

# B I O S

Alberta Society of Professional Biologists • Fall 2011

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## A Message From Your President

*By Charles Macmichael, P.Biol.*

I begin with many thanks for the opportunity to serve this organization and its members. I am humbled by the many talented people I have met through my involvement with the ASPB the last 4 years. The members, the board, the volunteers and the staff have all enriched my experience and taught me a lot. I began working with the ASPB as a volunteer on the conference committee and then as a co-chair of the conferences. From that position I got to know many of the board members and gain exposure to their work and the work of others within the ASPB. This exposure piqued my interest in the organization and its governance, from which point I became involved as the President Elect to Laurie Hamilton and now the President. Laurie, and those who have served as president before her, have put in many hours and have done great work to get the organization through many challenges in its growth and development. I certainly have big shoes to fill in this regard. I am proud to be a part of a board and staff that care about the organization, are willing to make tough decisions and put in the time to do what is required to keep the ASPB going through its continued development, to serve its members, and increase its standing within Alberta.

This summer has been an active one for the board and staff of the ASPB, as well as the committees of dedicated volunteers. Highlights of these activities include:

- Mentorship program assessment and continued development of the program structure
- Continuing Competency Program review process development
- Continued membership applications review and processing
- Strategic plan development for 2011/12
- Developing relationships with other professional organizations and academic organizations within Alberta and British Columbia
- Guidelines for use of logo and continued development of ASPB management processes
- Continued development of the role of the Executive Director
- Passing the 1000 members mark
- Communications committee development of new outreach products
- Discipline committee guidelines development

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ASPB Executive and Board of Directors from left to right: Top row: Susan Patey LeDrew (President –Elect), Charles Macmichael (President), Markus Thormann, Gerry Haekel, Darrell Jobson, Gary Ash (Treasurer)  
Bottom Row: Laurie Hamilton (Past President), Tara Caseley, David McInnes (Public member), Kashif Sheikh.  
Not in photo: Glenda Fratton (Secretary), Henri de Pennart.

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BIOS is published for the enjoyment and benefit of the members of the Alberta Society of Professional Biologists and those interested in the field of professional biology. Articles or comments are welcomed and should be sent to the editor, Linda Zimmerling at [lindazim@shaw.ca](mailto:lindazim@shaw.ca).

## Executive Director's Report



P. Ross Bradford, ASPB Executive Director

This past and first year has been one full of learning the ropes which tie this organization together. I have learned about the purpose and history, and am now ready to take on the challenges of the future of the regulated professions in Alberta and Canada. I believe that now I have a pretty good handle on the issues and am more prepared to make a significant contribution to the ASPB as its Executive Director.

The opportunity to attend Biology Career Day at the U of A was significant. Also the Environmental Science Students' Association invited me to attend their career night. What surprised me was how uninformed those students were about the opportunities in professional biology and how they knew little about the requirements to qualify for a PBIol designation. They were enthusiastic and welcoming. It was also interesting to note the participation of other organizations offering the student a non-professional and non-regulated choice.

An ASPB volunteer committee is taking up the challenge to provide students with the information they require in order to make the choices in their education that will open these opportunities to them. Our scholarship programs with the major Alberta universities provide the other continuing ties.

Much of these past summer months have been dedicated to engaging other external communities in building essential relationships so critical to the mission and vision of the ASPB. Promoting awareness of the ASPB to the outside community is essential, especially as the demands on the profession continue to evolve.

Introductions and meetings with our universities, colleges, and partners such as the zoo, Nature Centres, museums and conservatories provided the opportunity to learn of their needs and describe the role and programs of the ASPB.

Interactions with, and the study of the other regulated professions have provided useful insight into the future development of the ASPB strategic plan. In many ways these organizations are in competition with each other and the ASPB's responsibility for stewardship of the profession must be recognized.

Recognizing change within the community and listening to the community's needs this summer included awareness of the proposed government actions at both the Federal and Provincial levels as The Report of the Alberta Environmental Monitoring Panel was released. Will there be increased need for the skills of the professional biologist? And how does the ASPB fill this need?

Several of our committees have been very busy this summer creating a new mentoring program and revitalizing our web page. These activities are timely in meeting the needs of the members in our community.



