MULTISAR

A LANDSCAPE APPROACH TO MULTI-SPECIES CONSERVATION IN THE GRASSLAND NATURAL REGION OF ALBERTA

Spotlight: Onefour Research Ranch

MULTISAR

Katheryn Taylor

MULTISAR

MULTISAR is a voluntary stewardship program, focusing on multiple species at risk in the Grassland Natural Region of Alberta that aims at:

- **influencing land management decisions**
- **creating habitat improvements**
- **assisting with their implementation**

To help in the sustainability of range lands, the conservation of wild species and the recovery of species at risk in a manner that also benefits ranchers in southern Alberta

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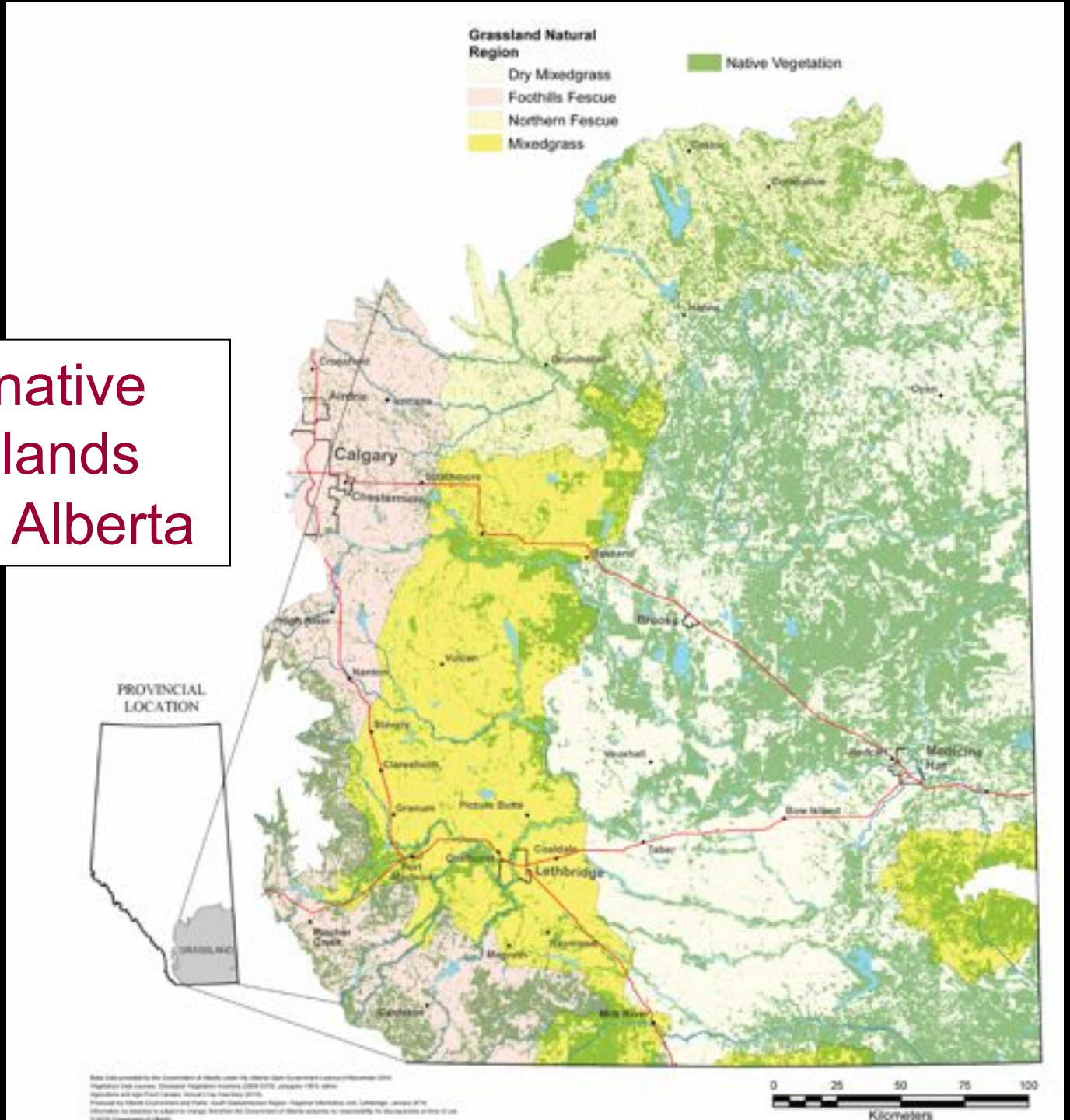
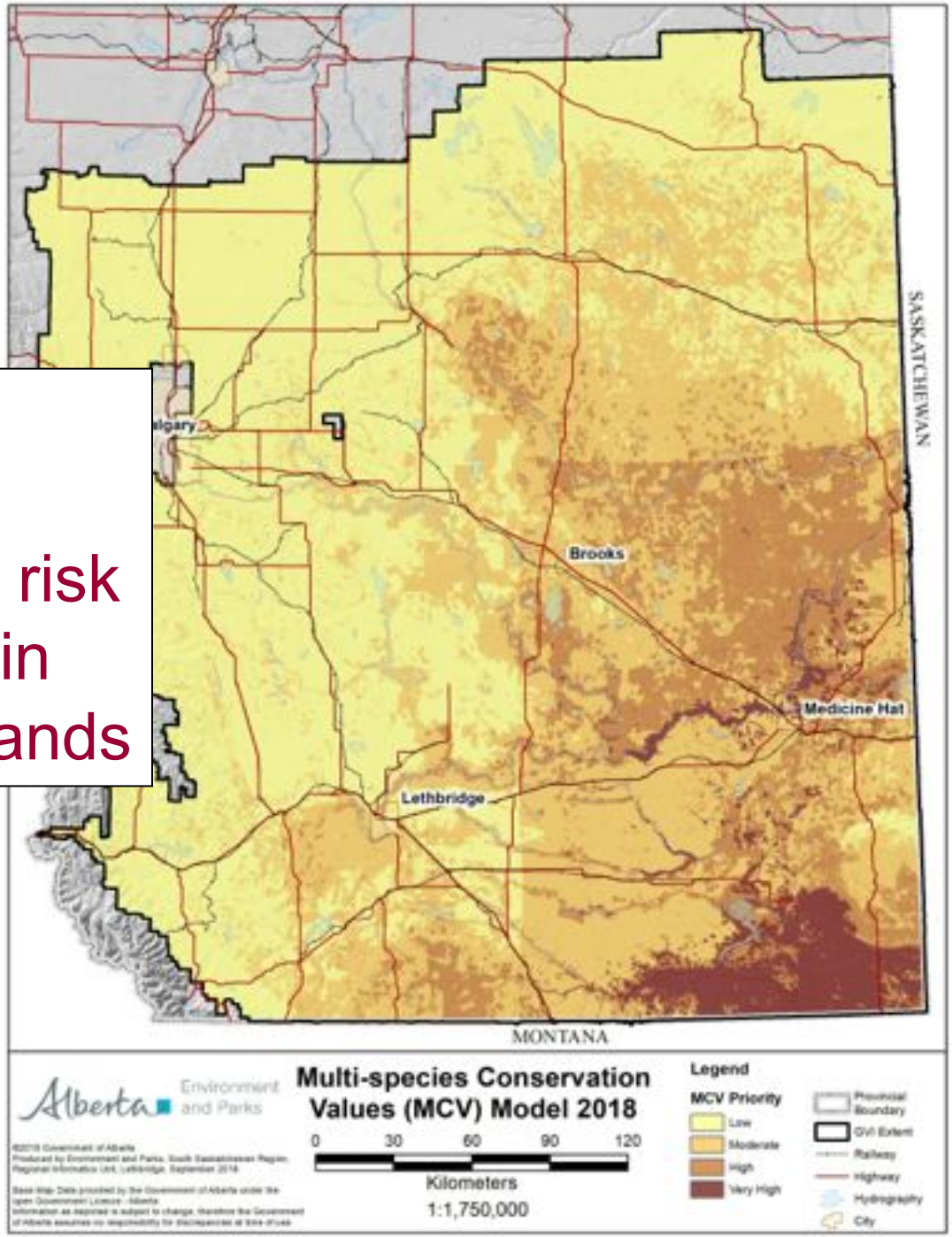
- **MULTISAR:**
  - **MULTIple Species At Risk**
  - **MULTI-disciplinary**
  - **MULTI-partners**

36% native grasslands left in Alberta



75% of Alberta's species at risk are found in the grasslands



So what does MULTISAR do?

