

THE CANADIAN SOCIETY OF ENVIRONMENTAL BIOLOGISTS Newsletter / Bulletin

In this Issue:

- AGM MEETING, 2013 FINANCIAL REPORT
- CSEB 2014 BUDGET
- BRITISH COLUMBIA'S STATE OF THE ENVIRONMENT
- WOODLAND CARIBOU ACROSS CANADA LISTED AS THREATENED
- PRAIRIE GAME BIRD POPULATIONS
- EXTINCTION OF SANDY POND



CSEB Newsletter Bulletin SCBE

VOLUME 71, ISSUE 1, 2014

CSEB Website <http://www.cseb-scbe.org>

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In this issue

National Executive & Regional Chapter Listings....	1
CSEB Objectives/Objectifs de la SCBE.....	2

National News

President's Report	3
AGM 2013 Minutes	3
CSEB Membership Report	5
CSEB Financial Report for 2013	6
AGM President's & Regional Reports.....	7
Newsletter Report	9
CSEB Budget for 2014	9

Regional News

British Columbia News.....	10
Alberta News	12
Saskatchewan News.....	13
Manitoba News	15
Atlantic News.....	16
Territories News.....	18
Membership/Subscription Application	20

Date of Issue- April 2014

Cover Photos:

Front Cover: Soil coring to examine for sewage contaminants in a farmer's impacted field Miniota, Manitoba

Back Cover: Students from Brandon University pollution biology course (now called Ecotoxicology). Water quality sampling – Assiniboine River.

Photo Credits: William Paton, CSEB Regional Director

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(*Term of Directorship)

CSEB NEWSLETTER 2014

Vol. 71, Number 1 Spring 2014

The Canadian Society of Environmental Biologists Newsletter is a quarterly publication. The Newsletter keeps members informed of the Society's activities and updates members on the current affairs and advances in the field of environmental biology. This publication draws together the widely diverse group of Canadian environmental biologists through a national exchange of ideas. Members are invited to contribute papers, photos or announcements that are of a national biological and environmental interest. Letters to the editor are welcome. This is a volunteer non-profit organization and we rely on your participation to make the newsletter a productive forum for ideas and discussion.

All business correspondence, changes of address, undeliverable copies and membership applications should be sent to: CSEB National Office, P.O. Box 962, Station F, Toronto, ON., M4Y 2N9. **Editorial correspondence:** Gary Ash, Editor, e-mail: gash@golder.com

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LE BULLETIN de la SCBE 2014

Vol. 71, Numéro 1 Printemps 2014

Le Bulletin de la SCBE est une publication trimestriel de la Société Canadienne des Biologistes de l'Environnement. Le Bulletin informe les membres des activités de la Société sur événements courant ainsi que les progrès qui font en sciences de l'environnement. Par un échange d'idées au niveau national, cette publication intéresse un groupe très diversifié d'environnementalistes Canadien. Les membres sont invités à contribuer des articles, photos (noir et blanc) ou des messages qui sont d'intérêt nationale en sciences biologiques et environnementales. Les lettres à l'éditeur sont bienvenues.

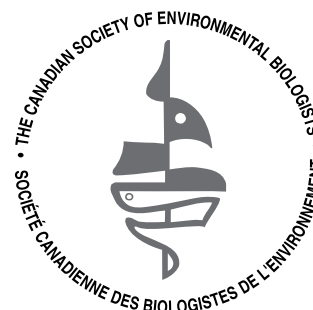
Tout la correspondance d'affaires, y compris les abonnements, les changements d'adresse, les exemplaires retournés et les formulaires: CSEB National Office, P.O.Box 962, Station F, Toronto, ON, M4Y 2N9. **Les lettres à l'éditeur:** Gary Ash, Editor, courriel: gash@golder.com

Rédacteur en chef: Gary Ash

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The Canadian Society of Environmental Biologists



CSEB OBJECTIVES

The Canadian Society of Environmental Biologists (CSEB) is a national non-profit organization. Its primary objectives are:

- to further the conservation of Canadian natural resources.
- to ensure the prudent management of these resources so as to minimize environmental effects.
- to maintain high professional standards in education, research and management related to natural resources and the environment.

OBJECTIFS de la SOCIÉTÉ

La Société Canadienne des Biologistes de l'Environnement (SCBE) est une organisation nationale sans but lucratif. Ses objectifs premiers sont:

- de conserver les ressources naturelles canadiennes.
- d'assurer l'aménagement rationnel de ces ressources tout en minimisant les effets sur l'environnement.
- de maintenir des normes professionnels élevés en enseignement, recherche, et aménagement en relation avec la notion de durabilité des ressources naturelles et de l'environnement, et cela pour le bénéfice de la communauté.

Advertising Rates:

CSEB National Newsletter/Bulletin

DISPLAY ADS• (4 issues)	Rate Per Issue	Annual Rate
Business Card Size (3.5" x 2")	\$ 25.00	\$ 85.00
1/4 Page (4"x 5")	\$ 55.00	\$ 190.00
1/2 Page (7"x 5")	\$ 100.00	\$ 375.00
Full Page	\$ 175.00	\$ 650.00

- prices are for camera-ready ads
- ads are subject to our approval for acceptance

- all ads are in black and white print
- payment due upon receipt of notice

Further Information Available Upon Request:

- sample of publication
- rates for preferred location
- special rates for repeat ads

Please Forward Submissions and Requests to:

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NATIONAL News

PRESIDENT'S Report

By Robert Stedwill, CSEB President

As the climate changes, so do governments' negotiators opinions with respect to the Experimental Lakes Area (ELA) in northwestern Ontario.

I think back to our input to the concerns raised around the world when the federal government indicated it would no longer support the station, and that the facility would be closed. The substantial scientific contributions, which the ELA has provided Canadians and the world's freshwater scientific community over the course of 40 years, is unparalleled. Needless to say, recent encouraging reports coming out of Ontario and Manitoba suggest that, with adequate rules, the transfer of the facility to the International Institute for Sustainable Development (IISD) can proceed and not break any environmental laws. Environment Canada has proposed a set of regulations that would allow experimentation to continue in the ELA. It behooves us as members of the CSEB to assess the proposed regulations and provide our input before they are cast in stone. They can be viewed at:

Proposed Enabling Regulations:

www.gazette.gc.ca/rp-pr/p1/2014/2014-02-15/html/reg5-eng.php

Proposed ELA Regulations:

www.gazette.gc.ca/rp-pr/p1/2014/2014-02-15/html/reg6-eng.php#mercury

As the climate changes, and northern Arctic weather warms, the thought of ice melting comes to mind. What most lay people don't consider are the other effects of accelerated melting of ice, and its consequences. Longer ice free periods in the Arctic Ocean and thinner ice will contribute to easier access to trans-Arctic Ocean crossings by super tankers and the like, thereby reducing fuel costs and travel times between Asia and Europe, as recently reported. What is not readily apparent are the more subtle impacts. A recently discovered "pumping process", which is drawing mercury into the Arctic ecosystem from the atmosphere, is a result of open leads in the ice due to warming temperatures. This has the potential to build up further at all levels of the food chain. Further, persistent organic pollutants are being released from diminishing sea ice as well, having been previously tied up for long periods of time.

Biologists' perspective will need to change as the climate changes, due in part to how organisms react to changing environments as studies mentioned above would indicate.

2013 ANNUAL GENERAL MEETING

AGM Minutes

Via conference call and web cast

Attendees: Robert Stedwill, Brian Free, Jim Armstrong, Joseph Hnatiuk, Anne Wilson, Patrick Stewart, Karen March, Paula Smith

Regrets: Gary Ash

1. Welcome – President Robert Stedwill
 - Welcome and Review of Agenda - from President R. Stedwill.
 - Call to order and review of Agenda.
2. Technical Presentations
 - a) Pat Fargey Species at Risk Specialist Alberta Environment and Sustainable Resource Development – Recent Conservation Challenges and Opportunities for Greater Sage Grouse Recovery in Alberta
 - b) Paula Bentham Golder Associates– Woodland Caribou State of the Science
 - c) Dr. Ken Ashley Director of the Rivers Institute at BCIT – Estuary Restoration and Protection in British Columbia
 - Thanks from all for excellent presentations.
3. Minutes from the 2012 AGM – Karen March
 - Minutes reviewed.

Motion to accept minutes - Karen March; Second - Joseph Hnatiuk; Carried.

4. CSEB Representative Reports
 - Joseph Hnatiuk outlined activities and Robert Stedwill thanked on CSEB behalf.
 - Appointment to Pest Management Advisory Council for Environment Canada, annual herbicide/pesticide review.
 - Involvement in CSEB Alberta and Saskatchewan Chapters;
 - AEN representation on behalf of CSEB – advice to AB government on environment, sustainability and resource development on air and water caucus.
 - National Canadian Environmental Network representative from AB.
 - CSEB representative on caribou planning in multi-stakeholder group, expecting land-use planning recommendations by 2014.
 - AB Ambient Air Quality Advisor executive committee.
 - Clean Air Strategy Alliance – multi-stakeholder advice

on air quality including handbook for AB with consistent response protocols.

- Nature AB involvement providing advise to Lethbridge Naturalist Soc. (LNS) and current President of LNS.

