

# WESTERN CANADA BAT WORKING GROUP

## WESTERN CANADA BAT WORKING GROUP

### NEWSLETTER

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ISSUE NO. 1

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## WELCOME!

Hello fellow bat enthusiasts. Two years ago a diverse group of people with a common interest in bats met to form the Alberta Bat Action Team (ABAT). Our purpose is to identify and prioritize research needs and promote bat conservation in Alberta. (For more details about ABAT check out our website <http://www3.gov.ab.ca/srd/fw/bat/index.html>) As some of you may not be aware of the origins of this newsletter I asked Lisa Wilkinson, the WCBWG coordinator, to bring us all up to speed:

Over the last year, we have pursued the idea of forming a Western Canadian Bat Working Group (WCBWG). We thought this would accomplish several objectives: increase communication among bat workers (through a semi-annual newsletter and conference calls as required); create a forum for discussing and highlighting bat issues; provide input on management decisions; and promote bat conservation. The North American Bat Conservation Partnership (NABCP) has encouraged the formation of working groups and provides administrative and financial support for important activities.

We will continue to have representation on, and work collaboratively with, the Western Bat Working Group (WBWG), which consists primarily of representatives from western states. However, by forming our own group we are better able to deal with Canadian issues, management and conservation.

Our current focus is to establish lines of communication, distribute the newsletter, and solicit input and suggestions. I am currently coordinating the WCBWG, and along with Mark Brigham (Sask) and Laura Friis (BC), form the executive committee. Please contact me if you have any comments or questions. Thanks for your interest and support, and let's hope 2003 is a great year for bats!

Lisa Wilkinson, Alberta Fish and Wildlife Service [Lisa.wilkinson@gov.ab.ca](mailto:Lisa.wilkinson@gov.ab.ca)

As Lisa mentioned, following conversations with many of you, it was agreed at our ABAT meeting in October that we will form a Western Canada Bat Working Group, consisting of members from BC, AB, YT, NWT, SK and MB. It was also decided that a newsletter is the best way to facilitate communication among members of this illustrious group. Well, here it is! The newsletter will normally come out in the fall (Sept, Oct) and spring (Mar, Apr). Many of you responded with great enthusiasm when I sent out the call for submissions and the list of subscribers grew rapidly to over 40 people! Thank you all for your contributions. As this is the first issue and my first crack acting as an editor there is no doubt room for improvement. Any comments and suggestions for future issues would be greatly appreciated and can be sent to [lasiurus\\_cin@yahoo.ca](mailto:lasiurus_cin@yahoo.ca). I hope you find this issue of the newsletter informative.

Sincerely,

*Krista Patriquin*

WCBWG Newsletter Editor

## RESEARCH UPDATES

I have included the summaries submitted to me without making any revisions. I have organized them according to province and territory in which the studies were conducted and by alphabetical order within province. If you wish to contact anyone regarding their research, a distribution list and contact information is available at the end of this newsletter.

### BRITISH COLUMBIA

#### Lillooet Bats

Vivian Birch-Jones, President, Lillooet Naturalist Society, Lillooet, BC

In Lillooet we have a bat club of two. I'm the president! We do bat education sessions in the school, and answer bat calls and questions. We are longstanding members of BCI and receive their magazine. Once in a while we are in the newspaper, and I often talk bats on our local radio station. When the Ministry of Sustainable Resource Management here took over the land use planning process they came up with a plan that neglected bats. I brought this to their attention and wound up doing a submission. This resulted in four bat species being added to their species at risk list and some small (sadly very small) changes to their habitat recommendations. Since our bats are very interdependent with the forests I have been mentioning this as part of my objections to the extensive old growth clearcutting we have going on here. Now I am invited to speak to the forestry guys and the loggers! So I have prepared a four page Bats and Lillooet Forests hand-out for them and learned a lot in the process. Luckily some experts like John Surgenor, Lisa Wilkinson, Syd Cannings and Laura Friis have helped me as well as Dan Taylor from BCI. I would be happy to have some more comments on this paper, [vbj@uniserve.com](mailto:vbj@uniserve.com) and



would really appreciate some help for our local bats from someone who actually knew what they were doing. Thanks for including me in your circular.

