

CBWG Meeting Minutes

April 14, 2006

Attendees

Lea' R. Bonewell (CDOW)
Kristin Philbrook (BLM/USFS)
Nancy LaMantia-Olson (CDOW)
Sophie Oglesby (CDOW)
Randy Ghormley (USFS)
Sonia Marzec (CDOW)
Toni Piaggio (NWRC)
Sandy Vana-Miller (FWS)
Mark Hayes (UNC)
Paul Cryan (USGS)
Laura Ellison (USGS)
Rob Schorr (CNHP)
Dan Neubaum (USGS/CSU)
Kirk Navo (CDOW)
Julie Annear (DMG)
Cyndi Mosch (Cave Resources/Helping Handwings)
Eric Odell (CDOW)

Meeting Results Action Items

For CBWG website, to send to Rob

- Kirk, Kristen, and Toni will send information about themselves for the section called "About Us".
- Everyone needs to send bat and field photos.
- Kirk will send information about funding opportunities.
- Lea' will send the 2005 meeting minutes (Kirk to send instead – done?).
- B/IMP will send 2007 training dates, when they are scheduled.
- Individuals will send changes about their contact information.
- The board and affiliation representatives list will be edited (Kirk sent, see attached email).

Wind Farms

- CBWG members to review draft proposal from Calgary University/FWS when available, discuss via email, and possibly follow up with a conference call.
- See Wind Farms section called "What can we do to help?"

Caves

- Cyndi and Sonia will work together on the possible gating of Cave of the Clouds and other caves affected by transients.
- Sonia will broach gating these sites with Glenwood Springs representatives.

BioBlitz 2006 trip

- Possible organizers are Kristen, Paul, and Kirk.
- See CBWG's Bat Blitzes section for details.

Bat Plan

See Bat Plan section called "Changes".

Next Meeting

April 2007

Paul said bring coffee next time! (Maybe Paul can bring the coffee next time!)

Meeting Discussion

Introductions and review of agenda

WBWG Updates:

Kirk, Toni

- Working on wind farms issues.
- Next meeting in Tucson, April 2007 - wind farm symposium, academia invited to attend, lots of people from the field, people invited to give talks.
- NASBR in N. Carolina this year and will talk about WBWG.
- Mike Herder working on website, but he needs help – more going on now, ie creating website firewalls and getting other states on board.
- Bats and mines in Nevada – working on sites to be closed.
- Board of officers wrote an action plan and accomplishments of first year to be reviewed by states.
- In 2005, officers elected to WBWG – 2 year terms – next vote will be in Tucson, April 2007.
- Bat blitzes going on this year – see WBWG website.

CBWG Website:

Rob

- Website address is
http://www.cnhp.colostate.edu/RASwebpage/cbwg_website/cbwg_index.htm
- Has everyone looked at the website?
- Handout from Rob shows possible menu titles and subjects for the webpage (see attached).
- Items to add to the website are past minutes, awards, updated member information, a page about funding/scholarship opportunities (Kirk will send some information about funding opportunities), add a link to get to the WBWG newsletter.
- Some links could include WBWG, NABCOP, IAFWA, and BCI.

- It was suggested that the title called Training be changed to Upcoming Events (B/IMP will send 2007 training dates when available).
- Kirk, Kristen, and Toni will send “About Us” information.
- It was suggested that spelunker be changed to caver.
- Email project needs to be sent to Rob for posting.
- Management and conservation information link may be added.
- Rob would like website volunteers to help him.
- Who should be on the webpage? What members? Answer is affiliation representatives and board members (see Kirk’s attached email).

Miscellaneous:

- A question was asked about museum specimens being online and the answer is that some museums are online and some are in the process of coming online. Eventually, one website will help provide easy access to all the museums online.
- A bat management handbook for species of concern by Mike Bogan and Tom O’Shea will soon be in press and should be available in summer 2007. The WBWG is developing protocols and will post them on their website.