5. CSEB Executive Reports

a) President's Report – Robert Stedwill

- Regular meetings held over past year including discussion and input to Newsletter and federal and provincial awareness.
- Looking for regional directors – some success in Ontario and BC, need Quebec.
- Need to encourage broader activity and involvement.
- CSEB video underway – text in final proof, pictures needed.
- Exploring goals for recruitment.
- Need to monitor all levels of government and be diligent in government review.
- Thanks to Brian for this year's AGM webinar.
- Looking to Jim Armstrong for west coast AGM and workshop in 2014.

b) 1st Vice President's Report - Bill Paton – Unavailable.

c) 2nd Vice President's Report – Anne Wilson

- Enjoyed working with the board and participating in monthly calls.
- Looks forward to next year's initiatives.

d) Secretary-Treasurer's Report – Karen March

- Draft financial report to be finalized in January 2014 pending completion of yearend banking.
- 2014 budget (attached) reviewed.
- Action: Robert to review costs.

Motion to accept Treasurer's report - Karen March; Second - Joseph Hnatiuk; Carried.

e) Membership Chair's Report – Brian Free on behalf of Gary Ash

- 150 members for 2013, down from last year.
- Action: All to contact potential members.
- Suggestion that the CSEB video be presented to Alberta Biologists Association.
- Need for 2014 workshop highlighted.
- Action: Robert to ask for suggestions to improve web site.

f) Newsletter Editor's Report – Brian Free on behalf of Gary Ash

- Breakdown between Electronic and Hardcopy was 49 to 72.
- Request for guest editors, 2014 submissions and photos of biologists in action.
- Robert to ask Gary if photos for newsletter can be used in video.

g) Past President – Brian Free

- Brian attended the regular conference calls and provided support including newsletter articles and review.
- Attended Stand up for Science Rally in Edmonton and provided article in newsletter on event.
- Help with technical arrangements for AGM.
- Anne and Robert thanked Brian for above.

6. Regional Reports

a. Atlantic Region Report – Patrick Stewart

- Patrick and Karen active for the region.
- Participated in monthly meetings, contributed to newsletter providing notes on activities and articles.
- Need to get local meetings organized.
- Enjoyed being part of the great team and good meetings.

b. Manitoba Region Report – Bill Paton – Not Present.

c. Saskatchewan Chapter Report – Robert Stedwill

- Saskatchewan was quiet in 2013.
- Need to engage biologists and encourage them to come out to CSEB events; renew interest and initiate action in others.
- The webinar technical talks were good examples of what can be done.
- Will work towards west coast 2014 AGM.

d. Alberta Region Report – Joseph Hnatiuk

- Notes that everyone is busy and need to make the effort for important biology and ecosystems issues.
- Suggests an Edmonton meeting of executive to discuss strategy.
- Had lots going on with the South Saskatchewan River Basin land-use planning, caribou and sage grouse as noted above.
- Have had some success with CSEB issues and need to keep trying.
- Would like to show the video for various audiences.

e. British Columbia Report – Jim Armstrong

- A lot is happening in BC, from the estuarine restoration and protection of fish resources to changes in the *Fisheries Act*.
- On the habitat advisory board to DFO and concerned about how to protect fish habitat in the future, the resource development role of biologists and challenges and the new fisheries protection program.
- Will work with executive to forward the AGM in BC (BCIT options).
- Agrees there is a lot to do to increase membership and involve professional organizations.
- We need to get the word out to younger biologists and invite them to participate.

f. Territories Regional Report – Anne Wilson, Paula Smith

- The territories are busy with hydro, mines and other development. There are lots of biologists and experts in the area, but it needs a sense of community.
- Will provide write-ups to the newsletter.

g. Ontario – Derrick Moggy - Not Present.

Motion to accept reports as presented - Joseph Hnatiuk; Second- Brian Free; Carried.

7. 2014 Board of Directors – Brian Free

- Robert Stedwill President,
- Bill Paton 1st VP
- Anne Wilson 2nd VP
- Karen March Secretary-Treasurer
- Gary Ash Membership Chair and Newsletter Editor
- Brian Free Past President
- Regional Directors – Patrick Stewart Atlantic, Derrick Moggy Ontario, Joseph Hnatiuk and Sheri Dalton Alberta, Jim Armstrong and Loys Maingon BC, Anne Wilson and Paula Smith Territories.

- Vacancies – Quebec, Manitoba, Saskatchewan.
- Joseph Hnatiuk agreed to stay as Saskatchewan representative until replaced.
- Action: Brian, Robert and Bill to work on additional directors.

8. Next AGM

To be discussed as agenda item in next meeting (second week in January 9th 1 pm EST)

9. Other Business

- None identified.

10. Adjourn

Motion to adjourn - Jim Armstrong, Second - Joseph Hnatiuk; Carried.

- Thanks to all and Best Wishes for the Season and New Year.

(Minutes taken by Karen March.)



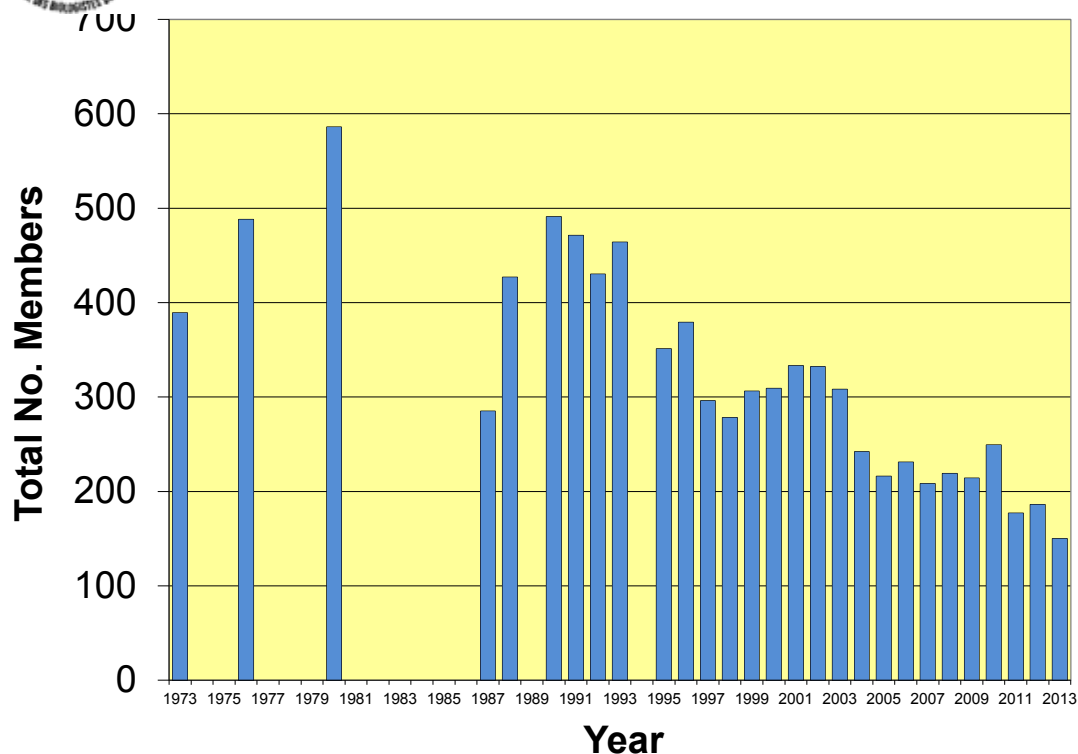
2013 CSEB Membership by Region and Membership Category

to 2 December 2013

Region	Compl. / Hon.	Associate	Library	Regular	Student	Total
1 Atlantic	2	3	1	6	1	13
2 Quebec				6	2	8
3 Ontario	3	3	1	28	9	44
4 Manitoba				3		3
5 Sask.	1			11	3	15
6 Alberta	1	1	3	32	4	41
7 BC	2			20	1	23
8 Territories				1		1
9 USA			1			1
O Foreign					1	1
Totals	9	7	6	107	21	150



CSEB MEMBERSHIP BY YEAR (1973 to 2 December 2013)



CSEB FINANCIAL REPORT FOR 2013 (April 7 2014 Final)

Cash in bank as of Dec. 2012 (from bank statement*)	\$ 9,385.90
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Receipts

Membership Fees (regular – Feb. Paypal 2001.88 Mar. 3510.75, May 220, Sep. 240, Nov., 20, Dec. paypal 1174.42)	\$ 7,167.05
NRC Journals (March)	\$ 778.75
Publication Sales (advertising)	\$ 375.00
Bank Interest	\$0.00
Contributions	\$0.00
Total	\$8,320.80

