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NEALE, JENNIFER C.C., B.N. SACKS, M.M. JAEGER, and D.R. McCULLOUGH. Comparative use of space by sympatric bobcats and coyotes in Mendocino County, California. University of California at Berkeley, Department of Environmental Science, Policy and Management, Berkeley, CA 94720 USA (JCCN, BNS, DRM); USDA-APHIS-ADC Denver Wildlife Research Center, Berkeley, CA 94720 USA (MMJ).

Several studies of sympatric carnivores have demonstrated resource partitioning based on body-size to prey-size ratios and consequent diet and habitat specializations. Few studies have investigated resource partitioning for carnivores of the same size class. We investigated space-use patterns of instrumented bobcats (*Lynx rufus*) and coyotes (*Canis latrans*) on and around the Hopland Research and Extension Center in Mendocino County, California, from June 1994 to July 1995. The study area included > 3,000 ha of oak woodland, pasture, and chaparral slopes. Approximately 6,000 telemetry and visual locations, as well as habitat association and activity information, were obtained on 19 individuals. Preliminary results include (1) spatial overlap between neighboring bobcats and coyotes was extensive; (2) neighboring coyotes showed little spatial overlap; (3) coyotes exhibited greater home range fidelity than bobcats; (4) bobcats made greater seasonal shifts in home range than did coyotes, and consequently occupied larger annual home ranges; (5) bobcats tended to use drainages and areas of heavy cover, such as chaparral slopes and rock outcrops; and (6) coyotes were more variable in their use of different habitats. Seasonal differences in activity, use of overlap areas, and habitat will be discussed in light of further analyses.