PROJECT REPORT

Developing a Coordinated Approach to Grassland Species at Risk Recovery in British Columbia

Workshop Summary

June 6–7, 2006
Kamloops, British Columbia

BRITISH COLUMBIA
Ministry of Environment

FORREX
Supporting Sustainable Natural Resource Management Decisions

Developing a Coordinated Approach to Grassland Species at Risk Recovery in British Columbia

Susan Leech, Bryn White, John Surgenor and Don Gayton (Compilers)

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CONTENTS

Executive Summary

From June 6th to 7th 2006, forty-three individuals representing over twenty different agencies and groups involved in grassland species at risk management in British Columbia met at a two-day workshop in Kamloops, British Columbia to discuss a collaborative approach to grassland species at risk recovery implementation. Day 1 of the workshop focused on information exchange and identifying potential opportunities for collaboration, while Day 2 involved developing a draft framework for coordinated implementation of grassland habitat and species at risk recovery.

Workshop participants expressed broad support for a coordinated approach to implementing existing grassland recovery strategies and recovery action plans. They emphasized that this approach should:

- Focus on implementation, not planning
- Build on existing models for multiple species and/or ecosystem action plans
- Reflect regional differences in land ownership and other issues across British Columbia grasslands
- Ensure compliancy with the *Species at Risk Act* (*SARA*)
- Include stakeholders, decision-makers, implementation partners, funders, and other Recovery Teams in subsequent meetings

Participants felt that it was important to build on existing grassland conservation programs by being clear on the roles and responsibilities of other groups involved in grassland species at risk recovery and habitat management. A gap analysis would help to define where this program could focus priority activities. Participants recommended collating all grassland species at risk information into one location; possible mechanisms for this included developing a grassland species at risk information database or collating this information in the existing federal Recovery Information Management System (RIMS) database.

On Day 2, workshop participants developed a situation analysis and a logic model which together can be used as an initial framework for coordinated grassland species at risk recovery. Participants emphasized that this program should be long term in nature, focus on ecological goals related to healthy, functioning ecosystems with viable populations of existing native species, and balance use with sustainability. They articulated a draft vision for the initiative, which may be refined in the future:

> "A complete, well-distributed grassland ecosystem, cherished by society, supporting viable populations of all native flora and fauna species as well as ecosystem processes, and balancing use with sustainability."

The draft logic model, presented in Appendix 3, will be used as the basis for future planning of this program, with next steps including focusing the logic model on priority outcomes and activities for this group, developing SMART (specific, measurable, achievable, relevant, and time-bound) objectives and indicators associated with each outcome, and working with key audiences to develop appropriate activities to achieve these outcomes.

Citation—

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At the conclusion of Day 2, participants agreed on the following next steps for further development of a coordinated Grassland Recovery Implementation Team:

1) **Gap Analysis:**

- Identify grassland initiatives already in place (e.g. GCC, invasive plant council)
- Identify where no initiatives occur/partners not in place to implement (by geography and approach)
- Identify recovery activities already being done by species at risk groups
- Build on previous gap analyses
- Focus priority actions based on gap analysis

2) **Species Matrix Development:**

- Collate and prioritize species recovery strategies and action plan recommendations
- Identify best way to collate, store, and update data
- Map overlay species distribution for complementarity analysis (where are efficiencies)
- Consider existing landowner contact database software
- Map landowner contacts spatially (need assistance with ownership layer)

3) **Business Case Development**

- Develop business case for the Species at Risk Coordinating Committee (SARCC), Canadian Wildlife Service (CWS), and others to identify resources needed to accomplish priorities
- Individuals to report back to sections/superiors to increase understanding of importance
- Joint support letter to be developed and signed by all recovery team chairs

4) **Grassland Recovery Implementation Team (GRIT)**

- Resources for coordination necessary
- Action Plan and Implementation is the focus
- Develop top 5 messages for consistency
- Determine best method for stakeholder involvement
- Recovery Team model, no agency ownership. Members fund the work, members do the work
- Select evaluation indicators carefully and consider central assumption that grassland conservation will meet species requirements.
- Entire GRIT meet twice per year; Kamloops central; include additional stakeholders at earliest stage possible
- Smaller Steering Committee of RT chairs, CWS, GCC and 1 person from each region continue to move immediate actions forward and meet more regularly
- Task/working groups established below to accomplish immediate actions before next September

Overall, the workshop proved instrumental in highlighting the benefits of a collaborative approach to grassland recovery implementation, confirming that participants agreed with moving forward on a collaborative approach, and beginning the process of developing this collaborative approach to implementation.

Introduction

Grasslands in British Columbia hold a vast number of species at risk: 30% of federally listed endangered species in British Columbia occupy grasslands for some or all of their lifecycle, while 137 provincially endangered plants, 87 animals and numerous plant associations are also grassland dependent (Geoff Scudder, Professor Emeritus, Biological Sciences, UBC Pers Comm 2002). With the introduction of the federal *Species At Risk Act* in 2003, Recovery Planning for federally listed species has become a key priority in this area. Recovery Teams for a variety of listed species, as well as for the South Okanagan Similkameen Conservation Program, have been working to develop Recovery Strategies that are consistent with *SARA* legislation. Many groups have recognized that, given the large number of agencies and groups involved, the urgency for implementation, and the long term vision required, grassland management might be best served through a coordinated approach to implementing the various recovery strategies and plans that currently exist.

To explore this possibility, a two-day workshop was developed jointly by the BC Ministry of Environment in Kamloops, the Okanagan College Species at Risk Coordinator and FORREX. Held at Thompson Rivers University from June 6-7th, 2006, the workshop was designed to bring Grassland Recovery Teams and Recovery Action groups together to determine the direction and next steps for species recovery and explore the development of a framework for incorporating species at risk recovery into a broader grasslands management approach in the province.

The goals of the workshop were:

- To identify the commonalities among the various grassland recovery strategies and action plans and to determine if and where they can be coordinated and prioritized.
- To develop direction and priorities for the implementation of grassland recovery strategies and action plans.
- To share information among grassland species Recovery Teams, implementation groups, stakeholders and other land and resource management agencies/owners.
- To initiate the development of a grassland management framework.

