

Trends in White-tailed Deer Hunting Effort and Harvest by Mississippi Resident Hunters (1980–2008)

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Abstract: Self-administered mail questionnaires have been used in Mississippi since 1980 to document resident hunting effort and harvest of game animals. These surveys provide information to biologists and researchers to determine trends in 1) proportion of licensed hunters seeking each game species, 2) number of hunters, 3) total person-days spent afield, 4) average person-days spent afield, 5) total harvest, 6) average seasonal harvest per hunter, 7) average daily harvest per hunter, and 8) percent successful hunters for 13 different game species and feral hog. This poster presentation focuses on hunter effort and harvest estimates for white-tailed deer (*Odocoileus virginianus*) which is the most hunted and economically important species in Mississippi. The proportion of licensed resident hunters who hunted for deer between 1980 and 2008 was variable and ranged from 0.673 to 0.886, peaking during the 1989 hunting season. Similarly, the number of hunters was variable and ranged from 118,897 to 200,067, peaking during the 1987 season. The number of hunters has generally declined since peaking in 1987. Total person-days hunting was variable and ranged from 2,390,619 to 3,603,325, peaking during the 1987 season. Average seasonal person-days deer hunting ranged from 14 to 24 days and has shown a general increase over the reporting period. Total resident harvest for white-tailed deer was variable and ranged from 196,375 to 335,599, peaking during the 1995 season. The average seasonal harvest of deer has ranged from 1.2 to 2.21 deer per hunter over the reporting period, peaking in 2002. Average seasonal harvest has been above 1.5 deer per hunter since the 1990 season. Average daily kill has remained relatively consistent throughout the reporting period ranging from 0.071 and 0.097, peaking during the 1995–1997 seasons. The percent of successful deer hunters has ranged from a low of 49.4% to a high of 79.2%, and has shown a general increase over the reporting period. In summary, fewer hunters are spending more seasonal days hunting and have become more successful at harvesting deer. Nevertheless, the total harvest of deer in Mississippi has steadily decreased since the mid-1990s because of the reduction in total number of deer hunters. These trends provide important information to wildlife agencies to manage and sustain wildlife populations and their habitats, and they provide measures of relative importance to species like white-tailed deer for assessing and prioritizing wildlife management decisions.

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