Expenses

Newsletter Production	\$2,383.09
V69.4 – 677.2	
V70.1 – 538.13	
V70.2 – 562.01	
V70.3 - 605.75	
Newsletter Mail-out	\$ 699.19
V69.4 – 257.1	
V70.1 – 246.71	
V70.2 – 92.36	
V70.3 – 103.02	
Membership Renewal (and cards)	\$ 490.53
Jan. 362.91, Apr. 52, 71, Jun. 63, Jul. 3.97, Oct. 7.94	
Administration (Board)	
 AEN	 \$ 30.00
Phone Conferencing	\$ 282.45
Recite – 149.94, 19.49, Apr. 18.61, Oct. 73.46, Nov. 20.95	
Outstanding – Recite Dec. 22.68, Accutel AGM 296.97	
 Mail Redirect and Mail Box Renewal (Apr. 345+235.04)	 \$ 580.04
Journals (March)	\$ 778.75
2013 Conference Expenses	\$ 0.00
Chapter Rebates	\$ 0.00
Northcote Hr Membership Plaque	\$ 155.80
Web Charges (2013-14 host 84.95; domain 29.84; sw 86.61)	\$ 201.40
Bank Charges	\$ 0.00
Society registration (federal)	\$ 30.00
 Total	 \$5,950.90
 Difference	 \$2,369.90

Cash in bank as of Jan. 24 2014**	\$ 7,869.05
GIC investment (value as of Jan. 10 2013)	\$ 1,546.05

Bank balances are provided for information purposes. Dec. 2012 bank statements does not reflect 2012 expenses with cheques outstanding at the time including Newsletter \$964.29, mail redirect \$574.29, registration \$30, phone \$111.46, publications estimated \$1200 – Total - \$2880.04)

** Jan. 2013 bank balance reflects Dec. payments for 2013 expenses, plus Canada Post renewal for 2014 (\$235.04). Outstanding 2013 cheques include Recite and Accutel (\$319.65)

2013 AGM President's Report

Submitted By Robert Stedwill, CSEB President

This past year has been a year of searching out new regional directors for the Society across the country, being successful in Ontario and British Columbia. Although we have representation across the country on the Executive, along with regional directors from some provinces, we still need to focus on getting representation from Quebec.

I have tried contacting biologists in Quebec who are personal friends, without much success, in convincing them to join the CSEB and representing the province. I would encourage you to think perhaps along these lines as well, in that there has been a lot of environmental work done there, and they can only add to our knowledge and expertise as an organization. The development of our CSEB video has been slow in its production, however, I have been encouraged in recent weeks by the input by members of the executive with the development of the text for the video. I am hopeful that before Easter we will have a product in hand that can be used to recruit new members to the Society, by explaining what we are as an organization, and what our goals are. If any of you have photographs of your work, either in the lab or field, and would be willing to share them with others, please forward them to me.

We continue to monitor all levels of government with respect to environmental legislation and regulations, particularly with respect to the impact that they may have on environmental protection; or not, as the case may be. The gutting of some legislation at the federal level in 2012 continues to be an irritant, particularly when it is in conjunction with the muzzling of Canadian Scientists and the results of their research.

This year's AGM is again being held using a webinar based format so as to accommodate the vast breadth of this country, and the expense of crossing it. Currently, we are looking at holding a "face to face" AGM in Alberta next year (2014) in conjunction with other like-minded organizations, so as to make the best use of your valuable time.

Second VP Report

Submitted by Anne Wilson, 2nd Vice President

I have again enjoyed working with the Board over the past year. There has been minimal need to act in Robert's stead, so my role as Second VP has centered around participation in the monthly calls. Over the next year I look forward to working with the new and returning Board members.

**2014 CSEB AGM and Conference
Tentative Date: 3 & 4 October, 2014
Edmonton AB**

Topic and venue to be announced.

Regional and Chapter AGM Reports

Alberta

Joseph Hnatiuk's Activities

Submitted by Joseph Hnatiuk, CSEB Regional Director

1. In 2010 (three year appointment) Joseph was appointed as a representative for the Canadian Society of Environmental Biologists (CSEB) to the Pest management Advisory Council (PMAC). The PMAC is a multi-stakeholder group that fosters communication and dialogue among stakeholders and with the Pest Management Regulatory Agency (PMRA) and provides advice directly to the Federal Minister of Health on policies and issues relating to the Federal PMRA. Decision making remains the responsibility of PMRA;
2. The CSEB has Joseph (CSEB member for many years) on its board of directors representing Alberta. He is also on the Alberta chapter of CSEB board; that chapter forms part of the National CSEB;
3. The CSEB is an affiliate of the Alberta Environmental Network (AEN). Joseph is their representative on AEN. He also is on the Environment, Air, Aggregate and Water caucus's of AEN. The AEN's purpose is to facilitate the sharing of information and resources among member groups and to assist them in taking common action. The AEN shares information with the general public and where warranted, interested stakeholders. They also facilitate member group meetings and the participation of member groups in meetings and consultation with government and/or industry;
4. Joseph represents CSEB on the Canadian Environmental Network as well as on the RCEN Board. He also is on the Environment and Biodiversity caucus's of RCEN and National representative to the RCEN on behalf of AEN;
5. Several months ago Joseph became president of the Lethbridge Naturalists Society (LNS). The objective of the LNS is to encourage the development of knowledge and appreciation of natural history and understanding of ecological processes by residents of Lethbridge and surrounding areas. They also organize field meetings, lectures, leisure and visual presentations and conduct research on any or all aspects of natural history;
6. In 2013-06 Joseph was selected by AEN on behalf of CSEB as an alternate to the Alberta Government Caribou Action and Range Planning Project for Little Smoky/A La Pêche Multi-Stakeholder Group. The mandate of the Advisory Group is to provide strategic advice to the Government of Alberta to inform key requirements related to caribou range planning efforts. The advice will include a template for range plans, baseline information, inventory

and assessment of management tools and approaches, planning key elements of stakeholder workshops and management options in range plans. The project is to be completed at the end of 2014;

7. Within the past 12 months as a representative of CSEB and selected by AEN Joseph was appointed to the Alberta Ambient Air Quality Objectives Stakeholder Advisory Committee (AAQOSAC). Alberta Environment and Sustainable Resource Development (AESRD) has the responsibility (under EPEA 14(1) and 14(4)) to develop ambient air quality objectives and guidelines as key components of the air management system. The stakeholder advisory committee has been established to assist AESRD in implementing the AAAQO work plan developed and review ambient air quality objectives;
8. Clean Air Strategic Alliance (CASA) is a multi-stakeholder alliance composed of representatives selected by industry, government and non-government organizations to provide strategies to assess and improve air quality for Albertans using the collaborative process. A noted gap by CASA in Alberta's air quality management system is a comprehensive framework that deals with air quality issues and odour. To assist in dealing with odour management CASA established an Odour Management Team. Joseph was selected to be one of the NGO representatives on behalf of CSEB as selected by AEN. The team will prepare a final report and recommendations for approval for the CASA board. They will also develop a Good Practice Guide (hand book/toolkit) for assessing and managing odour in Alberta and to deal with all odour complaints in a consistent manner;
9. To assist the odour management team in developing a Good Practice Guide (GPG) the team created a Complaints Task Working Group (CTWG). The CTWG is responsible for completing a piece of the work that will be reviewed by the task team and will form the complaints part of the GPG. Other task groups will work on the other components (odour assessment, health linkages, prevention/mitigation, enforcement role, regulations, information/communication/awareness, and continuous improvement) of the GAG. Joseph is one of the representatives on the CTWG from the team; and
10. Joseph is an alternate to Nature Alberta on behalf of the Lethbridge Naturalists Society and CSEB. Nature Alberta represents persons who are interested in nature and a desire to support the work of Nature Alberta (NA). The NA is a federation of naturalists throughout Alberta who share a passion for natural history.

Territories

Submitted by Anne Wilson (NU) and Paula Smith (NT)


Membership is quiet in the North, and there have not been any specific CSEB activities in 2013. The main activity has been providing quarterly Director's reports for the newsletter.


As with previous years, ongoing development in the NWT and NU brings a range of environmental challenges of interest to biologists. Climate change and effects on species' ranges and life histories continues to be documented. Polar bears are still under pressure, and seem increasingly vulnerable. In the area of data management and cumulative effects assessment there is much work to be done. Northern residents place a high value on the environment, and protection is written into permits and environmental agreements to the extent it can be regulated. The North represents the opportunity for biologists to make a real difference in understanding and protecting sensitive ecosystems. It is our hope that we can network as biologists, and use the CSEB as a voice or a vehicle to take forward important issues.

