

THE ALBERTA WILDLIFER

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ACTWS President's Report

Larry Roy

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One shoe! What a gorgeous early spring as these crocus flowers announced their presence on April 12th. Unfortunately the other shoe dropped and the hot dry weather, that we so enjoyed, brought a surge of wildfires including the devastating fire that engulfed Fort McMurray. The ying and the yang of climate change! These events make us reflect on lessons we may have learned from the presentations at our Drumheller conference on how our wildlife and also ourselves will adapt to the changing climate.

From comments received, the conference was quite successful with some 180 registrants of which more than half were students. The large numbers of students indicate significant progress towards some of our goals outlined in the ACTWS 2014-19 Strategic Plan. Since on May 2nd, we received the donation from Larry Norman Comin's estate, your executive is working on a financial plan to ensure that we continue to move forward to achieve our outlined goals. Stay tuned for our progress report and the announcement of the location and date of our 2017 conference. Let us know of any wildlife issues we should address. And hey, lets hope for some significant rainfall, soon.



photo by Dave Hobson

The New Executive

President	Larry Roy
President-Elect	Holly Duvall
Past-President	Jason Fisher
Secretary-Treasurer (Until 2018)	Samantha Morris-Yasinski
Director (until 2017)	Elston Dzus
Director (until 2017)	Brian Kopach
Director (until 2018)	Lisa Takats Priestley
Director (until 2018)	Michelle Fournier



Canadian Section Representative's Report

Art Rodgers, Ontario Ministry
of Natural Resources
art.rodgers@ontario.ca



Canadian Section Update

The mid-year TWS Council meeting was held in Pittsburgh, Pennsylvania, 13-14 March 2016, in conjunction with the North American Wildlife and Natural Resources Conference. Here is a brief summary of some of the highlights;

In his report to Council, President Gary Potts stated that communications are key to his president's theme of "Expanding the Partnerships" and that "Outreach and Partnerships" is the theme of the Raleigh conference, with a focus on efforts to improve TWS visibility and linkages throughout the conservation community.

Executive Director Ken Williams reviewed the 2015-16 finances of the Society that showed TWS is still on track for full recovery from previous shortfalls in the reserve fund within the next 2 years. Ken Williams also reviewed the 2015-16 operations plans and presented the proposed plans for 2016-17. His review demonstrated that with the exception of development, goals for finances, technology, conferences, membership, publications and government affairs had all achieved or exceeded expectations. Council approved the proposed operations plans for 2016-17 and an interim budget for the new 2016-17 fiscal year beginning in July that is expected to produce an even larger surplus by this time next year. The interim budget will be reviewed by Council at their fall meeting.

Publications and Communications Director Nancy Sasavage reported that she has been working with the Editors in Chief (EIC) of the Journal of Wildlife Management (JWM) and Wildlife Society Bulletin (WSB) to expand the journals' outreach on TWS' website and Wiley's social media networks. She also announced that the EIC of the Wildlife Monographs, Eric Hellgren, will be stepping down February 1, 2017. The addition of a science writer has enabled The Wildlife Professional (TWP) to increase to 6 issues per year and post more articles to the TWS website. TWP marked its 10th anniversary by featuring wildlife students and young professionals.

Wiley representatives presented information on open access trends, new author support, such as Kudos software, and surveys of researchers concerning peer review and society membership. They shared statistics and trends about TWS' journals including processing, usage, subscriptions, and marketing. They noted that the high renewal rate for WSB (100%) is above average, while the rate for JWM (95%) is more reflective of the industry norm.

Chief Operating Officer Ed Thompson reported that declines in membership had been arrested and the new membership goal for the 2016-17 is 9,650. He described two current efforts to improve networking among TWS members; using LinkedIn as a tool to reach out to members and enhance networking with

them and a new TWS Network Online Directory that has been under development for some time and is expected to be launched in May.

Council approved several bylaws changes that will go forward for voting by the membership in early May. The proposed changes would provide Council with flexibility in determining the amount charged for Student and New Professional dues, while maintaining current cap levels. The other proposed change would re-establish a Life Member option that was previously available, but discontinued in 1965. The proposed changes can be found at <http://wildlife.org/notice-of-proposed-bylaws-changes/>.