### **News from the Queen Charlotte Islands**

Doug Burles, Environmental Assessment Specialist/Resource Management Warden,  
Gwaii Haanas National Park Reserve and Haida Heritage Site, Queen Charlotte City, BC

I am spending most of my time right now co-authoring a technical report on the native mammals of the Queen Charlotte Islands, working with Dave Nagorsen to update the COSEWIC status report on Keen's myotis and trying to prepare a couple of papers on my thesis research for publication.

### **Bat research on Vancouver Island**

Vanessa Craig, Ph.D., R.P.Bio, EcoLogic Research, Gabriola Island, BC

I have been fortunate to be involved in four different projects this year focusing on bats on Vancouver Island, BC. The first project involves identifying the distribution and roost selection criteria of the Blue-listed (Vulnerable) Townsend's big-eared bat (*Corynorhinus townsendii*) on the BC coast. The project is funded by the BC Habitat Conservation Trust Fund, and is being carried out in association with the BC Ministry of Water, Land and Air Protection (originally Susan Holroyd, presently Don Doyle). The project began in 2000 with a survey of bats on four Gulf Islands. We discovered several maternity colonies of *C. townsendii*, including one with over 450 females and pups. In 2001 I discovered additional maternity roosts along eastern Vancouver Island, expanding northward the known range of this species on Vancouver Island. All of the roost sites discovered were in man-made structures. In 2002, with additional funding from the BC Public Conservation Assistance Fund, and in cooperation with the Heron Rocks Friendship Society, I am coordinating the building of two "bat houses" (small sheds) for *C. townsendii* on Gulf Islands. With support from Bat Conservation International, I also collected temperature data at *C. townsendii* maternity roosts in summer 2002, and am currently collecting temperature data at hibernacula along the BC coast to identify temperature characteristics of roost sites. I am currently analyzing the summer data and am interested in speaking with other researchers who have collected temperature data at *C. townsendii* maternity roosts or hibernacula. In addition to these field projects, I am currently writing the BC status report for *C. townsendii*. I have been collecting records of *C. townsendii* in BC, but if I haven't already contacted you, and you have found a roost or captured a Townsend's big-eared bat, please contact me so I can include the information in the report. In summer 2002, I was also contracted to assess potential impacts of a proposed tourist development on a maternity colony of Red-listed (Threatened) Keen's long-eared myotis (*Myotis keenii*). The resulting report was submitted to the Ministry of Water Land and Air Protection to assist them in evaluating the proposed development.

### **Campbell River Bat Project**

Mandy Kellner\*, Pacific Slope Consulting and Sal Rasheed (Parks Canada)

2002 was the final summer of the 2-year Campbell River Bat Project, which looked at roosting and foraging habitat and hydroelectric development. We investigated what was going on in 2 local generating stations, which turned out to be house maternity colonies of Little Brown and



Yuma bats in a cozy warm environment. We installed numerous bat houses of 2 styles, in anticipation of the colonies being evicted last winter. The eviction never happened – nevertheless, we did observe use by bats of several of the maternity-style houses. Temperature monitoring showed that the houses get very warm, but the temperatures were quite variable – much more so than those in other maternity colonies we monitored. We located other roosts used by radio-tagged bats in this highly-altered landscape, and found that bats were using buildings, bridges, large snags in thinned second-growth, and veteran trees and remnant old forest patches. Comparison of nightly activity levels at reservoir- and non-reservoir water bodies suggests that the reservoirs are not used to the same extent as natural ponds. We are currently working on the project final report and it will be available early next year from Mandy (myotis@telus.net). The project was funded by BC Hydro's Bridge-Coastal Fish and Wildlife Restoration Program.