- Habitat Conservation Strategies (HCS)

- Species At Risk Conservation Plans (SARC)
- Beneficial Management Practices (BMP's)
- Habitat Management Plans (HMP)

Kristen Rumbolt Miller

Habitat Conservation Strategy (HCS)

A plan to manage rangeland for sustainable cattle production, watershed protection and habitat quality for fish & wildlife

- Baseline Inventory

  Includes wildlife surveys, assessments of the health of rangeland and riparian areas

  General and pasture specific management recommendations

  Habitat improvements

  Monitoring and evaluation program

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Reassessments

- Adopted a collaborative process in the development of the strategy
- Desired range and riparian health is occurring
- Maintained or enhanced habitat for multiple wildlife species including species at risk
- Desired wildlife species are occurring on the ranch and/or potential habitat is being maintained or enhanced for these species
- Recommendations within the HCS are being attempted
- Utilized an adaptive management process in the implementation of the strategy
- Habitat improvement projects are having the desired effect.

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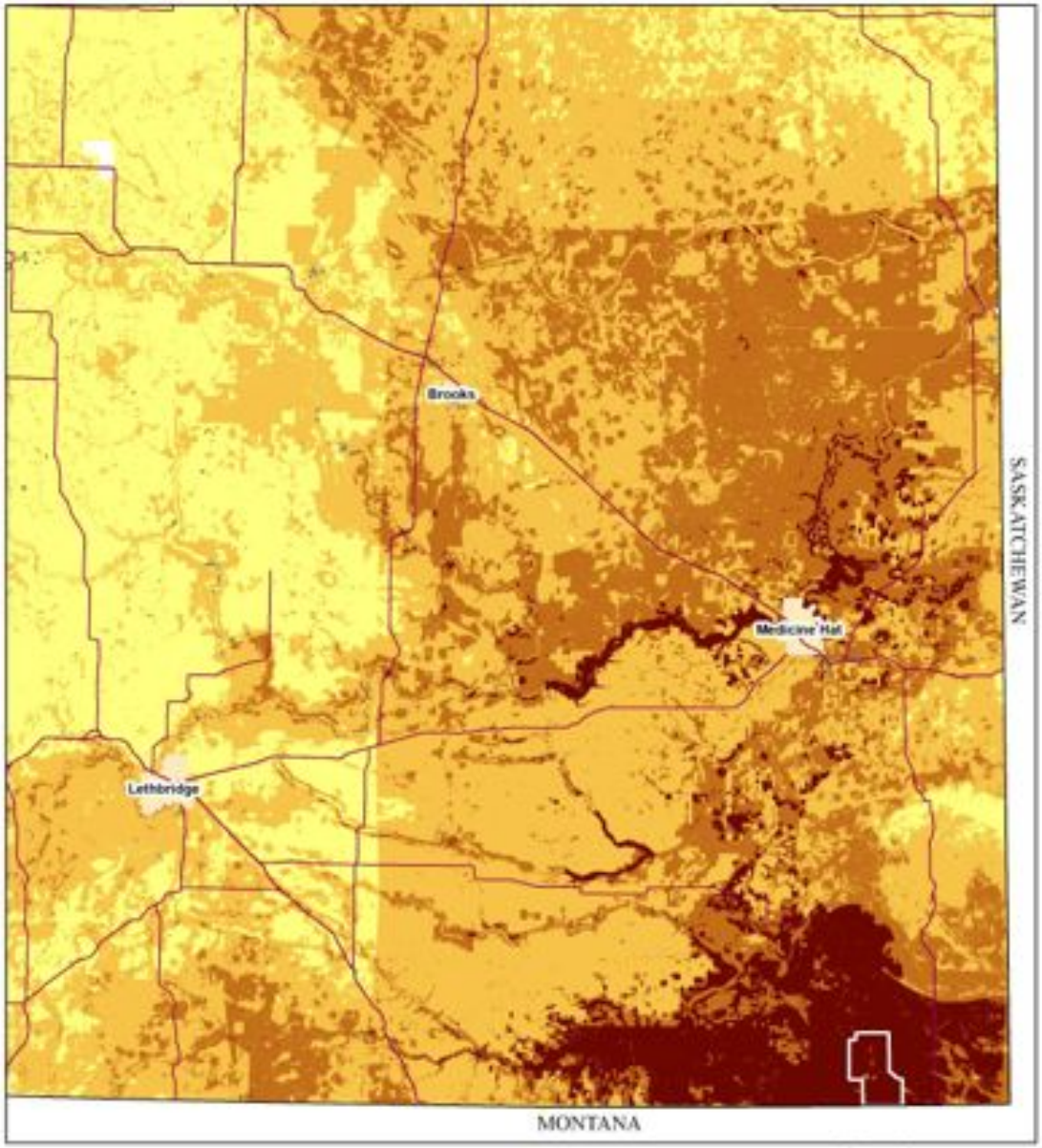

