

A Biosphere Reserve of, by and for the local people: Redberry Lake Biosphere Reserve, Saskatchewan, Canada

International Conference
Communities, Conservation & Livelihoods
Halifax, Canada, May 28-30, 2018

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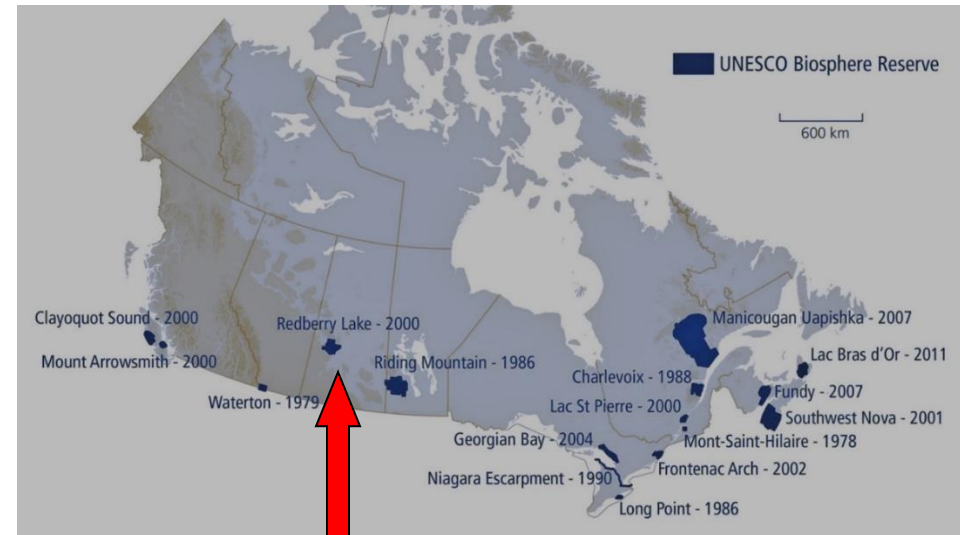
Key Messages

- Local residents can initiate action for sustainability of their communities, even where no strong support comes from outside.
- A global institution like UNESCO's Man and the Biosphere (MAB) Programme can be used by local people for such action.
- Actors in different standpoints can also join the action at different times to help diversify options and opportunities for sustainability.

Community Introduction

Hafford and 10 urban & rural municipalities constituting the Redberry Lake Biosphere Reserve (RLBR) District

- Location: Central Saskatchewan in Treaty 6 Territory
- Population: 4,000-, Metis, Cree, descendants of Ukrainian and other European settlers
- Major Livelihood: Agriculture
- Redberry Lake: Saline lake at the bottom of a closed watershed
- Aspen parkland; Migratory Bird Sanctuary & Important Bird Area



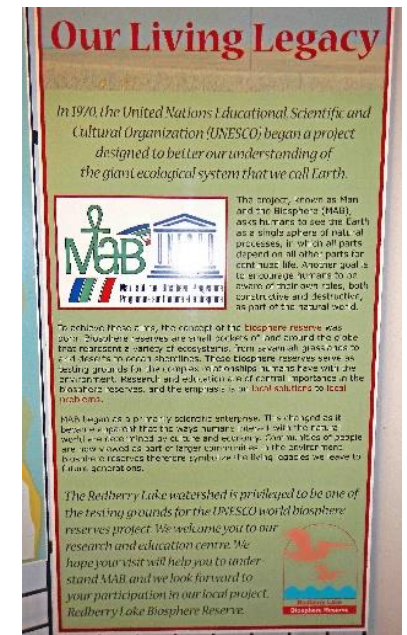
Conservation and Livelihood Challenges (1)