\* submitting author

### **Habitat Use by Forest Dwelling bats in the Northern Skagit Watershed, British Columbia**

Tanya Luszcz, MSc candidate, University of Calgary, Calgary, AB

The objectives of my study are to compare habitat use of bats in forests of different ecosystem zones and ages in the Skagit watershed and ultimately apply this information to a forest management perspective. I measured activity levels of forest dwelling bats by placing remote AnaBat II detector systems in young, medium and old forests of four different ecosystem types. Three of the ecosystem types are biogeoclimatic zones within the watershed (IDFww, CWHms1 and ESSFmw). From within the first two zones, I chose to separate black cottonwood zones into their own zone based on their high habitat value for many wildlife species. Detectors were placed in natural forest gaps within a contiguous habitat type. Following ecomorphology theory, habitat use by bats can be predicted by differences in their wing morphology, body size and other characteristics that influence their maneuverability. I am determining habitat use by species or species groups using Analook call analysis software and discriminant function analysis.

There was much higher activity by *Myotis* species in black cottonwood stands. Black cottonwood stands may represent important foraging or roosting habitats for *Myotis* species. *Myotis* activity also decreased with an increase in elevation, while activity by large bat species showed no specific trend. There are generally fewer species at higher elevations, and reproductive female bats generally do not occupy higher elevations due to thermoregulatory constraints. Activity for the western long-eared *Myotis*, *Myotis evotis*, increased with increasing forest age while no trend was seen for other bat species. Older forests are structurally heterogeneous and often provide more roosting opportunities for bats than younger, more homogeneous forests. It is interesting that this trend is only seen for *Myotis evotis*, a maneuverable bat that is better able to deal with clutter than other species. Further analyses are presently being undertaken.

### **Habitat Use and Roost Selection by Pallid Bats (*Antrozous pallidus*) in British Columbia**

D.A. Rambaldini, MSc candidate, University of Regina, Regina, SK

Pallid Bats reach the northern limit of their range in British Columbia, where they are restricted to the semi-arid steppe highlands of the Okanagan Valley. Pallid Bats are Red-Listed in B.C. and are federally classified as Threatened. Despite this, there is a paucity of data concerning their ecology in Canada. Suitable foraging habitat and roost sites may be limiting resources determining the extent of this species' range. This study was conducted from May to August



2002 near Oliver, B.C. Based on a sample of 5 radio-tagged individuals, Pallid Bats exhibited fidelity to roosts in inaccessible rock crevices that were located  $\leq 0.5 - 1$  km from foraging areas and that maintained high stable temperatures. Maternity colonies were located near or within roosts used by adult males. Pallid Bats foraged in areas of native vegetation (dry sandy soils vegetated by mature antelope bitterbrush, sagebrush, and Ponderosa pine) but preliminary data are insufficient to assess whether orchards and vineyards were also used as foraging areas. Based on a sample of 34 faecal pellets, bats ate solely beetles including Scarabidae and Carabidae (*Calosoma* spp.). Previous studies in the Okanagan Valley showed that Pallid Bats foraged in open, sparsely vegetated grasslands and night roosted in Ponderosa pines after a single foraging bout. However, I found that Pallid Bats foraged in areas dominated by mature antelope bitterbrush, showed a bimodal foraging pattern, and used day roosts between foraging bouts. In 2003, I will explore thermoregulation by Pallid Bats.

### **Insectivorous bats as predators in forest pest outbreaks**

Joanna Wilson, MSc candidate, University of Calgary, Calgary, AB

I am studying the predator-prey interactions between the bat community and a forest pest. I have two main objectives: to understand the response of bats to insect pest outbreaks, and to determine whether bat predation can have an impact on a pest population. In 2002 I worked in Douglas-fir forests of southern interior B.C., near Merritt, where an outbreak of western spruce budworm (*Choristoneura occidentalis*, Lepidoptera: Tortricidae) is currently underway. I predicted that bats would show both a functional response and an aggregative numerical response to high concentrations of prey in outbreaks. To test my predictions I measured insect abundance, bat activity and bat diet and compared them in both space (outbreak vs non-outbreak sites) and time (before vs during the budworm moth flight period). If I do find a predator-prey relationship between bats and western spruce budworm, this could help to motivate efforts for the conservation of bats in forests.