Alberta Environment and Parks

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Multi-species Conservation Values (MCV) Model 2018

0 15 30 60 90 120

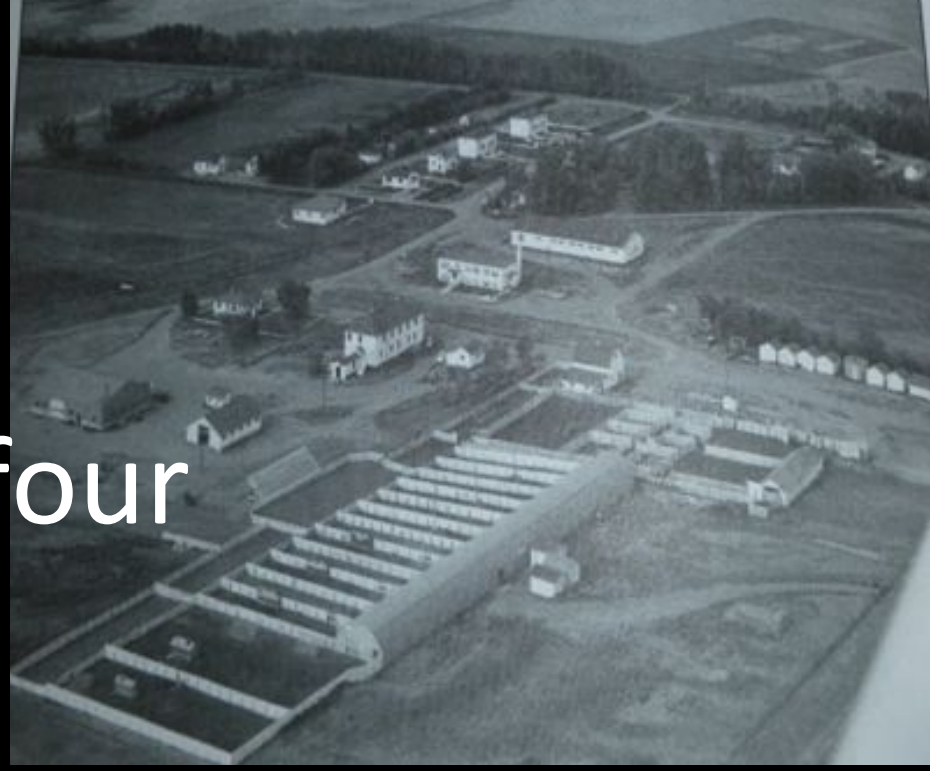
Kilometers

1:1,200,000

Legend

MCV Priority

- Low
- Moderate
- High
- Very High
- Highway
- City



Onefour

Francois Blouin

Adam Moltzahn

