



## **Fiscal Note for Proposed Wildlife Management Rules and Rule Amendments**

**Rule Amendments:** 15A NCAC 10B .0116 Permitted Archery Equipment  
15A NCAC 10B .0110 Attendance of Traps  
15A NCAC 10B .0203 Deer (White-tailed)  
15A NCAC 10B .0202 Bear

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**Impact:** State Government: Yes  
Local Government: No  
Private Impact: Yes  
Substantial Economic Impact: No

**Authority:** G.S. 113-134; 113-291.2

### **BACKGROUND**

The wildlife resources of the State belong to the people of the State, including the enjoyment of these resources (G.S. 113-131(a)). The Wildlife Resources Commission (hereinafter WRC or Commission) is tasked with the conservation of wildlife resources of the State (G.S. 143-239). This responsibility includes managing as equitably as possible the various competing interests regarding these resources, including the use and take of such resources (G.S. 113-131.1(a)). The statutes governing wildlife resources are found in Chapter 113, Subchapter IV of the General Statutes, and WRC has been granted rulemaking authority to implement the provisions of these statutes (G.S. 113-134). In accordance with the supply of wildlife and other factors it determines to be of public importance, the WRC may fix seasons and bag limits upon the wild animals and wild birds authorized to be taken that it deems necessary or desirable in the interests of the conservation of wildlife resources (G.S. 113.291.2(a)).

A summary of the proposed rule amendments with anticipated impacts is shown below. Proposed rule text is included in Appendix A.

## PROPOSED RULE CHANGES

### 15A NCAC 10B .0116 PERMITTED ARCHERY EQUIPMENT

Sling bows continue to increase in popularity as a manner of take and were made legal in North Carolina for wild turkey, small game animals, non-game animals and non-game fish in 2019. The proposed amendment to this Rule will allow for the use of a sling bow for taking white-tailed deer.

#### Impacts & Benefits

##### *State Impact*

This amendment has no state government impact.

##### *Local Impact*

This rule has no local government impact.

##### *Private Impact*

Allowing this manner of take for deer presents opportunities for hunters who currently use sling bows and for those who want to start. However, because the Commission does not track the type of archery equipment used to harvest other species or know the deer hunter interest in using sling bows, the Commission has no means to quantify this benefit.

### 15A NCAC 10B .0110 ATTENDANCE OF TRAPS

Currently, with the exception of completely submerged conibear-type traps, trappers are required to physically check their traps daily. While this is likely not an issue for many trappers, Wildlife Control Agents (individuals in the business of trapping depredating wildlife for compensation), have expressed interest in allowing remote trap checking systems in leu of a physical trap check in order to maximize cost effectiveness and improve animal welfare.

Remote trap checking systems are increasingly being authorized for use throughout the country as a substitute for physical trap checks. The advantages to using remote trap checking systems is that the trapper is immediately alerted to a trap that has been activated, likely indicating an animal capture. The user is then able to prioritize checking activated traps, which can improve animal welfare (the animal is not held as long in the trap, thus reducing stress and exposure to the elements) and decrease trapper time and resources for unnecessary trap checks.

#### Impacts & Benefits

##### *State Impact*

This amendment has no state government impact.

### *Local Impact*

This rule has no local government impact.

### *Private Impact*

The proposed rule change allows use of electronic remote trap checking devices but does not require them. Additionally, trappers could use as many of these devices as they want, as long as the requirements of the rule are met. As such, any costs incurred by the trapper would be by choice, not necessity. Representatives from the wildlife control industry have informed the Commission that trappers and WCAs who choose to use remote trap checking devices view this as a legitimate expense that would likely result in cost-savings.

Electronic remote trap checking devices range in price from \$99<sup>1</sup> - \$495<sup>2</sup> each, with an additional charge of anywhere from \$12.99/month<sup>1</sup> to \$40/month<sup>2</sup> per trap for communication service. However, allowing remote trap checks has the potential to increase trapper efficiency by permitting trappers to prioritize trap checks, decrease fuel costs by eliminating unnecessary physical trap checks, and increase or expand their effort, which may allow them to increase their the number of clients.

### 15A NCAC 10B .0203 DEER (WHITE-TAILED)

Blackpowder firearms, also known as muzzle-loaders, are defined in this rule and currently exclude weapons with the propellant loaded through the breech. The proposed amendment to this rule will allow for propellants loaded through the breech, as new products are available in the form of pre-loaded powder capsules, that make the loading, reloading, and unloading aspect of using a muzzleloader much easier and safer for hunters.

### Impacts & Benefits

#### *State Impact*

This amendment has no state government impact.

