



DEVELOPMENT TITLE: *Retrieval of bat acoustic and microclimate data loggers and opportunistic collection of bat DNA samples from caves within Nahanni National Park Reserve.*

PROPONENT:

Organization Name: Wildlife Conservation Society Canada (WCS Canada)

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PROPOSED DEVELOPMENT DATES: July 8 - July 17, 2019

DEVELOPMENT DESCRIPTION:

In 2016, Parks Canada deployed bat roost loggers and microclimate data loggers in caves within Nahanni National Park Reserve (NNPR) to increase understanding of bat species diversity (including species at risk), bat over-wintering activity, and climatic conditions of hibernacula within the park reserve. Due to the technical nature of the caves where the loggers were deployed, and the sensitive species that inhabit them, Parks Canada requires outside expertise to assist with the logger retrievals. Parks Canada has chosen to partner with WCS Canada to accomplish this work as the researchers affiliated with WCS Canada's Bat Caver Program (<http://www.batcaver.org/>) possess the caving abilities (i.e., experience with technical, high angle caving and enclosed spaces), familiarity with caves within NNPR, and bat knowledge required to successfully retrieve the loggers while ensuring that sensitive bat cave habitat (including critical habitat for two species of endangered bats) is not impacted by logger extraction activities.

Proposed Activities

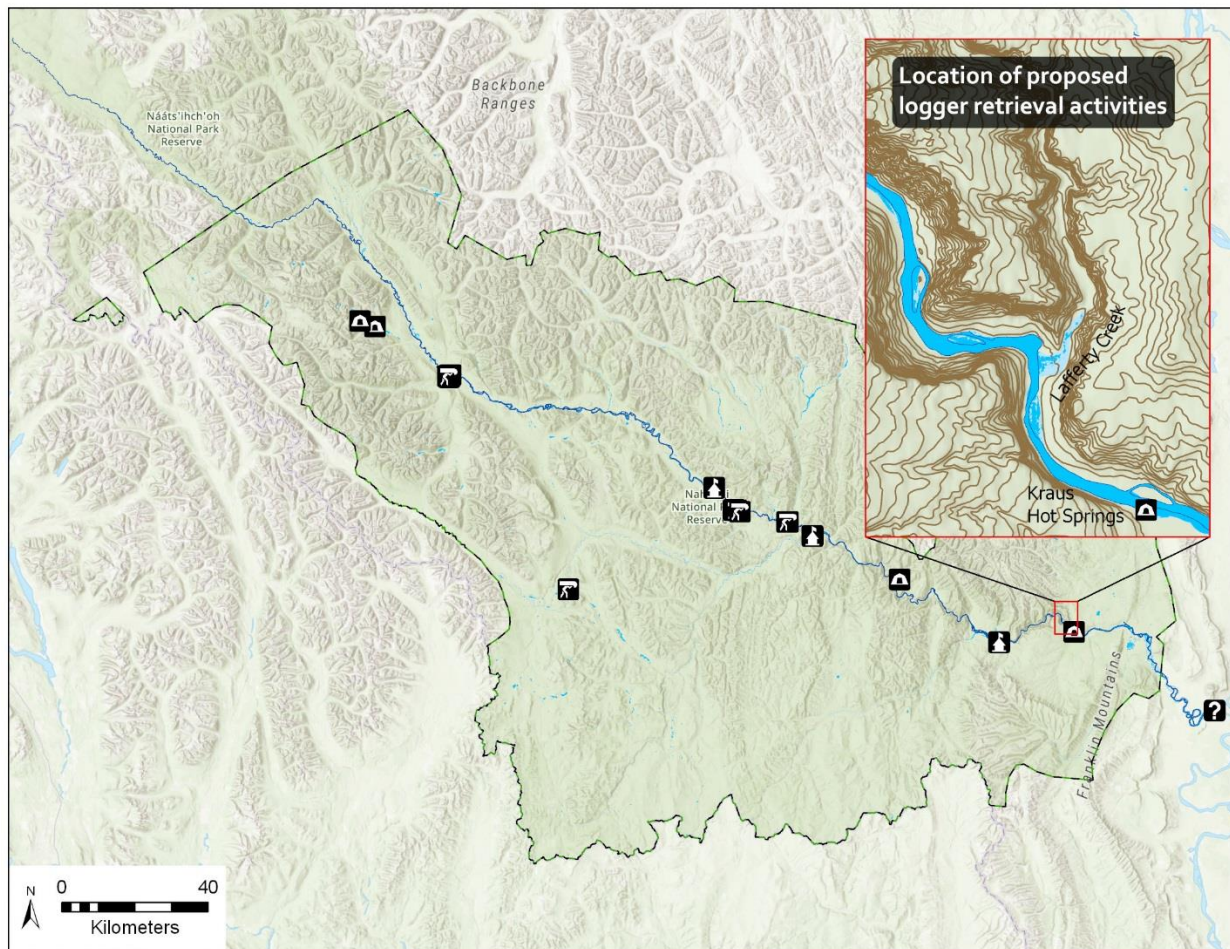
Bat Caver researchers are proposing to spend a maximum of 10 days in NNPR to retrieve the roost loggers and microclimate data loggers that were deployed in 2016 in the following 8 caves near Lafferty Creek and Kraus Hot Springs on the South Nahanni River: Grotte Claudette, Trou Jean, Grotte Louise, Grotte Mickey, Grotte Andree, Grotte Valerie, Cave 93B, and Frost Pocket Cave (see Figure 1). During fieldwork, Bat Caver researchers will opportunistically collect bat carcass and guano samples from the cave sites to help confirm the bat use and species diversity in the area. Parks Canada staff will accompany the Bat Caver researchers for the duration of fieldwork within NNPR. Proposed access to the cave sites is by jet boat, which will be operated by NNPR staff, and by hiking.

INDIGENOUS ENGAGEMENT TO DATE:

The proposed activities have been approved by the Nahᓃᓴ Dehé Consensus Team.



Figure 1: Location of proposed logger retrieval activities within NNPR



Mitigations

Bat Caver researchers will adhere to the mitigations described in “*Parks Canada Standards for Managing Bats in Protected Heritage Areas*”, and the “*Canadian National White-nose Syndrome Decontamination Protocol for entering bat hibernacula*” (see attachments).