

The Kootenay Community Bat Project: 2005 Summary Report



Lone Townsend's big-eared bat reported by a resident

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Columbia Basin Fish and Wildlife Compensation Program⁴

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Acknowledgements

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We would especially like to thank Sarah Roberts for her field assistance and for updating the website and Tom Bradley for his GIS assistance. Thanks also to: Craig Lawrence for organizing the community programs in Winlaw, the staff of the Pass Creek Regional Park for hosting a public mist-netting night, Gwen Teichroeb for organizing the Argenta events, Tamara Smith for providing graphic design support for posters, Dr. Mark Brigham and Cori Lausen for sharing their technical expertise, Thomas Stewart for assisting with cutting bat-house supplies, Per Wallenius for storing bat-house supplies, Thomas Hill and Aaron Reid for their assistance with surveys, and Marlene Hebert for her enthusiasm and assistance with field surveys and public events. Special thanks to Angela Saffire for recording information on the Townsend's big-eared bats near Winlaw.

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**Public
Conservation
Assistance Fund**

Executive Summary

The Slocan Valley Bat Project (SVBP) was initiated in 2004 to raise awareness about bats and their conservation, identify local bat species and their roost sites, and to provide a resource to residents with bats on their property. The overwhelming enthusiasm from residents in the Slocan Valley and surrounding area, and the success of the project in identifying local bat species, led to the expansion of the SVBP in 2005 and its renaming as the Kootenay Community Bat Project (KCBP). This report provides only a brief summary of the activities and results from the KCBP in 2005. For a more detailed overview of the objectives and methodology of the project, please see *Slocan Valley Bat Project: A Community Approach to Bat Inventory and Conservation* (Craig and Sarell 2004).

The objectives of the Kootenay Community Bat Project in 2005 were:

- 1) To promote public awareness of the diversity and importance of bats through education and dispelling myths;
- 2) To identify bat roosts on private property, some which could be at risk by inappropriate management practices;
- 3) To work with resident to promote the conservation and enhancement of these roost sites, including addressing landowner concerns (e.g. health, noise);
- 4) To encourage residents to record bat activity at their roosts.

In 2004, the focus of the bat project was the Slocan Valley. However, with phone calls from interested residents throughout the Kootenays, the study area of the KCBP in 2005 was expanded to include the entire West Kootenay.

This project incorporated outreach, inventory, stewardship and conservation. The project was highly publicized, and encouraged local participation in identifying and conserving bat roosts. As well as raising awareness through advertising and public events, the project included roost surveys. Approximately 137 site visits were conducted throughout the 2005 field season to actual and suspected bat roosts for a total of 229 site visits in the past two years.

A total of 114 roost sites were identified during 2005, including 62 maternity roosts, 36 day roosts, 10 night roosts, and 6 unknown roosts. Seven bat species were seen or detected in 2005 including Townsend's big-eared (*Corynorhinus townsendii*), little brown myotis (*Myotis lucifugus*), California myotis (*M. californicus*), Yuma myotis (*M. yumanensis*), big brown bat (*Eptesicus fuscus*), silver-haired bat (*Lasiurus noctivigans*) and long-legged myotis (*M. volans*).

The KCBP continued to raise awareness about bats and engage communities in bat conservation. With almost 230 site visits conducted in the past two years, and numerous public events with high attendance, residents have been learning about the importance of bats. The increased number of reported roost sites is indicative of a higher awareness of the project and its goals. We hope that the continuation of this project will lead to further public involvement and awareness.

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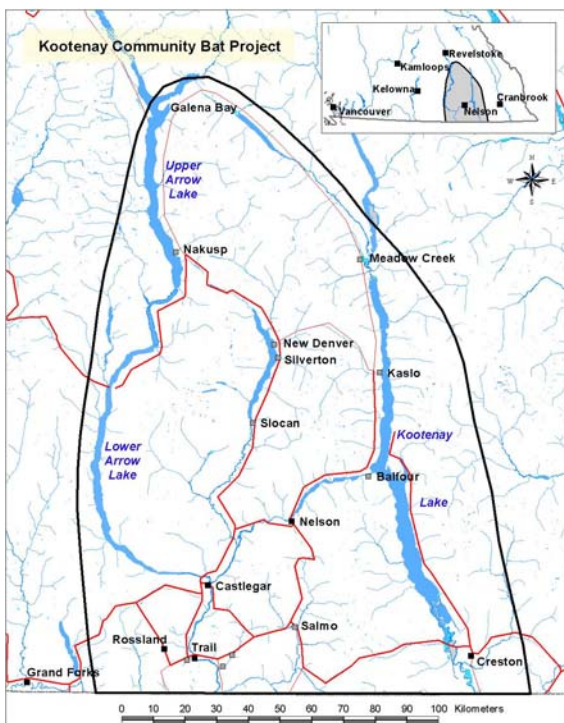
FIGURE 1. LOCATION OF KOOTENAY COMMUNITY BAT PROJECT IN SOUTH-EASTERN BC... 1

Introduction

The Slocan Valley Bat Project (SVBP) was initiated in 2004 to raise awareness about bats and their conservation, identify local bat species and their roost sites, and to provide a resource to residents with bats on their property. The overwhelming enthusiasm from residents in the Slocan Valley and surrounding area, and the success of the project in identifying local bat species, led to the expansion of the SVBP in 2005 and its renaming as the Kootenay Community Bat Project (KCBP). This report provides only a brief summary of the activities and results from the Kootenay Community Bat Project in 2005. For a more detailed overview of the objectives and methodology of the project, please see *Slocan Valley Bat Project: A Community Approach to Bat Inventory and Conservation* (Craig and Sarell 2004).

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1. To promote public awareness of the diversity and importance of bats through education and dispelling myths;
2. To identify bat roosts on private property, some which could be at risk by inappropriate management practices;
3. To work with resident to promote the conservation and enhancement of these roost sites, including addressing landowner concerns (e.g. health, noise and smell);
4. To encourage residents to record bat activity at their roosts.



Study Area

In 2004, the focus of the bat project was the Slocan Valley. However, with phone calls from interested residents throughout the Kootenays, the study area of the KCBP in 2005 was expanded to include the entire West Kootenay (see Figure 1). Castlegar, Nelson, Ymir, Balfour, Thrums, Shoreacres and Kaslo.

The study area is located within the Central Columbia Mountains, Selkirk Foothills, and Southern Columbia Mountains ecozones. The areas surveyed were primarily within six subzones of the Interior Cedar Hemlock biogeoclimatic zones: (ICHdw, ICHmw2, ICHwk1, and ICHvk1, ICHxw, ICHmw4).

Figure 1. Location of Kootenay Community Bat Project in south-eastern BC.

Methods

This project incorporated outreach, inventory, stewardship and conservation. The project was highly publicized, and encouraged local participation in identifying and conserving bat roosts. For a detailed description of the methodology for this project, please *Slocan Valley Bat Project: A Community Approach to Bat Inventory and Conservation* (Craig and Sarell 2004).

Project Promotion

Advertising

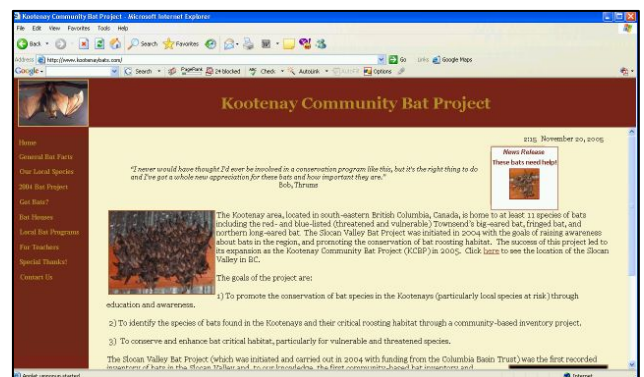
Posters were developed in 2005 to advertise the project and to encourage residents to report their bats.



