

Monitoring North Carolina's Deer Herd



A look at databases and key metrics

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NCWRC Deer Biologist*

NCWRC Goal for Deer Hunting and Management

“use science-based decision making and biologically-sound management principles to assure long-term viability of deer populations at desirable levels of health, herd composition, and density with respect to land cover type and use, hunter satisfaction, and overall social acceptance.”



Biological Objectives

- Density
- Age-structure
- Sex ratio
- Breeding chronology
- Movements
- Disease



Deer Related Databases

- **NCWRC Big-Game Harvest Reporting**
- **NCWRC Hunter Harvest Survey**
- **NCWRC Deer Hunter Observation Survey**
- **NCWRC Biological Deer Data Collection**

*Harvest Trends
&
Herd
Demographics*



Deer Related Databases

- **NCWRC Big-Game Harvest Reporting**
- **NCWRC Hunter Harvest Survey**
- **NCWRC Deer Hunter Observation Survey**
- **NCWRC Biological Deer Data Collection**
- NCWRC Western Mast Survey
- Southeastern Cooperative Wildlife Disease Study
- NCWRC Human-Wildlife Interaction
- NCWRC Depredation Permits
- NC Department of Transportation
- State Farm
- Boone & Crockett / Pope & Young Club
- Wake Co. Wildlife Club

*Harvest Trends
&
Herd
Demographics*

*Condition,
Health, &
Disease*

*Nuisance
& Damage*

*Record Book
Antlers*



1. Big-Game Harvest Reporting



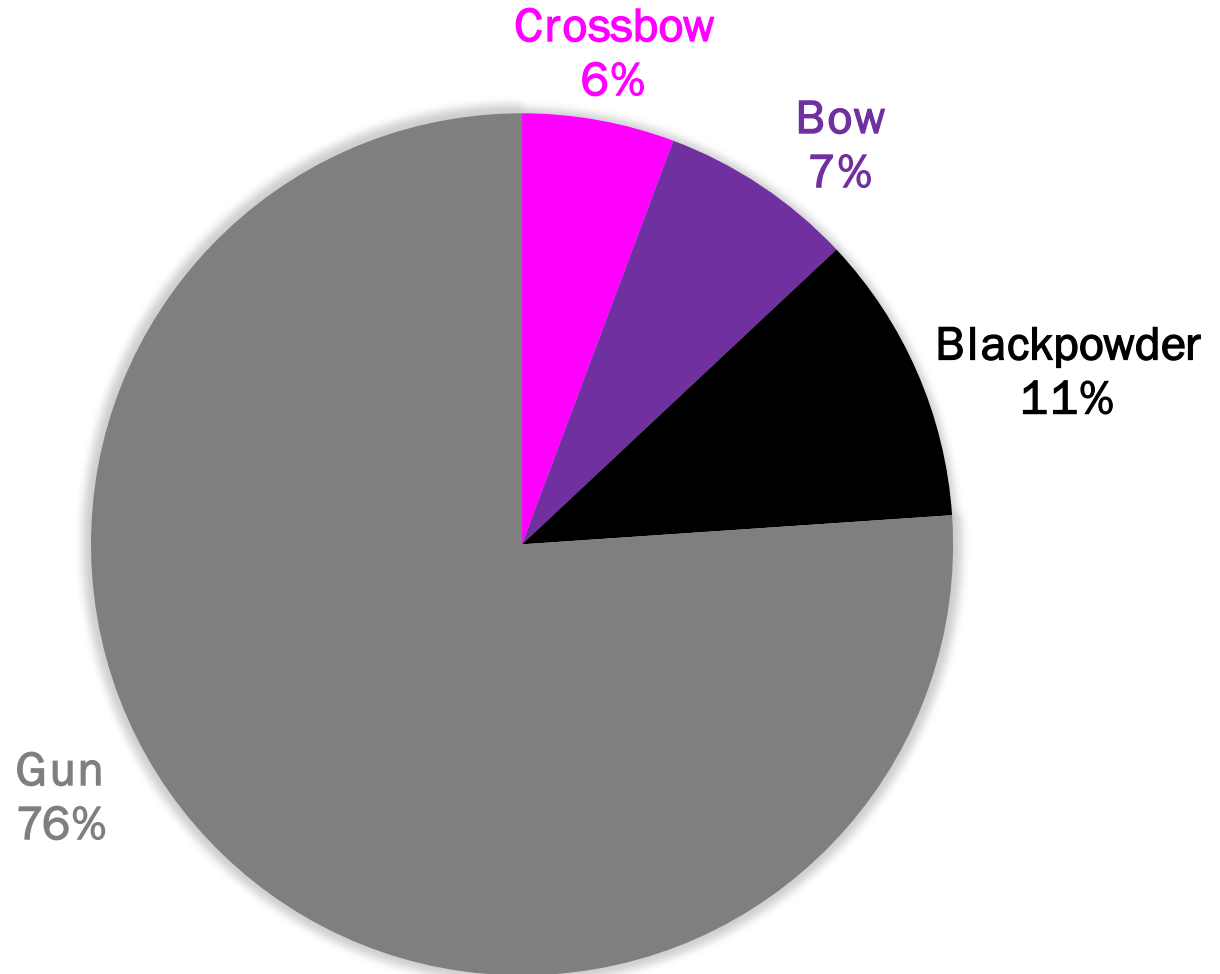
Register Your Big Game Kill
Required for Bear, Deer and Wild Turkey

800-I-GOT-ONE
(800-446-8663)

