

# RARE CARNIVORES OF THE HIGH CASCADES

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PHOTO BY GRETCHEN KAY STUART



PHOTO BY KAYLA SHIVELY

**CASCADES CARNIVORE PROJECT**

## Our Mission

We study and protect carnivores at risk of extinction in mountain ecosystems through innovative science, strong partnerships and local community action.



# Partners



# RETURN OF WOLVERINES TO THE SOUTH CASCADES



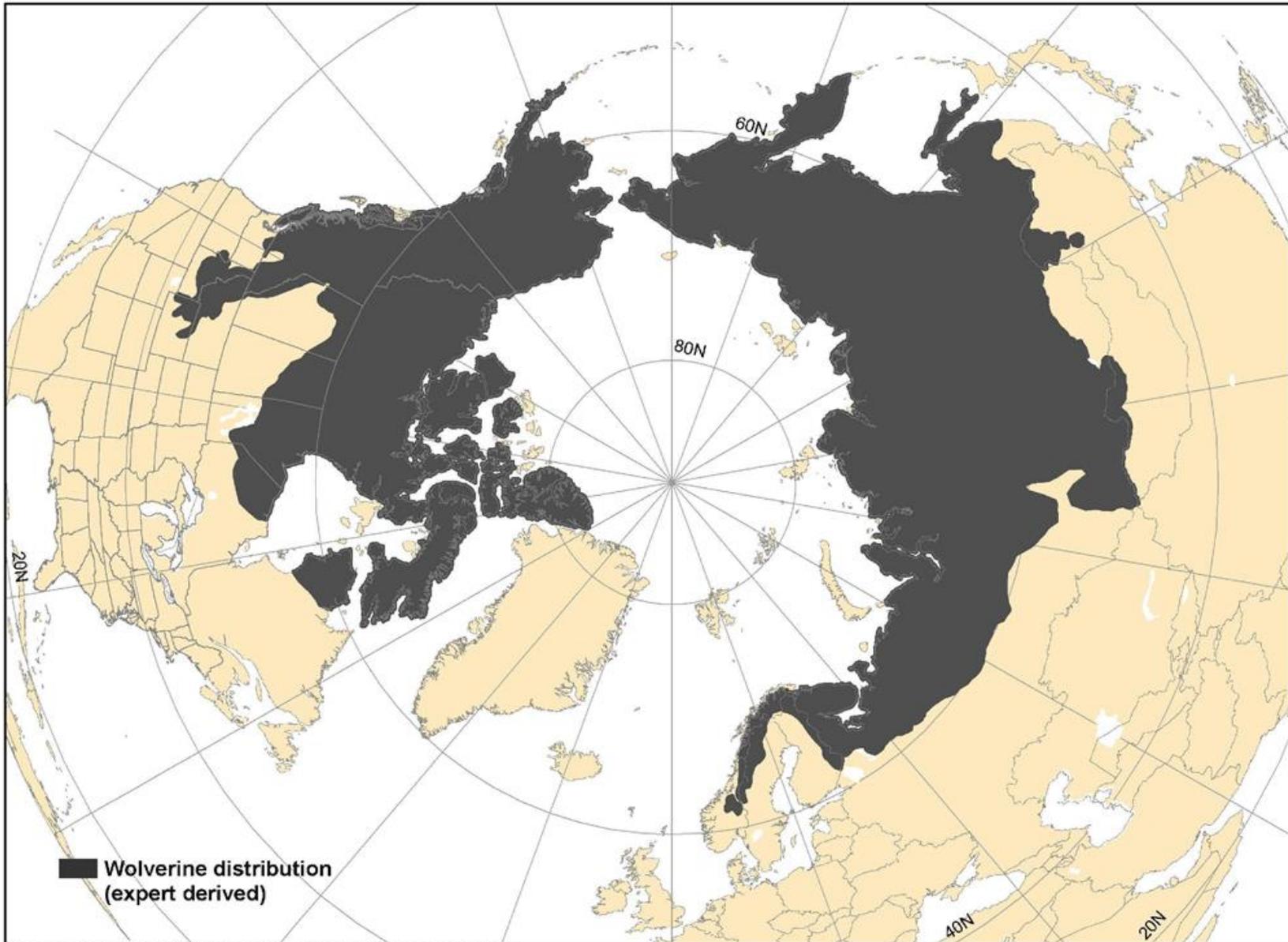
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PHOTOGRAPHER  
KAYLA  
DREHER



Cuddeback Digital Camera 8/25/06 8:11 AM YN Wildlife

# Worldwide Distribution of the Wolverine



Data used in the development of this map were gleaned from the published sources listed below.