The key to this project was advertising and promotion. Posters were developed and installed throughout the West Kootenay, and newspaper articles were written throughout the summer to promote the project, inform residents of recent findings, and raise awareness about bats (see Appendix A). Several radio advertisements and interviews were made on CBC, Kootenay Co-op Radio, and BKR. Radio interviews were done for CBC, Kootenay Co-op Radio and CKNW (Vancouver).

Website

The website was updated regularly (www.kootenaybats.com) to include information on upcoming events, and results from the 2004 field season. The website is currently averaging 8,500 hits per month, and they have come from around the world including United States, England, and China, although the majority of visitors are from Canada.



Public events

Awareness about this project was also raised through public events. We offered interpretive programs in Winlaw, Nelson, Slocan City, Argenta and Creston. During these programs, we provided information on bats, addressed the myths about bats, discussed methods of research, and provided information on local bat species.

Bat-house building workshops were offered in Winlaw, Nelson, Argenta and New Denver. These programs, carried out in collaboration with the Slocan Valley Recreation Commission, Nelson and District Recreation Commission, and HomeLinks School respectively. Two public mist-netting nights were also offered in Argenta and Pass Creek as part of the project.

In 2005, the Annual Backyard Bat Count was initiated. Held in late June and early July, residents were encouraged to conduct an emergence count of their colony. During all of these events, residents were encouraged to provide their contact information if they had bats on their property and/or if they were interested in joining the bat project email list.

As well as local events, the Kootenay Community Bat Project received international exposure. Juliet Craig, Outreach Biologist, presented at the *Western Bat Working Group* conference in Portland, Oregon and the *North American Symposium for Bat Research* in Sacramento, California, as well as provided the Keynote Address for the *Ecological Monitoring and Assessment Network National Conference* in Penticton, BC.

Landowner Visits

As well as raising awareness through advertising and public events, we conducted roost surveys to identify bat species and their roost sites. Approximately 137 site visits were conducted throughout the 2005 field season to actual and suspected bat roosts for a total of 229 site visits in the past two years. Methodology followed that of 2004 (Craig and Sarell 2004) with the following differences:

- The “Landowner perspective” scale was not used in 2005. It did not appear to capture the change in attitudes that was occurring as a result of site visits. Rather, comments were written regarding the perspectives of the resident and any changes as a result of the visit.
- DNA samples were collected on big brown bats to provide to Jacquie Metheny from the University of North Carolina to assist her graduate work. Only two other samples were taken and they have not yet been identified.
- A new company, BAT Management Services was formed in 2005 by sole proprietor, Sean Smerdon. This company focuses on building and installing bat-houses, and cleaning and modifying attics. Contact information for this company was provided to residents with bat issues.

Results and Discussion

Education and Awareness and Public Involvement

The enthusiasm and support that the Slocan Valley Bat Project generated in 2004 continued and grew in 2005.



Interpretive programs had high attendance and were popular with both adults and children. A total of 17 interpretive programs were offered to community groups, the general public and school children.

Cori Lausen providing guest talk during interpretive program.

The bat-house building workshops were also popular, with all programs filling up to full attendance. A total of 90 bat-houses were built through local workshops in 2005.



Bat-house building workshops in Winlaw (left). Participant (Raven) with his bat-house in Argenta (right).

The mist-netting night offered in Castlegar at the Pass Creek Regional Park had 150 participants. Due to the large crowd, no bats were actually caught. However, participants learned about bats and research equipment, and enjoyed a night out. Unfortunately, the mist-netting night in Argenta was cancelled due to rain.

The Annual Backyard Bat Count had only seven participants in 2005. More promotion will be done in 2006, as well as phone calls to residents with large colonies to encourage their participation.

These programs provided key contacts in each community, and were instrumental in the success of the project. By the end of the summer, 150 contacts were on the Kootenay Community Bat Project email list.

Table 1. Summary of 2005 Extension Activities

| Date | Event | Location | # Audience |
|-------------|--|------------------------------------|-------------------|
| 04-Jan-05 | Kootenay Co-op Radio | Nelson & Area | Unknown |
| 17-Jan-05 | General Public | Winlaw | 9 |
| 19-Jan-05 | General Public | Nelson Library | 50 |
| 23-Feb-05 | MWLAP and MSRM staff | Nelson | 25 |
| 25-Feb-05 | West Kootenay Naturalists | Trail | 40 |
| 28-Feb-05 | Company of Older Women | Nelson | 15 |
| 01-Mar-05 | Rotary Club | Nelson | 40 |
| 01-Mar-05 | Brent Kennedy School | South Slocan | 25 |
| 01-Mar-05 | Brent Kennedy School | South Slocan | 25 |
| 12-Mar-05 | Bat-house building | Nelson Recreation Commission | 30 |
| 01-Apr-05 | Western Bat Working Group presentation | Portland, OR | 125 |
| 17-Apr-05 | Bat-house building | Winlaw | 50 |
| 17-Apr-05 | Interp Program | Winlaw | 40 |
| 13-May-05 | Rotary Club | Nelson | 7 |
| 29-May-05 | GRUBS garden kids | New Denver | 15 |
| 03-Jun-05 | LVR High School | Nelson | 25 |
| 07-Jun-05 | Interp Program | Argenta | 75 |
| 07-Jun-05 | Bat-house building | Argenta | 75 |
| 08-Jul-05 | CBC Radio | Throughout BC | Unknown |
| 09-Jul-05 | Garden Festival | Creston | 15 |
| 09-Jul-05 | Garden Festival | Creston | 15 |
| 26-Jul-05 | Kootenay Coop Radio | Nelson & Area | Unknown |
| 09-Aug-05 | Mist-netting night | Pass Creek Regional Park | 150 |
| 08-Sep-05 | Interp Program | Selkirk College student field trip | 25 |
| 01-Oct-05 | Vancouver Radio CKNW | Vancouver & area | Unknown |
| 22-Oct-05 | NASBR presentation | Sacramento, CA (International) | 125 |
| 05-Nov-05 | Bat-house building | Nelson Recreation Commission | 50 |
| 23-Nov-05 | EMAN presentation | Penticton (National) | 150 |
| 29-Nov-05 | Blewett School (grade 2) | Nelson | 20 |
| | | TOTAL | 1236 |

Bat Inventory and Roost Sites

A total of 114 roost sites were identified during 2005, including 62 maternity roosts, 36 day roosts, 10 night roosts, and 8 unknown roosts (see Table 2). Seven bat species were seen or detected in 2005 including Townsend's big-eared (*Corynorhinus townsendii*), little brown myotis (*Myotis lucifugus*), California myotis (*M. californicus*), Yuma myotis (*M. yumanensis*), big brown bat (*Eptesicus fuscus*), silver-haired bat (*Lasiurus noctivigans*) and long-legged myotis (*M. volans*).

The silver-haired bat was reported in December 2005, when it repeatedly flew into a resident's house. It is possible that this juvenile male bat had been hibernating in the house, and aroused to find water or food.

For 2004 and 2005, 180 roost sites have been detected from almost 230 site visits. As well, because of the high exposure of this project, roost sites from other areas of BC were reported including Masset (Haida Gwaii), Parsons, Oliver, and William's Lake. When site visits were not feasible, an information package was mailed to the resident following a phone conversation. These roost sites have not been included in the results since the bat species were not identified.

