requesting access to private land or First Nation lands, as they may only get mail once per week, especially during busy times of the year.
- Include information on the agency/group, the team lead and provide a brief description of the field activity. For example: research objectives and the bio-survey methodology that will be used; the intended survey/sampling dates; and any additional information that may be relevant to understanding the nature of the fieldwork and/or the stakeholder operations.
- Identify all quarters for which access authorization is being requested; distinguish between actual work site quarters, and the ones you just need to cross to get to the work site.
- Verify that such access, if granted, will be contingent on weather, road and pasture conditions, and that the landowner/manager has the right to restrict access during wet weather or extremely dry situations.
- Invite the landowner/manager's input; it is invaluable to a field program's success. Provide contact information, so that he/she may contact the field project lead if desired.
- Indicate when a follow-up phone call may occur, so that you can have a more detailed discussion on issues important to both the stakeholder/land manager and the field project. Allow a minimum 10 business days to pass before contacting private landowners/managers by phone.

Access Authorization Requests for Specific Land Tenures

Federal Community Pastures

The federal government is divesting some PFRA/AESB Community Pastures to the province; however, until the land transfer is complete, details on how to obtain a Right of Entry Licence can be obtained by visiting the AAFC website: <http://www.agr.gc.ca> or by contacting:

Manager
Agriculture Agri-Food Canada (AAFC)
Real Property Section
300-2010 12th Avenue
Regina, SK S4P 0M3
Phone: 306-523-6513
Fax: 306-780-5018

- The Pasture Manager must be notified prior to each entry into the pasture and subsequent to each exit.
- Access may be denied if conditions warrant (e.g. high fire hazard, inaccessible trails).
- The Right-of-Entry permit must be prominently displayed in each vehicle.
- Within the South of the Divide landscape, Govenlock, Battle Creek, Nashlyn, Lonetree and Masefield community pastures border the USA. Much of the line is aircraft-patrolled, and researchers are encouraged to report at border crossings whenever practical.

Provincial Community and Co-op Pastures

Access into Provincial Community Pastures is initially authorized by the Saskatchewan Ministry of Agriculture's Regional Office (<http://gt ds.gov.sk.ca>) and then confirmed with the pasture manager.

Saskatchewan Ministry of Agriculture
350 Cheadle Street West
Box 5000
Swift Current, SK S9H 4G3
Phone: (306) 778-8285

Saskatchewan Ministry of Agriculture
55 - 3rd Avenue East
SCIC Customer Service Office
Shaunavon, SK S0N 2M0
Phone: (306) 778-8285

- The Pasture Manager must be notified prior to each entry into the pasture and subsequent to each exit.
- Access may be denied if conditions warrant (e.g. high fire hazard, inaccessible trails).

Provincial Co-op Pastures are managed by a patron group Board of Directors.

- The Saskatchewan Ministry of Agriculture's Regional Office (i.e. Swift Current) or the applicable Rural Municipality can provide the names of Board members to contact for access authorization.

Provincial Crown Lands

Leased Agriculture Crown lands are considered the same as private land (below) and field personal must adhere to the same legal responsibilities when requesting access. Contact Ministry of Agriculture offices, above, for lease owner contact information.

Leased Resource Crown lands - it is still appropriate to contact the lessee to acquire prior permission to access these lands. Contact Ministry of Environment offices for lease owner contact information on resource Crown lands

Saskatchewan Ministry of Environment
350 Cheadle Street West
Swift Current, SK S9H 4G3
Phone: (306) 778-8205

Saskatchewan Ministry of Environment
55 - 3rd Avenue East
Shaunavon, SK S0N 2M0
Phone: (306) 297-5433

Vacant Crown lands (Agriculture or Resource) historically could be accessed without permission, but access restrictions may be placed on a parcel under certain circumstances; therefore, it is recommended that you ensure that all necessary permits and conditions are investigated. If you must cross any other parcels to get to these lands, you require permission. Stay on designated trails to avoid damage to the habitat. Use common sense and access only by foot when conditions are extremely wet or dry.

Fish and Wildlife Development Fund Lands: Permission to access and conduct research should be acquired from the Fund Manager.

