Wolverine Food Habits and Foraging Strategies in Glacier National Park, Montana

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From 2003-2007 we captured and instrumented 28 wolverines (Gulo gulo) in Glacier National Park to investigate reproduction and recruitment. We collected 189 scat samples at reproductive den, forage and rendezvous sites, and documented 90 prey species through observation and prey remains found at similar sites. Seasonal scat analysis provided evidence of differences in prey species consumed during winter ($n = 170$), summer ($n = 19$), and reproductive den ($n = 103$) periods. Ungulates were the most frequently observed prey found in all scats (71%; $N=135$), with Cervid remains being observed most often (37%; $n = 70$).
Hibernating rodents (ground squirrels and marmots) (36%; \( n = 68 \)) were the next most utilized prey, with the third most documented prey being mice and voles (31%; \( n = 56 \)). Vegetation (72%; \( n = 169 \)), soil material (31%; \( n = 59 \)), and bone (90%; \( n = 171 \)) were also found in scats. Seasonal importance of prey was documented, with ungulates being the most observed prey in winter scats (75%; \( n = 128 \)) and den period scats (79%; \( n = 81 \)), and hibernating rodents being most observed in summer scats (47%; \( n = 9 \)). A similar condition was found with analysis of all prey remains (\( n = 90 \)); ungulates were consumed most often (69%; \( n = 63 \)), with hibernating rodents as the second most documented prey (12%; \( n = 11 \)). Wolverines exhibited seasonal dietary shifts in that ungulates were consumed most frequently during winter (77%; \( n = 55 \)) and the den period (78%; \( n = 17 \)), with hibernating rodents the most frequent prey documented in summer (50%; \( n = 9 \)). Wolverine foraging strategies, including searching tree wells, fishing, decapitation, and food caching are also discussed.