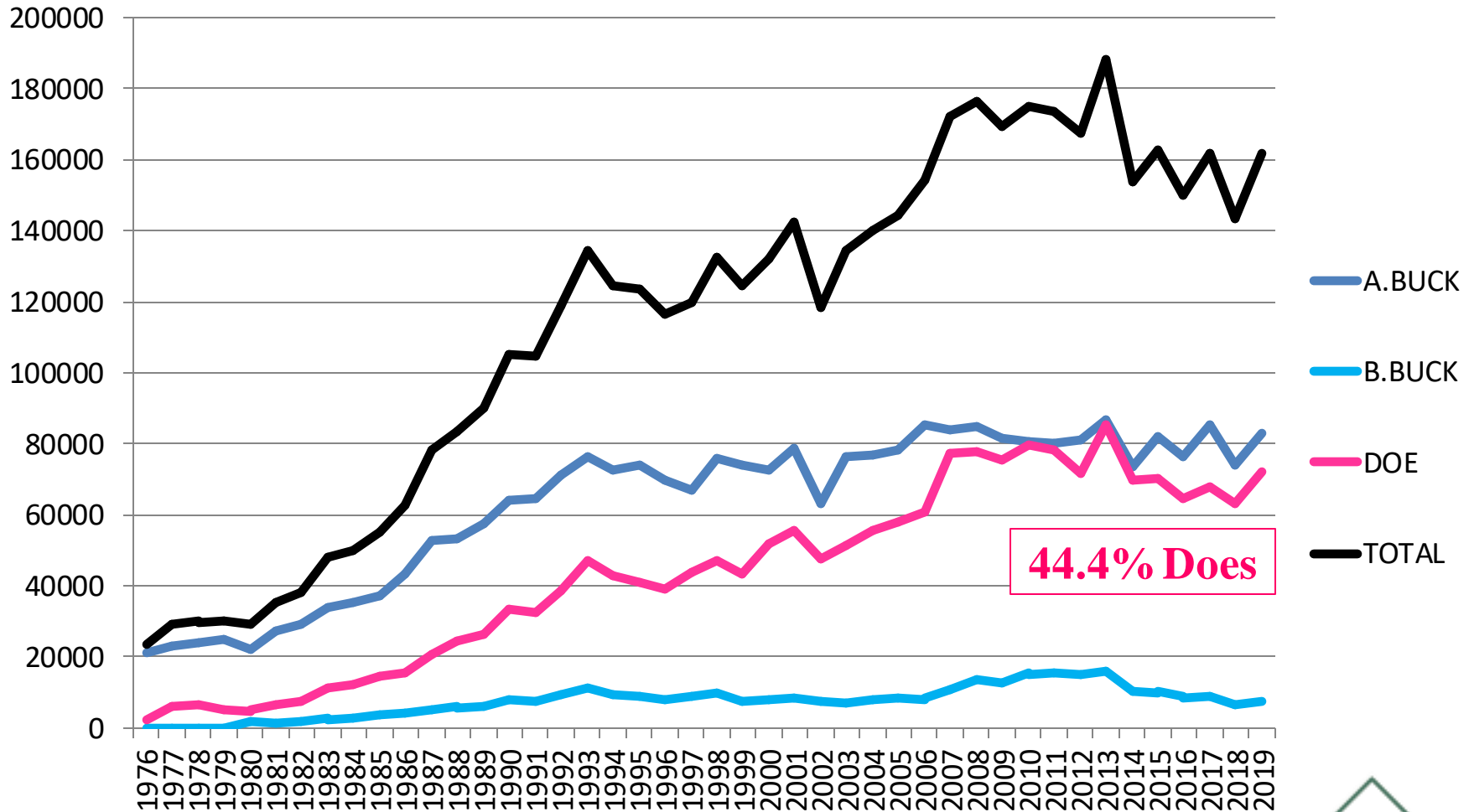
ncwildlife.org/IGotOne



Percent of Total Harvest by Weapon Type



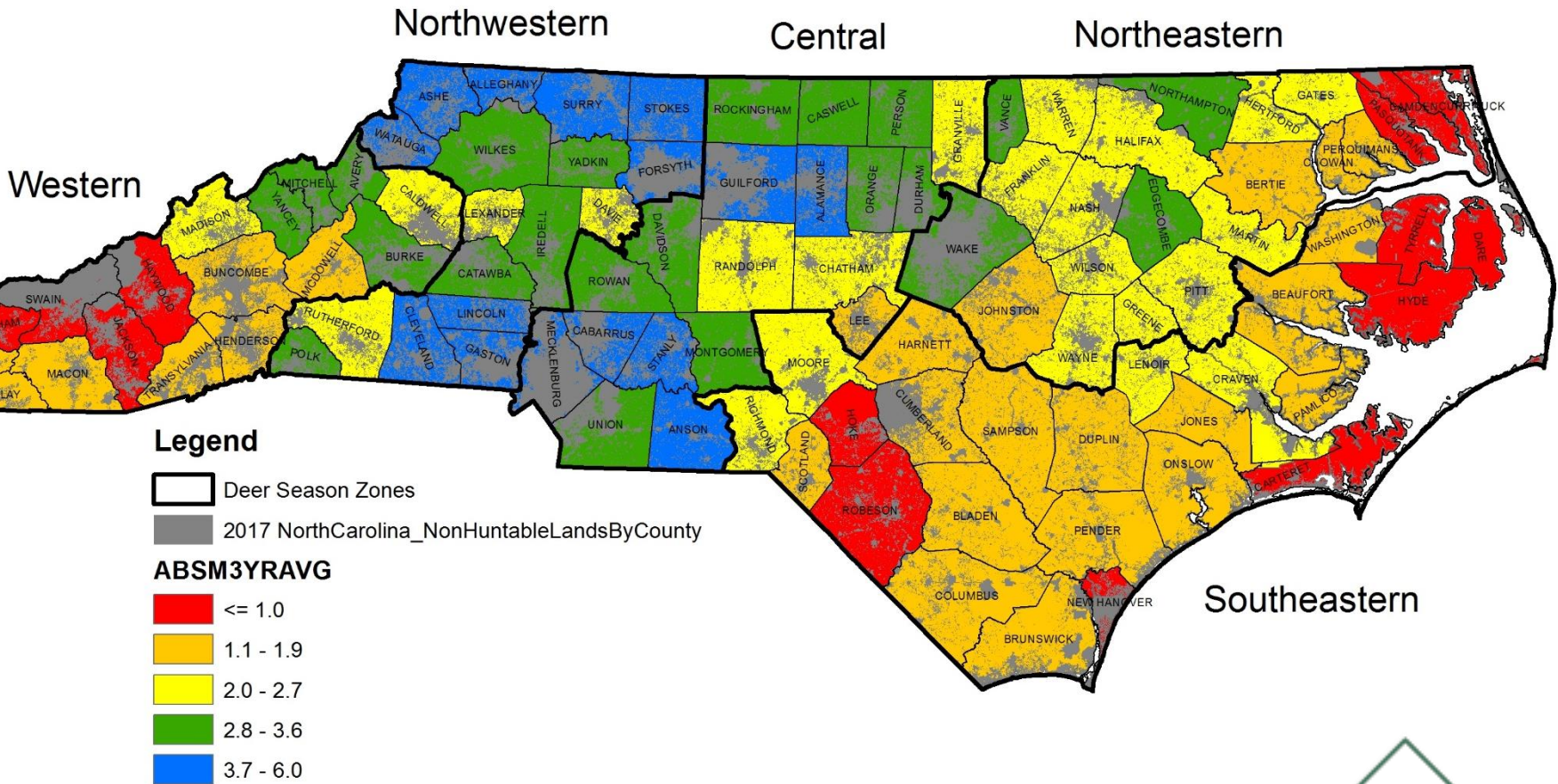
North Carolina Reported Deer Harvest



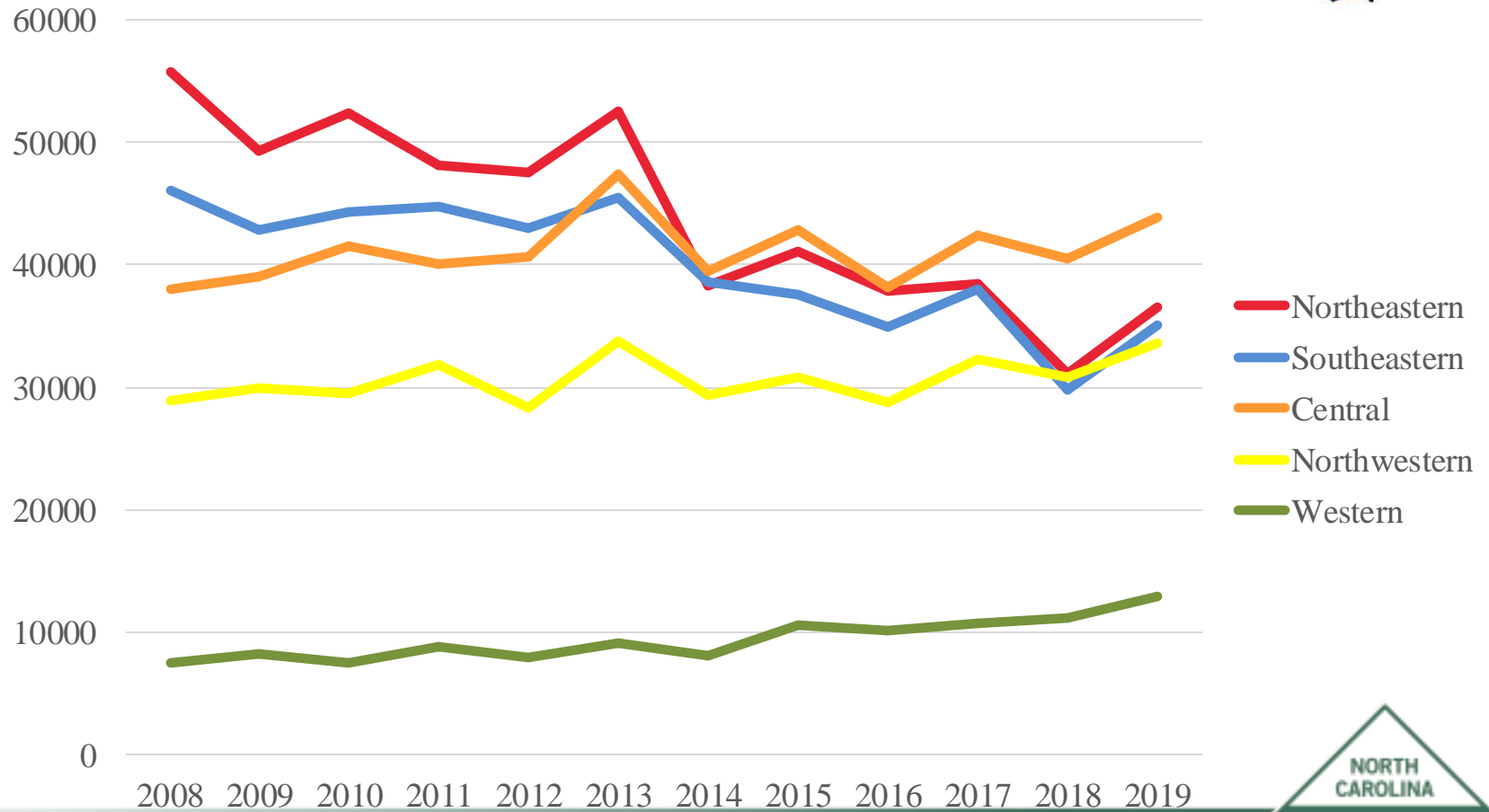
44.4% Does



Reported Antlered Buck Harvest Per Hunttable Square Mile By County, 2017-2019



Reported Deer Harvest By Zone





See Live Harvest Reports

View real-time county, regional or statewide harvest totals and multi-year trend comparisons for deer, bear or turkey.

Select from the following options to generate your report:

Species:

Deer

Show Totals by:

State

Region

Deer Season - All Regions

County

-- Select one or more --

Include past 3-year comparisons

Generate Report

Clear

As of Monday, December 7, 2020:

Area	Total Deer - Current	Total Deer - Past 3-Year Avg	Total Deer - Past 3-Year Range	Antlered Bucks - Current	Antlered Bucks - Past 3-Year Avg	Antlered Bucks - Past 3-Year Range
Deer Season - Central	32,779	28,172	26,956 - 30,148	18,232	15,953	15,400 - 16,461
Deer Season - Northeastern	25,893	24,450	21,287 - 28,313	14,023	13,782	11,815 - 16,537
Deer Season - Northwestern	25,560	21,663	21,019 - 22,749	14,616	12,270	11,892 - 12,631
Deer Season - Southeastern	26,201	24,486	20,230 - 28,161	15,087	14,708	11,947 - 17,766
Deer Season - Western	12,616	9,279	8,296 - 10,112	7,982	6,016	5,791 - 6,135
Total	123,049	108,050		69,940	62,729	

Click here to view historical total reported harvest summaries for [deer](#), [bear](#), and [turkey](#).





2019-2020 North Carolina Hunter Harvest Survey



Conducted by the North Carolina Wildlife Resources Commission

Please complete the following wildlife harvest survey and return it in the enclosed business reply envelope, or complete the survey online at www.ncwildlife.org/HunterHarvestSurvey by using the following access code: **ABCDEFG**

1. Did you hunt in North Carolina during March 1, 2019 to February 29, 2020?

Yes No

*Deceased (the person receiving this survey is/ now deceased.)

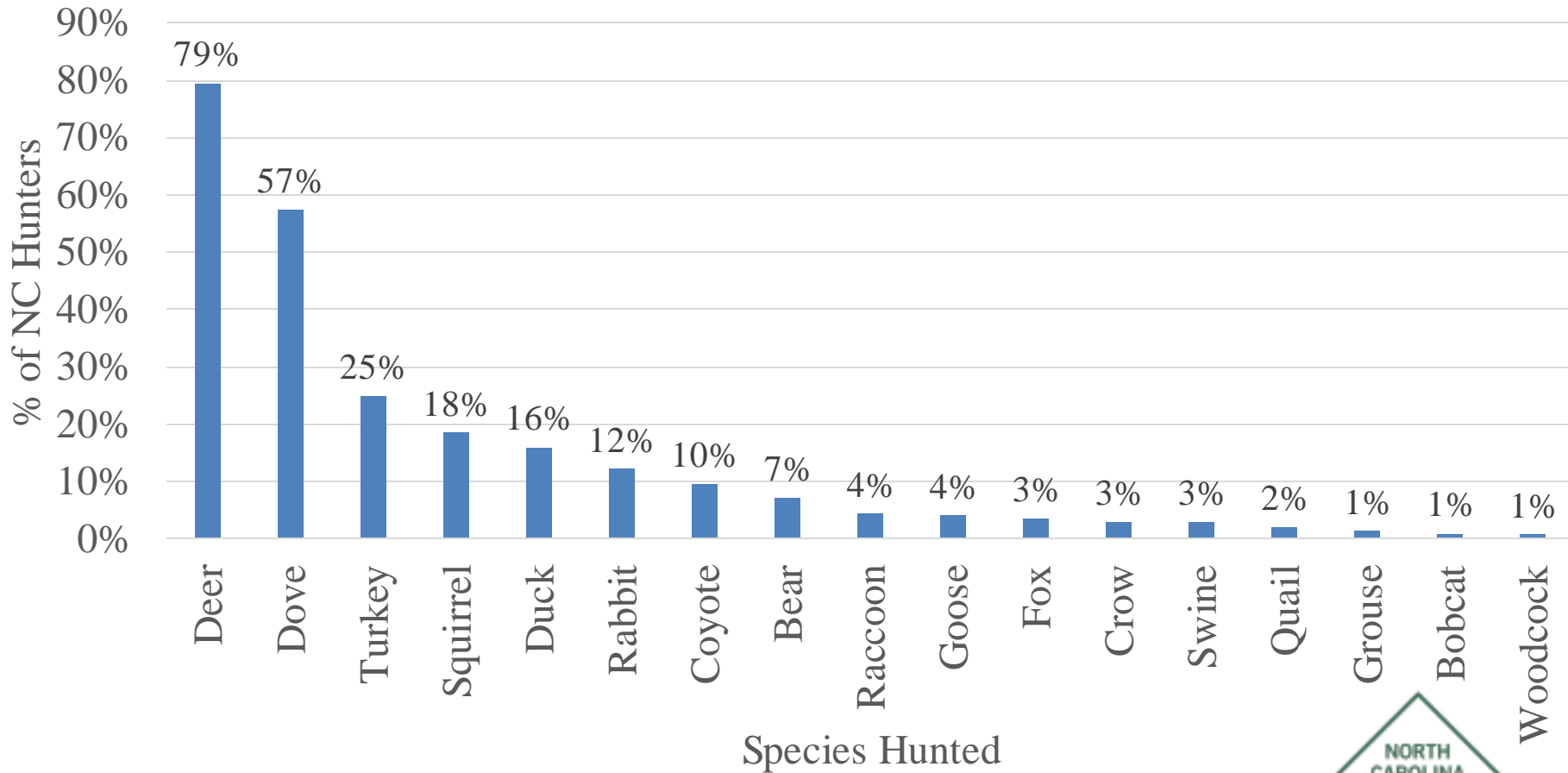
If you answered **yes** to the above question, please complete the remainder of the questionnaire.
If you answered **no**, return the survey in the postage-paid envelope or enter your response online.