## **ALBERTA**

### **Effects of Mixedwood Understorey Protection Cuts on Bats**

Jason Fisher, Wildlife Ecologist, Alberta Research Council, Vegreville, AB

Anabat II bat detectors were used to sample bat activity in deciduous reserves, clearcuts, mixedwood reserves, mixedwood understorey protection cuts, conifer reserves, and conifer cuts in Grande Prairie and Manning study areas. With current Anabat sophistication only two types of bats will be distinguished: small bats from the genus *Myotis* (potentially including *M. evotis*, *M. septentrionalis*, *M. volans*, *M. lucifugus*) and larger non-*Myotis* bats (potentially including *Eptesicus fuscus*, *Lasiurus noctivagans*, *Lasiurus cinereus*). Detector units were strapped to trees at breast height at a slight angle, such that microphones pointed upwards to capture the airspace between the forest floor and canopy. Two bat detectors were placed in a stand for three nights at a time, and were situated a minimum of 250 m apart and 100 m away from major openings. Detectors were checked daily and reset. Detectors were moved to different locations within the stand for subsequent recording sessions. Detectors were active in each stand for a total of five or six nights. This work began in 2000, was expanded in 2001, and continued in 2002, which marked the end of data collection for this project.



**Developmental changes in thermoregulation of big brown bats.**

Lydia Hollis, PhD candidate, University of Calgary, Calgary, Alberta

Torpor is defined as a state in which an endothermic animal allows its body temperature to drop below its active homeothermic level. Although there are significant advantages to torpor use for adult bats, juvenile bats may experience disadvantages at low body temperatures. For example, growth rates are reduced at low temperatures and feeding opportunities for pups may be reduced for torpid individuals. The purpose of my study is to investigate the developmental changes in thermoregulatory ability of temperate-zone bats. To determine if thermoregulation changes during different life stages, I measured body temperature (with temperature-sensitive radiotransmitters) and metabolic rates (*i.e.* oxygen consumption) of 4-9 captive big brown bats, *Eptesicus fuscus*, at six different ambient temperatures (*i.e.* from 10°C to 35°C increasing in 5°C increments) for four different age classes (*i.e.* early prevolant, late prevolant, volant juveniles, and adults).

Body temperatures of early prevolant bats closely matched ambient temperatures (*i.e.* early prevolant individuals did not stay warm at 10, 15, or 20°C). Consequently, metabolic rates of early prevolant big browns were consistently low at all ambient temperatures (~5 mL O<sub>2</sub>/g/h). In contrast, some late prevolant bats maintained an active body temperature at low ambient temperatures. For volant juveniles and adults, there was a clear dichotomy between bats that went torpid at low ambient temperatures and those that remained euthermic at ambient temperatures between 10 and 30°C. For late prevolant, volant juveniles and adult bats, there was a clear dichotomy in metabolic rates for bats that went torpid (*i.e.* low metabolic rates) and those remaining euthermic (*i.e.* high metabolic rates). In terms of energy savings for late prevolant bats, at 10°C the calculated oxygen savings for a torpid bat is 90% compared to a euthermic individual at 10°C. Similar savings were observed for volant juveniles and adults that went torpid (*i.e.* 95% and 96%, respectively) compared to bats that maintained an active body temperature. Interestingly, adults have a greater thermal neutral zone than pups.

**Movement and Distribution of Prairie Bats**

Cori Lausen, PhD candidate, University of Calgary, Calgary, AB

I just recently began a PhD with Robert Barclay at the University of Calgary. My research focuses on the movement and distribution of prairie bats, specifically *Myotis ciliolabrum*, *M. lucifugus*, and *Eptesicus fuscus*. My field season was from the end of April to mid-October this year and I netted many areas of southern Alberta (from Dry Island Buffalo Jump south to Writing on Stone and east to Empress). I did extensive netting in the Onefour, Bow Island, Dinosaur Provincial Park, and Empress areas and did extensive traveling of the river valleys in S. Alberta, N. Montana and S.W. Saskatchewan to better understand the distribution of *M. ciliolabrum* in the prairies. I will continue this work next summer and will likely work most extensively in the Milk and Missouri Drainages.