Manager, Fish and Wildlife Development Fund
Saskatchewan Ministry of Environment
112 Research Drive
Saskatoon, SK S7K 2H6
Phone: 306-933-6240

First Nations Lands

Access consent is often specific to the Reserve. Correspondence should be addressed to the Chief and Band Council well before the field season begins. Contact Information for specific tribal councils or individual First Nations in the region can be found at: www.sicc.sk.ca or www.aadnc-aandc.gc.ca.

- The researcher should outline the goals of the fieldwork, methods, study areas and any other relevant information.
- Work permits are issued by the Band Administration Office.
- The Band may request that a member accompanies the research biologist, either to be mentored or to provide guiding services.

Active Oil/Gas Fields

Oil and gas development is on the rise, and this industry is a key stakeholder in many rural municipalities within the South of the Divide. Multiple energy companies may operate in one field, so pre-field season contact with each company is required to obtain all necessary permits and access authorization.

- Contact the relevant AAFC/MOE and/or MOA field offices (including Pasture Managers) for required permits. Ask Regulatory Staff for contact information on specific energy companies in active fields.

Saskatchewan Ministry of Environment
Landscape Stewardship Branch
350 Cheadle Street West
Swift Current, SK S9H 4G3
Phone: (306) 778-8260

- Pre-season contact with the lead operator or oilfield supervisor is also strongly advised. Energy personnel can update field staff on equipment moves, restricted access or industrial activities.
- The lead operator may ask for proof of safety permits if there will be field work/surveying close to oil and gas infrastructure. These safety precautions benefit everyone; in case of emergency, oil and gas operators are typically the first responders onsite.
- In well-developed oil and gas fields, a network of subsurface pipeline and cables criss-cross below ground. Many of these lines are not marked or visible to field researchers. Safety is paramount; soil disturbance exceeding depths of 30 cm requires authorization by the battery supervisor and Ground Disturbance certification.
- No trespassing on well site access roads, pads or pipelines; this includes parking or unloading equipment/quads. These areas are leased to the energy companies. In cases where a field study area can be more readily reached via oilfield access, (resulting in less disturbance to the field vegetation) special permission to travel on oil and gas field access routes may be granted.

Cultural Heritage Sites

- A Cultural Heritage Clearance Survey may be required for some areas and/or prior to some fieldwork if there are sensitive heritage locations and invasive sampling.
- All heritage locations are protected under The Heritage Property Act and any destruction or removal of artifacts is prohibited.

For more information, contact the
Ministry of Parks Culture and Sport
Heritage Conservation Branch
3211 Albert Street
Regina, SK S4S 5W6
Phone: (306) 787 2817
Fax: (306) 787-0069

- Developers' Online Screening Tool: A free service for developers to assess the heritage sensitivity of quarter sections in Saskatchewan. It can be used as a planning tool, as well as for obtaining heritage clearance.
- Developers-Heritage Resource Review and HRIA Information: Fill out these forms to find out if your project needs a heritage assessment (HRIA). There is also a list of archaeological consultants.

Private (Deeded) Land

Landowner permission must be obtained in order to access private land. This is not just a courtesy to the landowner, but also allows the researcher to discuss their work and identify any potential issues the landowner may be aware of.

- Trespass laws apply on private land and you may be charged if permission has not been acquired.
- Anyone requesting access to private lands is encouraged to get permission in writing, but this is at the discretion of the landowner.



credit AAFC

Initial Follow-up Phone Call

Ask if the stakeholder received/reviewed the letter, and if not reiterate the points under “Contact by Letter” section. Always respect the rights, privacy, property and activities of stakeholders, and keep information about all stakeholders' operations confidential. Work together to understand, plan and time your respective operations to minimize conflict.

- Record any potential field challenges such as problematic access, multiple land managers, calving/bull fields, corrals, dugouts, conflicting agency activities, etc.
- Provide information on the field/research project's limitations (seasonal or daily timing, duration, study area, etc).
- Discuss scheduled activities and if possible adjust timing of one or both field operations to minimize conflict, but recognize that there may be times when access is denied.

Request permission for access, and complete any and all Access Authorization permits. Depending upon the land tenure, and the type of field activity, one or more documents will be required to outline the conditions under which access is being granted.

