

# Western Canada Bat Network Newsletter

Spring 2013

Issue No. 22

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Front cover photograph by Juliet Craig: Myotis lucifugus



### **UPDATES BY REGION**

### Alberta

University of Calgary
Bat Lab Update



**Jesika Reimer** - I completed my master's research on little brown bats (*Myotis lucifugus*) in the NWT and on May 10th, I defended my thesis entitled, "Nocturnality under the midnight sun: behavioural adaptations of the little brown bat at 60 degrees latitude". I recently relocated to Anchorage, AK and am currently looking for bat research opportunities in Alaska.

Laura Kaupas - I spent the summer of 2012 assisting Jesika Reimer in the South Slave region of the NWT. During this time I collected morphological data and fecal samples from male *Myotis lucifugus* and *Myotis septentrionalis* to investigate the foraging strategies and diets of these species, as cold temperatures early and late in the active season limit the flight of aerial insects. Over the course of my honour's project this past year, I found that *M. lucifugus* had significantly higher wing loading and aspect ratio than *M. septentrionalis*, which suggests that *M. lucifugus* may forage further from vegetation than *M. septentrionalis*. *Myotis lucifugus* may be using an aerial hawking foraging strategy, while *M. septentrionalis* may be using a gleaning foraging strategy. Their diets were significantly different, with a higher proportion of spiders and moths in the diet of *M. septentrionalis*. Spiders were also found in the diet of *M. lucifugus*, but only in early June and late August when temperatures were below 10°C. This suggests that *M. lucifugus* may be consuming spiders, and possibly gleaning, when flying insect abundance is low. I presented my results at the Biological Sciences Undergraduate Research Symposium, and was awarded Best Presentation within the Ecology Program. I will be presenting my findings at the International Bat Research Conference in Costa Rica in August. I am excited to be starting a Master's program with Dr. Robert Barclay at the University of Calgary in September. I will be continuing to work in the NWT.

#### Alberta ESRD

Alberta ESRD would like to announce that the Western Small-footed Bat Conservation Management Plan 2012-2017 was published in January. Its goal, objectives, and actions (management recommendations), provide guidance for land and resource management decisions that affect this species and its habitat. This is our first conservation management plan for bats in Alberta.

The plan can be accessed via:

http://srd.alberta.ca/fishwildlife/speciesatrisk/LegalDesignationOfSpeciesAtRisk/documents/SAR-Western-SmallFootedBat-ConservationManagementPlan-2012-17.pdf



A large Myotis yumanensis colony

## **British Columbia**

#### **Kootenay Community Bat Project**

Juliet Craig julietcraig@uniserve.com



**Bat Educators** 

The Kootenay Community Bat Project is continuing its fifth year (2004-06; 2012) in southeastern BC. Funded by the Columbia Basin Trust and the Public Conservation Trust Fund, the KCBP promotes education and awareness of bats, identifies bat roost sites (particularly on private land), assists landowners with roost conservation planning, and involves community members in monitoring bat populations. Extension activities planned for this year include press releases, bat-house building workshops, school programs, interpretive programs and a display booth at community events. Educators who were trained last year will continue to provide school programs.

The project also includes roost surveys. Residents are encouraged to report their bats so that project biologists can visit their roost sites, identify species present, and discuss and address their issues. As well, we provide strategies to conserve and enhance roosts, and encourage residents to monitor their bat populations. We are continuing the Annual Bat Count this year to encourage residents to count bast as they emerge from a roost site. We will be continuing DNA sampling of guano (as well as acoustic sampling at roost sites with an EM3 detector) to confirm species identification. We have also formed a partnership with the BC Government for testing for Histoplasma capsulatum in collected guano to assess the risk of histoplasmosis in the Kootenays. We have a new toll-free phone number this year (1-855-9BC-BATS) to encourage more reporting of roost sites.

Kootney Community Bat Project continued...