This report documents the information exchanged and the results of this workshop. In total, forty-three individuals representing grassland species at risk recovery teams, implementation partners, and First Nations attended the two-day event, to share information and help develop a common approach to species at risk recovery on grasslands in British Columbia. The agenda for the workshop may be found in Appendix 1, while a list of the participants and acronyms/abbreviations may be found in Appendix 2 of this document.

Workshop Design: Day One – Information Sharing and Identifying Opportunities for Coordination

Day 1 of this workshop focused on information sharing, identifying common issues which could be addressed through collaboration, and confirming that participants were interested in pursuing a collaborative approach to grassland habitat and species at risk recovery in British Columbia. Following a welcome from workshop organizers, participants heard presentations from representatives of grassland species at risk recovery teams. These presentations were designed to highlight the current state of planning for each species or guild, as well as the key threats identified through this process. Along with a overview presentation on provincial policy initiatives, these presentations set the stage for a morning discussion session to determine whether there was support for a coordinated approach to grassland species at risk recovery and if so, what it would look like.

In the afternoon, workshop facilitators led the group in an exercise designed to develop a situation analysis for grassland species at risk recovery implementation, as a starting point for developing a logical framework for implementation on Day 2. The remainder of the afternoon session again focused on information sharing, with presentations describing the Grassland Conservation Council's mapping project, a federal perspective on coordinated recovery implementation, the South Okanagan Similkameen Conservation Program (SOSCP) as a model for coordinated recovery implementation, as well as presentations from three potential implementation partners: Partners In Flight, The Nature Conservancy, and Ducks Unlimited Canada.

A synopsis of these presentations and discussions from Day 1 of this workshop is provided on pages 6-10 of this report. Where possible, PDF versions of presentations have been made available on the following webpage:
www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp.

Workshop Design: Day Two – Developing a Framework for Coordinated Implementation of Grassland Species at Risk Recovery

Day 2 of this workshop began the process of developing a coordinated implementation plan for grassland species at risk recovery in British Columbia. Using information gathered from participants on Day 1 of the workshop as the launching point, workshop participants developed long-, medium-, and short-term outcomes to address the group's vision for this program.

This process was organized using the Logic Model, a program planning tool developed by evaluators and based on Bennett's hierarchy, which describes levels of desired changes need to achieve the ultimate goal of a program. The logic model works by first focusing attention on the "long-term" outcomes (changes in condition or ultimate program goals) and then asking the group to determine what "medium-term" outcomes (changes in action, behaviour, practices, procedure, policy, etc.) are needed to achieve the long-term outcomes. From here, participants are asked to define "short-term" outcomes (changes in knowledge, skills, attitudes, aspirations, etc.) that are needed to achieve the medium-term outcomes. In the final step, activities and programs to meet these short-term outcomes are developed with specific target audiences. By focusing on outcomes, evaluation is built in from the beginning, in a hierarchical fashion that allows program evaluators or funders to clearly see how program success will be measured. While painful at times, the group process of developing a logic model helps to build consensus and focus the creative power of everyone in the room to build a program that will achieve desired results. A full description of the logic model and how it may be used in program planning for species at risk recovery may be found in Leech *et al.* 2005[1].

Based on the information collected on Day 1, a situation analysis was developed, describing what is needed for grassland species at risk recovery, who should be involved, and what the key threats are to grasslands in BC. This information was used to develop the draft logic model, built collaboratively with all Day 2 participants. The final session of the day involved a group discussion on next steps for continuing to work on a coordinated implementation approach to grassland species at risk recovery, and defined some actions which need to occur before the group meets again. The results from Day 2 of the workshop are presented on pages 11-14, while the draft logic model may be found in Appendix 3.

[1] Leech, S.M., K.A. Sutherland and C. Wainwright. 2004. Recovery Planning to Achieve Desired Results: using principles of extension to create meaningful behavioral changes linked to overall recovery goals. *In* T.D. Hooper, Editor. Proceedings of the Species at Risk 2004 Pathways to Recovery Conference. March 2-6 2004, Victoria, BC. Species at Risk 2004 Pathways to Recovery Organizing Committee, Victoria, BC. Available online at: http://www.speciesatrisk2004.ca/html/searchform.html.

Workshop Results Day 1 – Key Messages from Presentations

During the information sharing session on Day 1, invited speakers provided participants with information regarding the state of the grasslands, species at risk recovery, provincial and federal perspectives on policy, ongoing grassland mapping projects by the Grassland Conservation Council, and opportunities for collaboration with implementation partners. Key messages from some of these presentations are summarized below, along with links to PDFs of available presentations.

State of the Grasslands – Bruno DeLeSalle, Grassland Conservation Council

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

GCC Mission: Foster greater understanding, stewardship, management practices, and conservation of grassland ecosystems and associated species.

Threats to grasslands are increasing. Losses in the last 10-15 years have been significant; 55% loss in the Central Okanagan and 20% loss in the South Okanagan. Urban development is the highest threat, followed by agriculture, acreage, and golf course development. Pressures include recreational activities, infrastructure footprints, and grazing/water access impacts. Projected growth rates for grassland areas over the next 20 years are significant.

Who owns grasslands? 43% owned privately, 10% federal, 9% IR, 46% crown, and only 6.9% protected. Sixty percent of grasslands sit in the Agricultural Land Reserve; of that, 30% is owned privately and 22% are Crown lands.

GCC Priority Grasslands Initiative Goal: Identify grasslands spatially based on criteria, and bring forward with strategy to reach priority audiences.

Top three priorities:

- Complete assessment – where are grasslands?
- Work with governments (local and regional, provincial, First Nations).
- Engage Agricultural Land Commission.

Project for Delivery: "Planning for Change":

- Extension with local and regional government. Workshops, data, maps, and tools. "Green Infrastructure Bylaw Package".
- Partnerships with First Nations – Extension program and pilot with Shuswap Nation Tribal Council and Kamloops Indian Band.
- Influence land use planning and decision making processes.
- Engagement of ALC.

