

Research points to previously unknown pine marten diversity

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The elusive American pine marten, a little-studied member of the weasel family, might be more diverse than originally thought, according to new research published by a University of Montana professor.

A study by Natalie Dawson, research professor in UM's Department of Ecosystem and Conservation Sciences and director of UM's Wilderness Institute, suggests that the forests of northwest North America may harbor not one, but two distinct species of the mammal. The research, published in a recent edition of the *Journal of Mammology*, also points to the presence of hybrid marten populations in Montana's Rocky Mountains, where the two species converge.

Dawson, whose work builds on previous research conducted in the 1950s by late UM Professor Philip Wright, examined hundreds of DNA samples to differentiate between the separate populations. She said her findings are exciting because hybridization in different species of mammals is still relatively new, especially in natural ecosystems.

"This is one of the few cases where there has been long-term hybridization between species that still maintain their distinctiveness in their respective localities," she said. "This research also illustrates the importance of historical climate change as a driver for biological diversity in the mountains and landscapes of Montana, as well as throughout the rest of North America."

Currently, Dawson is furthering her research by examining historical

pine marten skulls housed in UM's Philip L. Wright Zoological Museum in hopes of understanding the morphological, or physical, characteristic differences between the two [species](#).

The study, "Historical biogeography sets the foundation for contemporary conservation of martens (genus *Martes*) in northwestern North America," is available online at [academic.oup.com/jmammal/article... 827815/Historical-bi](https://academic.oup.com/jmammal/article/.../827815/Historical-bi)

Provided by University of Montana

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