Director of Government Affairs & Partnerships Keith Norris reported that his department is now fully staffed and their current efforts include looking for opportunities to lead on issues, striving to be the outreach arm for TWS, and elevating visibility in the conservation arena and with agencies. Council approved extension of all 22 position statements due to expire prior to October 2016 until the fall Council meeting.

Council voted to approve a slate of 10 nominees for Fellows Awards and voted on the nominees for the Group Achievement Award. It gives me great pleasure to tell you that 2 Canadians will be recipients of the Fellows Award at the Annual Meeting in Raleigh, NC. Congratulations to both Canadian nominees and many thanks to those who made the time to nominate these deserving people, and especially to Evie Merrill who has been a driving force behind the CSTWS Awards Committee this past year.

Additional details will be provided on Council-approved actions in the *eWildlifer* and full minutes of the mid-year TWS Council meeting will be posted on the TWS website.

Arrangements for the Canadian Section AGM, to be held in conjunction with the Canadian Society for Ecology and Evolution meeting in St. John's, Newfoundland and Labrador July 7-11, 2016, are well underway and I hope you are making plans to be there. It's also time to make plans to attend the 23rd Annual TWS Conference in Raleigh, North Carolina, October 15-19, 2016.





Conservation Committee Update

As we slide into the Summer of 2016 we are also witness to the transformation fire brings to landscapes. When that fire runs into human habitat it can be quite traumatic to persons trying to escape its path. Undoubtedly there will be countless discussions to follow on the cause and consequences of any fire. However, fire has also been recognized as an invaluable tool in landscape management and biodiversity management that benefits biodiversity as much as human habitation. Troubling as fire may be for its indiscriminate attack, fire is a tool that needs to be reintroduced into landscapes long protected from fire. Fire protection has generated complacency as much as fuel, sometimes for exceptional time scales not often seen with natural landscapes normally subjected to fire. Finding and applying ways to use fire as a wildlife management tool while applying it to landscapes also used by people for other purposes is requiring new scientific examinations and land management skills. Adaptive management becomes an invaluable skill set as wildlife professionals encounter circumstances that call for fire on landscapes serving a multitude of human uses. Are you as a wildlife professional ready to entertain and advance the discussion?

There are numerous wildlife management issues warranting public examination. Members are encouraged to step forward as a civil and professional duty. ACTWS members are encouraged to ensure wildlife management science is front and center as the public weighs options related to wildlife management. Committee attention has been focused on the following subjects.

Service to the Community

Alberta Game Policy Advisory Committee – ACTWS reps: Larry Roy & Evie Merrill - Alberta Environment and Parks are in the midst of revamping this group and splitting its functions into two. One part would be the Alberta Game Policy Advisory Committee and a second part would deal with Game Management. More details to follow, however it is understood that the AEP intend to have more detail on the activities of these two committees available via the AEP website.

Alberta Endangered Species Conservation Committee – ACTWS reps: Doug Collier – Kirby Smith – <http://aep.alberta.ca/fish-wildlife/species-at-risk/default.aspx> As reported in the last newsletter the Committee last met in March 2015. Further meetings have been deferred because the government has not identified a

Committee Members

Ken Crutchfield
(Chair)

Mark Boyce

Kristie Derkson

Lorne Fitch

Matthew Pyper

Larry Roy

Committee Chair. Further, the ESCC has been caught up in a government -wide review of committees, Boards, Commissions, Delegated Administrative Organizations etc. Fortunately this has not stopped Species at Risk programs; however it is happening without the benefit of these advisory groups. The most recent example has been the release of the draft *2016-2021 Alberta Grizzly Bear Recovery Plan* (<http://aep.alberta.ca/files/GrizzlyBearRecoveryPlanDraft-Jun01-2016.pdf>). Albertans have been requested to complete an online survey by July 15th (<https://extranet.gov.ab.ca/opinio6/s?s=27506>)

Alberta Pacific Local Advisory Committee – ACTWS rep - Kristie Derksen –

“our next meeting at the end of June so I won't have anything till then. I'll report back after that”.

