

*Sault Tribe Wildlife Program Works with Hiawatha National Forest to Restore Aagask (Sharp-tailed Grouse) Habitat with Ishkode (Fire)*

For millennia, *ishkode* (fire) has served as an important actor in ecosystem management for Anishinaabe people. *Ishkode* ignited by lightning and employed by Anishinaabek played an important role in shaping and re-shaping the ecological communities of the Great Lakes. *Ishkode* intentionally set by Anishinaabe people is used to improve harvest opportunities, for forest succession management, to support culturally-important communities, and contributes to the maintenance of openlands, such as those important to *aagask* (sharp-tailed grouse).

Over the past century, suitable habitat for *aagask* (sharp-tailed grouse) has decreased as grasslands were converted to croplands, as a result of livestock grazing and haying, and as a result of the adoption of widespread fire suppression.

To mitigate the negative and long-lasting effects of fire suppression, climate change, and development, it is important for wildlife and forest management to consider implications for the suite of grouse native to the Great Lakes, including *aagask* (sharp-tailed grouse). Restoration of *ishkode* to the landscape is one means to restore natural disturbance regimes that have the potential to benefit grouse populations, whether through creation or restoration of openlands for *aagask*, through succession management of forests to benefit *bine* (ruffed grouse), by playing a role in decreasing food or roost tree mortality as a result of disease, or by playing a critical role in the maintenance of jack pine-dominated forests for *mashkodese* (spruce grouse).

Currently, the best strategy for employing prescribed fire to benefit the three grouse species in the east zone of the Hiawatha National Forest is unknown. Sault Tribe member and assessment biologist, Danielle Fegan, is currently working to address these questions as part of her dissertation research through the Center for Cooperative Ecological Resilience, a partnership between Sault Tribe's Wildlife Program and Michigan State University. Through Fegan's dissertation work and position with Sault Tribe's Wildlife Program, she aims to address this knowledge gap by better understanding the relationship between grouse and *ishkode* (fire), by relating occupancy of grouse to forest composition and fire history, and by contributing to the development of an inter-agency *ishkode* stewardship plan that seeks to employ structured decision making principles to optimize prescribed fire alternatives for this suite of grouse species in the eastern Upper Peninsula. The Sault Tribe Wildlife Program and staff from the east zone of the Hiawatha National Forest are wrapping up the first iteration of the inter-agency *ishkode* stewardship plan for the Raco, MI area after a year-long collaborative process, with plans to put *ishkode* on the ground in the coming years.