## A Message From Your President

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Looking forward, the board with assistance from the volunteers and staff, will be working towards the following initiatives along with their regular meetings and business:

- Fiscal responsibility and examination of membership fees
- Building more internal capacity and development of the Executive Director role
- Increased support for Mentorship program and phased approach to developing a more supported system of implementation
- Membership benefits program expansion
- Planning for successful 2012 conference and AGM
- Communications and guidance for students and academic institutions for membership applications
- Strategic plan implementation
- Continued promotion of the organization and professional sign-off requirements

I look forward to working alongside the other board members, staff and volunteers during my term, and hope that more members choose to get involved in the organization and its committees. Together, we strive to develop and promote the benefits of being a member of a professionally recognized and regulated group.

If you have any questions or comments, please send them to [pbiol@aspb.ab.ca](mailto:pbiol@aspb.ab.ca).

## ASPB at the ACTWS

*By Kashif M. Sheikh, P.Biol. and Aynsley Shirriff, B.I.T.*

In March, Aynsley Shirriff and Kashif Sheikh represented the ASPB at the Alberta Chapter of The Wildlife Society (ACTWS) Conference in Camrose. The ASPB maintained a booth at the conference where we displayed brochures, pictures and information about the ASPB's objectives and role in promoting excellence in the practice of biology. Interacting with professional colleagues within the ACTWS and meeting young professionals and students enabled us to answer questions and raise awareness about the ASPB's regulatory functions for biologists in Alberta.

It was an interesting conference with incredible keynote speakers such as Michael Sullivan and Brian Keating. Michael Sullivan spoke about the Last Goldeye: the Past and Future of North Saskatchewan Watershed; and Brian Keating offered a quick journey through various conservation and wildlife projects in the African savannah, Himalayas and Alberta. Apart from ASPB official representation at the conference, Kashif Sheikh gave a talk on the topic of "Community-based Biodiversity Monitoring at Industrial Sites in Western Canada: Prospects and Challenges".

The conference was attended by Government, regulatory agencies, and a few members from consulting and NGOs. There were student and faculty participants from NAIT, UofA-Augustana, UofC, Lethbridge College and Lakeland College. We had stimulating discussions with various people from SRD Fish & Wildlife, Alberta Environment and the Alberta Conservation Association; namely, Ron Bjorge and Margo Pybus of SRD, Courtney Hughes of Alberta Environment, and Tammy MacMillan of ACA. Many appreciated the ASPB presence.

Brad Stelfox received the ACTWS Rowan Award this year. The Rowan Award is the most prestigious award offered by the ACTWS. Each year, the ACTWS selects a seasoned Alberta wildlife biologist who is recognized for his or her outstanding cumulative contributions to wildlife management and conservation. We extend our congratulations to Dr Stelfox.

The participants at the ACTWS conference were apprised of the functions and benefits of ASPB membership and the networking potentials that come along with it. Some biologists inquired about the membership renewal process. A few others asked about the Annual General Meeting (AGM) and other programs. UofA and NAIT students showed interest in becoming student members and inquired about the process of membership.

Dave Scobie (outgoing president of ACTWS) and James Allen (incoming President) reaffirmed their commitments to the ASPB and, in turn, the ACTWS displayed a booth at the ASPB conference held in April. Overall, the ASPB's presence at the ACTWS conference was welcomed. It is nice to feel everyone's commitment to the wildlife, conservation and biodiversity community in Alberta.



Photo Credit: Iman Kashif

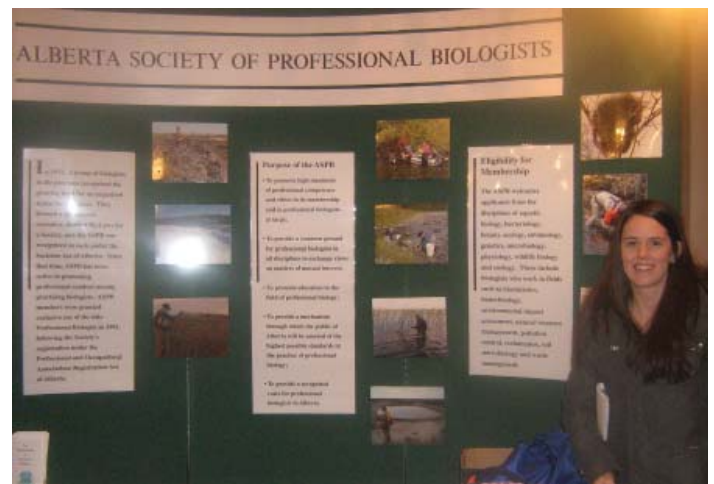


Photo Credit: Kashif Sheikh, P.Biol.