Alberta Fisheries Management Round Table – ACTWS rep – Ken Crutchfield – (<http://aep.alberta.ca/fish-wildlife/fisheries-management/alberta-fisheries-management-roundtable.aspx>)

The Round Table met on May 7th in Edmonton. Information on that meeting is available through the above link. The Terms of Reference (TOR) for a revised *Alberta Fisheries Policy Advisory Committee* (<http://aep.alberta.ca/fish-wildlife/fisheries-management/documents/FisheriesPolicyComm-TermsRef-2015.pdf>) had garnered significant discussion. As a consequence of the feedback AEP has chosen not **to alter the original TOR**. Chatham House rules would not be followed.

North Saskatchewan Watershed Alliance (<https://www.nswa.ab.ca/>) – ACTWS rep – Ken Crutchfield –

NSWA held a Non Government Organization (NGO) Education Forum on April 28th where I made a presentation about ACTWS and its involvement in the North Saskatchewan Watershed. The presentation focused on the important role of its membership in providing support for various initiatives within the watershed, e.g., Sturgeon River, Beaver Hill UNESCO submission etc. Also highlighted the annual awarding of scholarships in support of aspiring wildlife management students.

Still Stirring in the Background

HOT - Suffield Elk Management –ACTWS Executive is currently reviewing a draft letter prepared by the Conservation Affairs Committee that emphasizes the role elk populations support in sustaining the ecological integrity of Suffield and adjoining grasslands while providing other societal benefits on a very busy working landscape.

SIMMERING - Alberta Environment and Parks is still intending to update the 1982 Fish and Wildlife Policy for Alberta –key contact: Sue Cotterill – 1780-422-9535

<http://esrd.alberta.ca/fish-wildlife/fisheries-management/documents/FishWildlifePolicyAlberta-1982A.pdf>.

BACK BURNER - Alberta Grazing Leases (<http://www.oag.ab.ca/webfiles/reports/OAG%20March%202015%20Report.pdf>) . members are encouraged to review a more recent 2015 review of the matter available through the Alberta Land Institute - <http://www.albertalandinstitute.ca/research/research-projects/project/grazing-leases>

GETTING UNDERWAY - Bison Transfer into Banff National Park –

<http://www.pc.gc.ca/eng/pn-np/ab/banff/plan/gestion-management/bison.aspx>

PERCOLATING - Canada Species at Risk Act –

http://www.registrelep-sararegistry.gc.ca/involved/consultation/default_e.cfm

PERCOLATING - Alberta Wetland Policy –

<http://aep.alberta.ca/water/programs-and-services/wetlands/alberta-wetland-policy-implementation.aspx>

Worthy of interest and follow-up:

TWS Conservation Affairs Network - check out the latest news from other Chapters and Sections - <http://wildlife.org/policy-2/conservation-affairs-network/>

Worth a read – members are encouraged to obtain and read a copy of a recent publication published by the Canadian Institute of Resources Law by Arlene Kwasniak “A Legal Guide to Non-Private Lands in Alberta” (<http://cir.ca/publications/booksreports-1991>) . With over 70% of Alberta land not in private ownership a publication that captures the legal and policy on the various categories of non-private land is a good read.



Richard Schneider

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for additional information

Conservation Planning in Northwestern Alberta

The Alberta Land-use Framework (LUF) was developed as a regional planning framework to manage growth and balance the economic, environmental, and social goals of Albertans. One of the main mechanisms for achieving environmental goals under the LUF is the establishment of new conservation areas, following the precedent established with the Lower Athabasca Regional Plan. These conservation areas also contribute towards the Government of Alberta's commitment to protect 17% of ecosystems under the Convention on Biological Diversity, which was reconfirmed in the Alberta Environment and Parks 2016 business plan.