AGM Presentation Titles

**Woodland Caribou
State of the Science**

Presented by: Paula Bentham



 December 2, 2013 


**Recent Challenges and Opportunities
for Greater Sage-Grouse
Conservation in Alberta**

Pat Fargey
Provincial Species at Risk Specialist




CSEB 2013 AGM

**Restoration of Urban Estuaries:
Opportunities and Challenges**



Dec 2, 2013



Canadian Society Of Environmental Biologist NEWSLETTER EDITOR'S REPORT

Prepared by Gary Ash

2 December 2013

- In 2013 to date, three newsletters have been published.
 - Newsletter distribution format is as follows:
 - o Electronic Distribution – 49
 - o Hard Copy Distribution – 72 (incl. two copies to National Library of Canada)
 - Deadlines for Submissions for Newsletters:
 - o Winter 2013 – now
 - o Spring 2014 – 1 Feb 2014
 - o Summer 2014 – 1 April 2014
 - o Fall 2014 – 1 Aug 2014
 - o Winter 2014 – 1 Nov 2014
 - Currently looking for Guest Editors and submission for 2014 newsletters – Contact Gary Ash
- The newsletter can only be as good as the input of content received.
- Currently looking for photos of Biologists in Action for upcoming newsletter covers

CSEB BUDGET FOR 2014 (Nov. 26 2013)

	2008	2009	2010	2011	2012	2013	2014
Receipts		Approx. from expenditures				Estimated	Proposed
Membership fees	\$6,800.00	\$9,300.00	\$6,700.00	\$5,700.00	\$6,500.00	\$6,400.00	\$7,000.00
NRC Journals	\$1,500.00	\$2,900.00	\$1,000.00	\$1,200.00	\$1,400.00	\$800.00	\$1,000.00
Publication Sales	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Bank Interest	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Conference Proceeds (incl. Sponsors)	\$0.00	\$3,800.00	\$0.00	\$0.00	\$1,500.00	\$0.00	\$1,600.00
Revenue Generation	\$0.00	\$0.00	\$0.00	\$175.00	\$0.00	\$0.00	\$0.00
<i>Total receipts</i>	<i>\$8,302.00</i>	<i>\$16,000.00</i>	<i>\$7,700.00</i>	<i>\$7,075.00</i>	<i>\$9,400.00</i>	<i>\$7,200.00</i>	<i>\$9,600.00</i>
Expenses							
Corporate registration	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00
Newsletter Production	\$5,000.00	\$4,500.00	\$4,700.00	\$3,600.00	\$2,500.00	\$2,400.00	\$3,500.00
Board Meeting (travel subsidy)	\$150.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$100.00
Administration (conference call, misc.)	\$2,000.00	\$2,000.00	\$600.00	\$150.00	\$750.00	\$300.00	\$750.00
Web hosting	\$80.00	\$120.00	\$70.00	\$150.00	\$0.00	\$200.00	\$150.00
NRC Journals (estimated)	\$1,500.00	\$2,900.00	\$1,000.00	\$1,200.00	\$1,400.00	\$800.00	\$1,000.00
Postage Newsletters	\$1,600.00	\$1,250.00	\$1,300.00	\$1,000.00	\$1,000.00	\$700.00	\$1,200.00
Mail Box Rental	\$200.00	\$250.00	\$250.00	\$250.00	\$250.00	\$240.00	\$250.00
Redirect Mail	\$300.00	\$1,000.00	\$300.00	\$350.00	\$350.00	\$350.00	\$800.00
Chapter Rebates	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Membership renewal, cards, postage	\$1,000.00	\$1,000.00	\$500.00	\$600.00	\$750.00	\$500.00	\$800.00
Bank Charges	\$25.00	\$15.00	\$10.00	\$20.00	\$20.00	\$20.00	\$20.00
Miscellaneous, Conference	\$50.00	\$350.00	\$30.00	\$1,000.00	\$4,000.00	\$30.00	\$1,000.00
<i>Total expenses</i>	<i>\$11,935.00</i>	<i>\$13,415.00</i>	<i>\$8,790.00</i>	<i>\$8,350.00</i>	<i>\$11,050.00</i>	<i>\$5,570.00</i>	<i>\$9,600.00</i>

REGIONAL News

BRITISH COLUMBIA News

BC's State of the Environment

Submitted by Loys Maingon (RPBio), CSEB Regional Director

7 March 2014



Fig 1: Paradise Meadows, Mount Alan Brooks, Strathcona Park, May 2013

British Columbia is a land of extremes, blessed by the clash of successive unstable terrains that have shaped its geography and its flora and fauna.¹ Even the human fauna is shaped by it to extremes of political polarization. British Columbia takes some pride in being home to some of the nation's wackiest, most extreme and incomprehensible politics. That probably explains a lot about the actual lamentable state of the environment belying BC's spectacular landscapes.

In February alone, the province was treated to a series of tell-tale announcements. Dr. Peter Ross made national news explaining that "Supernatural BC's" coastal waters are a microplastic soup.² The BC scallop fishery is collapsing as 10 million scallops were lost to ocean acidification.³ After two decades of wildlife management to re-build endangered interior caribou herds, their numbers have plummeted to record lows, with a near collapse of the Moberly herd.⁴ In this context, in spite of persistent public and First Nations opposition, projects for the flooding of rich agricultural lands, rare plant species habitat and key wildlife migration corridors, including what is left of the interior caribou, preparations for the Site C dam project continue unabated. In order to avoid further scrutiny, the BC government has even exempted Site C from Agricultural Land Review process.⁵

This absurd merry-making reached new heights when Prime Minister Harper rebuked Taseko mines, and by extension BC's Minister of Mines and Energy, Bill Bennett, for persisting with the "New Prosperity" mine project at Fish Lake, which

has now twice failed to meet minimum federal environmental standards.^{6,7} Prime Minister Harper's government has hardly garnered a high reputation for environmental activism, but in comparison with BC's government, the Spanish proverb applies: "*Al país de los ciegos, el tuerto es rey*" ("In the land of the blind, the one-eyed man is king.")

The actual sad state of BC's environment, as reflected in the fragmented but constant flow of bad news, is the product of cumulative self-contradictory mismanagement, where promotional marketing has often replaced science. Even the best science and the best intentions of environmental biologists cannot undo the corrosive cumulative impacts of misguided government policies, which delude the public into believing that we can promote development at will, and also maintain a sustainable high quality environment. Though site by site we may talk of landscape-level integrated management, the cumulative yielding of ecological priorities to economic development can never result in the promised land of endless sustainability.

Fifty years ago when the US Secretary of the Interior, Stewart Udall, framed *The Wilderness Act* (1964), *The Endangered Species Preservation Act* (1966), and *The Wild and Scenic Rivers Act* (1968), he understood two important facts to which our Canadian legislators remain to this day seemingly unaware. First, Udall wrote into legislation that species need "critical habitat", not just habitat surplus to human demands. Second, that wilderness is essential to our humanity, and must remain "*an area where earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.*"⁸

Failure to understand and appreciate these key values is reflected in the controversy that now surrounds *BC's Parks Act*. The act itself is flawed because, unlike the *Canada National Parks Act*, it does not view these protected areas as conservation areas, but primarily as poorly defined "recreation" areas or playgrounds, although many of the provincial parks, such as Strathcona and Tweedsmuir, rivalize with most national parks in size and grandeur. In the *BC Parks Act*, "recreation" exceeds the kind of low-impact conservation-oriented activities that Peter Wells aptly described in the winter issue of the CSEB Bulletin. Just as Peter Wells' perspective is one in which recreation naturally and logically leads to an appreciation of nature and conservation that enhances "the role of the recreationist in citizen science",⁹ the concept of the untrammelled public ownership of parks is essential to the development of the public responsibility for stewardship of the parks. Otherwise, parks are simply "commons", and as Garrett Hardin so aptly documented in 1968, commons become abused by competing private interests.

A recent legal decision has asserted the legal right of the Minister of Environment to give precedence to private commercial recreation interests over the public character of the park as "a protected area".¹⁰ This shows that "recreation" as defined in the *BC Parks Act* is inconsistent with untrammelled public ownership of "*an area where earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.*" In short, this decision asserts that BC Parks are not "protected areas", but merely commons open to commercial interests, recreational and otherwise.

After over two decades of constant erosion of the management and protection of our provincial parks, the *Park Act* [RSBC 1996 Chapter 344] is once again being threatened. Bill 4 proposes revisions weakening sections 8.1 and 9.1, which were originally designed to protect the ecological integrity and legacy of the parks. The proposed revisions signal a renewed attempt to enable

private commercial interests and developments that would grant privileges to industry and override the public's ownership of BC's provincial parks. In the original wording the current BC *Park Act* restricts alienation of interests for Class A or C parks (the majority classification for BC Parks) and restricts resource extraction. If passed, the proposed amendments will now facilitate "feasibility and impact" studies for the "location, design, construction, use, maintenance or deactivation" of roads, telecommunication infrastructure, transmission lines, and pipelines. These assessments can be made by the proponent and or his agents. BC Parks and the Ministry of Environment no longer have the staff to carry out these studies, and work will, therefore, have to be contracted under the "professional reliance" model. Subsequent development will only require the simple approval of the Minister, seemingly without even requiring public consultation or independent scientific assessment.

Canadian Parks and Wilderness Society has pointed out that in late June 2013, Minister Polack circulated an internal document requesting to know what it would take to change existing "protected areas" designations.¹¹ The alleged document would then coincide with the disastrous judgement of Justice Sigurdson (24 June 2013) against Friends of Strathcona Park's challenge to the Minister's issuance of a permit to the Clayoquot Wilderness Resort to use part of the park for commercial activities.¹²

The current proposals give industry and commerce precedence over environmental and ecological values seemingly of special interest to the public. **Bill 4** would render the public ownership of parks and the concept of "protected areas" completely meaningless, since both can be undone whenever and wherever a commercial opportunity arises.

