

***Status & Management of
Black Bears in NC
2016 Bear Forum Presentation***



So What is Tonight About?

1. Briefly review the NC Black Bear Management Plan.
2. Share data and information about our bear populations.
3. Describe development of “Zones” in the Coastal Bear Management Unit.
4. Discuss with hunters the status and opportunities regarding bear hunting rules, seasons, future needs and desires.
5. Get input from you on the future of bear management!

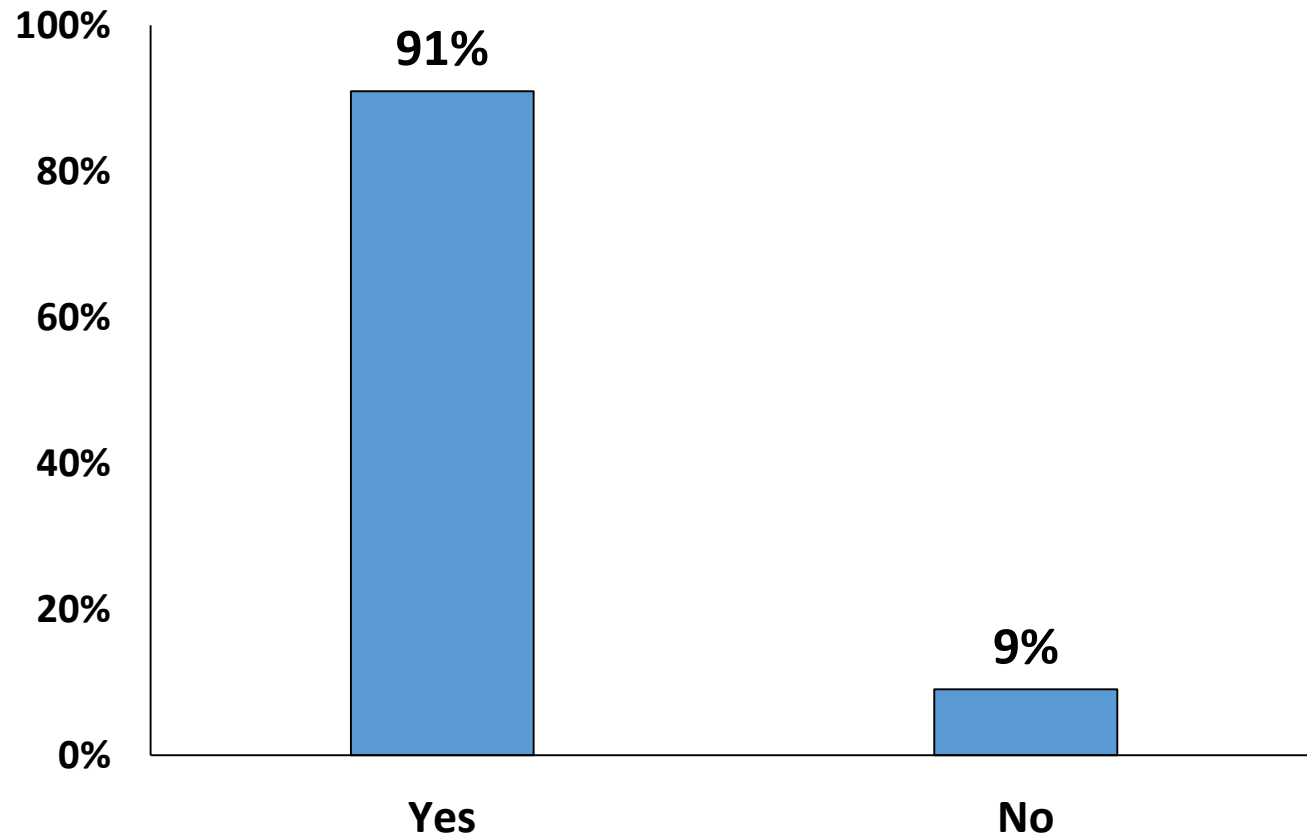


We are going high tech!

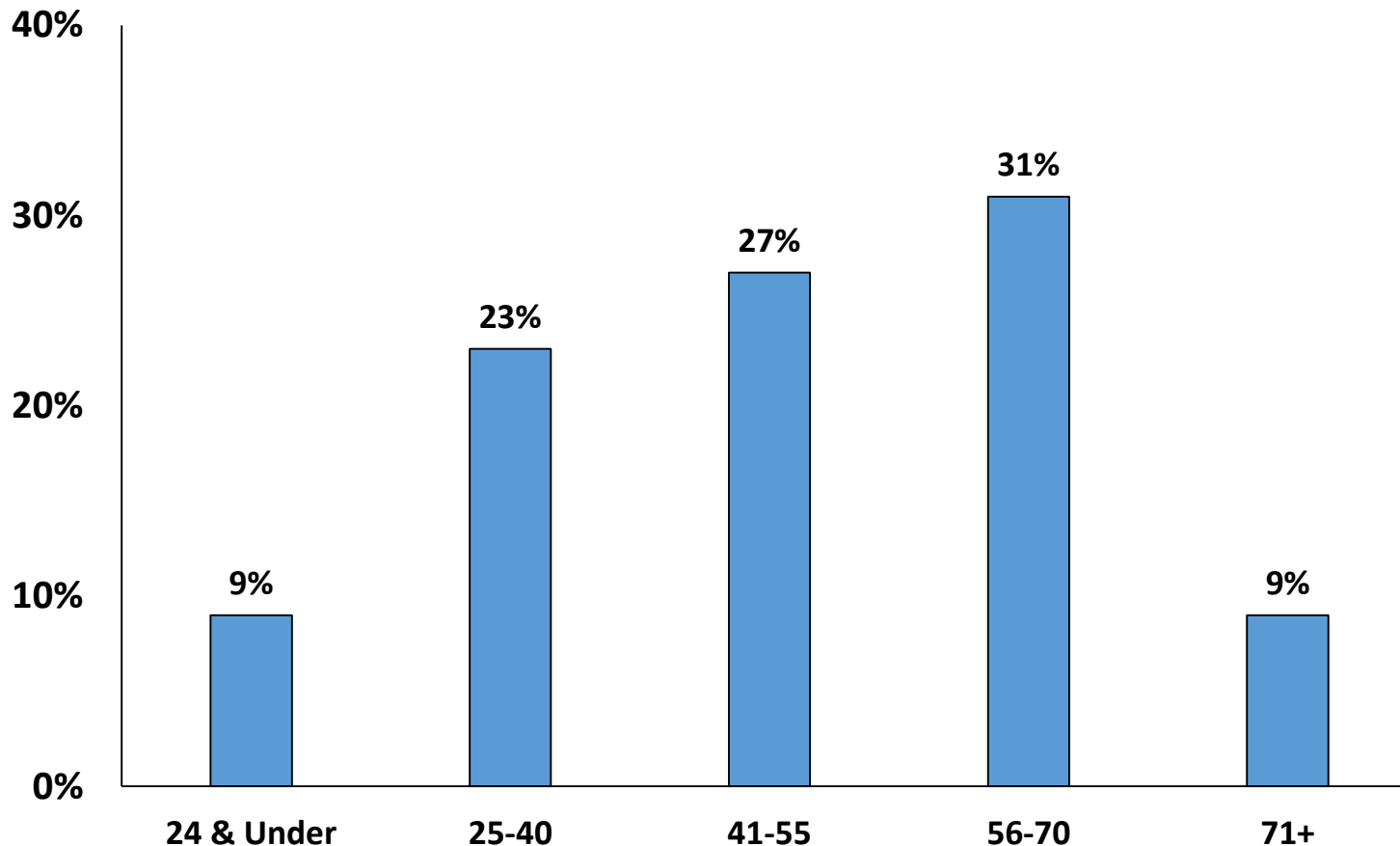


Each attendee was given an electronic device that they could use to anonymously answer questions throughout the night. The statewide summary of audience answers are included in this presentation.

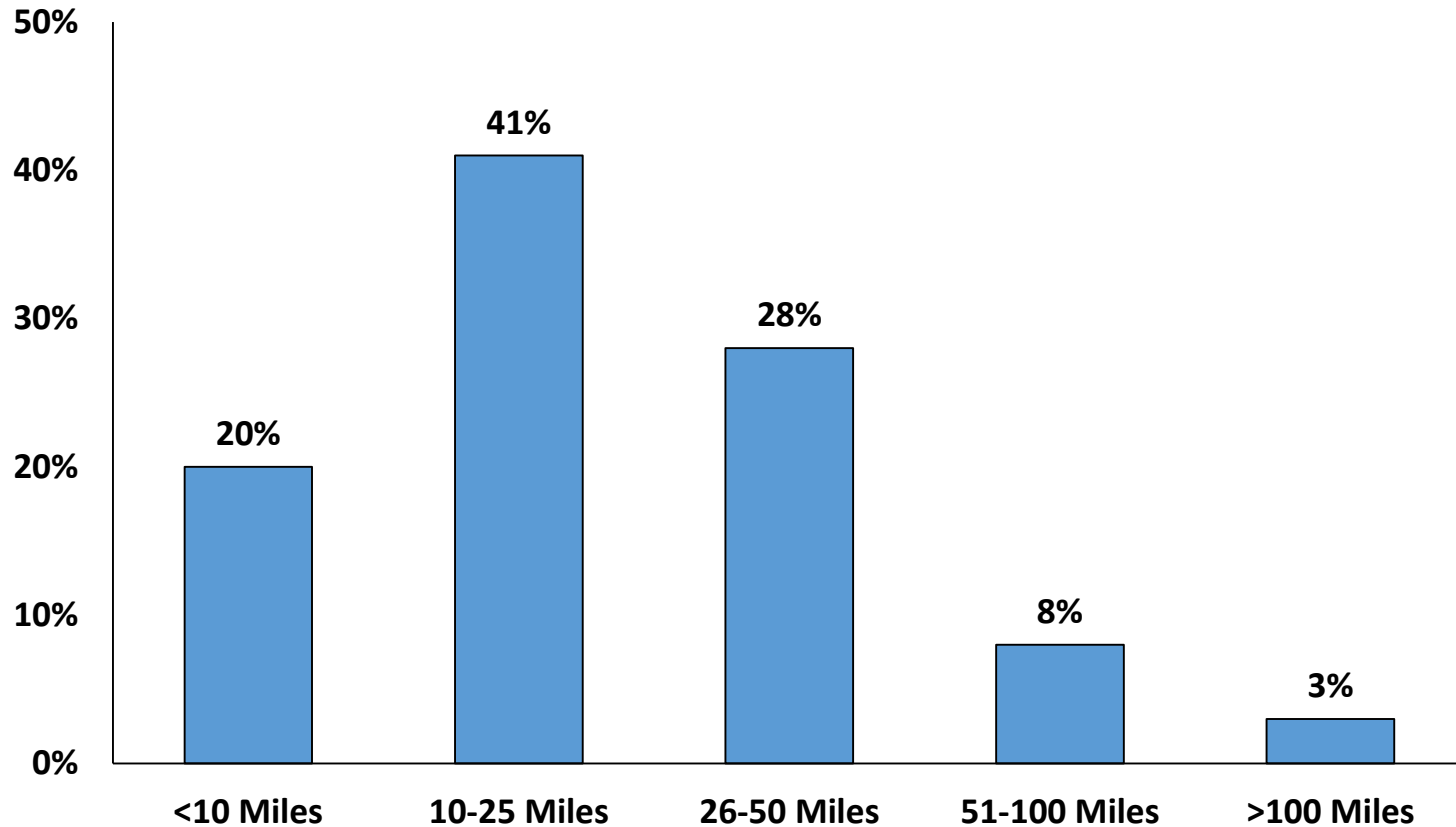
Are you a hunter? (for any species)



Please tell us your age range...



How far did you travel to get to this meeting?



Review of North Carolina Black Bear Management Plan



Plan Approach

- History
- Current Status
- Future management

- Biologically-sound principles
- Formalizes Process:
 - Goal
 - Objectives
 - Addressing bear issues

NORTH CAROLINA BLACK BEAR MANAGEMENT PLAN

2012-2022

North Carolina Wildlife Resources Commission



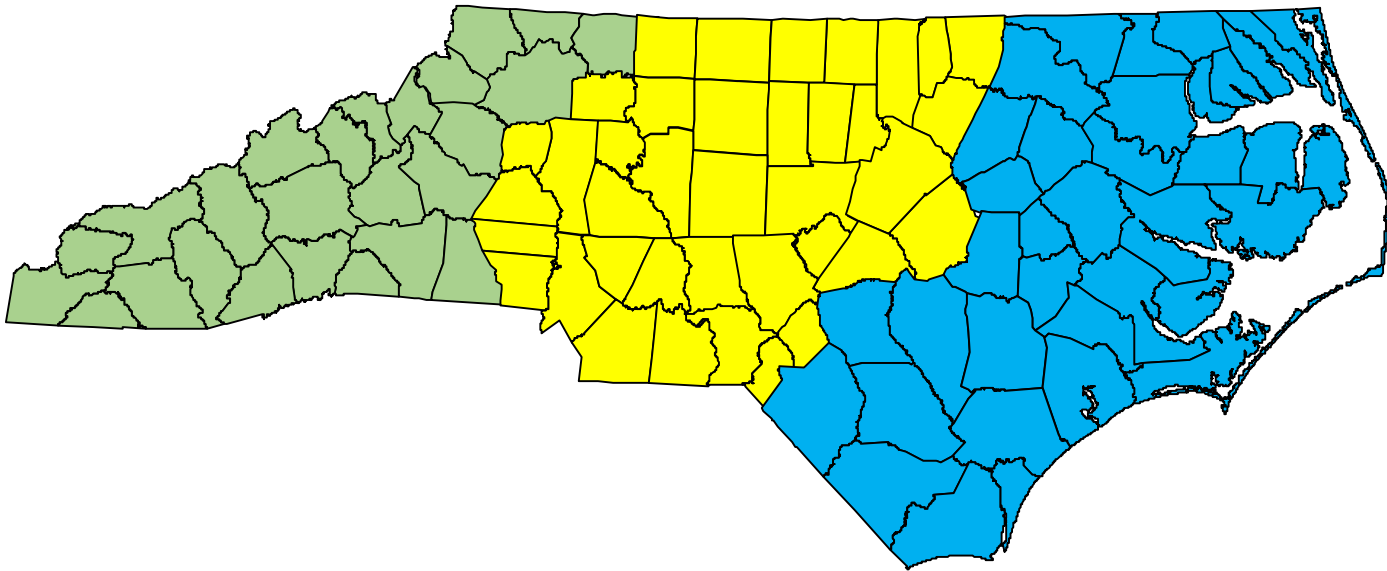
Plan Goal

“Use science-based decision making and biologically-sound management principles to manage black bear populations in balance with available habitats and human expectations to assure long-term existence and hunting opportunities.”

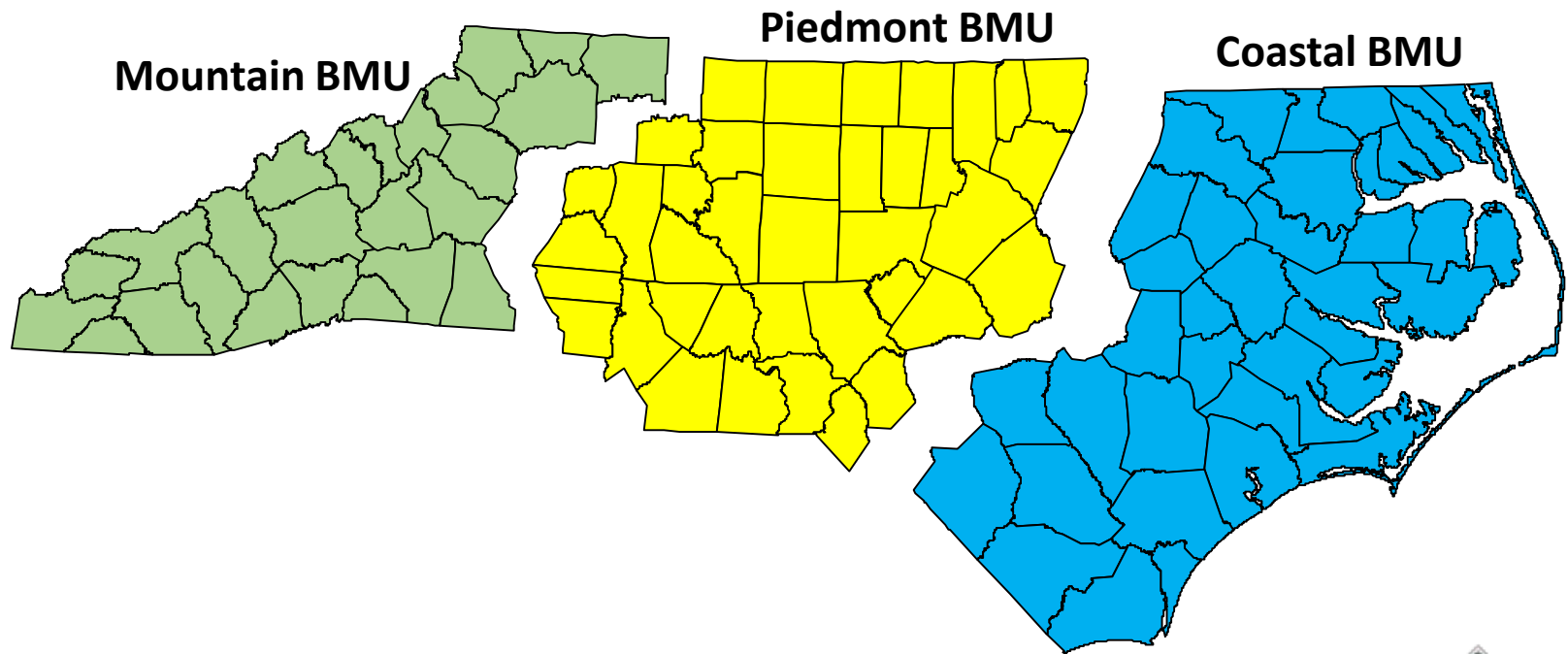


Plan Objectives

Seven Statewide Management Objectives



The Plan Identifies Three Regional Black Bear Management Units (BMU)



Population objectives were developed for each unit.



NORTH CAROLINA BLACK BEAR MANAGEMENT PLAN

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www.ncwildlife.org/bear



Review of North Carolina Bear Population Data and Information



What are “Data”?

Facts or information (measurements or statistics) used to calculate, analyze, or plan something.

Examples:

Number of bears harvested

Number of Hunters

Square miles of huntable land in each county



Where Do We Get Our Data?

Most of it comes from you, our Bear Hunters!



We know we send you lot's of stuff.....



North Carolina Wildlife Resources Commission (NCWRC) Black Bear Hunter Survey

Attention Bear e-Stamp holder: The NCWRC is conducting this survey to help us make the best management decisions for black bears and bear hunters. Please take a few minutes to complete this important questionnaire, **even if you did not hunt for bears during the 2015 season.**

«First_Name» «Middle_Name» «Last_Name» «Suffix»
«Address_1»
«Address_2»
«City» «State_» «Zip» «Zip_4»

WRC Customer Number:
«WRCcustomernumber»



Your response is very important. Your response will help us determine if changes in harvest information will also help us determine if changes in hunting methods, the number of bear hunters, or actual change in information will assist us in evaluating both current and future management options.

Your answers are completely confidential.

We appreciate you taking an active part in the management of North Carolina's wildlife resources.

Please complete the following black bear hunter survey and return the enclosed business reply envelope.

Sincerely,

Colleen Ofenbittel, Black Bear and Furbearer Biologist

Envelop Flap

NCWRC-BEAR TOOTH RETURN ENVELOPE

We need the premolar tooth from **all bears, young & old, big & small.** You will receive a blaze orange cooperator hat & the age of your bear. If you need assistance, call (919) 707-0050 to get contact information for your local biologist. A video showing how to remove the tooth is available at: www.ncwildlife.org/bear



INSTRUCTIONS:

BEAR COOPERATOR PROGRAM

COOPERATOR # (found on your hunting license): _____

STATE: _____

☐ Party Leader, ☐ Both

TYPE OF KILL: _____

☐ FEMALE

☐ Game land ☐ Game land

WEAPON USED: _____

☐ Muzzleloader ☐ Bow

COOPERATOR # _____

DATE: _____

This report card is valid for the 2014-15 hunting season. Refer to your license to ensure your license(s) is valid.
WRC Customer # 7612765
Big Game Harvest Report Card

- Patch or fill the appropriate cooperator symbol **before entering the animal in on the site of kill.**
- All harvest must be reported within 24 hours (domestic) or 48 hours (foreign) for cooperator symbol.
- Report harvest by phone (919-707-0050), online (www.ncwildlife.org), or by Mail (Cooperator Report Card, available for carry and under activity stamp).
- Report authorization number on the back of the cooperator symbol.
- If the animal is killed in a hunting area, it must be checked with your name, WRC customer number, and date of kill.
- Animals to be checked as done and button books.

Harvest ID # 761276520
Bear - 1st-2nd-3rd-4th-5th-6th-7th-8th-9th-10th-11th-12th-13th-14th-15th-16th-17th-18th-19th-20th-21st-22nd-23rd-24th-25th-26th-27th-28th-29th-30th-31st-32nd-33rd-34th-35th-36th-37th-38th-39th-40th-41st-42nd-43rd-44th-45th-46th-47th-48th-49th-50th-51st-52nd-53rd-54th-55th-56th-57th-58th-59th-60th-61st-62nd-63rd-64th-65th-66th-67th-68th-69th-70th-71st-72nd-73rd-74th-75th-76th-77th-78th-79th-80th-81st-82nd-83rd-84th-85th-86th-87th-88th-89th-90th-91st-92nd-93rd-94th-95th-96th-97th-98th-99th-100th-101st-102nd-103rd-104th-105th-106th-107th-108th-109th-110th-111th-112th-113th-114th-115th-116th-117th-118th-119th-120th-121st-122nd-123rd-124th-125th-126th-127th-128th-129th-130th-131st-132nd-133rd-134th-135th-136th-137th-138th-139th-140th-141st-142nd-143rd-144th-145th-146th-147th-148th-149th-150th-151st-152nd-153rd-154th-155th-156th-157th-158th-159th-160th-161st-162nd-163rd-164th-165th-166th-167th-168th-169th-170th-171st-172nd-173rd-174th-175th-176th-177th-178th-179th-180th-181st-182nd-183rd-184th-185th-186th-187th-188th-189th-190th-191st-192nd-193rd-194th-195th-196th-197th-198th-199th-200th-201st-202nd-203rd-204th-205th-206th-207th-208th-209th-210th-211st-212nd-213rd-214th-215th-216th-217th-218th-219th-220th-221st-222nd-223rd-224th-225th-226th-227th-228th-229th-230th-231st-232nd-233rd-234th-235th-236th-237th-238th-239th-240th-241st-242nd-243rd-244th-245th-246th-247th-248th-249th-250th-251st-252nd-253rd-254th-255th-256th-257th-258th-259th-260th-261st-262nd-263rd-264th-265th-266th-267th-268th-269th-270th-271st-272nd-273rd-274th-275th-276th-277th-278th-279th-280th-281st-282nd-283rd-284th-285th-286th-287th-288th-289th-290th-291st-292nd-293rd-294th-295th-296th-297th-298th-299th-300th-301st-302nd-303rd-304th-305th-306th-307th-308th-309th-310th-311st-312nd-313rd-314th-315th-316th-317th-318th-319th-320th-321st-322nd-323rd-324th-325th-326th-327th-328th-329th-330th-331st-332nd-333rd-334th-335th-336th-337th-338th-339th-340th-341st-342nd-343rd-344th-345th-346th-347th-348th-349th-350th-351st-352nd-353rd-354th-355th-356th-357th-358th-359th-360th-361st-362nd-363rd-364th-365th-366th-367th-368th-369th-370th-371st-372nd-373rd-374th-375th-376th-377th-378th-379th-380th-381st-382nd-383rd-384th-385th-386th-387th-388th-389th-390th-391st-392nd-393rd-394th-395th-396th-397th-398th-399th-400th-401st-402nd-403rd-404th-405th-406th-407th-408th-409th-410th-411st-412nd-413rd-414th-415th-416th-417th-418th-419th-420th-421st-422nd-423rd-424th-425th-426th-427th-428th-429th-430th-431st-432nd-433rd-434th-435th-436th-437th-438th-439th-440th-441st-442nd-443rd-444th-445th-446th-447th-448th-449th-450th-451st-452nd-453rd-454th-455th-456th-457th-458th-459th-460th-461st-462nd-463rd-464th-465th-466th-467th-468th-469th-470th-471st-472nd-473rd-474th-475th-476th-477th-478th-479th-480th-481st-482nd-483rd-484th-485th-486th-487th-488th-489th-490th-491st-492nd-493rd-494th-495th-496th-497th-498th-499th-500th-501st-502nd-503rd-504th-505th-506th-507th-508th-509th-510th-511st-512nd-513rd-514th-515th-516th-517th-518th-519th-520th-521st-522nd-523rd-524th-525th-526th-527th-528th-529th-530th-531st-532nd-533rd-534th-535th-536th-537th-538th-539th-540th-541st-542nd-543rd-544th-545th-546th-547th-548th-549th-550th-551st-552nd-553rd-554th-555th-556th-557th-558th-559th-560th-561st-562nd-563rd-564th-565th-566th-567th-568th-569th-570th-571st-572nd-573rd-574th-575th-576th-577th-578th-579th-580th-581st-582nd-583rd-584th-585th-586th-587th-588th-589th-590th-591st-592nd-593rd-594th-595th-596th-597th-598th-599th-600th-601st-602nd-603rd-604th-605th-606th-607th-608th-609th-610th-611st-612nd-613rd-614th-615th-616th-617th-618th-619th-620th-621st-622nd-623rd-624th-625th-626th-627th-628th-629th-630th-631st-632nd-633rd-634th-635th-636th-637th-638th-639th-640th-641st-642nd-643rd-644th-645th-646th-647th-648th-649th-650th-651st-652nd-653rd-654th-655th-656th-657th-658th-659th-660th-661st-662nd-663rd-664th-665th-666th-667th-668th-669th-670th-671st-672nd-673rd-674th-675th-676th-677th-678th-679th-680th-681st-682nd-683rd-684th-685th-686th-687th-688th-689th-690th-691st-692nd-693rd-694th-695th-696th-697th-698th-699th-700th-701st-702nd-703rd-704th-705th-706th-707th-708th-709th-710th-711st-712nd-713rd-714th-715th-716th-717th-718th-719th-720th-721st-722nd-723rd-724th-725th-726th-727th-728th-729th-730th-731st-732nd-733rd-734th-735th-736th-737th-738th-739th-740th-741st-742nd-743rd-744th-745th-746th-747th-748th-749th-750th-751st-752nd-753rd-754th-755th-756th-757th-758th-759th-760th-761st-762nd-763rd-764th-765th-766th-767th-768th-769th-770th-771st-772nd-773rd-774th-775th-776th-777th-778th-779th-780th-781st-782nd-783rd-784th-785th-786th-787th-788th-789th-790th-791st-792nd-793rd-794th-795th-796th-797th-798th-799th-800th-801st-802nd-803rd-804th-805th-806th-807th-808th-809th-810th-811st-812nd-813rd-814th-815th-816th-817th-818th-819th-820th-821st-822nd-823rd-824th-825th-826th-827th-828th-829th-830th-831st-832nd-833rd-834th-835th-836th-837th-838th-839th-840th-841st-842nd-843rd-844th-845th-846th-847th-848th-849th-850th-851st-85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Why Do We Need Data?

We need data to effectively measure, monitor, and manage our bear populations.

- Monitor Population trends
- Determine effects of hunting regulations
- Manage people (response, defense of hunting, etc.)

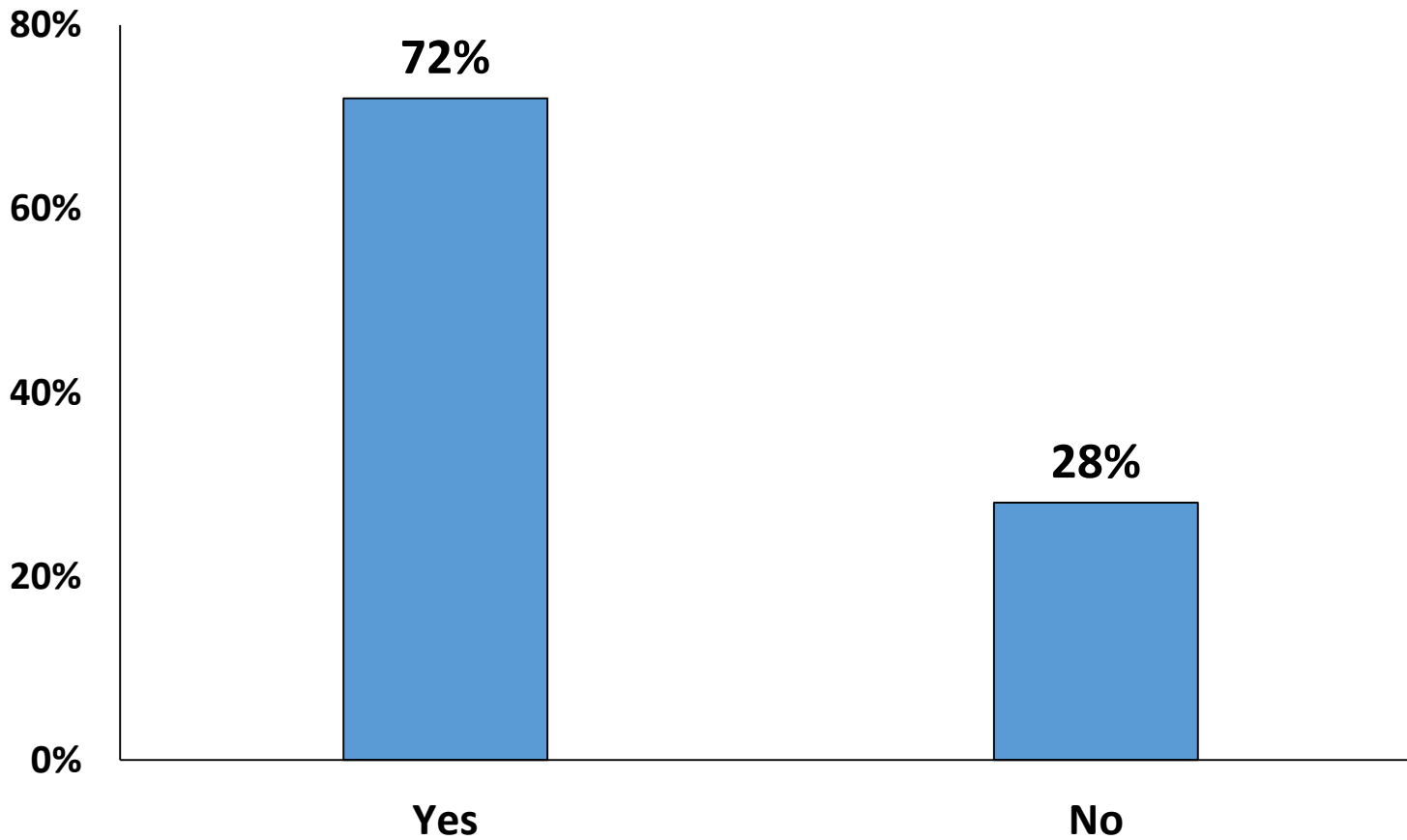


We're working for you, so please:

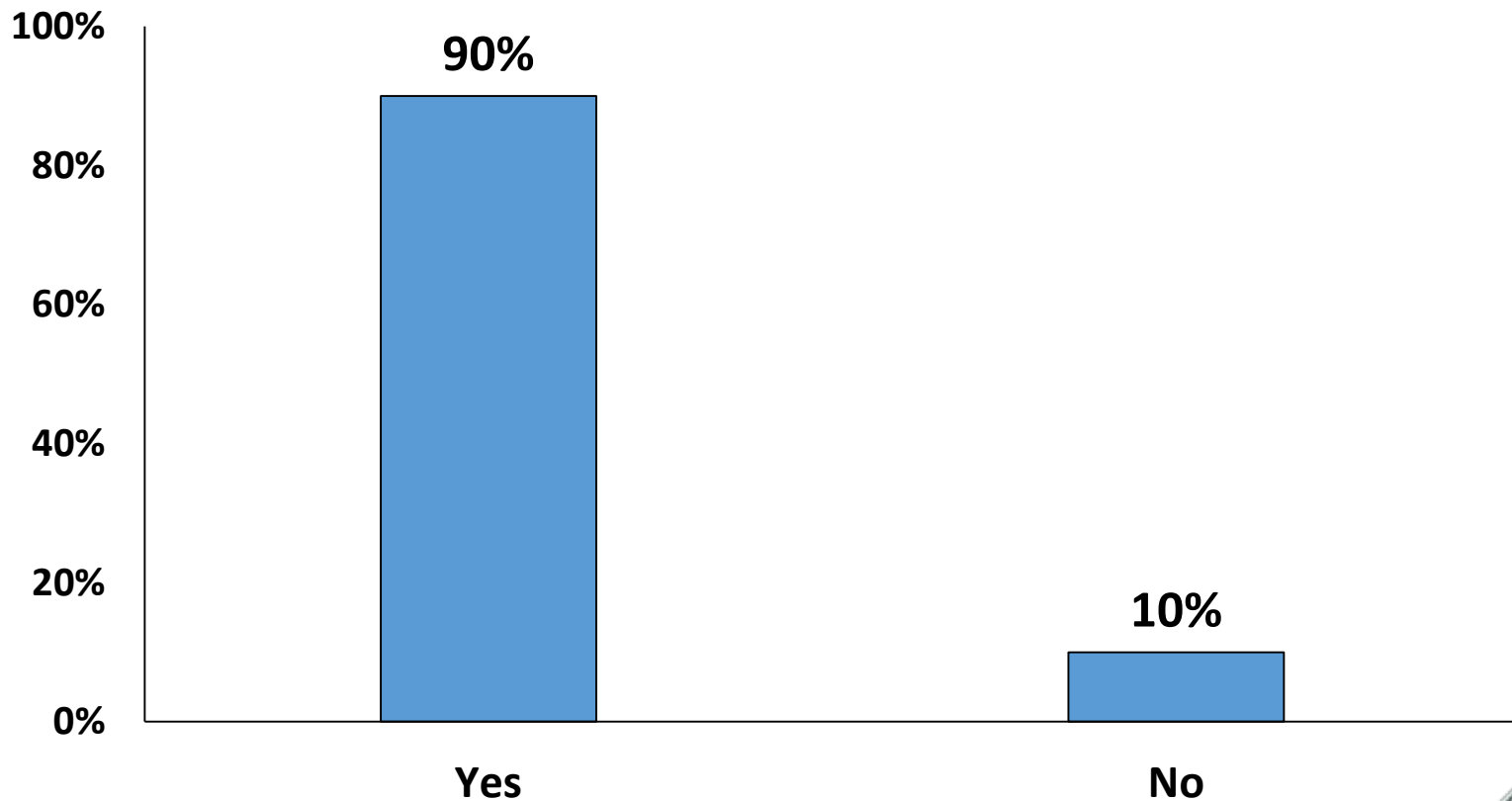
- Report your bear harvest
- Respond to mail surveys
- Submit a tooth from the bear you harvest



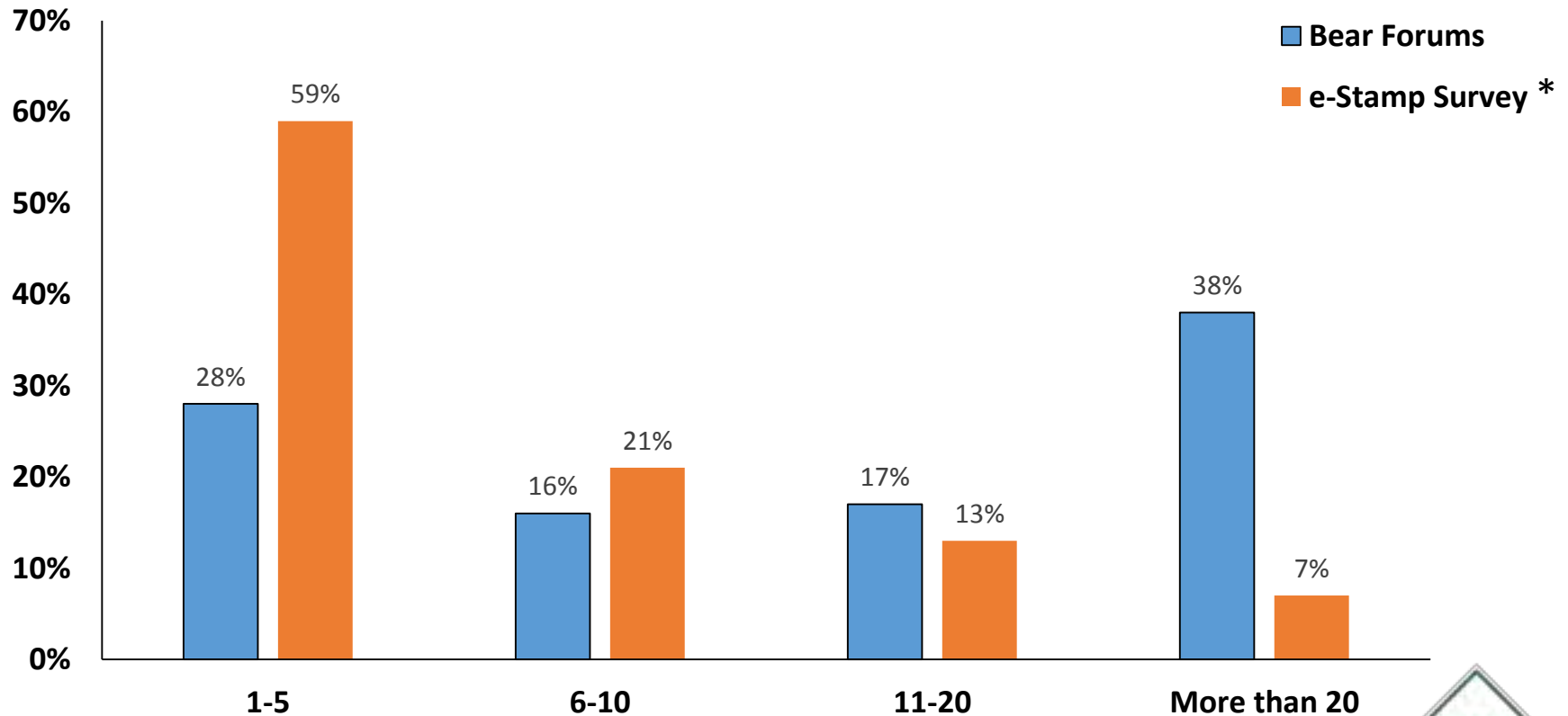
Do you consider yourself a bear hunter?