The experience gained with the first two regional plans indicates that short timelines limit the amount of research and analysis that can be done once the actual planning process begins. The planning teams must generally work with the information that is available to them at the time. In the case of the Lower Athabasca Region, considerable conservation planning had already been done through development of the Terrestrial Ecosystem Management Framework, and this effort was of significant benefit to the LUF planning process. No equivalent planning framework exists for northwest Alberta.

The Northern Alberta Conservation Area Working Group was established in March 2015 to undertake a study of conservation options to support the province's regional planning process in the Upper Peace, Lower Peace, and the Upper Athabasca planning regions. It is anticipated that the province will begin planning in these regions in the near future. Our objective was to provide scientifically-grounded information on conservation planning, including the optimal location of new conservation areas, leaving the decision of how much of land to protect (i.e., the balance between economic and environmental goals) to the regional planning process.

Our approach to identifying conservation priorities was grounded in the principles of systematic conservation planning. We also sought alignment with the Convention on Biological Diversity, the LUF's planning criteria for conservation areas, and the planning approach used by Alberta Parks. Our working objective was to design a reserve system that provided the greatest overall conservation benefit given limits on the amount of protection available. Not knowing how much land would ultimately be available for protection, we produced reserve designs across a range of sizes. The reserves were generated using the Marxan conservation planning software, which identified optimal designs for representing a wide range of conservation features across multiple scales. Our analysis also incorporated disturbance intensity, climate change, and resource conflict.

The summary report for our study is now available. This report describes the inputs and methods used to generate the reserve designs, and it provides a series of maps that illustrate the steps in our analysis, leading to the identification of a set of regional priority sites. The report and supporting data have been provided to the Government of Alberta for use in upcoming regional planning initiatives, and are available to the public at:

<http://www.ace-lab.org/index.php?page=asca&atlas=12>.

Frances Stewart

PhD Candidate

University of Victoria

Thank you for the William Wishart Award

Dr. William Wishart's long and lasting career in wildlife conservation in the province of Alberta provides an example for many young wildlife biologists. This year I was honoured with the William Wishart Postgraduate award, and hope that my future career in wildlife biology can be as productive and influential as his. Dr. Wishart's work re-introducing the Canadian goose serves as a strong link to my current PhD work and future career interests.

My research interests are focusing on the field of re-introduction ecology. Specifically; how re-introductions are assessed, when and why they should be performed, their effects on the ecology of the landscape in which they occur, and the social and ecological factors affecting their success. My current thesis uses genetic sampling to follow up on a re-introduction of fisher (*Pekania pennanti*) to central Alberta, and demonstrates that this re-introduction had most likely failed despite popular belief that it was successful. This raises the question: How many other re-introductions are failures when they were previously assessed to be successful, and how many of these have been quantified with *post hoc* genetic sampling? Perhaps there is an over assumption of re-introduction success, and under assumption of species' ability to disperse and re-colonize a lost range.

My winter of 2016 was spent completing the second and final field season of my PhD work on the *Moraine Mesocarnivore Project*. It takes place in Alberta's Cooking Lake Moraine – a recently designated UNESCO Biosphere Reserve – and involves multiple methods to try and distinguish the success of a fisher re-introduction (non-invasive genetic tagging; Figure 1), functional connectivity of this landscape to the rest of the province (gene flow and individual GPS movements; Figure 2), and the importance of landscape features and mesocarnivore occurrence to these patterns (GIS work and wildlife cameras; Figure 3). Combined, these novel contributions provide a conceptual link between re-introductions, animal movement, gene flow, and detectability that is yet to be realized within the scientific literature and implemented in management practices.

I am very thankful for this award and its timing – the acknowledgement is humbly received at the end of a long and busy field season. I'd like to also acknowledge the many biologists, landowners, volunteers, and funders that have helped with this collaborative work. You can follow project updates at www.mesocarnivore.weebly.com or email me at fstewart@uvic.ca.



