STATUS OF BOBWHITE HUNTING

he NBCI Hunting Inventory of state agency statewide quail hunting surveys for 2015-16 is a five-year update of data last reported in the 2011 State of the Bobwhite Report (pages 3-5). See that report for background on state surveys, particularly the high frequency of released, pen-raised quail. Comparing the quality of data for the 2011 and 2016 reports, state survey methodology changed relatively little, with continued high variability across states in identification of harvest of wild and released pen-raised quail, residents and non-residents hunters, "youth" and "senior" hunters, landowner hunters, etc. The NBCI report continues to report the gross number of quail hunters, disregarding any distinction between wild and penraised quail, thus providing an index of the potential interest in wild quail hunting.

Results

Seventeen states reported recent annual hunting survey results, based on the following hunting seasons, 2015-16 (GA), 2014-15 (AL, DE, IA, IL, KS, LA, MD, MO, MS, NC, NE, OK, and TX), 2013-14 (SC and VA), and 2012-13 (FL). The estimated number of quail hunters ranged from 240 in Delaware to 43,622 in Kansas (Figure 6). Total number of quail hunters for these 17 states was 222,937, and they spent 1,023,283 days in the field (does not include Oklahoma hunters). Kansas, Oklahoma and Texas combined accounted for 47% of quail hunters. Among NBCI states reporting recent data on statewide quail hunting, the number of quail hunters (hunting wild and/or released pen-raised bobwhites) was by far highest in Kansas, Texas and Oklahoma (20,758-43,622 quail hunters); mid-range, 10,000-17,000 quail hunters, in Alabama, Florida, Georgia, Illinois, Indiana, Missouri, Nebraska and North Carolina; lower, 1,000-9,999 quail hunters, in Iowa, Louisiana, Mississippi, South Carolina and Virginia, and Iowest, <1,000 quail hunters, in Delaware and Maryland.

Comparing the 16 states with data for both 2011 and



Figure 6. Estimated number of quail hunters (pursuing wild or pen-raised quail) in 17 states reporting for the 2015 NBCI Hunting Inventory. For those 17 states that also reported for the 2011 State of the Bobwhite Report, 2011 data are displayed.

2016 (Figure 6; excludes Florida, which only reported for 2016, and Indiana, Kentucky, New Jersey, Ohio, and Pennsylvania, which only reported for 2011), the total number of quail hunters declined 30 percent. Hunters declined in 12 states, did not change in Louisiana, and increased in Alabama, Mississippi and South Carolina, states where hunting of pen-raised quail could be a prominent part of survey results.

A common question is "how many quail hunters are there in the 25 NBCI states?" This was estimated as 357,542 in 2011 for the 21 reporting states (of the 25 NBCI states, Arkansas, Florida, Tennessee and West Virginia seldom collect quail hunting data). Applying the current -30% rate of change to the original estimate for 21 states, NBCI conservatively estimates there are about 249,846 bobwhite hunters. This is a conservative, minimum value, missing information from several states, and often from a large part of the hunting community, e.g., "seniors" and landowners.

Discussion

The continued decline in quail hunting is not surprising based on parallel declines in range-wide bobwhite abundance, and the previous finding that the long-term average annual rate of decline in number of quail hunters was 2,524 (2012 State of the Bobwhite Report, pg. 36). The annual rate of decline for the 2011-2016 reports was 1,143 hunters. This slower rate of the loss of hunters could be the result of many factors, some "positive" (e.g., response by hunters to locally or periodically abundant wild quail abundance, state agency hunting access programs), many "neutral" (e.g., stability by a minimum, persistent, core group of wild quail hunters; increase in pen-raised quail), but mostly unknown factors. Access to private lands for quail hunting is an increasingly common priority of state agencies (e.g., Iowa, Kansas, Nebraska and Missouri access programs), and by extra privileges for youth (e.g., Kansas, Missouri).

A factor in the loss of wild quail hunters is the permanent loss in numbers following major, but temporary, weather-caused reductions in quail abundance. Quail hunting is relatively complicated because of reliance on bird dogs and required shooting skill, diminishing the potential for recruitment. Wild quail hunters who persist increasingly have less competition, and the opportunity to take advantage of the weatherrelated upticks in bobwhite abundance where habitat has been maintained. Because of the complexity of quail hunting, however, resources can lag the opportunity presented by rapidly increasing quail populations. For example, during the 2015-16 hunting season a shortage of bird dogs was common among Texas quail hunting outfitters.

Distribution of quail hunting across the range is highly variable, with bobwhites recreationally extinct in some eastern states. Since the 2011 State of the Bobwhite Report, Pennsylvania joined New Jersey as a state where statewide wild bobwhite hunting surveys are not conducted because of extirpation, or near extirpation of wild bobwhites. Robust hunting of released, pen-raised bobwhites continues in these states.

Despite the reduction in quail hunting across 2011-2016 State of the Bobwhite Reports, persistent hunters recently amassed over 1 million days in the field, and continue to be strong cultural and economic forces in many areas. Further, this year's NBCI Hunting Inventory does not reflect the much improved hunting reported in many areas during the 2015-16 hunting season (e.g., Oklahoma, Texas) as a result of a weatherinduced increase in quail abundance. The NBCI State Conservation Report for Iowa Department of Natural Resources (page 37) indicates hunter numbers and harvest both increased during the 2015-16 hunting season over the previous year, and that the quail harvest was 18% above the 10-year average.

Although the NBCI Hunting Inventory focuses on state-scale data, the foundation of quail hunting is personal experience, and as such can be viewed as three-pronged: 1) habitat, 2) an abundance of wild quail, and 3) a satisfactory experience. Toward improved hunter satisfaction, some states are controlling hunting pressure on select public areas to improve the opportunity to have a satisfactory experience. Quail hunting satisfaction is often defined by bird dogs finding quail, and toward this end, NBCI's Eighth National Quail Symposium features six studies of wild quail hunting using bird dogs, and will provide better understanding of the complexities of this important part of quail conservation.