BC Parks now stand in the way of energy projects such as shale-oil fracking, in-stream power projects and of pipelines, as Fish Lake stands in the way of the "New Prosperity" mine. As easy access to energy supplies decreases, parks and protected areas are increasingly becoming targets for industrial and commercial developments. In the United States, state park authorities are re-writing legislation to allow fracking in state parks, and the future of the national parks system is already in question.¹³

The 2009 protests at Pinecone Burke Mountain Provincial Park, and the 2011 protests at Glacier National Park, against the passage of IPP transmission lines through the parks, heralded what is sure to become a growing concern in this province. Unfortunately, if controversy over the IPPs, the collapse of the Moberly caribou herd and the handling of the Site C project are any indication, industry-related science in the public arena is not providing adequate guidance for the protection of nature. Thus, in an industry-commissioned report for Clean-Energy BC, Dr. Brian Riddell CEO of Pacific Salmon Foundation, found in November that up to 88% of IPPs had potential impacts on salmon, only to publicly declare in February that IPPs did not seem to have a noticeable impact on salmon!¹³ The key here being how "noticeable". The report itself notes: "between 15 and 23 of these projects... as being inconclusive..."¹⁴ thereby confirming a basic lack of data to provide reliable "noticeable" conclusions, and of value mainly to opening "dialogue with an industry that understands that environmental and public accountability is appropriate and expected in BC."¹⁴

It is not that we lack the knowledge. Nor is this a question of good or bad intentions. It is a simple question of understanding where the limits lie. Outcomes on the ground, acknowledgement of what is effectively systematically going wrong, not marketing platitudes of what is "appropriate and expected in BC" must guide decision making. There are broader questions to be asked that exceed even

our best datasets, the latest "Best Management Practices", and the broadest "terms of reference" of any contract we sign. Those are the **critical** conservation questions that Udall and his advisors asked 50 years ago, and which we need to continue to ask every day.

The future of our parks as biodiversity reservoirs and as refugia for species relocation in an age of tremendous environmental upheaval is now more urgent than ever, and yet it is threatened once again by the lure of short-term gain, of economy over ecology. In short, it is threatened by a tragedy of the commons. Our parks were explicitly created for the benefit of future generations. It is often said that the experience of the grandeur of nature in our parks brings us to scale. The proper scientific management of the parks must always be guided by reverence and an understanding that "*man himself is a visitor who does not remain.*"

As climate change progresses, the preservation of the integrity of our parks will become increasingly important. On Vancouver Island, we will face special challenges, since Strathcona Park is deemed to be the provincial park that will undergo the greatest ecological changes.¹⁵ Thus, although Strathcona may be our oldest and biggest park, size is not a guarantee of resilience. Strathcona is also our most fragile and most vulnerable park. It is, therefore, the one that will require the most public stewardship.

Canada is signatory to the 1992 Convention on Biodiversity. Under that convention we are committed to creating and maintaining 17% of our land mass as "protected areas". Now 22 years later, we have barely set aside 10% of our land mass as protected areas – and that includes national and provincial parks often in questionable states of "protection" and management. This makes the public defense of the ecological integrity of our parks and protected areas an imperative. BC's government has taken various progressive steps to address climate change, but no government can claim to taking climate action seriously while dismantling its protected areas. There needs to be a clearer sense of purpose and consistency of action if we are to begin to take adaptive measures. Marketing claims that "environmental and public accountability is appropriate and expected in BC" must measure up with observed facts on the ground.

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3. **Millions of shellfish are dying off before they can be harvested at Island Scallops** [http://www.cbc.ca/news/canada/british-columbia/acidic-ocean-deadly-for-vancouver-island-scallop-industry-1.2551662\[3/7/2014 2:08:11 PM\]](http://www.cbc.ca/news/canada/british-columbia/acidic-ocean-deadly-for-vancouver-island-scallop-industry-1.2551662[3/7/2014 2:08:11 PM])
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7. Peter Koven, **Vancouver Sun** (March 4 2014). "Stephen Harper comes down hard on Taseko mine proposal PM cites environment, aboriginal issues among reasons to not approve project" http://www.vancouversun.com/story_print.html?id=9574570
8. **The Wilderness Act**. http://www.wilderness.net/NWPS/documents/publiclaws/PDF/16_USC_1131-1136.pdf
9. Peter G. Wells (2013). "Mountain Recreation and Environmental Conservation-A Passionate Perspective." **CSEB Bulletin** 70 (4), p. 11-15.
10. **Society of the Friends of Strathcona Park v. British Columbia (Environment), 2013 BCSC 1105 (CanLII)**
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15. **Keith R. Holmes 1, Trisalyn A. Nelson 1, Nicholas C. Coops and Michael A. Wulder (2013)** "Biodiversity Indicators Show Climate Change Will Alter Vegetation in Parks and Protected Areas." *Diversity*, 5, 352-373; www.mdpi.com/1424-2818/5/2/352/pdf

ALBERTA News

Alberta Chapter of The Wildlife Society Conference

Submitted by Joseph Hnatiuk, CSEB Regional Director

From March 7th to 9th, I attended an annual conference of the Alberta Chapter of The Wildlife Society in Jasper Alberta. The theme of the conference was 'Protected Areas Inside and Out: Landscape Management for Biodiversity Conservation'. The focus of the conference was to brainstorm a variety of concepts and experiences in Protected Areas Management, such as protected areas and landscape management for biodiversity conservation, transboundary protected areas, international lessons learned in protected areas management effectiveness, mountain protected areas, economic protected areas, and biodiversity conservation outside the realm of protected areas. The conference was a great opportunity for young professional and students (Lethbridge College) to gain exposure and meet a diversity of leading wildlife and biodiversity professionals. Approximately one hundred attended over the two and one half days.

I participated in two field trips: one to see caribou habitat and caribou at Maligne Valley, Jasper National Park (no caribou were seen). Parks Canada believe there are only five caribou remaining in the area; a reduction of 50+ from previous numbers. Reduced numbers are likely due to an increase in public use of the area.

In the afternoon the second trip was to see bighorn sheep and mountain goats and their habitats. Approximately 25 of each species were observed. In both instances the animals were seen from the number 16 highway. The habitats of both species appeared satisfactory.

On Saturday, a plenary session began with welcomes by The Wildlife Society, Alberta Chapter President, followed by Alberta's Minister of Environment and Sustainable Development, the Assistant Deputy Minister, Alberta Parks, Tourism and Recreation, and lastly by the Resource Conservation Manager, Jasper National Park.

The remainder of the morning session had presentations on Alberta's Provincial Parks: Key Components of the Conservation of Biodiversity, the Role of Science in Managing Provincial Parks, Investigating the Social Dimensions of Protected Areas to Promote Biodiversity Conservation, the Challenges of Protecting Landscapes and Biodiversity in Developing Countries, At Arms Length: Managing Visitors to Jasper National Park in Grizzly Country, and Managing Living Landscapes: a Conservation Matrix Approach to Sustaining Regional Biodiversity. A panel discussion followed.

The afternoon had concurrent session presentations that included Wildlife in Protected Areas, Carnivore Ecology, Landscapes for Wildlife Ungulate Ecology and poster sessions. The evening concluded with a silent/live auction, banquet, awards, and music.

The Sunday morning session was similar with concurrent sessions on Ecology, Evolution and Management, Birds and Biodiversity, Conservation Advocacy. The afternoon session concluded with Alces On-line Workshop.

In conclusion, I found the Annual Conference of the Alberta Chapter of The Wildlife Society an excellent event and wish to thank TWS AC for a great job done.

Woodland Caribou (*Rangifer tarandus caribou*), in Alberta and Across Canada, Are Listed as Threatened

Submitted by Joseph Hnatiuk, CSEB Regional Director

The following showcases cooperative caribou and wolf research between the University of Alberta, Weyerhaeuser Company Ltd., and the now dissolved, West-Central Alberta Caribou Standing Committee (WCACSC). The WCACSC has been amalgamated with the Boreal Caribou Committee to form the Alberta Caribou Committee. For more information, see the following <http://www.ualberta.ca/~fschmiege/Caribou/index.htm>

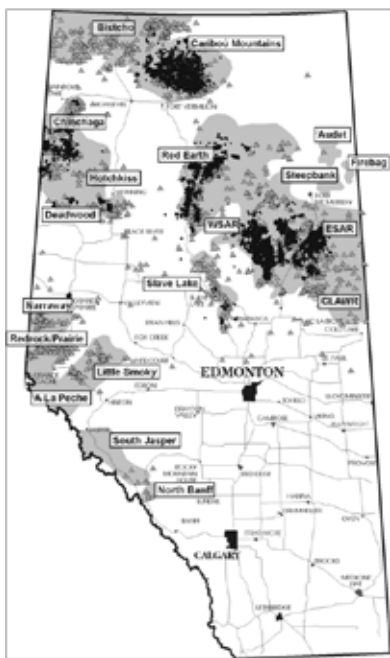
There are 18 woodland caribou herds in Alberta (See Figure). We have studied four herds in west-central Alberta: Little Smoky, A la Pêche, RedRock-Prairie Creek, and Narraway herds. We have studied wolves in the ranges of the Little Smoky and RedRock-Prairie Creek herds.

Caribou Ecotypes: There are two ecotypes of caribou in west-central Alberta: boreal and mountain. The mountain ecotype is restricted to western Alberta whereas the boreal ecotype is found

throughout northern Alberta. The mountain and boreal ecotypes differ primarily in their migratory habits. In west-central Alberta, both ecotypes inhabit forested foothills during the winter. However, in the spring, mountain caribou migrate into the mountains of Alberta and British Columbia, while the boreal caribou do not.