Boundaries were reviewed and refined by participants at the 1st International Wolverine Symposium, Jokkmokk Sweden, 2005. The Wolverine Foundation, Inc. offers this map as a representation based on the best information available but makes no claims as to its accuracy.

Additional Sources:

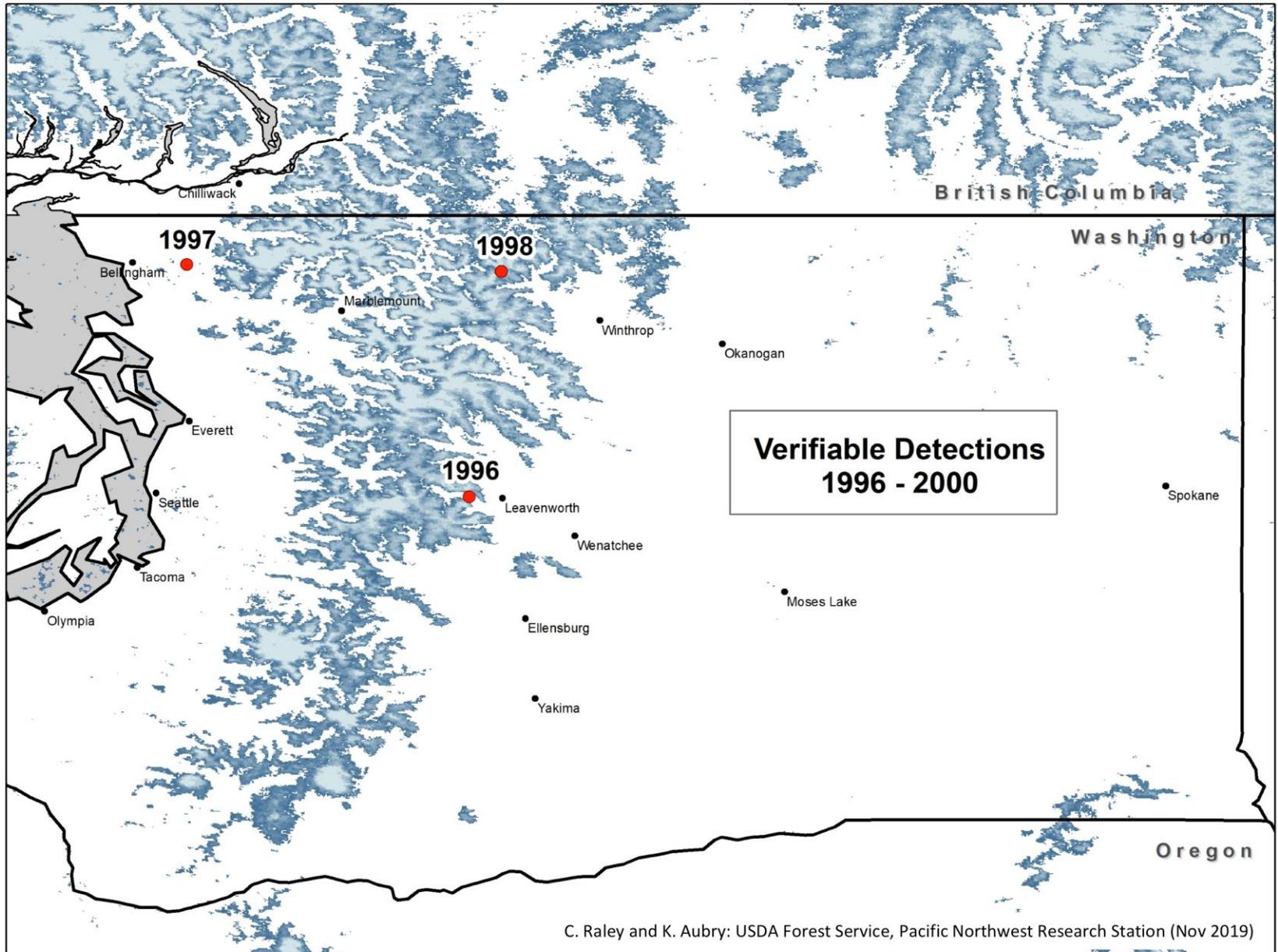
Novikov, G. A. 1962. Carnivorous mammals of the fauna of the USSR. Academy of Sciences of the USSR, Israel Program for Scientific T  
Landa, A., M. Linden, and L. Kojola. 2000. Action plan for the conservation of wolverines (*Gulo gulo*) in Europe. Convention on the conse  
Renzhu, P. 2000. The Chinese Wolverine. Science Books [Published in Chinese with English Summary]. 191pp.