Your response is very important, even if you did not hunt.

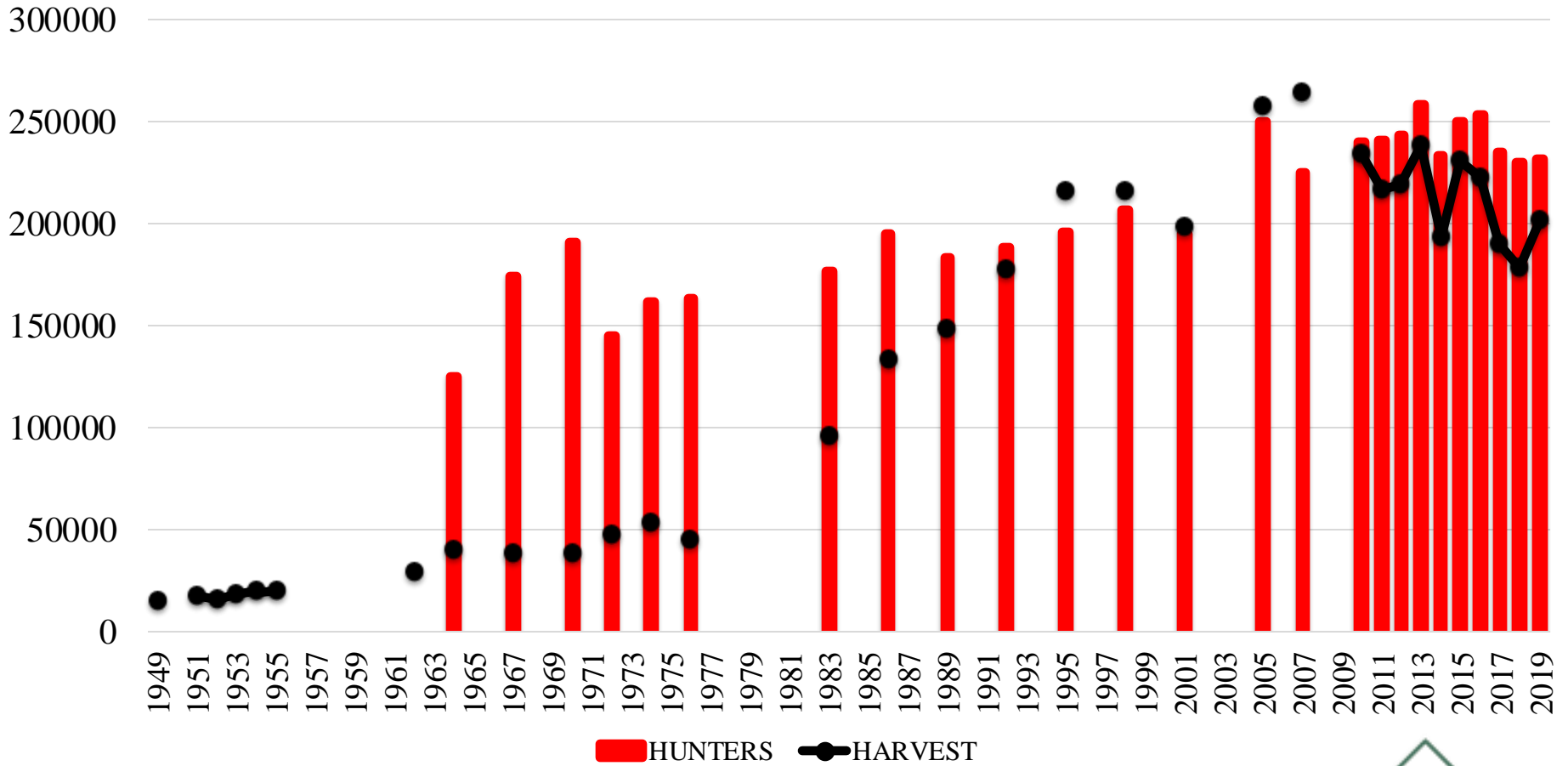
2. Hunter Harvest Survey



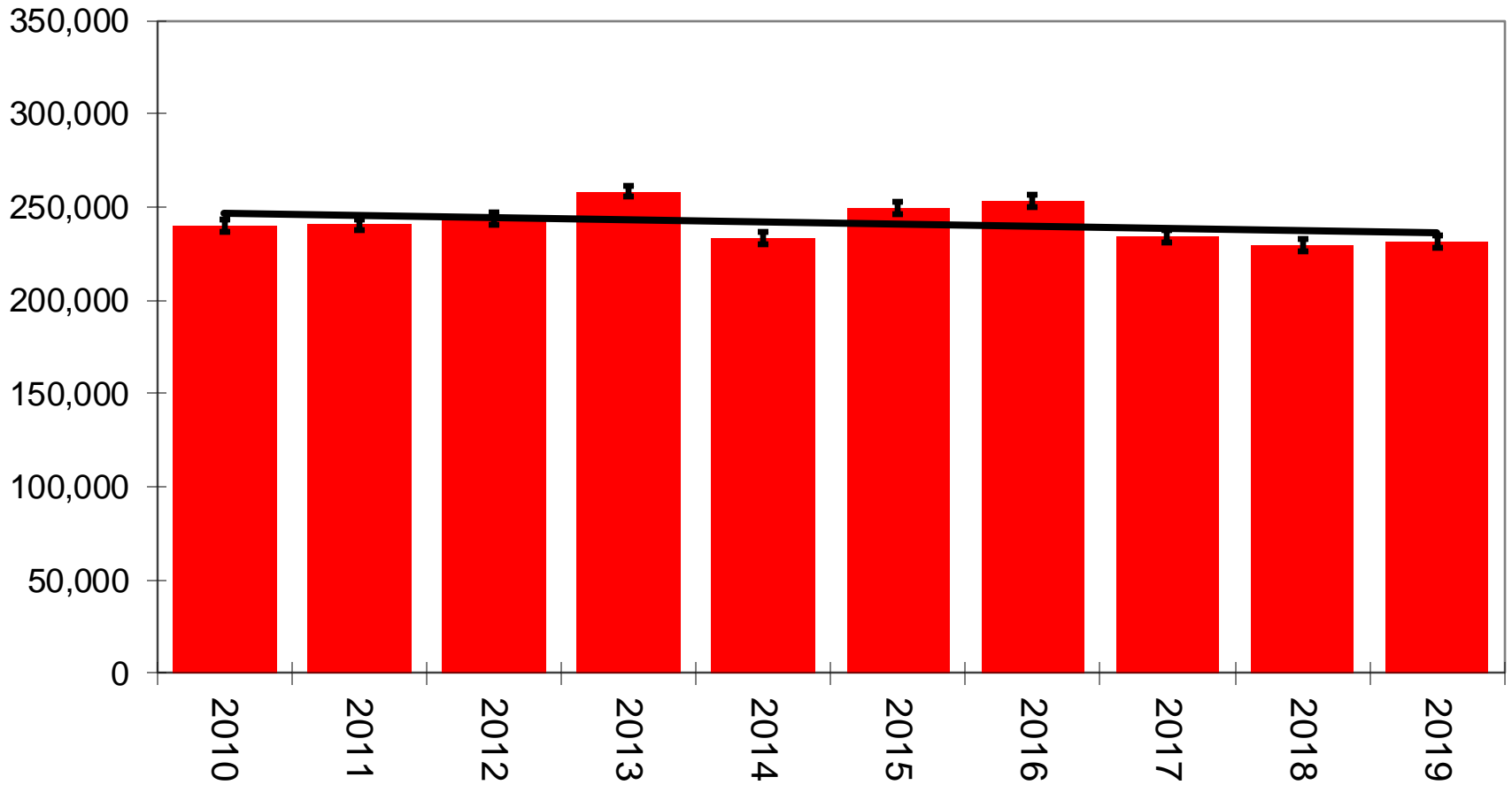
Percent of NC Hunters (291,847) By Species Hunted