#### *Local Impact*

This rule has no local government impact.

#### *Private Impact*

Allowing the use of propellant products designed to make muzzleloaders less intimidating and easier, provides opportunities for current and new hunters interested in participating in the blackpowder firearms season. Currently available products that fit the new definition could cost hunters anywhere from an estimated \$550 to \$700 for the one-time purchase of a muzzleloader,

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<sup>1</sup> Skyhawk Kiwi from Tomahawk Live Trap (livetrapp.com) with three-month subscription plan.

<sup>2</sup> TrapSmart Worldwide pure satellite system for use in areas without ground based cellular communication options (trapsmart.com) with three-month subscription plan.

with recurring costs of approximately \$27 for 10 powder capsules.<sup>3</sup>

The Commission has no way to estimate how many hunters will take advantage of this opportunity now or in the future, or what products they will choose to use, and thus has no means to quantify this benefit.

## 15A NCAC 10B .0202 BEAR

The Black Bear Cooperator Program lets hunters directly participate with the Commission in monitoring the bear population when they voluntarily submit biological information from their harvested bear to the Commission. Information gathered from biological samples (premolar teeth) are used for analyzing the age structure of the harvested population and for population reconstruction modeling. Hunter submissions are critical to the management of North Carolina's bear populations.

In order to meet the assumptions of population reconstruction, remove biases due to the under-sampling of younger bears and female bears, accurately determine age structures of bear populations, and calculate population growth rates at a smaller scale, biologists would need ~80 to 90% submission rate. Unfortunately, despite intensive efforts by Commission staff during the bear hunting seasons, the number of bear teeth submitted by hunters statewide has declined since the 1990's.<sup>4</sup>

Proposed amendments to this rule will require successful bear hunters to submit at least one upper premolar tooth from their harvested bear no later than January 31 of the year following the successful hunting season. Requiring submittal will increase the data needed for the agency to make confident management decisions.

### Impacts & Benefits

#### *State Impact*

##### Costs

Assuming submission rates increase from an average 48.55%<sup>5</sup> to 90%, and no other changes are implemented to the program, the following costs would be incurred by the Commission: additional lab costs to analyze teeth, purchase of additional hats for successful hunters, and additional costs for mailing hats to successful hunters. While staff time required to process data from the bear teeth would also increase, there would be no additional cost incurred, as staff would simply reallocate their time from other projects (staff salaries and work time will not change).

The 2019-2020 lab costs incurred for processing 1,779 teeth was \$10,788 (approximately \$6.06/tooth). Assuming a 90% compliance rate, lab costs are estimated at \$18,956 (\$6.06/tooth x 3,128 teeth), a difference of approximately \$8,168 per season (\$18,956 - \$10,788 - \$8,168).

The Commission currently spends approximately \$9,042 per year (\$5.51/hat) for Bear

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<sup>3</sup> traditionsfirearms.com and federalpremium.com.

<sup>4</sup> N.C. Black Bear Annual Report - 2018.

<sup>5</sup> 2019-2020 state-wide bear tooth submission rate.

Cooperator hats used as rewards for hunters that submit bear teeth. While the Commission is uncertain at this point if incentive for submittal of biological samples will continue to be offered, as tooth submittal will no longer be voluntary, the continuation of these incentives with 90% compliance would cost the Commission an additional \$8,193 per year ( $\$5.51/\text{hat} \times 3,128 \text{ hats/year} = \$17,235 - \$9,042 = \$8,193$ ). Also, mailing the hats to 3,128 successful hunters is estimated to cost an estimated \$13,325/year, \$5,432 more than mailing costs incurred during the 2019-2020 season ( $\$13,325/\text{year} - \$7,893/\text{year} = \$5,432$ ).

In 2019-2020, staff spent approximately 89 hours to process 1,782 (3 minutes/envelope) bear teeth and associated data. With 90% compliance, it is estimated that 156 hours (3 minutes/envelope  $\times$  3,128 envelopes = 9,384 minutes/60 seconds = 156 minutes) would be required to process hunter harvest bear tooth envelopes and data, a difference of approximately 76 hours, and a cost to the agency of approximate \$2,204 (76 hours  $\times$  \$29/hour = \$2,204). However, there is no increase in cost associated with this task, as staff time will be reallocated to accomplish this (staff salaries and work time will not change due to change in tasks).

### Benefits

Each season, agency Wildlife Management and Land and Water Access staff spend weeks in each bear management unit collecting bear teeth and other biological data from successful bear hunters to improve submission rates for the Bear Cooperator Program. If submission becomes mandatory, an estimated 80% reduction in staff time and travel costs (mileage, lodging, meals) are anticipated, as staff will not need to track down harvested bears.