Aubry, K. B., K. S. McKelvey, and J. P. Copeland. 2007. Distribution and broadscale habitat relations of the wolverine in the contiguous United States.

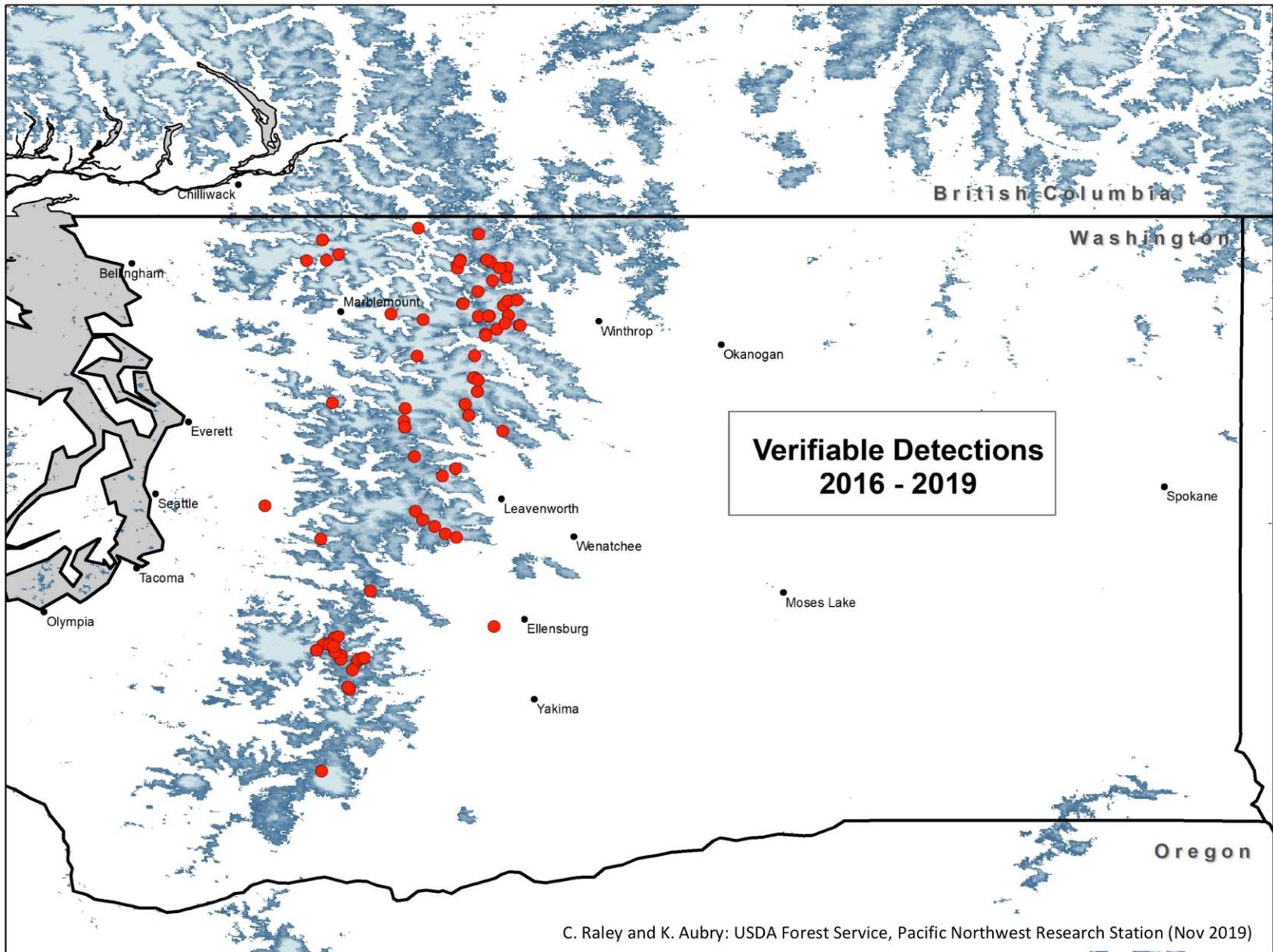