## Interview with a Biologist: Doug Chadwick

By Ngaio Hotte, P.Biol.

Usually in this column we bring you stories of Professional Biologists from across Alberta. Instead, we are bringing something a little different: we will explore the story of Doug Chadwick, a Montana-based biologist and author. Let us know what you think!



Photo Credit: Rick Yates

What began as a winter vacation for Doug Chadwick and his wife, Karen, has turned into an eight-year campaign to raise awareness about wolverines, culminating in the release of his recent book, *The Wolverine Way*. Of course, Doug's idea of a vacation is not what many would consider typical.

Doug was six when he used his first microscope, a gift from his geologist father, to examine a droplet of water. He was astonished to find the droplet was teeming with life and other wonders. Before long he was a "child geek scientist", conducting experiments with fruit flies in the family's basement. He grew up in field camps during the summers, working alongside his father as he traveled around North America every summer; from the border of Alaska, right down to Mexico. While his father investigated rocks, Doug spent most of his time gazing at birds and mammals.

He went on to complete his undergraduate degree at the University of Washington and graduate studies at the University of Montana, studying the ecology and social behaviour of mountain goats at the edge of the Bob Marshall Wilderness in the Swan Mountains. After graduating, Doug was hired as a wildlife technician by Glacier National Park to study the Park's official symbol, the mountain goat. Mountain goats outside the Park were being hunted intensively at the time, and the herds' numbers were falling rapidly in the Rocky Mountain region. Management agencies in both the U.S. and Canada needed better information to develop an understanding of the species and to create a recovery plan. "Everyone assumed they were a lot like cervids and other resilient hunted species, but they are totally different. In fact, their closest relatives in North America are muskoxen," Doug explains. "They're slow to mature; slow to reproduce."

But progress toward the herds' recovery was slow, and Doug grew frustrated. "New roads for logging and development were going in everywhere. The species I knew and loved was in steep decline," he recalls. "So I began to make the transition from conservation work to that of being an activist." Fortunately, the story of the mountain goat in much of the Rockies has a happy ending: the species has recovered from an overexploited population of perilously low numbers to healthier herds in many areas.

Doug's next career move was a shift into journalism. "Writing has always come naturally, and I enjoyed being a bridge between scientists and the public, so I became a journalist," he says, although Doug admits that a degree of good fortune was involved in his transition.

It happened in the 1970s, while Doug was lobbying for conservation of the Flathead Valley: he was approached by a representative from National Geographic Society Magazine and asked to write a story for an issue of the magazine that would focus on wild and scenic rivers. His involvement marked a turning point for Doug; he has since written approximately fifty stories for National Geographic. *The Wolverine Way* is his eleventh published book.

Doug's involvement in wolverine research, like so many of his projects, was spontaneous and unplanned. He heard from a colleague about a research team led by principal investigator Jeff Copeland that was looking for volunteers with experience in the backcountry to help track and trap the animals. "I just wanted to learn more about wolverines," Doug says. "I knew that there was little known about them. As soon as the researchers started pointing out some of the walls they were scaling, and how they were moving through the mountains, and the size of their range, I knew I was in. It was simple research, as long as you could work in the conditions."

Wolverines were extirpated from the lower 48 states in 1920, and the reduction of predator poisoning campaigns in Canada and the U.S. helped to reintroduce the animals in the 1960s and 1970s. But the return of the wolverines attracted hunters and trappers and increasing development in Montana's high country was permitted without consideration of the potential impacts on the population. "Wolverines are a symbol of changing environments in the top of the world and landscape connectivity," he explains. "They have small litters every other year, starting at age three. If you remove a couple of females a year, the population starts sliding downhill. Now, there are only about 40 to 50 wolverines in Glacier National Park and possibly fewer than 300 in the lower 48 states because they were not a high profile animal and little was known about them."