Highlights of the season include capturing *M. ciliolabrum* at the end of April in cold weather (3-8 degreesC) at Dinosaur Provincial Park on the Red Deer River, and again in middle of October. Numbers of bats seemed to be very high in the spring and fall, which suggested bats are hibernating in the park. This speculation was also made in 1981 by Tim Schowalter who described late summer activity there. I was unsuccessful in getting transmitters onto bats before winter set in, but instead I visited the park during a Chinook near the end of November. I detected bats with a Peterson detector and recorded numerous passes with an ANABAT. Activity



was infrequent throughout the night from 5 pm to 6:45 am, and included Big Brown and *Myotis*. I have not done any call analysis yet but hope to identify the *Myotis* based on reference calls collected this past summer. Because dataloggers have not been downloaded to date, I do not know the temperature at which bats were active. Temperatures at the beginning of the evening were around 5 degreesC. This confirms Dinosaur Provincial Park as a hibernation area, and to the best of my knowledge, this is the first confirmed natural hibernation area in the Alberta prairies. Next fall I hope to radiotrack several species to describe their rock-crevice hibernacula. During this same Chinook period I also visited my main study site on the South Saskatchewan River NE of the Suffield Army Base, and Bonnie Moffet monitored Writing on Stone Provincial Park on the Milk River. No bats were heard in these locations despite equally warm conditions.

### **Bat Surveys at Fish Creek Park, Calgary, Alberta**

Carol Stefan, Wildlife Ecologist, Golder Associates Ltd., Calgary, AB

The wildlife group at Golder Associates Ltd. in Calgary began volunteer work at Fish Creek Park in Calgary in the spring of 2002. Working with the Friends of Fish Creek Park and the local conservation officer, the wildlife team has been conducting field surveys to help gather information about wildlife species that live in the park. Two bat surveys were completed in August, 2002 in different areas of the large urban park. For the first survey, three mist nets were set up across Fish Creek, along an oxbow of the creek and on a forested path in the western portion of the park. The riparian habitat was mixedwood including cottonwood, aspen and white spruce. One little brown bat was captured at the Fish Creek site. The second survey was conducted in the central section of the park. Two mist nets were set up across Fish Creek adjacent to an open picnic area. Large cottonwood trees and dense shrub lined the creek banks. More than 20 little brown bats were captured between both nets set at this site. Additional surveys will be conducted in other areas of the park next summer.

### **Differences in Torpor Use and Roosting Behaviour Among Mountain and Prairie Populations of Western Long-eared Bats in Alberta**

Donald Solick, MSc candidate, University of Calgary, Calgary, AB

This past summer I collected data on the use of torpor and roosting behaviour of female western long-eared bats (*Myotis evotis*) from a mountain site (Kananaskis Valley) in Alberta, to test my hypothesis that female bats in the mountains are under selective pressure to accelerate the process of reproduction due to the short reproductive season. Specifically, I predicted that females in the mountains would minimize their time spent in torpor to avoid the costs of delayed reproduction, and would instead either select roosts with warm microclimates and/or cluster with other individuals to maintain a high body temperature. My summer was very successful, radio-tagging 22 *M. evotis* and locating 86 roosts. I compared my data to pre-existing data on torpor use and roost behaviour of *M. evotis* in the prairies of Alberta. As predicted, mountain females spent less time in torpor than bats in the prairies. To compensate for this cost, females in the mountains appear to roost singly in warm roosts during pregnancy, and then shift to clustering with several other individuals during lactation when ambient (and thus roost) conditions are cooler. I will be combining this information with data I collected the previous summer on differences in morphology between mountain and prairie bats to present an overall picture of the influence of environment on bat behaviour and morphology.



### **Northern East Slopes Bat Inventory**

Lisa Wilkinson, Regional Endangered Species Specialist, Alberta Fish and Wildlife Division, Edson, AB

In 2002, a reconnaissance bat inventory was conducted in the Edson and Hinton areas. Eighteen sites were sampled with mist nets and bat detectors in a variety of habitats, and additional sites were surveyed with remote bat detectors. The only species captured was *Myotis lucifugus*, and with the exception of a juvenile female, all individuals were males. Based on bat detector data, *Eptesicus fuscus*, *Lasiurus cinereus*, and *Lasiurus cinereus* were present. In general, bat activity was lower than expected, which could have been due to poor weather conditions and low insect activity. It is recommended to continue inventory efforts in this region.