If you are a bear hunter, do you hunt species other than bear?



If you hunt, on average, how many days do you hunt bear each year?

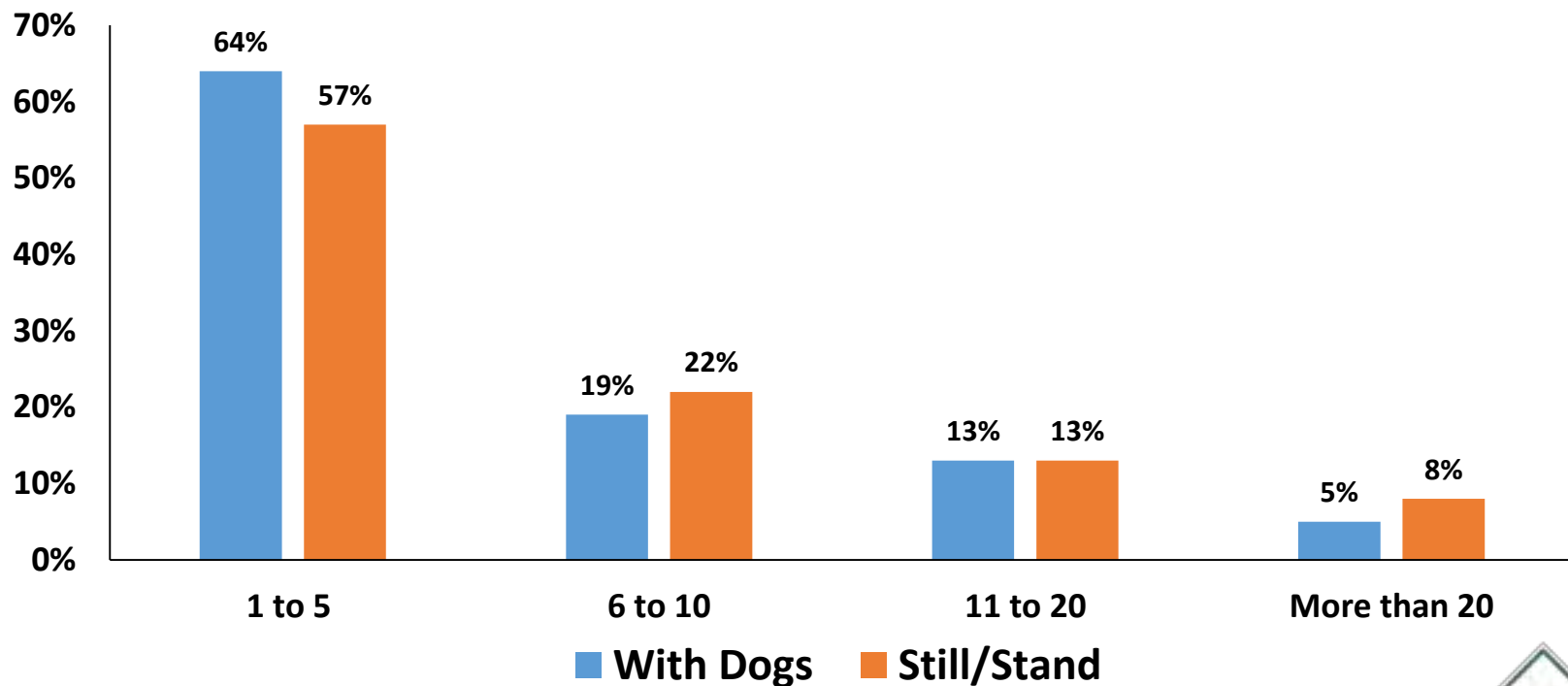


**e-Stamp Survey – Survey of all NC bear e-Stamp license holders*

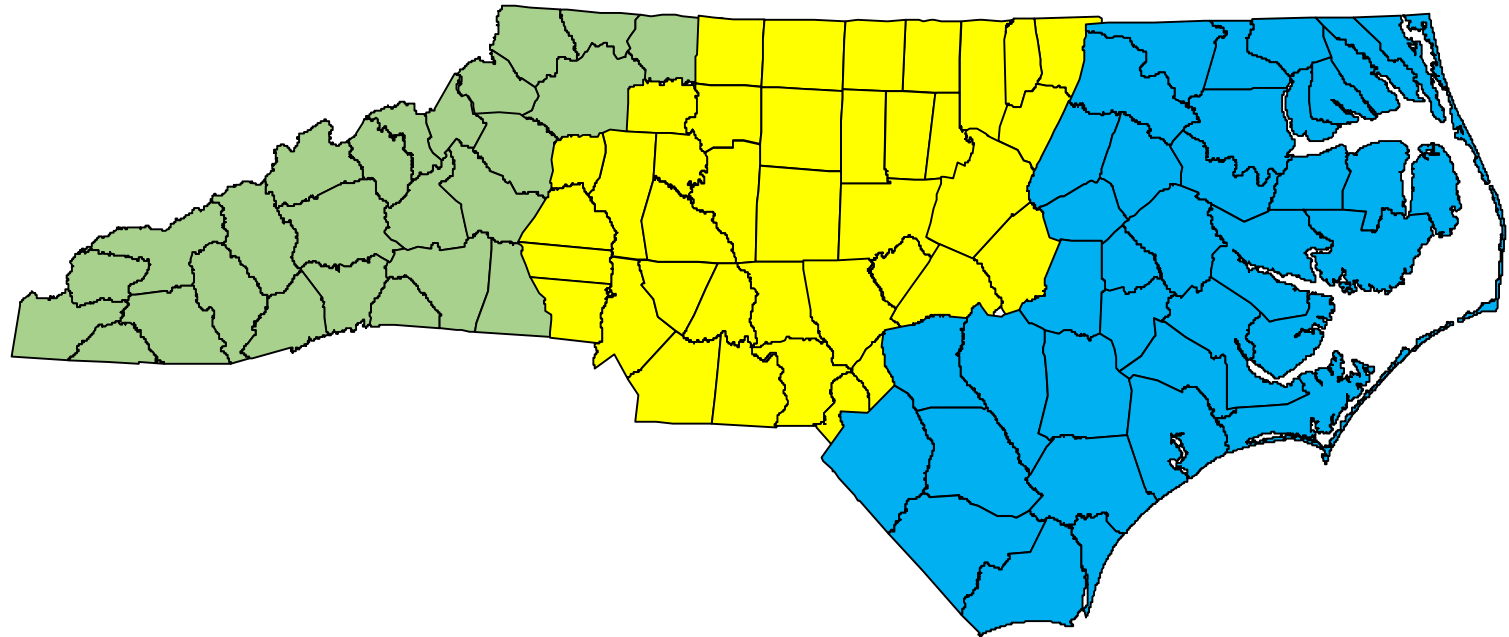


How many days did you hunt bears?

(2015 e-Stamp Survey)

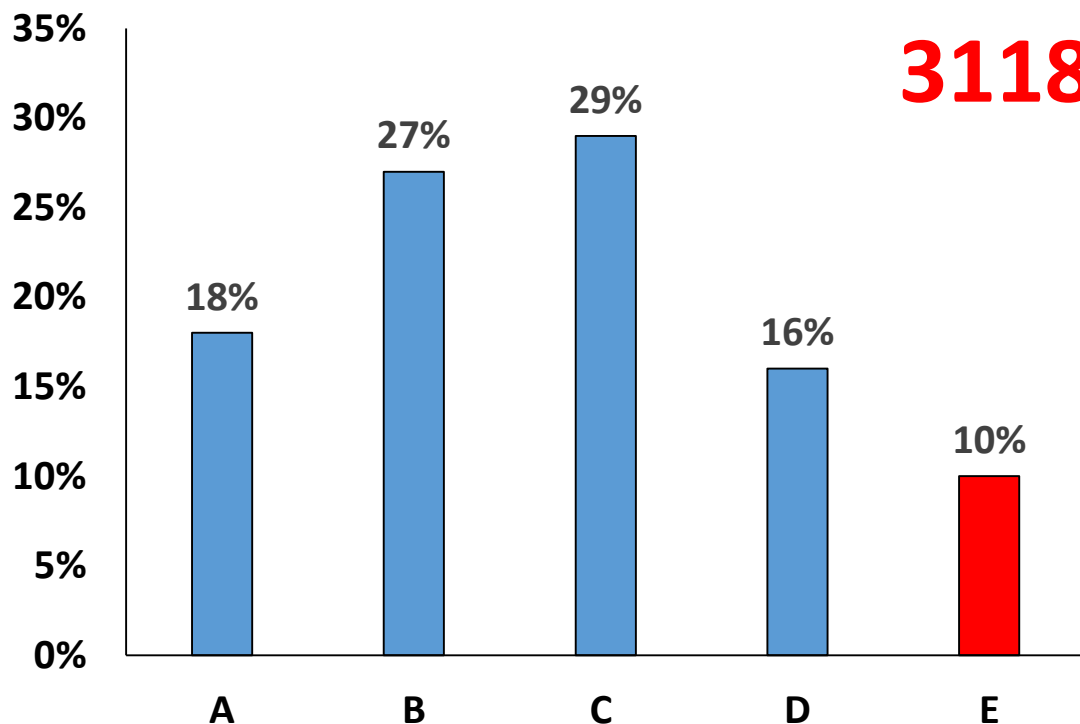


Statewide Harvest Data

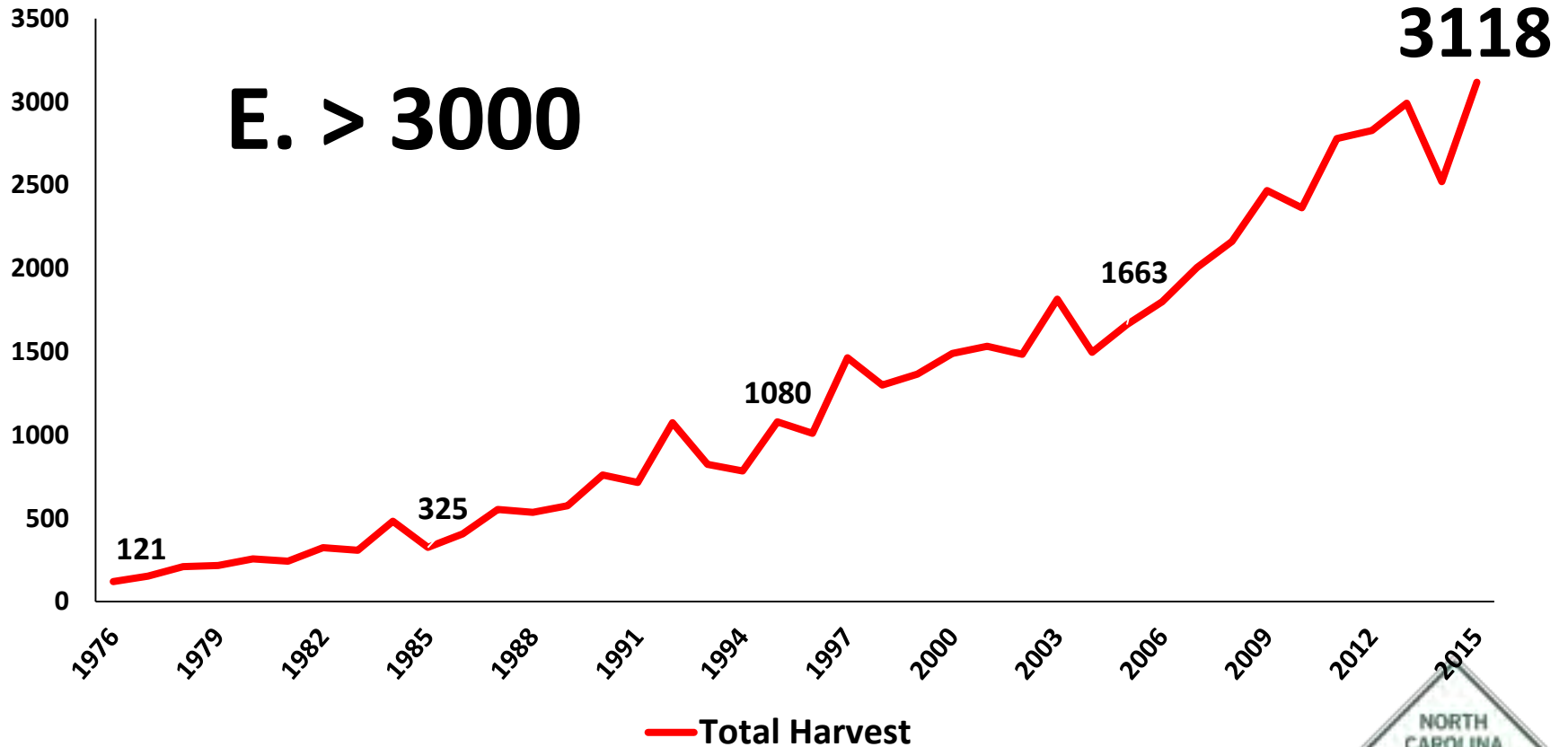


What do you think the statewide bear harvest was in 2015?

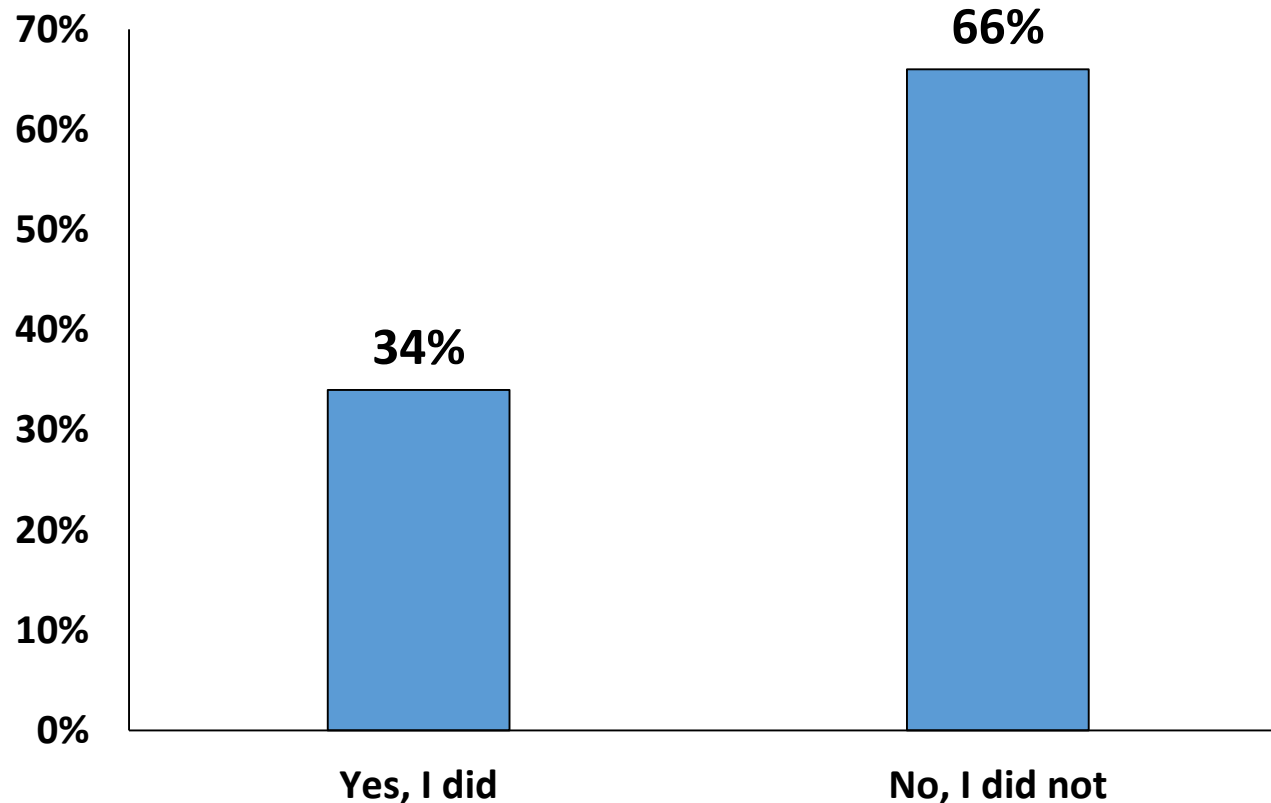
- A. < 500
- B. 500 - 1000
- C. 1000 - 2000
- D. 2000 – 3000
- E. > 3000**



2015 Statewide Black Bear Harvest

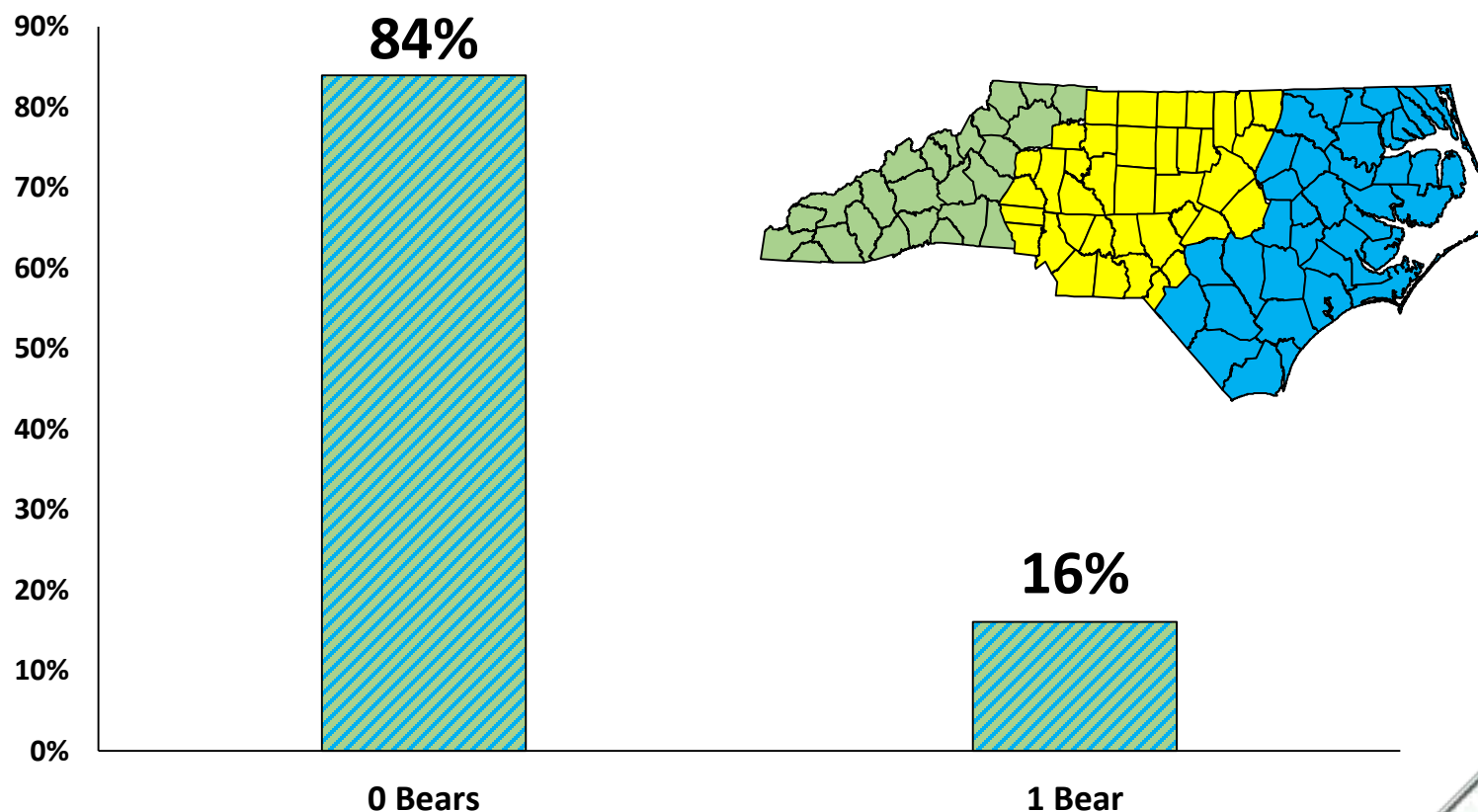


If you bear hunted last season, did you kill a bear?



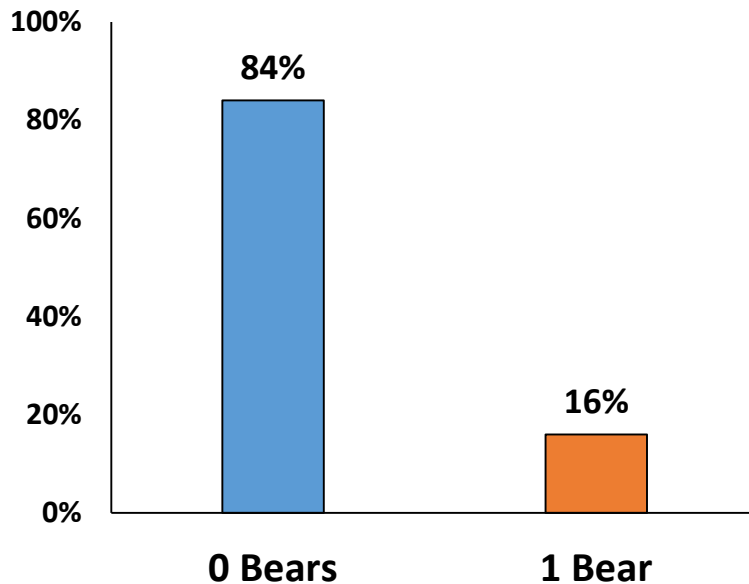
2014-2015 Hunter Harvest Survey

Hunter Success Statewide

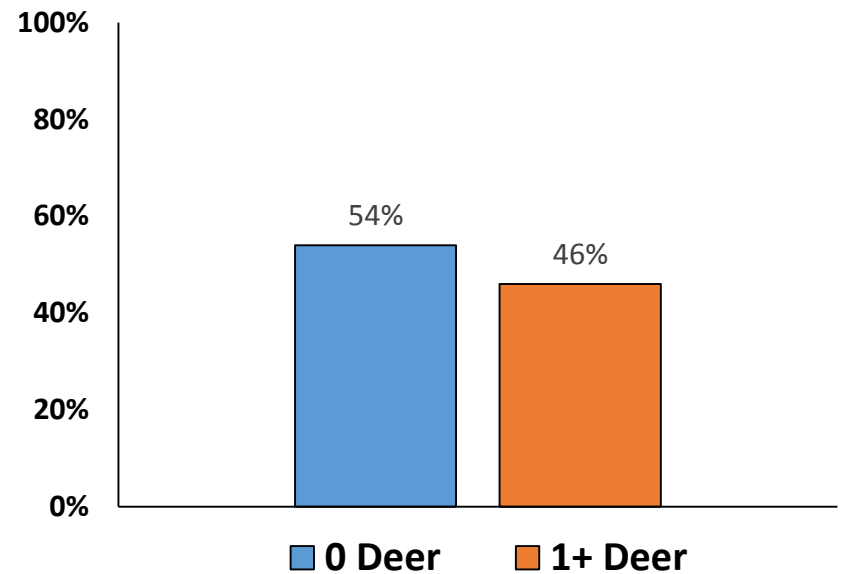


Statewide Hunter Success #s

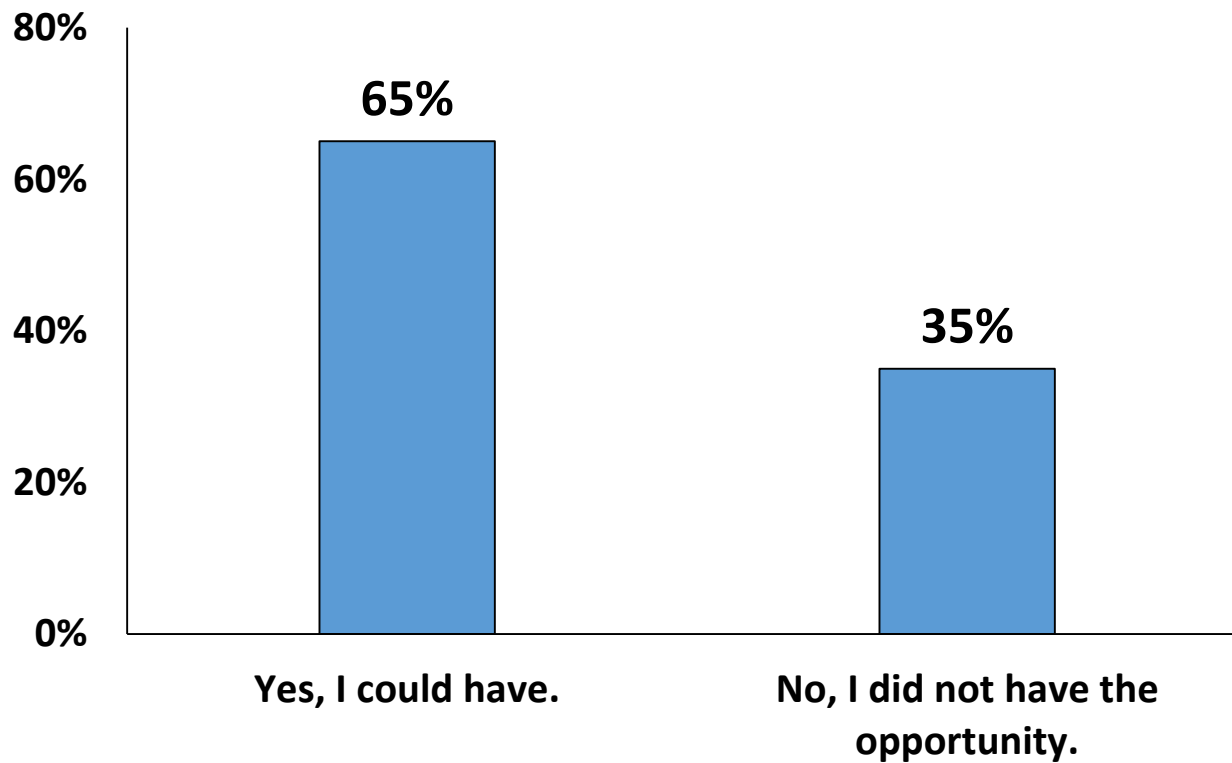
Bear Hunter Success



Deer Hunter Success



If you bear hunted last season, could you have killed a bear but chose not to shoot it?

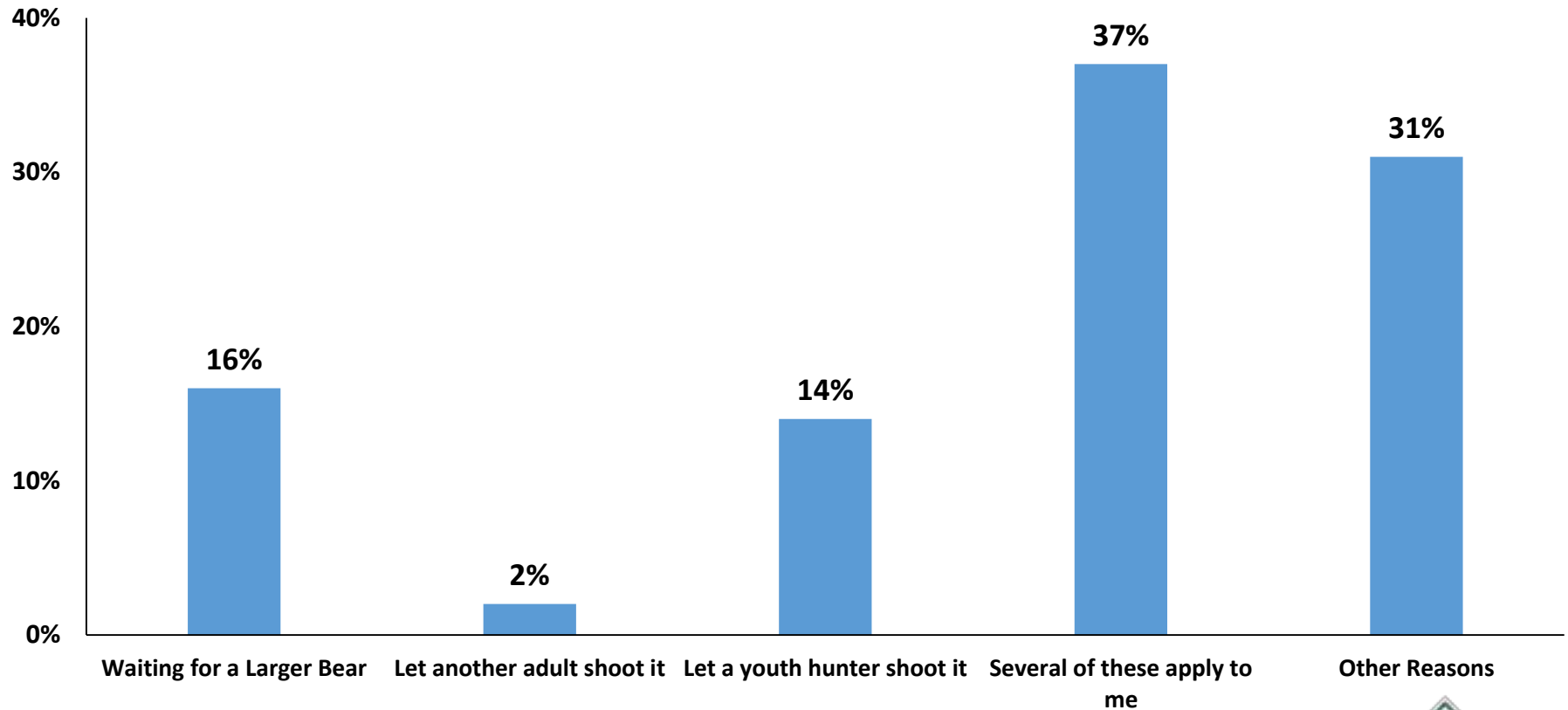


If you chose not to shoot, Why?

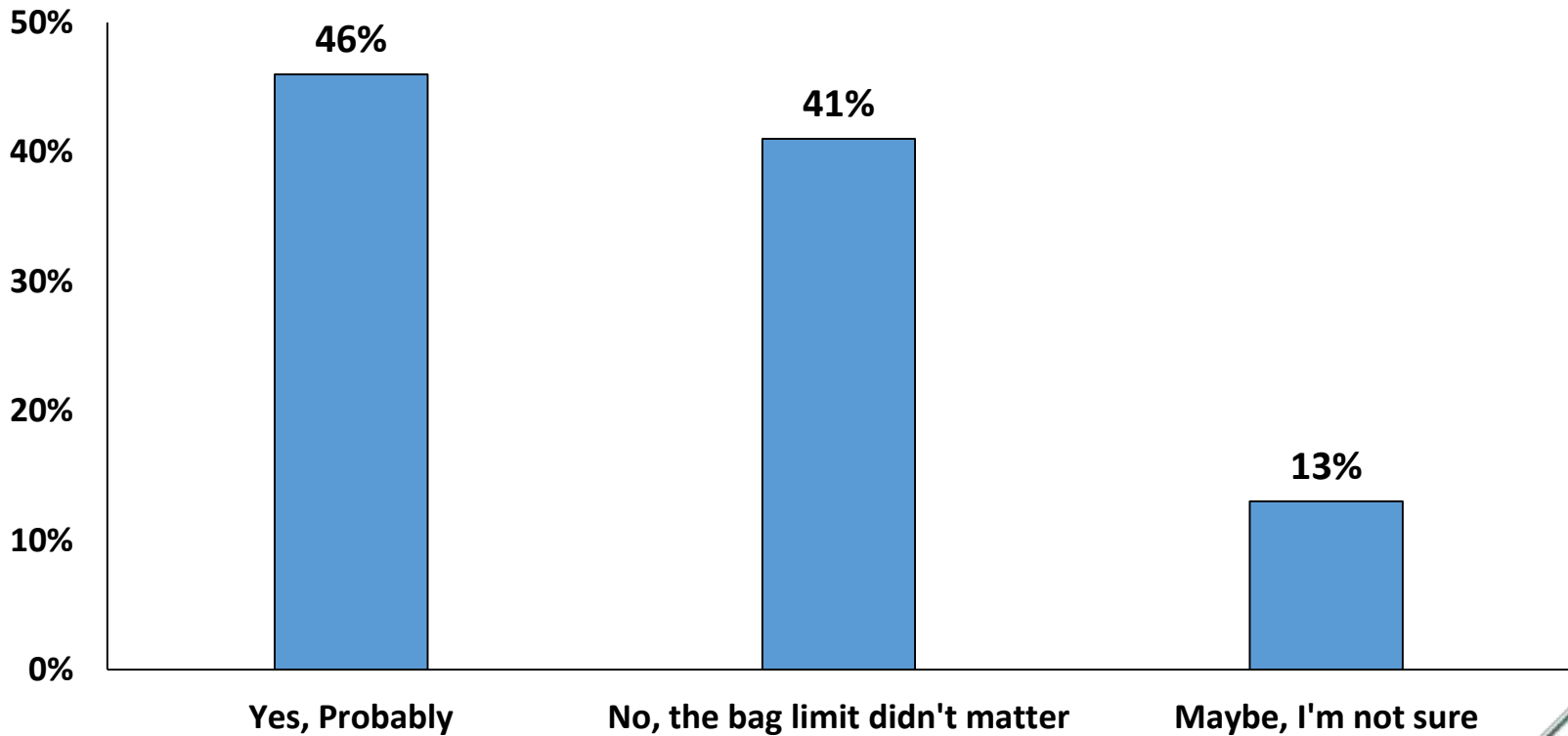
- A. I was waiting for a larger bear (saving my “tag”).
- B. I let another adult shoot it.
- C. I let a youth hunter shoot it.
- D. Several of these applied to me.
- E. Other reasons.



