** Variation in Habitat Use of Fauna in Relation to Beaver Dams and Water Availability in Small Prairie Streams in Montana (Poster)

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Human activities and climate change continue to impact wildlife and ecosystem integrity in eastern Montana. In the state's semi-arid prairie ecosystems, the North American beaver (*Castor canadensis*) may play an important role in buffering against drought. By impounding water, beaver dams can increase the resilience of water-limited ecosystems and promote species richness for both aquatic and terrestrial species. However, there is still limited understanding regarding the influence of beaver dams on species richness and composition in these semi-arid, prairie ecosystems. Through a camera-trap study, we sought to examine how wildlife species richness and composition in eastern Montana is associated with changes in water availability during the summer. We used 48 cameras that recorded nightly wildlife activity across beaver-dammed and unimpounded sites on four small, prairie streams (7 PM to 7 AM, June through September 2025). Presence or absence of water was determined from photos, which showed drying events occurred at both beaver-dammed and unimpounded sites. To date we have identified 14 mammal species and 5 groups of bird species, including waterfowl and songbirds. For our next steps, we will examine how beaver influences species richness and composition associated with prairie streams. This project will provide useful insights into how wildlife use beaver-dammed and undammed sections of small streams as well as how that use changes throughout the summer in response to changing water conditions in eastern Montana prairies.