

Mountain Sheep and Human Predation:  
Forager Adaptations in the Salmon River Mountains

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Faunal remains from 10VY31, a winter settlement in the Salmon River Mountains of Idaho, indicate that sheep were the primary winter food source. Although sheep and deer exist in the immediate environment in approximately equal numbers, sheep outnumber deer 2:1 in the MNI count and 85% of identifiable bone is sheep. Our fundamental hypothesis is that the prehistoric inhabitants insured winter survival through specialized predation on sheep. Sheep have predator avoidance strategies which are effective for canids and felids, but which leave them vulnerable to an intelligent, tool-using, social predator--human beings. An initial model suggests the local herd of 125 sheep would support 15 to 20 people for a single winter, but two or three successive seasons would deplete the herd to a point where encounter frequencies and kill frequencies would be too low to insure sufficient food. We propose that a small human group preyed on several sheep herds, exploiting one for a single season and not hunting it again until population recovery was sufficient to sustain the group through another winter. This specialization requires multiple sheep herds, small human populations, low population density, and winter population dispersal.