Hunting Dynamics, Condition Estimates and Movements of Black Bears Hunted with Hounds in Virginia

by

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(Abstract)

Effort and success of Virginia's bear houndsmen were determined through field and mail surveys, and hunter diaries. The number of houndsmen per chase ranged from 5 to 12, hounds ranged from 6 to 11, and each chase lasted 2 to 6 hours. Second chases of the day lasted 2 to 3 hours and 3 to 10 hounds were used. Fifty-three to 74% of all first attempts resulted in a chase and 24% to 44% of these bears treed. A 2nd chase occurred in 11% to 96% of attempts and 9% to 50% of bears treed. Five to 17% of the 1st bears and 13% to 21% of 2nd bears were harvested. Field surveys found virtually no differences in hunting effort or success between seasons, study areas, and years. The hunter diary appears to be the most reliable means of sampling hunter effort and success.

The applicability of Schroeder's physical condition estimate (PCR) was tested on data from Maine's black bear population. Bears exposed to poor hard mast had lower PCR's than bears exposed to good hard mast ($\underline{P} = 0.009$). PCR and body weights of adult female black bears in Virginia exposed to hunting did not differ from those not hunted ($\underline{P} = 0.09$). Annual adult female, adult male, and cub survival and reproductive rates in the hunted population were numerically similar to those in the non hunted populations.

Five radio collared females were experimentally chased by hounds. The chases,on average, lasted 0.9 hours and 43% of bears treed. The average total home range for 3 of the bears was 17.8 km^2. The area used by 2 of the 3 bears pursued by hounds did not differ from their total home range ($\underline{P} \geq 0.05$) based on the MRPP test. The area covered by 3 of the 5 pursued bears was 5.6%, 11.8%, and 79.7% of their home range.

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