Figure 1 – Non-invasive hair samples, collected at bait stations, are analyzed to identify individual fisher as well as their ancestry. These results allow for *post-hoc* assessment of re-introduction success of fisher to the Cooking Lake Moraine. Photo credit: Frances Stewart



Figure 2 – Frances Stewart with a GPS collared fisher. The GPS points on this collar will help to assess functional connectivity of Alberta’s Cooking Lake Moraine for this re-introduced species. Photo credit: Chantal and Rick Pattenden



Figure 3 – Occurrence of fisher, and other mesocarnivores, at baited wildlife cameras reveals the importance of landscape class, configuration, and species co-existence to fisher occupancy on the Cooking Lake Moraine. Photo credit: Alberta Innovates-Technology Future and Alberta Parks

Mystery Photo

Name the species.



Photo by Dave Hobson

Dee Patriquin

Beaver Hills Biosphere Reserve

In March 2016, the United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and the Biosphere Programme designated the Beaver Hills Moraine as a Biosphere Reserve. The new Beaver Hills Biosphere Reserve joins a global network of 669 sites dedicated to promotion of sustainable human and economic development. Located just east of Edmonton, the moraine has long been recognized for its ecological values. About 25% of the moraine is conserved as federal or provincial protected areas or through land conservation organizations like Ducks Unlimited and the Nature Conservancy of Canada. Just under 50% of the landscape remains in natural forest or wetland cover, supporting high biodiversity and several species at risk, including trumpeter swans, and Canada's only disease-free herds of plains and wood bison. The natural landscape is valued by local residents and visitor alike, leading to interest and support for sustainable ways to live, work and play in the area. Work by the Beaver Hills Initiative to develop and promote innovative approaches for land use, ecotourism, research and education helped demonstrate the capacity to become a Biosphere Reserve. Programs like the Beaver Hills Bioblitz co-organized by the ACTWS are an example of the citizen science and outreach activities that helped illustrate the public and professional support for the Biosphere Reserve. Plans are already underway for next year's Bioblitz, which will kick off a year focused on the citizen science opportunities offered by government and non-governmental organizations across the moraine. Look for more information about programs and activities to celebrate the designation over the next year!