Wind Farms:

Paul (CBWG wind turbine lead)

- PowerPoint presentation given (see attached)
 - Wind turbine bird death monitoring revealed bat deaths, too.
 - In West Virginia, 100’s of dead bats found in 2003, and in 2005, about 2,000 dead bats found.
 - Turbines going up everywhere and in big numbers.
 - Bats killed all over the continent and probably the world, from wind turbines.
 - On the CDOW website is a wind turbine working group link.
 - Ft. Collins symposium in January 2006 about wind turbines.
 - Bats are colliding with turbine blades.
 - Migrating tree roosting bats – Europe, Australia, N. America.
 - Possible non-impact mortality? Hemorrhaging, disintegrating bone, etc.
 - Proposed study to necropsy bats and archive them in museums.
 - Impacts – Disturbance of roosts, bats avoiding areas?
 - Several states doing mortality monitoring.
 - Bats and Wind Energy Cooperative Study created.
 - In the West, approximately 1-3 deaths per turbine per year, but in the East, 21-38 deaths, and in Alberta, about 13 deaths.
 - Above figures are the information gathered so far.
 - Some turbine operators becoming uncomfortable with surveys.
 - 1.5 megawatt turbine is about 100 – 180 meters.
 - Why are bats hitting turbines?
 - Eastern red bats, silver haired, hoary bats (major species in the West) – 99% of the deaths are these 3 species. Most in the West are silver haired, hoary, and a bit of *Myotis*. Plus some free-tailed in Oklahoma.

- Clearly so far, kills occur mid-August to late September.
 - Appalachians and Alberta – largest kills so far. Also possible Front Range and Pacific Coast.
 - Other 12% of kills on the continent are big browns, little browns, eastern pipistrelles.
 - 95% of other bats in occur in the East.
 - Colorado – wind potential is mostly in the foothills and especially the eastern plains.
 - Largest proposed wind farms - 2 in Washington/Weld counties of 200-300 megawatt turbines.
 - Bat mortality list - Paul has from Foot Creek Rim in WY.
 - Peetz (NE Colorado) – we don't have post construction monitoring by the company at this time.
 - How do we pre-assess a proposed turbine site for bats?
 - Protocol for assessment with detectors from Alberta, but not tested or reviewed yet.
 - In the West, water tanks are more successful for capturing and monitoring when migration occurring.
 - Thermal imaging on turbines could be used, at a cost of approximately \$3-400,000.
 - Pre and post-assessment of turbine sites for bats. State specific protocol? Use existing wind farms to gather information. Shut down turbines at night during peak migratory times?
 - CNHP – has mapping for wind flows and species in those areas (correct?)
 - When permanent tax incentive for wind energy in place, bat research funding may be available, because then it's not a hard push to get turbines installed (correct?).
 - Bats flying through when winds are not so strong – observation in Tennessee.
 - Altamont (in CA?) shuts down during certain times for birds.
 - Some organizations involved with the Bats/Wind Energy Coop Study include BCI, West Inc., Boston University, and University of Maryland.
- What can CBWG do to help?
 - Help with development of protocols and guidelines. Documents are forthcoming regarding draft protocols from Robert Barkley of Calgary University and Al Manville of FWS. CBWG can review first and discuss via email, then perhaps a conference call. Work on protocols to give to proposals when companies submit proposals to counties.
 - Offer support to CDOW for access potential and impacts before and after installation.
 - Work with the wind industry instead of being confrontational.
 - Update Colorado Bat Plan to include turbines.
 - Provide endorsement of WBWG's guidelines.
 - Mist net proposed areas for pre-assessment?