The more Doug learned, the more he was drawn into the world of wolverines: "They are nothing like people imagine."

Contrary to their reputation as solitary, vicious creatures, Doug and the researchers discovered that wolverines are often animated and caring toward their young. "They're investigative, playful, and exploratory," he describes.

They also discovered that wolverines have ranges far larger than expected: "There is a female in the North Cascades that has a 760 square mile territory, extending up into Canada. That takes up about half of North Cascades National Park. It's hard to imagine how anybody can cover that kind of ground; not even in a year, but regularly. One radio-collared wolverine climbed to the summit of the tallest peak in Glacier Park, Mount Cleveland, in January, and this thing looks like an Olympic ski jump - only steeper. He climbed the last 5,000 nearly-vertical feet in 90 minutes. And then he carried on to British Columbia and Waterton National Park, then back into Glacier. And he did it in a week."

Starting in 2003, Doug and Karen helped the researchers to collect six years' worth of radio-tracking data. Their winter "vacation" took on a life of its own, paving the way to production of a PBS special on wolverines, "Chasing the Phantom", and laying the foundation for a book. Through an existing business relationship with the outdoor clothing manufacturer Patagonia, Doug was offered funding for the publication.

While writing the book, Doug allowed himself to stray from hard science and focused more on the exciting adventures from his earlier days working on the project. “If wildlife books aren’t fun, no one but other wildlife people will read them,” he says. “When I write books, I’m always looking over my shoulder at my scientist colleagues and keeping an eye on scientific data. But these animals are fun, and I’m having a ball trying to track them. Everything we find out about them is jaw-dropping.”

Having been an “honest scientist” before he moved to “the dark side and the media”, Doug wonders if wildlife scientists need to re-evaluate their role as experts. “If we are serious about this being the Great Age of Extinction and Climate Change, the Age of Seven Billion People and counting fast, as scientists, can we afford to sit back, publish our data, and wait for it to spread?” Doug asks. “The information is technical and is not accessible to the public. If you’re modeling population dynamics, you can’t expect that other people will jump on board and help that population thrive. There needs to be more of a bridge with the public. Scientists need to communicate this information. And who better? They are the people doing the original work.” He appreciates how difficult this is for scientists to do, but notes: “If journalists say it, it is easier to dismiss than if a professional says it.”

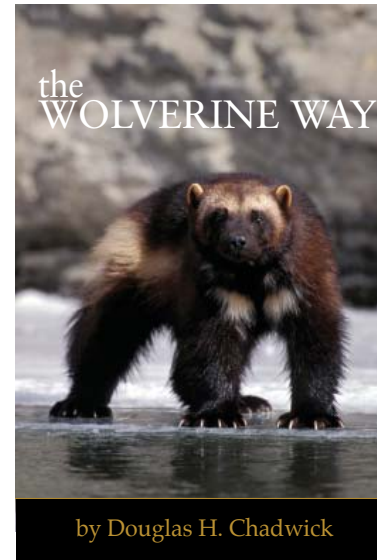
So what does Doug see as the emerging role for wildlife scientists in conservation? “Scientists need to find a new way to dance along the line of science versus advocacy. I’m reading too much bad science from journalists. I hope that one day, I will live in an environment where speaking out for conservation based on science is encouraged,” he says.

Doug compares the responsibility of wildlife scientists to that of doctors, as experts in their respective fields: “Doctors are supposed to speak for good health: they sit the patient down and explain in the best terms possible what needs to be done.”

Though Doug has moved on to other investigative projects, he continues to do whatever he can to attract attention to Montana’s wolverine population and the challenges it is facing. He and Karen are still involved in field work for the project, embarking on four-day treks several times a year to collect hair samples at bait posts.

When prodded about what will be his next big project, Doug is excited but uncertain; his projects are always a surprise, especially to him. The evolution of his exciting career has been equal parts luck, talent, being at the right place at the right time, and a willingness to explore new possibilities. “If you are engaged in a conservation challenge, jump in and see where it leads you. This is not a call to become a rabid activist,” Doug cautions. “But I don’t think we should work so hard to separate the logical, rational, professional parts of us from our hearts. If you feel strongly about something, you should pursue it and worry about what to do with it later.”

