

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 ( $P = 0.009$ ). PCR and body weights of adult female black bears in Virginia exposed to hunting did not differ from those not hunted ( $P = 0.09$ ). 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<sup>2</sup>. The area used by 2 of the 3 bears pursued by hounds did not differ from their total home range ( $P \geq 0.05$ ) 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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## TABLE OF CONTENTS

Abstract.....	ii
Acknowledgments.....	iii
Introduction.....	1
SW study area.....	3
NW study area.....	4
Literature Cited.....	7
<b>Chapter 1-Dynamics of hunting bears with hounds.....</b>	<b>9</b>
Methods.....	11
Results.....	12
Hunter effort-field surveys.....	12
Hunter success-field surveys.....	13
Characteristics of harvested bears from field surveys.....	27
1995 Bear Hunter Survey.....	27
1996 Bear Hunter Diary.....	28
Comparison of 3 Survey Methods.....	38
Discussion.....	39
Field Surveys.....	39
Harvest Rates.....	39
1996 Hunter Diary.....	40
Response Rates.....	40
Recommendations.....	41
Literature Cited.....	43
<b>Chapter 2-Physical condition estimates for hunted &amp; non-hunted black bear populations in Virginia.....</b>	<b>45</b>
Methods.....	47
Results.....	48
Test of Schroeder's Physical Condition Ratio.....	48
Physical Condition Estimates of hunted vs. non-hunted bears.....	56
Survival Rates.....	56
Reproductive Rates.....	56
Discussion.....	56
Test of Schroeder's Physical Condition Ratio.....	57
Physical Condition Estimates of hunted vs. non-hunted bears.....	57
Survival Rates.....	58
Reproductive Rates.....	58
Physical Condition Estimates of pursued bears.....	59
Conclusions-condition of study bears.....	59
Literature Cited.....	61

<b>Chapter 3-Short-term movements of black bears pursued by hounds.....</b>	<b>64</b>
Methods.....	65
Results.....	66
Characteristics of chases on radio located bears.....	66
Home range estimation.....	66
Home range overlap and stability.....	72
Movements.....	72
Discussion.....	72
Characteristics of experimental chases.....	72
Home range estimation.....	72
Movements in relation to home range.....	73
Literature Cited.....	74
<b>Appendix</b>	
<b>Appendix 1.</b> General description of hunting bears with hounds.....	78
<b>Appendix 2.</b> Data sheet for field surveys during the bear-dog training season.....	80
<b>Appendix 3.</b> Data sheet for field surveys during the general bear season.....	82
<b>Appendix 4.</b> The 1995 bear hunter survey form.....	84
<b>Appendix 5.</b> Daily form taken from the 1996 bear hunter diary.....	86
<b>Vita.....</b>	<b>88</b>

## LIST OF TABLES

Table 1. Comparison of hunting effort between the bear-dog training season (chase) and the bear firearm season (kill) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1995.....	14
Table 2. Comparison of hunting effort during the bear-dog training season (chase) and the bear firearm season (kill) between the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1995.....	15
Table 3. Comparison of hunting effort between the bear-dog training season (chase) and the bear firearm season (kill) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1996.....	16
Table 4. Comparison of hunting effort during the bear-dog training season and the bear firearm season between the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1996.....	17
Table 5. Comparison of hunting effort, 1995 versus 1996, during the bear-dog training season (chase) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia.....	18
Table 6. Comparison of hunting effort, 1995 versus 1996, during the bear firearm season (kill) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia.....	19
Table 7. Comparison of hunting success between the bear-dog training season (chase) and the bear firearm season (kill) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1995.....	20
Table 8. Comparison of hunting success during the bear-dog training season (chase) and the bear firearm season (kill) between the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1995.....	21
Table 9. Comparison of hunting success between the bear-dog training season (chase) and the bear firearm season (kill) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1996.....	22
Table 10. Comparison of hunting success during the bear-dog training season and the bear firearm season between the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia, 1996.....	23
Table 11. Comparison of hunting success, 1995 versus 1996, during the bear-dog training season (chase) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia.....	24