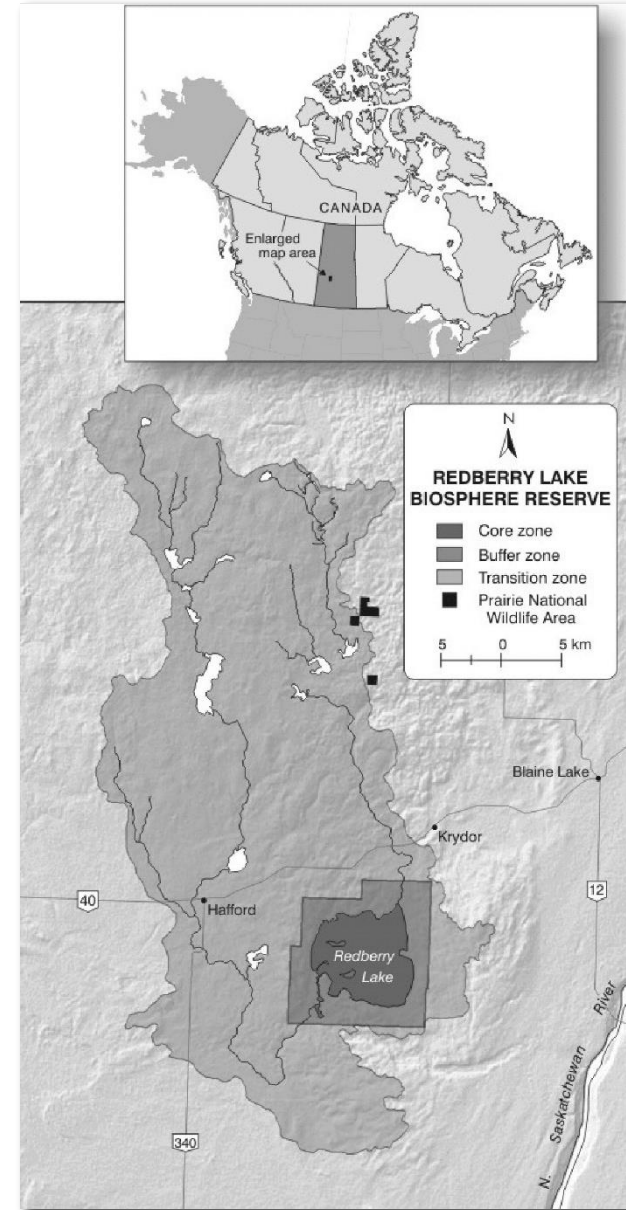
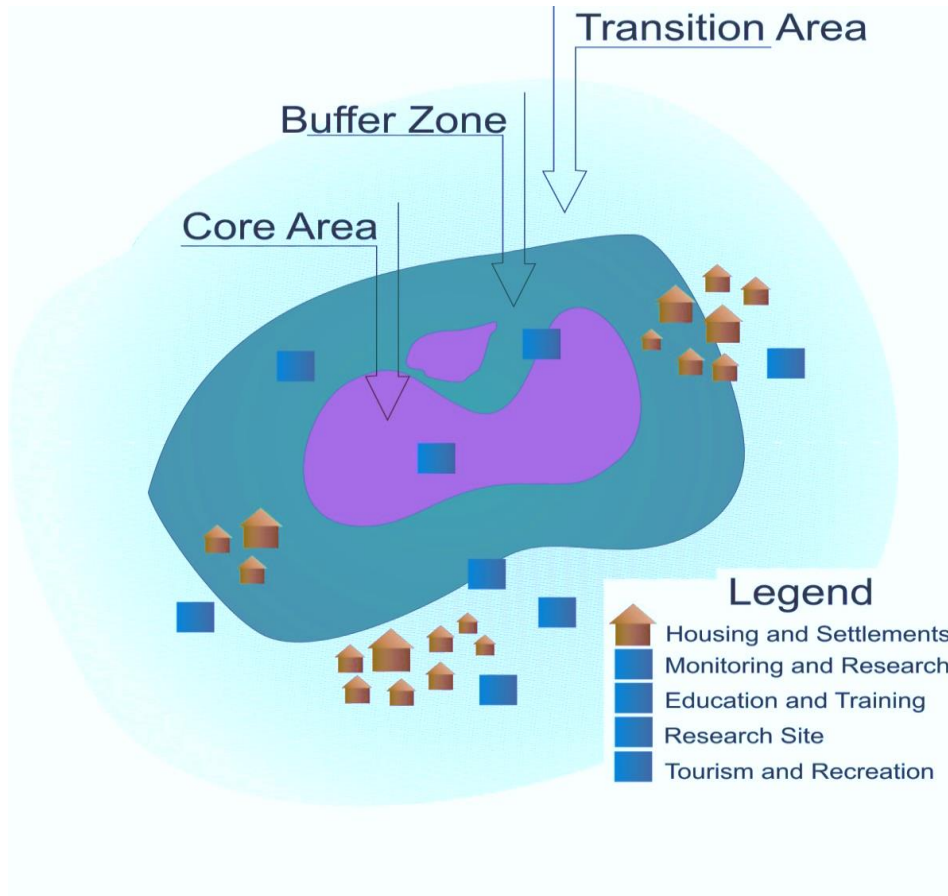
- Conversion of native prairies to crop-based farms, totally altering landscapes and ecosystems
- Change in prairie hydrology, varying precipitation patterns
- Demographic and livelihood change
- Larger scale and mechanized farming practices – small scale farming becoming less viable