BEAVER HILLS INITIATIVE
L'INITIATIVE BEAVER HILLS



the **Beaver Hills**
is now a **UNESCO**
 **Biosphere**

**Celebrate with us at member events
throughout the summer!**

June 26, 2016 - Kalyna Voice/Vintage Day

July 1, 2016 - Strathcona County Canada Day Celebration

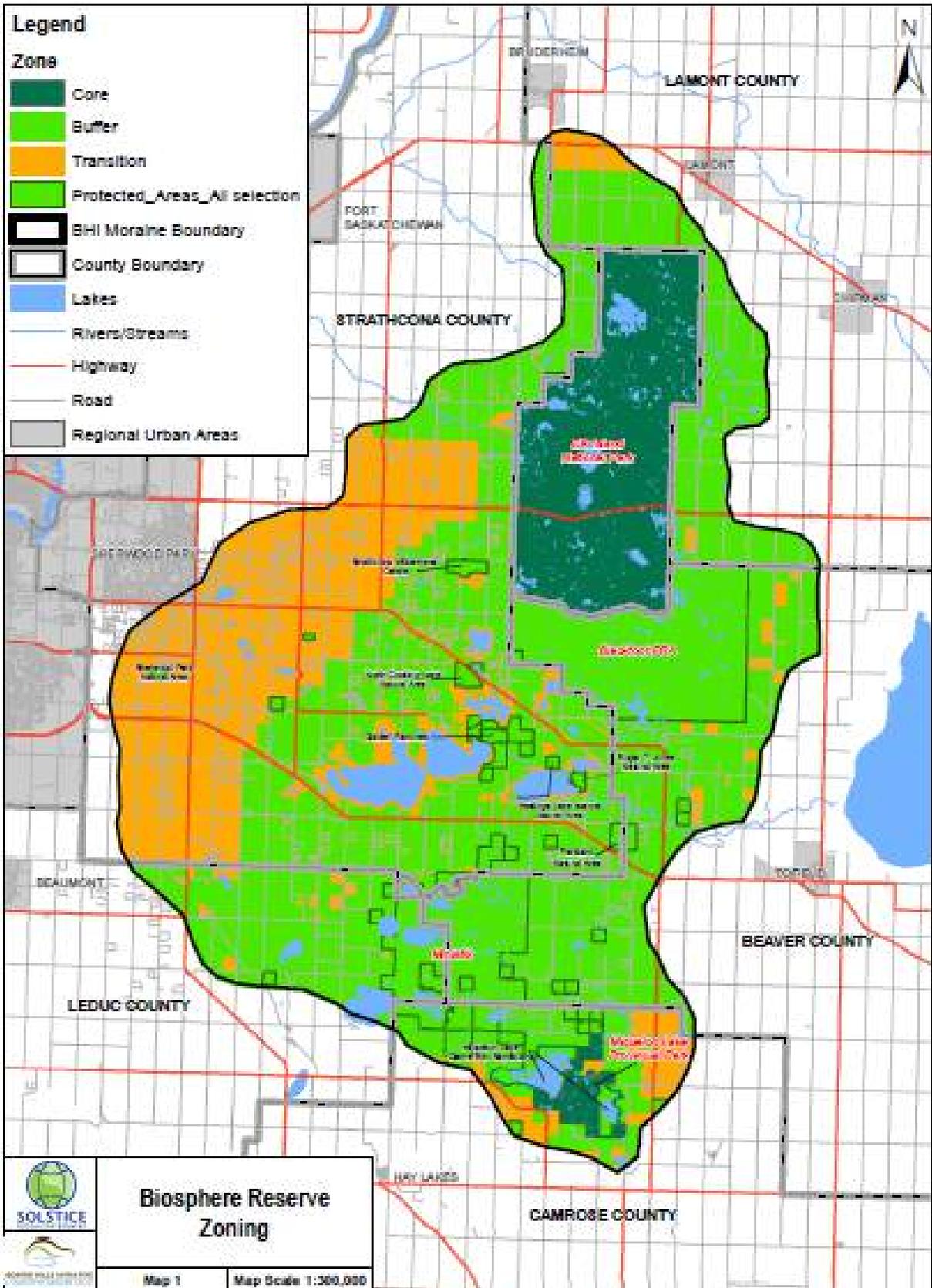
Sept. 3-4, 2016 - Beaver Hills Dark Sky Preserve Star Party

with more events to be announced on our website.

Learn more.



beaverhills.ca
#myBHI

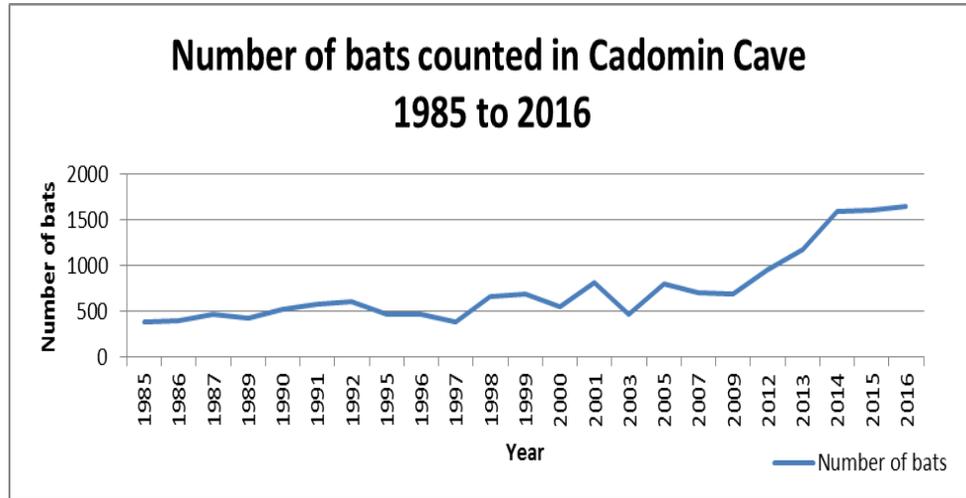


Cave bats in Alberta and White-nose Syndrome in the west

Alberta is still a good place to be a bat these days. Populations appear to be doing well. Since I and Margo began surveying the hibernating population in Cadomin Cave in 1985, populations have increased, or at least become more visible.