Finally, we are continuing our Building Homes for Bats initiative where we reimburse the cost of materials for residents to build and install two bat-houses (through funding from the Public Conservation Assistance Fund) and in return, the resident commits to monitoring the bat-houses during the Annual Bat Count. For more informationIn light of WNS and the increased need for bat conservation of little brown bats and other common species, we are beginning the KCBP again in 2012. We are promoting a "BC Bat Count" where residents with roosts on their property conduct an emergence count during 4 evenings of the summer – two pre-pup and two post-pup. We are also encouraging residents to test bat-house designs by installing at least two bat-houses and monitoring occupancy. To find out more, please see www.kootenaybats.com or email Juliet Craig at kootenaybats@gmail.com.

### **Year Two of Winter Monitoring in Southern BC**

Cori Lausen, Wildlife Conservation Society Canada clausen@wcs.org

Another winter of acoustic monitoring has wrapped up. This year, myself with the help of Purnima Govindarajulu, Martin Davis, Gillian Sanders, Don Hunt, Leigh Anne Isaac and Mike Sarell (pictured at right) deployed close to 50 bat detectors across southern BC: Anabats, SM2Bats and Roostloggers were used in areas of open water, inside mines, and inside caves. These acoustics data will be analyzed over the course of the next few months.

In addition to acoustics, Mike Sarell and I mistnetted in south Okanagan throughout Feb. and March. We captured/ observed 4 species: Myotis ciliolabrum (observed hibernating in a mine), M. californicus (captured), Corynorhinus townsendii (captured), and Lasionycternis noctivagans (captured). Through internal inspections of mines, one hibernaculum was located: a mine in the Fairview area of Oliver. Two known summertime building roosts were monitored for activity using bat detectors. Myotis yumanensis was not detected at one of the attic roosts until late winter (20 March) despite having detectors in place starting late February. This roost was genetically confirmed to house a maternity colony of M. lucifugus (UBC Kelowna FADSS genetics lab) in summer of 2008. Myotis yumanensis was detected at the Peachland building roost starting 27 Feb. This species is known to roost in this building attic during summer. Myotis yumanensis was also recorded on some bat detectors deployed in the South Okanagan region during the survey period, but this species was not captured.



#### **Bat Hibernacula Survey in Northwest BC**

### Shaun Freeman sfreeman@rescan.com

Rescan-ERM is conducting an investigation of the potential for bat hibernacula to occur in an area associated with a development in the northwest BC. The emphasis is on locating little brown myotis that may be using features within karst geology to overwinter as has been identified in other northern locations (e.g. The Pas Manitoba, and Hay River NWT). The approach includes using geological survey information to develop a karst map, locate possible areas that may support subterranean features that may be used by overwintering bats, and then place Titely Roost Loggers at (or near) these locations in April. The roost loggers will record bat activity until we return in June to pick them up. From the results (detections) it will be determined if a more intensive ground survey will be required. We hope to learn a fair deal from this, both about bats and how to improve the inventory technique for future projects.



Vanessa Rukas tracking bats through the snow in the badlands of Alberta.

#### Bat CrewBat counting in BC: Looking for volunteers for roost counts

Purnima Govindarajulu Purnima.Govindarajulu@gov.bc.ca

As the threat of White Nose Syndrome looms large, we realize we are deficient in even basic bat population size and abundance information across British Columbia. While community bat projects are doing their part in filling in the knowledge gap, individuals can also participate on their own. We are encouraging volunteers around the province to commit to one or two roost sites in their region to conduct a Bat Count using the protocol developed by the Kootenay Community Bat project (http://www.kootenaybats.com/get-involved/participate-in-bc-bat-count). The protocol is very simple and only requires commitment of a few hours (an hour of actual counting time plus travel) on two evenings between June 1st and 30th and again between July 21st and August 15th. Last year the Kootenay Community Bat Project completed 18 counts. Could we hope for a similar representation from the rest of the province? It is up to YOU!!!