Gord Court

Ken Pitcher

Gord Court

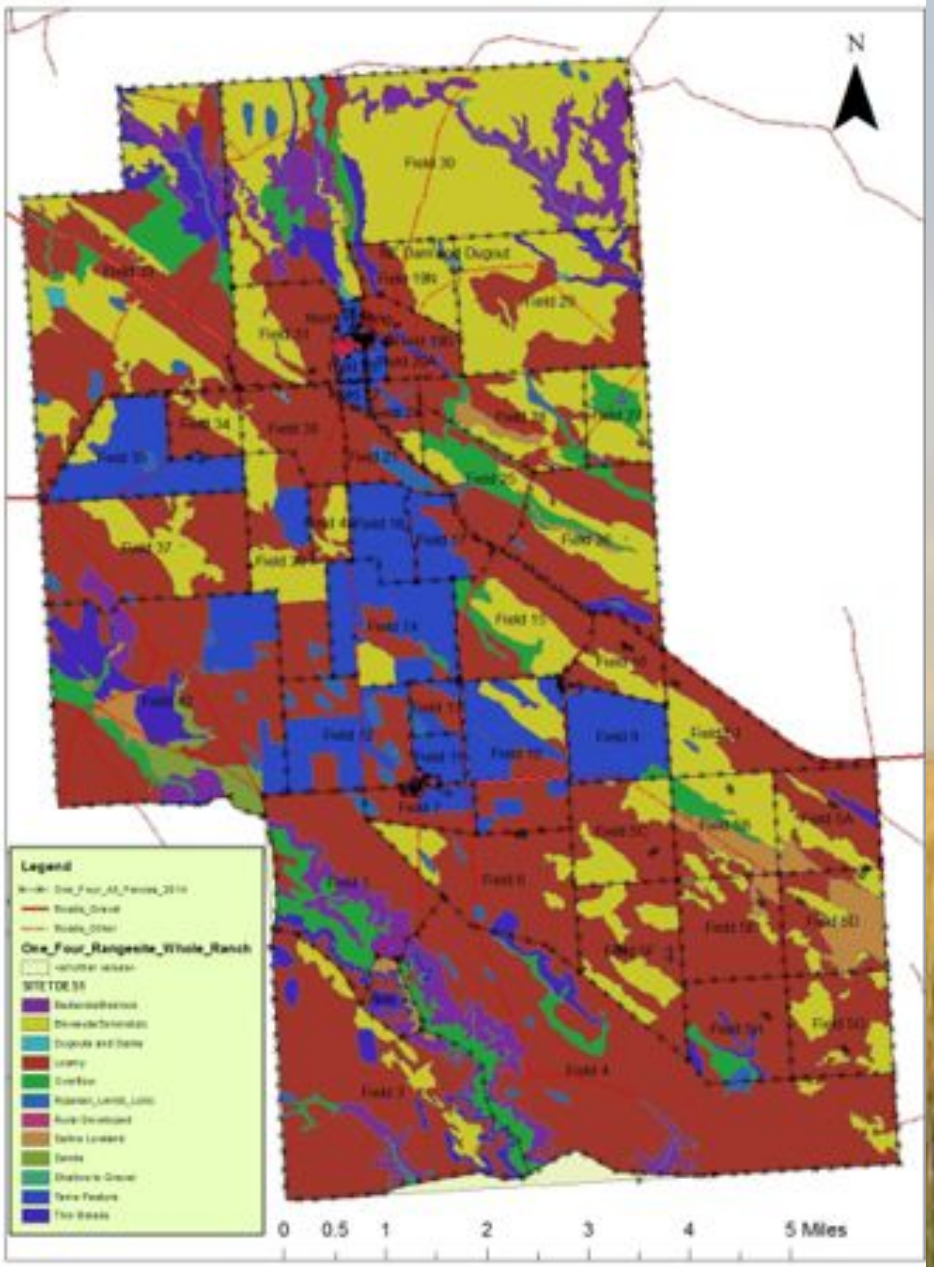
Gord Court

Kristen Rumbolt Miller

Kristen Rumbolt Miller

Ken Pitcher

Range & Wildlife Inventories



- Grassland Vegetation Inventory (GVI) ecological range site (soil based) polygons added to map of ranch as survey units for range and wildlife surveys.