Table 2: Summary of Bat Observations for the Kootenay Community Bat Project (2004 & 2005)

| Common Name | Scientific Name | Fed/Prov Status ^{1,2} | # Roosts 2004 ³ | # Roosts 2005 | TOTAL |
|---------------------------|--------------------------------|--------------------------------|---|---|----------------|
| Yuma Myotis | <i>Myotis yumanensis</i> | n/a / Yellow | 1 Mat | 2 Day 10 Mat | 13 |
| California Myotis | <i>Myotis californicus</i> | n/a / Yellow | 1 Night | | 1 |
| Little Brown Myotis | <i>Myotis lucifugus</i> | n/a / Yellow | 3 Day 13 Mat 2 Night | 6 Day 20 Mat 1 Night | 45 |
| Western Long-eared Myotis | <i>Myotis evotis</i> | n/a / Yellow | 1 Day 1 Mat 1 Night | | 3 |
| Long-legged Myotis | <i>Myotis volans</i> | n/a / Yellow | 1 Day | 1 Day 1 Mat 1 Night | 4 |
| Big Brown Bat | <i>Eptesicus fuscus</i> | n/a / Yellow | 5 Day 8 Mat 2 Night | 3 Day 10 Mat 3 Night | 31 |
| Townsend's Big-eared Bat | <i>Corynorhinus townsendii</i> | recommended T/Blue | 3 Day 2 Mat | 5 Day (1 Mat) ⁴ | 10 (1) |
| Little brown or Yuma | <i>Myotis spp.</i> | | 2 Mat | 3 Mat 3 Day | 8 |
| Silver-haired bat | <i>Lasiurus noctivigans</i> | n/a / Yellow | | 1 Day | 1 |
| Unknown Bats | <i>Myotis sp. and others</i> | | 3 Day 6 Mat 11 Night | 15 Day 18 Mat 5 Night 6 Unk | 64 |
| TOTAL ROOSTS | | | 16 Day 33 Mat 17 Night 66 TOTAL | 36 Day 62 Mat 10 Night 6 Unk 114 TOTAL | 180 (1) |

1 Federal Status is Endangered (E), Threatened (T), Special Concern (SC), Data Deficient (DD), not assessed (n/a)

2 Provincial Status: Red, Blue, Yellow

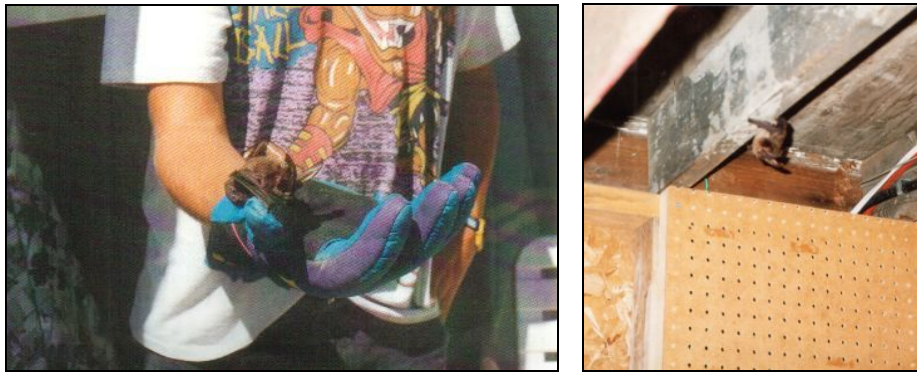
3 Roosts: Maternity is day roost with evidence of parturition; day roost is no parturition detected. Dead bats and bats detected flying are not included in this summary.

4 One roost was reported by friends of a family who had a Townsend's maternity roost in their barn. This site had already been identified (Firman 1999)

Townsend's big-eared Bat (*Corynorhinus townsendii*): Blue-listed

Five day roosts of Townsend's big-eared bats (*Corynorhinus townsendii*) were identified in the West Kootenay in 2005. Two of these roost sites were reported by residents (Castlegar and the East Shore) who recognized the long-eared bats from a photo they had seen in a newspaper. Another two roost sites were identified because residents submitted photos of bats they had seen on their property. It is interesting that one of these photos is from the Slocan Valley in 1995, indicating that other historic information may be available from residents. These photographs are from Appledale and the Columbia Gardens areas. The final day roost site was identified in Blewett, an area where Townsend's big-eared bats were not previously known to occur. This lone bat may indicate further roost sites in the vicinity.

As Townsend's maternity colony was also reported this year by friends of a family with bats in their barn in the Fort Steele area. When the report was followed up, the family indicated that this roost site had already been identified in previous bat inventory work (Firman 1999) so it is not included in our summary.



Photographs submitted by residents of the Kootenays. (left) Photo taken in 1995 in Appledale and (right) photo of bat in basement in Columbia Gardens.

The small maternity cluster near Winlaw was identified in 2004 (Craig and Sarell 2004) was monitored this year. Resident, Angela Saffire took detailed notes on the activities of the bats, providing information on the timing of arrival, parturition and departure (see Table 3).

Funding was acquired from the Public Conservation Assistance Fund to modify this roost site. A design has been developed to add a small room to the roof of the building in order to provide a quieter space for these bats. Although many residents had volunteered for the project, a lead carpenter could not be found so the renovation has been postponed until 2006.

This colony was investigated further by staff from the Columbia Basin Fish and Wildlife Compensation Program (Hill et al 2005). Suspecting a larger maternity roost site in the region, likely in a natural rock feature, Thomas Hill and Aaron Reid caught one of the bats and put a transmitter on her on September 7, 2005. Unfortunately, despite extensive

searching they were unsuccessful in relocating this bat. However, the disappearance of the signal may indicate another roost site (likely a rock feature) in the vicinity.

Table 3: Notes taken by resident, Angela Saffire, about the small Townsend's maternity cluster.

| Date | Notes |
|-----------|--|
| 03-Jun-05 | Saw 2. She was away before this. |
| 06-Jun-05 | 3 bats snuggling |
| 07-Jun-05 | 4 bats - 3 snuggling and 1 loner |
| 29-Jun-05 | 4 bats |
| 29-Jun-05 | 5 bats - 4 snuggling and 1 loner (lighter in colour - grey). |
| 13-Jul-05 | Woken by bats crying. Maybe a cat that got them but 4 + 1 are there. |
| 18-Jul-05 | Noticed new babies. 7 bats. |
| 27-Jul-05 | Woken again by bats crying. Solo dude flew first. Counted 10. 2 slightly bigger and 1 really small. Little ones left behind. |
| 07-Sep-05 | For past week, counted 7-8 bats. CBFWCP bat guys came and put on transmitter. |
| 08-Sep-05 | Woke to hear bats flying. Squeaking. 6-7 of them. |
| 15-Sep-05 | Saw bat with transmitter. |
| 25-Sep-05 | 8 bats. |
| 08-Oct-05 | 3 COTO bats - 1 little brown |
| 09-Oct-05 | 1-3 bats for the past while. |
| 12-Oct-05 | 3 COTO bats - 1 little brown |
| 13-Oct-05 | 3 bats. |
| 15-Oct-05 | Bats left? |

Other Bat Observations

As well as Townsend's big-eared bats, six other bat species were recorded in 2005. A detailed database outlining the locations of these roost sites has been submitted to the Columbia Basin Fish and Wildlife Compensation Program.