Herd Status: At present, the Little Smoky herd is listed at risk of extirpation, the A la Pêche and RedRock Prairie Creek herds are stable, and the status of the Narraway herd is not known.

Reasons for Decline: Conflicts with land use practices, landscape change, and predation are factors for the decline of caribou. Caribou are part of a complex predator-prey system. It is theorized that human activity has disrupted the balance of this system placing caribou at a higher risk of predation. The presence of human activity and infrastructure may also negatively impact caribou by altering their behaviour. The loss of old-growth habitat due to industrial expansion is another contributing factor. Caribou are dependent upon the lichens of old-growth forests for winter forage. A decline in the availability of lichens may compromise the health and viability of a caribou herd. There are several land use practices within the ranges of the RPC, ALP, and LS herds that may affect the herds. These include timber harvesting, extensive oil and gas exploration and production, coal mining, roads, recreational off-road vehicle use, recreational hunting, and commercial trapping. The range of the Narraway Herd is relatively pristine; however, oil and gas exploration, mining exploration, and logging development is increasing.



For further information, see the following links:

COSEWIC Assessment and Update Status Report on the Woodland Caribou (http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCgQFjAA&url=http%3A%2F%2Fwww.sararegistry.gc.ca%2Fvirtual-sara%2Ffiles%2Fcosecwic%2Fsr_woodland_caribou_e.pdf&ei=tBEU6DYCIK6yQHJ0oHoDa&usg=AFQjCNGDb6RDFW79cb3bOe2Grij9kAwTFQ)

Status of the Woodland Caribou in Alberta – 2010 (<http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCgQFjAA&url=http%3A%2F%2F2FAlbertawilderness.ca%2Fissues%2Fwildlife%2Fcaribou%2Farchive%2F2010-07-00-status-of-the-woodland-caribou-in-alberta-update-2010%2Fdownload%2Ffile&ei=3FFEU6y6luScyQHvYoGoDw&usg=AFQjCNEeEF-hPuCbONKX7tQGRMk5Zk7mEg&bvm=bv.64507335,d.aWc>)

Alberta Woodland Caribou Recovery Plan 2004/05 – 2013/14 (http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCgQFjAA&url=http%3A%2F%2Fesrd.alberta.ca%2Ffish-wildlife%2Fspecies-at-risk%2Fspecies-at-risk-publications-web-resources%2Fmammals%2Fdocuments%2FSAR-WoodlandCaribouRecoveryPlan-Jul2005.pdf&ei=kJEU97TNrOQyQGZq4CQCQ&usg=AFQjCNGSXD_T0V-LtjliwsOB-kO7C1Rayg&bvm=bv.64507335,d.aWc)

at-risk-publications-web-resources%2Fmammals%2Fdocuments%2FSAR-WoodlandCaribouRecoveryPlan-Jul2005.pdf&ei=kJEU97TNrOQyQGZq4CQCQ&usg=AFQjCNGSXD_T0V-LtjliwsOB-kO7C1Rayg&bvm=bv.64507335,d.aWc)

A Woodland Caribou Policy for Alberta (<http://esrd.alberta.ca/fish-wildlife/wildlife-management/caribou-management/documents/WoodlandCaribouPolicy-Alberta-Jun2011.pdf>)

SASKATCHEWAN News

Review of Prairie Game Bird Populations

Saskatchewan is moving forward in efforts to monitor its upland game bird population.

The seven species to be monitored in the review are the gray partridge, ring-necked pheasant, ruffed grouse, spruce grouse, willow ptarmigan, rock ptarmigan, and Saskatchewan's provincial bird, the sharp-tailed grouse.

There has been little research conducted on game bird populations in Saskatchewan during the past decade, aside from anecdotal reports.

"Upland game birds are an important part of the Saskatchewan ecosystem and it is time we understood more about their populations in order to make better-informed wildlife management decisions to ensure our environment is healthy and that our resources are protected for future generations," Environment Minister Ken Cheveldayoff said.

"The cornerstone of a science-based wildlife management model is comprehensive data," Saskatchewan Wildlife Federation President David Pezderic said. "It begins with baseline and comparative information on species populations. The Saskatchewan Wildlife Federation strongly supports these efforts and encourages all our members to participate in this program."

Hunters, stock growers, landowners, birders, interested groups and individuals are invited to participate in the Saskatchewan Upland Game Bird Survey. Each time an individual or group of the specified birds is observed, participants are encouraged to fill out and submit the form that can be accessed at www.environment.gov.sk.ca/gamebirds survey.

"Monitoring is a valuable tool for assessing the impact of changes in weather, habitat and the normal fluctuations in species," Cheveldayoff said. "This is a good example of our shift to a results-based approach that ensures that the ministry is able to balance environmental protection with promoting the sustainable use of natural resources."

The results of the survey will assist the ministry in developing a management plan for upland game birds in Saskatchewan. More information about the Ministry of Environment surveys can be viewed at www.environment.gov.sk.ca/wildlife.

For more information, contact:

Kathryn Newton, Environment, Regina P: 306-787-0412

Government Funding Helps Municipalities Build Infrastructure for Recycling Programs

Saskatchewan municipalities are getting a financial boost as they prepare to participate in the Multi-Material Recycling Program (MMRP). Environment Minister Ken Cheveldayoff announced that a \$500,000 grant will be provided to the Saskatchewan Urban Municipalities Association (SUMA) to help eligible communities improve or implement recycling programs.

"Recycling plays an important role in building a strong economy and a healthy environment," Minister Cheveldayoff said. "These dollars will help municipalities to build necessary infrastructure, improve their programs and potentially divert up to 40 per cent of residential waste from provincial landfills each year."

To be eligible for funding, municipalities will be assessed on their infrastructure needs and their demonstrated co-operation with other municipalities. The grant will cover up to 40 per cent of eligible project costs, while municipalities to fund the remaining portion. SUMA will administer the grant program. "We appreciate the Ministry of Environment's ongoing support of recycling programs," SUMA President Debra Button said. "This funding will help our growing communities get the infrastructure they need to meet their residents' recycling needs."

Since 2004-05, the province has granted more than \$9.45 million to SUMA, the Association of Regional Waste Management Authorities of Saskatchewan, and the Saskatchewan Association of Rehabilitation Centres to support recycling efforts.

For more information about recycling programs in Saskatchewan, visit www.saskatchewan.ca/recycling.

Through its 44 offices across the province, the Ministry of Environment plays a leadership role in providing science-based solutions, compliance and mitigation measures aimed at protecting the environment, safeguarding communities and helping to meet the challenges of economic growth.

For more information, contact:

Barb Barootes, Environment, Regina P:306-787-6595

Sean McEachern, SUMA, Regina P:306-581-4591

Government of Saskatchewan Proclaims Great Blue Heron Provincial Park

Parks, Culture and Sport Minister Kevin Doherty announced the official proclamation of Great Blue Heron Provincial Park in August 2013. In addition to being the first new provincial park to open in nearly 20 years, it is Saskatchewan's 35th provincial park. The park - located north of Prince Albert - encompasses Anglin and Emma Lake recreation sites and surrounding crown land, contains nearly 300 campsites and protects 11,168 hectares.



"Our government is dedicated to developing new provincial parks," Doherty said. "The result of a 2007 election promise, this new park is a proud achievement for our government. I am pleased to offer this attraction to the people of our growing province and to our growing number of parks visitors. This park will help create a stronger Saskatchewan."

This area was identified as an ideal location for a new provincial park because significant year-round recreation and tourism opportunities exist in the region. Provincial parks are one of Saskatchewan's most popular tourism attractions. They set another attendance record in 2012 with more than 3.5 million visits, exceeding the previous attendance record set in 2011 by 5.7 per cent.

This area, known as Lakeland and considered the gateway to Saskatchewan's northern forests, is also home to a variety of wildlife. Extensive boreal forest habitat exists for moose, elk, white-tailed deer, woodland caribou, various songbird species, the common loon and the great blue heron.

Since one of the park's primary goals is to conserve more of the watershed and habitat of the Anglin and Emma Lake sites, the great blue heron, which frequents the park's lakes and waterways, was chosen as a suitable park namesake and emblem.

Government will continue engaging with all stakeholders including First Nations and Métis as work begins to develop a park management and development plan.

The Government of Saskatchewan continues to improve provincial parks and in 2012 committed an additional \$10 million over four years to supplement the previously-enhanced provincial parks capital budget. Since 2008, government has invested almost \$44 million to improve Saskatchewan's provincial parks.

For more information, contact:

Chelsea Coupal, Parks, Culture and Sport, Regina

P: 306-787-5781, E: chelsea.coupal@gov.sk.ca

MANITOBA News

Manitoba's Carbon Emissions Jump

Submitted by Bill Paton, CSEB Manitoba Director

Manitoba's greenhouse gas emissions spiked in 2012 after five years of small steady declines. The new data were contained in the annual climate change progress report (released end of February). The province is still 3,300 kilotonnes short of achieving the Kyoto goals.

Conservation Minister Gordon Mackintosh, whose department is now working on a next-generation climate action plan, said Manitoba's emissions spike is due to the rebound in agriculture following the 2011 flood. No mention is made of the increasing contributions from increasing oil production in the Manitoba part of the Bakken field.