Community Initiative (1)

- 1980s: Resort development plan prompting local residents to consider sustainability of their communities seriously
- 1989-: Redberry Pelican Project, with then endangered American White Pelican as an attractive environmental icon
- 1996-7: A biologist during his fieldwork recommended that the UNESCO MAB might be suitable with the local action
- Local people decided to aim at BR designation, which was realized in 2000

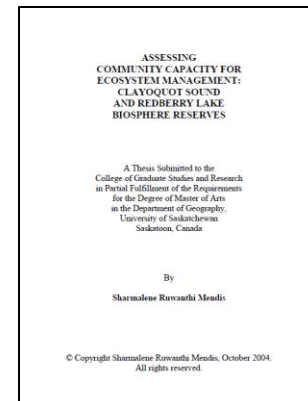




Source: Reed, M. G. (2007); Map cartography by Keith Bigelow

Practical Outcome (1)

- RLBR's Periodic Review (2011):
Generally positive assessment in all three functions of conservation, sustainable development, and support for research and education
 - Educational programs at Hafford Central School
 - Master's theses related to RLBR
- Sustainable farming practice promoted by RLBR was acknowledged with particular emphasis – largely owing to the Executive Director's expertise



Conservation and Livelihood Challenges (2)

- Budget cut: Federal funding terminated in 2012
- Lack of government support
- Difficult to cover operational cost, e.g. staff, office, projects, etc.
- Invasive weeds and zebra mussels (potentially) threatening the ecosystems
- Waste management: Particularly plastic waste, e.g. grain bags

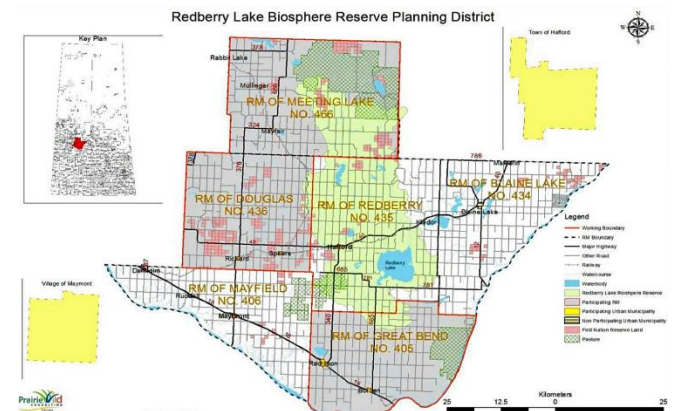


nps.gov



Community Initiative (2)

- Working group structure: local people acting as subject matter experts
- Collaboration with broader network
 - University of Saskatchewan
 - Saskatchewan Polytechnic
 - Canadian Biosphere Reserves Association
 - Rhon Biosphere Reserve, Germany
 - Integrated Local Environmental Knowledge project of the Research Institute for Humanity and Nature, Japan
- Sustainability plan for RLBR district
- Fee-for-service entity



Practical Outcome (2)