While he may appear to be pulled in a million different directions by his work, Doug sees a common theme emerging: “Nature lies in the process and the connections as much as it lives in the individual animals. The messages from the large mammals about connectivity are the same as the messages from the microbes: The power of nature lies in the connections between species. And I want to know more about how it works. I’m really lucky that my job is to find out more all the time.”



Look for Angela Perry’s book review of *The Wolverine Way* in the next edition of BIOS.

## Book Review ‘The Algal Bowl’

*By Angela Perry, P.Biol.*

In 1974 John R. Vallyntyne wrote *The Algal Bowl: Lakes and Man*. This book predicted that by the year 2000 we would be living in an Algal Bowl, analogous to the Dust Bowl of the 1930s. Just as the dust bowl was caused by mismanagement of our land, the Algal Bowl is a result of mismanagement of land and water resources. This book was key in affecting change in policy, helping shape political decisions, resulting in a decrease in urban phosphates. Witnessing acceleration in eutrophication of our water bodies, Vallyntyne then invited David W. Schindler to co-author an updated version resulting in *The Algal Bowl: Overfertilization of the World’s Freshwaters and Estuaries*.

The original predictions from 1974 have proven true and Schindler and Vallyntyne use several different case studies to examine both successes and failures in both stopping and reversing eutrophication. It is good to see local examples, such as Lac La Biche, presented in the book.

I found this book very interesting especially in light of this year’s exceptional rainfall events. Local lakes are experiencing heavier than average algal blooms owing to nutrient overloading. Once the ground was saturated, there was enough water to cause runoff from areas that don’t normally reach our water bodies. The book also offered a perspective of causes and issues that are relevant to Albertans – increasing intensity of agriculture and livestock as the world’s demand for food also increases. Waste by farm animals exceeds human production by a ratio of 30:1 in Alberta. The daily phosphorous output from one cow is equivalent to that of 11 humans.

The book examined causes of eutrophication but also offered solutions and hope: “We know most of what we must do to prevent eutrophication and to recover culturally eutrophied lakes. What is often missing is the courage of policy makers to apply the measures that we know well” (p. 37). Overall, this was a very culturally relevant and fascinating book.

## ASPB Conference Success

By Alison Beal, B.I.T.

### 2011 ASPB Conference Recap

The 2011 ASPB Conference “The Role of the Biologist in Industrial Development” was held at the Calgary Zoo on April 13 and 14, 2011. Planning for the conference began in November 2010. The conference committee was composed of a dedicated and diverse group of ASPB members. The ASPB Conference committee was privileged to have a number of speakers from industry, government, environmental consulting, academia, and non-government organizations give presentations on a wide range of topics. Creating the program involved a call for papers, with all submissions included as a presentation and some set up as a discussion panel. The presentations were divided into seven sessions:

- Session 1 – Environmental and Risk Management
- Session 2a – Stakeholder Engagement
- Session 2b – Wind Energy Development
- Session 3 – Investigating the Roles & Perspectives of a Biologist \*Discussion Panel\*
- Session 4 – Wildlife Interactions
- Session 5 – Reclamation: Hot Topics
- Session 6 – Wetland Assessments \*Discussion Forum\*
- Session 7 – Effective Team Participation & Policy Development

Attendees were treated to a variety of presentations ranging from high level discussions to those focusing on specific studies and/or practical applications. Discussion forums allowed for a variety of perspectives to be presented. It was refreshing to focus on the diversity of roles of a biologist and acknowledge that biologists are working in other areas, not just environmental consulting.



Panel from left to right: C. Gates, University of Calgary; C. Nugent, ASRD; S. Grindal, P.Biol., ConocoPhillips Canada; M. Jalkotzy, Golder Associates Ltd.; C. Bradley, P.Biol., Alberta Native Plant Council. Photo Credit: Laurie Hamilton, P.Biol.

Conference attendees were also treated to a presidential address by Laurie Hamilton, P. Biol., to kick off the conference and closing remarks by incoming ASPB President, Charles Macmichael, P. Biol. The ASPB Annual General Meeting was held on the first day of the conference and was well attended by members. The dinner banquet followed with comedian Leland Klassen.

