

## **Abstract**

This thesis focuses on the Matcharak Peninsula site (AMR-00196 or the MPS), located on the east side of Lake Matcharak in the upper Noatak River valley of Alaska's central Brooks Range. The MPS contains a substantial and well-preserved collection of faunal remains that date to between  $6,190 \pm 35$  and  $3,780 \pm 35$   $^{14}\text{C}$  years BP along with side-notched projectile points and microblade technology. Radiometric dating and stone tools attribute the collection to the Northern Archaic tradition, thus the MPS is unique in that it yielded the largest and most well preserved collection of faunal remains reported from a Northern Archaic context to date. This project analyzed both faunal and lithic materials to identify a more robust suite of human behaviors, better assess post-depositional processes, and delineate between cultural components. This thesis first focuses on intrasite activities and site function within a larger system of land use, indicating that the MPS functioned as a short-term hunting camp and late-stage hunting tool repair location occupied during warm months. A small number of individual caribou dominate the faunal assemblage, but a narrow range of other Brooks Range prey species are also present including Dall's sheep and locally available fish and Arctic ground squirrel. This thesis then develops broader interpretations about the Northern Archaic tradition to investigate technological, mobility, and subsistence strategies by mid-Holocene Brooks Range hunter-gatherers. The inhabitants were logistically mobile and organized special task groups when resources were leaner, and came together in aggregated communities to engage in communal hunts when caribou were reliably abundant. Lithic raw material use at the MPS reflects a broader Northern Archaic trend of favoring more exotic obsidian for maintainable tool components and locally available cherts for more heavily engineered implements such as inset-microblade weapons. Finally, this thesis explores side-notched and inset-microblade projectile weapon armatures in the context of hunting strategies at the MPS and other sites, inferring bifacially tipped projectiles were more effective at medium-range while inset-microblades were designed for long-range strategies.