- Field course modified over the years to better meet the needs of graduate students and local communities
- Innovative farmers: Ranch with native vegetation; Organic farming and community-supported agriculture
- Turning a large, abandoned hog barn into new facility for plastic waste recycling; then developing it into a local center of innovation
- Documentary film 'Striking Balance' and accompanying e-book 'Sustaining Home'





MEMORANDUM OF UNDERSTANDING
BETWEEN
Rudolfs Lake Bioscience Reserve
Hafford, Saskatchewan
AND
The ILEK Project
Research Institute for Humanity and Nature
Kyoto, Japan

The MEMORANDUM OF UNDERSTANDING (MOU) is hereby made and entered into by and between Rudolfs Lake Bioscience Reserve (RLBR) and the ILEK Project (Division and Institutional Governance of the Centre through Formation of Integrated Local Environmental Knowledge) conducted at the Research Institute for Humanity and Nature (RIHN). This is not an MOU covered in RLBR and ILEK.

A. PURPOSE:
The purpose of this MOU is to provide specifications regarding the collaboration between RLBR and the ILEK Project. Both parties to this agreement share broad goals of research and practice regarding sustainable development and environmental protection. The partnership includes collaboration in planning, implementation and evaluation of activities aimed at the goals mentioned.

B. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:
Both parties enjoy mutual benefits from this partnership. The RLBR seeks advice in collaboration with the ILEK Project, which values local and environmental knowledge and collaboration in planning and societal development. The ILEK Project seeks advice in collaboration with RLBR, which exemplifies local initiatives. For sustainable community development and integrated conservation in use of the UNESCO Biosphere Reserve Hafford, both parties will pursue mutually beneficial outcomes from this partnership.

C. ALTERNATIVE:

1. Provide an integrated content plan for the ILEK Project. RLBR will notify the ILEK Project of any change in the content plan.
2. Provide an adequate building and workspace for work. The Research and Education Centre at Rudolfs Lake offers working and meeting space, internet access, a library, meeting facilities and workspace.
3. Share related research results from other projects with the ILEK Project (RLBR is not liable for disclosure of data).
4. Participate in the planning and development of collaborative activities with the ILEK Project and



COMMUNITY CONNECTIONS

October 23 at 3:00 pm

Celebrate our
farm & ranch community

Meet your neighbours!

- Learn about how your farm neighbours are helping environmental experts-in-training prepare for their careers.
- Learn about why an institute in Japan is interested in how we live and think.
- Find out what 20 students and faculty at the University of Saskatchewan are saying about this community.

Browse our displays
and talk to people who care:

- Lakeland College
- ILEK (Japan)
- Hafford Central School
- Ministry of Agriculture
- AgriTeam Services
- North Sask River Basin
- SENS (UofS)
- Pickseed
- Bayer CropScience
- AGT Foods
- 4-H Saskatchewan
- PA Model Forest

And the list is growing!