In the 2019-2020 bear season, 32,684 miles (approximately \$18,793.30 at the IRS mileage rate of 57.5) were dedicated to the Bear Cooperator Program and staff spent a total of approximately 1,995 hours in the field. Additionally, approximately \$710 (\$230 lodging + \$480 meals = \$710) in overnight travel was spent on this program. An 80% reduction in the time and travel dedicated to the collection of bear teeth would be a savings of approximately 1,496 hours, \$568 in food and lodging ( $\$710 - \$142 = \$568$ ), and \$14,095 in mileage (24,513 miles  $\times$  .575/mile = \$14,095). Though reduced staff time dedicated to this project will be an obvious benefit to the agency, this time will not be an actual cost savings, as staff will reallocate their time to other projects.

### *Local Impact*

This rule has no local government impact.

### *Private Impact*

### Costs

Per G.S. 113-135.1, convictions for violation of wildlife rules are a Class 3 misdemeanor (first conviction) and carry a fine of \$25 plus cost of court. Because bear tooth submission will be mandatory, and some individuals may choose not to comply, the penalty associated with non-submission is a potential cost to hunters. The Commission has no data to quantify this potential cost.

### Benefits

Additional biological bear data will improve population reconstruction, remove biases due to the under-sampling of younger bears and female bears, accurately determine age structures of bear

populations, and calculate population growth rates at a smaller scale. All of this may lead Commission biologists to modify bear management and modify hunting seasons to provide additional opportunities for bear hunters. While this cannot be guaranteed or quantified, opportunities and/or the quality of opportunities could improve for bear hunters in NC, as the Commission will have more data on which to base management decisions because of the proposed amendments to the rule.

## **SUMMARY**

### **Quantifiable Impacts**

#### *State*

The following quantifiable costs are anticipated from the proposed bear rule changes:

- Lab costs = \$8,168 per season
- Rewards (hats) = \$8,193 per year
- Mailing = \$5,432 per year

The following quantifiable benefits are anticipated from the proposed bear rule changes:

- Food & Lodging = \$568 per year
- Data processing = \$2,204 per year
- Mileage = \$14,095 per year

#### *Private*

The following quantifiable benefits were identified for the proposed rule changes:

- Electronic trap checking devices range in price from \$99 - \$495 each, with an additional charge of anywhere from \$12.99/month to \$40/month per trap for communication service.
- Currently available products that fit the new definition for muzzleloaders could cost hunters anywhere from an estimated \$550 to \$700 for the one-time purchase of a muzzleloader, with recurring costs of approximately \$27 for 10 powder capsules.

### **Unquantifiable Impacts**

#### *State*

The following unquantifiable benefits are anticipated due to the proposed bear rule changes:

- Staff time - 1,496 hours of staff time reallocated to other projects

*Private*

The following unquantifiable benefits were identified for the proposed rule changes:

- Adding sling bows to permitted archery equipment allowed to take deer may present additional opportunities for hunters who currently use sling bows and for those who want to start to participate in the deer archery season.
- Allowing electronic remote trap checks has the potential to increase trapper efficiency by permitting trappers to prioritize trap checks, decrease fuel costs by eliminating unnecessary trap checks, and expand trapper effort.

## APPENDIX A

### 1 **15A NCAC 10B .0116 PERMITTED ARCHERY EQUIPMENT**

2 (a) "Archery equipment" means any device that has a solid, stationary handle, two limbs, and a string, that uses non-  
3 pneumatic means to propel a single arrow or bolt and may be used to take game and nongame species.

4 (b) ~~When used for taking bear, deer, elk, wild turkey, alligator, and feral swine, longbows~~ Longbows and recurved  
5 bows ~~having shall have~~ a minimum pull of 40 pounds, compound bows having a minimum pull of 35 pounds, and  
6 crossbows ~~having shall have~~ a minimum pull of 100 pounds. ~~pounds shall be used for taking bear, deer, elk, wild~~  
7 ~~turkey, alligator, and feral swine.~~

8 (c) Archery equipment utilizing an elastic string and having a minimum pull of 40 pounds may be used to take deer,  
9 wild turkey, small game animals, nongame animals, and nongame fish.

10 (d) Only arrows and bolts with a fixed minimum broadhead width of seven-eighths of an inch or a mechanically  
11 opening broadhead with a width of at least seven-eighths of an inch in the open position shall be used for taking bear,  
12 deer, elk, wild turkey, alligator, and feral swine.

13 (e) Blunt-type arrow heads may be used in taking small animals and birds including rabbits, squirrels, quail, grouse,  
14 and pheasants.