If you chose not to shoot, why?

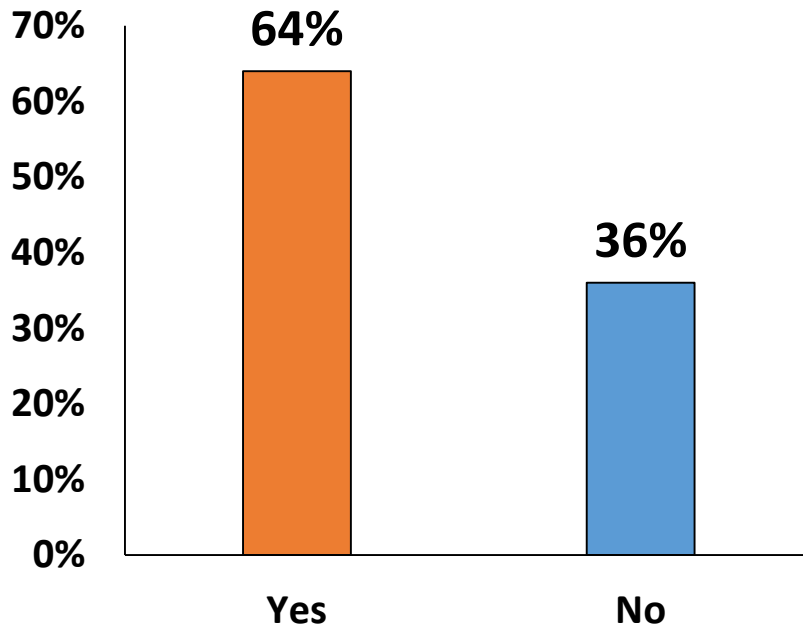


If your bag limit had been two bears, would you have chosen to shoot a bear?

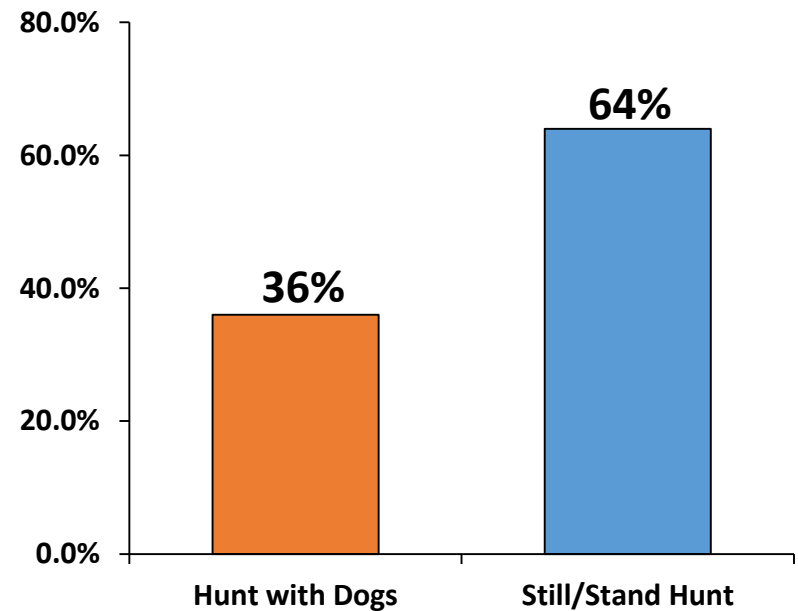


Last season, did you participate in a bear hunt using dogs?

Statewide Attendees Response

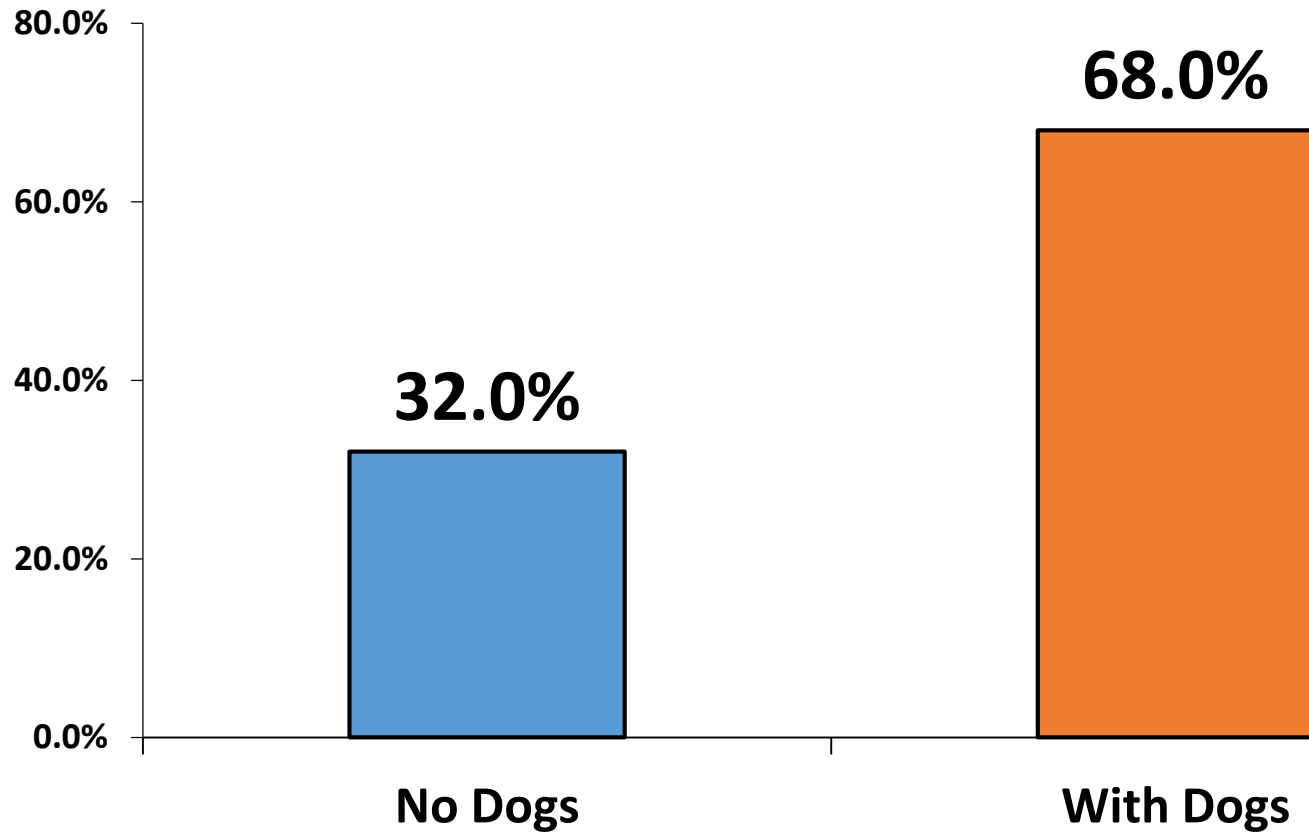


2015 e-Stamp Survey



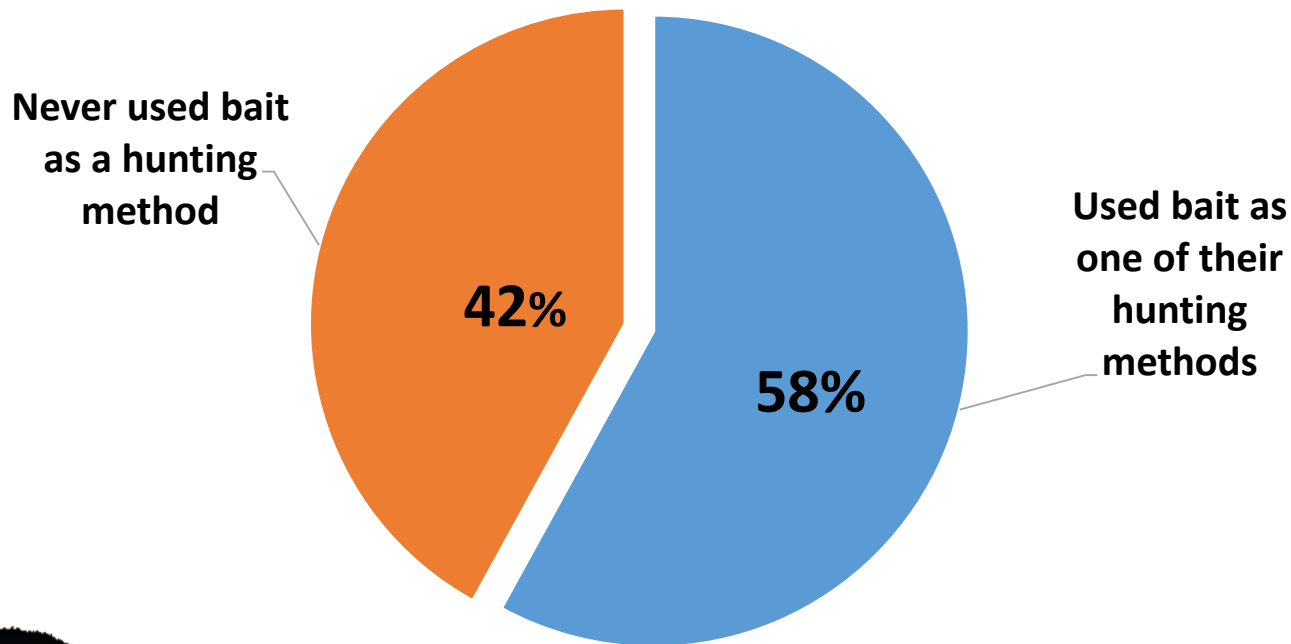
Use of Dogs for Harvesting Bears

(2013-2015 Reported Harvest)



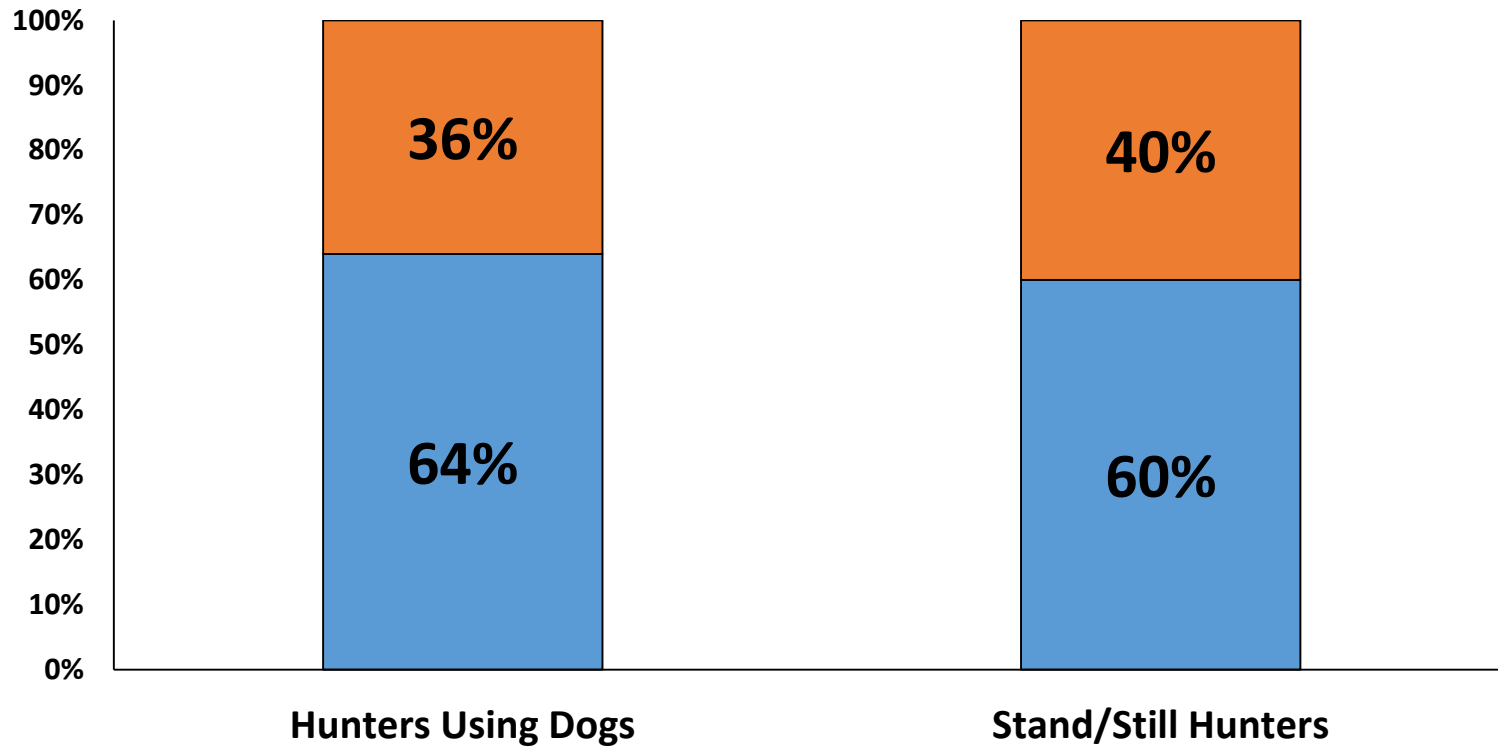
Successful Bear Hunters Statewide (2015 e-Stamp Survey)

Used Bait as a Hunting Method



Use of Bait by Method

(2015 e-Stamp Survey)



■ No Use of Bait

■ Use of Bait



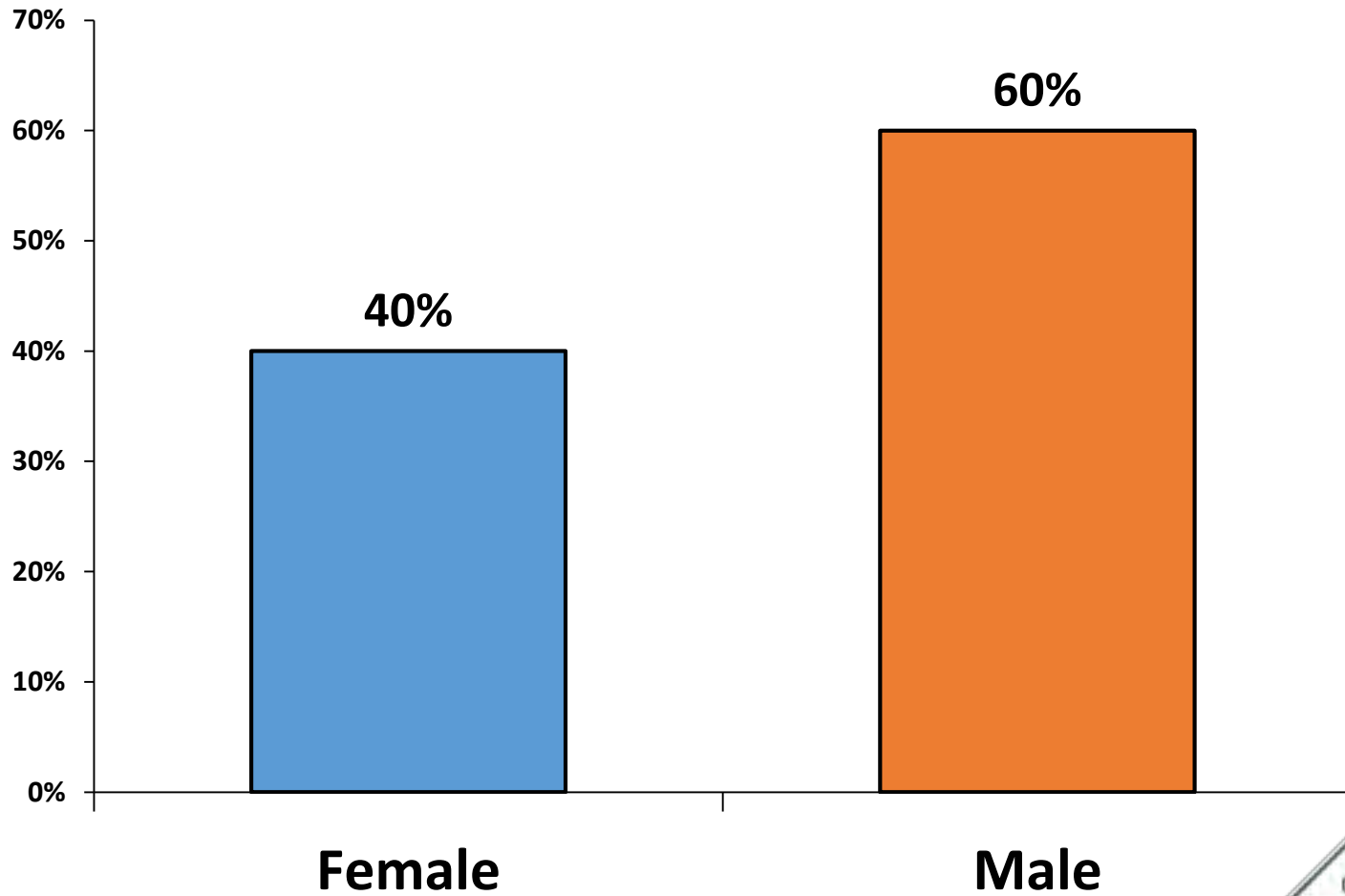
Sow harvest is important to population management!



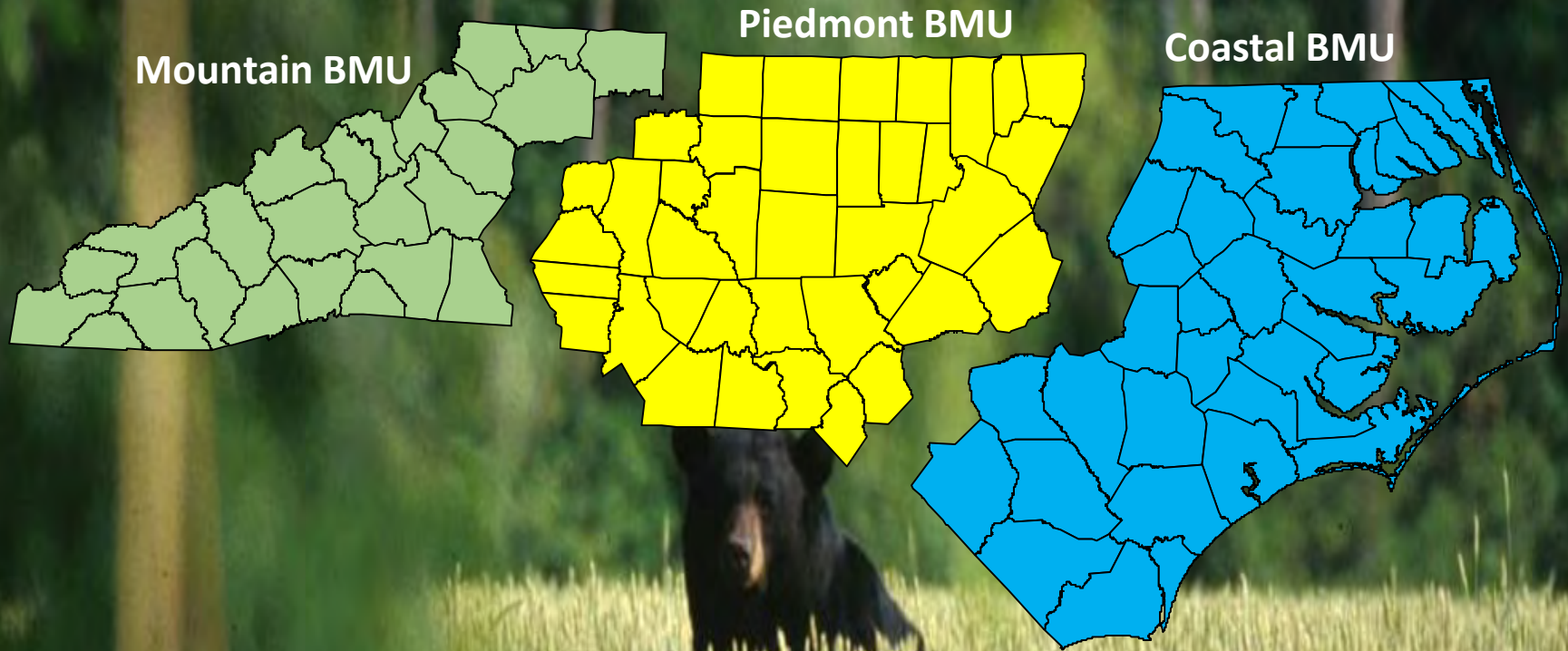
In general, 40 - 44% of the harvest can be females before experiencing population declines.



Sex Ratio of Harvested Bears (2013-2015)

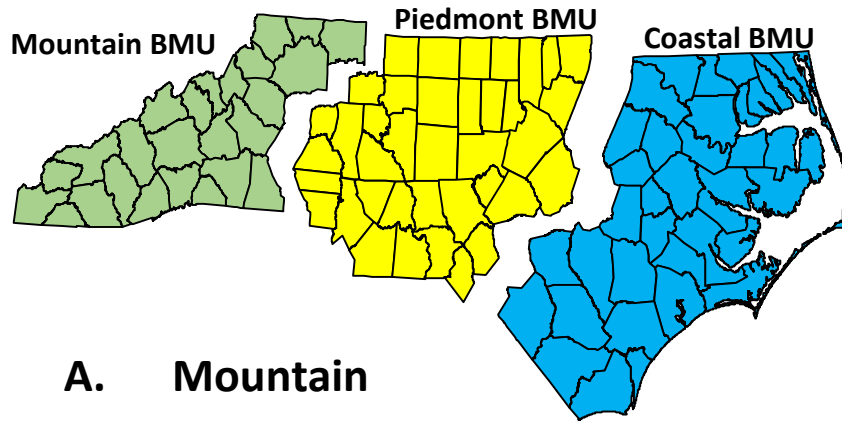


Regional Black Bear Management Units

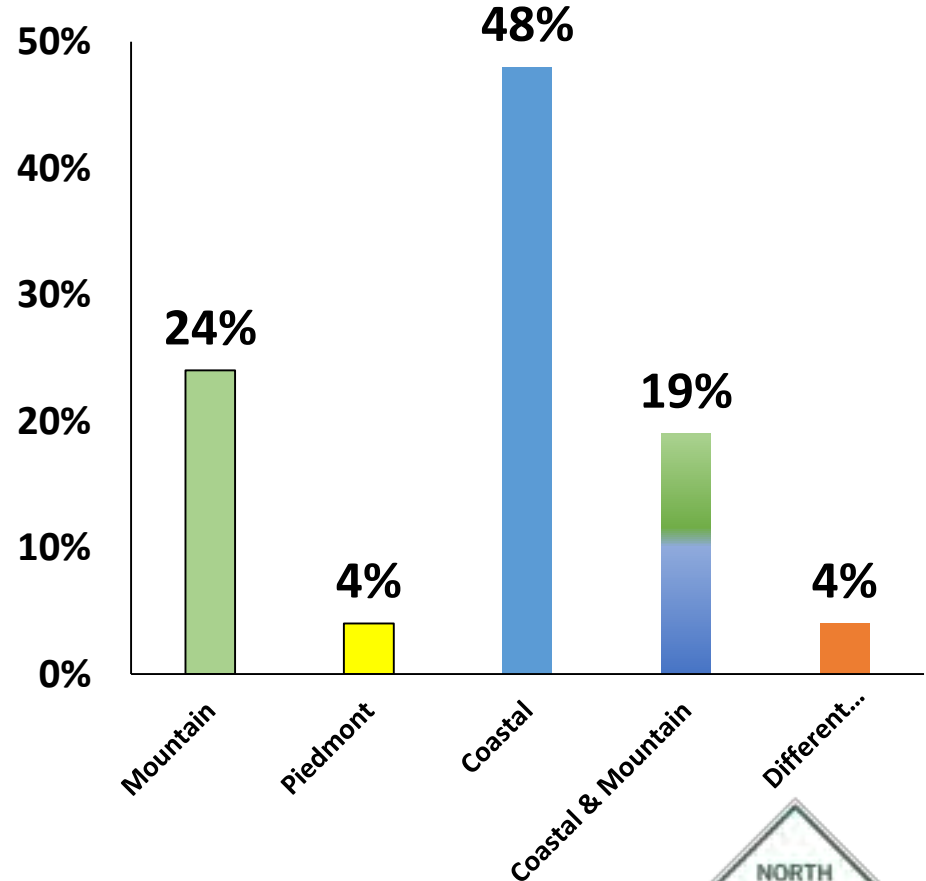


Which Bear Unit(s) do you hunt in?

Statewide Attendee Responses



- A. Mountain
- B. Piedmont
- C. Coastal
- D. Coastal and Mountain
- E. Different combinations



Bear Management Unit Population Objective Statements

Mountain Objective

Stabilize the Mountain Bear Population at the current level.

Piedmont Objective

Manage the PBMU as a “limited bear population zone”.

Coastal Objective

Maintain the Coastal Bear Population at current levels.



So, let's talk briefly about Bear Population Management!

Based on the current “best science” to maintain a stable population:

- We can harvest approximately 22-27% of our minimum bear population estimate annually (hunnable population*).
- 40-44% of the harvest level can be females (sows) before we expect to experience population declines.

**Hunnable population represents the estimate of bears in areas where they can be legally hunted. Examples of bears not represented in this estimate are bears found on National Parks, Wildlife Refuges, large black bear sanctuaries and significant urban areas.*



So, for NC's best current data that translates to:

Mountain Region

2014 Minimum Huntatable Population Estimate: 5,917

- Current 3 yr. average harvest = 1,013 (17%)
- Current 3 yr. average female harvest is: 39%

Coastal Region

2014 Minimum Huntatable Population Estimate: 11,259

- Current 3 yr. average harvest = 1,842 (16%)
- Current 3 yr. average female harvest is: 40%



So, using our best current data:

Mountain Region

2014 Minimum Huntatable Population Estimate: 5,917

- Possible 289-585 more bears in the harvest (3 yr. avg.)
- Of which, 116-234 can be female bears

Coastal Region

2014 Minimum Huntatable Population Estimate: 11,259

- Possible 635-1198 more bears in the harvest (3 yr. avg.)
- Of which, 254-479 can be female bears



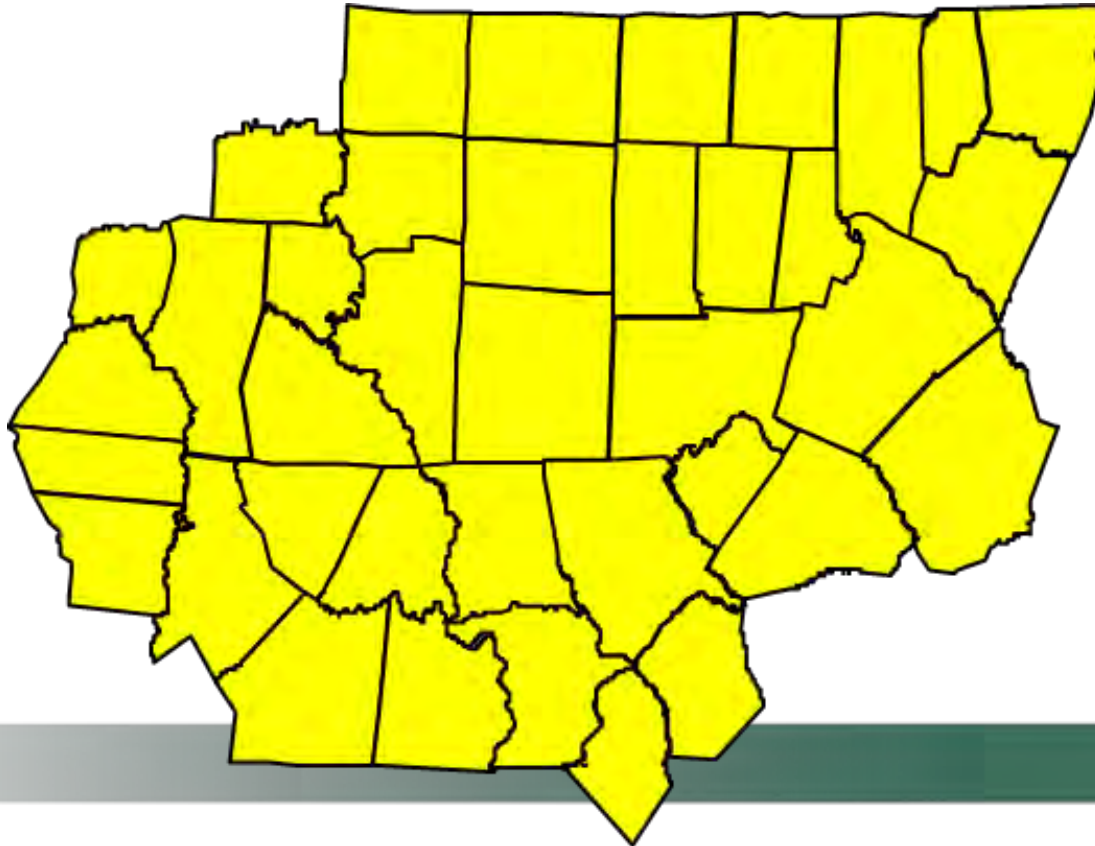
Recent Regulatory Changes

- Baiting (hunting with the aid of unprocessed foods)
- New county seasons
- 75 lbs. cub weight law (statutory change)



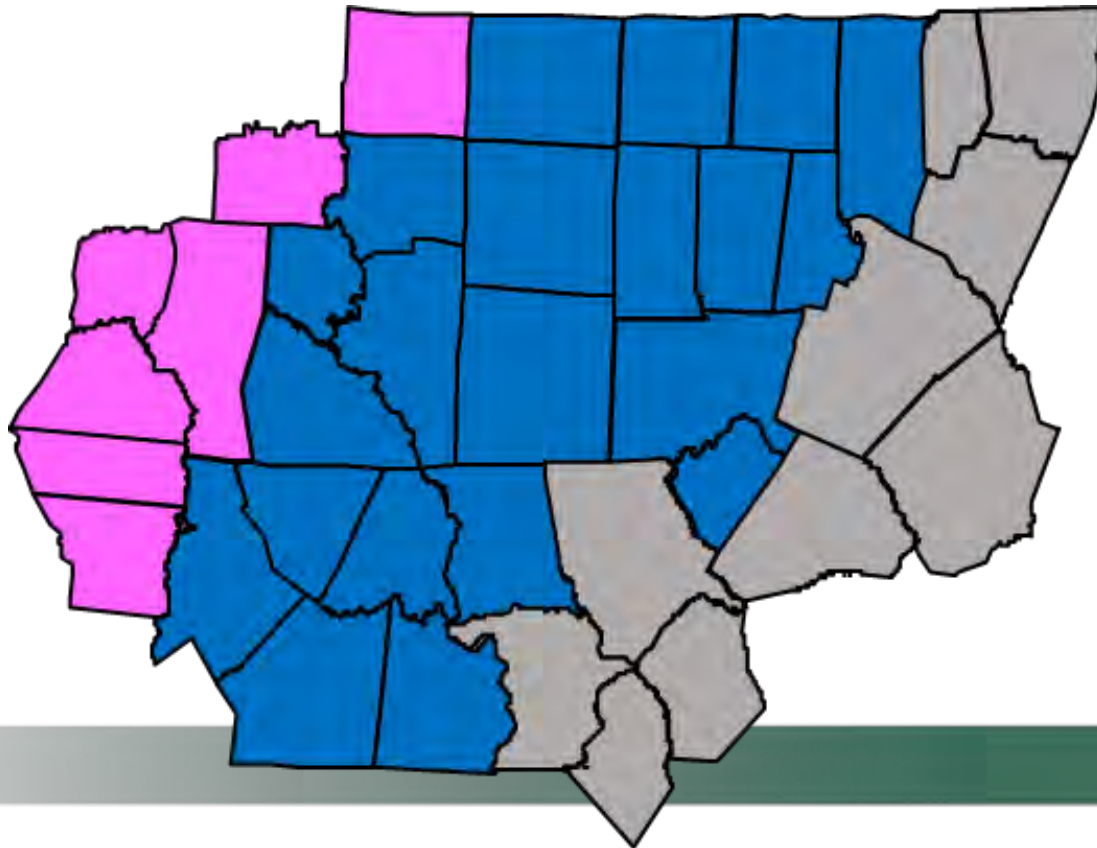
Piedmont Bear Management Unit (PBMU)

Objective: To manage the PBMU as a “limited bear population zone”