If you are interested in pledging to an annual bat count, please contact either Purnima or Juliet –

Purnima Govindarajulu Purnima.Govindarajulu@gov.bc.ca 250 387 9755 Juliet Craig kootenaybats@gmail.com 1-855-9BC-BATS



#### **BC Summer Bat Blitzes!**

**7 to 9 June 2013:** New Denver in the West Kootenay region – 2 wetlands will be inventoried, including bat mistnetting and acoustic sampling. Tenting accommodation.

**21 to 28 June 2013:** BC Flathead in SE part of the province – no previous bat inventories have been done in this region of the province. Mistnet capture and acoustic sampling for ~4 nights in this timeframe. Tenting accommodation. Some food provided.

To assist with either bat inventory, please contact Cori Lausen corilausen@netidea. com Space is somewhat limited and preference will be given to those with bat handling and/or mistnetting skills and rabies shots.



Erecting nets is in the US Flathead region where there has been much bat inventory work done.

## Saskatchewan

### University of Regina, Bat Lab Update



Brandon Klug at one of the hibernacula trying to setup a temp/RH logger.

**Dr. Mark Brigham**- I just returned from an adventure in Belize where I continued the *Chrotopterus* project with Dr. Robert Barclay. We are examining roosting and foraging behaviour. Looking forward to the Costa Rica bat meetings!

**Jody Rintoul** - I finished my second and final field season in August and will likely defend my thesis sometime in June. My MSc research looked at how reproductive condition and roost type affect thermoregulation and foraging in big brown bats. This summer I am working for the Brigham lab doing bat surveys in eastern SK as well as continuing the ongoing work in the Cypress Hills.

**Brandon Klug** - This past winter season was a success! My ultimate goal is to determine habitat requirements of bats over-wintering in a prairie landscape and to investigate reasons for mid-winter flight. This winter, I captured nearly 40 big brown bats (*Eptesicus fuscus*) during mid-winter flights in Dinosaur Provincial Park. I found three hibernacula in Dinosaur Provincial Park, Alberta, all located in narrow rock-crevices. Preliminary data suggest that bats over-wintering in the prairies roost in small groups, which they associate with for the entire hibernation season, and are choosing roosts based on specific microhabitat and landscape features. Also, bats caught during mid-winter flight showed evidence of dehydration, which suggests that bats flying mid-winter in our study area may indeed be seeking water. I'll be back out next winter for another field season thanks to confirmed funding and support from the Alberta Conservation Association, NSERC, and Alberta Parks (especially from the awesome people at Dinosaur Provincial Park).



Brandon Klug setting up a net over the Little Sandhill Creek earlier in the season.



Brandon Klug rappelling down to one of the hibernacula in the park.

### USA

#### **US Bat Monitoring Program and Database**

Cori Lausen, Wildlife Conservation Society Canada clausen@wcs.org

A US interagency committee (USFWS, USGS, USFS, NPS, etc) is designing a bat monitoring program that can be used across the US, but will also be applicable to Canada and Mexico. I attended the first of 3 workshops in Fort Collins, CO in Feb., and will be attending the second one in Knoxville, TN in May. The goal is to have a sampling 'grid' and the associated program designed by the end of this second workshop, with an implementation/ training workshop in early fall. The entire program is to be in place by end of this calendar year.

In essence, this is a second attempt to come up with a program for monitoring bat populations on a large scale. The first such attempt was also in Ft. Collins in 1999 and produced the document:

O'Shea, T.J. and Bogan, M.A., eds., 2003, Monitoring trends in bat populations of the United States and territories: problems and prospects: U.S. Geological Survey, Biological Resources Discipline, Information and Technology Report, USGS/BRD/ITR--2003–0003, 274 p.

The goal of this current effort is to provide a sufficient framework for a coordinated bat population monitoring program to document and measure regional and range-wide population changes over time, including distribution and abundance of bats. This effort is being driven mainly by WNS but will also address other current (e.g. wind energy development) and emerging threats (e.g. climate change).