Presentations * Refreshments * Cash Bar at 4:30

It all happens at the
HAFFORD COMMUNIPLEX

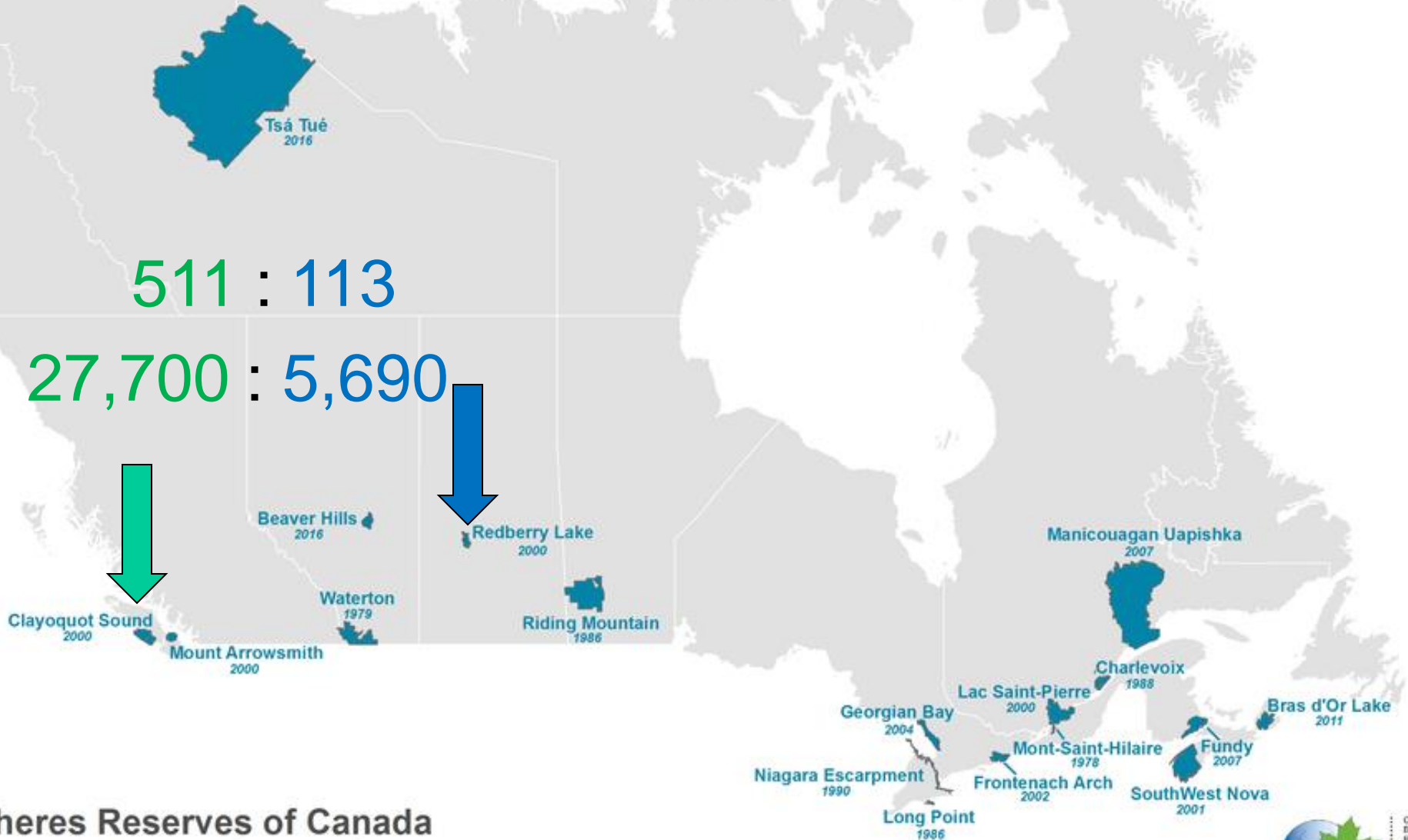


- Learn about why an institute in Japan is interested in how we live and think.

Clayoquot Sound vs Redberry Lake

511 : 113

27,700 : 5,690



Biospheres Reserves of Canada
Réserves de la biosphère du Canada

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Thank you for your attention!

We are grateful to :

- Peter Kingsmill, John Kindrachuk, Larry Hawrysh, Thomas and Susanne Abe, Larissa Matechuk, Ian King, Brian and Dorcy Yasieniuk, their families and all the other collaborators at Redberry Lake Biosphere Reserve, for sharing their experiences;
- Lenore Swystun and the team of Prairie Wild Consulting for providing documents and insightful comments;
- Steven Kuski of the Saskatchewan Bureau of Statistics for providing data and interpretations regarding the historic trends in population;
- Vladimir Kricsfalusy, Christy Morrissey and other people in the University of Saskatchewan for providing information on the field course and research;
- Shearmalene Mendis-Millard for her knowledge and advice; and
- Tetsu Sato, Reiko Omoto and other members of the ILEK Project at the Research Institute for Humanity and Nature (RIHN), Kyoto, Japan, for supervising and supporting the study.
- This work was supported by JSPS KAKENHI (Grant Number 15K00673) and the Noto Satoyama Satoumi Research Program.