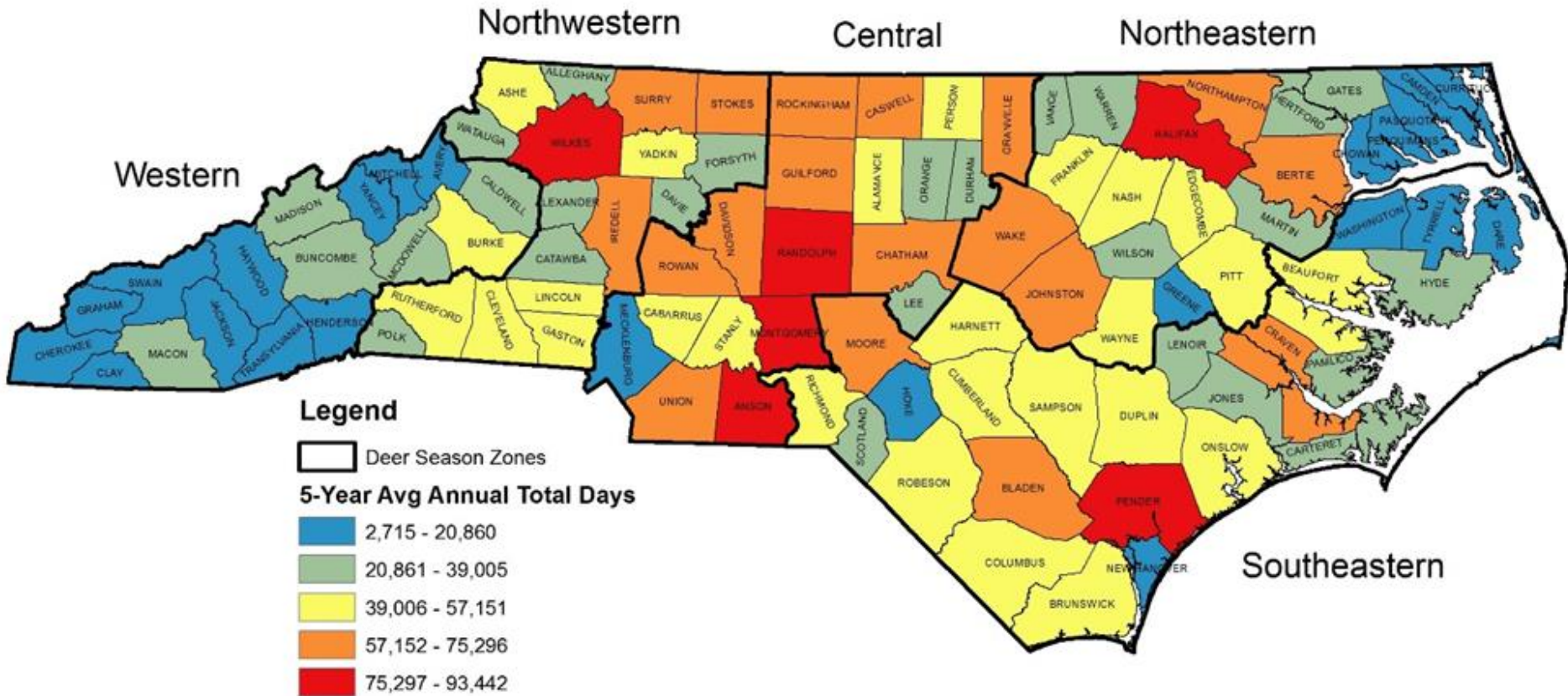
Estimated Deer Hunters and Harvest



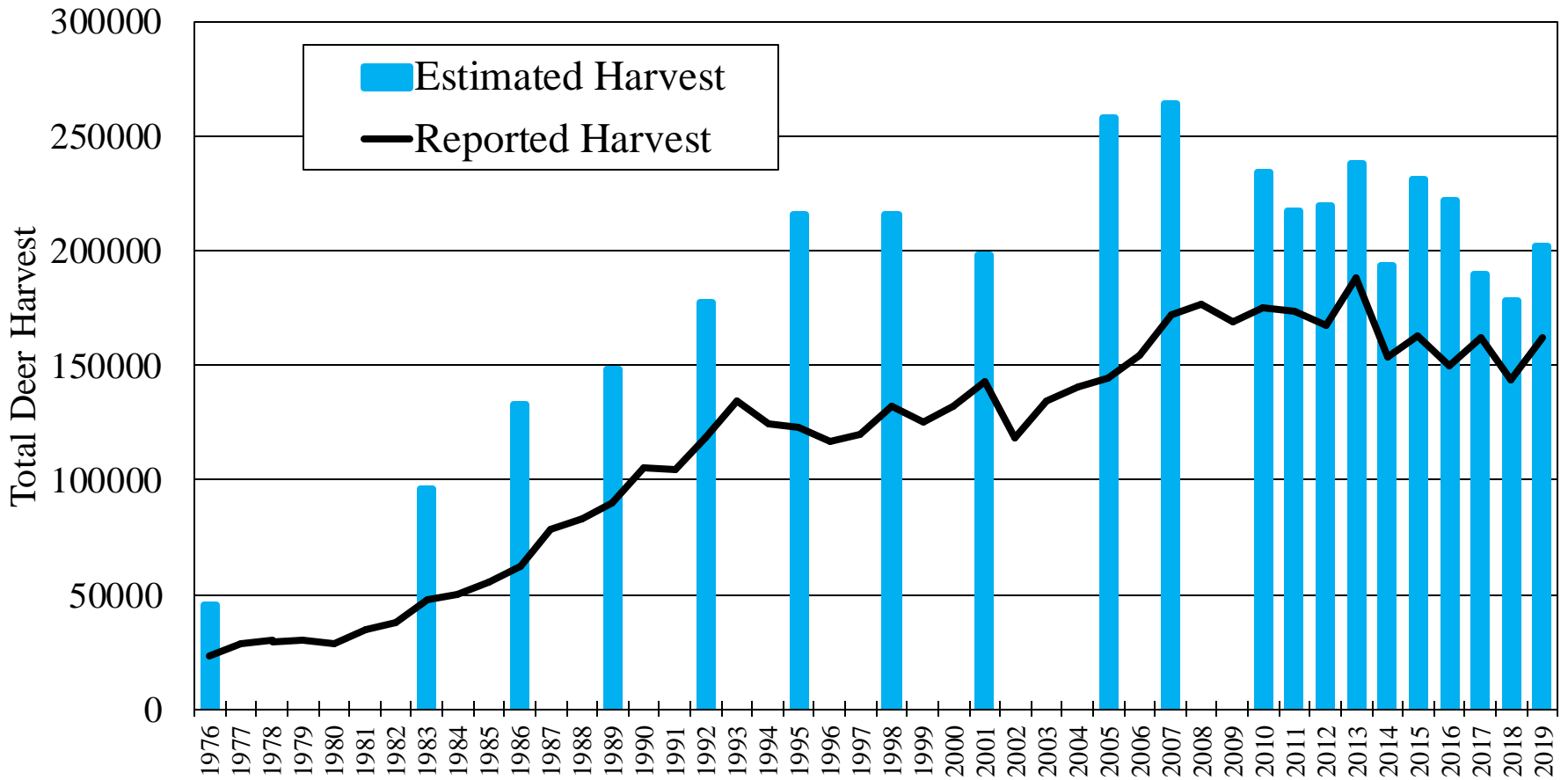
Estimated Deer Hunters



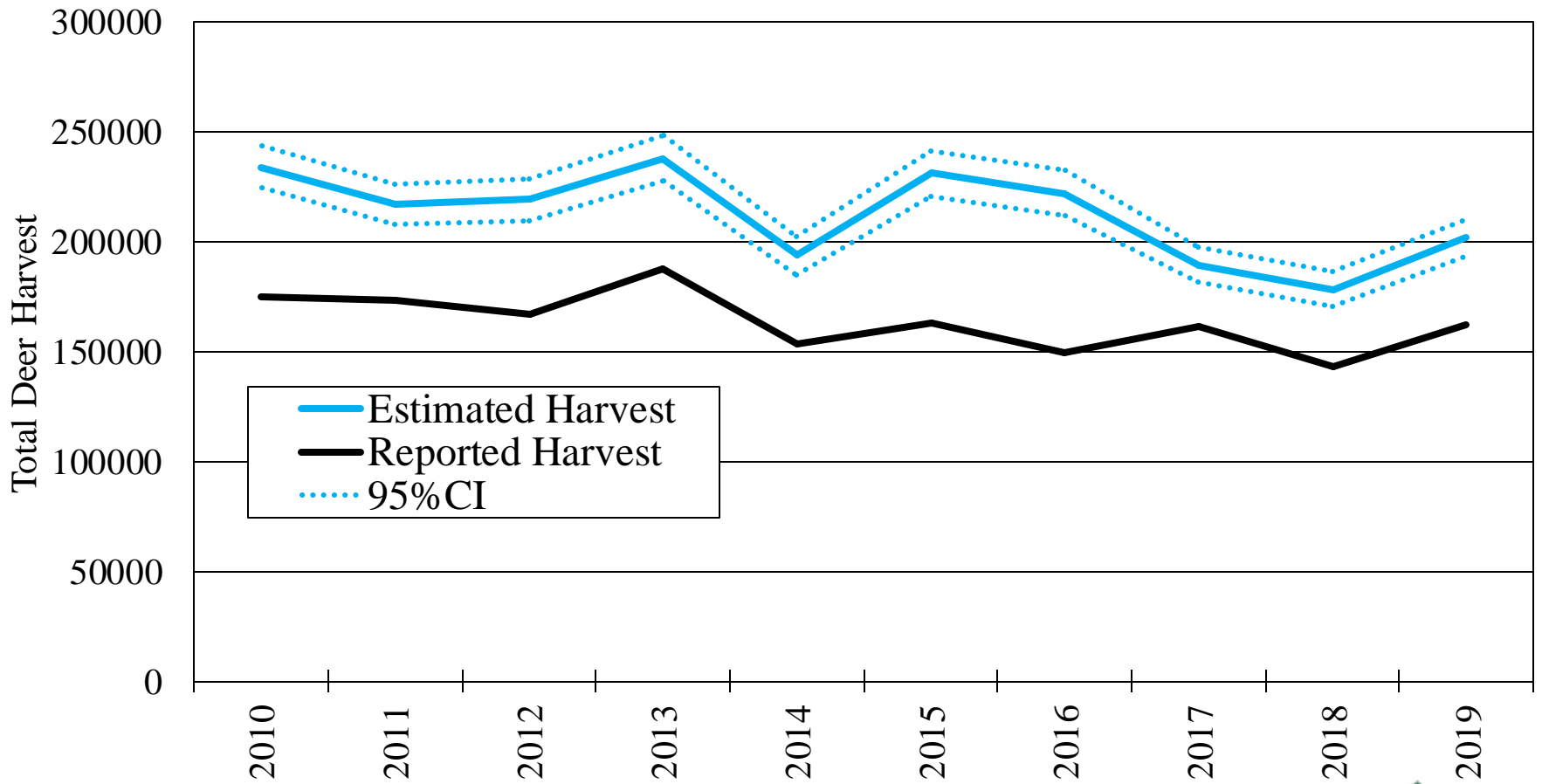
Total Days Hunted by Deer Hunters



Estimated and Reported Deer Harvest

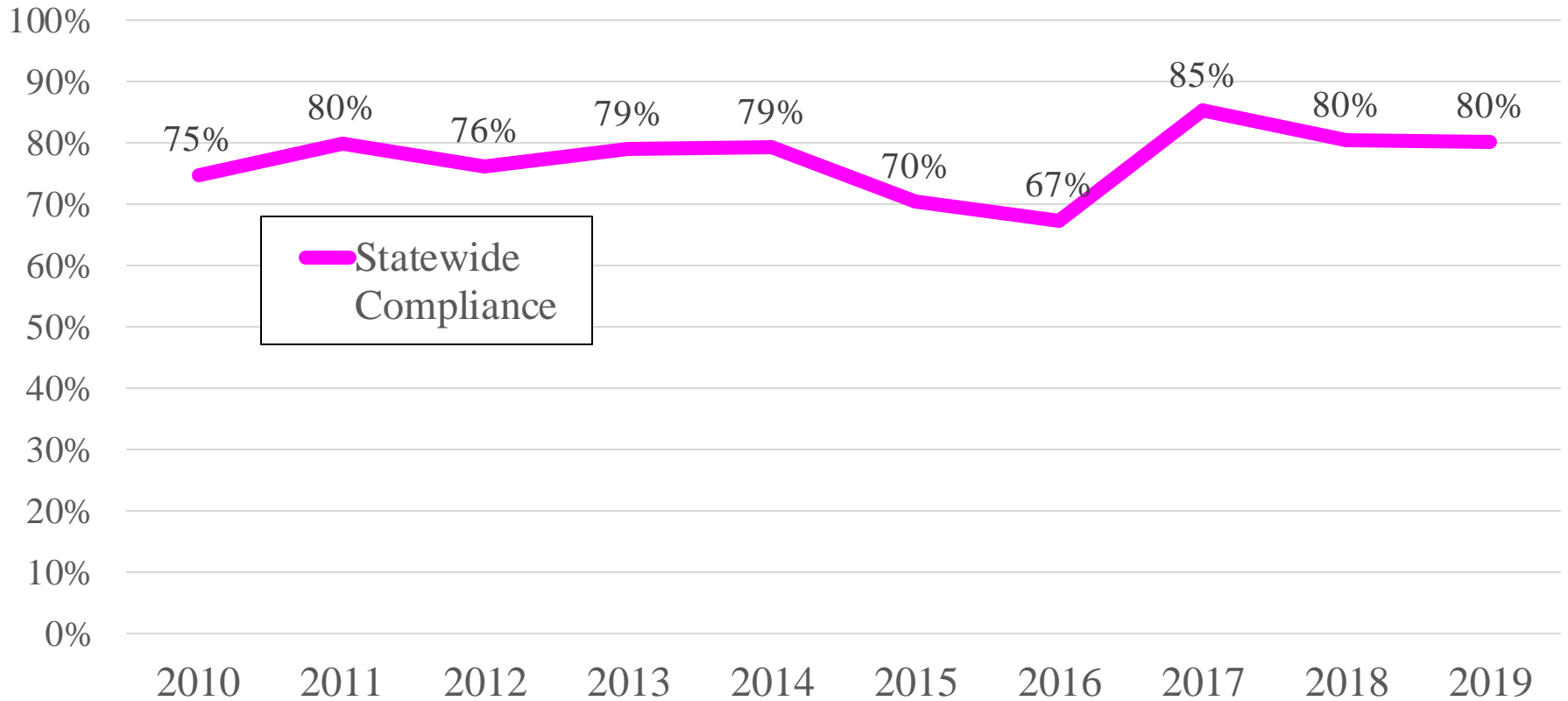


Estimated and Reported Deer Harvest




Reporting Compliance Rate

Reported Harvest / Estimated Harvest



3. Deer Hunter Observation Survey

Deer Hunter Observation Survey



Deer Hunter Observation Survey

Access Survey With Customer ID
 Find My Customer ID

WRC Customer ID:
 Last Name:

[Access Survey](#)

Thank you for taking an active part in the conservation of North Carolina's wildlife resources! The NC Wildlife Resources Commission is seeking volunteers to report wildlife observations this deer season to help biologists improve management decisions. Hunter