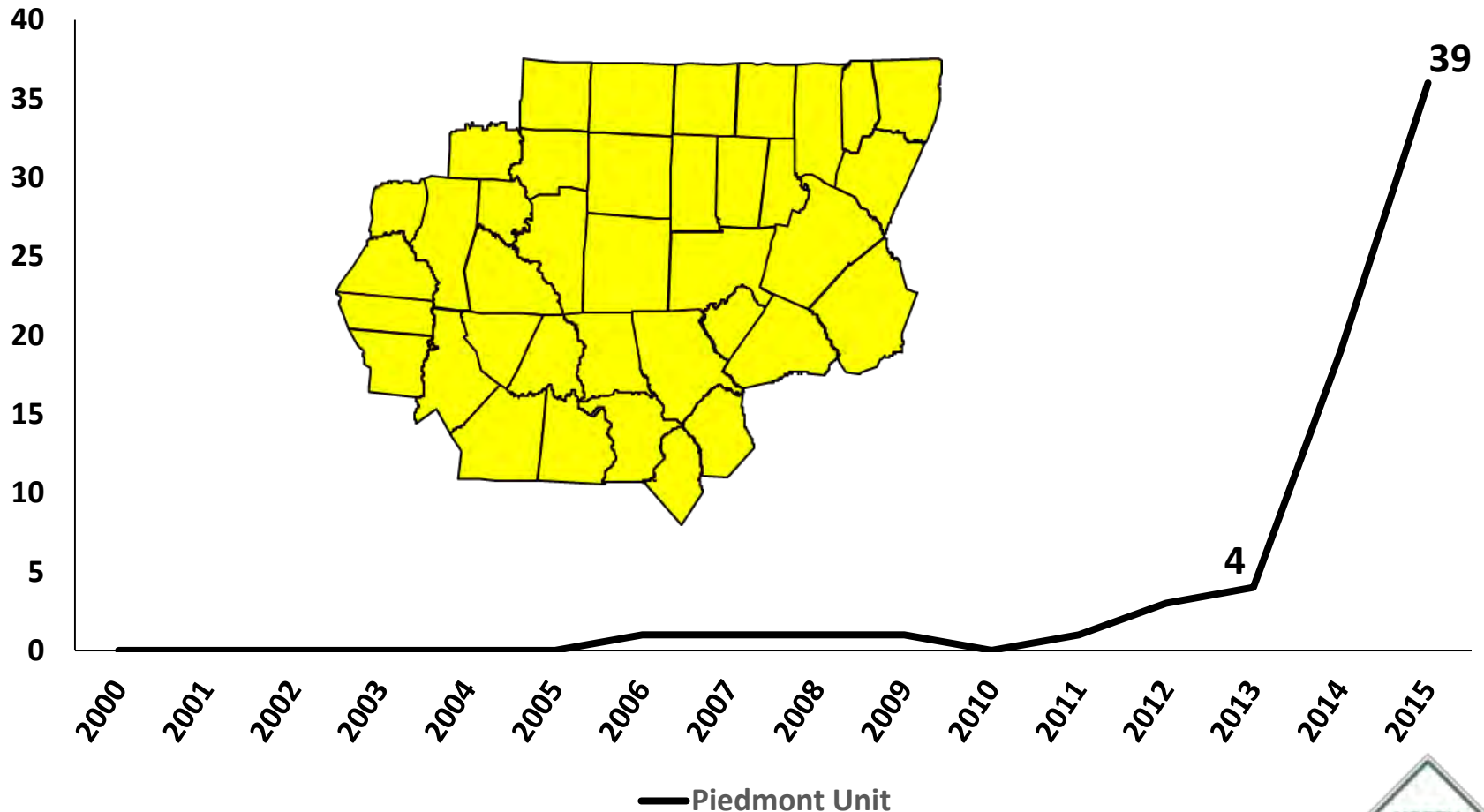


Piedmont Bear Management Unit

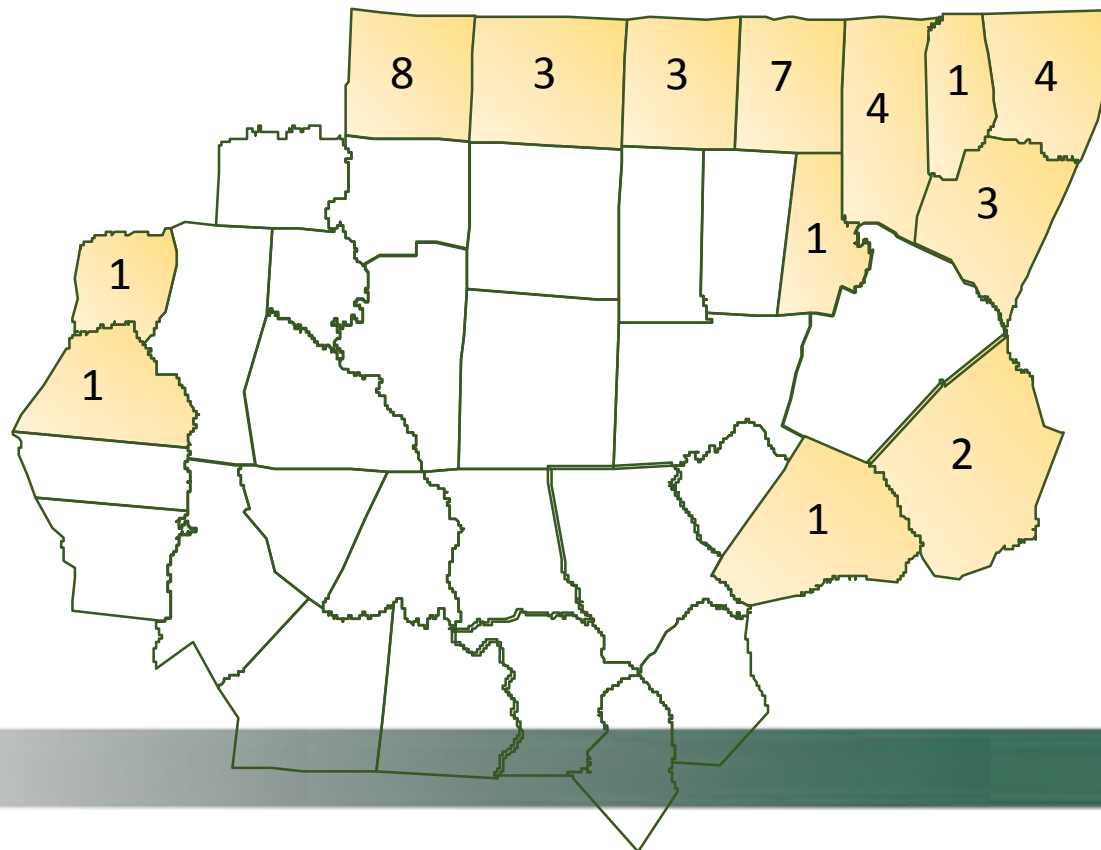
Bear Hunting Seasons



PBMU Reported Harvest

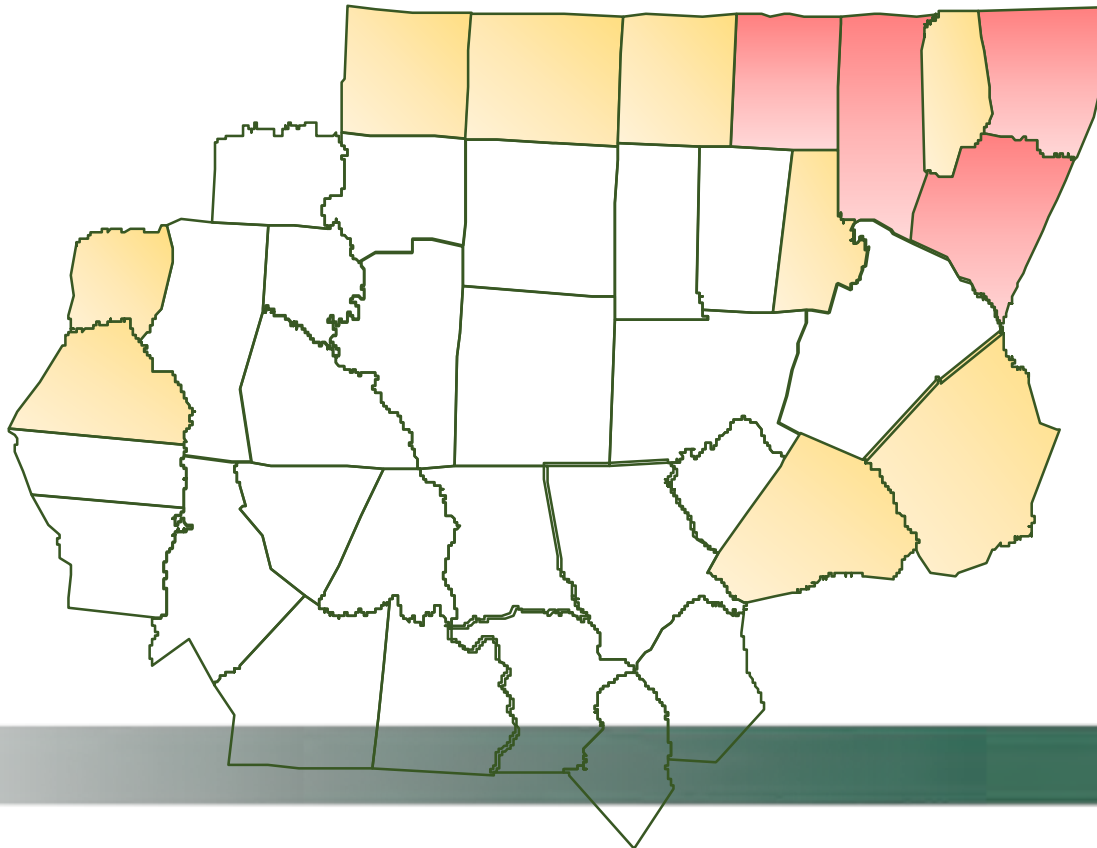


2015 Reported Bear Harvest in the PBMU

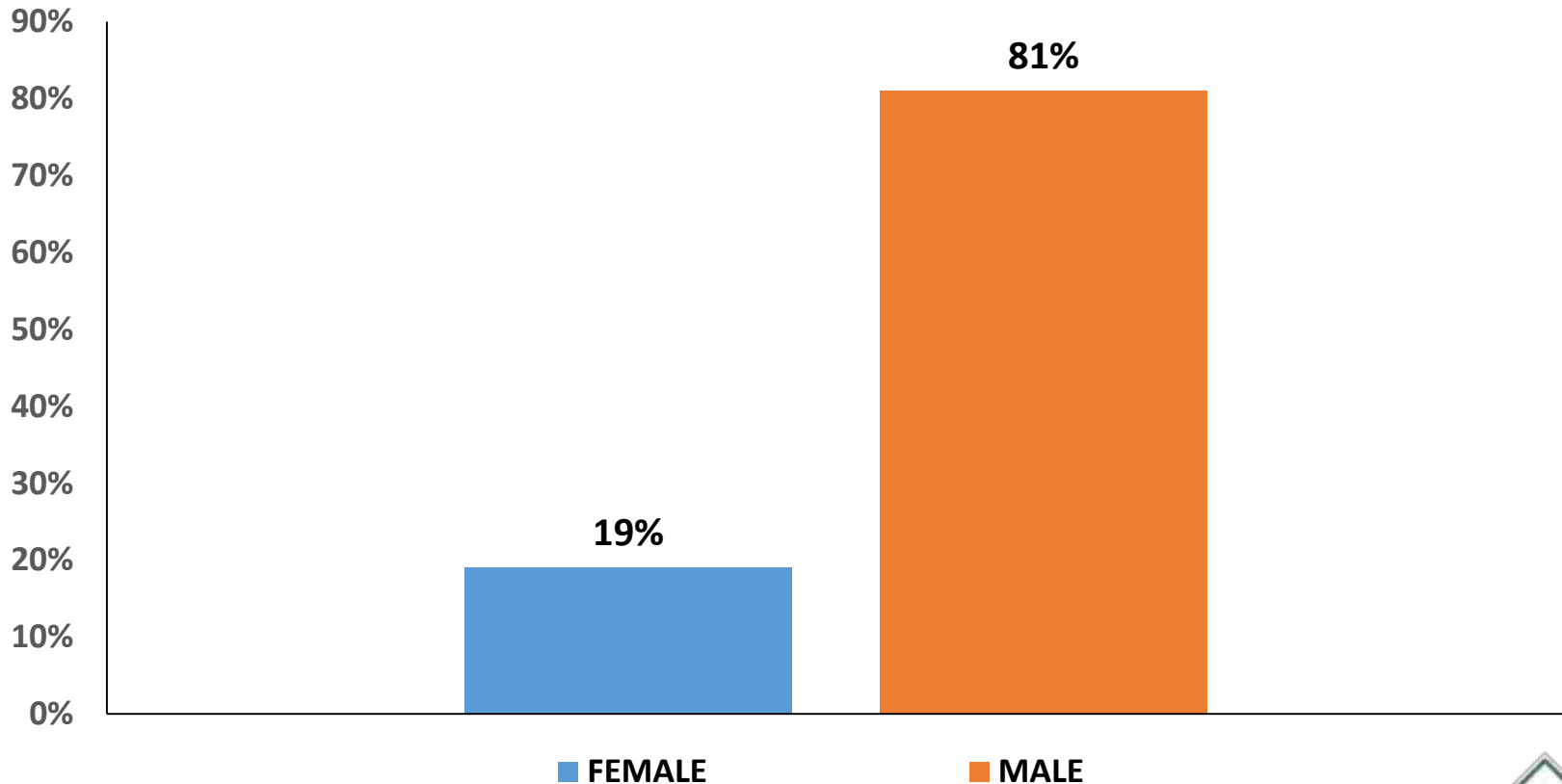


2015 Piedmont Hunting Methods

- With Dogs = 4 (*Franklin, Granville, Person and Warren*)

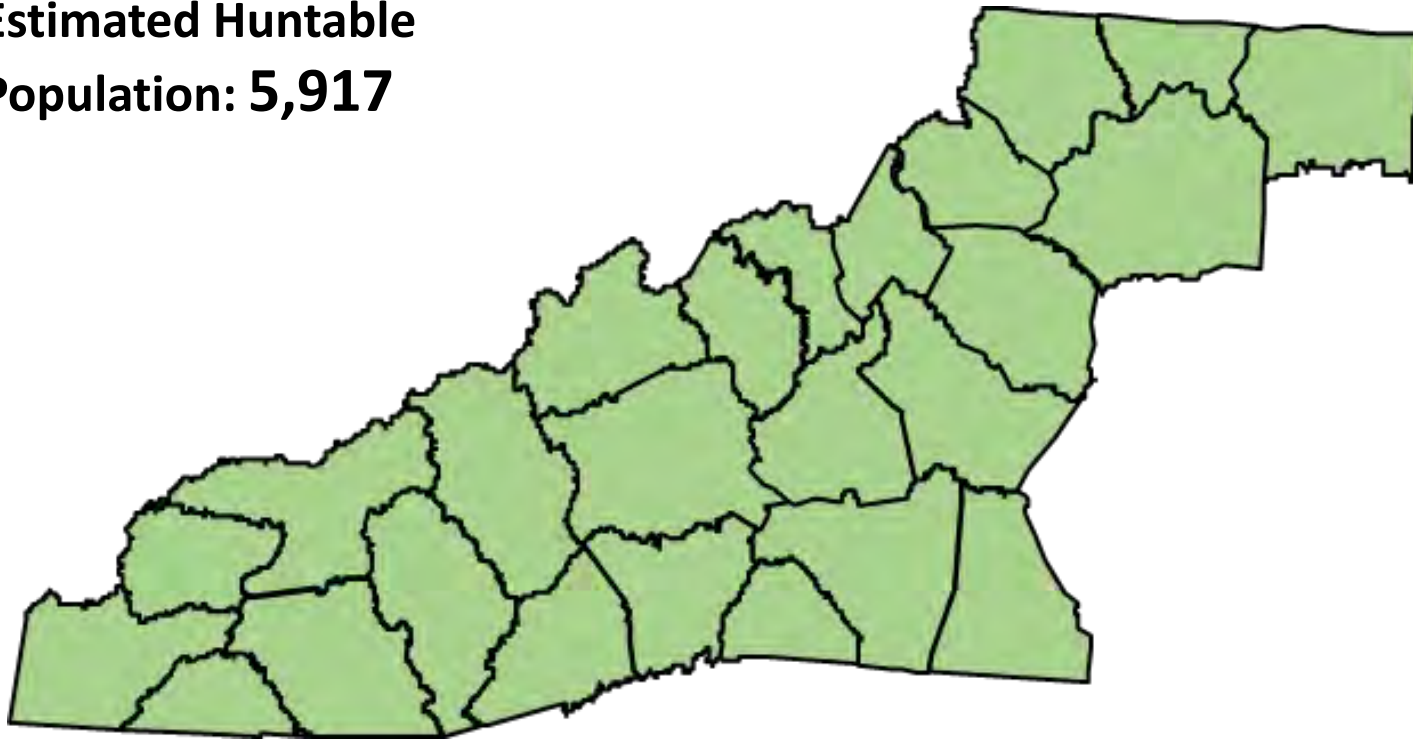


2013-2015 Harvest Sex Ratios PBMU

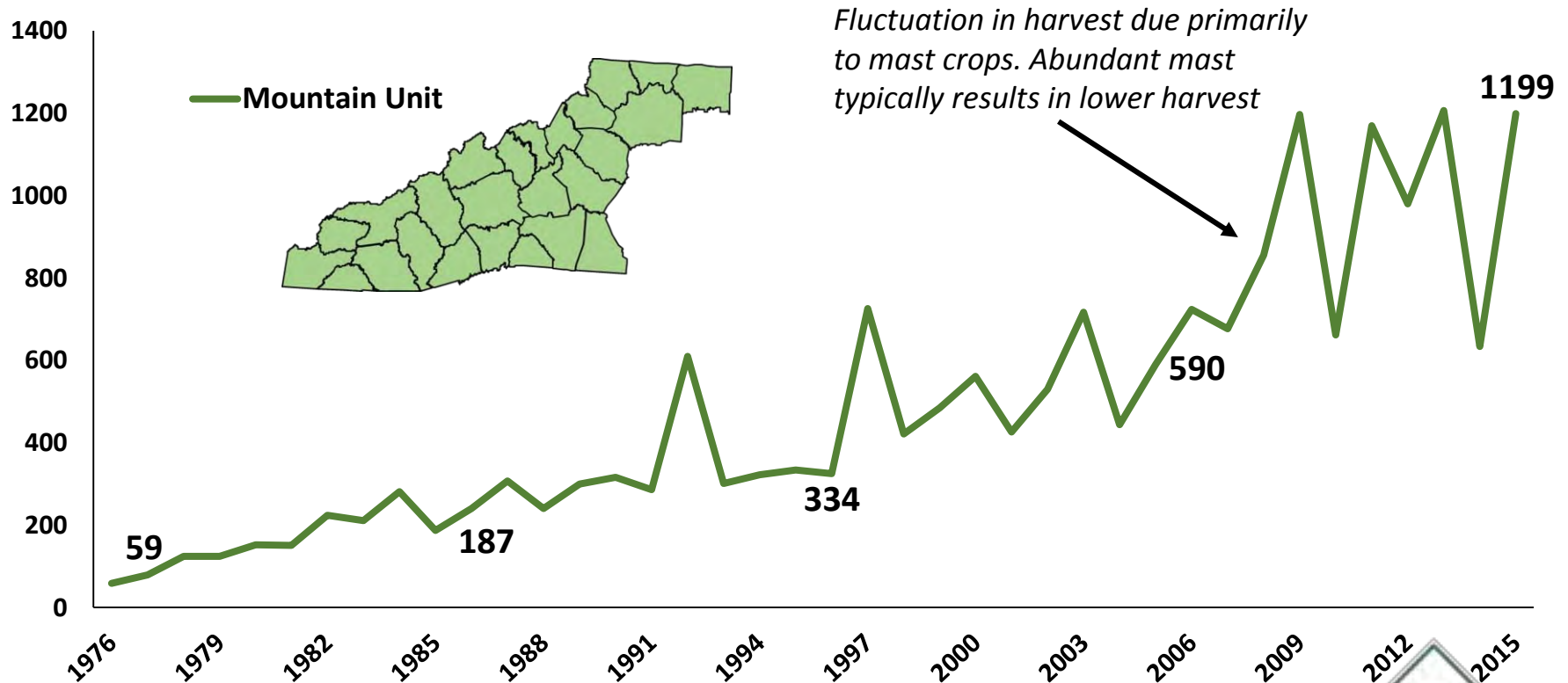


Mountain Bear Management Unit (MBMU) and Bear Hunting Season

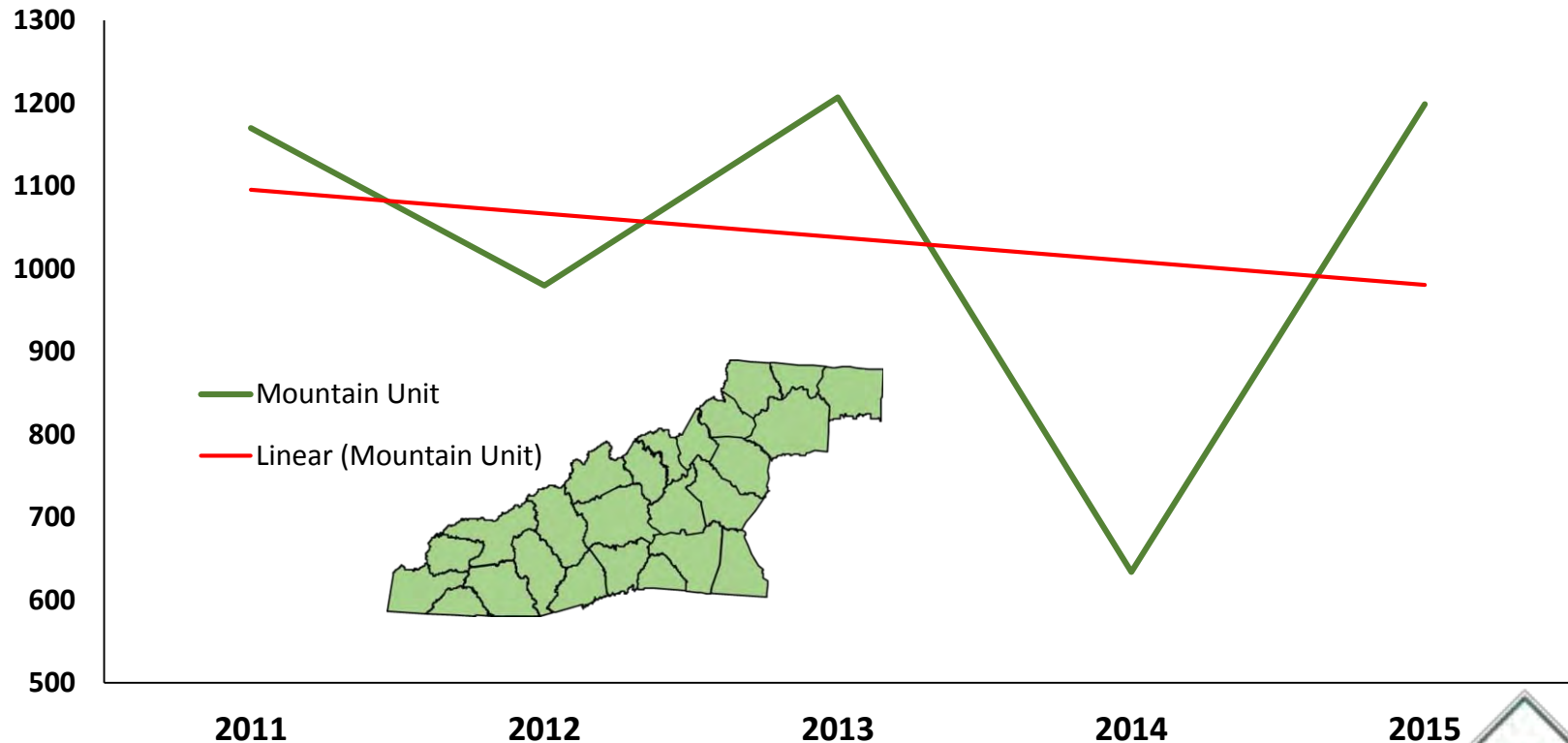
Estimated Hunttable
Population: 5,917



Mountain Bear Management Unit Reported Harvest



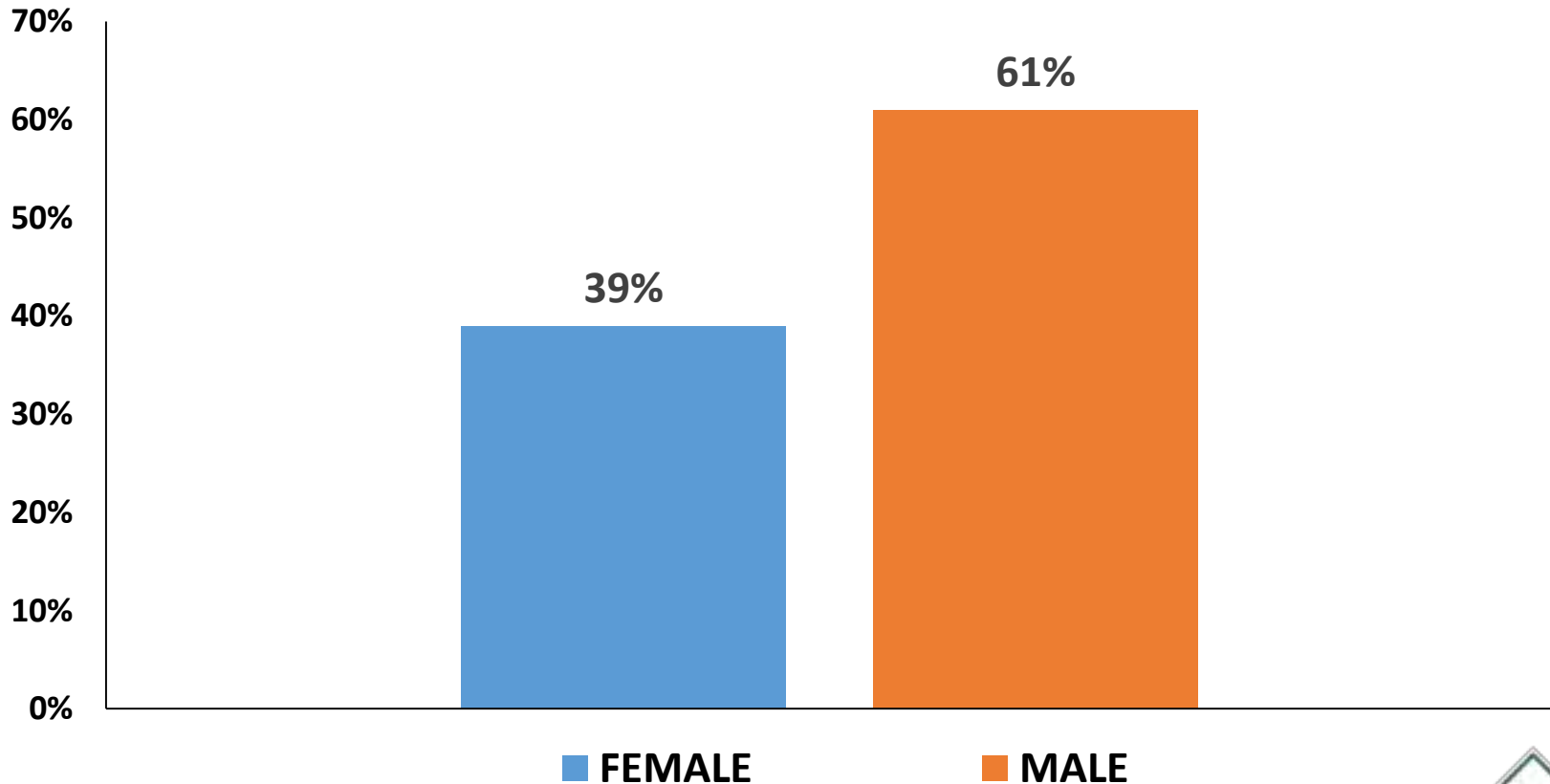
Mountain Bear Management Unit Reported Harvest (5 Yr. Trend)



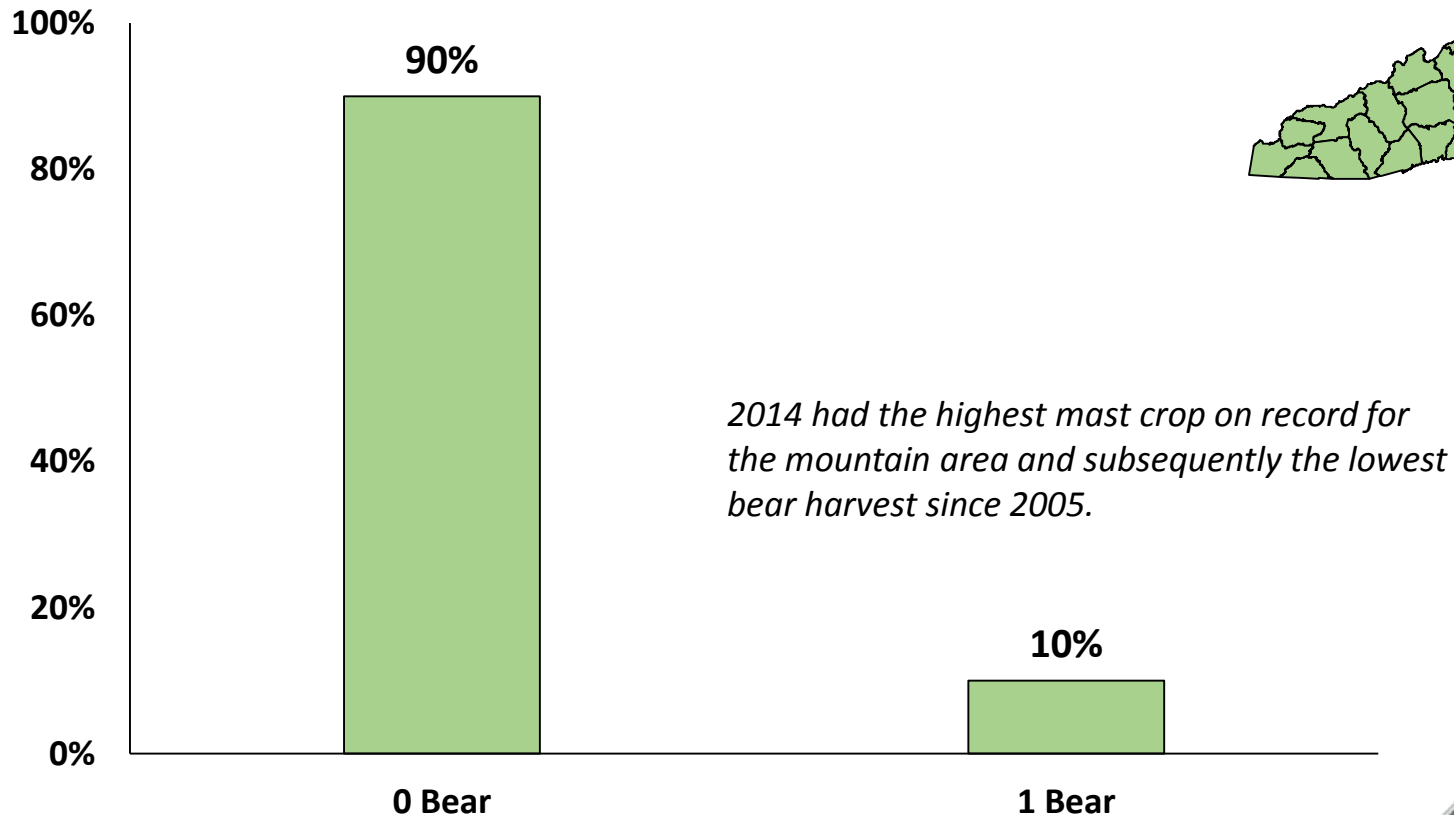
2014 was the highest recorded mast crop on record!



