## College of New Caledonia

## Bat Habitat Enhancement in Disturbed Forest Landscapes

Research Forest

## **Project Summary**



Little brown Myotis (*Myotis lucifugus*). Image couresty of Parks Canada Illustration ©Sheri Amsel

**INTRODUCTION**: Among the 19 species of bats found in Canada, the province of British Columbia is home to 16 species alone, 8 of which do not occur elsewhere in the country. Considered an ecosystem indicator, bat populations worldwide are in decline, facing threats including habitat loss from deforestation, mass mortality events due to wind turbines, disease and predation. As the concern for dwindling bat populations becomes increasingly prevalent, the College

of New Caledonia's (CNC) Research Forest has decided to implement a new bat habitat enhancement project to begin in spring 2020. Fifteen modified, three-chambered bat houses, built by a local craftsman, Lenard Sanders, are to be installed in six Research Forest Units (pending site suitability) located north of Prince George to enhance and provide habitat for local bat species in landscapes heavily altered by forest harvesting.

**METHODS**: All bat houses will be installed as per the guidelines established by the Community Bat Projects of BC. All bat house will be installed:

- In areas with maximum sun exposure (south-facing aspect)
- Within 400m of waterbody or stream

 On poles or stub trees at least 10 feet high equipped with plastic or metal guards to deter and reduce predators

All houses installed will be registered with the national bat program and updated when necessary. Two bat houses will also be equipped with Hobo® MX2202 temperature/light Bluetooth data loggers to ensure temperature suitability. All bat houses installed are to be monitored semi-regularly for bat use. Upon confirmed uptake, the following data may be obtained:

- Species
- health/condition
- Demographic use (adults, nursing females etc)

Remote cameras may also be installed near the bat house landing strip to monitor use, activity and potential predation events. Additional bat houses may be installed in areas in which bats are prevalent. Minimal disturbance of bats by CNC staff is required. As there is a high disease transmission risk associated among bats, all staff must have proper personal protective equipment (PPE) when handling deceased bats, or guano. All data associated with bats is to be documented, including mortality. All bat houses with occupancy must be cleaned in late fall once all the bats have vacated.



One of fifteen constructed bat houses to be installed within the CNC Research Forest. Uschenko 2020.