observations help managers track long-term wildlife population and distribution changes. Deer observations also provide information on fawn survival and buck to doe ratios.

Observations should only be recorded while still/stand hunting during the deer season. Please attempt to provide an accurate count for the animals listed in this survey. Record observations from each hunt (morning, evening, or daily) on a single row on the table. Separate morning and evening hunts on different rows for the same day, when applicable. Record all the animals you observe on each hunt, even if you suspect you have

Deer Hunter Observation Survey
North Carolina Wildlife Resources Commission

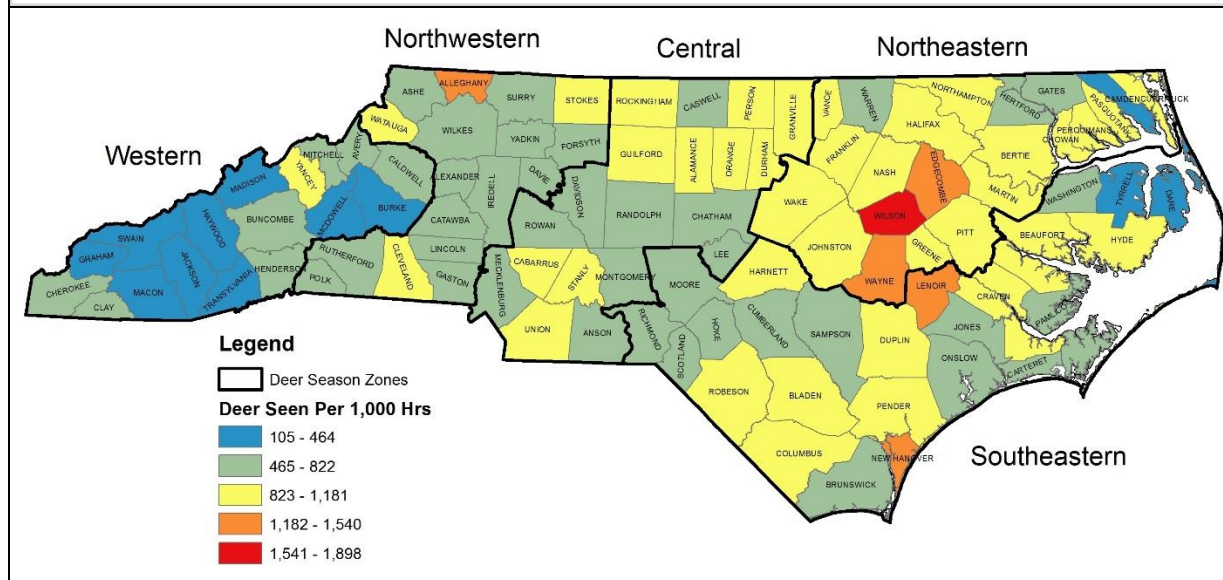
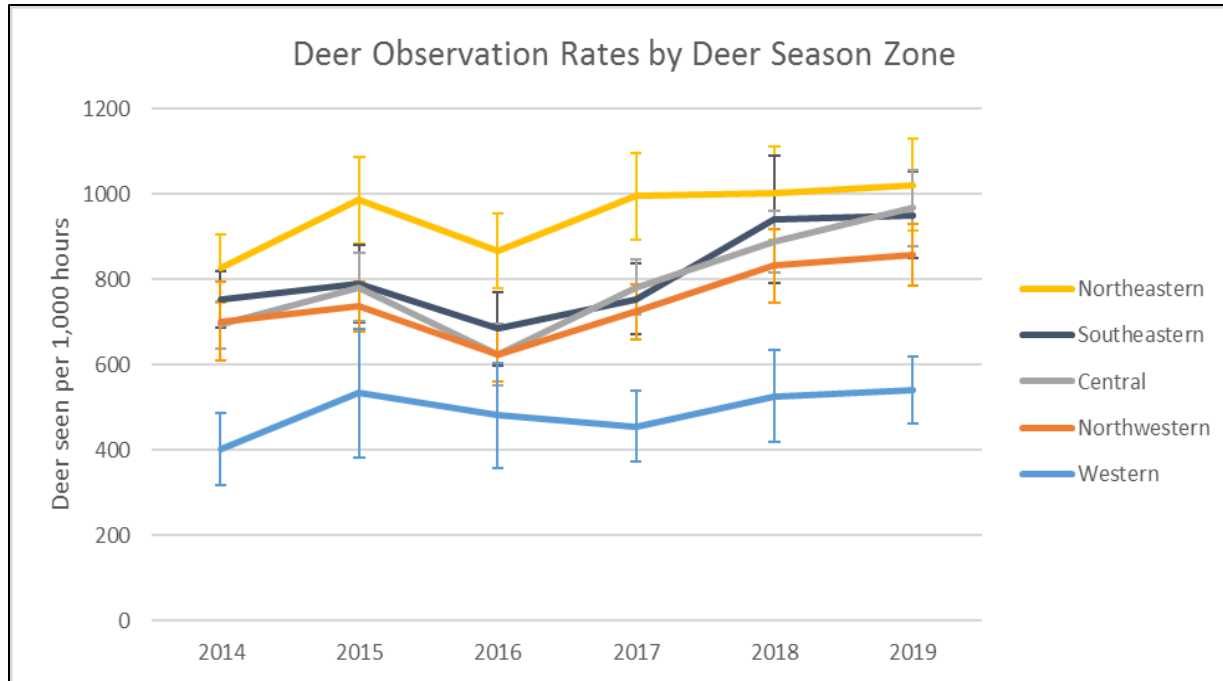
Please see instructions on the back of this form. Return this form immediately after your last hunt of the deer season.