Table 12. Comparison of hunting success, 1995 versus 1996, during the bear firearm season (kill) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia.....	25
Table 13. Characteristics of bears harvested during the bear firearm season (kill) in the southwest and northwest study areas of the Cooperative Alleghany Bear Study, Virginia,1995 and 1996.....	26
Table 14. Summary of the results of the bear-dog hunter survey in Virginia, 1995.....	29
Table 15. Number of bears killed by each group surveyed in the bear-dog hunter survey in Virginia,1995.....	30
Table 16. Summary of hunting effort during the bear firearm season from the 1996-97 Bear Hunter Diary, Cooperative Alleghany Bear Study, Virginia, 1996.....	31
Table 17. Summary of hunting success during the bear firearm season from the 1996-97 Bear Hunter Diary, Cooperative Alleghany Bear Study, Virginia, 1996.....	32
Table 18. Characteristics of bears that were treed during the 1996 bear firearm season, Cooperative Alleghany Bear Study, Virginia. <sup>2</sup> (data from the 1996-97 Bear Hunter Diary).....	33
Table 19. Distribution of hunting effort throughout the bear firearm season from the 1996-97 Bear Hunter Diary, Cooperative Alleghany Bear Study, Virginia, 1996.....	34
Table 20. Distribution of hunting pressure by county during the bear firearm season from the 1996-97 Bear Hunter Diary, Cooperative Alleghany Bear Study, Virginia, 1996.....	35
Table 21. Comparison of hunting effort between field surveys, mail surveys, and bear hunter diary, Virginia, 1995 and 1996.....	36
Table 22. Comparison of hunting success between field surveys, mail surveys, and bear hunter diary, Virginia, 1995 and 1996.....	37
Table 23. A comparison of Schroeder's (1987) physical condition estimate and body weight for adult female bears in poor fall mast crop years (even years) and high fall mast crop years (odd years) in Spectacle Pond study area, Maine,1982-91.....	49
Table 24. A comparison of physical condition ratios of black bears in hunted (SW & NW study areas of CABS) and nonhunted populations (Great Dismal Swamp and Shenandoah National Park) of Virginia.....	50
Table 25. A comparison of physical condition ratios of black bears intentionally pursued by hounds (SW study area of CABS) and nonhunted populations (Great Dismal Swamp and Shenandoah National Park) of Virginia.....	51



Table 26. A comparison of body weights of black bears in hunted (NW study area of CABS) and nonhunted regions (Great Dismal Swamp and Shenandoah National Park) of Virginia.....	52
Table 27. A comparison of body weights of adult female black bears intentionally pursued by hounds (SW study area of CABS) and adult females from nonhunted populations (Great Dismal Swamp and Shenandoah National Park) of Virginia.....	53
Table 28. Survival rates of black bears in hunted (NW study area of CABS) and nonhunted regions (Great Dismal Swamp and Shenandoah National Park) of Virginia...	54
Table 29. Reproductive rates of black bears in hunted (NW study area of CABS) and nonhunted regions (Great Dismal Swamp and Shenandoah National Park) of Virginia....	55
Table 30. Summary of hunting effort of experimentally pursued adult female black bears in the southwest study area of the Cooperative Alleghany Bear Study, Virginia, 1996.....	67
Table 31. Summary of hunting success of experimentally pursued adult female black bears in the southwest study area of the Cooperative Alleghany Bear Study, Virginia, 1996.....	68
Table 32. Comparison of home range estimates and movements of experimentally pursued adult female black bears in the SW study area of CABS, Virginia, 1996.....	69
Table 33. Home range stability of 3 experimentally pursued adult female black bears in the SW study area of the Cooperative Alleghany Bear Study, Virginia, 1996.....	70

## LIST OF FIGURES

<b>Figure 1.</b> Southwest study area of the Cooperative Alleghany Bear Study, VA.....	4
<b>Figure 2.</b> Northwest and Southwest study areas of the Cooperative Alleghany Bear Study, VA.....	6
<b>Figure 3.</b> Degree of overlap between the total home ranges of bears S1, S25, and S41 and the area used by these bears during experimental chases, George Washington-Jefferson National Forest, VA 1996. Home range estimated with the bivariate normal ellipse (Jennrich and Turner 1969).....	71