## **SASKATCHEWAN**

### **News from Saskatchewan**

Mark Brigham, Professor, University of Regina, Regina, SK

Aside from the bat folk working in my lab who expound at length about their projects in this newsletter, I also have several other grad students working with me on projects about small non-flying mammals, burrowing owls, grassland songbirds and long-billed curlews. I am collaborating on a bat life-history project in which we are trying to unravel the reasons for delayed implantation and fertilization in temperate bats. Another collaborative project involves using a meta-analysis on the data collected to date about the ecology of forest bats to determine if there are any common trends.

### **Roost Use by Big Brown Bats in Cypress Hills, Saskatchewan**

Kristen Kolar\*, MSc candidate, University of Regina, Regina, SK, Craig K.R. Willis, Amanda L. Karst, Matina C. Kalcounis-Rueppell, and R. Mark Brigham

We used data gathered this past summer and in other years in Cypress Hills, Saskatchewan to examine re-use of roosts by big brown bats, *Eptesicus fuscus*. Roost availability may limit some bat populations, implying that there is a selective advantage to being able to re-use sites on an annual basis. We monitored aspen tree use by *E. fuscus* during multi-year studies (spanning 10 years) at the same site in Cypress Hills. Our data suggest that aspen roosts are reused by groups of bats more often than by solitary individuals. We found that re-use of live trees over the medium term (three years) is more common than previously thought and that in some instances, long term (nine and 10 years) re-use can occur. This supports the hypothesis that cavity roosting bats exhibit between year loyalty, not just to patches of forest but to specific trees as well. We have submitted our results to the American Midland Naturalist and Kristen Kolar presented our paper orally at the 32nd Annual North American Symposium on Bat Research in Burlington, Vermont at the beginning of November.

\*submitting author





## **Roost selection and torpor use by big brown bats and hoary bats in Cypress Hills Inter-Provincial Park**

Craig Willis, PhD candidate, University of Regina, Regina, SK

My Ph.D. research addresses torpor use and roost selection by hoary bats and big brown bats. I work on the Saskatchewan side of Cypress Hills Inter-Provincial Park, an excellent site to study torpor because of dramatic diurnal fluctuations in temperature. Highs above 30° C and lows approaching freezing are common during summer. Solitary, foliage-roosting hoary bats and colonial, cavity-dwelling big brown bats are also well suited to a comparative study of roost requirements and thermoregulation. During the 2002 field season, I used temperature telemetry to track both species to roosts and record skin temperatures, and affixed dataloggers to record ambient temperature at roosts. I measured internal cavity dimensions of big brown bat roost cavities in trembling aspen trees and used multiple dataloggers spread out within cavities to address spatial variability in microclimate. Big brown bats switch tree roosts frequently so, to address the importance of roost switching and sociality to general roosting patterns, I tracked multiple individuals over time and quantified their associations. My findings to date include the routine use of prolonged, deep torpor (up to nine days without leaving the roost site) by pregnant hoary bats in late May and early June. This is surprising because pregnancy is a period when mammals are predicted to avoid torpor. For big brown bats, simultaneous radiotracking of multiple individuals revealed strong associations between bats inhabiting the same small (< 2 km<sup>2</sup>) areas of forest, despite the fact that bats within an area were spread among multiple trees on a given night. Bats remain loyal to these areas within and between years but switch trees frequently. Roost switching serves to increase novel associations between bats and may effectively increase colony size by allowing the numbers of bats in a colony to exceed the spatial capacity of individual tree cavities. Thus, the social structure of forest-living big brown bats may exert a stronger influence on their roosting patterns than the physical characteristics or the microclimate of roost structures.