15 (f) Poisonous, drugged, or explosive arrowheads shall not be used for taking any wildlife.

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## APPENDIX A

### 1 **15A NCAC 10B .0110 ATTENDANCE OF TRAPS**

2 (a) Every trap shall be visited daily and any animal caught therein removed, except for completely submerged conibear  
3 type traps which shall be visited once every 72 hours and any animal caught therein removed.

4 (b) Remote trap checking systems may be used in lieu of visiting the trap, provided the system has the following  
5 features:

6 (1) a control unit that remains in continuous operation and reports trap status to a centralized application  
7 database at least once every 24 hours;

8 (2) notification alarms that report trap closures and system health issues within one hour of detection  
9 via email and text-based messaging systems; and

10 (3) on-demand control unit testing capabilities for determining trap status, signal strength, and battery  
11 condition via remote system check-in.

12 (c) If the remote trap checking system control unit reports a trap closure, the trap shall be physically visited within 24  
13 hours of the time the trap was reported closed.

14 (d) If a remote trap checking system control unit fails to report trap status within a 24-hour period, or reports a system  
15 health issue, the trap shall be physically visited within 24 hours of the last time an open trap signal was received.

16 (e) Remote trap checking system users shall maintain records of trap status and notification alarms for a period of no  
17 less than seven days after receipt. Records shall be made available for inspection upon request by a representative of  
18 the Commission.

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## APPENDIX A

1 **15A NCAC 10B .0203 DEER (WHITE-TAILED) (EFFECTIVE AUGUST 1, 2020)**

2 ...

3 (c) Open Seasons (Blackpowder Firearms and Archery) for hunting deer:

4 (1) Authorization. Subject to the restrictions set out in Subparagraph (2) of this Paragraph, deer may be  
5 taken only with blackpowder firearms and archery equipment during the following seasons:

6 (A) Two Saturdays preceding the first day of the Deer with Visible Antlers seasons described  
7 in Parts (a)(1)(A), (B), (C), (E), and (F) of this Rule through the second Friday thereafter  
8 except on Buffalo Cove, Nicholson Creek, Rockfish Creek, Sandhills, and South  
9 Mountains Game Lands (Refer to 15A NCAC 10D .0103 for Blackpowder Firearms and  
10 Archery seasons on these Game Lands):

11 (B) Monday on or nearest October 1 through the second Saturday thereafter in the counties and  
12 parts of counties having the open seasons for Deer With Visible Antlers specified by Part  
13 (a)(1)(D) of this Rule.

14 (2) Restrictions

15 (A) Deer of either sex may be taken during blackpowder firearms and archery season in any  
16 county or county part set forth in Part (a)(2)(G) of this Rule that has either-sex days for all  
17 lawful weapons and in the following counties: Polk, Rutherford, McDowell, Burke,  
18 Caldwell, and Cleveland. Deer of either sex may be taken on the first Saturday day of this  
19 season only in all other counties.

20 (B) In the areas of the State where the Commission is authorized to regulate the use of dogs as  
21 provided in G.S. 113-291.5, dogs shall not be used for hunting deer during the blackpowder  
22 firearms and archery seasons, except a single dog on a leash may be used to retrieve a dead  
23 or wounded deer in accordance with G.S. 113-291.1(k).

24 (3) As used in this Rule, blackpowder firearms means "Any firearm - including any firearm with a  
25 matchlock, flintlock, percussion cap, or similar type of ignition system - manufactured in or before  
26 1898, that cannot use fixed ammunition; any replica of this type of firearm if such replica is not  
27 designed or redesigned for using rimfire or conventional centerfire fixed ammunition; and any  
28 muzzle-loading rifle, muzzle-loading shotgun, or muzzle-loading or cylinder-loading handgun that  
29 is designed to use blackpowder, blackpowder substitute, or any other propellant loaded through the  
30 ~~muzzle or cylinder~~ muzzle, cylinder, or breech and that cannot use fixed ammunition."