The transportation sector emissions, which represent more than 40% of the greenhouse gases, have steadily increased since 1990.

Source: Winnipeg Free Press 3rd March, 2014.

Manitoba Plans to Create a New Provincial Park

The intent of this action is to extend protection to the entire region of the Hudson Bay Lowlands from Churchill to the Ontario border. Polar bear denning areas are the rationale for the park, even though Wapusk National Park serves that purpose for many of the dens. Positive reviews have appeared from wildlife and protected area enthusiasts. Developers do not share that view and feel that wildlife-management areas in concert with other existing rules are adequate protection and that development can be accommodated with careful regulation.

Source: Winnipeg Free Press February 15, 2014 –Jim Collinson, consultant

General topics:

Farmers More Aware of Herbicide Resistance

According to Dr. Ian Heap, director of the International Survey of Herbicide Resistant Weeds, a new poll indicates that concerned farmers are taking action to stem the problem. The third annual poll, conducted by Ipsos Reid for BASF Canada Inc., shows 86% of growers are increasingly concerned. Six in 10 farmers say weeds in their fields are getting tougher to control. Nearly half suspect they have herbicide-resistant weeds on their farms. Ninety percent are adjusting their growing practices to minimize herbicide resistance by using herbicides from more than one group, and crop rotation.

Source: FCC/FCC Express February 28, 2014

First-ever World Wildlife Day Celebrated

Date: 3 March 2014: World Wildlife Day was recognized by the United Nations as a day for the international community to celebrate wildlife, its relationship with people, and to find pathways for a sustainable future where people and wildlife can coexist harmoniously. Ban Ki-moon, UN Secretary General, urged all sectors of society to end illegal wildlife trafficking and commit to trading and using wild plants and animals sustainably and equitably. Many positive and supportive comments supporting the initiative have been released. Some examples follow:

"The U.S. Fish & Wildlife Service is delighted to join the international community in recognizing and celebrating the first World Wildlife Day. The native species and ecosystems of our planet support billions of people and drive the world's economy. Preservation of our wild fauna and flora depends on the international community coming together to find solutions to our greatest conservation challenges." *Dan Ashe, U.S. Fish & Wildlife Director.*

"We face an unprecedented decline in our planet's biodiversity, largely due to human impacts. More than ever, we need a World Wildlife Day to pause and take note of our responsibility to wildlife- both fauna and flora. WCS is proud to recognize this event with CITES and all our partners and to work with them every day on behalf of the world's living treasures which are inspiring, beautiful and essential to life on earth." *Wildlife Conservation Society President and CEO Cristian Samper.*

"The Secretariat of the Ramsar Convention on Wetlands is pleased to join the celebrations. We celebrated the beauty and utility of wetlands- home to a huge diversity of wildlife. As wetland people, our favourite wildlife might include a bear fishing for salmon along a river, a coral reef alive with colourful fish, or a pond of frogs, dragonflies and water lilies in full bloom. Our aim is to sustain this beauty as well as the many benefits wetlands bring to humankind and wildlife – water, food, transport, coastal protection and much, much more. Indeed, sustaining wetlands and their water is key to sustaining us all." *Christopher Briggs, Ramsar Secretary General.*

The Canadian Minister of the Environment released a statement late in the day with a great deal of emphasis on legislation dealing with poachers. The ideals of conservation of biodiversity was not evident in her release.

Source: <http://land-l.iisd.org/news/first-ever-world-wildlife-day-celebrated/>

Landmark meeting in Virden Manitoba

On March 26th, 2014 a workshop took place in Virden to consider the establishment of a Qu'appelle, Souris and Assiniboine River Basins management structure. The event was organized by a steering committee made up of representatives of stakeholders in Saskatchewan, North Dakota

and Manitoba. Over 200 participants endorsed the desire to work collectively to address the issues of flooding, drought, water quality and public health. The biota were also identified as important. This is a major step forward in addressing the significant degradation of these systems and the mitigation of future major climatic events.

The keynote speaker was Bob Sanford, the Canadian Chair of the United Nations International "Water for Life" Decade, a national partnership initiative that aims to advance long-term water quality and availability issues in response to climate change in this country and abroad. Bob has published a number of books on water (*Restoring the Flow: Confronting the World's Water Woes* 2009; *Ethical Water: Valuing What Really Matters* 2011; *Cold Matters: The State & Fate of Canada's Snow and Ice* 2012). He is based in Alberta and explained the circumstances around the recent Alberta and Manitoba record floods. The evolution of Arctic Vortices and recent associated extreme weather events were expertly explained. A video of his alarming predictions on future weather events will be broadcast to communities throughout the watershed.

The lunch-time speaker was Lance Yohe, the long-time Executive Director of the Red River Basin (RRB) Commission. Lance addressed the ups and downs of this transboundary initiative and suggested ways for the new organization to avoid some of these pitfalls. He also presented the many scientific approaches and studies that have been carried out over the past 35 years in the RRB.

Coming out of workshop was commitment to meet again in the fall (October) for a two-day session. One day of science – what we know about the basin; major questions that need research and the creation of a Science Consortium bringing together expertise from the three political jurisdictions. The second day would be devoted to agreeing upon a governance structure for the basin. It was noted that certain stakeholders were not present – the major municipalities, aboriginal groups, recreational and fisheries/wildlife organizations.

ATLANTIC News

The Extinction of Sandy Pond (Placentia Bay, Newfoundland)

R. John Gibson (rjgibson@nf.sympatico.ca)

Sandy Pond Alliance to Protect Canadian Waters Inc.

A flame has been extinguished in our natural world, with both Federal and Provincial governments having given permission for Sandy Pond, located near Placentia Bay, Newfoundland, to be used as a toxic waste dump. A mining company, Vale, was given the lake, under Schedule 2 of the *Fisheries Act*, to use as a Tailings Impoundment Area. Sandy Pond was a pristine, isolated post-glacial lake, of 37.83 ha, with a unique ecosystem, including trophy brook trout, probably the largest

brook trout left on the Island. Three species were present, brook trout (*Salvelinus fontinalis*), rainbow smelt (*Osmerus mordax*) and American eel (*Anguilla rostrata*).

Judging by work in other similar situations, where a population has been isolated for thousands of years, the trout and the smelt were probably unique genotypes. Yet, no genetic studies were done before eradicating these stocks. After attaining a certain size the brook trout fed on the smelt, and grew up to 1.5 – 2.5kg. The brook trout had a deep girth, and 'looked different' from most brook trout, and were probably a unique race. Destroying biodiversity contravenes the Convention on Biological Diversity (1992), signed by Canada, but this was not considered.

In 2010 the Sandy Pond Alliance to Protect Canadian Waters, a group of concerned Canadian citizens, challenged the give-away of this priceless natural resource under the recent federal government change allowing toxic wastes to be dumped into pristine waters. Our legal case was based on the premise that the guiding principle of the *Fisheries Act* of Canada is conservation and such destruction was beyond the parliamentary intention of the Act, or in legal terminology – *ultra vires*. In her ruling of October 31, 2013 Federal Court Justice Heneghan indicated that "...subsection 35(2) of the Fisheries Act allows the Minister to authorize the alteration, disruption or destruction of fish habitat under any conditions he deems appropriate". Thus, if the Government so chooses, Sandy Pond, or any other waterway in Canada, can simply be taken away from citizen owners and given free of charge for a destructive industrial use.

Judge Heneghan described the Environmental Impact Study, which was in fact surprisingly inadequate, as an 'extensive environmental study of Sandy Pond'. No studies were done to estimate the biological productivity of the lake. The population estimates were a failure. For example, although the proponent (Vale) claimed to have done a mark and recapture study to estimate numbers of fish, no recaptures of smelt were made, but they say if they had caught one marked smelt the population number would have been 3,609 smelt. They had no recaptures of trout, but one trout had a damaged fin, which they guess might have been a mark, so calculated that there were 303 trout in the lake. However, they later report moving 1400 fish to nearby lakes, 'primarily trout plus a small number of smelt' (Vale newsletter 2012). Also trout were killed when they drained the lake. Moving fish to lakes with different genetic stocks has been shown for decades to be damaging to receiving stocks, because of reduction in fitness of the receiving stocks if they interbreed, so this exercise was worse than a waste of time and money.

Dams have created a new reservoir of 74 ha for permanent toxic waste, including small adjacent lakes, destroying 45 ha of natural waters. For compensation of fish habitat the proponent calculated for the three species combined that there was fish habitat loss of 18.11 ha. The main compensation for loss of Sandy Pond was opening a partial barrier of vegetation at the outlet of Forest Pond on Salmon Cove River, Conception Bay. This purported to compensate for 12.12 ha of the lost

18.11 ha of fish habitats in Sandy Pond. In fact no new habitat would be created, and no studies showed that Forest Pond was not already at carrying capacity. Further questionable compensation is 7.4 ha by enlarging some small bog ponds, and 0.2 ha with Salmon Cove River enhancement. In fact their estimate of lost habitat in Sandy Pond was in error. Using the same variables for 'Habitat Equivalent Units' (Bradbury et al. 2001), I calculated habitat losses of 25.5 ha for brook trout (67.5% of the area of the lake), 34.8 ha for smelt (91.8% the area of the lake), and 15.7 ha (41.6% the area of the lake) for eel.