## **MANITOBA**

### **Manitoba Bat Work 2002**

Jack Dubois, Director, Wildlife & Ecosystem Protection Branch, Manitoba Conservation, Winnipeg, MB

I and a crew of volunteers have been banding little brown bats in Manitoba since 1988. Work commenced this spring with re-capture and banding of little brown bats at hibernacula in central Manitoba in late May. A new hibernaculum was found, on the same trip, that had at least 400 little browns. Just over 100 were banded (no recoveries), as the rest were inaccessible. Three sets of instruments to record relative humidity, temperature and activity were put into the province's largest hibernaculum in September, for retrieval next spring. One set was put into an abandoned mine east of Kenora, ON, in November. This hibernaculum over-winters little browns (~200), big browns (~200) and a small number of northern long-eared bats. For further information contact the author.



## YUKON

### **Bats in the Yukon**

Brian G. Slough, Independent Consultant/Researcher, Whitehorse, YT

I conducted bat surveys in the Yukon for 5 years between 1997 and 2001, documenting habitat associations, activity patterns, and distribution of the little brown myotis. I banded bats and obtained tissue samples which were to be used in genetic studies of migration patterns in conjunction with studies in Alaska; however I have heard no results from Alaska yet. There were no field studies in 2002, however there was a reliable report of a big brown bat near Teslin in the southern Yukon, near where I recorded one in 1999. I am also experimenting with heated bat houses in a northern environment. There should be a report on 2002 results in the spring 2003 "Bat House Researcher", Bat Conservation International's newsletter of the North American Bat House Research Project. Funding for the surveys was provided by the Northern Research Institute, Yukon College, Whitehorse, YT.

## NORTHWEST TERRITORIES

Mike Fournier has collected all the historic published and unpublished information on distribution of bats in the NWT. He intends to publish this summary in order to promote awareness and perhaps encourage someone to conduct research there. He suggested he might publish the summary in a future edition of the newsletter.

## ABAT MEETING MINUTES

I have highlighted items from the meeting minutes of the 5<sup>th</sup> ABAT meeting. If you would like the detailed meeting minutes, please contact Lisa Wilkinson.

**ABAT Meeting Oct 17, 2002**

**Edmonton, Alberta**

Attendees: Robert, Robin, Dave H., Jason Fisher, Krista, Cori, Lisa, Mitch, Carol, Scott

**1. Minutes distributed, action items reviewed. Decided to rotate minute taking responsibility.**

Action items:

- website
- Turbines: Robert presented information about the impact of turbines on bats in Pincher Creek, AB
- Cori wrote up description on wing punch
- Robin circulated address list for corrections
- Lisa and Krista completed terms of reference
- Education: kits



**2. Terms of reference:**

- need to put on website

**3. Data management**

- Dave provided handout with issues, info to include in database.
- Discussed use of BSOD, museum banding database and echolocation call libraries

**4. Website**

- no money to work on this

**5. Protocol**

- comments need to be incorporated

**6. USA protocol, echolocation, CCAC**

- Lisa explained protocol development initiative from Pacific Coast Forest Research Station, initially for western forest bats but will likely expand and be very comprehensive
- Robert said that proceedings of the bat detector symposium will be published by end of year. Will try to find out how to obtain copies
- CCAC guidelines are revised and will be available soon. All these animal care committees are under Canadian council for animal care. New guidelines for wildlife, section on bats. Will require specific training for animal handlers, evaluate qualifications of applicants. Jason is on ARC's committee, his impression is that the CCAC will ultimately have mandatory training for all handlers.

**7. Update on WBWG, provided by Lisa**

- Matrix finally ready for completion, agreement has been reached on bat status
- WBWG playing role in USA protocol development
- Conservation plan – distributed Nevada copy (several other states have plans in development), BC probably developing conservation plan

**8. Western Canadian Working Group**

- Lisa gave update on progress with forming group
- Laura and Mark supportive, territory reps have been notified
- discussed BCI funding (\$1500US annually) and expectations
- discussed communication requirements, decided to start with newsletter – spring and fall-coordinate with ABAT meetings, could include ABAT minute meetings.
- any issues that Lisa should bring to NABCP exec committee? Issues about long-eared bats, general species identification
- how to spend funding? Best to send three provincial representatives to meetings, then discuss other options
- Lisa will talk to NABCP exec in Vermont to make sure that our working group will not influence our status as part of WBWG, this may influence what we call ourselves
- WBWG may hold annual meeting in conjunction with North American meetings in Nebraska and Salt Lake City in 2003 and 2004, respectively
- Logo – discuss at next meeting
- Website – how to relate with ABAT – talk to Mike Herder/BCI to set up one under WBWG, have link to ABAT