- Federal, Provincial, First Nation and Industry require special Access Authorization documents and/or conditions to be met (see Access Authorization section above).
- Private landowners must be contacted and give permission for access. A written Access Authorization Form (see Appendix X), can be used/requested, but is at the discretion of the landowner.

Review method of access and note any restrictions and when they apply. In the arid climate of the southwest, tracks in native grassland persist indefinitely.

- Vehicle access and trail restrictions.

- ATV access and tracking; for example, one producer may prefer that field crews double-track (quad tracks paralleling each other) while another may insist on one set of tracks, regardless of the number of quads. Similarly, quad movement may be restricted to fence lines whenever there are no established pasture trails, or may be banned altogether.
- Foot access only.
- Parking location and restrictions.

Ask advice on potential issues with respect to safety:

- fire hazards
- road conditions
- personal safety – check in/out requirements, weather etc.

Address any concerns or potential issues with respect to:

- General Field Use Protocols;
- Researcher Protocols for handling/surveying wildlife;
- Weed Management Protocols; and
- Vehicle Use Protocols

Confirm that you would like to corroborate schedules again five to seven days prior to going into the field, and discuss their preferred method and time of contact.

- Ask if they want a copy of the final/annual report or research results. This is especially important if the research/report can be used to inform stakeholder management decisions.
- Complete the contact checklist in Appendix 1 and send a copy to private landowner/manager if requested.

Re-contact Stakeholders Five to Seven Days Prior to Going Into the Field

- Provide information on the team lead and any field staff, contact numbers, vehicles, signage, licence plate numbers and descriptions.
- Corroborate field schedules and negotiate adjustments as required. Not only is this a common courtesy, it also provides an opportunity for updates on recent changes to land access or safety issues.
- Make changes to any Access Authorization forms as required. If a private landowner authorization form is being used, inquire if and when the landowner/manager wants to meet to exchange signatures.
- Confirm with each stakeholder, their preferred method and level of contact during the project's field season. Some individuals or agencies are very interested in field

research programs and appreciate regular updates, while others prefer less contact. Ask the stakeholder if they want to be:

- re-contacted on the first field day and/or last field day;
- contacted daily - i.e. do they require daily check in and check out;
- contacted periodically/weekly; or
- if they prefer no further contact (unless necessary).

Working in the Field

Safety Protocols

Researchers are responsible for ensuring they follow all provincial legislation and regulations with respect to safety. The following recommendations confirm important safety practices for researchers undertaking field work, but they are also valuable for others visitors to the area. A Safety Equipment checklist can be found in Appendix 2.

Personnel Safety Protocol

Field staff will:

- familiarize themselves with all safety protocols outlined in this document ;
- comply with all Occupational Health and Safety (OH&S) requirements, including First Aid/CPR certification. In particular, be aware of the risk, signs, prevention and treatment of heat and sunstroke, especially if you know you will be working in the field during the hot summer months;
- Additional workplace requirements may include fulfillment of Transport of Dangerous Goods (TDG), Workplace Hazardous Materials Information System (WHMIS), confined spaces training, defensive driving, trailering skills and ATV operation;
- check in and check out with a designated field contact. (Note that oil and gas operators often agree to be the area safety contacts, but require field staff to sign-in at the local battery or gathering facility.);
- complete safety pre-checks for equipment and list contact names;
- have in their possession contact information and directions to the nearest RCMP, community voluntary fire department numbers and the nearest hospital/emergency clinic. A list of the names, home quarters and numbers of local land managers/owners is also an excellent safety measure;

- conduct daily staff tailgate meetings to identify field hazards and corrective actions, and to serve as reminders for safe equipment operation and field safety; and
- know the most efficient and rapid exits from the area.

Severe Weather Protocol

Weather in the South of the Divide can change rapidly, leaving field personnel dangerously exposed to lightning strikes, damaging winds, hail and possible tornados. Heavy downpours can prevent rapid escape or result in you being stranded due to muddy or washed-out trails. Field staff should familiarize themselves with local weather patterns and common weather indicators, and understand safety procedures in case of severe thunderstorms.

