
****REDISTRIBUTION, HUMAN SHIELDS AND LOSS OF MIGRATORY BEHAVIOR IN THE CROWN OF THE CONTINENT**

Wesley Sarmiento*, Wildlife Biology Program, The University of Montana, Missoula

Mark Biel, Natural Resources, Glacier National Park, West Glacier, MT

Joel Berger, Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, and Wildlife Conservation Society, Bronx, New York

Redistribution of wildlife resulting from human alteration of environments is of growing management concern in North America. Habituation, which can coincide with redistribution, seems to be particularly prevalent in national park systems because millions of visitors interact with wildlife. For example, Glacier National Park in northwestern Montana, USA, receives approximately 2.2 million visitors over the months of June, July, and August each year—with the majority of their activity concentrated along the Going-to-Sun Road. The Going-to-Sun Road corridor is well-known for its habituated mountain goats (*Oreamnos americanus*). Habituation, however, was identified as a priority management concern in Glacier National Park. Successful management actions require a clear understanding of the causes and consequences of complex ecological issues such as habituation. Through experimental and observation effort this project has identified human-created predation refugia, or human shields, where mountain goats are escaping predation through interaction with people. Reductions in predation risk have resulted in mountain goat redistribution and changes in behavior. We found mountain goats using sites with human shields were less vigilant and were found in smaller groups. Furthermore, goats in areas with human-mediated predation refuge had reduced use cliff security terrain. Additionally, mountain goats that exploited people as shields from predators showed a weakened response to an experimentally presented predator model. Reductions in predator risk appear to be the primary driver of mountain goat redistribution and the use of humans as buffers from predation has led to close contact between people and wildlife, resulting in compromised safety and altered ecological interactions.