Myself and Charles Francis (CWS) were invited to the Ft. Collins workshop to represent western and eastern Canada, respectively. There was also a representative from Mexico. Several statisticians were present to help with questions of design such as grid sizes, sampling repetition, occupancy models, etc. Charles and I presented a summary of what bat monitoring is going on in Canada, and other groups presented their monitoring programs: Breeding Bird survey (John Sauer); Water Quality (Tony Olsen); Amphibian monitoring program (Steve Corn); Western Bat Grid (Pat Ormsbee); U.K. bat monitoring program (Kate Barlow), etc. The main goal of the workshop was to hear and discuss other monitoring program's experiences to provide insight into designing a nation-wide and perhaps continental-wide bat monitoring program. Over the 2 days we considered various designs and sampling frames, discussed tools such as acoustics, capture, colony counts and telemetry, and molded the key objectives for second workshop. This second workshop is 7 – 9 May in Knoxville, TN.

The data to come out of the monitoring program will be housed by USGS in Ft. Collins, and Laura Ellison (ellisonl@usgs.gov), the lead bat ecologist for this effort, recently opened up the database (BPD – Bat Population Database) for use, on a trial basis; comments are welcome. You can check out the database (only historic data so far has been entered): <a href="http://my.usgs.gov/bpd">http://my.usgs.gov/bpd</a>. While this database is US based and houses US data, the USGS have invited to Canada to submit data to it for a North American BPD. The Canadian WNS Interagency Committee currently feels that it would be better to have a Canadian database as long as funding can be secured; the Canadian database would be built in such a way as to allow easy transfer of data with the US database should that be desired in the future.

#### **Montana State Zoology Program Presentations**

Bryce A. Maxell, Senior Zoologist, Montana Natural Heritage Program

I have posted the following powerpoints as PDFs on the Heritage Program's website at <a href="http://mtnhp.org/animal/presentations/presentations.asp">http://mtnhp.org/animal/presentations/presentations.asp</a> and the original powerpoints and a Montana Bat Roost Survey Summary spreadsheet are posted at the following ftp site <a href="ftp://nris.mt.gov/public/BATS/Presentations/">ftp://nris.mt.gov/public/BATS/Presentations/</a> (paste this into Windows Explorer, not Internet Explorer and you should be able to easily drag and drop files to your local file system).

#### MT\_Bat\_Roost\_Summary\_20130401.xls

A bat roost survey and species detection summary currently sorted by prioritization for survey based on criteria noted in the monitoring efforts powerpoint. Note, that I have included general roost type (cave, mine, building, rock outcrop, tree, bat house, other) and have cross walked each roost site to the County, BLM Field Office, USFS Forest/District, FWP Region, USGS 1/24K Quadrangle, and TRS that it falls in. However, I have not included precise coordinates for the roosts in order to comply with the National Cave Resource Protection Act; this information is available for environmental reviews for folks with agency-level access to the Natural Heritage Tracker application. It should also be noted that map coordinates are not available for some caves. I encourage you to report observations of bat roosts!

### Montana\_Bats\_Distribution\_Status\_and\_Roost\_Overview\_20130402.ppt

This powerpoint gives some general background information on bats, bat conservation issues, and then provides an overview of what is known about the spatial and temporal distributions and documented roost use of Montana bats. It should be generally informative and folks are welcome to use it for presentations to local school groups, Audubon Chapters, etc.

#### Montana\_Bat\_Monitoring\_Efforts\_20130402.ppt

This provides an overview of the collaborative efforts to better understand Montana bats spatial and temporal distributions through passive acoustic monitoring and roost habitat use and characteristics through surveys of caves, mines, and other roost habitats.

We have made some good progress in getting a handle on the spatial and temporal distribution, status, and roosting habits of Montana bats and there are some easy opportunities for biologists to document bat roosts at bridges and in buildings without the need for special rope/climbing skills. I encourage you to report observations of bat roosts so that we can keep the momentum going! Finally, we still have several thousand Montana Bat Posters available if anyone needs them at a local level.