Field staff should retreat to vehicles and/or evacuate the area immediately in the event of a thunderstorm. If the storm is already within the surrounding area follow the 30/30 Rule:

- retreat to safety before there is 30 seconds or less between lightning and thunder;
- wait 30 minutes after the last thunder to return to field work;
- if a tornado warning is in effect, try to evacuate the area at right angles to the storm track;
- if a funnel cloud is suspected or seen you should try and drive to/seek shelter in a sturdy building. (The area under a highway overpass is very dangerous in a tornado.) As a last resort, if you are caught in debris while driving, you can either stay in the car with the seat belt on and put your head down below the windows, covering with your hands and a blanket if possible, or you can safely get noticeably lower than the level of the roadway, (e.g. ditch or a culver t- but not if flooding is a risk), exit your car and lie in that area, covering your head with your hands. Your choice should be driven by your specific circumstances.



Fire Hazard Management Protocol

Accidental or wild fires are a persistent threat in the South of the Divide, regardless of the season. Lightning strikes and the heat from vehicle (e.g. truck, ATV) exhaust systems can ignite dry vegetation, and small fires can escalate into huge, unpredictable fires very quickly.

Operation

- Do NOT idle or park vehicles in tall, dry vegetation.
- Visually inspect vehicles to ensure dry vegetation is not in contact with any part of the vehicle that may cause a fire to start.
- Store extra fuel tanks and any chemicals according to standard safety (TDG) protocol.
- Confine all smoking to the inside of vehicles.
- Access field sites on foot when fire hazards are high.

Equipment

- Ensure fire-suppression equipment is available and accessible at all times in vehicles and on ATVs.
- Ensure that the vent valves on fuel containers are operating, and keep fuel safely stored, secured and out of direct sunlight.

Reporting

- Any fires controlled and extinguished will be reported to the landowner.
- Any fires that escape control will be reported to 9-1-1 immediately.

Oil and Gas Field Safety Protocol

When operating in active oil or gas fields, there may be special safety considerations field researchers should be aware of. Contacting the Lead Operator or Oilfield Supervisor is an excellent way to determine if the conditions outlined below apply and to ensure you are informed if they do:

- In well-developed oil and gas fields, a network of pipelines and cables cross below ground. Many of these lines are not marked. Safety is paramount; soil disturbance exceeding depths of 30 cm requires authorization by the battery supervisor and Ground Disturbance certification.
- Operating wells in certain oil fields can release toxic levels of H₂S (“sour gas”); non-industry field staff access is prohibited or restricted at the discretion of the oilfield supervisor.
- Personal protection equipment such as high-visibility vests or coveralls, steel-toed boots, hardhats, eye protection and personal gas detection monitors may be required if surveying in sour fields.
- In many of the pastures, a field study area can only be reached via oilfield access routes - for which you require permission. Access ranges from well-developed gravel access, to grass trails, to foot/ATV only. As a result, there is a high potential for field researchers to interact with the energy sector. Stay alert, and make sure you have your access authorization and all other permits with you at all times.



credit Parks Canada

Vehicle Use Protocol

All traffic laws and bylaws shall be followed. The recommendations below are intended for researchers, but can also apply to other stakeholders or visitors making frequent roadside stops in the area.

Vehicle Identification

- Vehicles must have agency signage or otherwise be easily identifiable.
- Business cards should be prominently displayed on the dashboard, along with a brief work description (e.g., call-playback surveys).
- A copy of the Access Authorization should be displayed on the dashboard if you leave the vehicle.

Vehicle Operation on designated roads

- There are only a couple of paved secondary highways in the South of the Divide area, and these are sometimes in poorer condition than the major grid roads. Know where you want to go, but ask a local for the best way to get there. Low lying areas on primary and especially secondary grid roads may be impassable in wet weather.
- On main and secondary roads, be alert to busy times of the day or season and drive accordingly: school bus pick-up and drop off times; seeding and harvest time. Whenever feasible, and obeying the rules of the road, yield the right of way to livestock and ranch/farm equipment operations.
- When working in or near active oil or gas fields, stay alert as oil and gas activity (i.e. equipment moves) may take place at unusual hours.
- Speed limits must be observed at all times. Drivers should drive at appropriate speeds to reduce noise, dust and disturbance.
- Always activate hazard lights if you are pulling over, or driving at a reduced speed.
- Most roads are narrow, with limited shoulder development. It is extremely important that drivers refrain from pulling over to the shoulder until it is safe to do so.
 - Stopping on hillcrests or valleys, blind approaches, etc. is hazardous to all traffic, particularly large farm equipment and school buses.

