Alberta Wilderness Association
"Defending Wild Alberta through Awareness and Action"

April 4, 2024

Species at Risk Public Registry Office
Environment and Climate Change Canada
351 St. Joseph Blvd - 21st Floor
Gatineau, QC K1A 0H3
By email: SARAregistry@ec.gc.ca

RE: Proposed listing of Eastern Red Bat, Hoary Bat and Silver-haired Bat under SARA

To whom it may concern,

Alberta Wilderness Association (AWA) appreciates the opportunity to provide comments for the proposed listing of three migratory bat species - eastern red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*) and silver-haired bat (*Lasionycteris noctivagans*) - under Schedule 1 of the *Species at Risk Act* (SARA). Given current population estimates and future predicted declines, AWA strongly supports the listing of these three species as 'Endangered' and encourages ECCC to swiftly determine and designate their critical habitat.

Founded in 1965, AWA strives to help Albertans understand the intrinsic values that wildlife and wilderness provide and encourage communities to participate in conservation initiatives that will ensure a legacy for future generations. With over 7,000 members and supporters in Alberta and across Canada, AWA is dedicated to conserving Alberta's wilderness and wildlife, advocating for conservation strategies that protect Canada's biodiversity. Protection of bat populations and their habitat is integral to AWA's vision of an ecologically representative network of protected areas throughout Alberta.

Bats play a crucial role in ecosystem health, particularly in regulating insect populations. Eastern red bats, hoary bats and silver-haired bats are insectivore species, consuming thousands of insects each night. In the United States, bats were estimated to be worth $3.7 to $53 billion a year to the agricultural industry through their control of pests[1]. Migratory bats also serve as connections between distant and diverse habitats, moving energy and nutrients across North America. The loss of these migratory bats could impact ecosystem processes and nutrient cycling.

Following are AWA's points of emphasis regarding the proposed listing:

- **Declines are estimated at greater than 50 percent.** As indicated in the COSEWIC assessment, while there remains uncertainty around the exact rate of decline, "declines in carcass counts at wind energy facilities suggest declines far in excess of 50% over three generations" for all three species. The calculation is complicated as total population numbers are unknown, and carcass counts focus on populations which pass in proximity to wind turbines.
- **The overall threat assessment for these species is "High" to "Very High", and an additional decline of 50 to 90 percent is expected over the next 50 years.** The development of wind

[1] Boyles, J. G., Cryan, P. M., McCracken, G. F., & Kunz, T. H. (2011). Economic importance of bats in agriculture. Science, 332(6025), 41-42.

generators continues to present a major threat, with an average 500,000 bats killed per year across Canada and the United States. Wind turbine development is expected to increase as countries transition to clean energy. In addition, the loss of hunting and roosting habitat, declines in insect abundance caused by continued pesticide use and other pollution are further pressures on the vulnerable population.

- **Migratory bat habitat is not well understood and in decline.** The COSEWIC assessment notes that both known migratory bat habitat (deciduous and coniferous forests, low-elevation meadows, grasslands, wetlands, etc.) and habitat of their insect prey are in decline. Determination and designation of critical habitat for roosting, foraging, and migrating serves the dual purpose of protecting migratory bats and identifying areas where other threats like wind development would more severely impact these species and should be limited.

- **There remain many gaps in knowledge around effective mitigation and conservation of this species.** Models indicate that, even with curtailment of wind turbines at low speed – currently one of the most effective ways to reduce bat mortality – populations are still expected to experience a greater than 50 percent decline. As stated in the COSEWIC Assessment, "extinction risk would not be eliminated; it would simply be delayed." Rapid and thorough investigation for bat populations, mortality risk and mitigation measures is needed for a chance to prevent the extirpation and extinction of these species.

Thank you for considering these comments. We look forward to hearing your decision.

Sincerely,

ALBERTA WILDERNESS ASSOCIATION

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Conservation Specialist

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