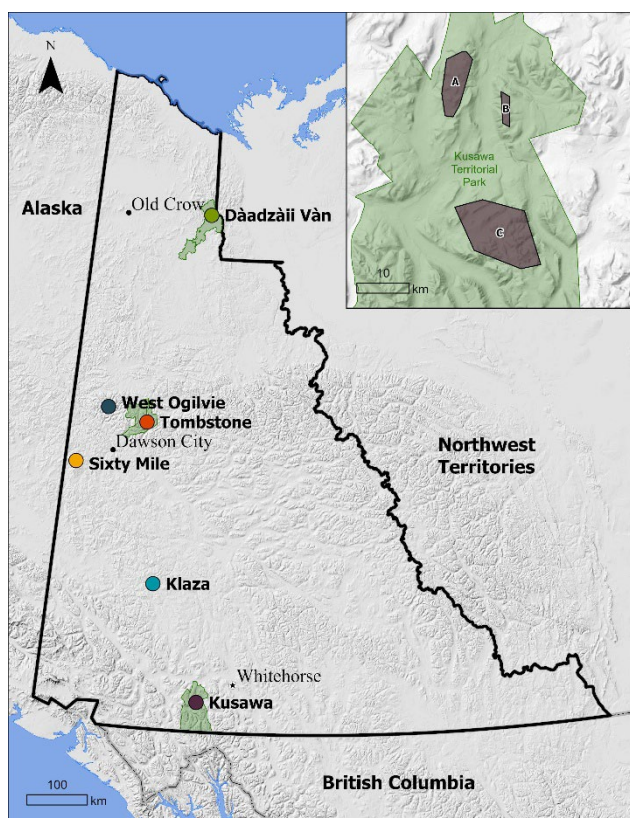




Location of six areas surveyed for Collared Pika (*Ochotona collaris*) in the Yukon, during 2009–2025. Inset shows the three blocks (sub-areas) surveyed in Kusawa Territorial Park.

Data at a glance

Survey areas:

Kusawa Territorial Park

Tombstone Territorial Park

Dàadzàii Vàn Territorial Park

Klaza

Sixty Mile

West Ogilvie

Survey timeline: 2009 to 2025

Survey effort: 2,091 surveys at 506 unique sites

Overall trend: Decline

Results of the 2009-2025 Field Surveys for Collared Pika (*Ochotona collaris*) in the Yukon

Project background

Collared Pikas (*Ochotona collaris*) are cold-adapted alpine mammals that persisted through the Last Glacial Maximum in the Yukon and Alaska, and are highly sensitive to the effects of climate change. As such, they are listed as Special Concern under Canada's Species at Risk Act, with climate change identified as the primary threat. Approximately 50% of the global population occurs in Canada, primarily in the Yukon, making the territory a global steward of the species.

As per the 2023 Management Plan for Collared Pika in Canada, continued monitoring is recommended to detect changes in population numbers, especially along the southern and northern edges of their range, as well as to inform COSEWIC status assessments, and guide conservation planning for Collared Pikas under ongoing climate change.

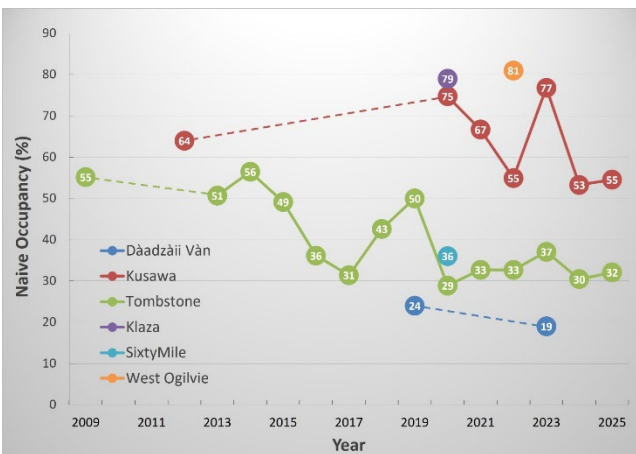
Project overview & objectives

The design of our monitoring program included three territorial parks that span the south-to-north distribution of the species: Kusawa (southern edge), Tombstone (range centre), and Dàadzàii Vàn (northern edge).

Between 2009 and 2025, we implemented a non-invasive monitoring program across the Yukon, with the aims of (a) tracking changes in the presence of Pika at sites visited every year (known as site occupancy) and (b) determining whether habitat characteristics influence pika occupancy over space and time.



Photographs of a vigilant Collared Pika (*Ochotona collaris*; top panel); biologists searching and listening for pika or their sign (e.g., haypiles) in ideal talus habitat (bottom right panel); and a fresh haypile (bottom left panel).



Site occupancy rates for sites repeatedly surveyed for Collared Pikas (*Ochotona collaris*) at three territorial parks between 2009 and 2025. Values inside the bubbles are the occupancy rate (% of sites surveyed with pika detected) for each year. Dashed lines represent estimated trend between years when surveys between consecutive years did not occur.

Key findings

Overall, we conducted 2,091 surveys at 506 unique sites distributed among six survey areas, with repeated surveys at long-term monitoring locations in Tombstone, Kusawa, and Dàadzàii Vàn territorial parks, and single year surveys at three other areas in central Yukon.

Site occupancy by Collared Pikas varied a lot between years, both within and among study areas. This highlights the importance of tracking populations over many years to see if year-to-year changes are signs of a long-term decline. At Tombstone Territorial Park, site occupancy declined significantly over time, with a consistent decrease of approximately 1.6 to 1.7% per year, although the decline appears to have stabilized at a low level in recent years, with Pika detected at ~30% of sites surveyed. At Kusawa Territorial Park, site occupancy showed high variation between years and a slight decline in the population over a shorter monitoring period (2020 to 2025). However, further years of surveying are needed to determine long-term changes in the population.

Overall, our results provide an assessment of changes in site occupancy by Collared Pikas and offer early evidence of declines in Tombstone and Kusawa territorial parks.