- Idling or parking a vehicle in tall, dry vegetation is an extreme fire hazard.

Vehicle/Equipment Parking at field site

- Parking on field and pasture approaches is generally acceptable, but ensure sufficient space is left for field access. Producers may suggest a staging area where equipment/flat-decks can be unloaded and/or stored.
- Some producers may request that the field crew leave a spare key in a safe location on the vehicle in case it needs to be moved.
- Load ATV ramps into truck boxes after unloading ATVs to prevent stray livestock from becoming entangled.
- Store extra fuel tanks and any chemicals according to standard safety (TDG) protocol.
- Park vehicles tail-end in to allow forward driving and a quick exit from a site or oil and gas batteries (collection facilities) if conditions deteriorate.
- Producers are not responsible for livestock damage to vehicles. Park where livestock cannot reach vehicles or equipment.

Vehicle Operation on the field site

- Only designated access roads may be used unless otherwise indicated by the stakeholder.
- No vehicular disturbance to wetlands or riparian areas should occur, regardless of any existing livestock impacts.
- Minimize excessive noise from equipment (i.e., ATVs), especially close to farm dwellings.
- Vehicular access is prohibited or restricted, at the stakeholder's discretion, during wet or extremely dry conditions.
- Off-road travel, rutting or trail braiding is prohibited; damage to trails should be reported to the producer and/or battery supervisor.
- Minimize vehicular tread impact in native pastures and damage to crops; employ 3-point turns and utilize access roads whenever possible.



Weed Management Protocols

Weeds are a scourge to native rangelands and croplands. Invasive species threaten landscape integrity and contribute to financial losses and management problems for producers as well as putting species at risk of extirpation. All stakeholders need to be diligent and capable of identifying and reporting weed populations to the producer, pasture manager and/or municipal weed inspector. All user groups share a responsibility in controlling their spread.

Key invasive species in the South of the Divide area include Downy and Japanese Brome; Leafy Spurge; Russian, Diffuse and Spotted Knapweed; Dalmatian Toad Flax; and Common Burdock. These and other species are listed in The Weed Control Act and landowners and occupants must destroy them to prevent their spread.

The Saskatchewan Invasive Plant Species Identification Guide is an excellent free publication available from the Saskatchewan Ministry of Agriculture. For those interested, there is also an online reference, mapping and reporting tool provided by iMapInvasives – Saskatchewan (<http://imapinvasives.org/skimi>).

Weed Management Protocol for Personnel

- Footwear should be cleaned prior to fieldwork, and when moving from one crop into another.
- Clothing should be checked for seeds and other propagules and cleaned of any material that might transfer to new locations.
- In extreme cases, this may include washing boots or wearing disposable booties to avoid spread of clubfoot, ergot, weeds, etc.

Weed Management Protocol for Equipment

- Equipment (e.g. ATV fans, undercarriages and wheel wells) must be cleaned prior to moving from non-native fields into native grassland, particularly if off-road access is required.
- Use a portable air compressor to blow out chaff/weed seeds from wheel wells and vehicle undercarriages prior to leaving the site.
- Vehicle and equipment wash-down is mandatory before accessing pastures/croplands.
- Wash-down declarations stating where and when the vehicles were last cleaned, should be available at producer request.



credit E. Kennedy SKCDC

Biological Survey Protocols

Pre-season Protocol

Obtain all necessary training, project approvals and permits, and have these documents on your person at all times.

- Contact the community well in advance if aerial surveys are to be done (see below), and/or roadside surveys (see below)
- Re-contact all stakeholders one week in advance of going into the field to verify timing, access, method of contact; discuss any changes in field operations, safety concerns, etc.