From The Wolverine Foundation



# CHANGES IN WOLVERINE OCCURRENCE

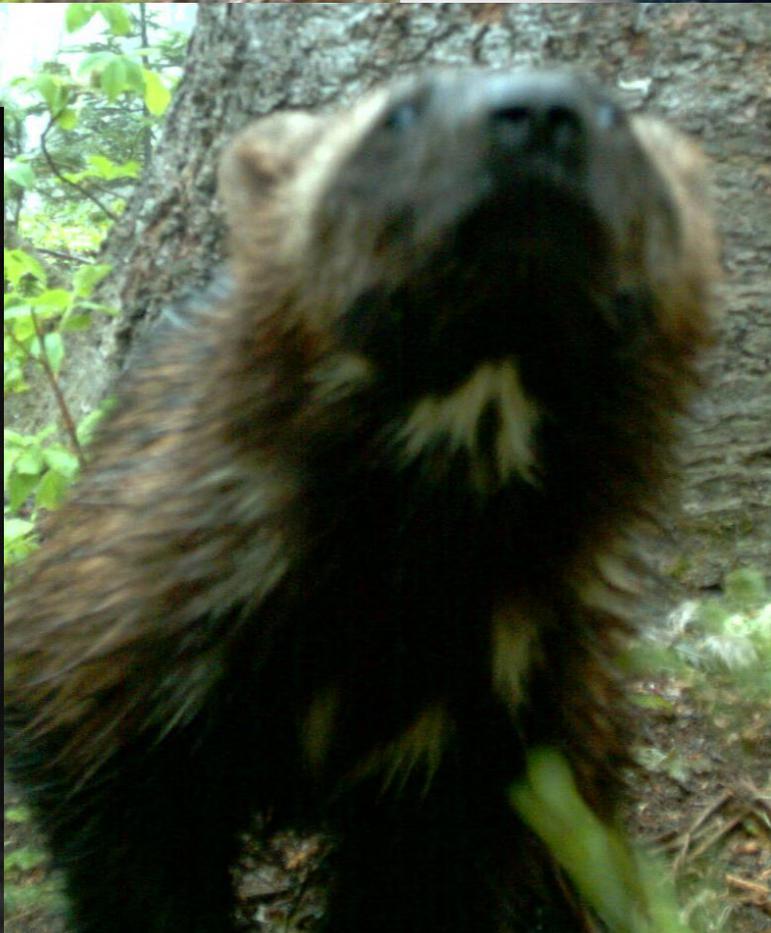


# CHANGES IN WOLVERINE OCCURRENCE

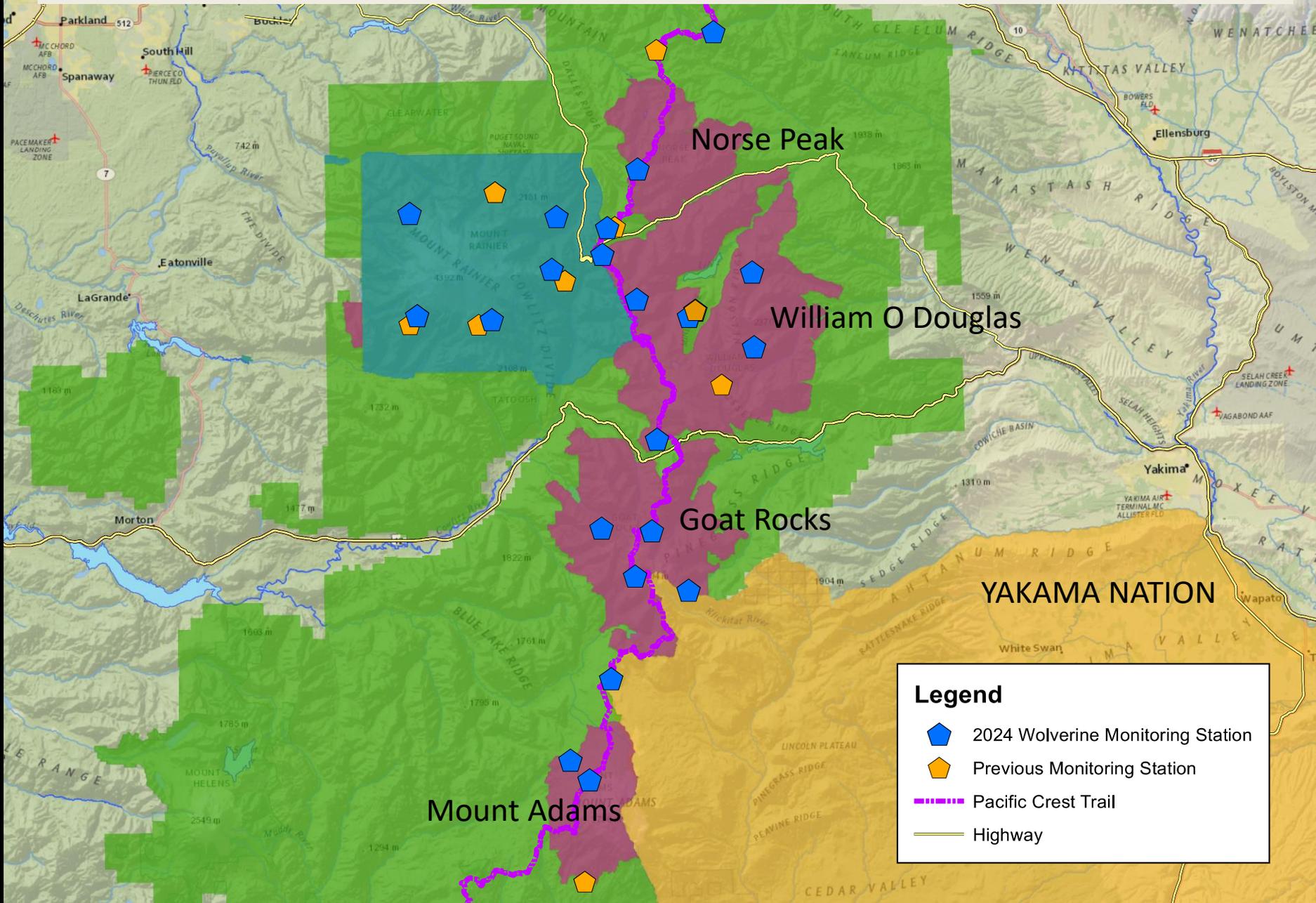


C. Raley and K. Aubry: USDA Forest