**9. Update on status of northern long-eared by Robin**

- decided not to put it through the ESCC process because there isn't enough info to determine its status – probably come out as data deficient. Need population and trend info, need strong ties with old trees ie. warblers

#### **10. Discussion of priorities, issues and future plans.**

- What are our inventory priorities? Continue to work in boreal, lots of industrial activity
- Krista may pursue septentrionalis roosting study in north – talk to forestry, SRD has detectors – possibly apply to NABCP
- Need habitat association info (not a project in itself – Robert commented on high cost of telemetry)
- Volans – need to get more data – recommendation to make inventory priorities species specific
- Red bat – difficult to get information on presence in AB, interesting question
- Cottonwood habitat- critical bat habitat but since it has no value to forestry there are few funding opportunities to study
- Need maps for each species – begin with plotting BSOD locations
- Talked about funding sources

## NASBR

The 32<sup>nd</sup> annual North American Symposium on Bat Research was held in Burlington, Vermont from November 6 to November 9, 2002. Over 260 people attended the conference with over 80 presentations and 50 posters covering a wide range of topics. You can access the abstracts for the presentations and posters on the conference website, [www.nasbr.org](http://www.nasbr.org).

## REQUESTS

### ANABAT REFERENCE CALLS

I am responsible for compiling a list of reference calls collected with Anabat detectors. Originally this list was to include Alberta, however, now that we have created the WCBWG, I feel the list should be more exhaustive. If any of you have reference calls, could you please notify me and include the geographic region, species, number of individuals per species and habitat in which the calls were collected as well as your contact information.

Thanks for your help,  
Krista Patriquin  
lasiurus\_cin@yahoo.ca



## TISSUE SAMPLES

Toni Piaggio is a Doctoral student in the US working on the genetics of Townsend's big-eared bats (*Corynorhinus townsendii*). Through her work she has detected a strong genetic split between *C. townsendii* in the Rockies, and those on Vancouver Island. She is looking for samples (wing punches or dead bats) from bats from the interior of BC to assist her in determining where the split occurs. Please contact Toni if you think you might be able to assist her in obtaining samples; she can provide a wing punch kit and protocol to interested researchers.

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## ANNOUNCEMENTS

### AWARDS

The Gerrit S. Miller, Jr. Award is periodically presented at the North American Symposium of Bat Research. This is the highest honor presented at NASBR, its namesake was an early 20<sup>th</sup> century bat biologist at the Smithsonian Institution whose work continues to influence our understanding of bat taxonomy. This award recognizes a person's "outstanding service and contribution to the field of chiropteran biology" and since 1977 has been presented to only 15 people. I am pleased to announce that at this year's meeting in Vermont our very own **Robert Barclay** was recognized for his work when he was awarded the Gerrit S. Miller, Jr. Award.

### MEETINGS AND CONFERENCES

#### **1<sup>ST</sup> WESTERN BAT WORKING GROUP/ 2<sup>ND</sup> FOUR CORNERS REGIONAL BAT CONFERENCE**

January 29, 2003 to be held in Durango, Colorado  
<http://www.batworkinggroups.org/calendar.html>

#### **MOTH/BAT MEETING**

The University of Alberta and the University of Calgary will be co-hosting a one-day meeting for the Alberta Lepidopterists to meet the Alberta Chiropterologists and trade 'secrets'. It will be an informal series of presentations to take place on Feb. 15 2003 at the U of Alberta campus. For more information, contact John Acorn at [janature@compusmart.ab.ca](mailto:janature@compusmart.ab.ca)



**ALBERTA CHAPTER OF THE WILDLIFE SOCIETY**

February 28 to March 2, 2003 to be held in Red Deer, Alberta

See website for call for papers, registration and details

<http://www.albertadirectory.net/actws/>**6<sup>th</sup> ABAT MEETING**

February 27, 2003 at 1:00pm to be held in Red Deer, Alberta

**DISTRIBUTION LIST**

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