GCC Tools:

- Best Management Practices for Recreation in Grasslands
- Methodology for assessing grassland conditions and trends (collaborative development with, and for ranchers).
- Education and outreach: BC Grasslands magazine, website.

Summary:
Gap in GCC Strategic Plan: Private Land Stewardship (*Crux of this workshop)
GCC interested in getting a sense of how the following can be accomplished throughout the range of grasslands in the province for private lands:

- Developing appropriate incentives for landowners.
- Coordinated contact programs.
- Developing effective tools for land/owners ranchers.
- Developing partnerships with industry, NGOs, First Nations.

Grassland Priority Mapping Project – Graham McGregor, Grassland Conservation Council

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

BC Grassland Mapping Project:

1) Inventory of grasslands.
2) Conservation Risk Assessment Report: considerations include species at risk, weeds, historic distribution of grasslands and associated ecosystems, land status, range tenure/monitoring sites.

Priority Grassland Sustainability Initiative and Pilot:
Goal: Identify priority grasslands and achieve no net loss. Develop regional strategic documents, extend maps/tools and data support for conservation and stewardship, and increase awareness and understanding of grassland values.

Kamloops Pilot Project:

- Criteria developed for assessing grassland values.
- Coarse filter using GIS analysis in workshop process to select priorities, then field assessments to refine and improve the information.
- Provincial Technical Advisory Committee providing direction and expert input:
  - Good condition grasslands
  - Rare candidate ecosystems
  - Grassland conservation representation
  - Rare and endangered species – badger sightings and predictive badger habitat modeling
  - Overlays include other species. Criteria to identify habitat – critical, very important, important.
  - Risk of intensive agriculture – candidates for development.
  - Risk of subdivision development and fragmentation.
  - Forage base for wildlife and socio-economic values.

When mapping and analysis projects completed, GCC will implement the "**Planning for Change" Project** to extend the findings to local and regional districts, and will provide maps and recommendations to priority audiences. Web, risk assessment users manuals, fact sheets, education programs.

Timelines:
Thompson Nicola and North Okanagan – 2006
Central South Okanagan - 2007
East Kootenays – 2008

Recovery Team Presentations

Each Recovery Team Chair represented at the workshop was asked to give a fifteen minute presentation describing:

- the current status of the recovery strategy and/or action plans;
- the species background, its status, population estimate, and range;
- the key threats facing recovery;
- what the main recovery action approaches are;
- the who, what, when, and how of implementation; and
- what the main approaches for implementation have been thus far

Where possible, this information has been summarized into the draft Grassland SAR tracking database (Appendix 4). Much of this information requires vetting by Recovery Team chairs.

- ***Badger Recovery Team:*** *Eric Lofroth, Recovery Team Chair*

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

- ***Southern Interior Amphibian and Reptile Recovery Team:*** *Orville Dyer, Recovery Team Chair*

Presentation not available

- ***Burrowing Owl Recovery Team:*** *John Surgenor, Recovery Team Chair*

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

- ***Sharptailed Grouse Recovery Team:*** *Doug Jury, Recovery Team Chair*

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

- ***Southern Interior Rare Plants Recovery Team****: Ted Lea, Recovery Team Chair*

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

- ***Southern Interior Invertebrates at Risk Recovery Team:*** *Jennifer Heron, Recovery Team Chair*

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

Update on BC Recovery Planning Process: Brenda Costanzo, Ministry of Environment

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

Federal Perspective: Opportunities for Recovery Implementation – Stephen Hureau, Canadian Wildlife Service

Presentation not available

SOSCP Model and Approaches for SAR Recovery – Orville Dyer and Bryn White, South Okanagan Similkameen Conservation Program

Presentation not available

Presentations from Potential Implementation Partners

- ***Partners In Flight:*** *Tanya Luszcz*

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

- ***Nature Conservancy of Canada:*** *Barbara Pryce*

Link to presentation: www.forrex.org/program/con_bio/PDF/Workshops/grasslands_workshop/workshop_presentations.asp

- ***Ducks Unlimited Canada:*** *Bruce Harrison*

Presentation not available

Workshop Results Day 1 – Discussion Summaries

Support for a Coordinated Implementation Approach to Grassland Species at Risk Recovery

Before lunch on Day 1, a facilitated discussion was led by Don Gayton on the four discussion questions highlighted below. The following points were made related to each of these discussion questions.

1) **Is there broad support to approach grassland species at risk recovery through a combined approach? Yes.**

    a. Avoids overlap and repetition
    b. Prevents private landowner or decision-maker "contact burn-out"
    c. Prevents conflict between individual species recovery requirements
    d. Assists in leveraging and combining resources and builds efficiencies
    e. Assists with the development of priorities

2) **What is needed to move forward on implementation?**

    a. Inclusion of stakeholders, decision-makers, implementation partners, and funders
    b. Inclusion of species teams that may be missing
    c. Collation of all species at risk information
    d. Development of a program delivery model

3) **Is the development of a Grassland Action Plan the right approach? Yes.**

4) **What would it look like, who would be involved?**

    a. Focus on implementation and not planning
    b. Follow the model of other multiple species or ecosystem type action plans out there
    c. The process to develop and implement a Plan must be coordinated
    d. Organize the Plan around subject areas (science, extension/communications, inventory, stewardship, research, legal tools, and restoration)
    e. Reflect and integrate regional differences
    f. Share data through agreements while still addressing sensitivities and protocols
    g. Identify the appropriate scale for Plan development and implementation
    h. Develop a grassland conservation case and direction for decision-makers, private landowners and land managers
    i. It would be *SARA* compliant

Collating Grassland Species at Risk Information

One of the key suggestions from participants in order to move forward with implementation is to collate grassland species at risk information in one location. Bryn White presented a draft template for a species tracking database (Appendix 4), which has been circulated to all grassland Recovery Team chairs. This tracking database could be used as a basis for collating this information. One participant also suggested using the existing federal RIMS database to collect this information, a possibility which should be explored further. The question was asked about existing prioritization schemes for implementation. Dave Fraser indicated that there are a few different prioritization methods that could be adopted.