Service, Pacific Northwest Research Station (Nov 2019)





# SOUTH CASCADES WOLVERINE STUDY



# WOLVERINE INTEGRATED MONITORING STATION

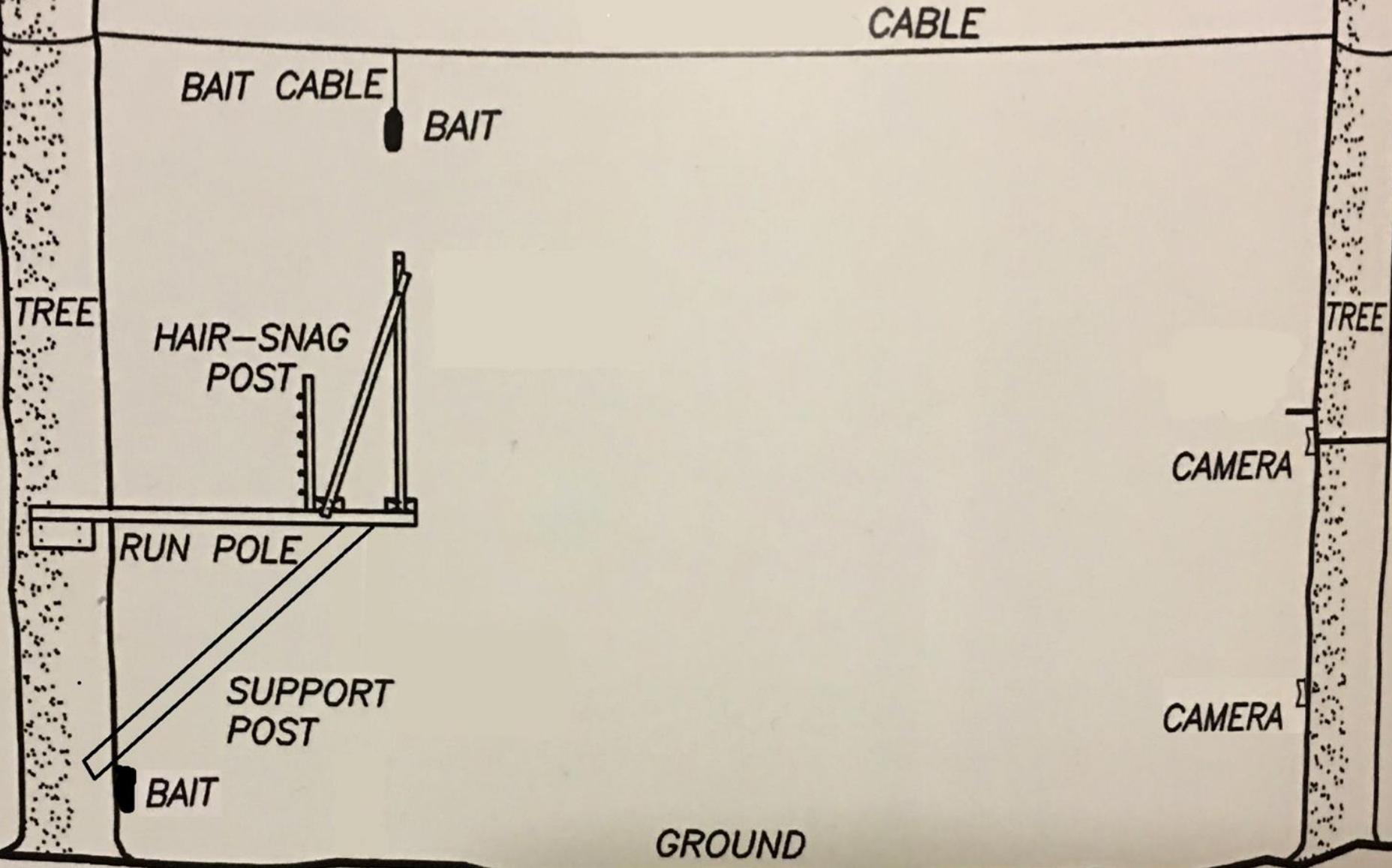






PHOTO: KAYLA SHIVELY



MAY 3, 2018

15S

05-03-2018 09



SEPTEMBER 25, 2018









24.57 inHg - 27°C 06/28/2023 09:08AM CCP MR23



24.57 inHg - 26°C ● 06/28/2023 09:06AM CCP MR23

Cascade red fox  
(*Vulpes vulpes cascadensis*)