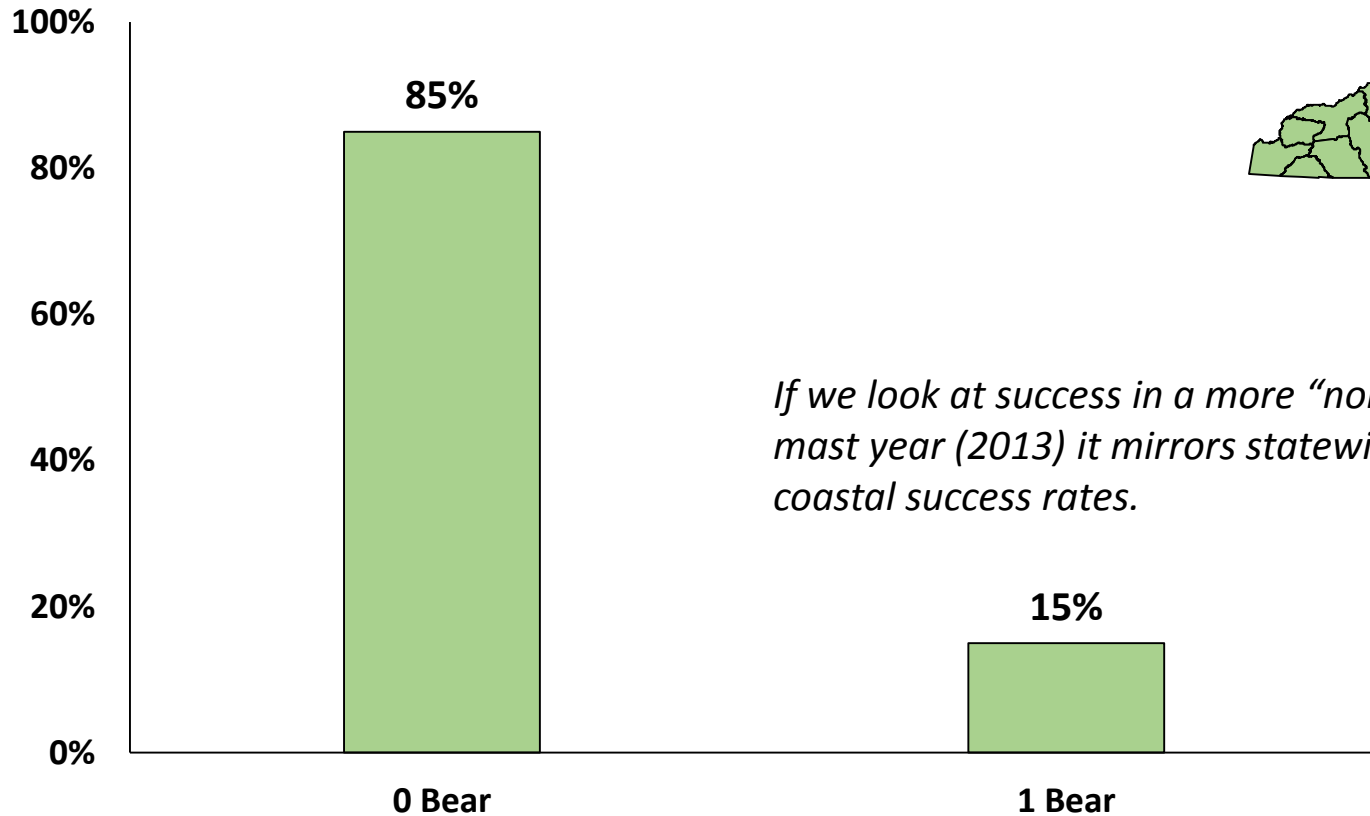
2013-2015 Harvest Sex Ratios MBMU



Fall 2014 Hunter Success MBMU (Hunter Harvest Survey)



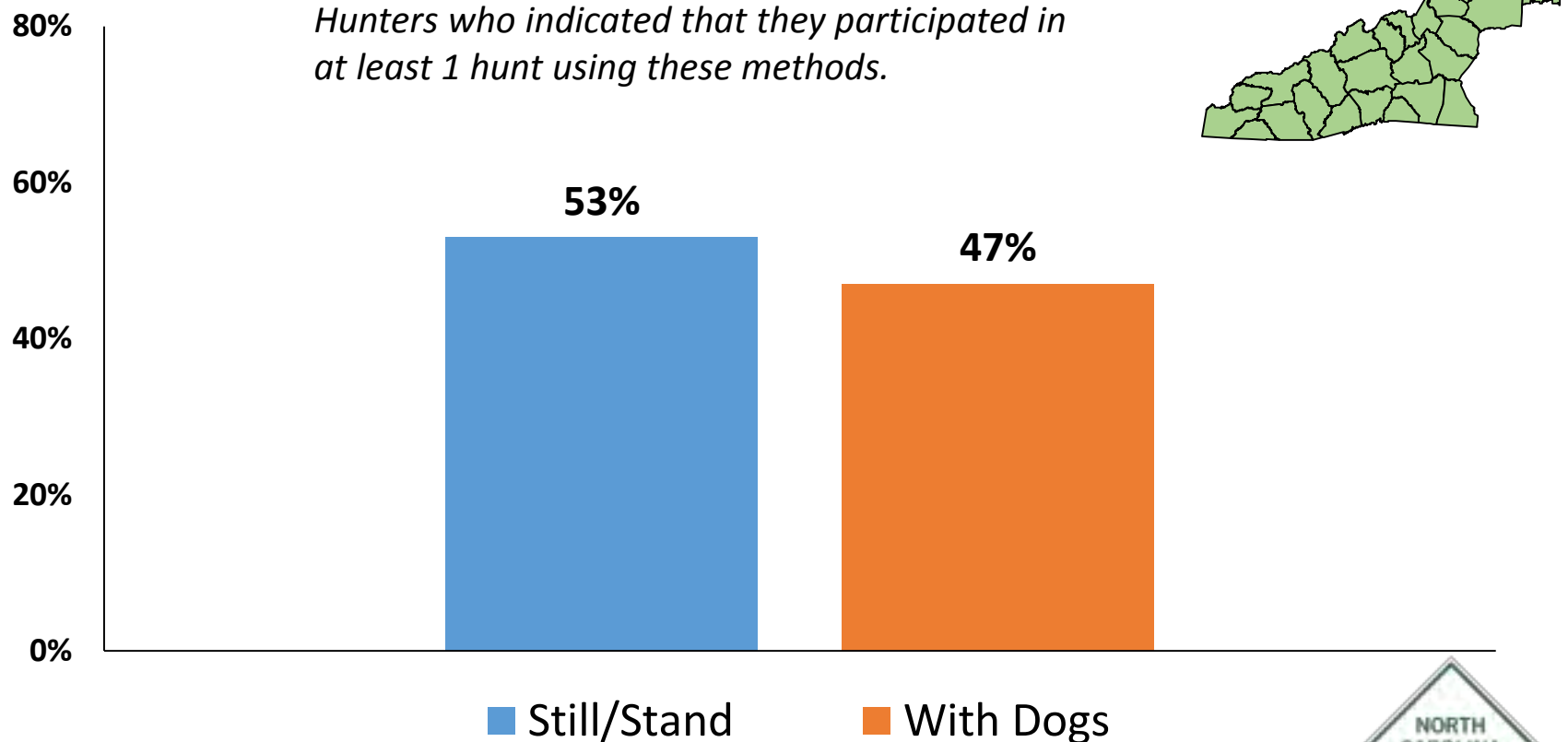
Fall 2013 Hunter Success MBMU (Hunter Harvest Survey)



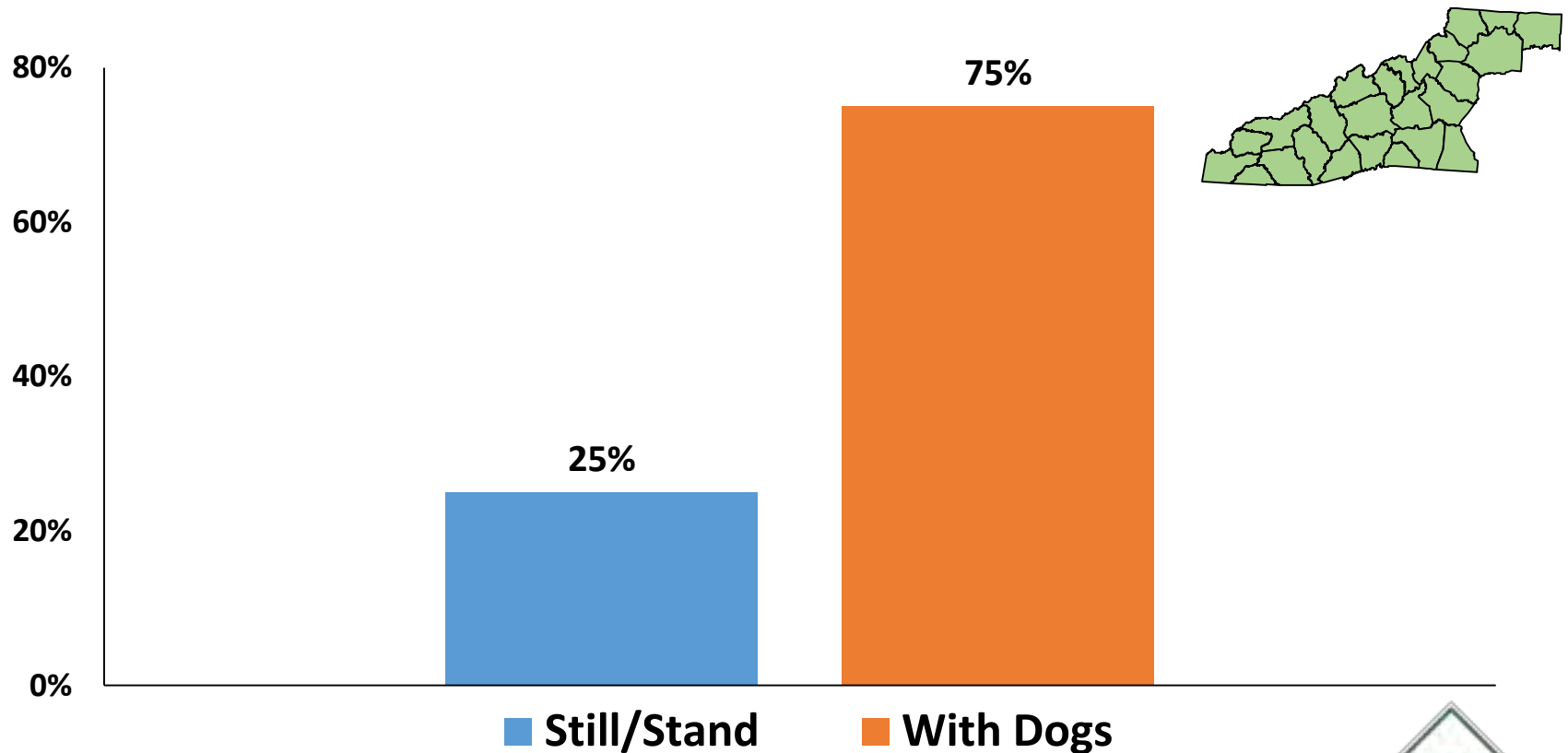
*If we look at success in a more “normal”
past year (2013) it mirrors statewide and
coastal success rates.*



MBMU by Hunting Method (2015 e-Stamp Survey)

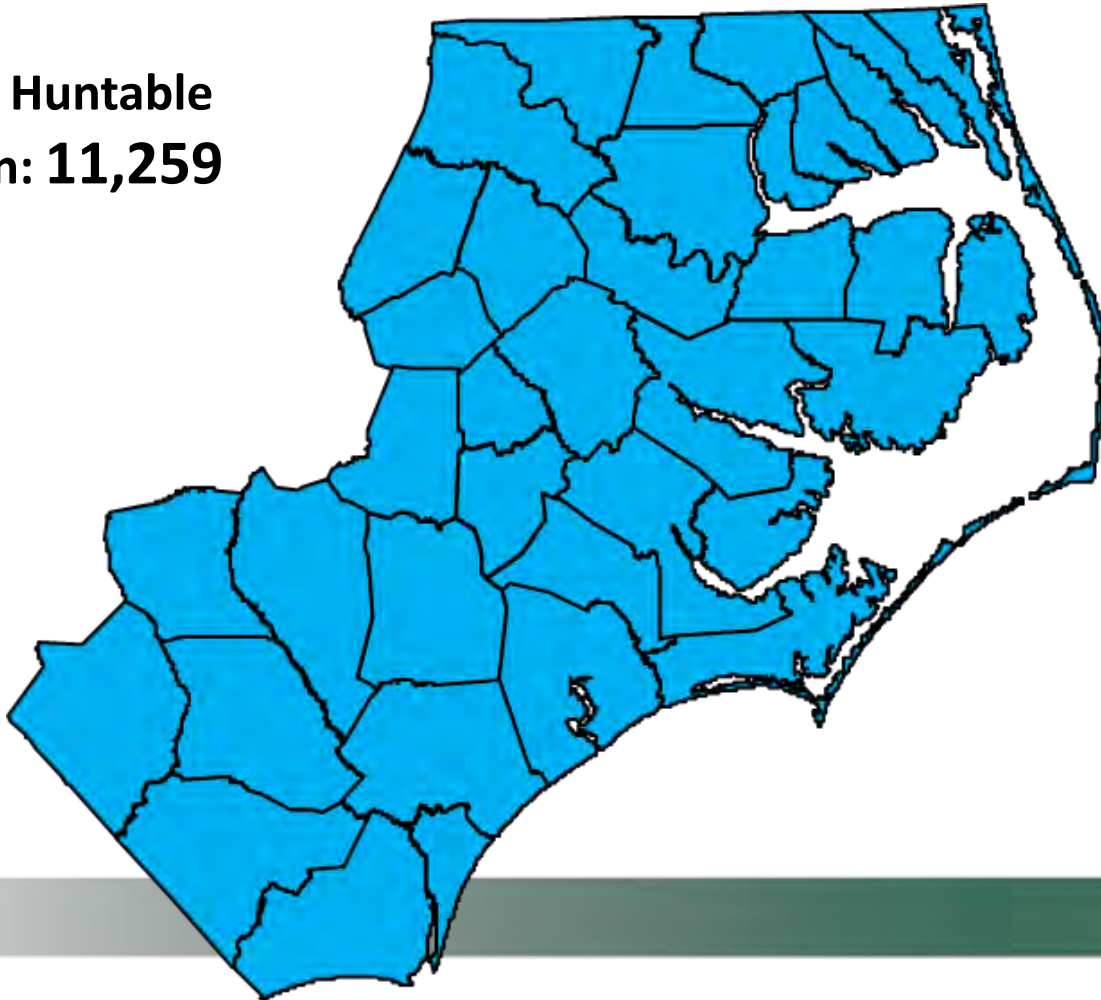


MBMU Harvest by Hunting Method (3 Year Average Reported Harvest)

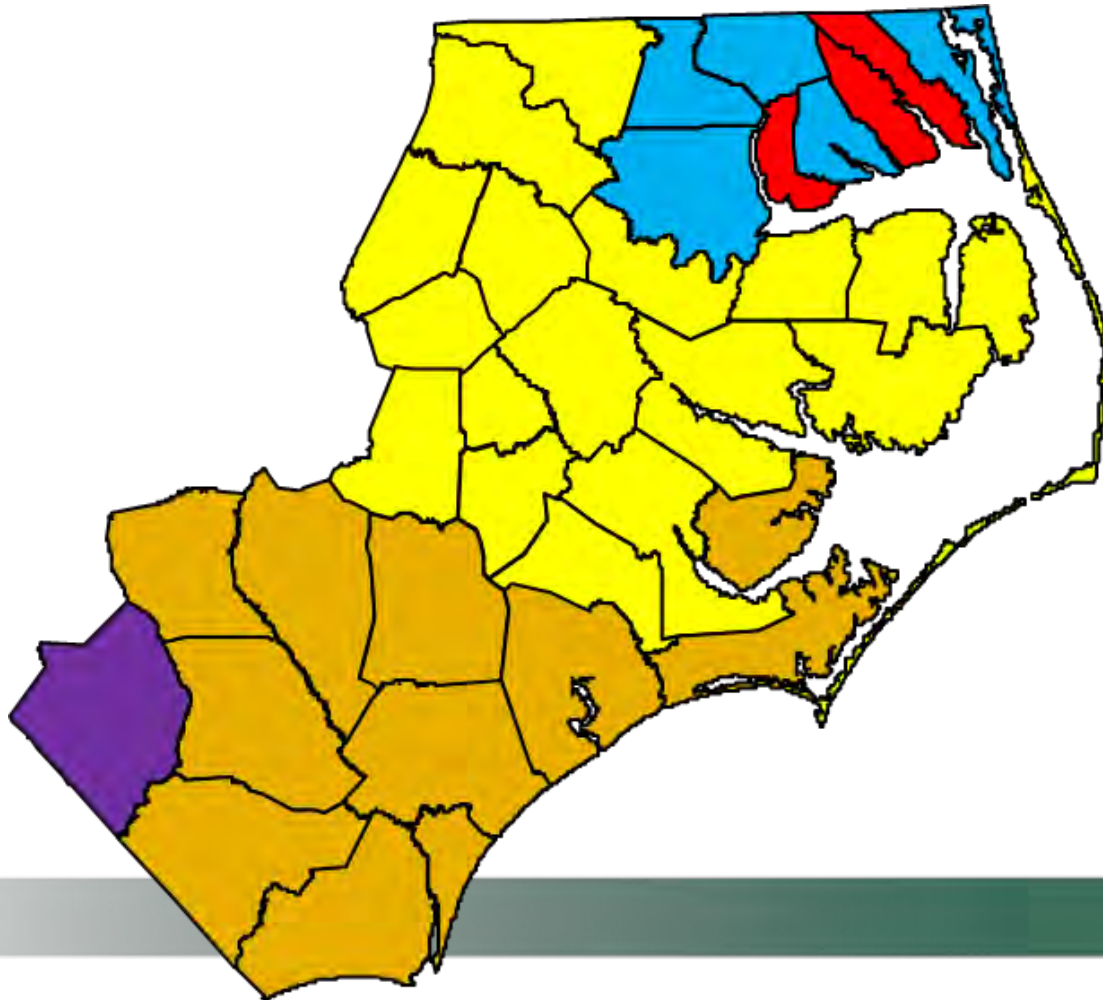


Coastal Bear Management Unit (CBMU)

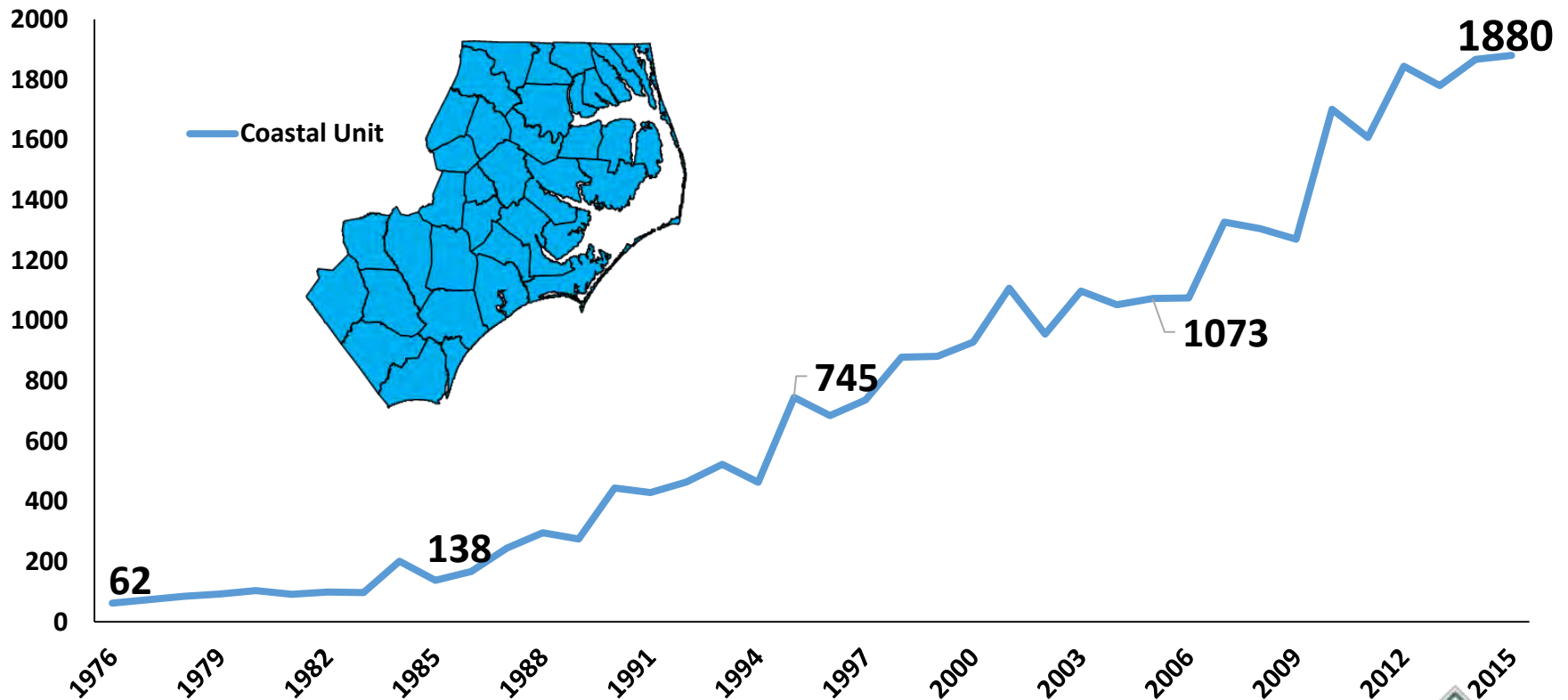
Estimated Hutable
Population: 11,259



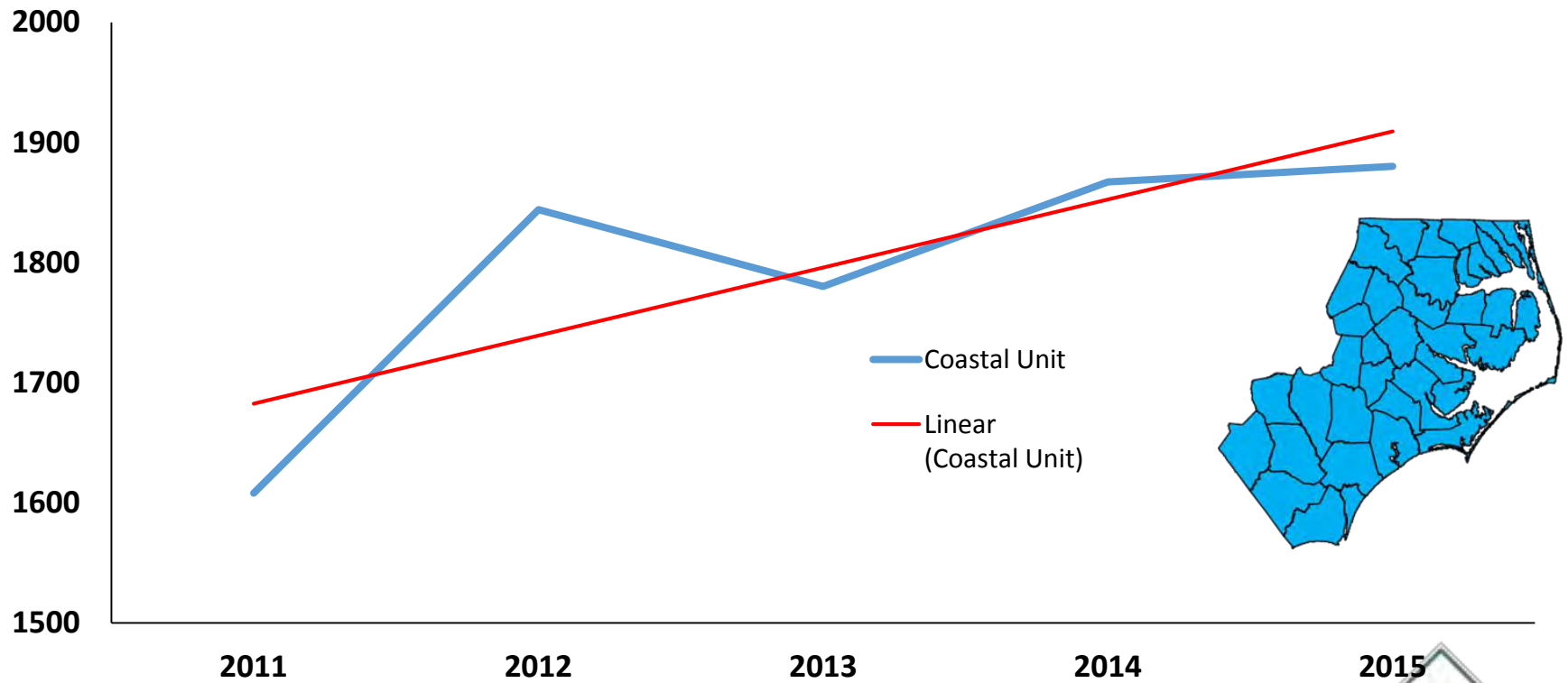
Coastal Bear Management Unit 2016 Hunting Seasons



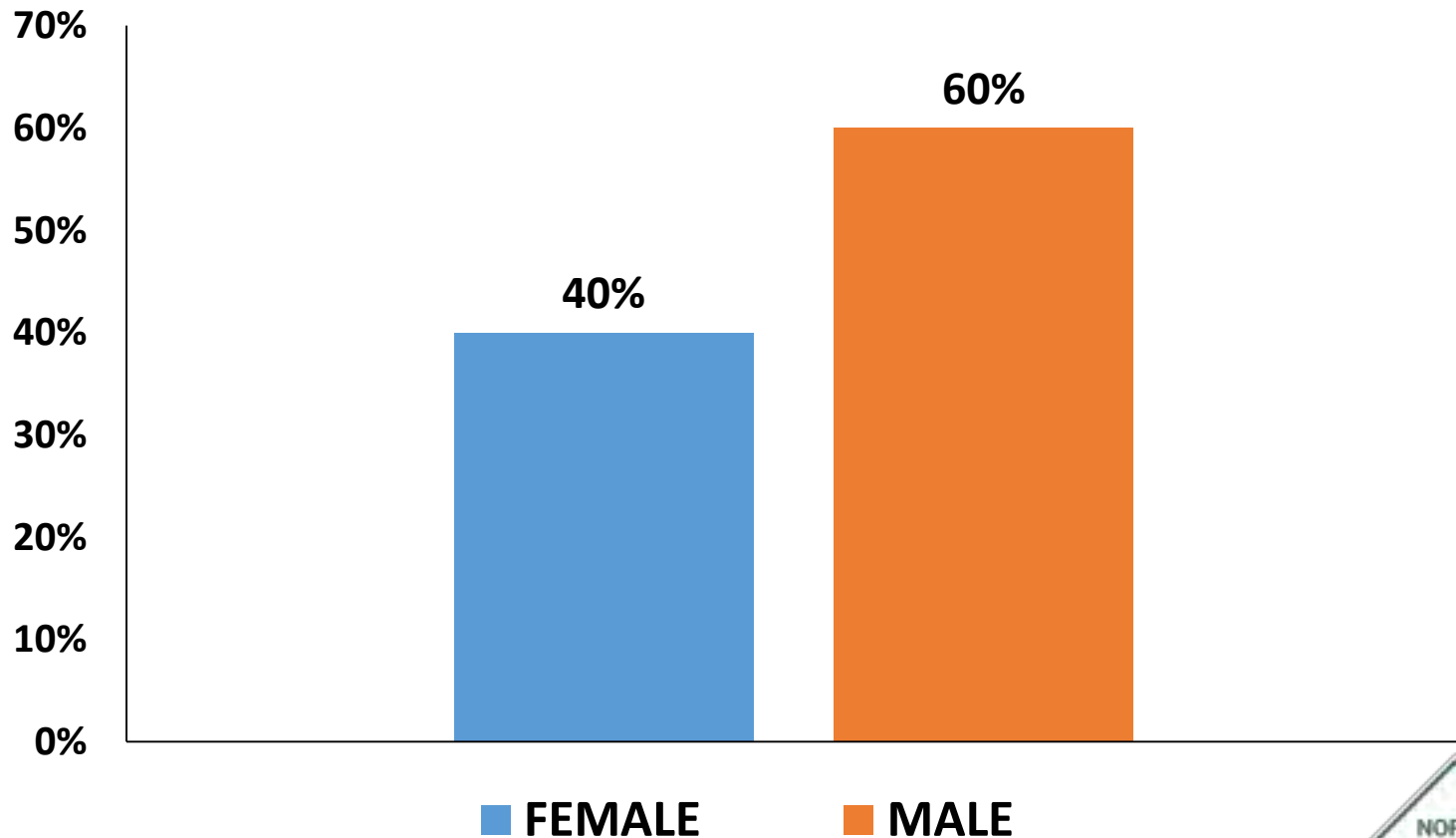
Coastal Bear Management Unit Reported Bear Harvest



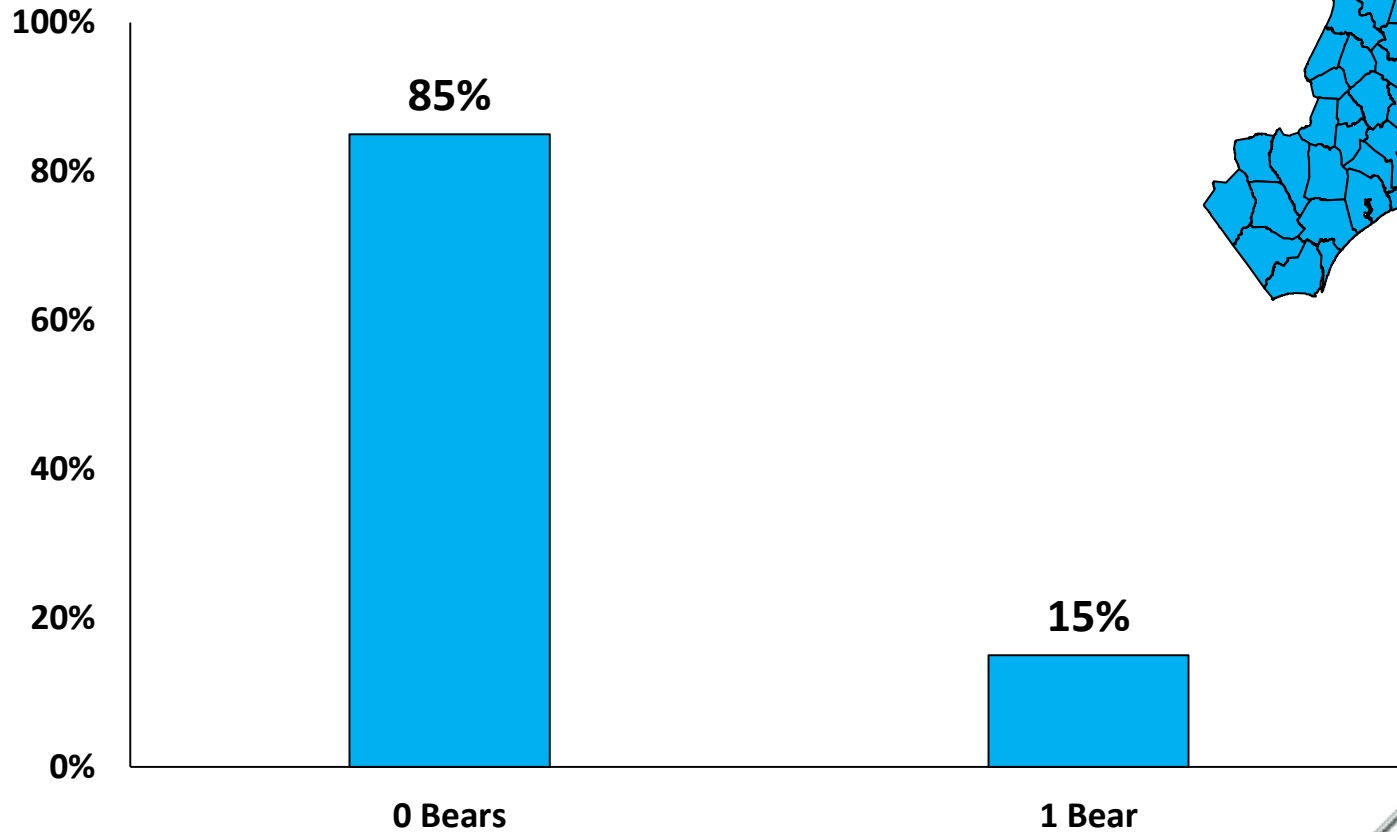
Coastal Bear Management Unit Reported Harvest (5 Yr. Trend)



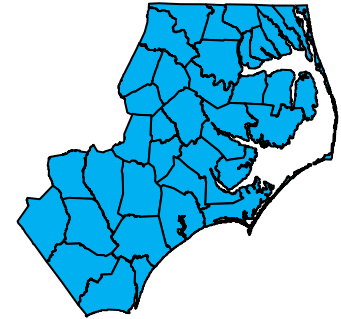
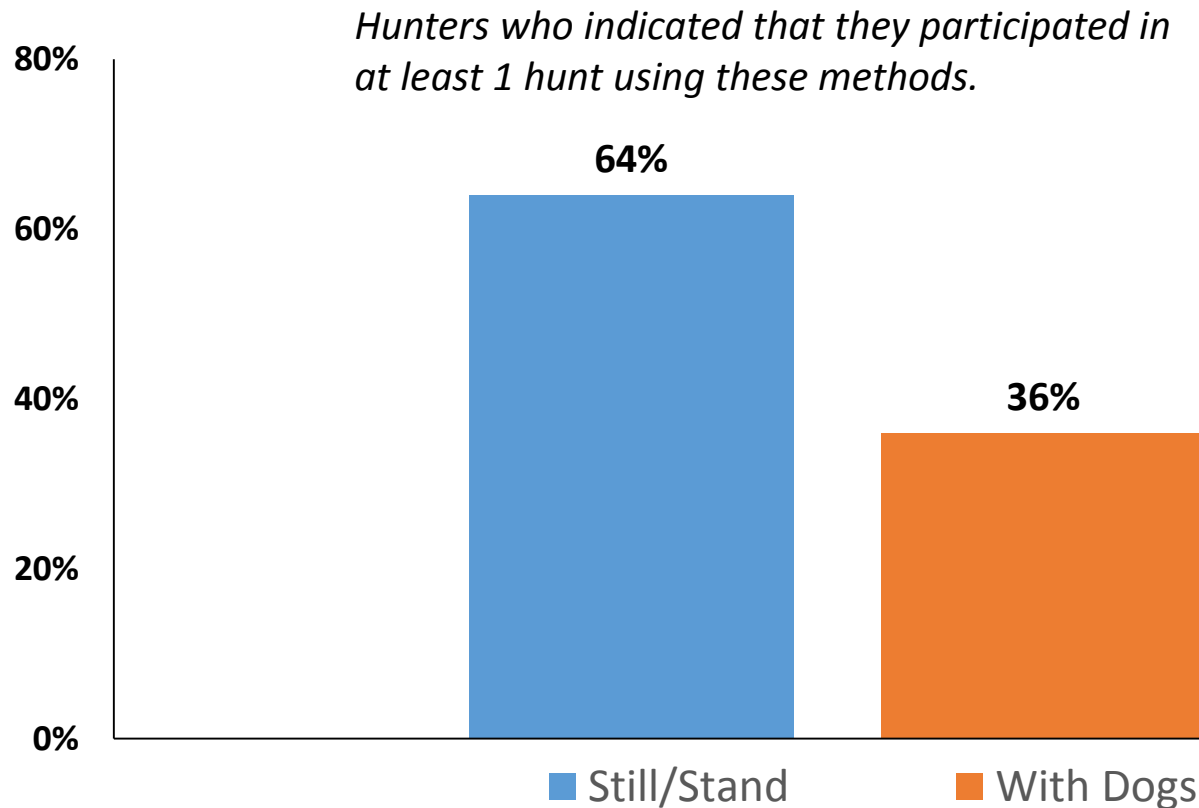
2013-2015 Harvest Sex Ratios CBMU



Fall 2014 Hunter Success CBMU (Hunter Harvest Survey)

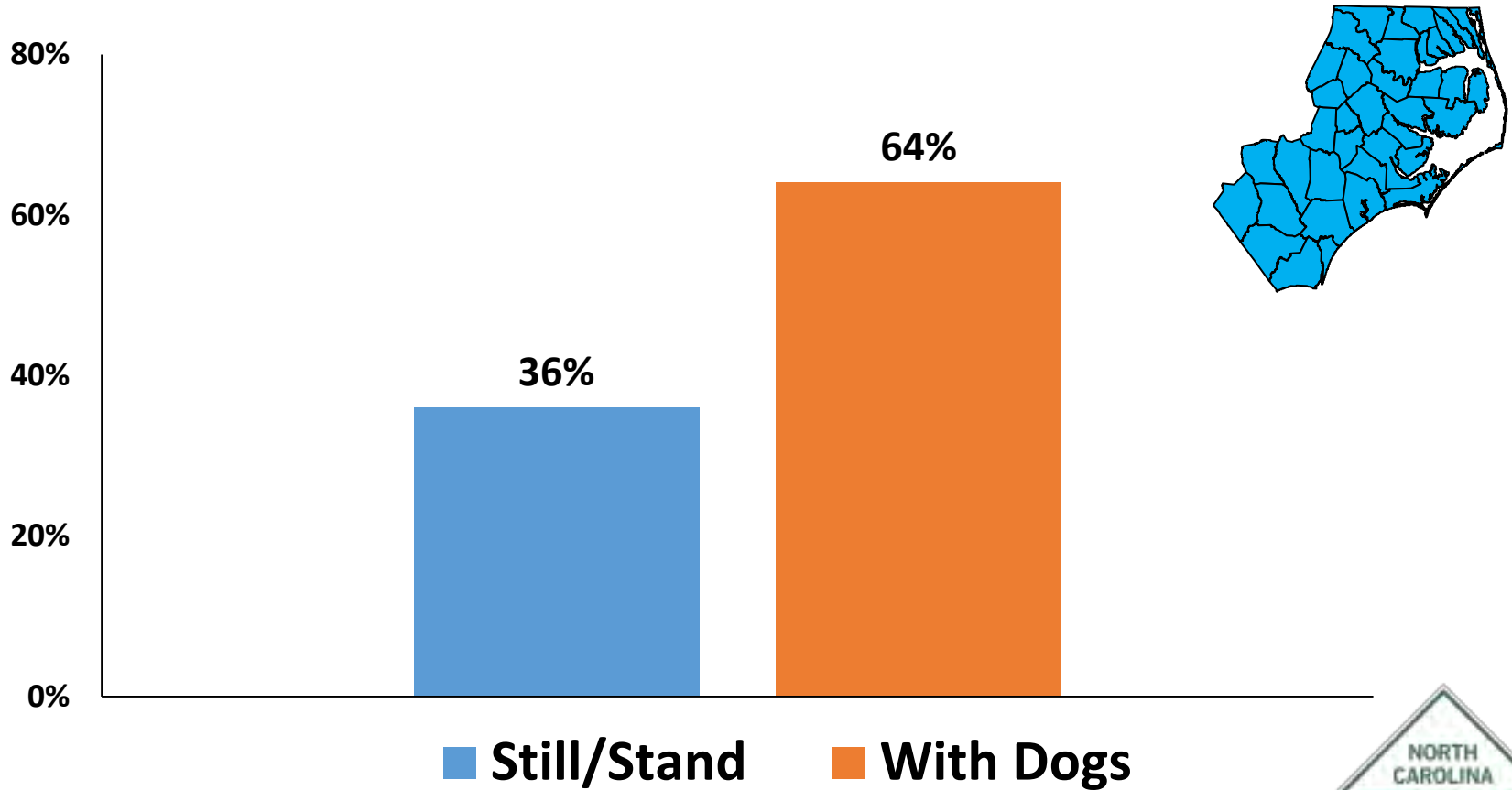


CBMU Hunting Method (2015 e-Stamp Survey)