Action Item: Develop or identify an appropriate system to collate grassland species at risk information in one location. Suggest reviewing the attached draft tracking database (Appendix 4) as well as other available information management systems.

Defining a Situation Analysis for Grassland Species at Risk Recovery Implementation

One of the key components to developing a logic model is to first focus some effort on describing the current situation that needs to be addressed through a program or plan. To this end, each participant was asked to interview three others and gather their responses on one of four questions. Responses to these questions were collated by the facilitators and presented back to the group on Day 2 for confirmation and refinement, and formed the basis for developing the Grassland Recovery Implementation Program logic model on Day 2. The results from this session are summarized on pages 11-12 of this report.

Workshop Results Day 2 – Developing a logic model for coordinated grassland species at risk recovery implementation

As described previously, Day 2 of the workshop was a working session designed to begin the process of developing a logical framework for coordinated grassland species at risk recovery implementation. The process is described on page 5 of this report, and the results are presented below.

What would coordinated grassland species at risk recovery look like? Think lofty: give us your vision of a successfully implemented coordinated approach twenty years from now.

A number of points were brought up in the exercise on Day 1 related to a vision for this coordinated implementation approach. These included:

- Single, coordinated, funded "clearing house"/ "agency"
- Central warehouse for monitoring that is contributed to by many and accessible by all
- Ecological – species (representation and sustainable populations)
- Targets are long-term (100 years)
- Healthy, functioning (within normal bounds of natural processes)
- Representative across ecological zones
- Cherished by society
- No loss (unsure if mean from today, or historic distribution)
- Balance use with sustainability

On Day 2, the facilitator asked the group to articulate a vision statement: something lofty and inspiring to keep the group motivated in this process. The vision statement below may require refinement in the future, but was sufficient to move the process forward for the time being:

"A complete, well-distributed grassland ecosystem, cherished by society, supporting viable populations of all native flora and fauna species as well as ecosystem processes, and balancing use with sustainability."

Who should be involved?

- **Government (local, regional, provincial, federal):** Including Ministries of Agriculture and Lands, Forest and Range, Environment, Transportation, and Energy, Mines and Petroleum Resources; Regional Districts, Municipalities, planners and politicians, Union of BC Municipalities, OCP Advisory Committees, Growth Planning Processes (Regional Growth Strategies/Smart Growth), Smart Growth BC, CWS, EC, National Parks, DFO, US Wash. Dept of Fish and Wildlife, LRMP Planning tables.
- **First Nations – Band Councils and Tribal Nations**
- **NGO's and Programs:** Including NCC, DUC, TNT, BCWF, TLC, GCC, PIF, FBCN, SOSCP, EKCP, GOERT, North OKCP, Smart Growth BC.
- **Environmental Consultants and Associations**
- **Industry Associations:** Including livestock, cattlemen's, real estate, fruit growers (including grape growers).
- **Private Industry:** Including mining, forestry, ranching, agriculture, real estate, utilities.
- **Recreation and Resource "Users" and Associations:** Including motorized vehicles (ATV and bikes), mountain bikers, eco-tourists and operators, hunters, gatherers.

- **Foundations and Funders**
- **Agricultural Land Commission**
- **Recovery Teams/RIG's**
- **Landowners**
- **Publics:** Including stewardship groups and advisory committees
- **Educational Institutions:** focused on university and college level

List the external forces that will impact the likelihood of grassland species at risk recovery.

Positive External Drivers

- Positive shift in public attitudes towards species and ecosystems; the beginning of a land ethic.
- Willingness to cooperate between the government agencies, NGOs, and stakeholder groups.
- Government policy, legislation and incentives.

Negative External Drivers

- Population growth and demographics.
- Increasing land values and economic hardships
- Lack of staff and resources
- Climate Change
- Lack of political will
- Bureaucracy and lack of coordination
- Economic policy and philosophy

List the top five threats to grassland species at risk recovery in British Columbia.

Top Five Threats to Grasslands:

1) Habitat Loss and Fragmentation
2) Habitat Degradation
3) Forest In-Growth and Encroachment
4) Invasive Alien Species
5) Incompatible land uses

Turning Threats into Long-Term Outcomes

Participants asked to turn these top five threats into outcome statements. The following five long-term outcome statements were defined by the group as a whole:

1) Habitat loss is halted.
2) Habitat quality is improved and function is restored.
3) Forest in-growth and encroachment is reversed.
4) Invasive alien species are reduced to a state in which they do not threaten species and habitat.
5) Improved compatibility of land uses.

Group Exercise to Define Develop Logic Model

By drawing on the considerable expertise in the room, the participants put together a draft logic model addressing the top threats to grassland habitat and species at risk. It should be noted that, during the collation process for this report, the authors recognized the overlaps between the last long-term outcome and other outcomes listed above, and chose to collapse the medium-term outcomes associated with "improved compatibility of land uses" into other long-term outcome statements. Medium-term outcomes associated with this long-term outcome are now captured under the long-term outcomes "habitat loss is halted" and "habitat quality is improved and function is restored." This change eliminated some of the repetition between the fifth long-term outcome and other outcome statements, while still maintaining the unique points made by this group, particularly related to recreation management. The logic model in Appendix 3 thus includes four long-term outcome statements associated with the priority threats to grassland habitat and species at risk, and a comprehensive list of potential medium- and short-term outcomes which may be addressed through a coordinated Grassland Recovery Implementation Team. Other refinements to the logic model built by the group on Day 2 of this workshop included rewording some outcome statements, adding short-term outcome statements that logically flowed from identified medium-term outcomes where these were not included, and listing potential activities under a separate column.