Date	Hours Hunted	County	Location*	Hunt with Bait	Deer					Squirrels		Turkey			Coyote	Bobcat	Gray Fox	Red Fox	Raccoon	Bear		Feral Swine	Other Animals & Number Seen**
					Antlered Buck	Adult Doe	Burton Buck/Doe Fawn	Unknown	Gray Squirrel	Fox Squirrel	Bearded	No Beard	Unknown	Adult						Cub			
10/8/17	2.5	Example	GL / PVT	Yes / No	1	1	1	10							1							Armadillo: 1	
			GL / PVT	Yes / No																			
			GL / PVT	Yes / No																			
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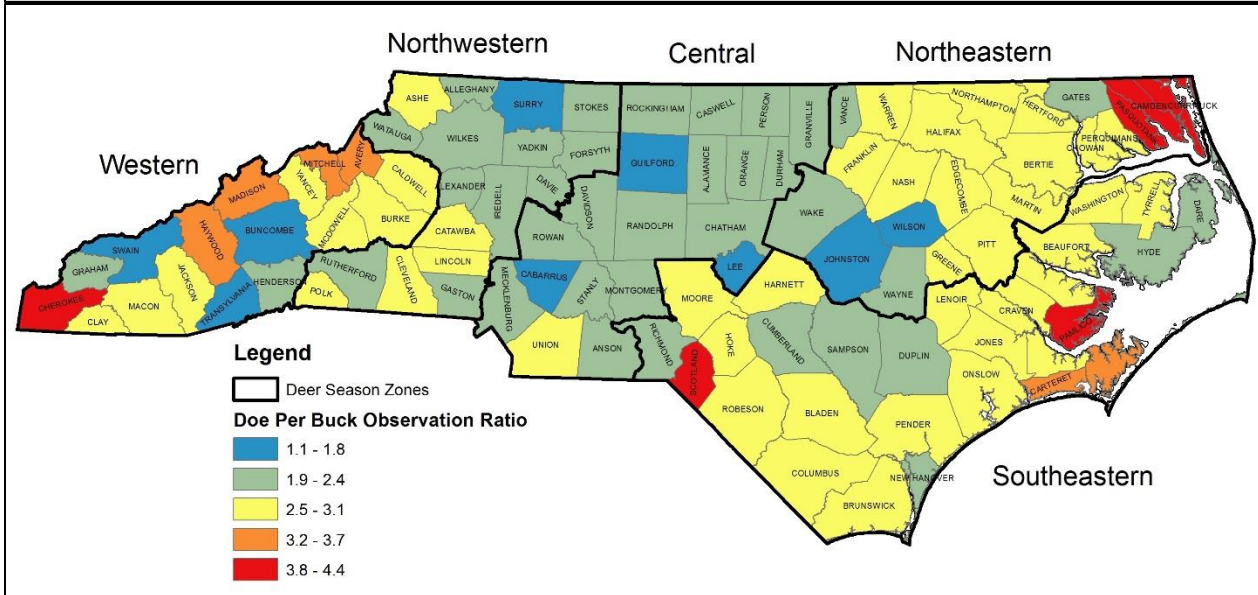
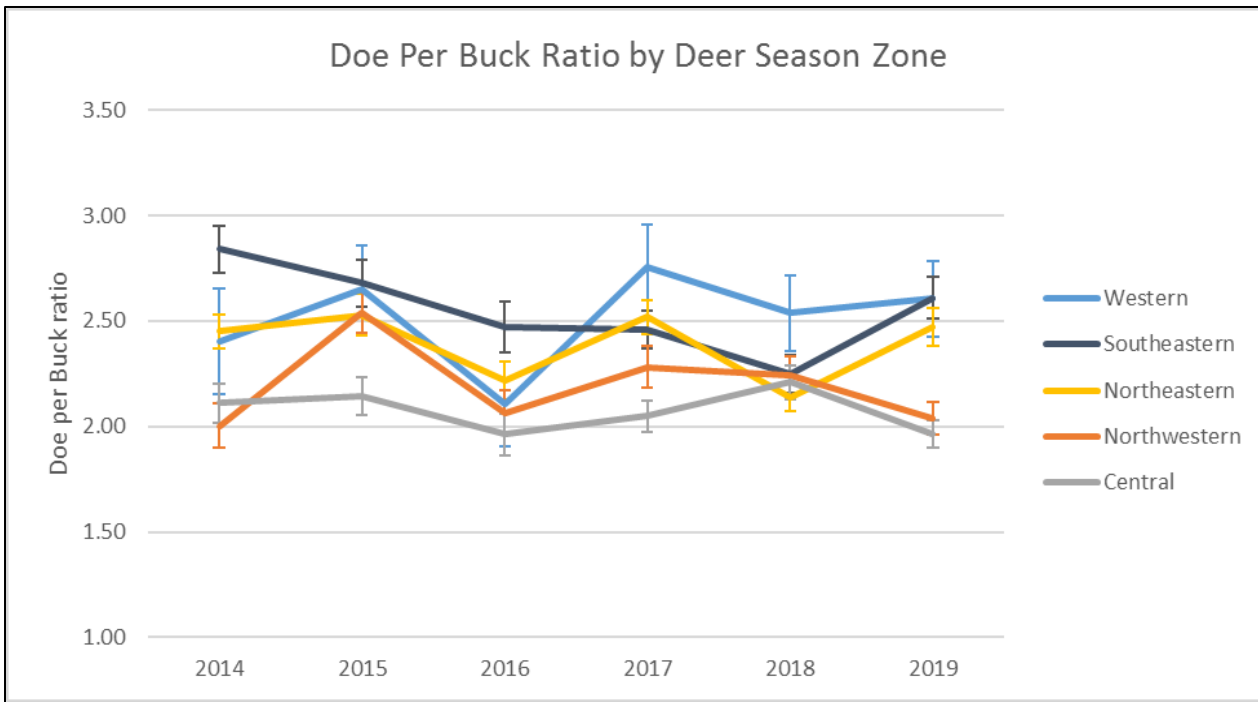
*Location types: GL=Game Lands, PVT = Private Land or other property not in the NC Game Lands Program
 **Other animals of survey interest include: armadillo, domestic cat, elk, mink, red squirrel, spotted skunk, and weasel



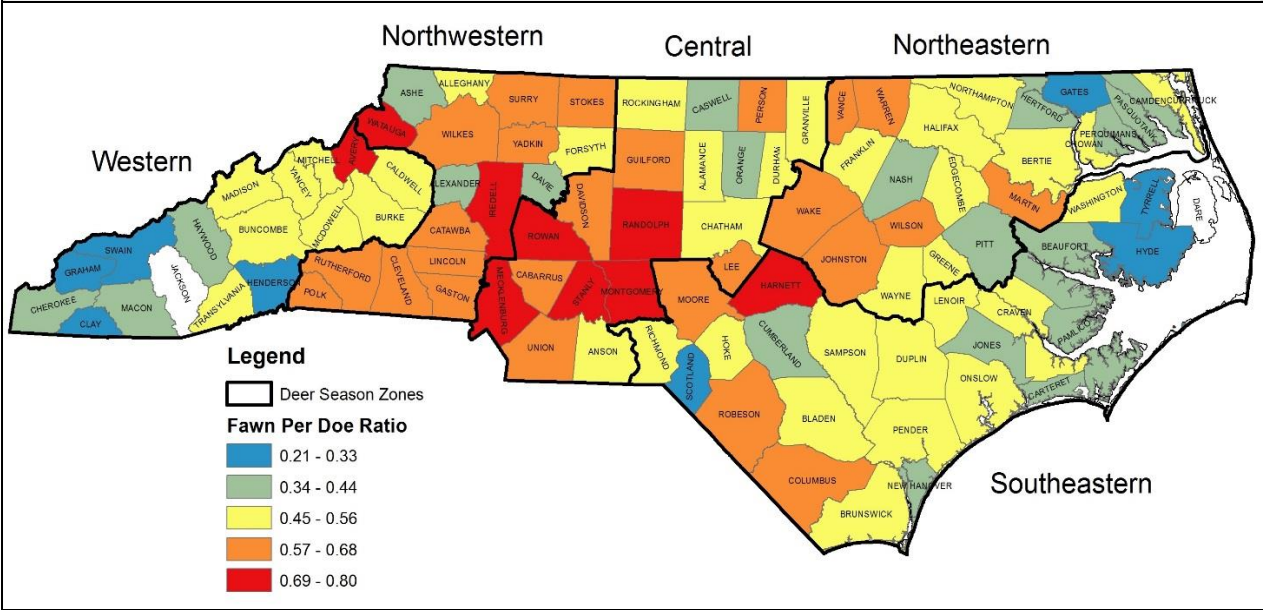
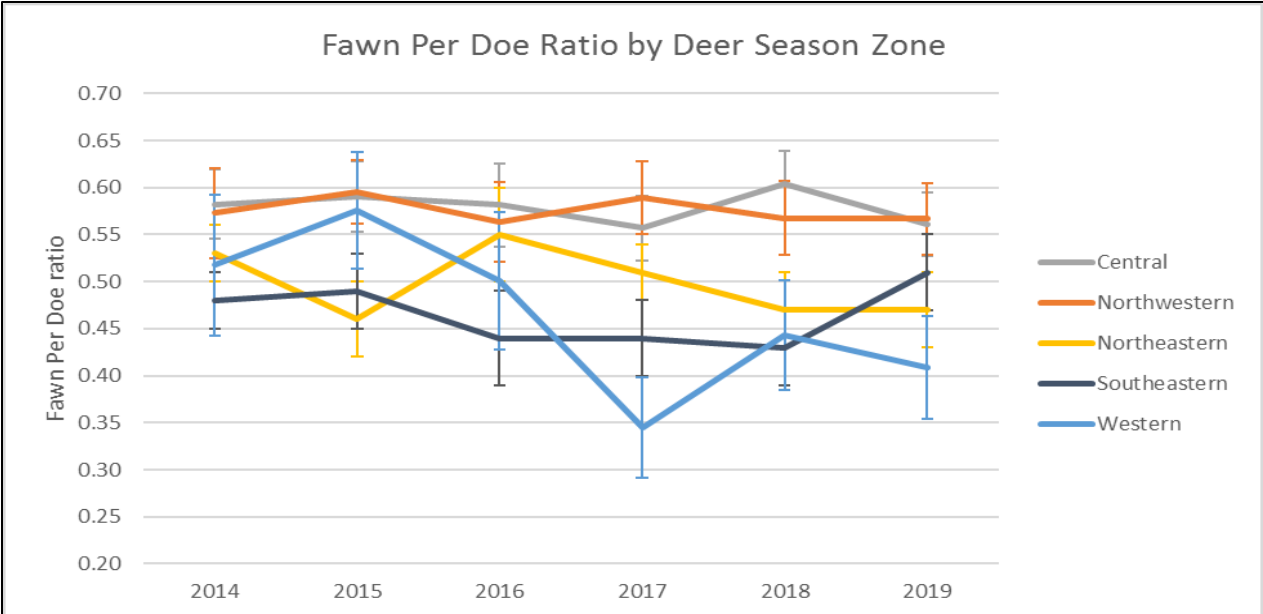
Deer Observation Rate



Adult Sex Ratio



Fawn/Doe Ratio (FDR)



Deer Hunter Observation Survey

Influence of Bait

	Bait	95% CI	No Bait	95% CI
All Deer (per 1,000 hrs.)	850	(822-877)	737	(711-762)
Doe/Buck	2.57	(2.46-2.69)	2.64	(2.53-2.74)
Fawn/Doe	0.58	(0.56-0.60)	0.45	(0.43-0.47)



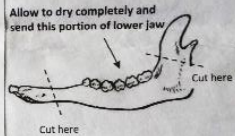


4. Biological Data Collection



NCWRC—DEER JAWBONE RETURN ENVELOPE

We need hunters to send in jawbones from all deer they harvest. Information is needed from does and bucks of all ages, **not just from trophies**. Our goal is to determine the age structure and status of the herd. The age of your deer will be returned to you. Call (919) 707-0050 to learn more about the program and to get contact information for your local biologist.



