

# The incidental capture of bats to Douglas-fir beetle funnel traps

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## Project Goals

- Encourage stewardship and education on the ecological services of bats provided to the forest industry
- Collect data on incidental bat captures, providing information on bats and their prey
- Provide solutions to prevent incidental bat



## Bats Attracted to Beetle Traps

- Long-eared bats (*Myotis evotis*) were found dead and alive
- In 2018, 4 bats were trapped in 15 weeks
- In 2019, 3 bats were trapped in 13 weeks
- Most bats were found from mid-July to mid-August
- Bats were found in traps in recent cutblocks, 50-100 m from the timber edge
- Bats are unable to escape the trap because of the smooth surfaces and shape



## Douglas-fir Beetle Funnel Traps

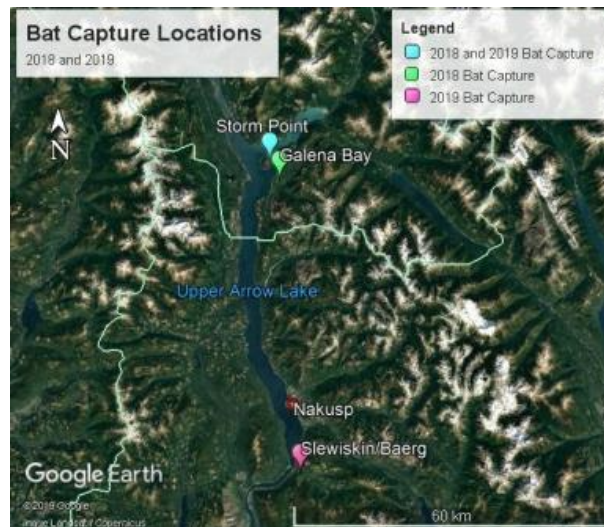
- Monitor Douglas-fir beetle (*Dendroctonus pseudotsugae*) populations in the Selkirk Resource District
- Combined effort between forest licensees and provincial government
- Pheromone-baited funnel traps collect beetles during beetle flight period (early May to late August)
- Beetles are collected in the trap, killed by insecticide, and retrieved weekly for analysis
- Traps are removed at the end of the beetle flight

## Efforts to Prevent Trapping Bats

- Wire mesh placed over the bottom funnel of the trap to prevent bats from entering the collection cup
- Poles covered in wire mesh to act as ladders so bats can climb out of collection cups
- Enclose the whole funnel trap in fine-gauge wire mesh so bats can't enter the trap system but beetles will not be impeded

## Data Collection and Reporting

- Multiple bat captures within a trapping grid collected over time can be uploaded to the B.C. Conservation Data Centre, Wildlife Incidental Observation Form (WIOF).
- Additional project fields within the WIOF should include if possible:
  - Number of pheromone traps
  - Pheromone lures used
  - Time period monitored
  - Insect trapping data
  - Location of traps with non-captures
- This would allow quantification of capture effort (% capture) and inspection of the timing of bat trapping and insect peaks



An Excel template can be obtained from [SPI\\_Mail@gov.bc.ca](mailto:SPI_Mail@gov.bc.ca)

<https://a100.gov.bc.ca/pub/wiof/locationForm.do>