This draft logic model can now form the basis for continued program refinement and planning. It should be noted that the logic model currently includes input from the species at risk community and does not yet include stakeholder input. In the future, continued program planning should involve focusing the logic model on priority outcomes and activities for this group, developing SMART (specific, measurable, achievable, relevant, and time-bound) objectives and indicators associated with each outcome to aid in evaluation, and working with key audiences to develop appropriate activities to achieve these outcomes.

Next Steps for the Grassland Recovery Implementation Team

Broad Approaches for Coordinated Implementation

At the end of Day 2, the group articulated the following next steps required for coordinated implementation of grassland species at risk recovery:

1) **Gap Analysis:**

- Identify grassland initiatives already in place (e.g. GCC, invasive plant council)
- Identify where no initiatives occur/partners not in place to implement (by geography and approach)
- Identify recovery activities already being done by species at risk groups
- Build on previous gap analyses
- Focus priority actions based on gap analysis

2) **Species Matrix Development:**

- Collate and prioritize species recovery strategies and action plan recommendations
- Identify best way to collate, store and update data
- Map overlay species distribution for complementarity analysis (where are efficiencies)
- Consider existing landowner contact database software
- Map landowner contact spatially (need assistance with ownership layer)

3) Business Case Development

- Develop business case for the Species at Risk Coordinating Committee (SARCC), Canadian Wildlife Service (CWS) and others to identify resources needed to accomplish priorities
- Individuals to report back to sections/superiors to increase understanding of importance
- Joint support letter to be developed and signed by all recovery team chairs

4) Grassland Recovery Implementation Team (GRIT)

- Resources for coordination necessary
- Action Plan and Implementation is the focus
- Develop top 5 messages for consistency
- Determine best method for stakeholder involvement
- Recovery Team model, no agency ownership. Members fund the work, members do the work
- Select evaluation indicators carefully and consider central assumption that grassland conservation will meet species requirements.
- Entire GRIT meet twice per year; Kamloops central; include additional stakeholders at earliest stage possible
- Smaller Steering Committee of RT chairs, CWS, GCC and 1 person from each region continue to move immediate actions forward and meet more regularly
- Task/working groups established below to accomplish immediate actions before next September

Action Items for GRIT Prior to Next Meeting

Action Item	Date Defined	Progress/Status
Logic model synthesis and workshop minutes (Susan Leech, Don Gayton, Bryn White & John Surgenor)	June 7th 2006	Complete
Business case development (Dave Fraser, Stephen Hureau, Recovery Team chairs)	June 7th 2006	
Draft letter from Recovery Team chairs to SARCC for review (Ted Lea)	June 7th 2006	Complete
Gap analysis and species matrix development (Eric LoFroth, Bruno DeleSalle/Graham McGregor, Orville Dyer, John Surgenor, Stephen Hureau, Sue Crowley via Ted Antifeau, Roger Packham)	June 7th 2006	
Acquiring cadastral layer (Graham McGregor and Orville Dyer)	June 7th 2006	
Develop contact list to inform other groups about GRIT (John Surgenor)	June 7th 2006	
Compile list of First Nations and Recovery Teams to be included in future activities: Chat RT, Screech Owl group, Okanagan Nation Alliance, Nicola Tribal Council, Shuswap Nation Tribal Council (Mike Labourdies/Wayne Christien), KKTC – Ktunaxa Kinbasket Tribal Council, SOS Syilx Aboriginal Environment Committee (John Surgenor and Bryn White)	June 7th 2006	

Appendix 1: Agenda

Day 1 – Information sharing and opportunities for collaboration

8:30 am	Welcome and Introduction	John Surgenor, Karl Larson,
8:45	State of the Grasslands	Bruno DeLeSalle
9:15	**Recovery Team Presentations**	
	Badger Recovery Team	Eric LoFroth
	Southern Interior Amphibian and Reptile Recovery Team	Orville Dyer
	Burrowing Owl RT	John Surgenor
10:00	BREAK	
10:15	**Recovery Team Presentations continued**	
	Sharptailed Grouse	Doug Jury
	Southern Interior Rare Plants Recovery Team	Ted Lea
	Southern Interior Invertebrates at Risk Recovery Team	Jennifer Heron
11:15	Update on BC recovery planning process	Brenda Costanzo
11:30	Coordination and Implementation Discussion	Don Gayton
12:00	LUNCH and continued discussion	
12:45	Group exercise: developing a situation analysis	Susan Leech
2:00	Grasslands Priority Mapping Project	Graham McGregor
2:30	Opportunities for Recovery Implementation	Stephen Hureau
2:45	BREAK	
3:00	SOSCP and approaches for Species at Risk Recovery	Orville Dyer & Bryn White
	Implementation Partners	
	Partners in Flight	Tanya Luszcz
	Nature Conservancy of Canada	Barbara Pryce
	Ducks Unlimited	Bruce Harrison
4:30	**Adjourn**	

Day 2 – Creating a Logic Model for Coordinated Grassland Species at Risk Recovery Implementation

8:30 am	Confirm agenda and workshop objectives	Susan Leech
8:40	Overview presentation – outcome-based program planning using the logic model. Introduction to the process and what we will achieve. Discussion with participants.	Susan Leech
9:30	*Stretch/Refreshment break*	
9:45	Presentation and discussion about vision, barriers/driving forces, audiences and threats	Don Gayton
10:15	Group exercise: turning common threats into long term outcome statements	Susan Leech
11:00	*Stretch break*	
11:15	Group exercise: Development of logic model chain for long term outcome statements	Susan Leech
12:00	*Lunch and continued discussion*	
1:00 pm	Reporting back on Group exercise	Susan Leech
3:00	*Refreshment break*	
3:15	Wrap-up discussion: next steps	Bryn White
4:15	Evaluation	Susan Leech
4:30	**Adjourn**	

Appendix 2: Participant List and Acronyms

Workshop Participants:

Name	Organization/Affliation
Ted Antifeau	BC Ministry of Environment
Dawn Brodie	Burrowing Owl Conservation Society
Brenda Constanzo	BC Ministry of Environment
Helen Davis	Badger Recovery Team
Bruno DeLeSalle	Grassland Conservation Council
Orville Dyer	BC Ministry of Environment/South Okanagan Similkameen Conservation Program/ Southern Interior Amphibian and Reptile Recovery Team
Marvin Eng	BC Ministry of Forests and Range
Wayne Erickson	BC Ministry of Forests and Range
Dave Fraser	BC Ministry of Environment
Lauchlan Fraser (Day 1 only)	Thompson Rivers University
Laura Friis	BC Ministry of Environment
Wendy Gardner (Day 1 only)	Thompson Rivers University
Don Gayton	FORREX
Marie Goulden	Badger Recovery Team
Bruce Harrison	Ducks Unlimited Canada
Jennifer Heron	BC Ministry of Environment/ Southern Interior Invertebrates at Risk Recovery Team
Corinna Hoodicoff	Badger Recovery Team
Rick Howie (Day 1 only)	Consultant
Stephen Hureau	Canadian Wildlife Service
Doug Jury	BC Ministry of Environment/ Sharptailed Grouse Recovery Team
Pam Krannitz	Canadian Wildlife Service
Karl Larson	Thompson Rivers University
Ted Lea	BC Ministry of Environment/ Southern Interior Rare Plants Recovery Team
Susan Leech	FORREX
Ernest Leupin	Sage Grouse Recovery Team
Eric LoFroth	BC Ministry of Environment/Badger Recovery Team

Workshop participants continued:

Name	Organization/Affliation
Tanya Luszcz	Partners in Flight
Graham MacGregor	Grassland Conservation Council
Mike MacIntosh	Burrowing Owl Conservation Society
Ian McGregor	BC Ministry of Environment
Aimee Mitchell	Burrowing Owl Recovery Team
Roger Packham	BC Ministry of Environment/Badger Recovery Team
Dave Poll	Badger Recovery Team
Barbara Pryce	Nature Conservancy of Canada
Morgan Rankin (Day 1 only)	Thompson Rivers University
Andrea Schiller (Day 1 only)	Canadian Forest Service
Julie Steciw	BC Ministry of Environment
John Surgenor	BC Ministry of Environment/Burrowing Owl Recovery Team
Rick Tucker	BC Ministry of Forests and Range
Troy Wellicome	Environment Canada
Bryn White	Okanagan College/South Okanagan Similkameen Conservation Program
Paul Williams	BC Wildlife Park
Tom Wood	Canadian Wildlife Service

Invited but unable to attend:

Arthur Robinson	Canadian Forest Service
Tim Ennis	The Nature Conservancy
Paula Rodriguez de la Vega	Nature Conservancy of British Columbia
Cindy Haddow	BC Ministry of Environment
Phil Belliveau	BC Ministry of Environment
Francis Njenga	BC Ministry of Forests and Range
Carrie Terbasket	SOSAEC
Stewart Guy	BC Ministry of Environment
Sean Sharpe	BC Ministry of Environment
Richard Weir	Consultant/Badger Recovery Team

List of Acronyms

ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
ATV	All Terrain Vehicle
BOCS	Burrowing Owl Conservation Society
BCWF	British Columbia Wildlife Federation
CFS	Canadian Forest Service
CWS	Canadian Wildlife Service
DFO	Fisheries and Oceans Canada
DUC	Ducks Unlimited Canada
EC	Environment Canada
EKCP	East Kootenay Conservation Program
FBCN	Federation of BC Naturalists
FORREX	Forest Research Extension Partnership
GCC	Grassland Conservation Council
GIS	Geographic Information Systems
GOERT	Garry Oak Ecosystem Recovery Team
GRIT	Grassland Recovery Implementation Team
IAS	Invasive Alien Species
ILMB	Integrated Land Management Bureau of British Columbia
IPC	Invasive Plant Council
KKTC	Knaxa Kinbasket Tribal Council
LRMP	Land and Resource Management Plan
MAL	BC Ministry of Agriculture and Lands
MOE	BC Ministry of Environment
MOFR	BC Ministry of Forests and Range
MOT	BC Ministry of Transportation
NCC	Nature Conservancy of Canada
NGO	Non Governmental Organization
North OKCP	North Okanagan Conservation Program
OCP	Official Community Plan
OK	Okanagan
PIF	Partners in Flight
RIG	Recovery Implementation Group
RIMS	Recovery Information Management System
ROW	Right-Of-Way (e.g. Hydro ROW)
RT	Recovery Team
SAR	Species at Risk
SARA	Species at Risk Act
SARCC	Species at Risk Coordinating Committee
SOSAEC	South Okanagan Syilx Aboriginal Environment Committee
SOSCP	South Okanagan Similkameen Conservation Program
TLC	The Land Conservancy
TNT	The Nature Trust
TRU	Thompson Rivers University
UBC	University of British Columbia
UBCM	Union of British Columbia Municipalities
WHAs	Wildlife Habitat Areas