The conference was well attended and successful, receiving positive feedback through discussions after the presentations and from the conference feedback forms. Conference attendees included delegates, presenters, sponsors, and committee volunteers coming from environmental consulting (64%), industry (17%), government

(11%) and other (8%). The ASPB received very positive feedback for the sessions in terms of the relevance of topics and quality of the presentations. The choice of venue also scored highly. Overall, the conference achieved the goal of keeping members informed about the role of the biologist whether in industry, government, environmental consulting, academia, or non-government organizations. It also provided opportunities to network, and help ASPB members fulfill their professional development requirements.

### Biography of Hilary C. Young, BSc, MA



Hilary Young was the ASPB Student Presentation Award winner at the ASPB 2011 Conference held at the Calgary Zoo, 13-14 April 2011. The title of her presentation was “Moose (*Alces alces*) Distribution at Clearcut-Forest Edges in the Rocky Mountain Foothills”.

A love of the outdoors was instilled in Hilary at a young age. She grew up in Ontario, where she spent summers exploring the forests, ponds and lakes around her family’s cottage near

Peterborough. Her interest in wildlife eventually led her to pursue an Honours degree in Animal Biology at the University of British Columbia (2001). In her fourth year, under the supervision of Dr Judy Myers, she camped on a small island in Queen Charlotte Sound for twelve weeks, collecting data on the insect biodiversity of three different habitat types.

Following graduation, she travelled to Borneo to conduct a study on social learning in juvenile orangutans (*Pongo pygmaeus*) at the BOS Wanariset orangutan rehabilitation centre. Her experience with insects and primates fused nicely in her Masters research with Dr Linda Fedigan at the University of Calgary. In Costa Rica at the Research Centre in Santa Rosa National Park, she examined selective insect foraging in white-faced capuchin monkeys (*Cebus capucinus*), focusing specifically on how the monkeys foraged on ant-defended acacia trees (*Acacia collinsii*). Her MA was awarded in 2005.

She decided to change tack again for her PhD, and has returned to conducting research in the temperate biome. Hilary’s current work, supervised by Dr Mary Reid at the University of Calgary, is on the movement behaviour of ungulates at habitat edges on the Eastern slopes of the Canadian Rocky Mountains. Despite the apparent diversity in her research interests, in each case Hilary was simply interested in the pattern of and process behind a specific biological or ecological system. Lately, she is also driven by wanting to understand how humans can minimize their impact on existing natural systems. Hilary is currently on the Board of Directors of the Friends of Kananaskis Country, and looks forward to completing her PhD in 2012.

Hilary has 4 publications, 3 in refereed journals, 1 non-refereed, and 9 presentations at conferences. Hilary has been awarded 9 scholarships and 7 awards and grants during her graduate studies.

And sometime in the near future, she will be applying to be a B.I.T. with the ASPB.

## Can grizzly bears persist on a landscape shared with mining?

By *Bogdan Cristescu and Mark S. Boyce*

The grizzly bear is an iconic species for the wilderness of the Alberta Rocky Mountains and Foothills. But how adaptable are bears to expanding industrial activities in Alberta?

One of the main resource extraction industries occurring in the Alberta Rocky Mountains and Foothills is open-pit coal mining. Coal is a major underground resource and in 2008 burning of thermal coal provided 59% of the total energy for the province.

On the other hand, metallurgical coal is almost exclusively being exported. Alberta contains 70% of Canada's coal reserves and coal-bearing formations cover 48% of the province's land area, some of which overlaps grizzly bear habitat. In 1999, the Foothills Research Institute Grizzly Bear Program led by Gordon B. Stenhouse set off to assess the effects of mining on grizzly bears. Subsequently a partnership was established with the University of Alberta to facilitate collection and analyses of data on grizzly bear movements, habitat selection and foraging on and around reclaimed and active open-pit mines, using Luscar, Gregg River and Cheviot mines in west-central Alberta as study areas. Data collection occurred in 1999-2003 and 2008-2010 allowing ongoing comparative analyses of grizzly bear response to mining at different stages.