Roost Enhancement and Conservation

Roost enhancement and conservation issues were similar to those of 2004. A number of residents were frightened of bats and hoped that by calling the Kootenay Community Bat Project, we could get rid of the bats for them. Some residents admitted to killing bats with Raid, killing bats in the day time because they thought by seeing the bat they could get rabies, or exterminating entire colonies with car exhaust systems. These same residents, and countless others, were extremely grateful to have a resource that they could call to get advice on what to do about their bats.

After a site visit, residents either let the bats remain where they were, or agreed to put up a bat-house and seal the roost in winter months. With the new "BAT Management Services" company, some residents were willing to pay for roost modification services.

Another conservation issue that was identified during the project was the decommissioning of mines. One local resident reported:

30 to 40 years ago when we used to explore the Rossland mines before they were all bulldozed or blasted shut, we would often find bats hanging from the ceilings of tunnels. They were small, brown and usually in a very deep torpor.

Barry, Nelson

Inventorying mine sites before they are decommissioned is an important element in conserving bat populations in the Kootenays.

The Kootenay Community Bat Project continued to raise awareness about bats and engage communities in bat conservation. With almost 230 site visits conducted in the past two years, and numerous public events with high attendance, residents have been learning about the importance of bats. The increased number of reported roost sites is indicative of a higher awareness of the project and its goals. The project has involved volunteers in putting up posters, assisting with events, assisting with surveys, and monitoring roost sites. We hope that the continuation of this project will lead to further public involvement and awareness.

Recommendations

Methods/Approach

- 1) Continue to promote the approach of a community-based bat inventory method throughout the Columbia Basin, and further afield.
- 2) Continue the project in a larger geographic area (e.g. entire Kootenay region) next year.
- 3) Maintain a two-biologist field crew that encourages volunteer assistance.
- 4) Acquire a 1-800 number for roost reports, and work towards making this number available throughout BC.
- 5) Continue to collaborate with small businesses making and selling bat-houses.
- 6) Encourage landowners to monitor their bat colonies and collect and report data. Continue the Annual Bat Count to encourage community members to collect data on a specific date every year.
- 7) Provide school programs during winter months to continue education and awareness and encourage children to become involved.
- 8) Contact realtors, exterminators, roofers, house inspectors, and others who may encounter bats to make them aware of the project as a resource for them and landowners they assist.

- 9) Advertise the project phone number through the Pennywise and other local classifieds, as well as through articles.

Conservation

- 10) Develop plan for Townsend's bat-houses or modify an existing structure and install them in various locations, including the Galena Bay and Perry's Siding properties.
- 11) Collaborate with Ministry of Highways to enhance bridge roosting habitat by either providing rough siding (so bats can cling to it) or by installing bat-houses under or along the sides of bridges.
- 12) Collaborate with the Ministry of Energy, Mines and Petroleum Resources to ensure inventories for bats are conducted prior to mine closures and bat gates are used where this occurs.
- 13) Develop plaques or window stickers to recognize landowners who are conserving or enhancing bat habitat.

Scientific

- 14) Continue to examine the DNA of several bat species, especially that of little brown myotis and all long-eared myotis', to confirm the identification of these bats and to contribute to the broader understanding of bat species genetics.
- 15) Collect more detailed roost site information including temperature, humidity, structural dimensions, to better design successful roost sites.
- 16) Collaborate with Interior Health to acquire data on bat locations and rabies and histoplasmosis incidents so that project biologists maintain accurate and recent information.


References

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Appendix A: Bat Project Press Releases, 2005.

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Nelson & District Recreation Guide, March, 2005

Build a Bat House 

Age: all ages
Did you know that one little brown bat can eat 600 mosquitoes in an hour?! Learn all about bats with biologist, Juliet Craig, and support bat conservation by building your own bat house. You will receive information on local bat species, bat conservation and learn where to put your very own bat house that you have built! You must pre-register for this program. Cost is \$15 per household (e.g. one bat-house per family, couple, person). All proceeds from this program go to the Kootenay Critical Bat Habitat Project. Please bring your own Robertson (square) screw-driver or drill if possible.
Note: this project will take approximately one hour to complete. You can arrive anytime between 1:00 and 3:00. (please do not arrive at 4:00)

Juliet Craig
North Shore Hall
3331 Sat Mar 12 1:00-4:00pm
Per Household: \$15

Nelson & District Recreation Guide, March, 2005

Go Batty! 

Age: 8 & up
Many bats call our area home and your children are bound to be curious! Let them enjoy the wonderful world of bats with biologist Juliet Craig. The kids will learn all about bats with a short slide show, crafts and games!

Juliet Craig
Blue Room
3352
Tue Mar 29 10:00-11:00am
Per Child: \$5

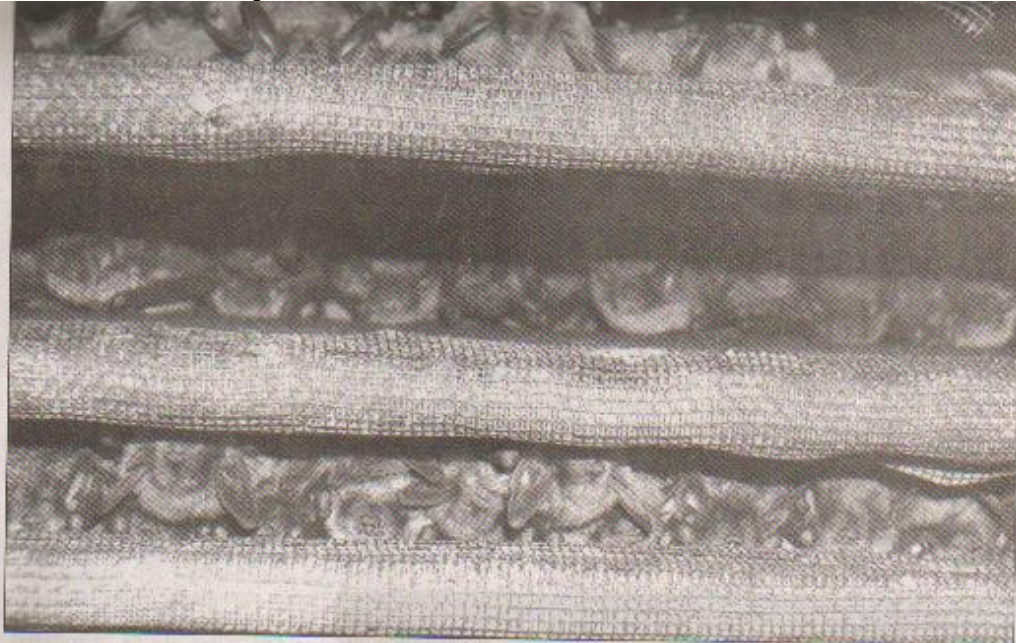


Kootenay Express, April 6, 2005

Build a batty abode

Join Biologist Juliet Craig as she combines forces with the Slocan Valley Recreation Commission to present another day devoted to bats! On Sunday, April 17 from 11 a.m. to 3 p.m. come on out to the Winlaw Hall where you can build a bat house for a nominal fee and/or get an update on the Kootenay Community Bat Project (formerly known as the Slocan Valley Bat Project). The Winlaw Hall Society will be hosting a tailgate Garage Sale from 10:00 a.m. to 2:30 p.m. the same day. You must pre-register to build a bat-house so call Slocan Valley Recreation at 226-0008 by April 11 to make sure there are supplies for you. If you are wishing to partake in the Tailgate Garage Sale call Carey at 226-7702.