# MOUNTAIN FOXES

CASCADE RED FOX



PHOTO: ANTHONY CARADO

SIERRA  
NEVADA  
RED FOX



PHOTO: YOSEMITE NP

ROCKY MOUNTAIN RED FOX



PHOTO: PATRICK CROSS

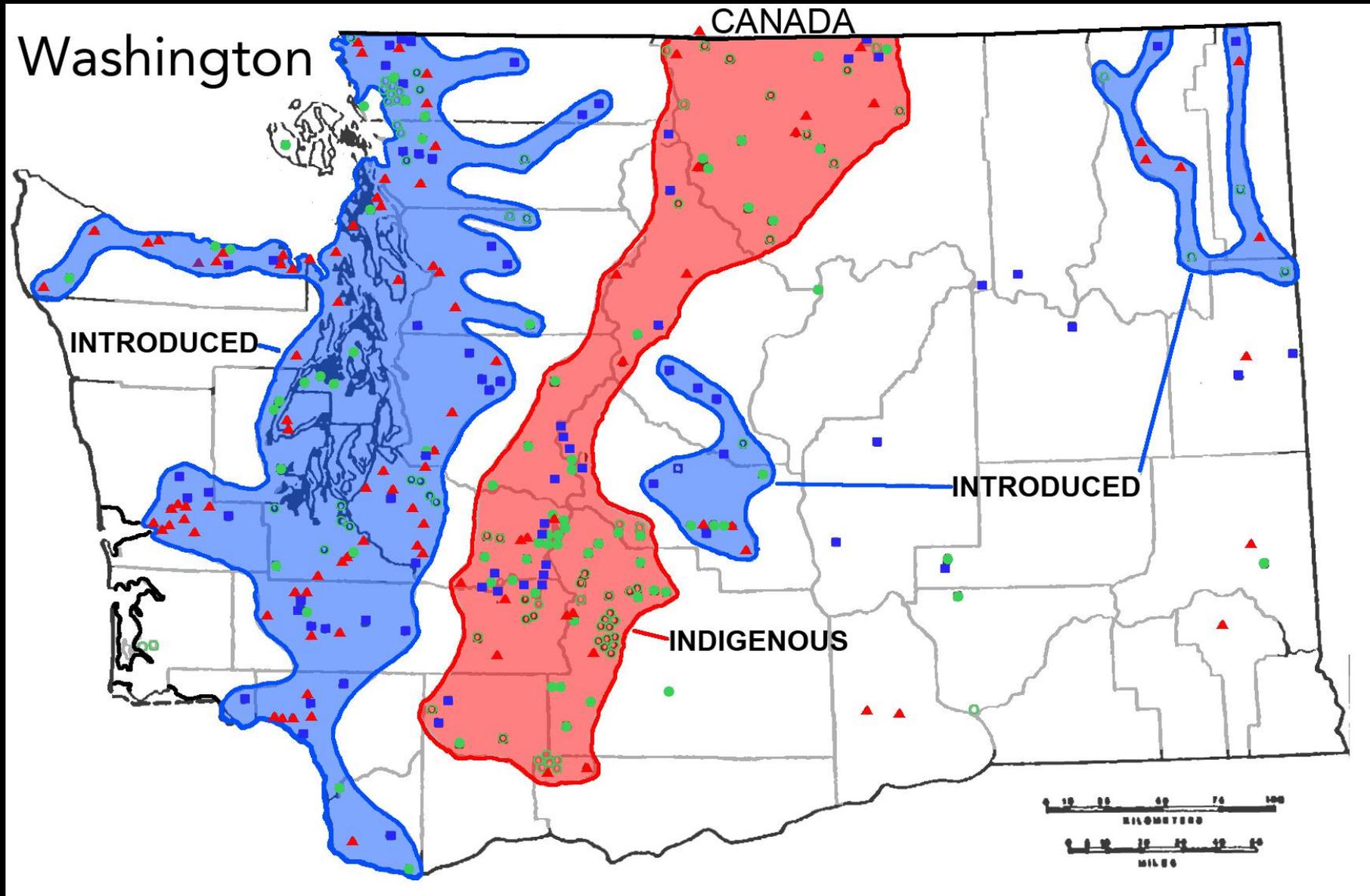
# Illinoian Ice Age: 300,000 to 130,000 ybp



