Monitoring Animal Use of Invasive Himalayan Blackberry (*Rubus armeniacus*) on Joint Base Lewis-McChord

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Himalayan blackberry (*Rubus armeniacus*) is widely invasive in the Pacific Northwest and extremely difficult to manage due to its persistent and aggressive spread. Its influence on community structure and animal diversity is largely unexplored, and the intensive treatment methods used to manage this species, such as herbicide, manual removal, and introducing grazers to prevent further spread, are often difficult and costly. Investigation of the interactions between animals and the blackberry will contribute to learning how management techniques impact wildlife and how invasive species shape communities. It was hypothesized that small mammals and birds utilize the invasive blackberry for foraging opportunities and shelter. An observational study was carried out over ten weeks in wilderness managed by Joint Base Lewis-McChord (JBLM), setting up several trail cameras in two blackberry sites and one Oregon grape site (Johnson Marsh, Chambers Creek, and Muck Creek) to compare activity and species richness between the invasive bramble and a native shrub with similar coverage. JBLM encompasses diverse and critical ecosystems, creating a unique opportunity to observe wildlife affected by both disturbances from military operations and the diligent maintenance and monitoring by other environmental programs. The blackberry sites exhibited significantly more activity and species richness than the Oregon grape site. Most of the species recorded at blackberry sites are common in suburban backyards, such as the Steller's jay, black-capped chickadee, and eastern grey squirrel. Developing an understanding of what animals are impacted by invasive blackberry will help inform conservation efforts, especially with regard to management techniques that affect the habitat of vulnerable or declining species.