The Trail Times, May 13, 2005



Submitted photo

SIMPLY BATTY: Residents counted over 505 bats emerging from their bat-house in the Slocan Valley.

Bat project expands in West Kootenay

The Kootenay Community Bat Project is gearing up for another year of identifying local bat species, providing educational programs and workshops, and assisting landowners with bat issues.

There are 16 species of bats in B.C., and half of them are considered vulnerable or threatened.

Very little is known about bats and local biologists are trying to change that. Following up on the success of the Slocan Valley Bat Project last year, the Kootenay Community Bat Project will be expanding its area to include the entire West Kootenay.

"We had amazing success last year," says Juliet Craig, outreach biologist for the project. "Residents were great for reporting their bats and allowing us come out to see them."

"We discovered over 75 roost sites, including important colonies of the rare Townsend's big-eared bat."

During a site visit, biologists will bring a bat down (if possible) from the attic or barn for residents to have a close look at.

Because they have their rabies shots, biologists are able to safely handle bats, allowing them to identify them. They measure and weigh the bat, provide information about bats to landowners, and provide ideas for addressing concerns such as smell and noise.

"Some people don't mind having bats in their buildings, while others are looking for methods to remove them," explains Craig. "We provide people with information and ideas for addressing their issues, whether that means leaving the bats where they are, or removing them from the roost site with as little impact as possible."

"We also encourage people to monitor their bat populations by letting us know when the bats are returning from hibernation, or leaving in the fall. This information is very valuable, since there is very little known about local bat species."

Funded by the Columbia Basin Trust, and supported by the Columbia Basin Fish and Wildlife Compensation Program, the Kootenay Community Bat Project is a leading example in North America of a community-based project that engages the commu-

encouraged to call the Kootenay Community Bat Project at 352-2260 or e-mail kootenaybats@uniserve.com.

See www.kootenaybats.com for more information.

Kootenay Express, May 19, 2005

Got Bats? Tell the Kootenay Community Bat Project



Biologists Juliet Craig and Mike Sarell gearing up for another year of identifying local bat species.

The Kootenay Community Bat Project (KCBP) is gearing up for another year of identifying local bat species, providing educational programs and workshops, and assisting landowners with bat issues.

There are sixteen species of bats in B.C., and half of them are considered vulnerable or threatened. Very little is known about bats and local biologists are trying to change that. Following up on the success of the Sloean Valley Bat Project last year, the KCBP will be expanding its area to include the entire West Kootenay.

"We had amazing success last year," says Juliet Craig, Outreach Biologist for the project. "Residents were great for reporting their bats and allowing us come out to see them. We discovered over 75 roost sites,

including important colonies of the rare Townsend's big-eared bat."

Funded by the Columbia Basin Trust, and supported by the Columbia Basin Fish and Wildlife Compensation Program, the Kootenay Community Bat Project is a leading example in North America of a community-based project that engages the community in bat conservation, incorporates local knowledge in identifying roost sites, and works with landowners towards the conservation and enhancement of roost sites.

If you have bats living in your buildings, you are encouraged to call the Kootenay Community Bat Project at 352-2260 or email kootenaybats@uniserve.com. See www.kootenaybats.com for more information.

Nelson Daily News, May 23, 2005

Bat project builds off success and prepares for new season

WILDLIFE: Whether you love them or hate them, local project will inform you about the night creatures

By JULIET CRAIG
Special to the Daily News

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"Some people don't mind having bats in their buildings, while others are looking for methods to remove them," explains Craig.

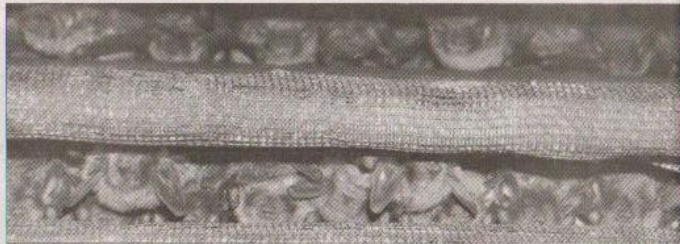


PHOTO SUBMITTED

Resident's counted over 505 bats emerging from their bat-house in the Slokan Valley. Whether you have problem bats or just want to find out more about them, the Kootenay Community Bat Project is at your service.

"We provide people with information and ideas for addressing their issues, whether that means leaving the bats where they are, or removing them from the roost site with as little impact as possible. We also encourage people to monitor their bat populations by letting us know when the bats are returning from hibernation, or leaving in the fall. This information is very valuable, since there is very little known about local bat species."

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If you have bats living in your buildings, you are encouraged to call the Kootenay Community Bat Project at 352-2260 or email kootenaybats@uniserve.com. See www.kootenaybats.com for more information.

Juliet Craig is a Registered Professional Biologist with Silverwing Ecological Consulting.

Kootenay Express, May 25, 2005

Breaking down bat fears

KOOTENAY COMMUNITY BAT PROJECT: Creatures of the night are nothing to fret over, on June 7 learn more about bats at a special day in Argenta

WINLAW — Residents of Argenta will be going batty on Tuesday, June 7, as they build bat-houses, enjoy an educational bat program, and see bats up close when the Kootenay Community Bat Project (KCBP) hosts "A Batty Day".

The KCBP is a community-based bat inventory and conservation project that is designed to identify local bat species, raise awareness about bats, and work with landowners to conserve roost sites. The project is hosting "A Batty Day in Argenta" to raise awareness about local bat species, and encourage residents to build and install bat houses.

"Bats are very misunderstood and feared animals," says Juliet Craig, Outreach Biologist for the KCBP. "Through these community programs, we hope to raise awareness about bats, and encourage people to install bat-houses to provide roosting habitat."

On June 7, there will be a kids program on bats at 3:30 p.m. at the Argenta Community Hall, and from 4 to 6 p.m., residents can drop in to build their own bat-house. At 7 p.m., mist nets will be set-up to try to catch local bats so they can be identified and released.

"It's a wonderful opportunity to



PHOTO SUBMITTED

Kids participating in a local bat-house building workshop last year.

learn more about local bats and see them up close," says Craig. "It will be a fun day, and everyone is welcome to attend."

To register to build a bat-house call Gwen at 366-0030. The cost for the bat-house building workshop is \$5 per family/household, and all other programs are free. Funding for the programs is provided by the

Columbia Basin Trust and the Kaslo and Argenta HomeLink Program.

To find out more about the Kootenay Community Bat Project or to report bats living on your property, call 352-2260 or email kootenaybats@uniserve.com. See www.kootenaybats.com for more information.

Nelson Daily News, August 15, 2005

Rare bat found in the Nelson area

NELSON – A rare Townsend's big-eared bat was recently discovered roosting in Blewett near Nelson, and residents are encouraged to report bats living on their property.

Biologists from the Kootenay Community Bat Project have been searching for roost sites for two years to identify local bat species, raise awareness about bats, and work with landowners who have bats in their buildings. Recently, a local report of abandoned buildings led to the discovery of a lone Townsend's big-eared bat roosting in Blewett.

"This single Townsend's big-eared bat may mean that there is a maternity colony of females nearby," says Juliet Craig, Outreach Biologist for the project.

"We are encouraging people to report bat roost sites to us to help us identify further roost sites of this bat and other rare species."

The KCBP began as the Slokan Valley Bat Project last year and has already identified over 100 bat roost sites, including a Yuma colony with approximately 1400 bats in the Slokan Valley. Residents are encouraged to



— PHOTO SUBMITTED

Townsend's Big-eared bats recently discovered in Blewett.

contribute to this project by reporting bats roosting (living) on their property.