CBMU Harvest by Hunting Method

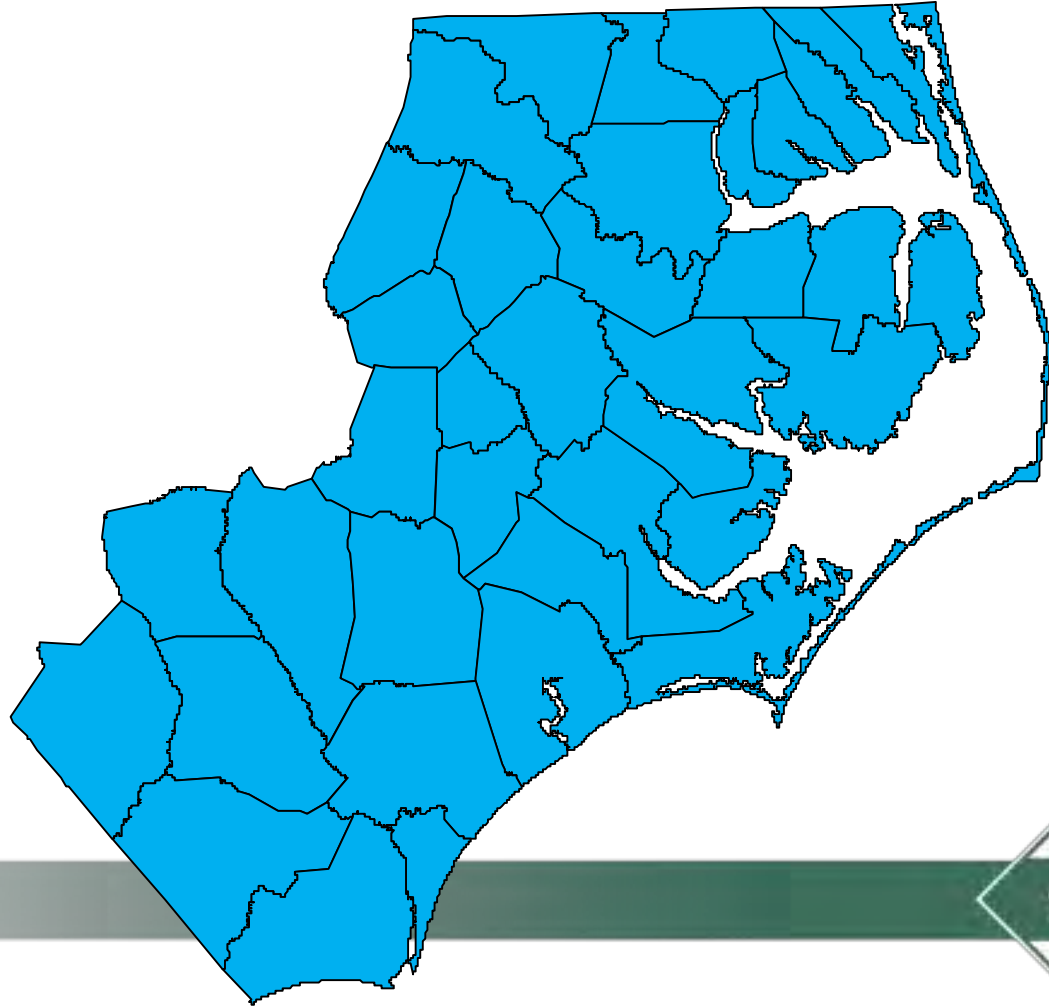
(3 Year Average Reported Harvest)



Development of Zones in the Coastal Bear Management Unit



Coastal Bear Management Unit (CBMU)



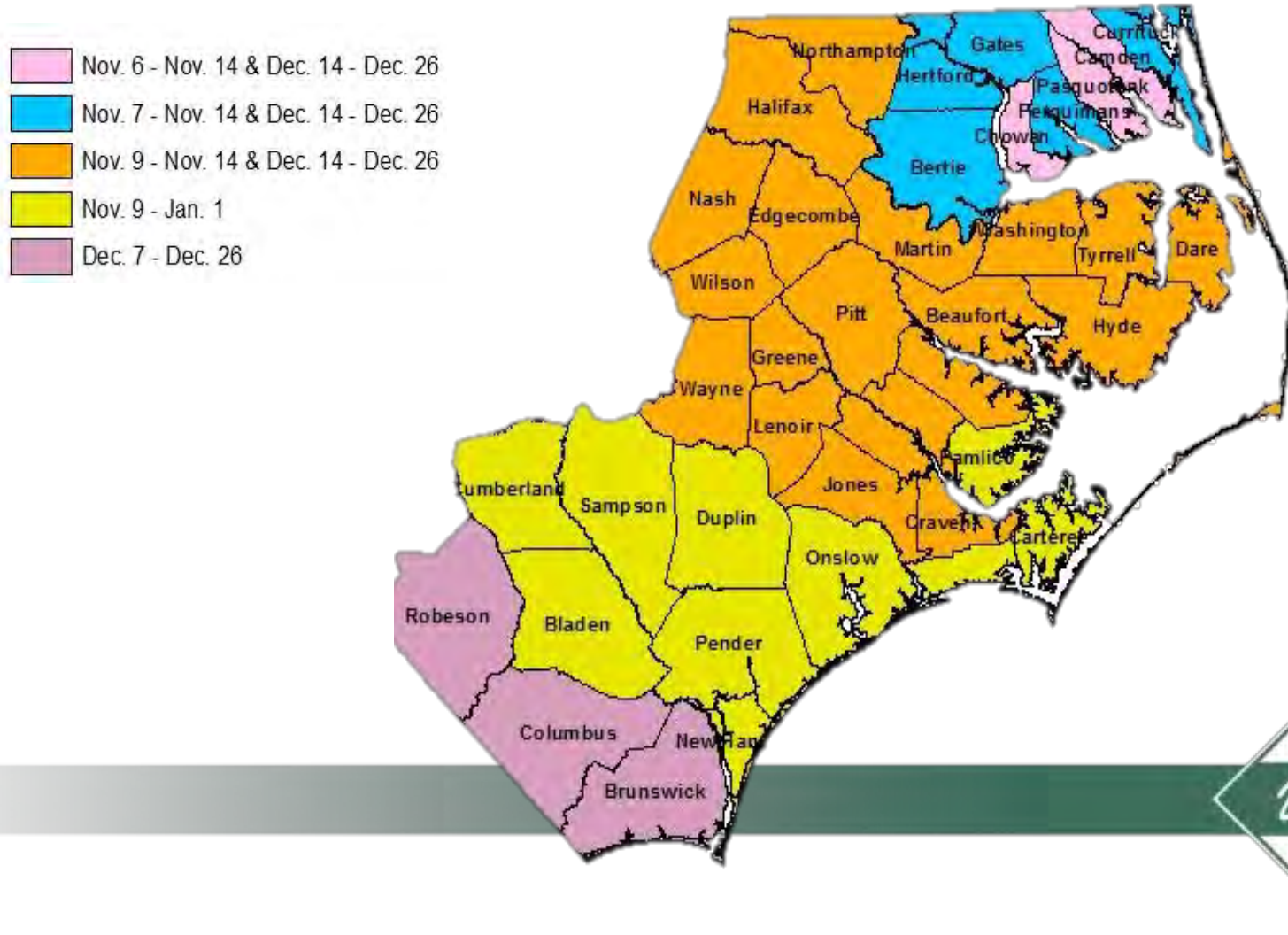
Why Develop CBMU Zones?

Biologists, commissioners, and hunters have all recognized there are major differences across the Coastal Bear Management Unit.

- Bear Population Levels
- Land Use (Available Habitat)
- Hunter Desires and Management Preferences
- Levels of Human / Bear Conflicts (Agriculture)



2015 CBMU Bear Seasons



Development of CBMU Zones

- These 5 bear seasons are not bear management areas or units.
- Instead, they reflect season dates established over time that were based on:
 - Bear Population Recovery / Expansion
 - Hunter Access
 - Hunter Desire and Input
 - Local Law



Development of CBMU Zones

So, to create zones we needed to start from scratch.....



Development of CBMU Zones

So, to create zones we needed to start from scratch.....

Because:

The existing bear seasons should not drive us toward a conclusion.



Development of CBMU Zones

We needed to conduct a cluster (or grouping) analysis based on variables that impact bear management and that are available for each county within the CBMU.

So, what is a cluster analysis?







Development of CBMU Zones

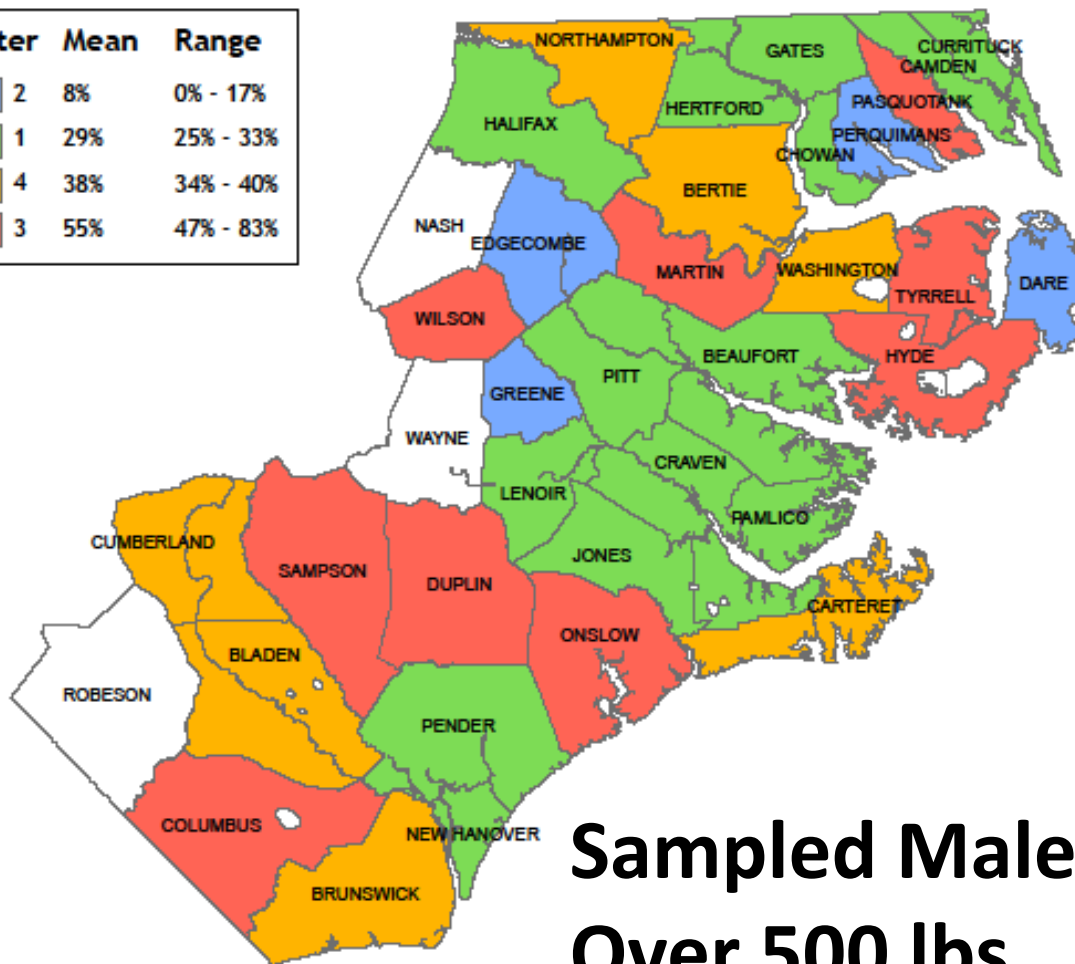
In simplest terms:

A cluster analysis is an formula that determines similarities and differences between items based on identified variables and then groups them accordingly.

So, let's look at a simple cluster analysis.....



Cluster	Mean	Range
 2	8%	0% - 17%
 1	29%	25% - 33%
 4	38%	34% - 40%
 3	55%	47% - 83%



**Sampled Males
Over 500 lbs.**

Development of CBMU Zones

1. What are most important variables with regard to bear management?
2. And, which ones are available at the county level?

We made a list.....



Development of CBMU Zones

Available Variables

Four Broad Categories of Variables

- Biological
- Harvest
- Habitat
- Hunter Access and “Bear Refugia”



Development of CBMU Zones

Available Variables

Four Broad Categories of Variables

- Biological (5)
- Harvest (6)
- Habitat (1)
- Hunter Access and “Bear Refugia” (4)

16 potential variables were identified for consideration



We ran 62 different cluster analyses with different combinations of the 16 available variables, and cluster groups ranging from 2 to 5.

We determined that **only 5** of the 16 available variables were providing meaningful results in cluster analysis.

We did not allow the process to force geographic clustering.



Development of CBMU Zones

Evaluated Variables

The 5 variables that demonstrated the ability to significantly influence clustering of counties were:

- Bear land cover
- Harvest per huntable area
- Ratio of sanctuary to non-sanctuary
- Average weight of sampled males
- Hunter success rate



Development of CBMU Zones

Evaluated Variables

- **Bear Land Cover:**
 - Deciduous forest
 - Mixed forest
 - Wetland
 - * Agriculture influence on the landscape ???



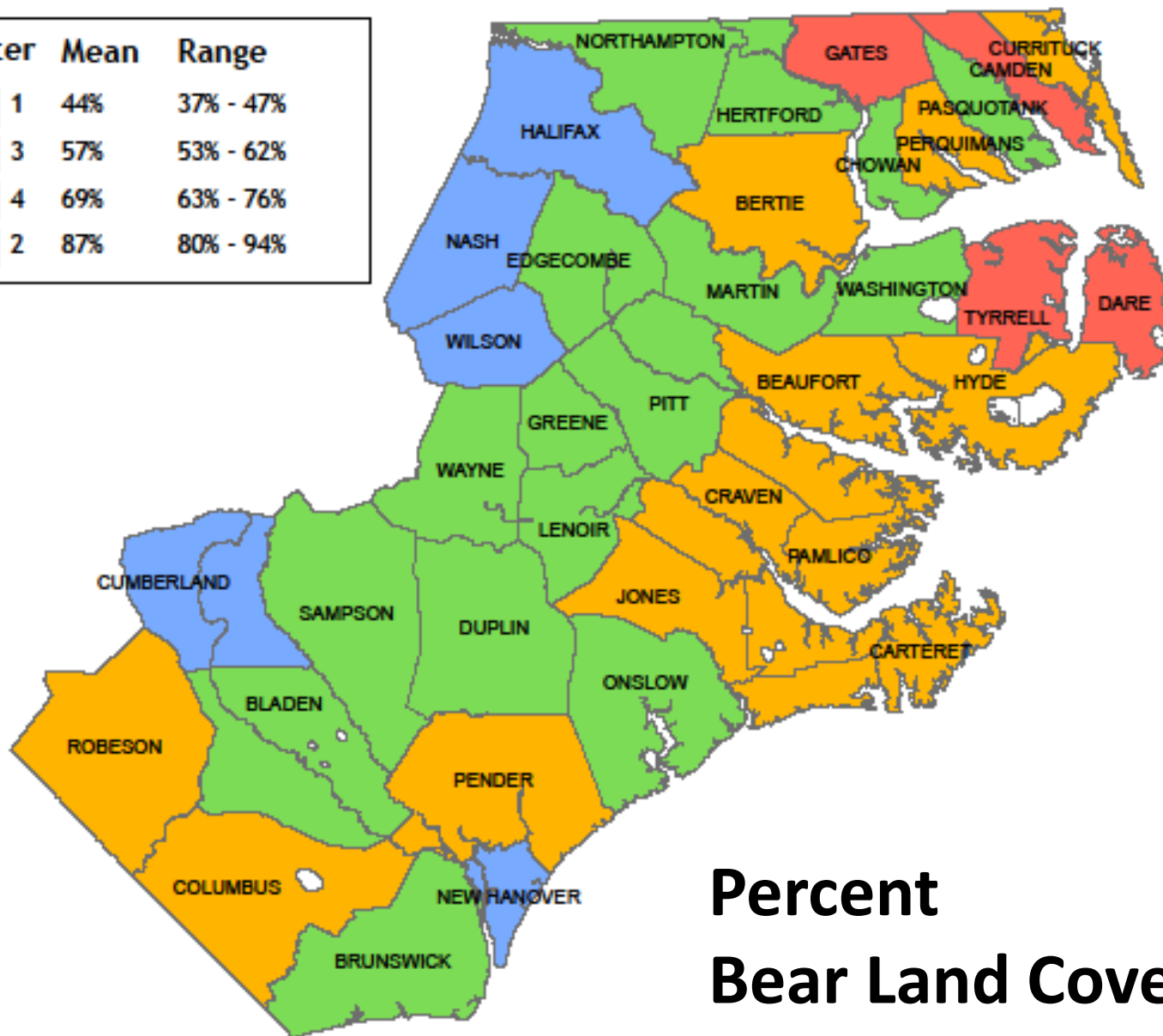
Development of CBMU Zones

Evaluated Variables

- **Bear Land Cover:**
 - Deciduous forest
 - Mixed forest
 - Wetland
 - “Edible” planted crop (3-year average)



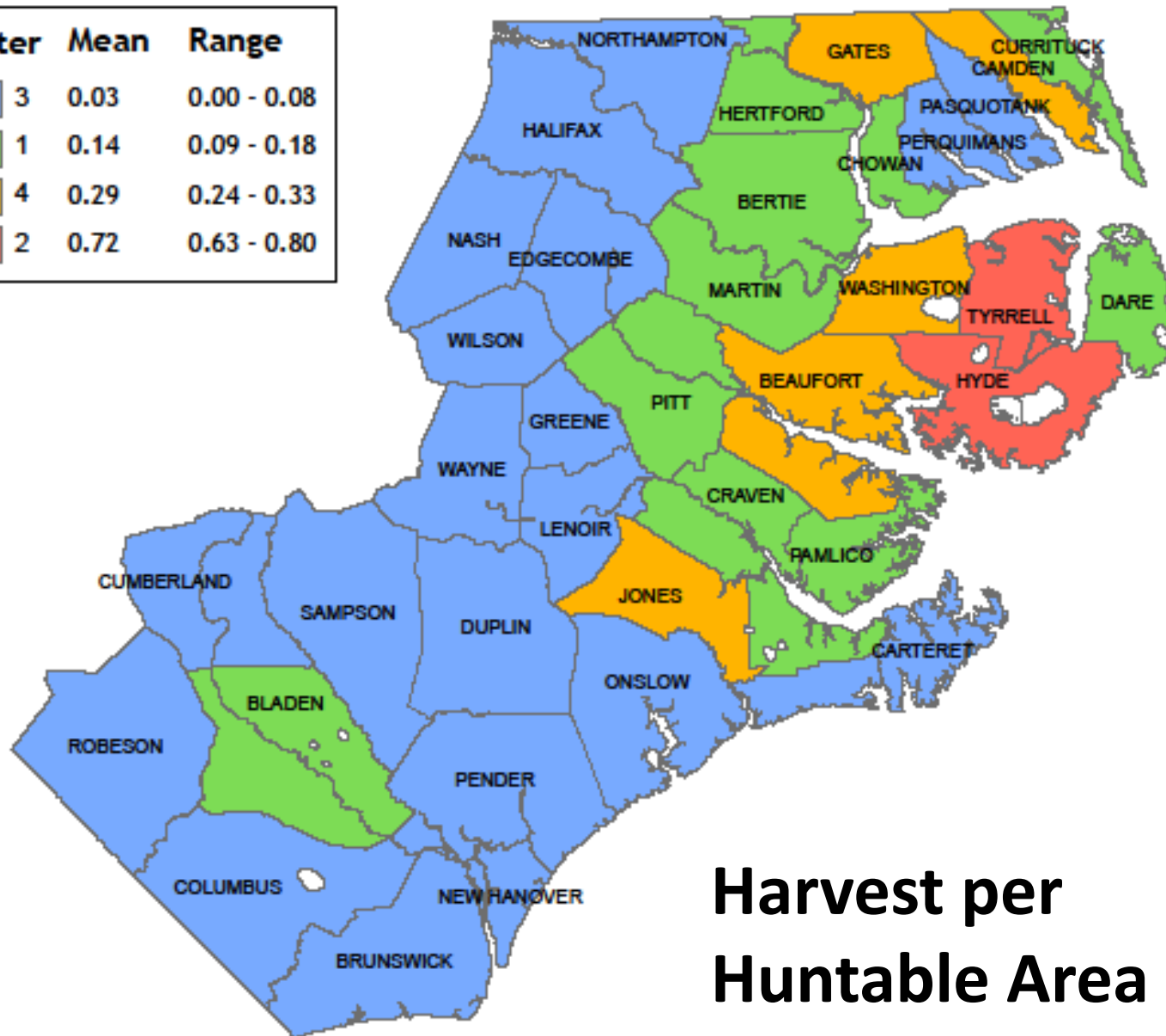
Cluster	Mean	Range
1	44%	37% - 47%
3	57%	53% - 62%
4	69%	63% - 76%
2	87%	80% - 94%



**Percent
Bear Land Cover**



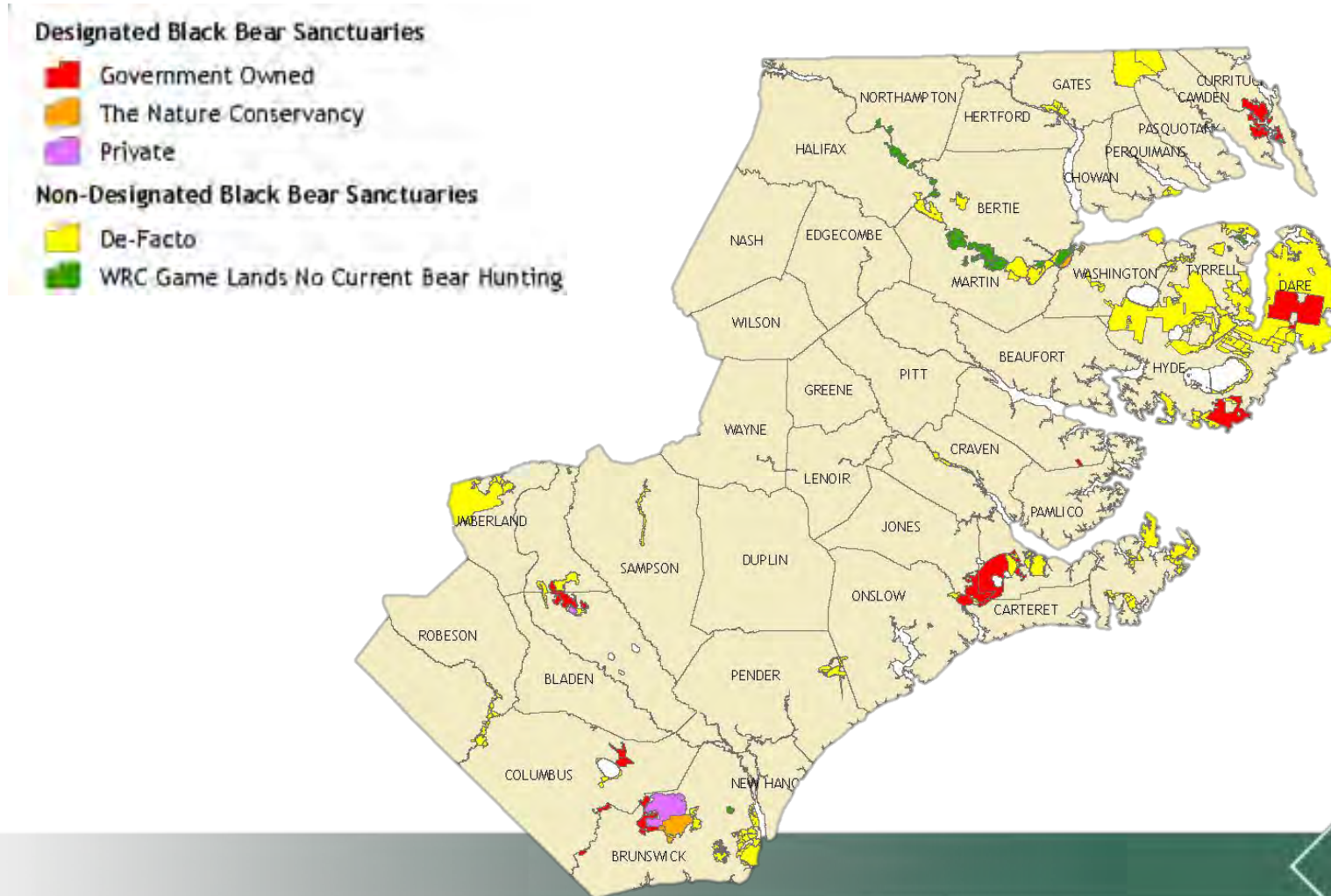
Cluster	Mean	Range
3	0.03	0.00 - 0.08
1	0.14	0.09 - 0.18
4	0.29	0.24 - 0.33
2	0.72	0.63 - 0.80



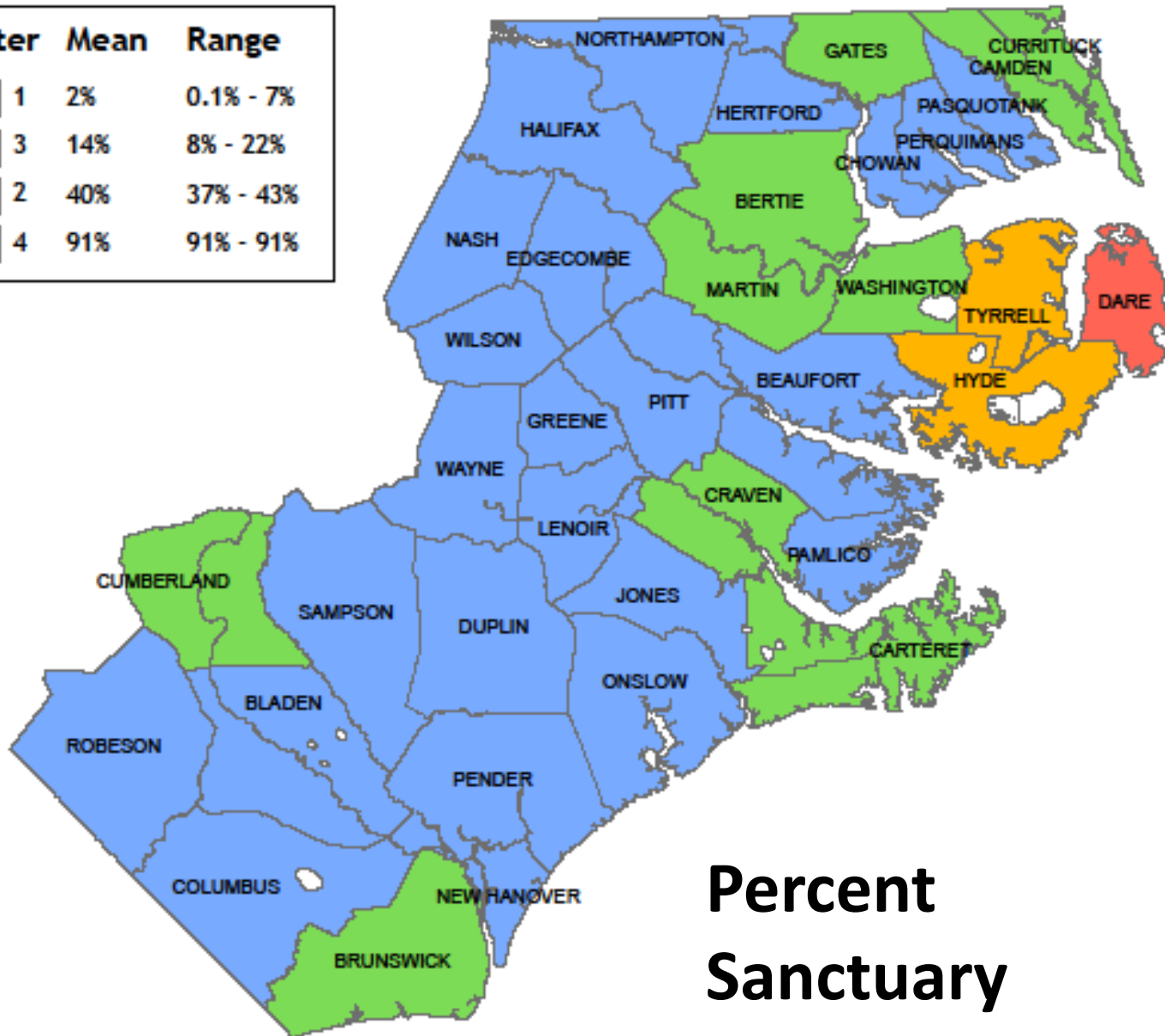
**Harvest per
Huntable Area
(kill/sq. mile)**



Bear Sanctuaries



Cluster	Mean	Range
1	2%	0.1% - 7%
3	14%	8% - 22%
2	40%	37% - 43%
4	91%	91% - 91%



**Percent
Sanctuary**



Final Zone Development

We ran multiple cluster analysis and found that Dare County was heavily influencing the clusters.

So we removed it and ran the analyses again.

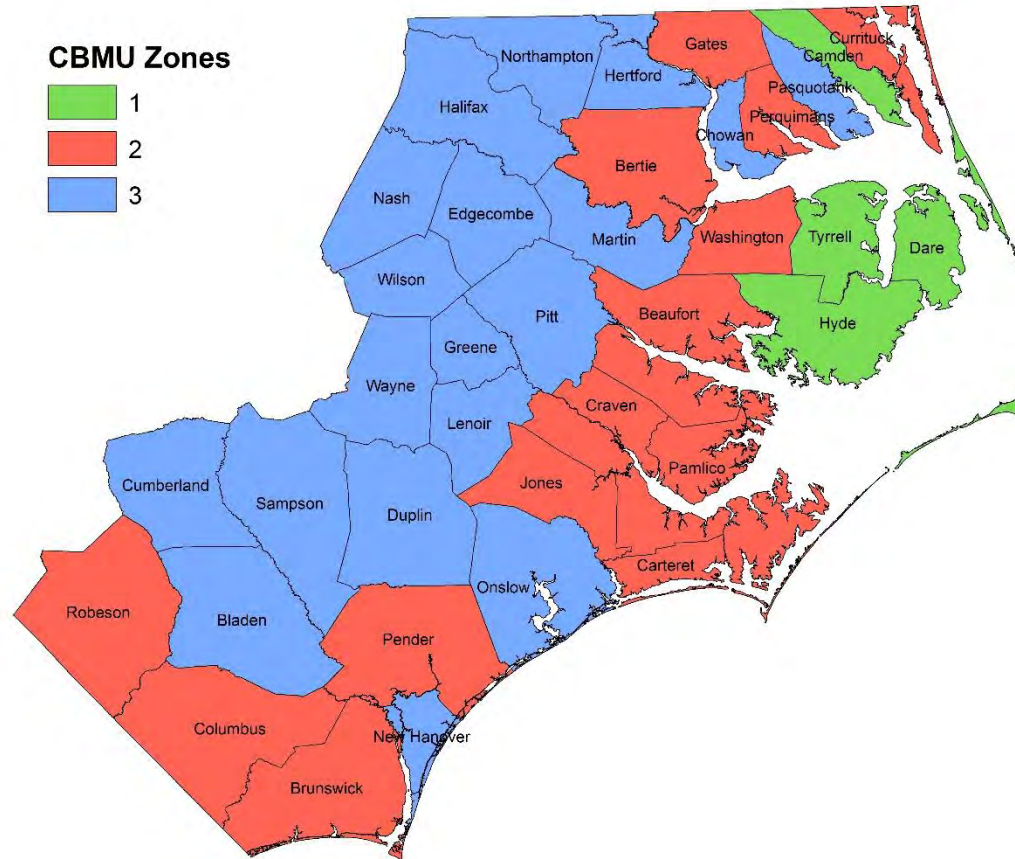
So let's look at the one that fit the best.....



Final Zone Development

* Our BEST Analysis was 3 Clusters with 3 Variables:

Bear Land Cover, Harvest per Huntatable Area, and Percent Sanctuary



*The **only** Anova with pairwise testing resulting in 9 out of 9 (100%) of cluster comparisons being significantly different ($P < 0.05$).



Science and Statistics can't tell you the complete answer to every question.....



Final Zone Development

This map was next evaluated using expert elicitation of WRC biological staff.



We asked them to provide recommendations based on their management knowledge and field experience in these counties.