Check with the Saskatchewan Conservation Data Centre (www.biodiversity.sk.ca) for a list of plant and animal species that are of interest in the region, and the procedure for submitting wildlife observation data forms to the SKCDC.

Saskatchewan Conservation Data Centre
Fish and Wildlife Branch,
Saskatchewan Ministry of Environment
3211 Albert Street
Regina SK S4S 5W6
Telephone: (306)787-7196

On-site Protocol

Follow the General Field and all other protocols as outlined in this document including:

- Personal Safety, Severe Weather Safety, Fire Hazard Management and Oil and Gas Field Safety; and
- Vehicle Use Protocols and Weed Management Protocols

Changes to Survey Timing or Method:

- During the field season, if any changes to the survey method or timing (e.g. delays due to poor weather, equipment failure, etc.) occur, you must notify the stakeholder to help minimize any potential conflict in operations.

Alternate Access:

- If you require an alternate access route to a given field site, (e.g., if your current access becomes unusable due to wet conditions) you must obtain permission from each landowner.

Use of Working Animals:

- If research involves the use of working animals, these animals must be under control at all times. Pets are not permitted in oilfields or Community Pastures. Working dogs used in wildlife recoveries (i.e., power-line strikes, waterfowl retrieval, etc.) are exempt. Producers reserve the right to prohibit pets on lands they manage.

Marking Survey Sites

- When research requires marking of a specific site on the landscape, recording of GPS coordinates is preferable.
- The location and erection of permanent structures (e.g. vegetation enclosures) must be approved by the producer. A mutually-agreed removal date should be verified at the same time.

- If temporary site markers are to be used, landowners should be aware of the location and notified prior to their placement and removal.

Eliminating the use of structural site markers is recommended for a variety of reasons:

- Livestock will consume pin flags and flagging tape, leading to disorders such as “hardware disease”;
- Flagging tape attracts predators and livestock (which could result in increased trampling of the site);
- Biodegradable flagging tape is slow to degrade in this arid climate. Chalk paint may be an acceptable alternative for marking locations; and
- Unseen holes or depressions are hazardous to pasture riders and their horses.

Capturing and Handling of wildlife:

- For any work involving capture and handling, researchers must have an animal care certificate from an accredited university and a commitment to best practices in the care and handling of wildlife.
- Successful handling should be methodical with minimal interaction. Careless treatment is not acceptable.

End of Season Follow-up

- Producers have requested that researchers follow-up with them once the field work is complete. Report back to them on what you found, either in person or in paper, and if/when you will be visiting again (especially if you were unable to complete the survey and be returning at a later date).
- Ask if they would like to receive a copy of the final report/study.

Roadside Survey Protocol

Members of the community may be unfamiliar with this kind of survey. The unscheduled pull-overs can be disruptive to local traffic, and cause for concern to local residents if your stop happens to be near occupied dwellings, and you are using binoculars or a spotting scope! Therefore, it is recommended that researchers:

- post a notice in the local post office or café to inform the public about upcoming fieldwork;
- before surveying shelterbelts that are close to occupied dwellings, researchers should first request permission from the occupants; and
- leave a business card at all yard sites along the route - particularly if survey vehicles are not signed or surveys are undertaken in isolated (remote) areas.

There are also several safety measures to consider when conducting roadside surveys:

- follow all traffic laws when pulling off or onto a road as well as when parked on the side;
- be attentive to potentially hazardous conditions along the edge of the pavement (high dry vegetation = fire hazard; soft mud in low lying areas, etc.);

- activate hazard lights;
- avoid stopping in areas with poor sightlines such as blind approaches or behind hillcrests. School buses and large farm vehicles cannot slow down quickly enough to compensate and go around a vehicle parked on the side of the road; and
- if survey protocol requires you to stop at a specific interval and the location has a poor sightline, either park where it is safe (e.g. at the top of the hill) and walk the rest of the way to the survey location, or place a warning flare or caution sign (where it is visible, e.g. at the hilltop) to indicate to oncoming vehicles that a cautionary approach is needed ahead.

Aerial Survey Protocol

Aerial surveying has unique challenges. To minimize conflict and disturbance to the local communities and livestock producers in the survey area, researchers should engage the entire community as early as possible.