## WHITE NOSE SYNDROME

#### **Canadian WNS Interagency Committee – Update**

Cori Lausen, Wildlife Conservation Society Canada clausen@wcs.org

The WNS Interagency Committee is continuing to have regular conference calls, mainly as small working groups. There are 5 technical working groups: Bat Population Monitoring, Surveillance and Diagnostics, WNS Mitigation, Communication and Outreach, and Data Management. On a short term CWS contract, Christina Davy worked to compile information about bat databases in Canada, as a start to understanding what information is located where nation-wide. And as most of you will have heard by now, Env. Min. Peter Kent announced \$300,000 spread over 4 years to hire a WNS Coordinator who will be housed in the CCWHC (Canadian Cooperative Wildlife Health Centre).

#### Brief overview of recent happenings relative to white-nose syndrome (WNS)

M.J. Pybus, Provincial Wildlife Disease Specialist, Alberta Fish and Wildlife

WNS continues to expand and spread death to more hibernacula. Up to date info can always be found at <a href="http://whitenosesyndrome.org/">http://whitenosesyndrome.org/</a>

Rather than recant a litany of mortality, is there any hope on the horizon? Well, maybe. Two recent initiatives caught my eye: conversion of two decommissioned concrete Cold War bunkers in Maine into possible bat hibernacula, as reported by BBC news <a href="http://www.bbc.co.uk/news/science-environment-22354517">http://www.bbc.co.uk/news/science-environment-22354517</a> and on the <a href="https://www.bbc.co.uk/news/science-environment-22354517">www.bbc.co.uk/news/science-environment-22354517</a> and the shared positive attitude towards trying to find anything that might mitigate the massive losses being recorded in once-common bat species.

Similarly The Nature Conservancy in Tennessee is reporting an attempt to create artificial hibernacula in the vicinity of known WNS sites <a href="http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/tennessee/artificialbatcave.xml">http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/tennessee/artificialbatcave.xml</a>. Even if it fails as a hibernaculum, the installation appears to offer opportunities for other research that could improve opportunities for potential mitigation of WNS.

The premise in both situations is that even if these sites became contaminated with Geomyces destructans they could be decontaminated while the bats are not there. It sounds good in principle, but will take a lot of tinkering to adjust the conditions such that bats will move it, will stay, and will survive a long winter. Natural hibernacula are so much more than just a place to sleep. But having said that, with the scale of the disease impacts and the potential ripples throughout broad geographic areas and whole ecosystems that might lose their guild of bats, we can only be well-served by at least looking for mitigations.

### **NBWG**

### Northern Bat Working Group Email Listserve is finally Live!!!

Miranda Terwilliger,

Ecologist & Research Coordinator, Wrangell-St Elias National Park and Preserve

Thanks to Link Olson (UAF) the Northern Bat Working Group (NBWG) finally has a working listserve!!!

To Sign up go to the link below and follow the instructions.

https://lists.alaska.edu/mailman/listinfo/uaf-nbwq

To send an email to the list use this address: North Bat Working Group <UAF-NBWG@lists.uaf.edu>. Don't forget to add it to your address book!

Also, feel free to pass the listserve on to colleagues that might be interested.

The Northern Bat Working Group (NBWG) is a largely informal group organized under the Western Bat Working Group (WBWG). The WBWG is a member of the North American Bat Conservation Working Group, which is a cooperative member within the International Association of Fish and Wildlife Association. The purpose of this new regional working group will be to share new information and knowledge among those working with bats in northern Canada and Alaska. Interest in bats in the north is definitely increasing and the working group is intended to connect bat workers across this vast region. The working group has not formalized a precise geographic region that encompasses "the north", and welcomes participants from Alaska and northern Canada, including the northern (~ boreal) portions of the western provinces and the Pacific coast, including Haidi Gwaii. This group was formed at the April 2012 Alaska Chapter of the Wildlife Society meeting. Currently Karen Blejwas (ADF&G) and Miranda Terwilliger (NPS, Wrangell-St. Elias NPP) serve as co-chairs.