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## APPENDIX A

### 1 **15A NCAC 10B .0202 BEAR**

2 (a) Open Seasons for hunting bear shall be from the:

- 3 (1) Monday on or nearest October 15 through the Saturday before Thanksgiving and the third Monday  
4 after Thanksgiving through January 1 in and west of Surry, Wilkes, Caldwell, Burke, and Cleveland  
5 counties;
- 6 (2) Second Monday in November through January 1 in Bladen, Brunswick, Carteret, Columbus,  
7 Cumberland, Duplin, New Hanover, Onslow, Pamlico, Pender, Robeson, and Sampson counties;
- 8 (3) Second Saturday in November through the second Sunday thereafter and the third Saturday after  
9 Thanksgiving through the fifth Sunday after Thanksgiving in Beaufort, Bertie, Craven, Hertford,  
10 Jones, Martin, and Washington counties;
- 11 (4) Second Saturday in November through the third Sunday thereafter and the third Saturday after  
12 Thanksgiving through the fifth Sunday after Thanksgiving in Dare, Hyde, and Tyrrell counties;
- 13 (5) Second Saturday in November through the second Sunday thereafter and the third Saturday after  
14 Thanksgiving through the fifth Sunday after Thanksgiving in Currituck, Gates, and Perquimans  
15 counties;
- 16 (6) Second Sunday in November through the following ~~Sunday~~ Sunday, when November 1 falls on a  
17 Sunday the season shall be from the third Sunday in November through the following Sunday, and  
18 the third Saturday after Thanksgiving through the fifth Sunday after Thanksgiving in Camden,  
19 Chowan, and Pasquotank counties;
- 20 (7) Third Saturday in November though the fifth Sunday thereafter in Edgecombe, Greene, Halifax,  
21 Lenoir, Nash, Northampton, Pitt, Wayne, and Wilson counties; and
- 22 (8) Concurrent with the open season for all lawful weapons for hunting deer as specified in 15A NCAC  
23 10B .0203(a)(1) in Alamance, Alexander, Anson, Cabarrus, Caswell, Catawba, Chatham, Davie,  
24 Davidson, Durham, Franklin, Forsyth, Gaston, Granville, Guilford, Harnett, Hoke, Iredell, Johnston,  
25 Lee, Lincoln, Mecklenburg, Montgomery, Moore, Orange, Person, Randolph, Richmond,  
26 Rockingham, Rowan, Scotland, Stanly, Stokes, Union, Vance, Wake, Warren, and Yadkin counties.

27 (b) Restrictions

- 28 (1) For purposes of this Paragraph, "bait" means any natural, unprocessed food product that is a grain,  
29 fruit, nut, vegetable, or other material harvested from a plant crop that is not modified from its raw  
30 components.
- 31 (2) Bears shall not be taken with the use or aid of:
- 32 (A) any processed food product as defined in G.S. 113-294(r), any animal, animal part or  
33 product, salt, salt lick, honey, sugar, sugar-based material, syrups, candy, pastry, gum,  
34 candy block, oils, spices, peanut butter, or grease;
- 35 (B) any extracts of substances identified in Part (A) of this Subparagraph;
- 36 (C) any substances modified by substances identified in Part (A) of this Subparagraph,  
37 including any extracts of those substances; or
- 38 (D) any bear bait attractant, including sprays, aerosols, scent balls, and scent powders.

## APPENDIX A

- 1           (3)       Bears may be taken with the aid of bait from the Monday on or nearest October 15 to the Saturday  
2 before Thanksgiving in the counties in Subparagraph (a)(1) of this Rule.
- 3           (4)       Bears may be taken with the aid of bait during the entire open season in the counties identified in  
4 Subparagraphs (a)(2) through (a)(6) of this Rule.
- 5           (5)       Bears shall not be taken while in the act of consuming bait.
- 6           (6)       Hunters shall not take bears using dogs in the following counties: Alamance south of Interstate 85,  
7 Anson west of N.C. Hwy 742, Cabarrus, Chatham, Davie, Davidson, Franklin, Forsyth, Gaston,  
8 Guilford, Lee, Lincoln, Mecklenburg, Montgomery, Orange south of Interstate 85, Randolph,  
9 Rockingham, Rowan, Stanly, Union, and Wake south of N.C. Hwy 98. In all other counties and  
10 parts of counties, hunters may take bears using dogs and may release dogs in the vicinity of bait.
- 11 (c) No Open Season. It shall be unlawful to take bear on posted bear sanctuaries except when authorized by permit  
12 issued by the Commission. See 15A NCAC 10D .0106 for posted bear sanctuaries.
- 13 (d) The daily bag limit for bear is one, the possession limit is one, and the season limit is one.
- 14 (e) Any hunter who has harvested a black bear shall submit at least one upper premolar tooth from the bear to the  
15 Commission at 1723 Mail Service Center, Raleigh, NC 27690-4619. The tooth shall be received by the Commission  
16 no later than January 31 of the year following the applicable hunting season. The following information shall be  
17 submitted with the tooth:
- 18           (1)       hunter's name and mailing address;
- 19           (2)       hunter's WRC customer number;
- 20           (3)       hunter's bear harvest authorization number;
- 21           (4)       sex of harvested bear; and
- 22           (5)       county of harvest.
- 23