# Wisconsin Ice Age: 110,000 to 12,000 ybp

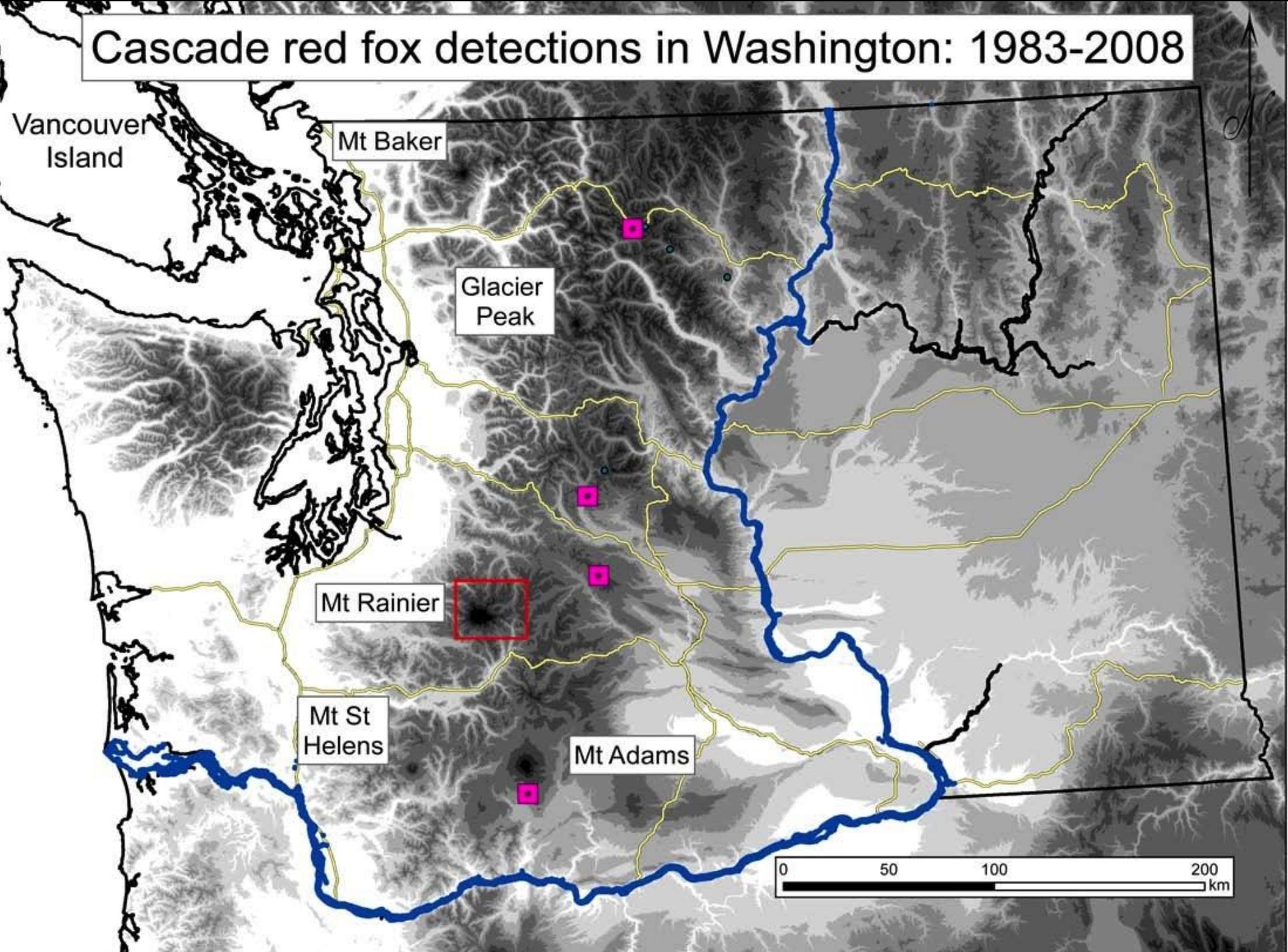






Red fox distribution: 1890s – 1983: Trapper record (red triangle), museum specimen (green circle), sighting report (blue square). Hollow symbols are pre-1970. From Aubry (1984)

# Cascade red fox detections in Washington: 1983-2008



[Environment](#) | [Local News](#)

# WA lists the Cascade red fox as endangered

Oct. 11, 2022 at 9:00 am | *Updated Oct. 11, 2022 at 5:27 pm*





# KEY PREY RESOURCES AND NICHE PARTITIONING WITH COMPETITORS



PHOTO BY DUNCAN MULLEN



PHOTO BY BOB RAE



PHOTO BY ANTONIA PARRISH



# Scat Collection & Analysis

- Intensively surveyed along trails and at passes or other natural wildlife corridors
- Scats are also archived for long-term preservation and future individual ID
- Samples sent for DNA metabarcoding
- Diet profiles created
  - DNA reads of prey species

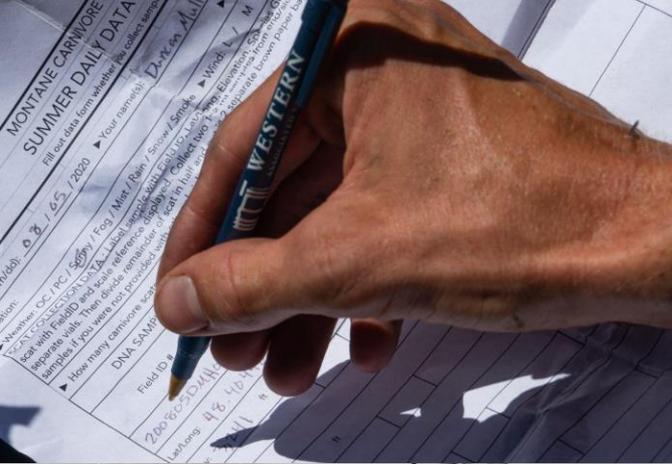




PHOTO: GRETCHEN KAY STUART

# CASCADES CARNIVORE PROJECT

## JOIN US!

# Thank you!

FOR YOUR  
SUPPORT



**DONATE!**

[cascadescarnivore.org](http://cascadescarnivore.org)

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SHIVELY