### **WBWG**

### **Western Bat Working Group Meeting**

Cori Lausen, Wildlife Conservation Society Canada clausen@wsc.org

#### **Species Matrix Update**

Every 2 years the Western Bat Working Group holds a conference/meeting. Just under 100 WBWG members met in Santa Fe, New Mexico to create a new Species Matrix for the western states and provinces.

The focus was on assessing the scope and severity scores for all western bat species, with a 10-20 year outlook. These scores will then be incorporated into the IUCN rank calculator for each species. The process being followed for each species is the same as that of NatureServe, such that each ranking will be defensible and easily updated over time. A representative from NatureServe was at the meeting and helped facilitate the process.

Threats for each species were considered by Landscape Conservation Cooperative (LCC) boundaries, which were developed based on landscape-specific threats/stresses. Seven LCC's were addressed at this meeting to cover the entire west: California, Desert, Great Basin, Great Northern, North Pacific, Plains and Prairie Potholes, and Southern Rockies. US distribution maps were also evaluated by meeting participants to refine and update range boundaries for each species.

BC contributed data to this matrix as did AK, rounding out the northwestern part of the matrix. Thank you to Lea Ramsay of BC Conservation Data Centre, BC MOE, for doing the scoring for BC and to Rita Dixon of Idaho Fish and Game for incorporating these scores into the Great Northern LCC.

The WBWG meeting is a very important venue for those doing bat work in the West. I encourage you to attend this biennial meeting to ensure that Canadians continue to have a voice in bat management in western North America.

### **Bob Berry Awards**

These awards are given out every two years in conjunction with the WBWG meeting. This year there were six awards, up from four in previous years. The awards are:

Holohil Award. Six transmitters + \$1,000

**Titley Scientific (Anabat) Award\***. AnaBat SD2 Bat Detector + a free seat in AnaBat training course

Binary Acoustic Technology Award\*. new IFR-IV recording system + SPECT'R software

**SonoBat Award.** SonoBat auto-identification software + \$1000

Wildlife Acoustics Award. An EM3 + seat in Wildlife Acoustics training session at Santa Fe April 4-6.

Pettersson Elektronik Award. One D240X detector + one copy of BatSound software.

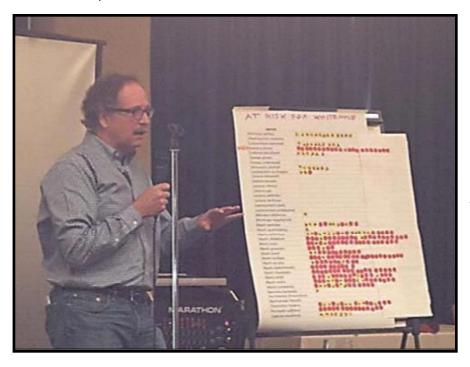
Bob Berry Awards cont...

\*This year, two folks from BC won these awards:

Christian Engelstoft of Habitat Acquisition Trust in Victoria won the Anabat award and will attend the training class in Calgary in May; Christian is working with Purnima Govindarajulu to start up a citizen science program in Victoria for bat monitoring and maternity roost location.

Juliet Craig of the Kootenay Community Bat Project won the B.A.T. award; Juliet runs the citizen science program in the Kootenays and will be using the IFR to passively monitor at roosts.

Canadians were recipients of 3 of the 4 awards in 2011, and 2 of the 6 awards in 2013! Posters were presented by winners from the last WBWG meeting: Marc-Andre Beaucher, Creston Valley Wildlife Management Area (2011 Anabat award winner); Barb Johnstone, Waterton Lakes National Park (2011 Binary Acoustic Technology award winner).



Dave Johnstone, outgoing WBWG VP (and former grad student of Brock Fenton's!), walks the group through a summary of predicted WNS risks for each western bat species.