A not inconsequential detail is that the status of American eel under the *Species at Risk Act* is 'threatened'. Under the Act (#32, [(1)]) no person is allowed to kill, harm or harass an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species, nor (# 33.) is it allowed to damage or destroy the habitat of such species. This detail was ignored.

It appears to me that plans had already been made to use Sandy Pond as a toxic waste site, and that the EIS and compensation were bureaucratic rationalizations to facilitate using a natural lake rather than building a more expensive retaining reservoir. In consequence, the Sandy Pond Alliance took the federal government to court in 2010, on the grounds that the Fisheries Act forbade the destruction of fish stocks and their habitats. Unfortunately for all of us, the judge, Justice Elizabeth Heneghan, on October 31, 2013 gave her decision that the applicant was mistaken when asserting that conservation is the paramount purpose of the *Fisheries Act*.

Under fairly recent changes to the Metal Mining Effluent Regulations and the *Fisheries Act* it is now legal, by decision of the Minister of the Environment, at their political whim, to allow companies to discharge toxic wastes into pristine waters, if that is the cheaper alternative. It is now regulatory policy for economics to override environmental protection. Compensation must be made, but as indicated above this may be only a public relations exercise. The new regulations have the potential to destroy numerous valuable fish stocks throughout Canada (Hutchings and Post 2013).

Since Sandy Pond and another lake, in central Newfoundland (Trout Pond, operated for eight years, 2007 - 2015) have been given as subsidies to mining companies, 23 other lakes are under threat for destruction (Nelson 2013).

The Sandy Pond Alliance is working to restore protection of such lakes, as was available under the prior *Fisheries Act*, by informing citizens of this unnecessary destruction of our natural heritage. And, following the advice of Justice Heneghan, that "the will of the people with respect to legislation can be expressed at the ballot box", we will continue to rally to bring pressure on our politicians to stop this destruction.

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Nelson, J. 2013. Loophole lets healthy lakes be converted into waste dumps. *CCPA Monitor* 20 (7): 18 – 20.



Sandy Pond brook trout.

Sandy Pond, a beautiful lake.



Photos by D.E. Messervey.

Converted to a 'Residue Storage Area'.



Photo: Vale Newsletter, November 2012.

TERRITORIES News

Nunavut Update Spring 2014

Submitted by Paula Smith, CSEB Regional Director

Although it doesn't feel like spring yet with blizzards in the forecast, the days are getting longer which is a welcome sign that winter will eventually fade to spring. It has been an interesting winter in the North with record storms, including the most violent blizzard to hit Iqaluit since 2007 occurring in January with hurricane level winds reaching 141 km/h.

In terms of development projects, Baffinland's Mary River iron ore project continues to go through the environmental assessment process with the hearings for the proposed early Revenue Phase components of the project. Other projects currently being reviewed include the Meliadine gold project near Rankin Inlet, the Back River gold project near Bathurst Inlet and the Kiggavik uranium project near Baker Lake. Arctic Cable's proposed undersea cable has been screened by the Nunavut Impact Review Board. The proposed project includes running a high-speed undersea fibre optic cable system through the Northwest Passage connecting London and Tokyo. The screening decision imposes 52 terms and conditions on the project. Also, going ahead without an environmental assessment is the federal government's long-delayed naval facility at Nanisivik. The review board recommended that the project be approved with 38 terms and conditions and 24 other requirements covering monitoring and reporting.

Due to potential interest in oil and gas exploration in Davis Strait and Baffin Bay, the federal government has begun consultations in 10 Nunavut communities. The intent is to develop a Strategic Environmental Assessment with input from various interested parties including territorial and federal government departments and communities and will include the incorporation of Inuit Qaujimajatuqangit (this translates loosely as "that which has long been known by Inuit" or Inuit Traditional Knowledge). Also, consultations continue across Nunavut regarding the Government of Nunavut's Polar Bear Management Plan. The Government of Nunavut is working in partnership with Nunavut Tunngavik Inc., Regional Wildlife Organizations, and Hunters and Trappers Organizations to develop an updated Polar Bear Management Plan that reflects the needs of Inuit and ensures long-term sustainability of polar bears in Nunavut.

NWT Regional Update

Submitted by Anne Wilson, 2nd Vice President

This winter has been reminiscent of the weather norms from the early 90s and before, with extended periods of cold in the NWT. I was grateful for my winter gear during recent trips to Yellowknife, and was reminded of the power of climate to affect everything we do (and usually take for granted). Several significant power outages resulted in home freeze-ups, and nothing likes to run during the deep freezes! It is none-the-less always so good to visit north of 60, whether in winter or summer. A trip to Behchoko took us out under spectacular northern lights, and gave us the opportunity to hear the Dene elders' passionate challenge of activity on their traditional lands.

Development activity is progressing in the NWT, with several mines getting closer to construction.

Mining and other development news

Although financing will be the critical challenge, there are several mining projects that are moving towards development with the application for or issuance of regulatory permits.

- Water licence hearings were held at the end of February for Fortune Minerals' NICO project (cobalt/gold/copper/bismuth).
- Canadian Zinc Corp.'s Prairie Creek Project was issued a water licence in September and the company is seeking financing to proceed.
- DeBeers Canada Inc.'s Gahcho Kue Diamond Project has applied for a water licence, and this review is underway, with hearings scheduled for May 6-8.
- Avalon Rare Metals has applied for a water licence for "early works" rather than full project development, and this is being reviewed. Processing will be moved out of the NWT.

The Giant Mine Remediation project is awaiting Ministerial approval for finalization of the environmental assessment report before proceeding to licencing. A recent surface tour highlighted that, while several remedial works have been done on an emergency basis, there is a tremendous amount of work to be done, and the sooner the better.

In the Environmental Assessment (EA) forum, the Dominion Diamond Corp. Jay-Cardinal pipe development EA is underway. These are located at the existing Ekati Diamond Mine, and are inconveniently situated underneath a large, pristine lake. Plans to access and mine these pits, and ultimately reclaim them, involve management of significant water volumes, which must be assessed. The Developer's Assessment Report is expected in June.

The existing Snap Lake Diamond Mine has been sent back to Environmental Assessment based on a request to amend effective discharge limits. Under the original EA, DeBeers is allowed to discharge TDS up to the point that the receiving lake reaches 350 mg/L whole lake average. It appears that concentration will be reached and exceeded, and now end-of-pipe limits are proposed for the water licence. As a procedural matter, the licencing Board is bound by the conditions of the EA, so has sent this back to the Mackenzie Valley Environmental Impact Review Board.

The Mackenzie Valley Highway EA is proceeding, with development of the Terms of Reference in December, and submission of the Developer's Assessment Report expected in April. This is for an all weather gravel highway up the Mackenzie Valley from Wrigley to the Dempster Highway near Inuvik, and the assessment will have to consider stream crossings, and some sensitive wildlife habitat to traverse – the key lines of inquiry are socio-economic, caribou, moose, and harvesting.

The Tyhee Yellowknife Gold Project EA is suspended, and would need considerable work by the company on information submissions to re-initiate.

Considerable oil and gas activity is taking place in the Sahtu region, and offshore in the Inuvialuit Settlement Area. Imperial Oil's Norman Wells refinery is up for a water licence renewal.

Full details for current environmental assessments are available on the Board's web site at <http://www.reviewboard.ca/registry/> and regulatory files at <http://www.mvlwb.ca/Boards/mv/SitePages/registry.aspx>.

Closing:

If you are doing work north of 60 that you would like to highlight in the newsletter, or running some seminars or other training opportunities, please let us know. The CSEB provides a valuable networking and communication forum, and a voice for biologists if there are any issues to be raised. There is also the option of instigating other CSEB activities – both of the fun and/or of the informational variety - with colleagues in the North. Please email your thoughts to anne.wilson@ec.gc.ca or paula.c.smith@ec.gc.ca.

Avalon Partners with French Company to Process Rare Earths

Company says partnership will reduce Nechalacho mine costs
- CBC News Posted: Mar 14, 2014 9:33 AM

Avalon Rare Metals has partnered with a plant in France to process materials from its Nechalacho rare earth mine in N.W.T. In November, the federal government approved plans for the

mine 100 kilometres east of Yellowknife. The company originally planned to have a refinery in Pine Point, N.W.T., but then changed the plant's location to Louisiana.

"The only way in which the Northwest Territories benefits from our project is by building the mine and having the hydromet and the refinery somewhere else," said Pierre Neatby, Vice-President of sales and marketing for the company.

"The project will not be economic if it's completely in the Northwest Territories. It won't get built. No one will finance it. It won't make any money."

The rare earth concentrate will now be shipped to Louisiana, where it will be processed, then to Solvay's plant in La Rochelle, France, where each rare earth mineral will be separated so it can be sold.

Neatby says the new partnership reduces the company's overall costs by about \$350 million, making the project more appealing to investors.

The mine is expected to be built three years after the money is raised to build the mine.

Rare earths are used in the manufacturing of consumer electronics such as cellphones, electric cars, and LED lights.

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