Grizzly bears not only move onto reclaimed mine sites at certain times of the year, but they also engage in foraging and resting in these human-modified areas. An analysis carried out for 2008-2010 showed substantial variation in home range sizes of adult bears captured and radiocollared near Cadomin, 50 km south of Hinton. Eight of the ten bears monitored with GPS radio-collars during this period had home ranges that overlapped mine leases, with the average overlap on reclaimed mine leases being ~10%. One female bear with cubs had almost 50% of her home range on reclaimed mines.

Seasonally, the greatest home range overlap with reclaimed mines occurs in late spring and early summer, when bears graze on legumes sown as part of mine reclamation. At this time of the year, when using areas undisturbed by mining, bears typically graze on forbs, grasses, sedges and rushes. In contrast, during early spring and late fall bears move primarily off the mines where they dig for roots of *Hedysarum* sp. Late summer is the season when bears consume berries, exclusively outside mines.

A large proportion of bear diet on and around reclaimed mines in our study area is composed of ungulates. We found that elk and moose were the primary prey outside mines, with deer the predominant ungulate consumed on mines. Bear consumption of ungulates peaks during calving/fawning season, with a secondary peak in the fall. The reclaimed mines provide sources of ungulates, particularly elk, which are taken by bears on and off mine leases.

Bears cross the 24-km Cheviot active mine haul road, and although some of the published literature suggests that bears in industrially active landscapes become more nocturnal, in our study bears were generally active primarily in the morning and evening, remaining active throughout the day, but were least active at night. Also, although overall bears spent disproportionately more time far away from active mining, some bears sometimes moved close to Cheviot mine where blasting, shovelling, loading and transportation of coal with heavy haulers occurred.

During our monitoring we observed males, single females and females with cubs using the reclaimed mines and neighbouring areas. This might be explained by the great abundance of forage as well as security; that is, the open grasslands on reclaimed mines allowing detection of threats from greater distances. Memory and learning play important roles in an animal's life history, and bear cubs, particularly females, will likely use the same areas as their mothers used through adulthood.

We caution that land-use planning within grizzly bear range during active mining, and following mine closure, needs to incorporate the reality of a landscape with bears of all age and sex classes. Some bears may have become accustomed to human activity during active mining operations. Once human presence on the mined landscape becomes less predictable, such as through recreational activities, the behaviour of bears may or may not switch to more fear of people. One of the cautionary approaches to prevent human-bear conflicts on mine leases would be to continue the enforcement of speed limits on coal haul roads. This is especially true in areas with high frequency of wildlife crossings, restricting access on reclaimed mines to designated trails, and proper waste management practices.

Home ranges of bears that overlapped mine leases also included vast areas of largely pristine habitats such as Whitehorse Wildland Park and Jasper National Park and other public lands where there is no mining. Wild areas are key strongholds providing essential bear foods during early spring, late summer and fall. They also act as sources of native plants and animals that in the long-term may colonize reclaimed mines contributing to ecological restoration.



Grizzly bear grazing on Gregg River reclaimed mine near Cadomin. Photo Credit: Beth MacCallum, P.Biol.

Bio: Bogdan Cristescu is a Ph.D. Candidate in Biological Sciences (Ecology) at the University of Alberta and 2010 recipient of the Alberta Society of Professional Biologists' Graduate Scholarship. Mark Boyce is a Professor of Biological Sciences at the University of Alberta and Alberta Conservation Association Chair in Fisheries and Wildlife. Correspondence can be sent to [cristesc@ualberta.ca](mailto:cristesc@ualberta.ca).

## ASPB Announcements

### 2012 ASPB Conference Planning

Planning for the 2012 ASPB Conference is now underway and volunteers are needed for this year's Committee. The ASPB is looking for enthusiastic, resourceful, committed members to join and contribute as volunteers for another successful, well-attended ASPB Conference. There are many subcommittees, from sponsorship and marketing, to event planning, that you can be involved in. Time commitment between the subcommittees varies so you can pick and choose based on your interest and your schedule. This is a great opportunity to get involved in the ASPB, and the time you volunteer can be used towards your continuing competency points required to maintain your membership as an ASPB member.