Every 2 years, in conjunction with the WBWG meeting, a new set of officers is elected. Election results for the 2013-15 Board of Officers:

**President** – Angie McIntire, Arizona Game and Fish

*Vice President* – Laura Ellison, US Geological Survey

**Secretary** – Becky Abel, Idaho Fish and Game

**Treasurer** – Brad Phillips, US Forest Service

At Large – Amie Shovlain, US Forest Service

At Large – Roger Rodriguez, Zotz Ecological Solutions

*Presidential Appointee* – Rob Schorr, Colorado Natural Heritage Program

Presidential Appointee – Dave Johnston, HT Harvey & Associates, Ecological Consultants

### CONFERENCES

- 1-15 August 2013: NASBR 43 & 16th International Bat Research Conference. San Jose, Costa Rica
- 2014: NASBR 44, Albany NY, USA
- 2015: NASBR 45, Monterey, CA, USA

### RECENT LITERATURE

Olson, C. R. and R. M. R. Barclay. 2013. Concurrent changes in group size and roost use by reproductive female little brown bats (*Myotis lucifugus*). Canadian Journal of Zoology 91:149–155.

Dzal, Y. and R.M. Brigham. 2013. The tradeoff between torpor use and reproduction in little brown bats (*Myotis lucifugus*) mutually exclusive: Thermoregulatory and foraging strategies of during the reproductive season J. Comp. Physiol. B. 183:279-288.

Kilgour, R.J. and R.M. Brigham. 2013. The relationships between behavioural types, social context and seasonal period in the gregarious big brown bat (*Eptesicus fuscus*). Ethology 119:189-198.



## FIELD NOTES

### Discover bat migration and movement patterns across Western North America! WAMI and Data Basin

Cori Lausen, Wildlife Conservation Society Canada clausen@wsc.org

In the last issue I described the newly formed Western Acoustic Monitoring Initiative (WAMI) and encouraged folks to get involved. That message still stands – if you are doing any kind of long term passive recording of bats in the west, we (and the bats!) would greatly appreciate your contribution of this data into the WAMI database.

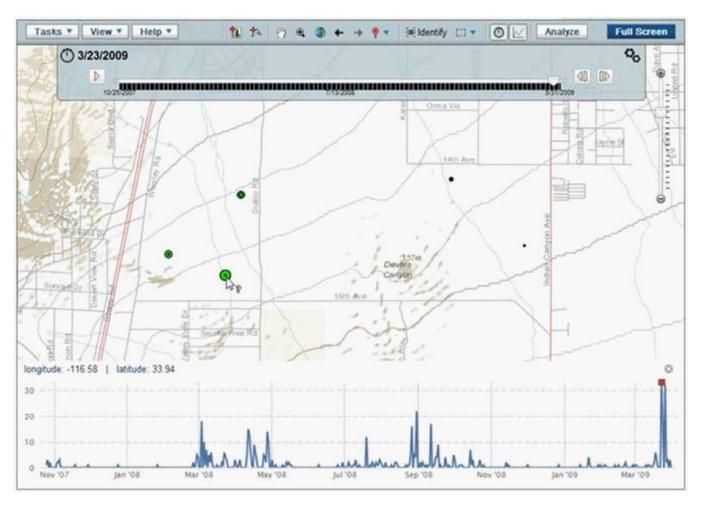
This past winter, Ted Weller of USFS in California and WAMI joined forces: WAMI needed a database for all acoustic bat records in the west to start to piece together movement and migration patterns; turned out Ted had a database that did that, but was looking for people with data to populate it! So it was a win-win for all. In addition to a number of conference calls, we had our first face to face meeting in Santa Fe, NM in conjunction with the WBWG meeting.

The database is central repository for acoustic data (not the files, just the summarized species and species-groups data), which can be visualized over time using a graphical mapping interface. Finally! ... we now have a hope of being able to elucidate seasonal patterns of species presence at the largest spatial scales, larger than radiotelemetry will allow, and more refined than through use of isotopes.