Appendix 3: Logic Model

A COORDINATED APPROACH TO GRASSLAND SPECIES AT RISK RECOVERY IMPLEMENTATION – LOGIC MODEL

	OUTCOMES - IMPACTS		
Activities	**Short –Term (Learning)**	**Medium – Term (Action)**	**Long – Term (Condition)**
	▪ Increased awareness/knowledge of the need for provincial legislation to protect species at risk/critical habitat/ecosystems (among the public(s), non-governmental organizations, politicians, etc.) ▪ Increased aspirations of politicians to enact/establish legislation	▪ Enhanced legislation for protection of ecosystems and species at risk (including critical habitat) on provincial lands	Habitat loss is halted
	▪ Increased knowledge of the benefits of grassland conservation in the ALR (ALC, landowners, public, politicians, agricultural associations, MAL) ▪ Increased awareness and knowledge of priority sites for conservation	▪ Decreased agricultural intensification and ALR withdrawal on priority grassland habitat (target: 0 intensification and/or withdrawal on important grassland habitat)	
		▪ Decreased alienation of Crown grazing license and grazing lease land (requires change in government policy)	
		▪ Decreased government taxation and subsidy incentives for destruction of grasslands and associated habitat (target: 0 incentives)	
	▪ First Nations have increased knowledge of the benefits of grassland conservation and desire to work with neighbouring jurisdictions (including international neighbours) on grassland conservation	▪ Improved complementary development and habitat protection by First Nations and adjacent land-owners	
	▪ Increased awareness and knowledge of priority sites for conservation ▪ Increased aspirations to secure priority sites (NGO's, Land Trusts, provincial government, local government, federal government, BC Trust for public lands, corporations, First Nations)	▪ Increased securement of priority grassland habitat by NGO's and others, through the application of various tools (WHAs, parks, protected areas, acquisition, eco-reserves, covenants)	
	▪ Increased knowledge of benefits of Smart Growth, grassland conservation and trade-offs/consequences of uncontrolled growth (scenarios of uncontrolled growth, consequences) – among UBCM, Regional districts, local government, province, OK partnership, academia, public ▪ Increased aspirations to establish urban containment boundaries and for g.rowth management planning ▪ Increased awareness of the problems associated with allowing development in the interface/encroachment areas (in terms of reducing grassland habitat availability, reducing ability to restore habitat, etc.)	▪ Improved incorporation of species at risk habitat needs by Regional Districts and local governments into growth planning, including containment boundaries, with cooperation of other levels of government. ▪ Increased preservation of critical habitat by Regional Districts and local governments ▪ Increased adoption and implementation of BMPs to reduce risk to grassland species in urban development (local and regional governments, First Nations) (other audiences/development include energy – Hydro ROW, housing developments, golf courses, vineyards, mines, highways, airports) ▪ Decreased development in the interface/encroachment areas through zoning, containment, OCPs and regional growth strategies (restricted by regional and municipal governments)	
	▪ Increased awareness of the need for incentives and benefits of their use (bang for the buck re: conservation) – among senior government, lobbyists, public landowners ▪ Increased aspirations to establish and use incentives (senior government, local government, NGO's – pay for covenants, WCEL)	▪ Increased stewardship activities to secure grasslands – e.g. farm planning, including clear, strong incentives	

Activities	OUTCOMES - IMPACTS		
	Short – Term (Learning)	**Medium – Term (Action)**	**Long – Term (Condition)**
	▪ Increased knowledge of the importance of maintaining large, intact grasslands ▪ Increased awareness of the problems with the existing policy ▪ Increased desire/aspirations to maintain large, intact grasslands	▪ Improved maintenance of large, intact grasslands: no subdivision to smaller acreages is allowed	Habitat quality is improved and function is restored; land use is more compatible
	▪ Increased knowledge of the importance of maintaining large, intact grasslands ▪ Increased desire/aspirations to maintain large, intact grasslands ▪ Increased ability (among government officials) to consolidate land titles	▪ Facilitate increased consolidation of multiple ranch parcels under the same ownership to a single title, to reduce potential for future alienation	
	▪ Increased knowledge of approaches for encouraging private grassland owners to maintain high quality habitat, specifically the potential for using tax incentives (e.g. knowledge of case studies from other jurisdictions)	▪ Increased tax incentives for private grassland owners who maintain high quality habitat (grassland and other associated habitat)	
	▪ Land owners have increased awareness of green ranching principles and increased aspirations to use these principles in grassland management ▪ Land owners have increased knowledge and skills related to maintaining a mosaic of habitat across their lands ▪ Buyers/consumers have increased awareness of benefits of buying certified beef, and aspire to buy agricultural products from certified ranches	Increased use of "Green Ranching" Principles: ▪ increased adoption of BMPs by land managers ▪ Increased buyer preference for certified range/agricultural products ▪ Increased land ethic among land managers ▪ Increased mosaic of range quality ▪ Increased viability of ethical ranching	
		▪ Increased use of range stewardship plans	
	▪ Increased knowledge of the benefits of wildlife and habitat needs of wildlife in grasslands among policy-makers, land managers, local regional governments, MOFR	▪ Increased incorporation of wildlife needs into land management plans	
	▪ Increased knowledge of the benefits of planted native vegetation (among land managers, etc. – incentives?)	▪ Increased use of native vegetation in lieu of agronomic species for erosion control, rehabilitation and road-cut stabilization	
	▪ Adequate knowledge of roads and road classification exists ▪ Increased awareness of the impacts of illegal dumping (in policy-makers, enforcement staff, industry, landowners) ▪ Increased awareness of the impacts of building roads in grasslands on species at risk and other values (in policy-makers, enforcement staff, industry, landowners) ▪ Increased skill to reclam roads (among industry, landowners, land managers) ▪ Increased knowledge of assessing impacts of roads (among industry, landowners, land managers)	Reduced impacts of roads: ▪ Decreased number of roads in grassland (land managers) ▪ Decreased vehicle access to grasslands (land managers) ▪ Increased road reclamation (land managers) ▪ Increased enforcement of illegal dumping (enforcement staff, policy-makers)	
	▪ Increased awareness/knowledge of need to avoid or mitigate direct impacts to species at risk (in power projects, energy corridors, wind power, transportation corridors, etc.)	▪ Increased use of Best Management Practices to avoid disturbance of species at risk from accidental loss/mortality (e.g. road kills) ▪ Increased adoption and implementation of BMPs by transportation to reduce risk to grassland species	
▪ Initiate access management process for grasslands ▪ Licensing/certification ▪ Mandatory certification course for ATV's directed at grassland integrity ▪ Coordinate meetings to identify and define designated sensitive areas through GCC and other mapping sources with stakeholders ▪ ATV awareness program, public information, brochures, signage, physical restoration ▪ Target manufacturers to promote responsible ridership, dealer involvement	▪ Increase awareness to affect change in attitude and appreciation of grasslands ▪ ATV users have increased aspirations to protect grasslands by environmental training and skills (leave nothing behind thinking) ▪ Recreation users and manufacturers/industry have increased knowledge, ethics and standards, share knowledge and have peer acceptance…related to grassland integrity	▪ Improved confinement of high impact off-road recreation users to designated recreation areas ▪ Increased designation of lower impact recreation use areas. ▪ Improved designation and enforcement of off road land use areas (through by-laws and enforcement by municipal, regional governments, and other levels of government) ▪ Best management practices are implemented by and followed by associations and users ▪ Recreation users use peer influence to create conservation ethic/standard of behaviour	