***C. townsendii*:**

Kirk

- New maternity roost found in the Elephant Mountain Cave/ Marley Love Mine near Redvale. The mining punched through a cave with geothermal activity. Mine owner Robert Condon, surface owner USFS, and Pitkin County (access crosses open space) are involved with a site management conflict. The roost has over 300 bats and tissue samples were collected. Owner R. Condon wants to have video/tours/caving. Cavers are going to the site as well. This is receiving a lot of press via Robert and USFS. The White River National Forest oversees the cave. Areas inside the site may be good hibernacula. Changes in airflow have occurred in the last few years from work on the site. R. Condon reopened the mine, found mummified bats, and the mine repopulated quickly with bats. The site is near Carbondale and Avalanche Creek. An existing road leads to the mine.
- The list of *C. townsendii* maternity roosts includes 10 in mines (about 5 in the east and 5 in the west state) and 4 in other areas.

Mine Claims:

Kirk

Uranium mining claims were staked at 3 *C. townsendii* maternity roosts in the western part of the state. This was done to postpone or prevent the mines from being reopened and preserve the maternity roosts. CDOW staked the claims, CBS holds the claims, and CWS funded the claims. Fee payments will be sent every year to the counties involved to keep the claims current. BLM formally requested that the sites be permanently withdrawn from mining and the request is now in process.

Caves:

Cyndi

- Cave of the Clouds is a newly discovered *C. townsendii* maternity roost. The cave is near Glenwood Springs. The site was historically a show cave, with the largest stalagmine in Colorado. Currently, a transient uses the mine. In mid-March 2006, 14 active bats were seen and later, the entrance was blocked up with rocks and inside, buckets were found collecting water. Transients are known to be living in at least 3 caves in the area. It was suggested that the caves be gated. What about working with the city to gate the sites? Sonia will broach the subject with the city. Sonia and Cyndi will work together on this project.
- Cavers flew overhead and saw gypsum carsts in Larimer County in Red Mountain Ranch.
- Continue with cave surveys for bats at future date. Funding? USFS? White River may be good focus.

Rob

Rob is looking for caves in Jackson County (Walden area) and in southwestern Colorado, south of Grand Junction and west of Gunnison.

Public lands data bases:

Randy

Discussed public lands data bases. The data base shows public (corporate) versus local (for Forest biologist management decisions), FOIA (Freedom of Information Act), and GPS locations of sites/area/species locations.

Rob

CNHP provides general location information, not specific location data.

Paul

Museums use curators and collections managers as a firewall.

Board positions and emails:

Board positions will stay the same. Discussed receiving emails and how to cut unnecessary text. Everyone seemed content with how things are structured at this time.

CBWG Bat Blitzes:

Last year's bat blitz

Cyndi relayed stories from the trip. Rob Schorr, Kim Cotter, Phil Nyland, and Cyndi Mosch went to Groaning Cave. Per Rob, the cave is not for the claustrophobic.

This year's bat blitz possibilities

Wind farm property cattle tanks? North Larimer County on Red Mountain Ranch? Near Spud Patch (Allen's big-eared bats - Kirk)? Jackson County area? Grand Junction area with Alice Chung-McCaubrey? West slope blitz timeframe end July/early August (Kristen organizing). Northeast area blitz timeframe mid-August/early Sept (Paul organizing).

Roundtable:

Sandy

Can help with information about wind farms on the east side of the state (and as a contact on the west side).

Paul

Besides wind turbines, trying to get funded to start a national repository from wind farm kills and put together a process to collect tissues, preserve specimens, archive data, and provide a central place for a database about wind farm kills; study stable isotopes in bats of migrants versus non-migrants; helping Tom O'Shea and Mike Bogan with handbook and helping to fill in for Mike since he's retiring; in NM – 2 species of *Leptonicteris* and found a roost with both species; this summer working in Mesa Verde with a CSU grad student (Apple Snyder) (correct sp?) studying dietary habits of MYEV and MYTH in burned versus unburned areas and insect abundance; helping Alice Chung-McCaubrey in Grand Junction, who is using 3 scent dogs to find bat roosts.

Laura

Working on Mesa Verde roosting ecology in relation to fire in PJ habitat and expressed difficulties being able to work there when permission to walk off trail and driving around are very limited; preparing papers for publishing from the 5 year NIH study that finished last summer. So far, results show mortality happens more in the summer rather than the winter. Ft. Collins has more pit tagged bats than any other place in the world and over 100 buildings have EPFU roosts.