By Dave Hobson

hitch-hiking on the backs of hitch-hiking bats



As this chart shows, the number of bats observed has more than tripled in Cadomin cave since 1985. Whether this is an actual population increase or the results of bats roosting more visibly now that winter human visitation had decreased significantly since restrictions were placed in 1998, is still a question. New hibernacula are still being found. A couple of years ago, a caver brought two caves near Nordegg to my attention. This year, I and three others investigated both these caves and found that they were being used by little brown bats and northern long-eared bats during the winter. This is the first known northern long-eared bat hibernacula in Alberta.

In Alberta, bats face a number of challenges. There are still people out there who fear and dislike bats, although those feelings have declined over the years. There is also loss of habitat and wind mills that can cause mortality. The biggest threat to cave hibernating bats though, and they are the most common bats in Alberta, is the fungal pathogen *Pseudogymnascus destructans* (Pd), which causes white-nose syndrome (WNS).

The Alberta Speleological Society has been heavily involved with bat researchers and the Alberta Government in looking at ways of reducing the risk of Pd to Alberta bats and providing guidance on preventing the unintended introduction of Pd spores into caves. Kate Graham of the Alberta Speleological Society drafted a document outlining a western approach to protecting caves that was widely accepted in British Columbia and Alberta. At that time Pd was not found west of Ontario and Nebraska. This is no longer the case. This spring, suddenly and without warning, a Pd infected bat was found in Washington State just east of Seattle. This certainly changes the game. Whereas last year there appeared to

be a 2,000 km buffer of cave less prairie, today it is on our doorstep with mountain ranges full of caves between Washington and Alberta.

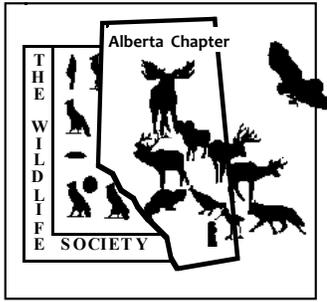
How did the fungus make the leap? No one knows for sure but two possibilities have been suggested. It could have come from eastern North America, possibly in the back of a semi-truck hauling cargo west, or it could have come from Asia in one of an innumerable number of shipping containers arriving from China daily - hitch-hiking on the backs of hitch-hiking bats. DNA testing is underway now to determine the source population of the fungus.

What does that mean for Alberta? Unfortunately, there is not much we can do when it arrives. Can we delay it until an effective response can be developed? It may be unlikely that a response will be developed in time but discussions and planning will need to happen. Meanwhile, we need to continue finding and monitoring hibernacula and identifying and monitoring summer roosts. We also need to reduce the other challenges bats face so as to ensure the populations are as resilient as possible when white-nose arrives.



Preparing to begin a Cadomin Cave survey

Photo by Jason Headley



Alberta Chapter of the Wildlife Society

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Don't forget we are also on Facebook

Upcoming Events

Do you know of an event that should be advertised here?
If so, contact one of the editors.

TWS Canadian Section AGM

July 7—11, 2016, St. Johns, Newfoundland and Labrador
<http://cstws.ca/canadian-section-agm/>

North American Congress for Conservation Biology.

July 17—20, 2016. Madison, Wisconsin'
<http://www.scbnacongress.org/>

Wildlife Disease Association 65th Annual International Conference.

July 31—August 5, 2016. Cortland New York.
<http://www.wildlifedisease.org/wda/CONFERENCES/AnnualInternationalConference.aspx>

50th Moose Conference and Workshop

September 6-10, 2016, Brandon, Manitoba.
<http://mwf.mb.ca/2016MooseConference/>

TWS 23rd Annual Conference.

October 15-19, 2016 Raleigh, North Carolina.
<http://wildlife.org/tws-23rd-annual-conference/>

Footnotes from the Editor



If you have wildlife and trail camera photos that you would like to share please send them to Lisa or Dave for inclusion in the newsletter.

Mystery photo:

Unfortunately it's a feral pig observed during an ungulate survey of WMU 348.