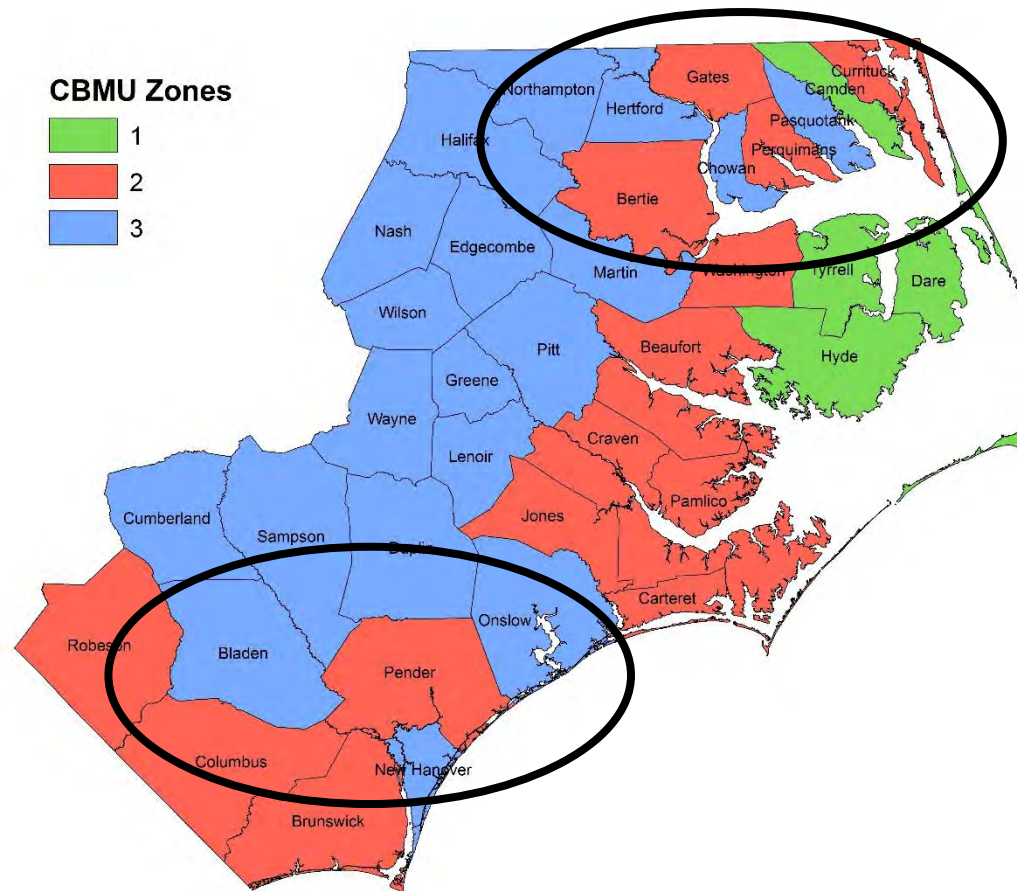


To Produce a Final Map of CBMU Zones



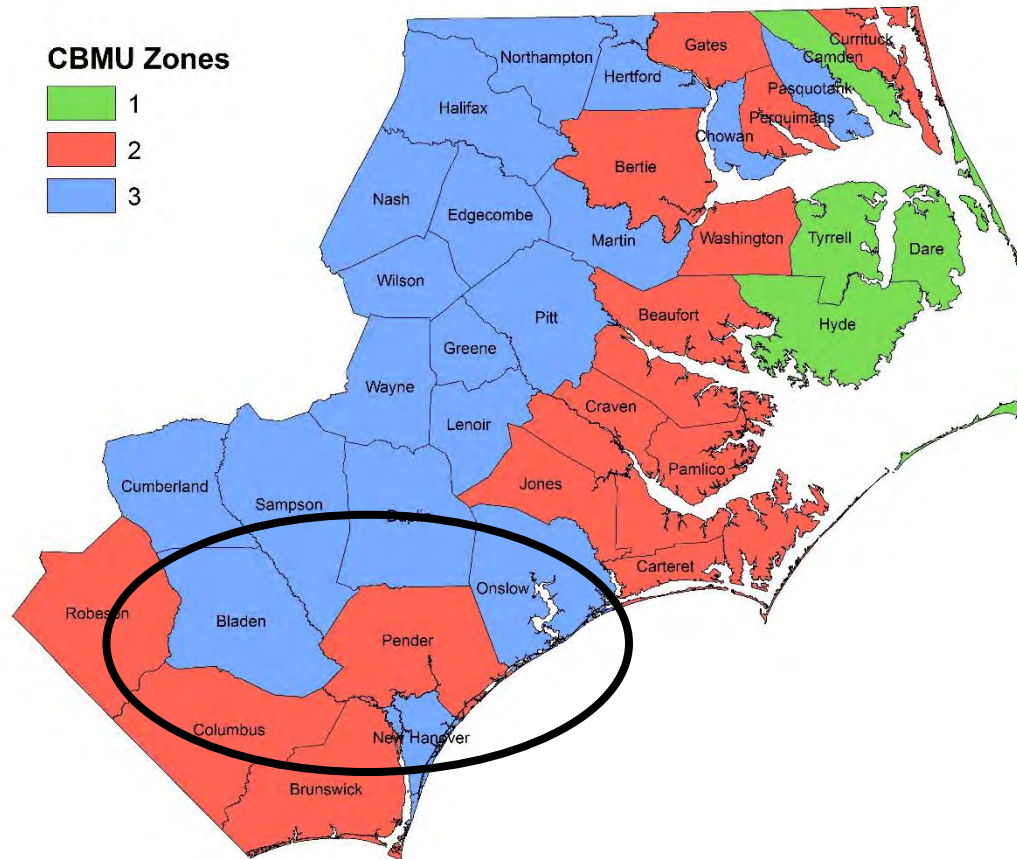
Final Zone Development

BEST Analysis 3 Clusters with 3 Variables:



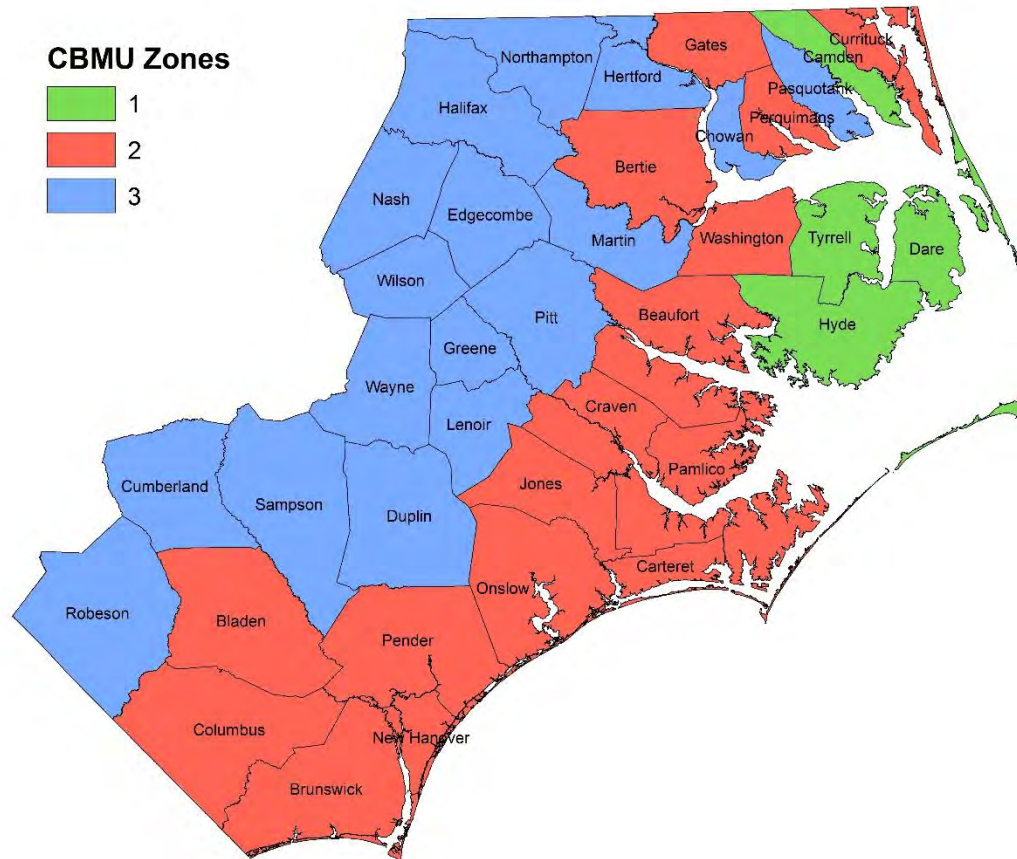
Final Zone Development

BEST Analysis 3 Clusters with 3 Variables:



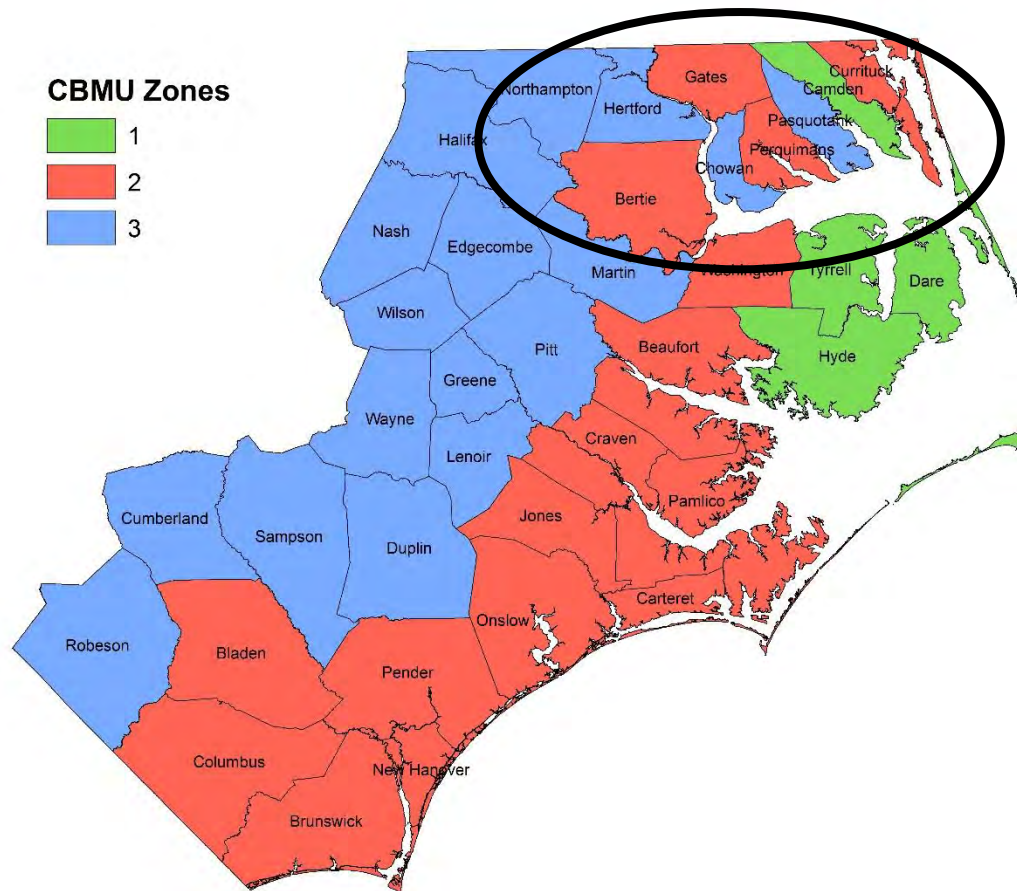
Final Zone Development

BEST Analysis 3 Clusters with 3 Variables:



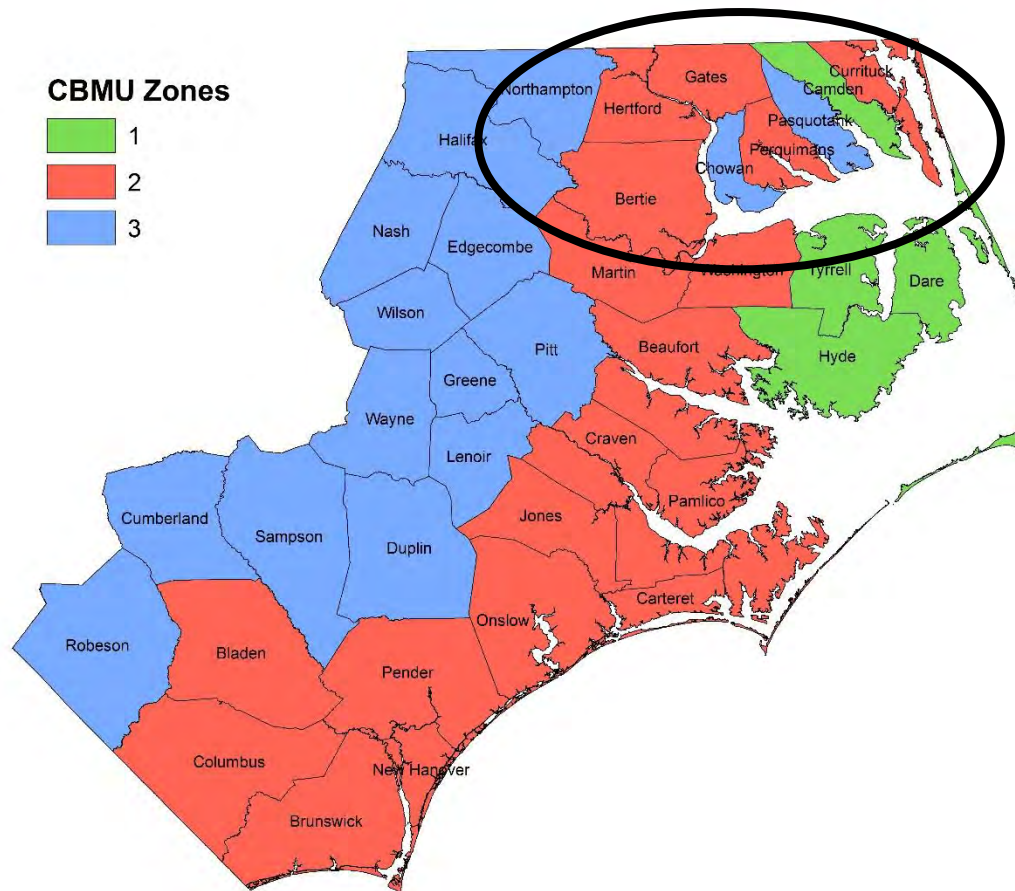
Final Zone Development

BEST Analysis 3 Clusters with 3 Variables:

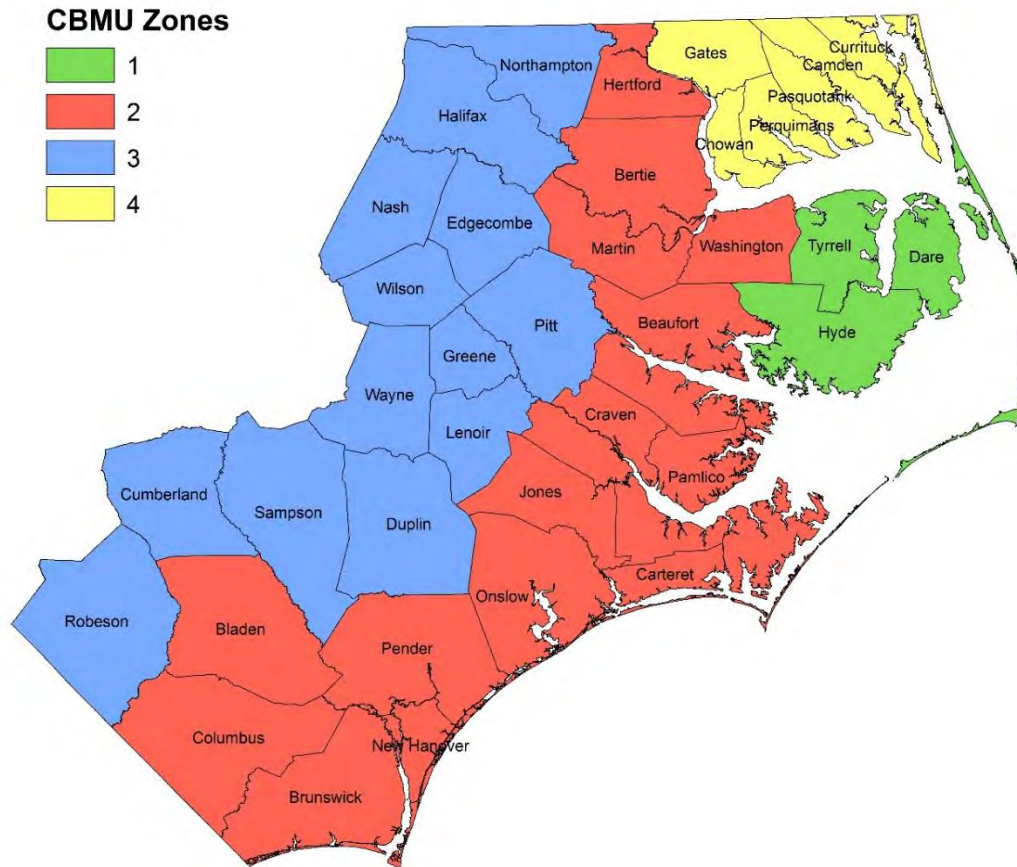


Final Zone Development

BEST Analysis 3 Clusters with 3 Variables:

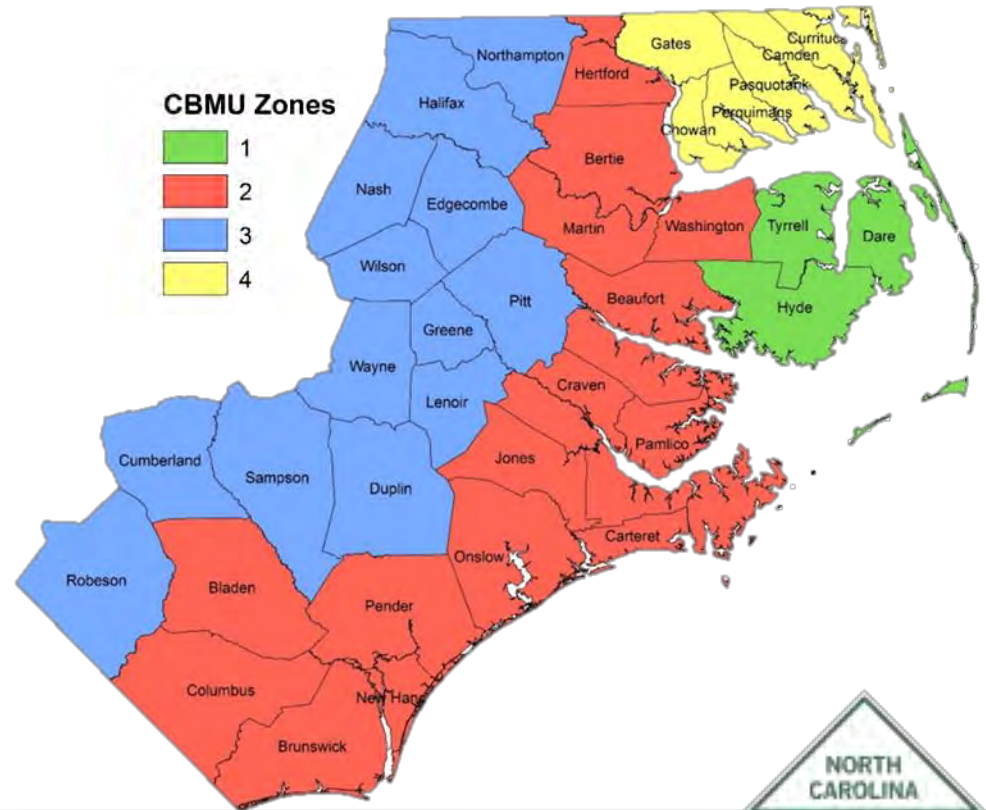


CBMU Biological Zones

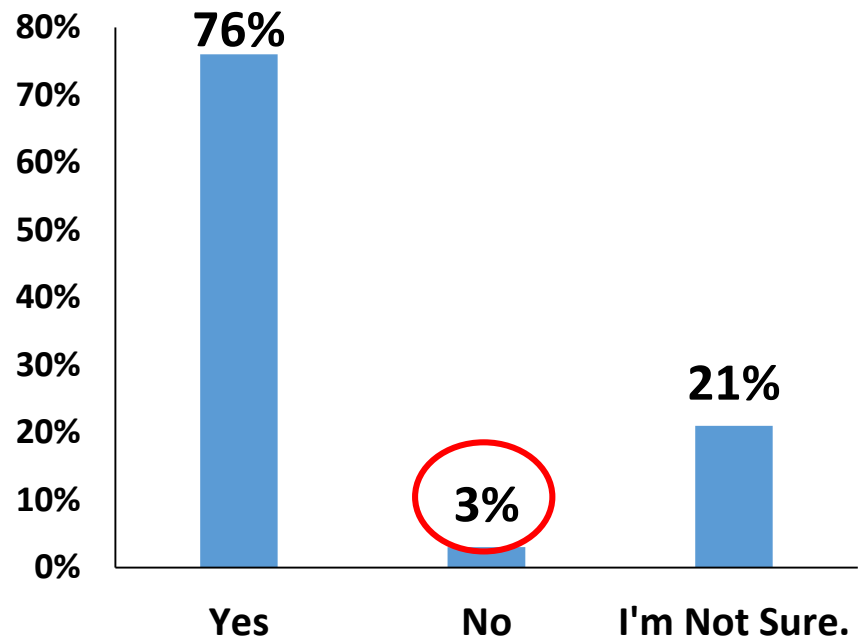
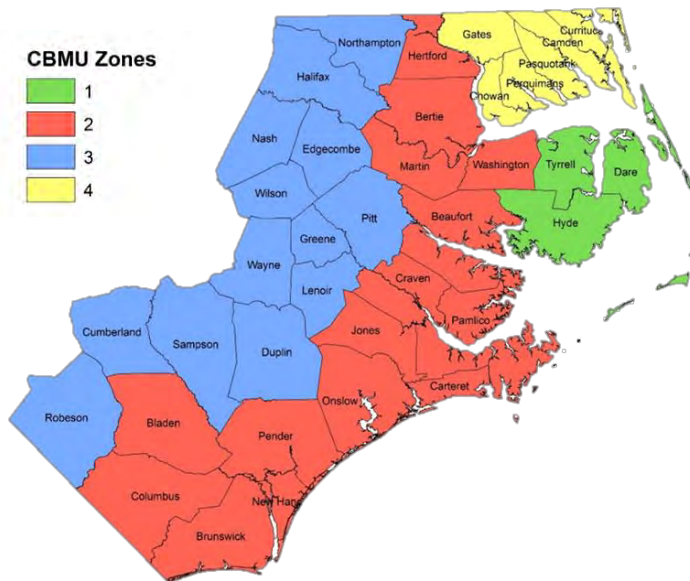


Do you think these zones look like reasonable bear management zones for our coastal unit?

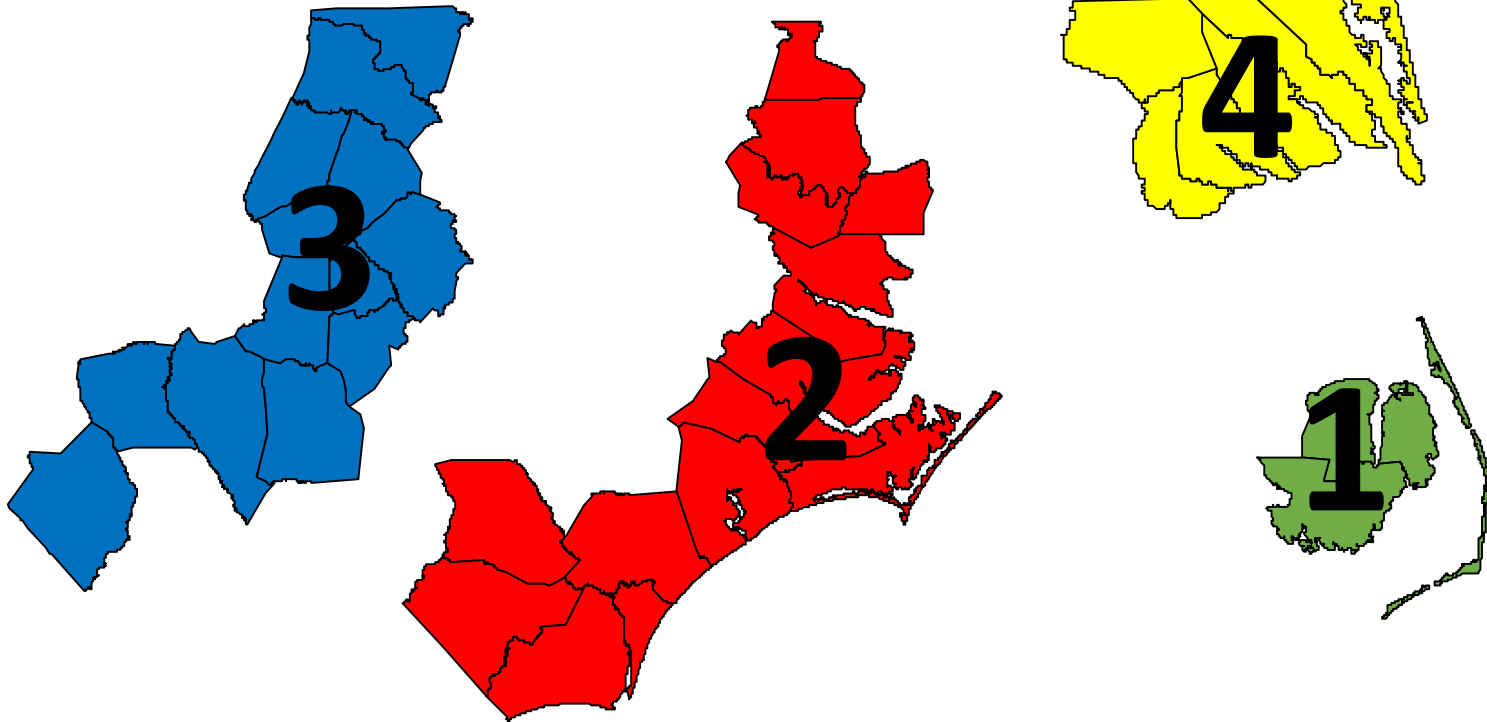
- A. Yes.
- B. No.
- C. I'm Not Sure.



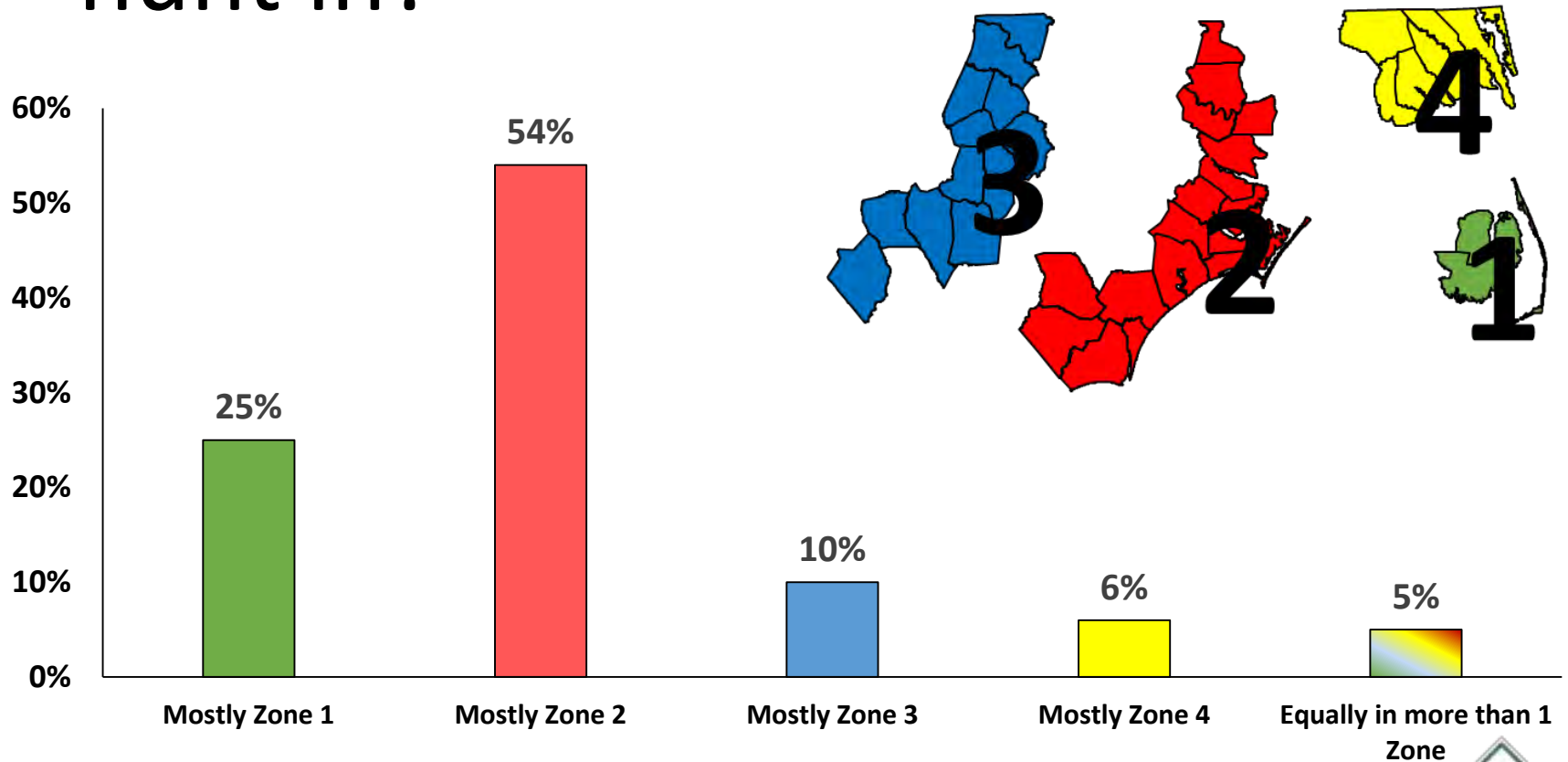
Do you think these zones look like reasonable bear management zones for our coastal unit?



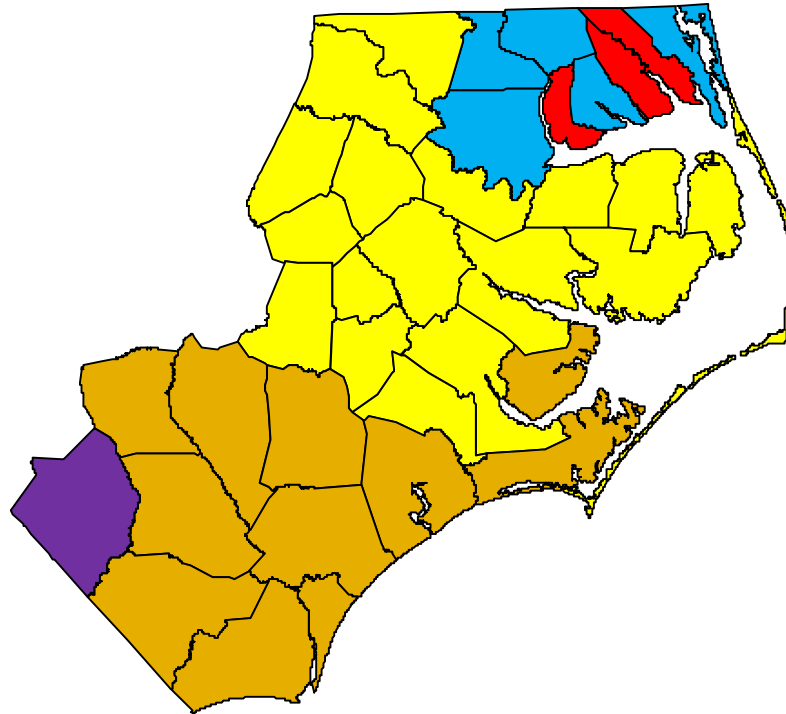
So, now let's talk about information for each of these zones!



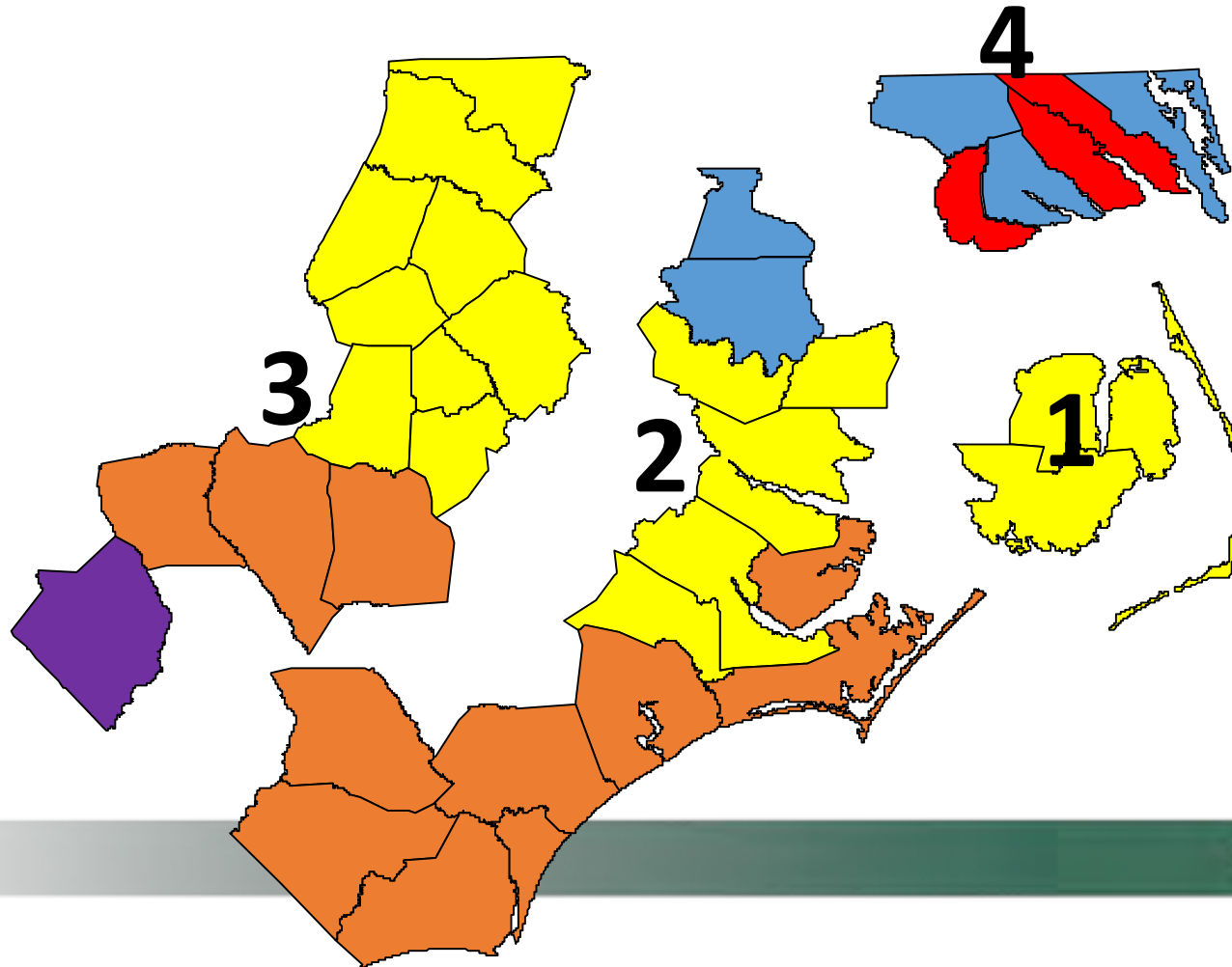
Which CBMU Zone do you most hunt in?

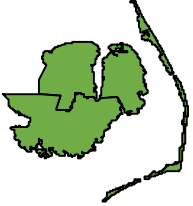
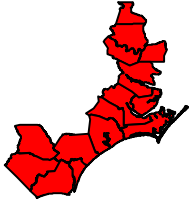
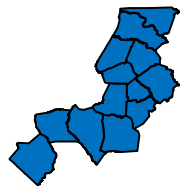
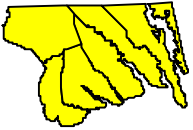


2016 CBMU Bear Seasons



How our current bear seasons overlay on the CBMU Zones!