HUNTER'S WRC CUSTOMER # (found on your hunting license): _____
 HUNTER NAME: _____
 HUNTER ADDRESS: _____
 CITY: _____ STATE: _____
 ZIP CODE: _____
 PHONE: _____ E-MAIL: _____

INFORMATION REQUIRED FOR DEER MANAGEMENT PROGRAM:
 DATE KILLED: _____ COUNTY OF KILL: _____
 SEX OF DEER (Circle one): MALE FEMALE
 NUMBER OF ANTLER POINTS: (right) _____ (left) _____
 WEAPON (Circle one): BOW CROSSBOW MUZZLELOADER RIFLE
 AREA (Circle one): PRIVATE LAND GAME LANDS
 GAME LAND NAME (if applicable): _____

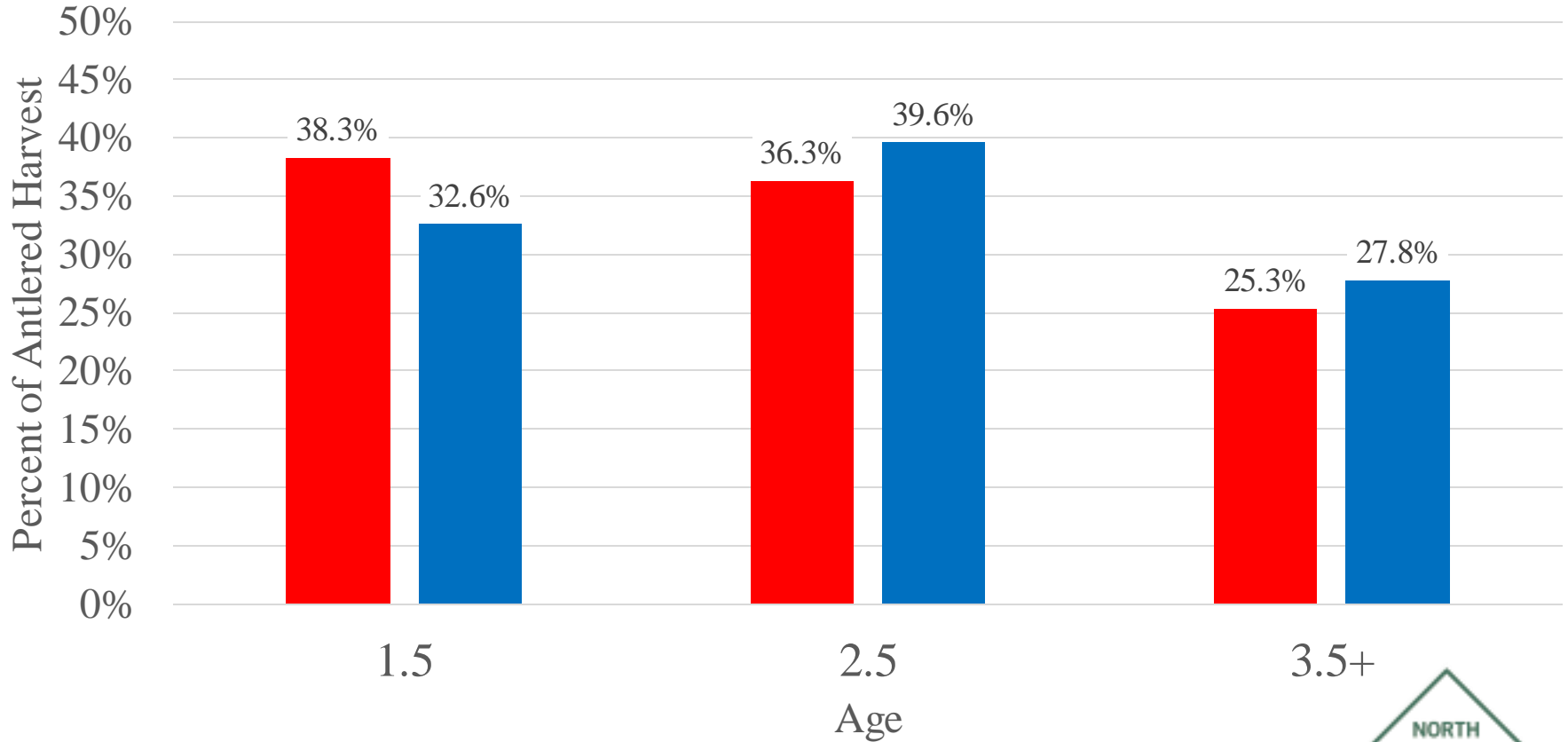
PLEASE INCLUDE ADDITIONAL INFORMATION YOU MAY HAVE ABOUT THIS DEER WITH A NOTE AND/OR PICTURE INSIDE THE ENVELOPE -- Actual LIVE weight or GUTTED weight, antler spread (inside beams), signs of disease, etc. Please do not include estimates and be specific about how measurements were collected.





Antlered Buck Harvest Pre & Post 2 Buck Limit

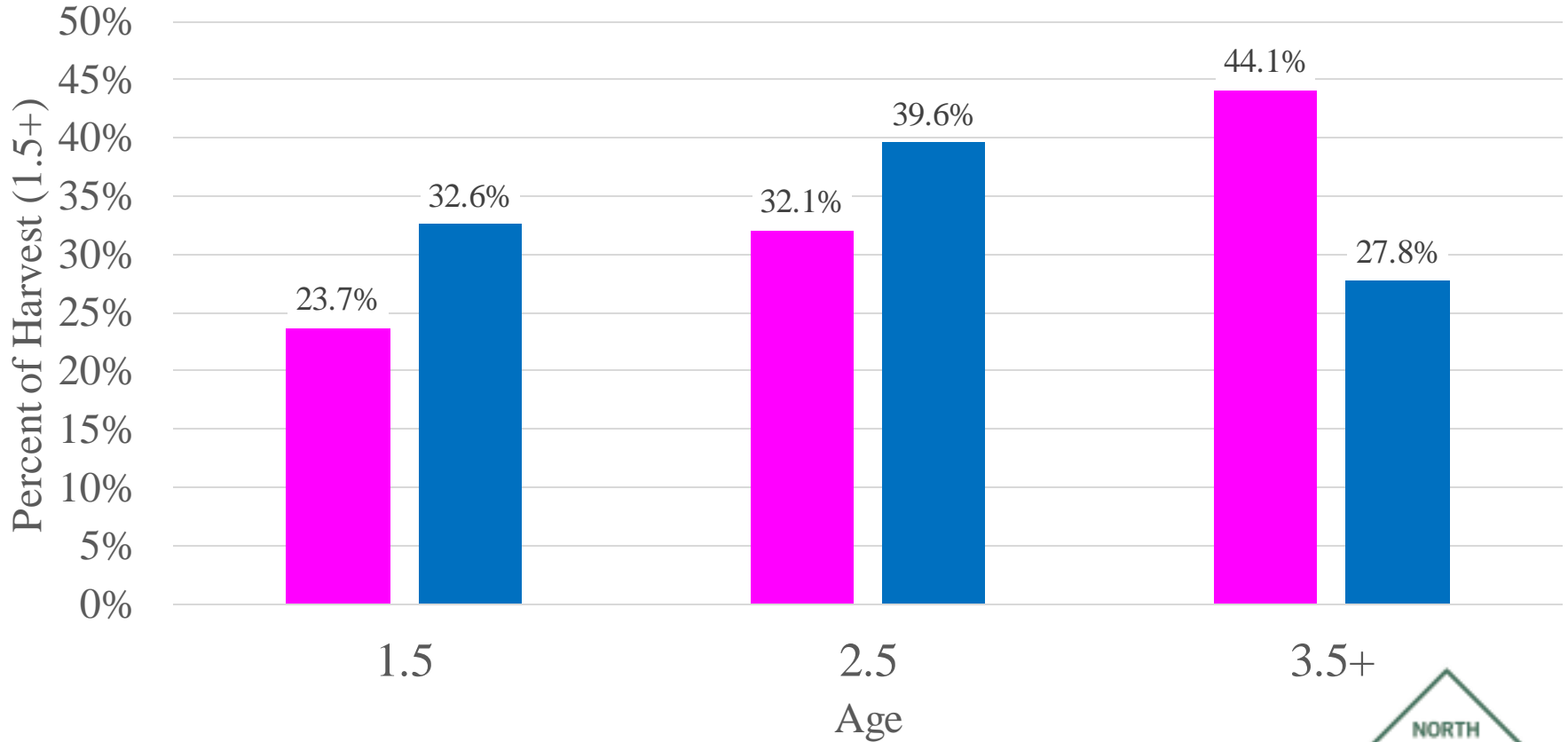
■ 15-17 (n=6,330) ■ 18-19 (n=4,157)



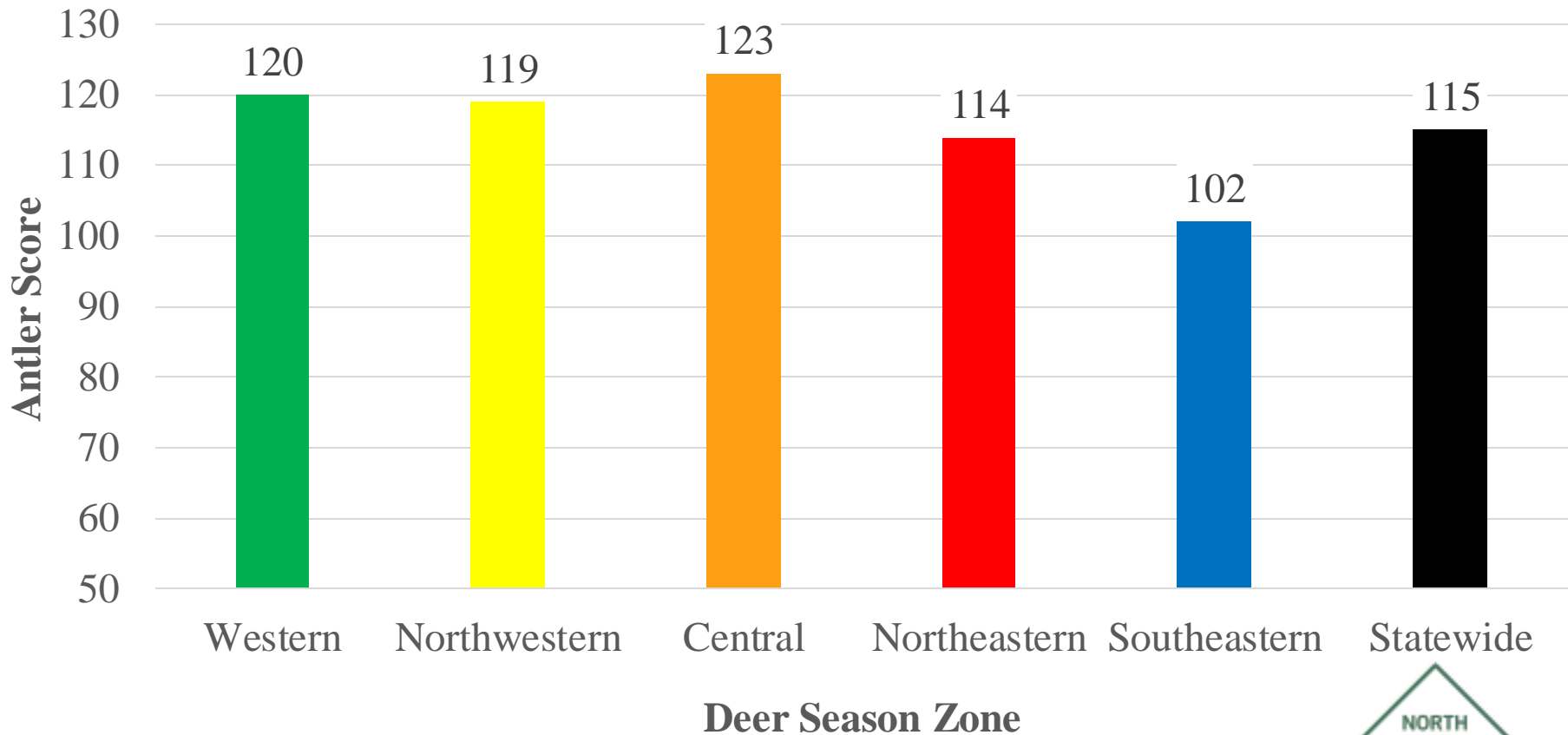
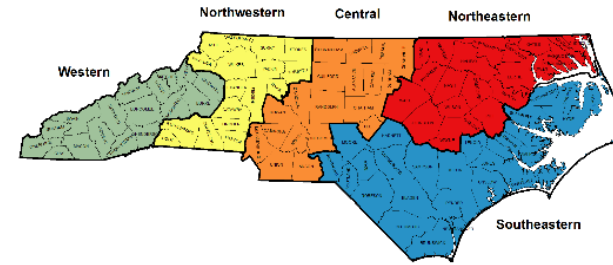


