

****Effects of Timber Harvest and Wildfire Disturbance on Grizzly Bear Space Use in the Northern Continental Divide Ecosystem**

Milan A. Vinks*, Montana Fish, Wildlife and Parks; Montana Cooperative Wildlife Research Unit, Wildlife Biology Program, University of Montana, Missoula

Sarah N. Sells, Montana Cooperative Wildlife Research Unit, Wildlife Biology Program, University of Montana, Missoula

Cecily M. Costello, Montana Fish, Wildlife and Parks, Kalispell

Lori L. Roberts, Montana Fish, Wildlife and Parks, Kalispell

*Indicates Presenter

**Indicates Student Presentation

Timber harvest and wildfire disturbance can have long-term effects on wildlife habitat. Studies have demonstrated both positive and negative effects of forest disturbance on grizzly bears. Balancing grizzly bear conservation and managing forest disturbances is a complex and dynamic challenge for land managers. Research on the effects of timber harvest and wildfire disturbance on grizzly bears can aid in developing strategies that balance species conservation and forest management objectives. Using GPS data from grizzly bears in Montana's Northern Continental Divide Ecosystem (NCDE), we aim to understand how grizzly bears respond to forest disturbance. We hypothesize that grizzly bears use forest disturbance but that factors such as access to foods, security, and cover influence grizzly bear space use in and around disturbance patches. Our long-term dataset (24 years) for collared grizzly bears and the NCDE's detailed records of timber harvests and wildfires provide a unique opportunity to study these effects for a range of disturbance conditions.