Biologists can come to the roost site to identify the species, and will bring one down from the attic or barn for residents to see. Biologists also provide information on how to get bats out of your attic in a sensitive way.

"We are so encouraged by the support of residents to report their bats," says Craig. "With their support, we are gathering important information about the distribution of species. These data are valuable since few inventories of bats have ever been conducted in the West Kootenay area."

The Kootenay Community Bat Project, supported by the Columbia Basin Fish and Wildlife Compensation Program and funded by the Columbia Basin Trust and Habitat Conservation Trust Fund, also aims to raise awareness about bats. The project offers bat-house building workshops, public talks, and other events. Over 125 people attended a bat mist-netting night in Pass Creek Regional Park last weekend.

To find out more, go to www.kootenaybats.com or contact the KCBP at (250) 352-2260 or kootenaybats@uniserve.com.



Kootenay Express, August 18, 2005

Rare bat found in Nelson



Biologists from the Kootenay Community Bat Project have been searching for roost sites for two years to identify local bat species, raise awareness about bats, and work with landowners who have bats in their buildings. Recently, a local report of abandoned buildings led to the discovery of a lone Townsend's big-eared bat roosting in Blewett near Nelson. The KCBP began last year and has already identified over 100 bat roost sites. Residents are encouraged to contribute to this project by reporting bats roosting (living) on their property. Biologists can come to the roost site to identify the species, and will bring one down from the attic or barn for residents to see. Biologists also provide information on how to get bats out of your attic in a sensitive way. To find out more, go to www.kootenaybats.com or contact the KCBP at (250) 352-2260.

Nelson Daily News, September 10, 2005

A NEW HOME FOR BATS

WILDLIFE: A small colony of at-risk bat species will get a new home, but skilled builders needed to help out effort

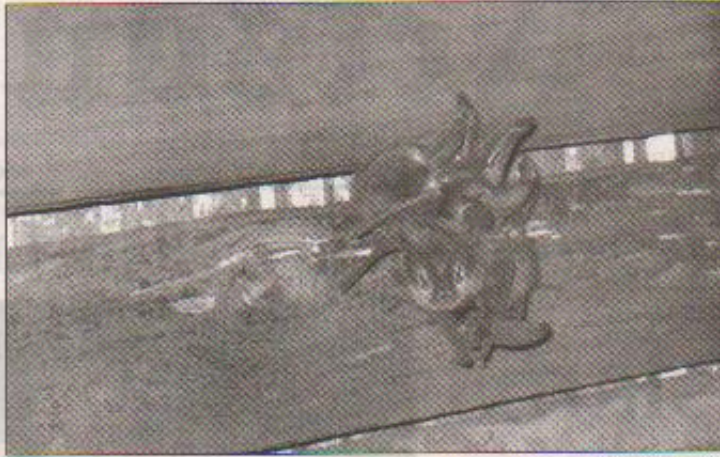
SLOCAN VALLEY — A colony of Townsend's big-eared bats will be getting a new home this winter as an additional room is put onto a resident's house just for the bats.

Townsend's big-eared bats are a blue-listed (vulnerable) species that were first confirmed in the Slocan Valley last year by local biologists. One of the colonies identified is a small cluster of females living within a resident's house.

With few maternity colonies of this species known in the region, maintaining this group of Townsend's big-eared bats is an important element of this species' conservation in the Kootenays.

"It's quite amazing that this group of bats is living where they are, since the building is both a residence and a small theatre," says Juliet Craig, Outreach Biologist with the Kootenay Community Bat Project (KCBP). "This species is quite vulnerable to disturbance, yet this group of females hangs out even while there are dance parties, theatre productions, and other large events."

One strategy to encourage the conservation and expansion of the colony is to provide the bats with their own space. Unlike other bat species, Townsend's big-eared bats don't live in small crevices so typical bat-houses won't work. Instead, these bats require large open cavities. The KCBP has successfully acquired funding from the Habitat Conservation Trust Fund to build an



— PHOTO SUBMITTED

Small cluster of female Townsend Big-eared bats and their pups who are awaiting a new roost.

additional room to the house just for the bats.

"The idea is to provide a small private room perched on the roof of the house that the bats can fly into for privacy and quiet," explains Craig. "In other parts of North America, limiting disturbance for these bats has resulted in larger colonies. For example, in the United States a small group of Townsend's big-eared bats had been roosting above a horse concession for years. When the concession was closed and the building became quiet, the colony grew from 10 to 70 bats. We are hoping something similar will happen with this colony."

The small room addition will be built in October when the bats have left to hibernate. Like most local bat species, Townsend's big-eared bats hibernate in local mines and caves, leaving the buildings where they roost during the summer.

The Kootenay Community Bat Project is seeking volunteers with carpentry skills to help with these

renovations. Funds are available for supplies and materials, but not for labour, so the project is relying on the generosity and interest of residents to help with this renovation.

"It's a wonderful opportunity to do something concrete and productive for our local species at risk" says Craig. "Carpenters or handy-people are encouraged to participate by offering a few hours of their time to help build this unique structure and support this community initiative."

Funded by the Columbia Basin Trust, the Kootenay Community Bat Project is a community-based initiative to raise awareness about bats, identify local bat species, and work with landowners who have bats in their buildings.

For more information on the Kootenay Community Bat Project, call Juliet Craig at 352-2260 or see www.kootenaybats.com. To volunteer your carpentry skills to build the new 'bat room', please call Angela at 355-0010.

Q

The Province, October 10, 2005

B2 | UNWIND | THE PROVINCE

Do mosquitoes drive you ba

BAT HOUSES: Slocan Valley residents show how you can do something for nature and get rid of pesky bugs at the same time

BY BRIAN HUTCHINSON
CANWEST NEWS SERVICE

A British Columbia community known for alternative lifestyles and communal living is attempting to attract new residents with offers of free housing.

The catch? The offer extends only to bats.

People in the Slocan Valley are being encouraged to welcome bats on to their property, and, in some cases, in their homes. It's part of an education and conservation effort led by local scientists and bat enthusiasts.

"There's never been anything like this in North America," says Juliet Craig, a volunteer member of the Kootenay Community Bat Project, a group she helped found this year. "There are a lot of bat species here in the B.C. Interior. Unfortunately, there are also a lot of people who are really frightened of them. We know that exterminators keep getting calls about bats, but it's illegal to kill them. So we created this resource as a response.

"We think that once people get to know their bats, they will begin to like them."

Most bats eat insects, which they can track and hunt down in flight. A bat can get through a lot of mosquitoes in a night. They have big appetites because of all the flying they have to do.

The Bat Project is raising money to build multi-chamber "bathouses" that people can erect next to their homes. A typical bathhouse accommodates around 250 brown bats.

Bat houses are typically one metre in height and depth and are made of fir plywood or cedar. In cool climates, they are painted a dark colour.

They are also inexpensive; in the Slocan Valley, a small, "economy" style bat house can be bought for as little as \$45.

The houses attach to the top of a tall wooden post, or to the side of a building, well away from predators and bright lights.

The response has been encour-

aging. "This is a pretty funky area, with a lot of colourful people," Craig says. "People here are open to different ideas."

Recently, a Slocan Valley woman discovered a colony of 400 Yuma bats in her attic. Rather than attempt an eviction, she dialled the Bat Project. Members were able to coax the bats from the woman's attic and direct them to a bat house they had built beside her home.

The Bat Project has also commissioned an architect to design a unique "bat extension" inside a local theatre. The addition will rest eight metres above the theatre's stage and will house a small colony of Townsend's big eared bats.