This database is designed and housed by Conservation Biology Institute. Called Data Basin, this central repository will provide all users (anyone can sign up) with a platform for storage of acoustic datasets that can be visualized over large time and spatial scales. You can -- and we highly encourage you to – allow your data to be shared with the 'echolocation portal.' This portal needs a catchy name and so far it has been suggested to call it "BatAMP" – Bat Acoustic Monitoring Portal. (If you have other name suggestions please let me know!) Any data shared with BatAMP within Data Basin can be viewed by all other users. In this way you can control how much of your data gets shared and to what extent (e.g. waypoint buffers will be allowed, etc.). For folks who are trying to look for the 'bigger picture,' such as industry trying to locate a wind development area that could avoid major bat migration routes, or bat biologists trying to figure out where their little brown bats may be moving to for the winter, BatAMP may provide that answer. We need enough folks from across the West to submit data; this could be highly effective tool with enough users and contributors. So effective in fact, that the USGS has not included acoustics data in their new Bat Population Database (BPD; USGS) because Data Basin has already created such a powerful database for acoustics that they would like to see this expanded instead, with the BPD and Data Basin linking together.

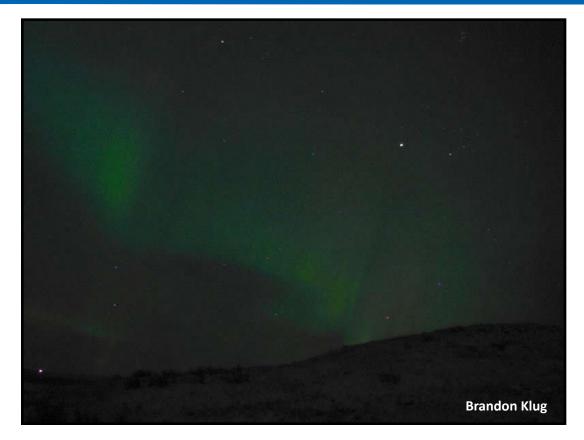
#### WAMI and Data Basin cont...

This bat database is still evolving, with future functionality to include more data export options, more control over times included in playback, etc. This will be open to the public as is within the next month or so (databasin.org). After that, we need folks to contribute data! Once we have a large amount of data from across the west, and it is evident that this tool is powerful and will provide significant insight into bat migration/movement patterns, then Ted, together with the help of WAMI, hopes to attract more funding from either WNS sources or wind energy developers -- whoever has money and sees the potential in this database! To date, the database has been funded by USFS with a grant originating out of California. The maps have been expanded to include all of western North America, and it is likely that if this can be sufficiently populated with data and prove to be a useful tool, the next infusion of funding could be used to expand it to eastern North America also.



Above is a screenshot of a map and graph you can see when you play with your acoustics data, or the data within BatAMP. You can select to 'play' all or just one species; for example if you select just silverhaired (LANO), and the map will show you night by night where LANO were detected on the landscape, with larger dots representing higher activity rates.

To join the WAMI group and be notified of when you can enter data into Data Basin to start exploring your regional bat movement patterns, either: email Karen Blejwas (Karen.blejwas@alaska.gov) or obtain the sign-up sheet from this link: <a href="https://dl.dropboxusercontent.com/u/88490728/Western%20Acoustic%20Monitoring%20Sign%20Up%20and%20Info.xlsx">https://dl.dropboxusercontent.com/u/88490728/Western%20Acoustic%20Monitoring%20Sign%20Up%20and%20Info.xlsx</a>



## **Archived Newsletters**

This newsletter first started in Fall 2002. It is produced two times per year and is housed by the Alberta Sustainable Resource Development on the Alberta Bat Action Team website. All past issues can be accessed at the following link:

http://www.srd.alberta.ca/FishWildlife/WildlifeManagement/AlbertaBatActionTeam/ABATProgramsPublications.aspx

#### **WCBN Newsletter Submissions**

Please submit all newsletter submissions to Jen Talerico:
western.canada.bat.network@gmail.com
Submissions can be made at any time.

### **Distribution List**

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