Activities	OUTCOMES - IMPACTS		
	Short – Term (Learning)	**Medium – Term (Action)**	**Long – Term (Condition)**
	▪ Improved knowledge and awareness of the impacts of current stocking standards on species and ecosystems at risk within MOFR, staff, academia ▪ MOFR staff aspire to reduce stocking standards to better accommodate species at risk habitat	▪ Decreased silvicultural stocking standards (stems/ha) in dry forest types and increased monitoring of stocking standards	Forest in-growth and encroachment is reversed
	▪ Increased knowledge of the benefits of fire in grasslands (among policy-makers, land managers, local government, MOFR) ▪ Increased knowledge of the timing to burn (and locations)	▪ Greater acceptance of fire maintained ecosystem restoration by MOFR; ▪ Increased appropriate use of prescribed fire (by governments, First Nations and land managers) over a broad range of seasons and conditions; ▪ Improved judicious application of "let it burn" options (required change in policy)	
▪ Develop prioritization tool to facilitate treatment	▪ Increased knowledge and skills related to use of ecologically sensitive pre-treatment in planning ▪ Increased recognition of other grassland values in forest planning processes	▪ Increased use of ecologically sensitive pre-treatment in planning and implementation (MOFR, MOE, stakeholders)	
	▪ Increased recognition of other grassland values in forest planning processes	▪ Increased completion and implementation of restoration plans (MOFR, MOE, MAL)	
	▪ Increased awareness of the effects of encroachment on grassland species and the extent of the problem (among all stakeholders)	▪ Improved policy to allow increased harvesting for restoration in forested grassland ecosystems (MOFR) and increased removal of forest in-growth: harvesting priorities are shifted to in-growth areas (MOFR, Industry)	
	▪ Increased awareness of the increased fire hazards as a result of in-growth and encroachment	▪ Increased public acceptance of prescribed fire	
▪ Research branches, academic institutions analyze Invasive Alien Species that affect species at risk ▪ Industry focused extension programs for IAS (BCNLA, Pet industry, ranching/cattleman associations)	▪ Increased awareness of impacts and spread of invasive alien species; ▪ Improved recognition of IAS; ▪ Increased knowledge and skills related to effective control of invasive alien species; ▪ Increased aspirations to control invasive alien species; ▪ Private land owners, MOFR, MAL, MOT, Range license-holders, ranchers, BC Hydro, BC Rail etc. increase in desire and capacity to decrease IAS through improved extension programs and secured funding	▪ Improved management and control of IAS along transportation corridors among MOT, Range license-holders, ranchers, BC Hydro, BC Rail, etc. ▪ Increased application of biocontrol to treat IAS, and judicious use of pesticides as part of an integrated weed management strategy ▪ Reduced distribution of IAS in grasslands and associated ecosystems	Invasive alien species are reduced to a state in which they do not threaten species and habitat Decreased IAS entering Canada
▪	▪ Increased knowledge of the need for legislative improvements (among province, municipalities, etc.) ▪ Increased knowledge of the need for a coordinated response to IAS among all responsible government agencies ▪ Increased knowledge of how to improve noxious weed list to reflect reality for IAS in grasslands	▪ Improved provincial and municipal legislation (stronger and broadened to other taxa not included in current regulations) related to invasive alien species (IAS) (e.g. weed act, by-laws) ▪ Improved noxious weed list to reflect reality for IAS in grasslands (provincial government) ▪ Increased definition of roles and responsibilities related to controlling/identifying/monitoring IAS (among Province/federal government)	
▪ Extension training; train the trainer sessions	▪ Increased knowledge and skills related to use of extension to decrease invasive alien species on private and crown grasslands	▪ Increased use of extension by MOFR, GCC, NGO's, cattlemen's association, IPC to decrease invasive alien species on private and crown grasslands	
▪ Industry focused extension programs for IAS (BCNLA, Pet industry, ranching/cattleman associations)	▪ Increased knowledge of detrimental effects of using invasive alien plants species in landscaping; ▪ Increased aspirations among BCNLA to reduce use of invasive alien plant species in landscaping	▪ Reduced use and introduction of new IAS into landscaping	
▪ Encourage province to track IAS through CDC; develop IAS tracking system ▪ Monitor IAS (partnerships) ▪ Create an invertebrate alien species working group or NGO to direct activities	▪ Increased skills related to monitoring IAS ▪ Increased ability to track IAS through the Conservation Data Centre ▪ Increased speed of awareness of new IAS	▪ Improved tracking and monitoring of IAS ▪ Increased coordinated data collection and depository and research on IAS effects on economy and environment ▪ Private landowners, MOFR, MAL have improved rapid response to "new" IAS	
	▪ Increased awareness of the impact of disturbance/increased access on the ability of IAS to spread; ▪ Increased ability to coordinate access management among all ministries and industries	▪ Decreased amount of disturbance contributing to the increase and spread of IAS (access management) among MOT, Range license holders, ranchers, BC Hydro, BC Rail, etc.)	
	▪ Improved knowledge of clean transportation procedures for cattle, vehicles, etc.	▪ Improved clean transportation procedures for cattle, vehicles, etc. (incentive program exists, legislation?)	
	▪ Increased knowledge of impacts of hay on introduction of IAS	▪ Decreased transportation of hay between areas	

Appendix 4: Draft Grassland Species at Risk Tracking Spreadsheet

A draft grassland species at risk tracking spreadsheet is appended to this document as an excel spreadsheet (DRAFT SAR grassland tracking database.xls). The information contained in this spreadsheet has largely been drawn from existing Recovery Strategies and has not been vetted by Recovery Team Chairs. It is intended to serve as a starting point for discussing how best to collate this information for grassland species at risk in British Columbia.