Considered an endangered species in B.C., the Townsend's bats have a small body, a bulbous nose, and yes, huge ears.

Craig calls them "rabbit-like." To most, they might seem more creepy than cuddly. But Angela Jones has come to love and respect all 10 of her batty roommates.

Caretaker of the Little Magic Theatre House the last four years, Jones also lives in the building.

With the bats. "When I moved here, I was told there were bats living inside, but that didn't bother me," she says.

The bats are not house-trained, but that's not as big a problem as one might think, adds Jones. "They are pretty tidy," she insists. "They drop their guano more or less in one place, and there's not a lot of it. I just collect it and throw it outside.

"It's good for the garden. Plus the bats eat up all the mosquitoes and bugs."

This year, one of the bats gave birth to a small litter of pups. The sound the mother made during the process was dreadful. "But I think they're really interesting," Jones says.

And friendly? "Not really," she concedes. "They don't seem to pay much attention to me, or to our performances. They just hang above the stage and sleep. Ideally, Jones' bats would be offered new quarters outside of the theatre, in a brand new bat house.

Bats can carry rabies, and are therefore unsuited for direct co-habitation with humans. But they don't seem to want to leave.

The Bat Project decided

The truth about bats

■ Less than one-half of one percent of bats carry rabies, and normally bite only in self-defence.

■ Bats have very sensitive hearing, which they use to navigate in flight. The Townsend bat's ears are about one-half the length of its body.

■ Bats are not blind. Laboratory tests have shown that they can distinguish shapes and colours.

■ Bats usually capture insects by scooping them into their tail or wing membranes, then reaching down and taking them into their mouths.

■ Bats are the only mammals with the ability to fly. Their wings are made of stretched membrane supported by elongated finger bones, the sides of the body, the hind limbs and, in Canadian species, the tail.

How bat sonar works

Bats emit high-frequency sound pulses, which the human ear cannot hear at a rate of 3 to 500 per second.

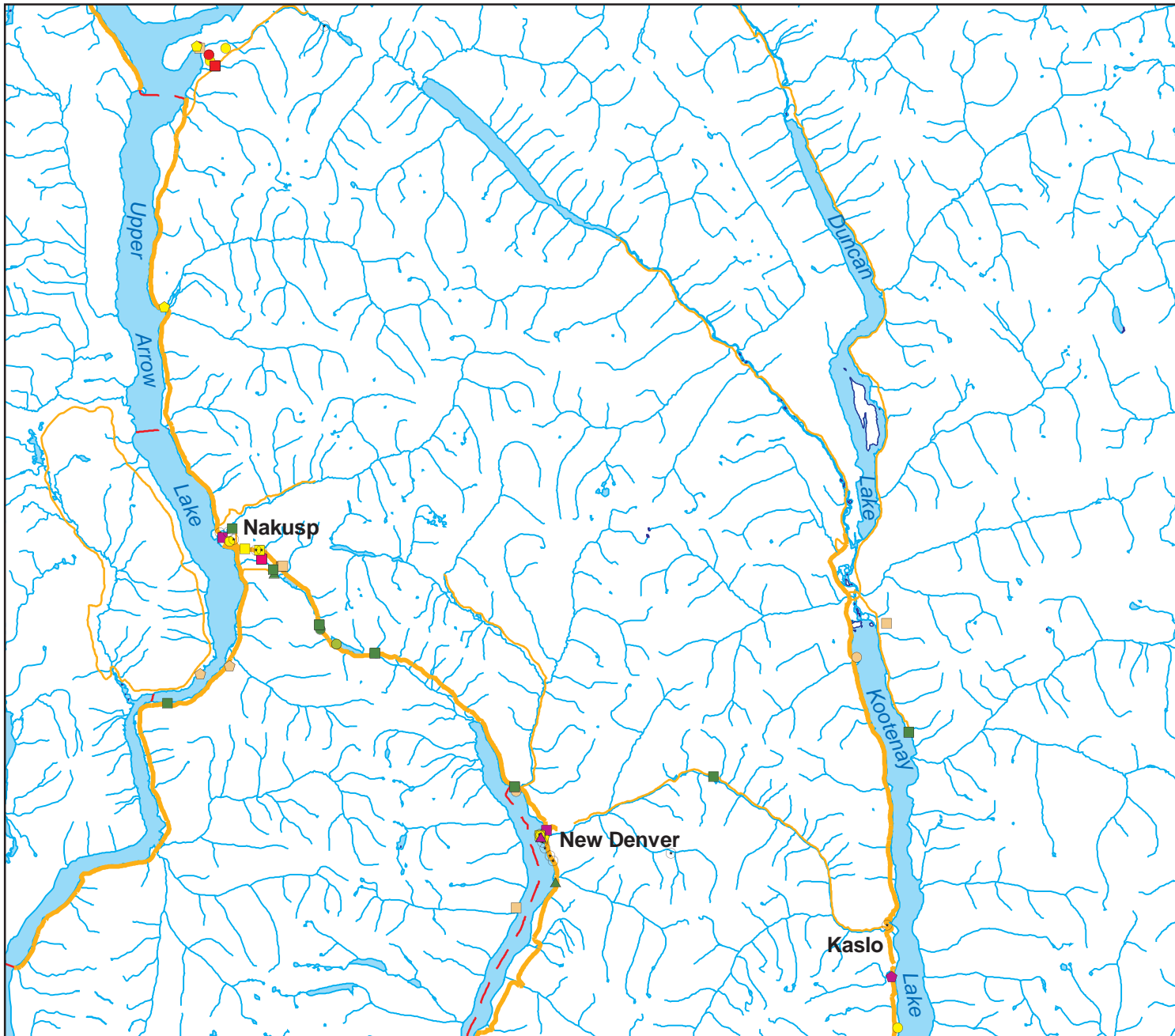
These sound waves reflect off of surfaces to create echoes that the bats use to "see" with their ears.



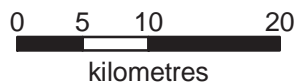
How to build a bat house

A bat house should be installed where it receives plenty of sunshine within the proximity of surface water. Sometimes bats will enter a new house within a few weeks, but it takes them up to two years. Hanging your house before April may increase the chance of early occupancy.

Appendix B: Maps of roost site locations, 2004 & 2005.