Produced by MULTISAR, a collaborative project between Alberta Conservation Association, Alberta Environment and Sustainable Resource Development, and the Prairie Conservation Forum
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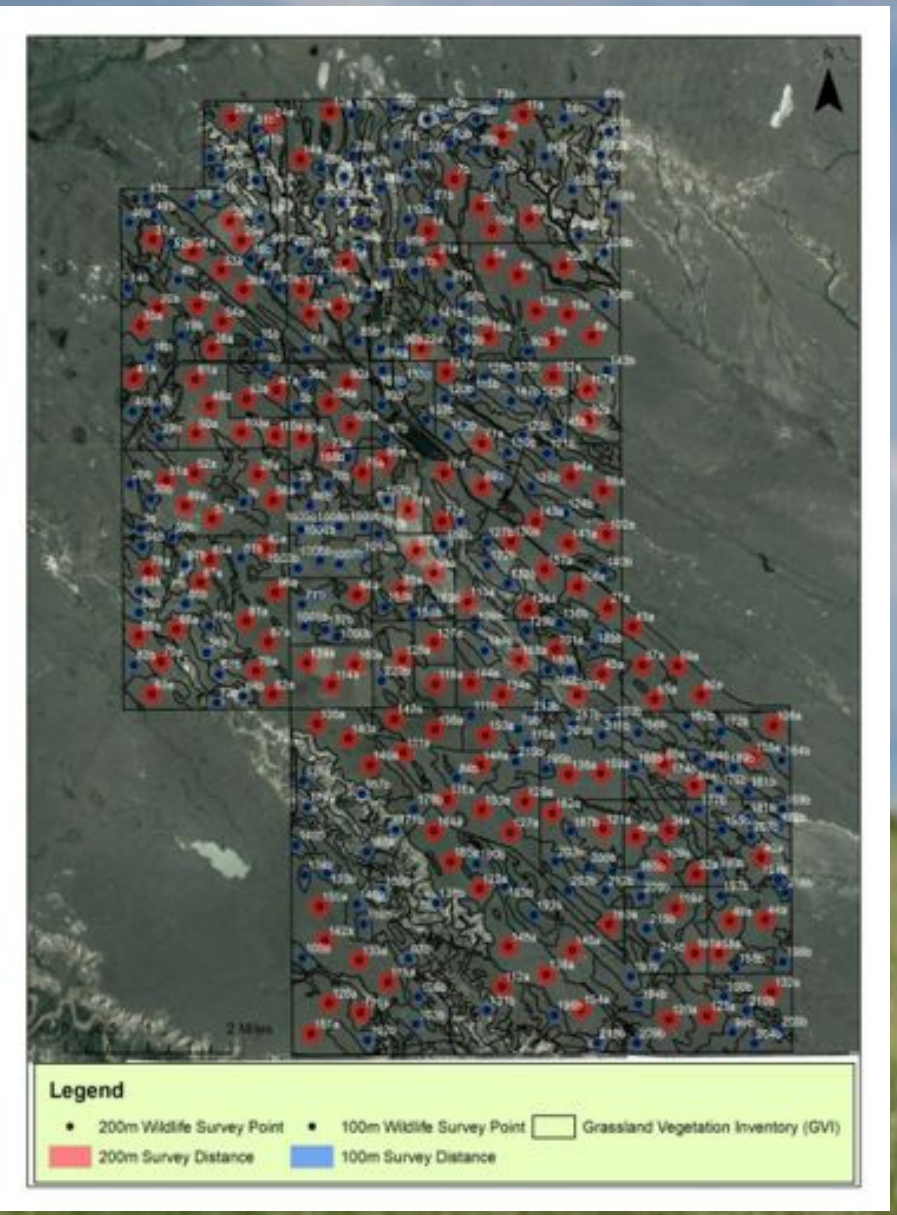
Wildlife Inventories
(multi-species surveys)



- Wildlife survey points are mapped within GVI polygons and individual pastures with either 100m or 200m survey distance (based on polygon size).
- Keeping wildlife survey points within GVI polygons increases our potential for correlations between wildlife and range health in each polygon.
- 391 wildlife survey point locations across the property.

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Wildlife Inventories

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Wildlife Inventories

Targeted Surveys for:

- Burrowing owl (call playback)
- Sharp-tailed grouse (leks)
- Swift fox (historic den check)
- Raptors (tree and cliff nests)
- Amphibians (all waterbodies)
- Short-horned lizards (badland areas & south facing slopes, AEP)
- Snake hibernacula (south facing slopes, AEP)
- Bats (ANABAT, AEP)

Francois Blouin

Wildlife Inventories

- Over 3300 wildlife observations were submitted to Alberta's Fish & Wildlife Management Information System (FWMIS).