Antlered Buck and Adult Doe Age Structure Comparison

■ Doe (n=3,215) ■ Buck (n=4,157)

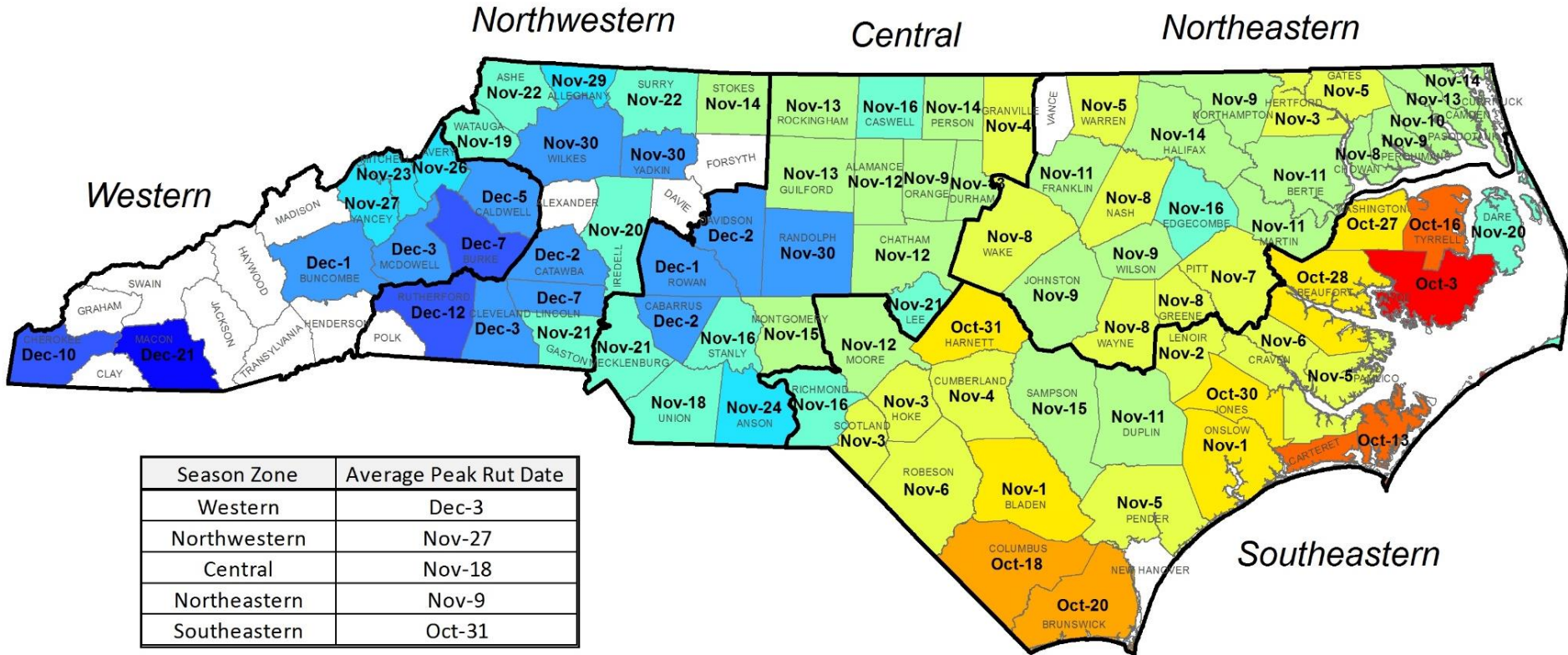


4.5+ yr. old Antler Size by Zone

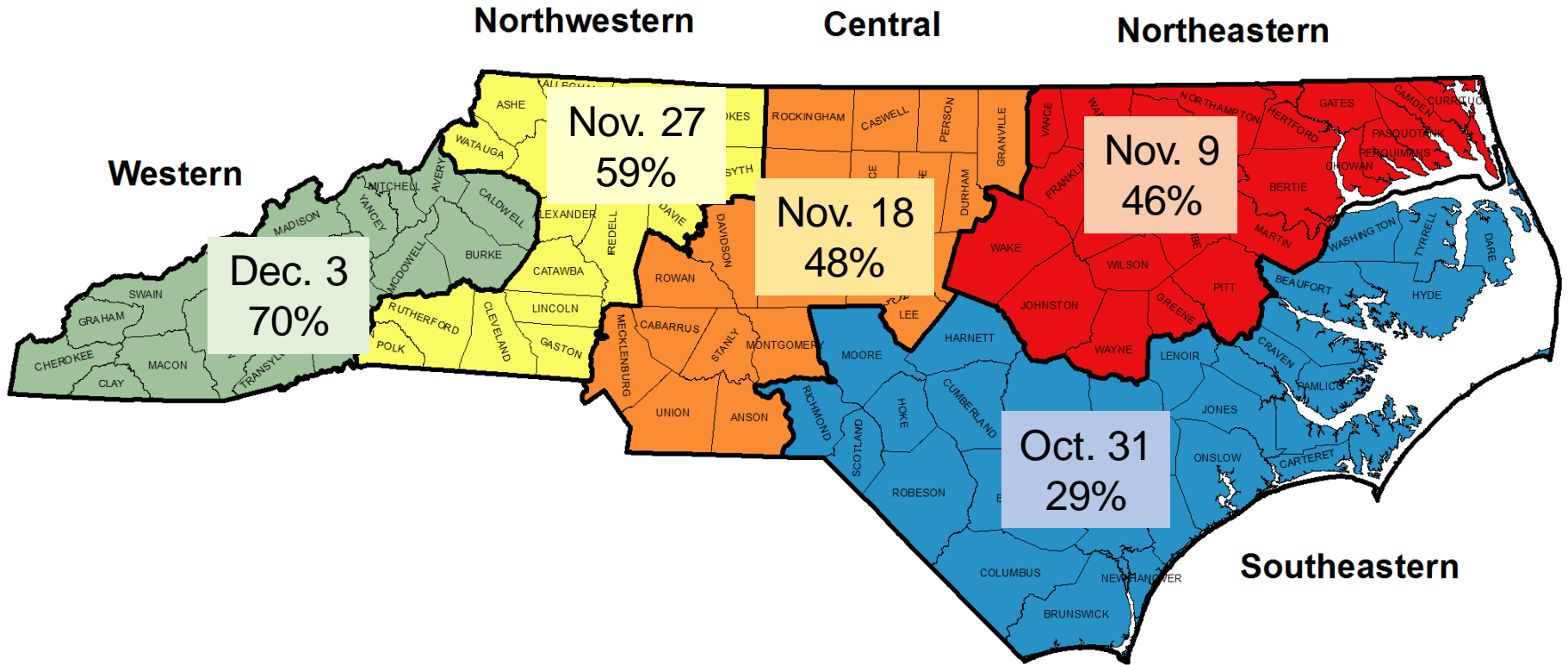


Estimated Peak Rut Dates

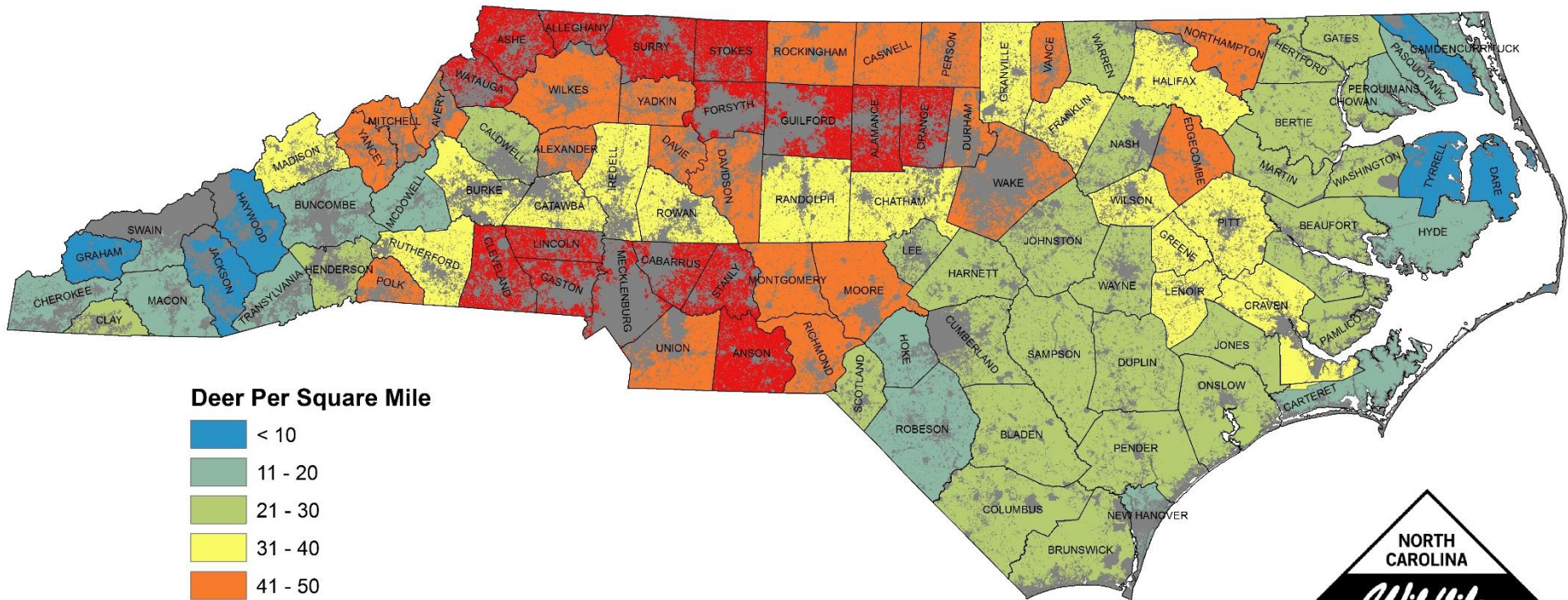
Updated 2020










Percent of Antlered Buck Harvest Prior to Peak Rut



2020 North Carolina White-Tailed Deer Density



Deer Per Square Mile

-  < 10
-  11 - 20
-  21 - 30
-  31 - 40
-  41 - 50
-  > 50
-  No Density Estimate - Hunting is Limited or Prohibited



Detailed information:

www.ncwildlife.org/deer

Or contact:

jonathan.shaw@ncwildlife.org