Rob

Will be testing pit tagged bats in full flight (already tested on dead mice) using 12” readers; Jeremy Siemers doing small mammal inventory (including bats) in southwestern Colorado that will eventually end up in the CNHP database.

Dan

Finished Master’s Degree - studied EPFU’s using urban selection roosts and hibernation roosts in rock crevices; now helping Tom O’Shea finish with 5 year NIH study; helping with the Mesa Verde surveys.

Mark

Discovered a MYYU maternity roost in northwestern Colorado in a bath house at Juniper Hot Springs near Maybell along the Yampa River; working on a Master’s degree at UNC; will be working at Heil Valley Ranch, helping with dietary analysis, treated (thinned) versus untreated forests, calcium loading and water sources, starting the thesis project estimating detection probabilities; Jamaican and short-tailed fruit bats are at UNC and development of flight skills and development of pups and epidemiological (infectious diseases) will be studied; Chiropteran Research Lab in Ross Sciences Hall at UNC is looking at ontogeny, development and dietary analysis – dietary analysis is finding so far that MYTH and MYEV are eating equal amounts of beetles and moths.

Kirk

Working on the Bats/Inactive Mines Project and this is the 16th year; Orient Land Trust in San Luis Valley leading guided bat tours; will be leading an Orient Mine bat tour and mist netting on July 29.

Lea’

Talked about Orient Land Trust protecting about 2,000 acres, including wildlife habitat such as the Orient Mine, and that the number of saved acreage will be growing, depending upon donations. Presented flashlights for purchase and talked about other upcoming OLT fundraising events, like this year’s raffle. Will be participating in the BioBlitz, June 23, with Mark and mist netting for bats after giving a natural history talk for Denver Audubon.

Kristen

Talked about upcoming Rush Basin area mine closures; attending a Wedding Bell project rendezvous with B/IMP in May to discuss individual mine closures; surveys of 3 project

areas for bat detection presence/absence last year and this year, with some portions hydro-mowed; finding more biologists are interested in bats, which is a good sign; discussed Alice C. to be in Grand Junction.

Nancy

Talked about Wedding Bell project and other B/IMP projects.

Cyndi

Rehabilitating bats; staying in touch with fellow cavers; talked about sink holes in Larimer County.

Randy

Went out with Kirk on Rio Grande last summer and captured MYVO and MYLU; will be writing COTO and MYTH species assessments this summer.

Sonia

Will be looking into cave closure possibilities near Glenwood Springs with Cyndi to keep transients out; CDOT and CDOW's Wildlife Watch will be installing a bat sign and it will be at Baer Ranch exit along I-70 instead of the Grizzly exit; another bat sign is at Glenwood Caverns.

Bat Plan:

Changes

- Add wind power information once WBWG has protocols in place. In 2-3 months, Paul will have wind farm information ready and will send to Kristen.
- S. Altenbach (UNM) suggested additional data from R. Sherwin's work.
- We could pick a couple things in the plan to focus and work on.
- Add distribution maps to the bat plan?
- When do we want to have the revision complete?
- Kirk said it would be important to look at bat ranking again.
- We could add references to research.

Bat Plan useful?

- Rob used plan to write proposals.
- When Kirk emailed USFS/BLM people last year, some said they used the plan as a supporting document to help with proposals. As a result, Joe Dohr (USFS) received ANAbat funding.
- Kristen talked to Alice C. and told her about the Colorado Bat Plan.
- This plan is a good template for other plans. Nevada is still trying to get their plan signed off.
- Do we want to put the bat plan into use as a group?

Google:

Looked at Google for “Colorado bats” and CBS comes up 1st and Colorado Bat Plan comes up 2nd. Kristen said TES under (USFS?) webpage has Colorado Bat Plan on site.

Next Meeting:

April 2007

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