- 113 wildlife species were recorded, 42 of which are species at risk.
  - 87 birds, 17 mammals, 6 reptiles and 3 amphibians.

- Species at risk were recorded at 94% of wildlife survey points.

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Grassland Birds

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2014-08-19 8:02:53 AM M 1/3 18°C
Swift fox
Alberta Conservation Association
PC800 PROFESSIONAL
RECONYX

Burrowing Owl

Darryl Jarina

Katheryn Taylor

Ferruginous Hawk

Kristen Rumbolt Miller

Short-horned lizard & Snakes

Julie Landry-DeBoer

Short-horned lizard

Adam Moltzahn

Short-horned lizard

Brad Downey

Eastern yellow-bellied racer

Sandi Robertson

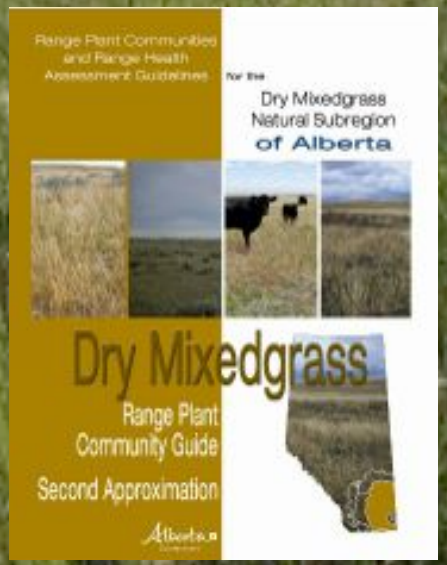
Vegetation Inventories and Range Health Assessments

- 227 detailed vegetation inventories.
- 365 range health assessments & 40 tame pasture health assessments.
- Four riparian health inventories by Alberta Riparian Habitat Management Society (Cows & Fish).

Lee Moltzahn

Vegetation Inventories and Range Health Assessments

- 140 plant communities
  - 40 of these are reference plant communities
  - 100 conditional communities



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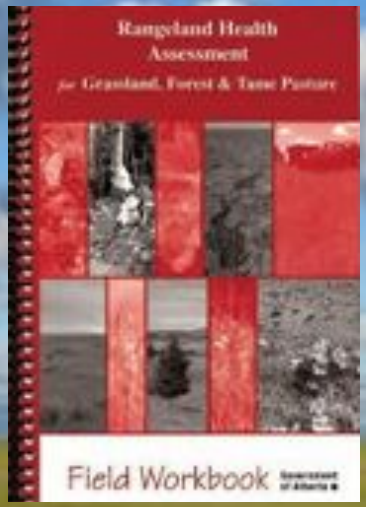
Vegetation Inventories and Range Health Assessments

- Seven rare plant species:
  - Soapweed (yucca), small-flowered sand verbena, smooth goosefoot, dwarf woolyhead, annual skeletonweed, Moquin's seablite, and small-flowered hawk's-beard.

Ken Pitcher

Ken Pitcher

Range and Tame Pasture Health Assessments



Range Health Indicators:

1. Integrity of Plant Community
2. Structure - expected plant layers present
3. Hydrological Function and Nutrient Cycling - litter levels
4. Site stability (erosion, bare ground)
5. Noxious weeds

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Health Scores: What They Tell You

HIGH HEALTHY	All key functions are being performed.
HEALTHY	
HIGH HEALTHY with PROBLEMS	Most, but not all functions are performed.
LOW HEALTHY with PROBLEMS	Early warning!
UNHEALTHY	Few of the functions are performed. Urgent action required!