If you are interested and want to become involved, or have any questions, please email this year's Conference Committee Co-Chairs for more information:

Elise Savard, BIT ([elise.savard@stantec.com](mailto:elise.savard@stantec.com)) & Alison Beal, BIT ([alison.beal@stantec.com](mailto:alison.beal@stantec.com)).

### ASPB Photo and Specimen Submission Request

The ASPB Communications Committee invites members to submit photos and specimens for use by the ASPB for the purposes of enhancing and updating our display, brochure and website. Consent waivers will need to be completed upon submission and details will be provided to contributors.

Photo submissions: Please email photos in tiff format to [pbiol@aspb.ab.ca](mailto:pbiol@aspb.ab.ca) with "ASPB photos for submission" in the Subject line. Individual photos should not exceed 3 MB.

Specimen submissions: Please email [pbiol@aspb.ab.ca](mailto:pbiol@aspb.ab.ca) with "ASPB specimen submission" in the subject line if you wish to supply specimens for the ASPB display. Arrangements will be clarified for the best method for ASPB to acquire the material.

### ASPB Introduces a Paperless Option: ASPB Membership Renewal Notice has a New Toggle!

In December, you will receive a friendly email reminder regarding your membership renewal with the ASPB. As in the past, renewals are completed online, and this process has reduced the amount of paper used by the ASPB. New to membership renewals will be a toggle that will give you a choice of whether you would like to continue to receive BIOS publications as a hardcopy (current default with membership), or whether you would prefer to have only a digital version emailed to you. The pros of the digital version include the following: a digital version is easy to forward to friends and colleagues; no paper or ink is used to create the digital version (this saves the ASPB money on printing costs); and a digital version can still be printed, if desired. A key pro of the published paper copy is that it looks very professional, and once read, it can be posted or displayed at your office or other bulletin board and used as advertising for the ASPB. Don't worry if you select an option at the time of renewal and then change your mind later. You will be able to access the toggle in your personal profile at any time.

If you have other green initiatives you would like to share, please email them to the BIOS editor, Linda Zimmerling, at [lindazim@shaw.ca](mailto:lindazim@shaw.ca).

## ASPB Upcoming Events

### Alberta Society of Professional Biologists Tour of Glenbow Ranch Provincial Park

**October 15, 2011** at 1:00 pm with an approximate duration of 2.5 hours

Program Fee: Donation

This guided tour will provide you with a chance to view the beautiful Glenbow Ranch and its diverse array of historical and natural resources. Yodel Loop has a little of everything. The unique geology of the Bow River Valley and a pristine environment has allowed the Ranch to become a sanctuary to animals of all kinds. The Tour will also cover the short, but colourful, history of the area and the many pioneer men and women that called this place home.

TO PARTICIPATE, you must pre-register. You need a GRPF Account Number to register.

If you do not have a GRPF Account Number, please call 403-398-3763 (outside Calgary area call toll free 1-800-447-1833) or email [experienceglenbow@grpf.ca](mailto:experienceglenbow@grpf.ca), and leave your full name, address, phone number, email, and the program number (111015PRGWCY).

OCTOBER 2011

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## Links Shared by Members

**The Foothills Restoration Forum's 5th Annual Fall Information Session** will be held on **Thursday, October 6th, 2011** at The Cowley Hall, Village of Cowley, Alberta.

The Theme for this year's Fall Forum is: "Developing practical solutions to reduce industrial disturbance in native grasslands" Incorporating local knowledge of the climate and landscape, with new technology, innovative construction and reclamation techniques to reduce industrial footprint.

For more information, visit our website at [www.foothillsrestorationforum.com](http://www.foothillsrestorationforum.com).

### Water Crossing – CAPF/CAPFT Fall Workshop, Oct. 13 & 14, 2011 in Grande Prairie, AB

This year's session will be focused around water and stream crossing management and will utilize the expertise and course design provided by the Woodland Operations Learning Foundation (WOLF). The course is designed to assist resource managers in understanding, assessing and managing creek crossings for all types of linear land use activity.

Course content can reviewed on the WOLF website at <https://www.w-o-l-f.ca/>

For more information contact Noel St Jean RPF, CAPF Program Chair, at 780-464-3295 or 780-499-0498 (cell)