- Provide written notification on proposed dates and times, and if possible, survey routes, to the local community and especially affected producers through a notice in the local paper and/or letters to directly affected individuals.
- Request/obtain information on livestock herd locations in the survey area (including yard sites) for the proposed survey time period (and any proposed changes in herd location for a few weeks thereafter in case there is a delay in the survey).
- Follow-up with individual phone calls.
- Work with directly affected producers to minimize disturbance to livestock, while maintaining survey protocols (discuss herd locations, timing and survey routes) .
- Discuss communication/protocols in the event that livestock are moved within the survey area OR alternatively, if the survey routes/or the timing has to be changed (e.g. weather /delays).



credit Jennifer Rumancik SKCDC

Appendix 1: Landowner Contact and Access Authorization Checklist

Landowner Name(s)			
Organization/Ranch			
Phone Number	Home:	Cell:	
Home Quarter		RM	
Mailing Address			
Email Address			
Was a letter of introduction about the project/request for access authorization sent?		Y	N
Was a letter of introduction about the project/request for access authorization received and read?		Y	N
Was a visit requested? <<Visit Date>>		Y	N
Was a post survey follow-up call requested?		Y	N
Did we mail information last year? about -		Y	N
Can we send landowner information to the Saskatchewan Conservation Data Centre?		Y	N
Record of Communication Date/Time	Type: letter, phone, email	Staff	Results
Permission to Access the following Quarters +/- Conduct Field Work (caveats noted below)			
Landowner			
Quarters:	QTR ___ SEC ___ TWP ___ RGE ___ MER ___	Y	Permission Y-Caveat or N (reason)
	QTR ___ SEC ___ TWP ___ RGE ___ MER ___	Y	Permission Y-Caveat or N (reason)
	QTR ___ SEC ___ TWP ___ RGE ___ MER ___	Y	Permission Y-Caveat or N (Reason)
	QTR ___ SEC ___ TWP ___ RGE ___ MER ___	Y	Permission Y-Caveat or N (Reason)
	QTR ___ SEC ___ TWP ___ RGE ___ MER ___	Y	Permission Y-Caveat or N (Reason)
	QTR ___ SEC ___ TWP ___ RGE ___ MER ___	Y	Permission Y-Caveat or N (Reason)

Researcher
 Phone:

Producer
 Phone:

Appendix 2: Safety Equipment Checklist

The following list should be modified to suit specific project conditions in order to meet corporate policy and provincial legislation. If there are teams working in the same area they should have means of communication within a team, between teams and with external parties. Walkie-talkies, cell phones or satellite phones are available options.

Table 1: Suggested Safety Equipment List

Truck	ATV	Backpack
<input type="checkbox"/> Fully stocked First aid kit	<input type="checkbox"/> Small first aid kit	<input type="checkbox"/> Small first aid kit
<input type="checkbox"/> Walkie-talkies and designated channel	<input type="checkbox"/> Walkie-talkies and designated channel	<input type="checkbox"/> Walkie-talkies and designated channel
<input type="checkbox"/> Spare batteries for electronic devices	<input type="checkbox"/> Spare batteries for electronic devices	<input type="checkbox"/> Spare batteries for electronic devices
<input type="checkbox"/> Emergency supplies *	<input type="checkbox"/> Emergency supplies *	<input type="checkbox"/> Emergency supplies *
<input type="checkbox"/> 20 lb. fire extinguisher	<input type="checkbox"/> 10 lb. fire extinguisher	<input type="checkbox"/>
<input type="checkbox"/> Shovel	<input type="checkbox"/> Fire broom or Pulaski	<input type="checkbox"/>
<input type="checkbox"/> Tow rope	<input type="checkbox"/> Tow rope	<input type="checkbox"/>
<input type="checkbox"/> Booster cables	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Cell-phone booster	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Phone charger	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Accessible spare tire	<input type="checkbox"/> ATV repair kit	<input type="checkbox"/>
<input type="checkbox"/> Portable 12-Volt air compressor	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Small spill kit	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Emergency supplies should include: water, snacks, a whistle, topographical map of the area, compass, mirror, flashlight (charged batteries), thermal blanket, candle and waterproof matches.