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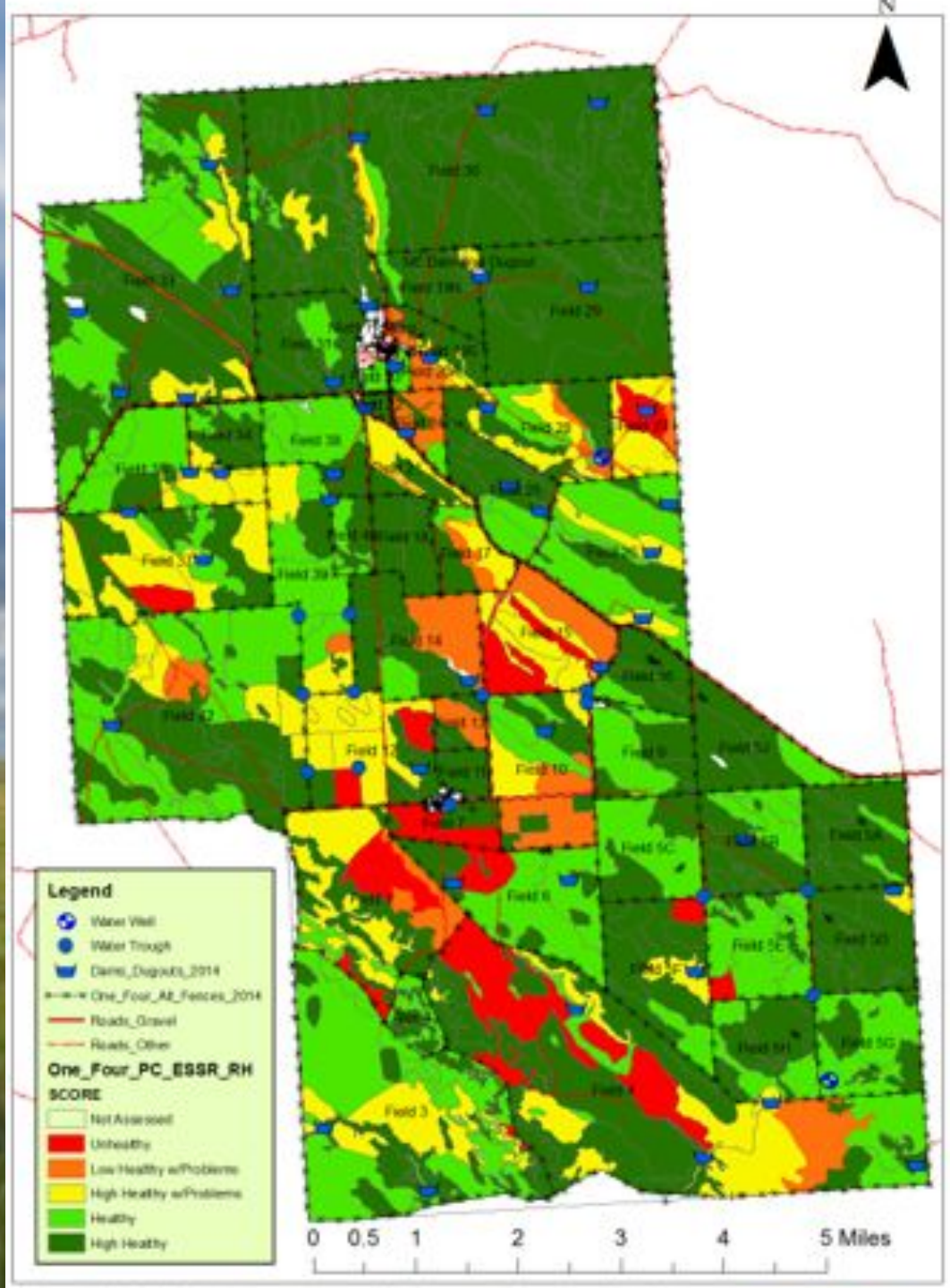

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MULTISAR – In Summary

- Voluntary approach, sensitive to the landowner's needs, interests and capacity (grassroots)

- Partnership

- An integrated approach, looking at the needs of multiple fish & wildlife species (including species at risk), healthy rangelands, sustainable ranching and informed industrial development in the Grassland Natural Region

Katheryn Taylor

Partners:

Government of Alberta

Prairie Conservation Forum

Alberta Conservation Association
Conserving Alberta's Wild Side

Cows and Fish

SINCE 1969 Alberta Beef Producers

CCA SINCE 1932

This project was undertaken with the financial support of the Government of Canada.

Ce projet a été réalisé avec l'appui financier du gouvernement du Canada.

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