Kootenay Community Bat Project - Bat Observations 2004 & 2005



UTM zone 11, NAD 83



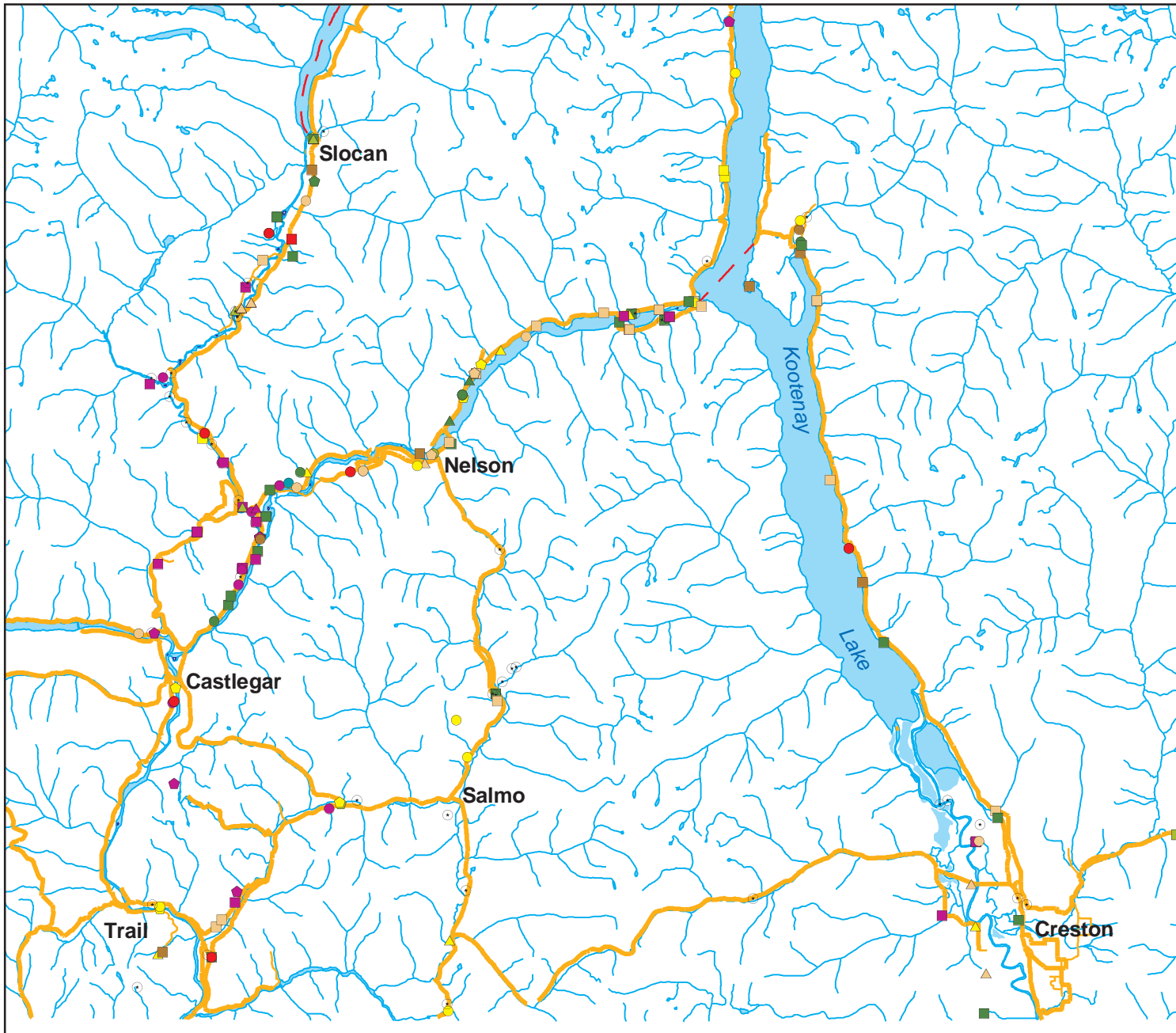
Bat Species

- Big Brown Bat
Eptesicus fuscus
- California Myotis
Myotis californicus
- Little Brown Myotis
Myotis lucifugus
- Long-legged Myotis
Myotis volans

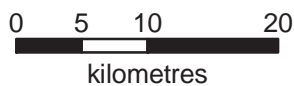
- Silver-haired Bat
Lasiorycteris noctivagans
- Townsend's Big-eared Bat
Corynorhinus townsendii
- Western Long-eared Myotis
Myotis evotis
- Yuma Myotis
Myotis yumanensis
- Unidentified Myotis
Myotis sp.
- Unidentified Bat

Roost Type

- Day roost
- Maternity roost
- ◆ Night roost
- ▲ Incidental Sighting
- No Bats Observed



Kootenay Community Bat Project - Bat Observations 2004 & 2005



UTM zone 11, NAD 83



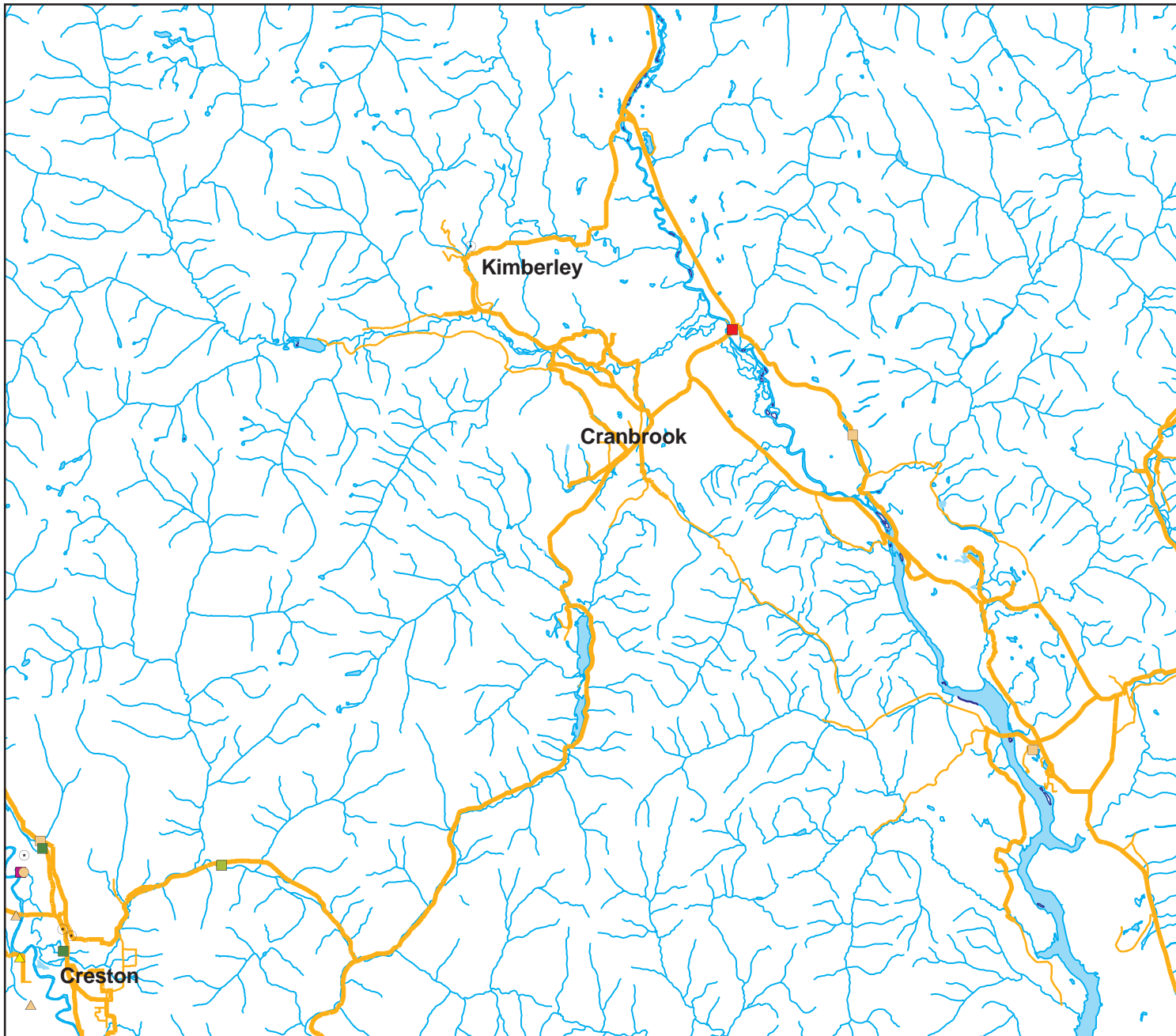
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Kootenay Community Bat Project - Bat Observations 2004 & 2005

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kilometres

UTM zone 11, NAD 83



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