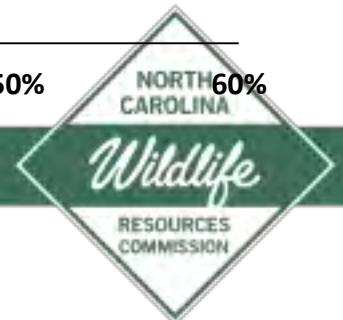
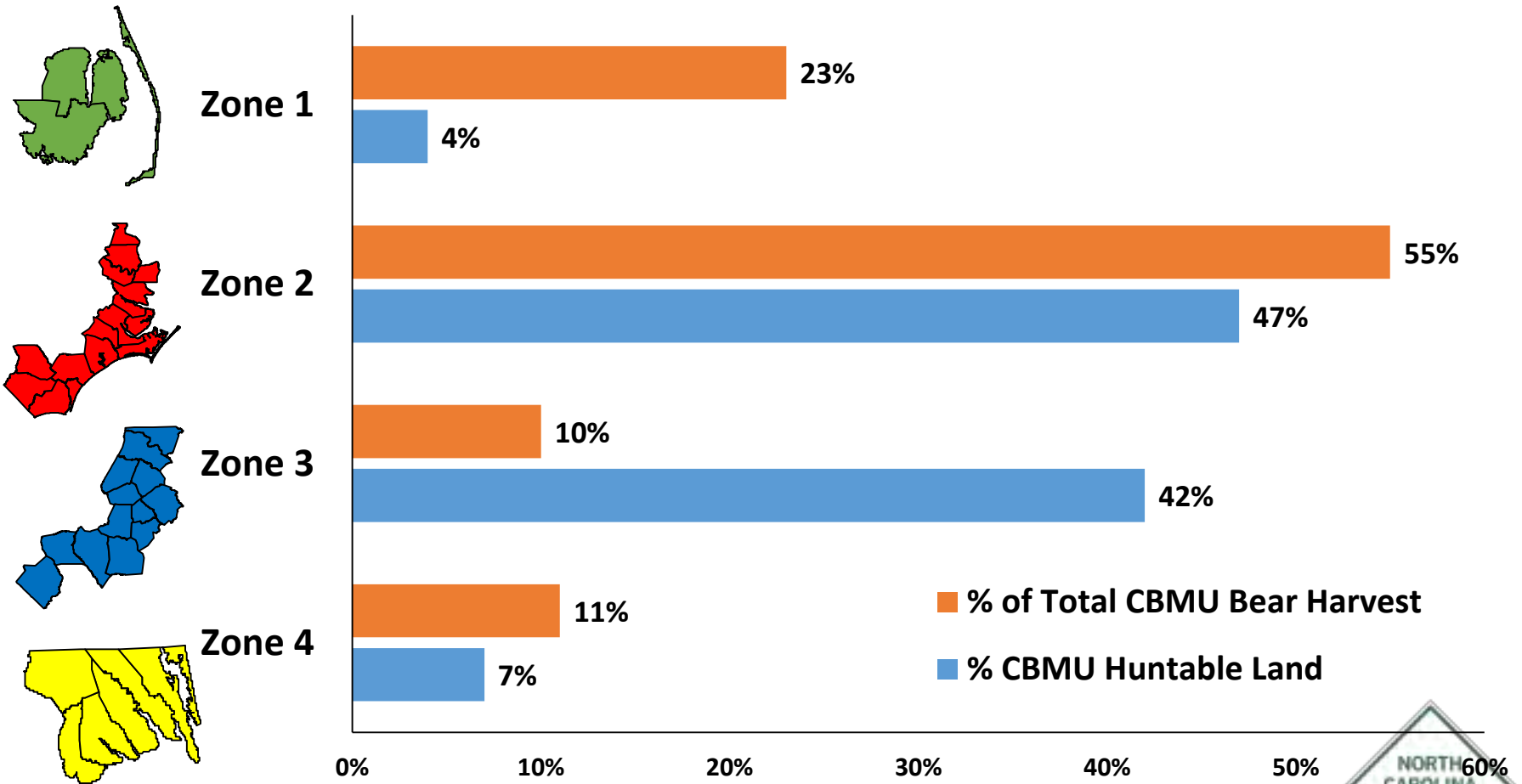


Zone	Number of Counties	Total Land Area (Square Miles)	Hunttable Land (Square Miles)
1 	3	1,459	635 (44%)
2 	15	9,275	8,141 (88%)
3 	13	7,959	7,252 (91%)
4 	6	1,486	1,289 (87%)



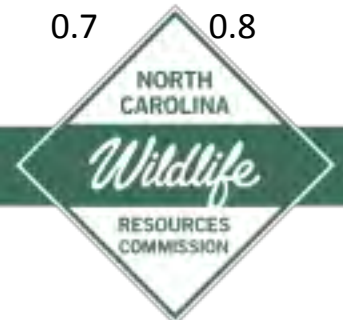
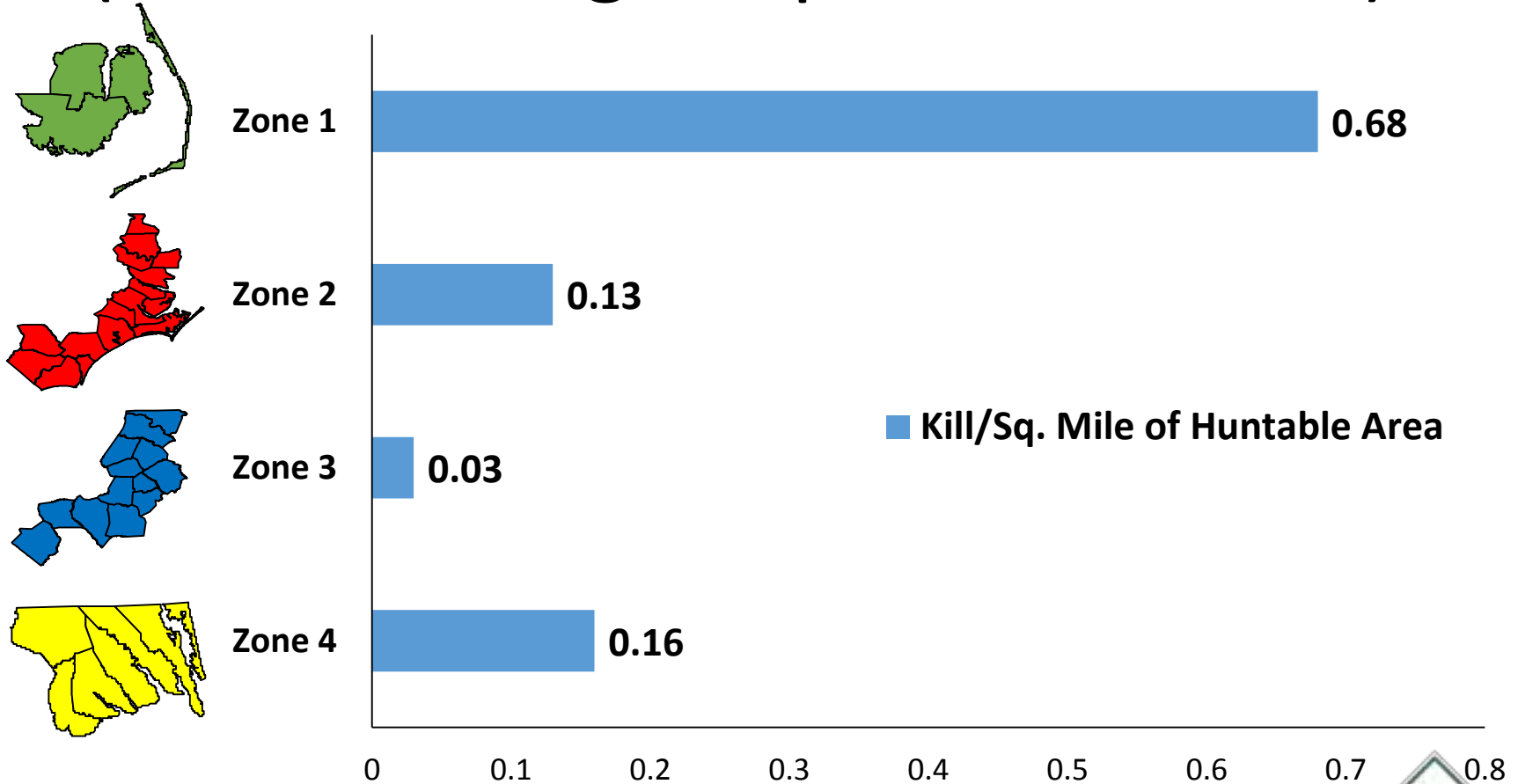
CBMU Zone Comparisons

(3 Year Average Reported Harvest)

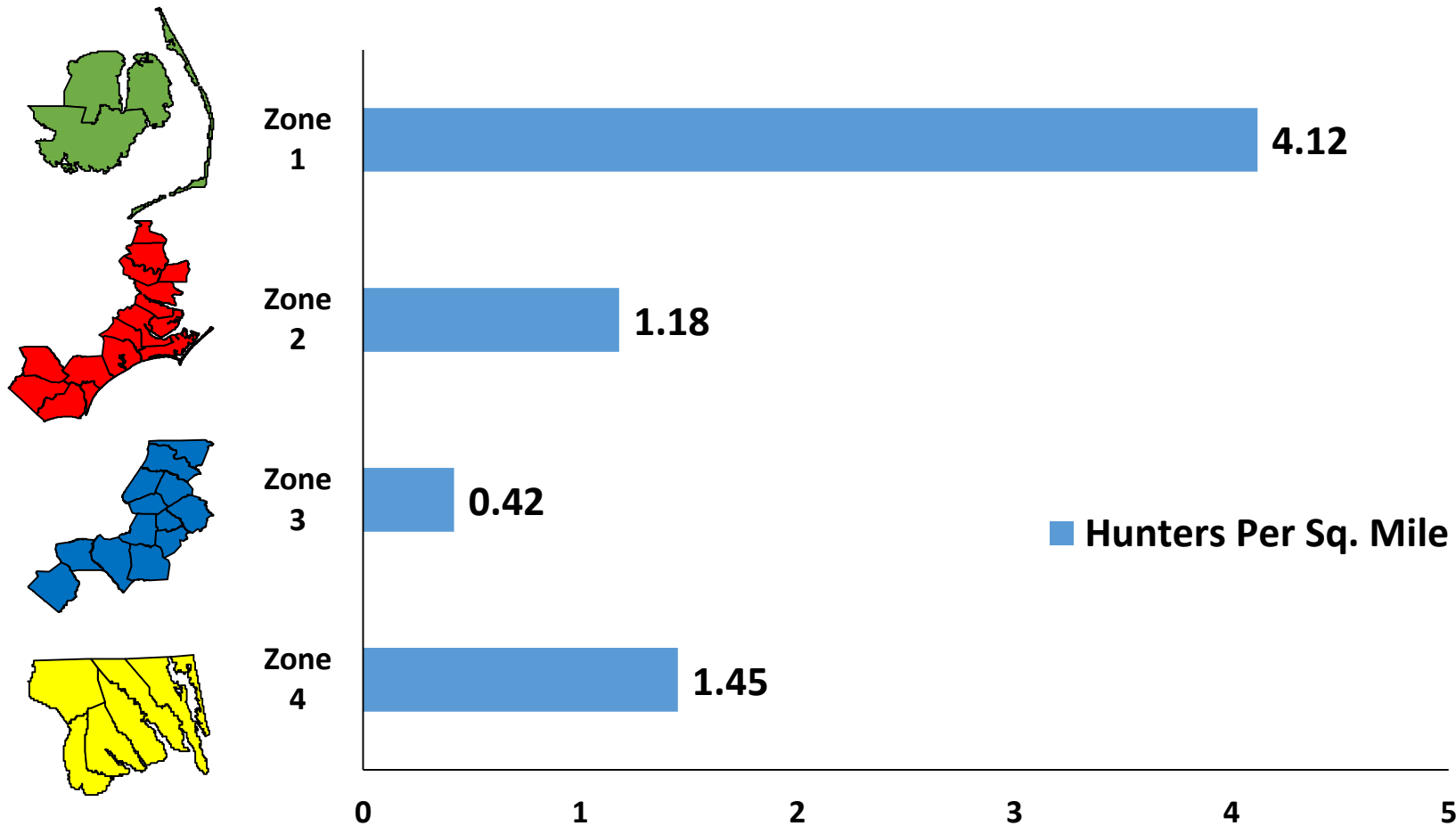


CBMU Zone Comparisons

(3 Year Average Reported Harvest)



CBMU Zone Comparisons

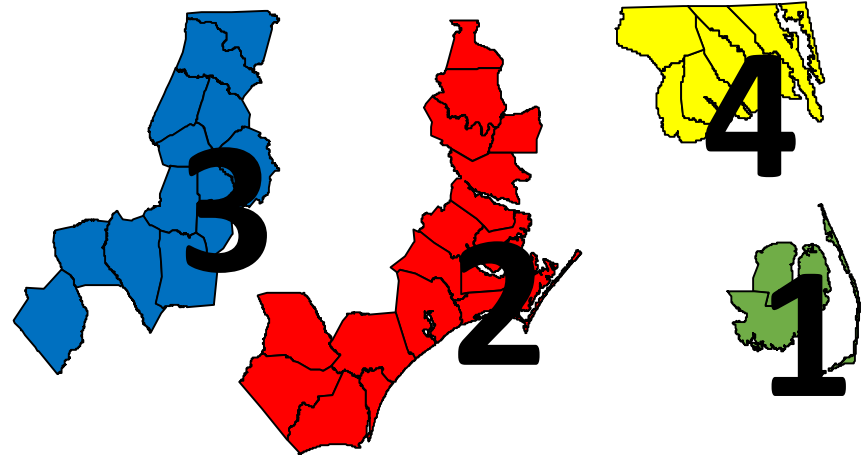


(2015 e-stamp)

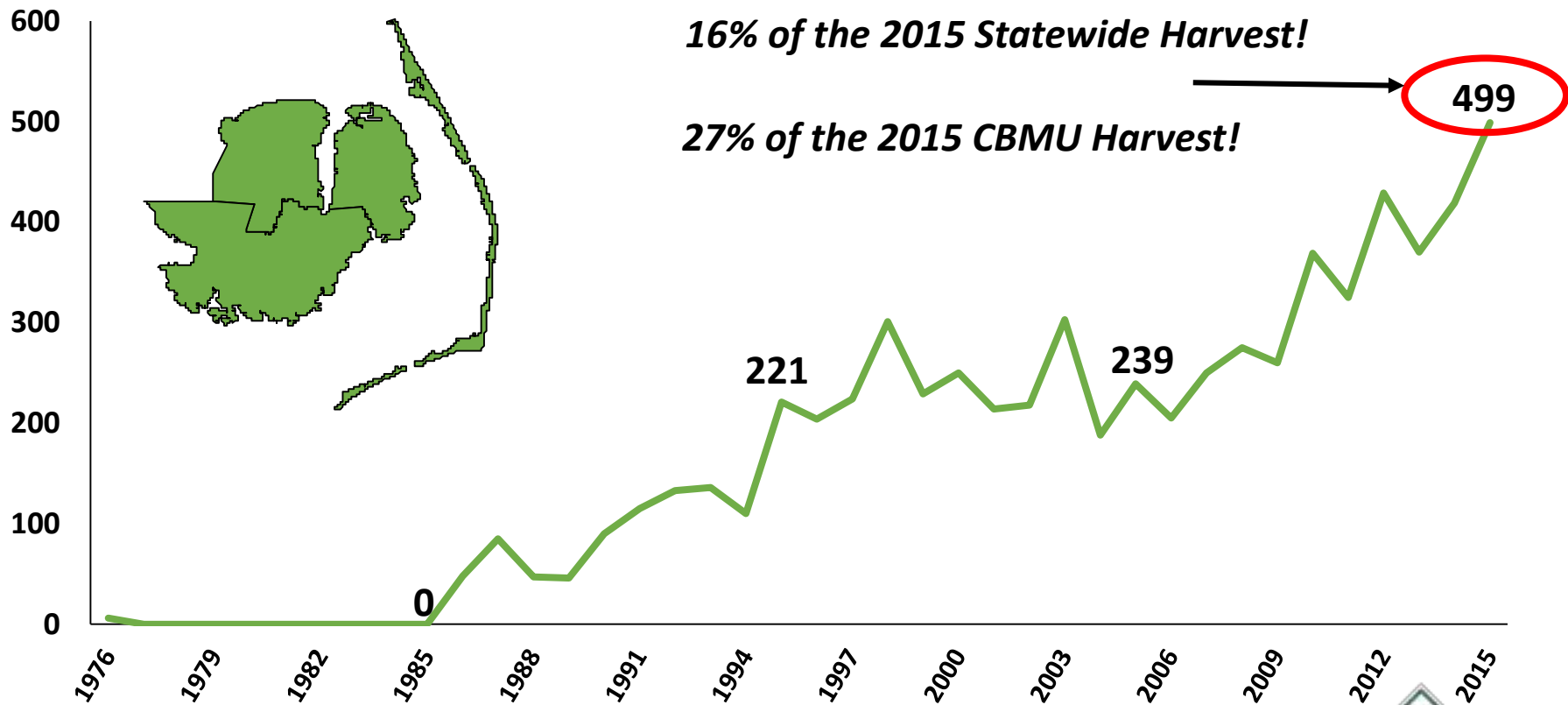


Which CBMU Zone do you hunt most in?

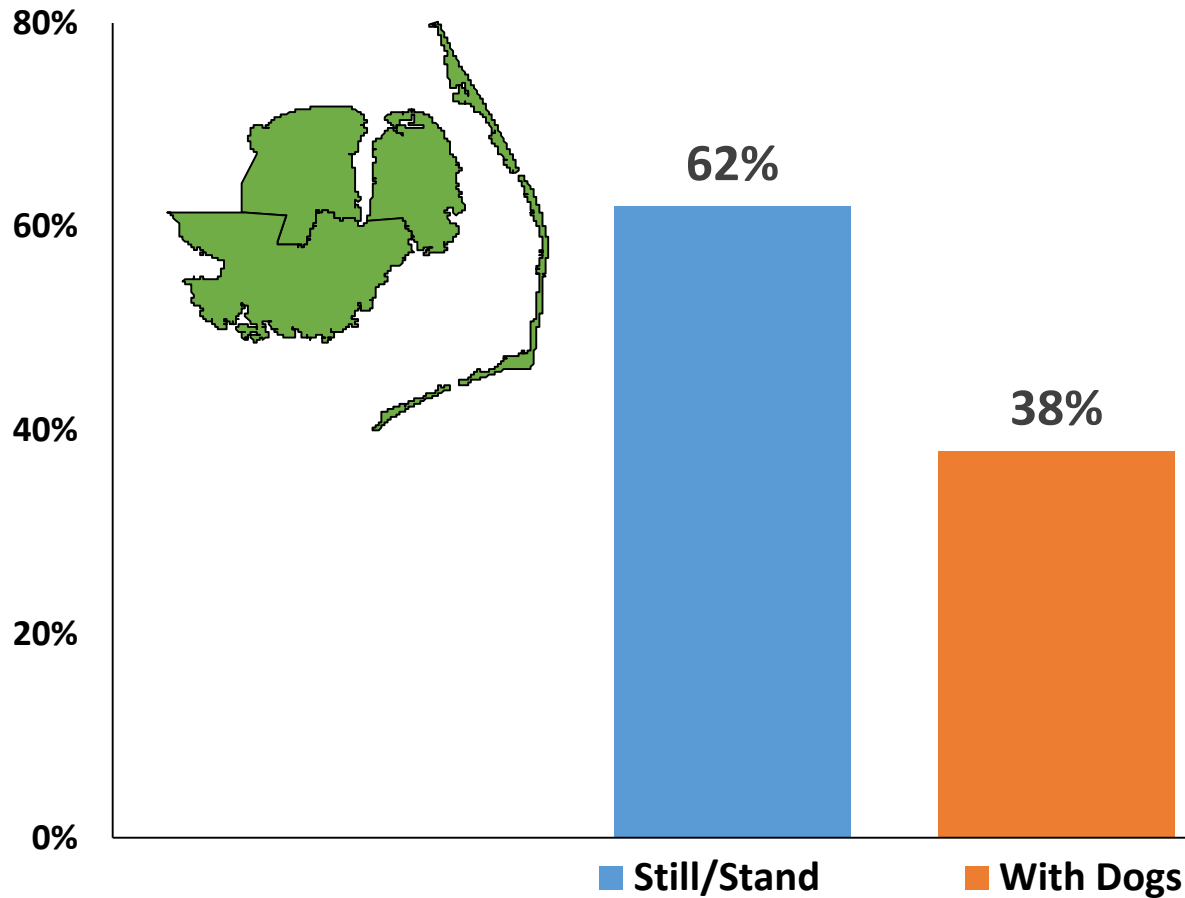
- A. Mostly Zone 1
- B. Mostly Zone 2
- C. Mostly Zone 3
- D. Mostly Zone 4
- E. Equally in more than 1 Zone



CBMU Zone 1 Harvest Trend

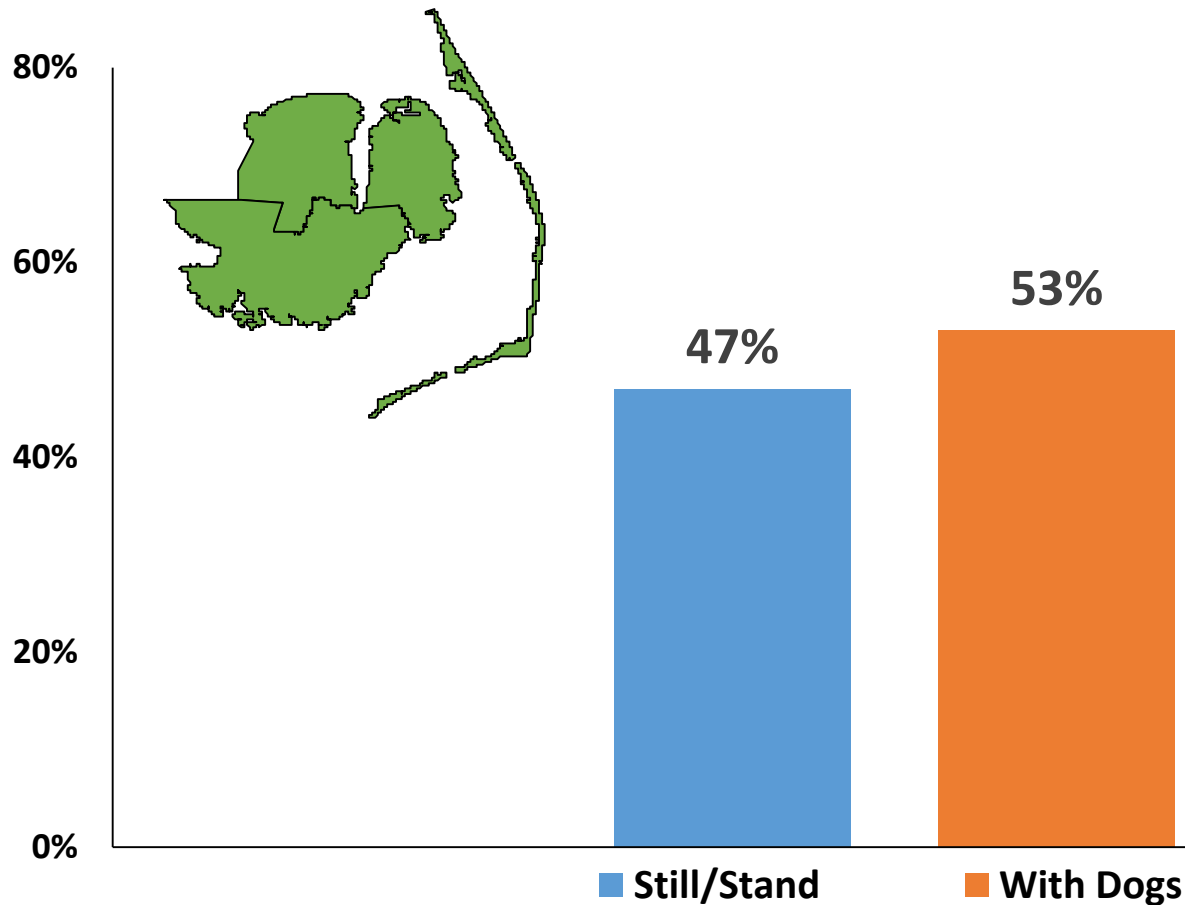


Zone 1 Hunting Methods (2015 e-Stamp Survey)

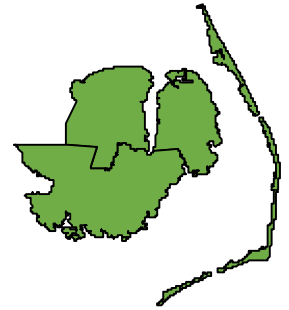
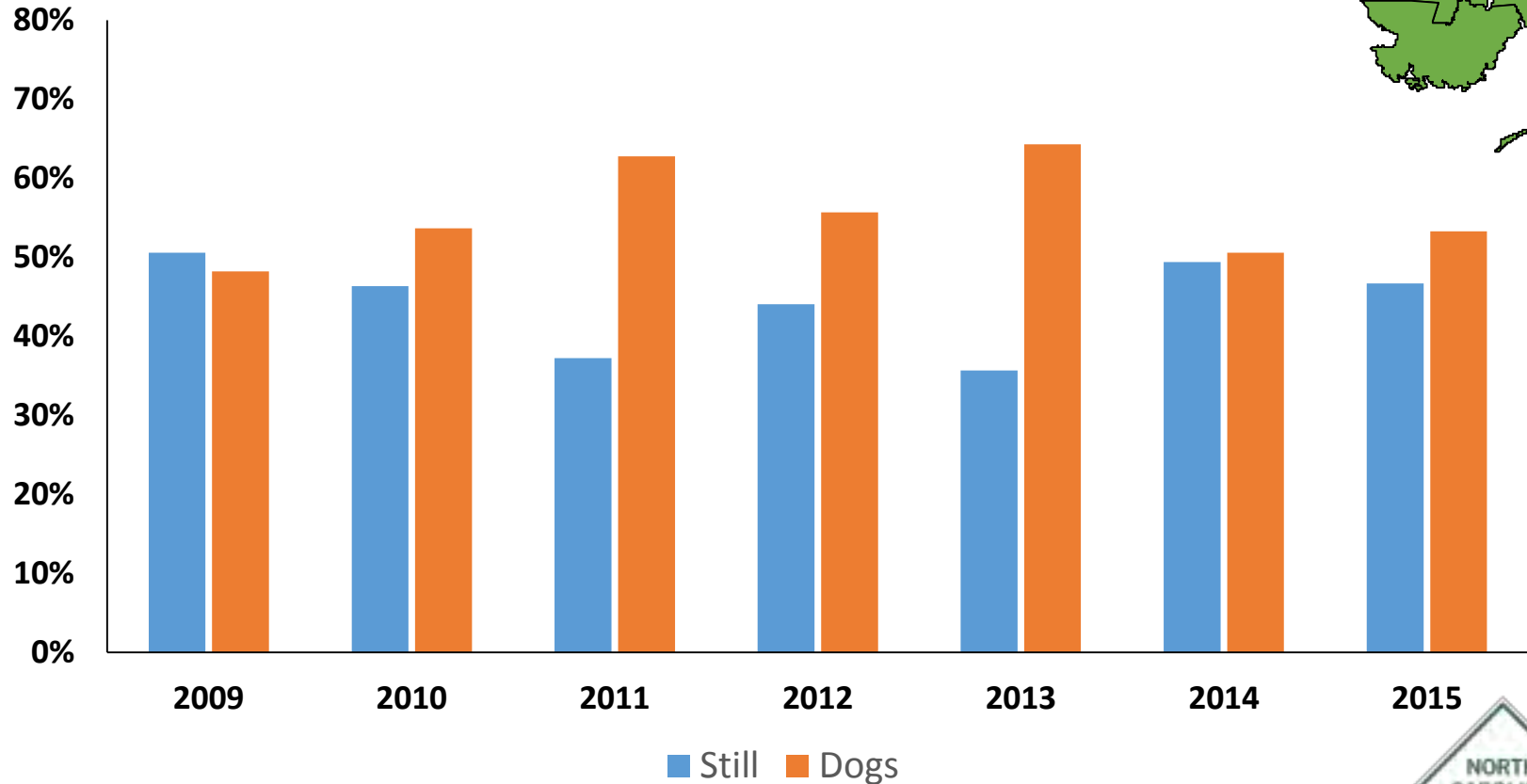


Zone 1 Harvest by Hunting Methods

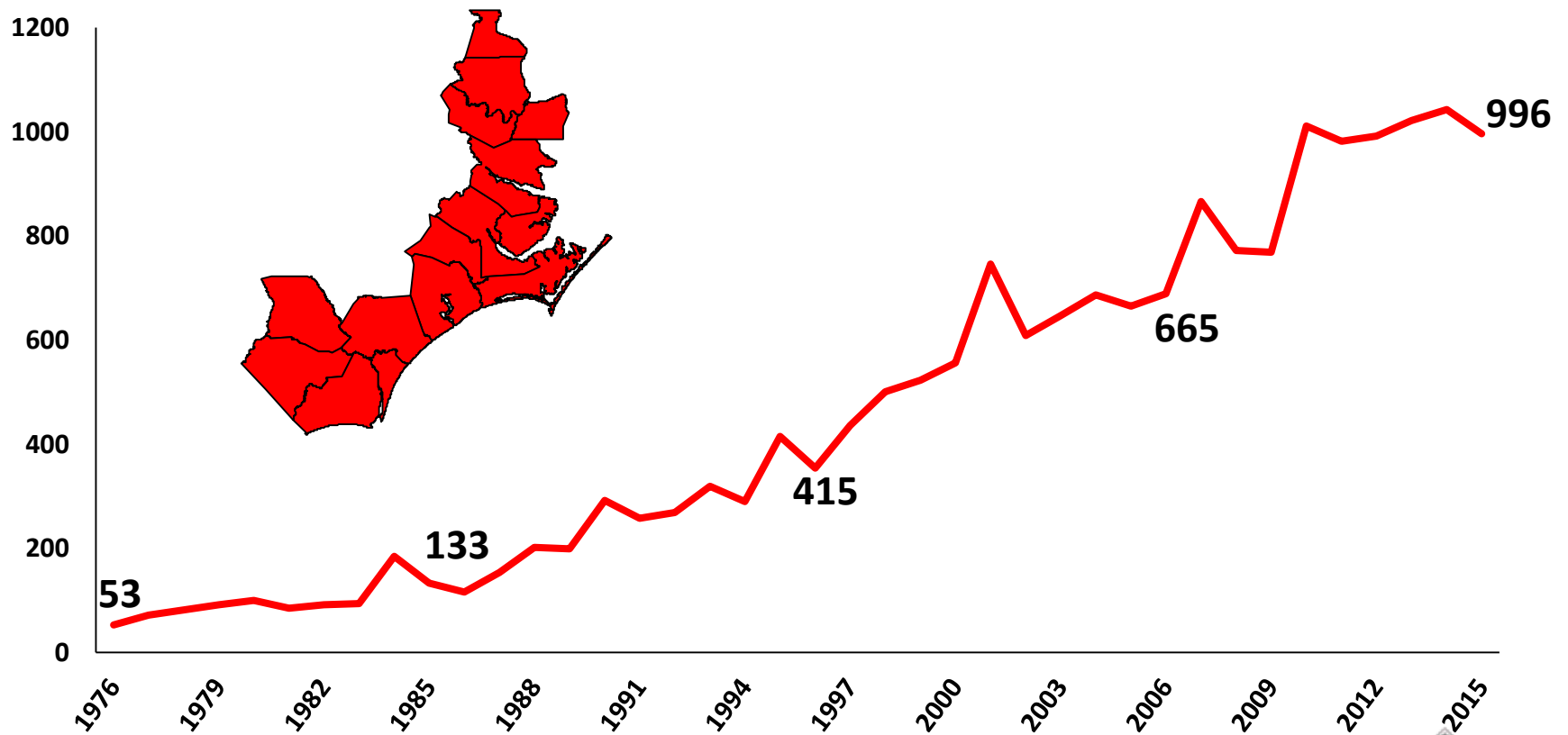
(2015 Reported Harvest)



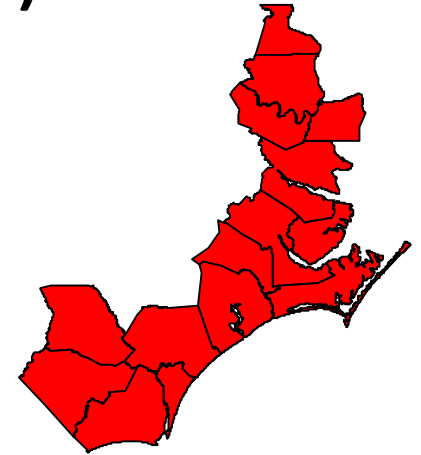
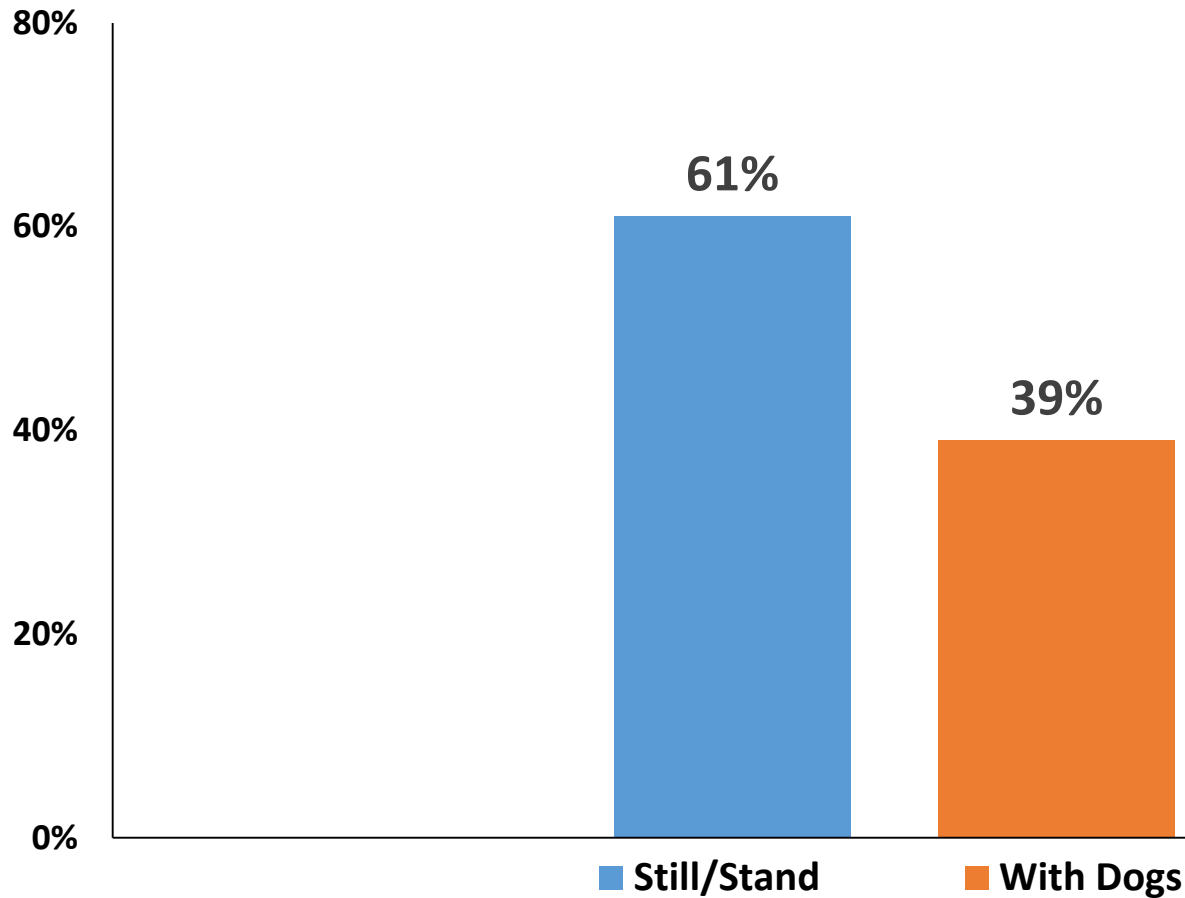
Zone 1 Harvested Bears by Method (2009-2015)



CBMU Zone 2 Harvest Trend

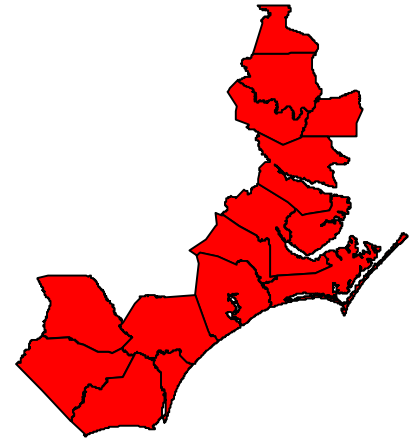
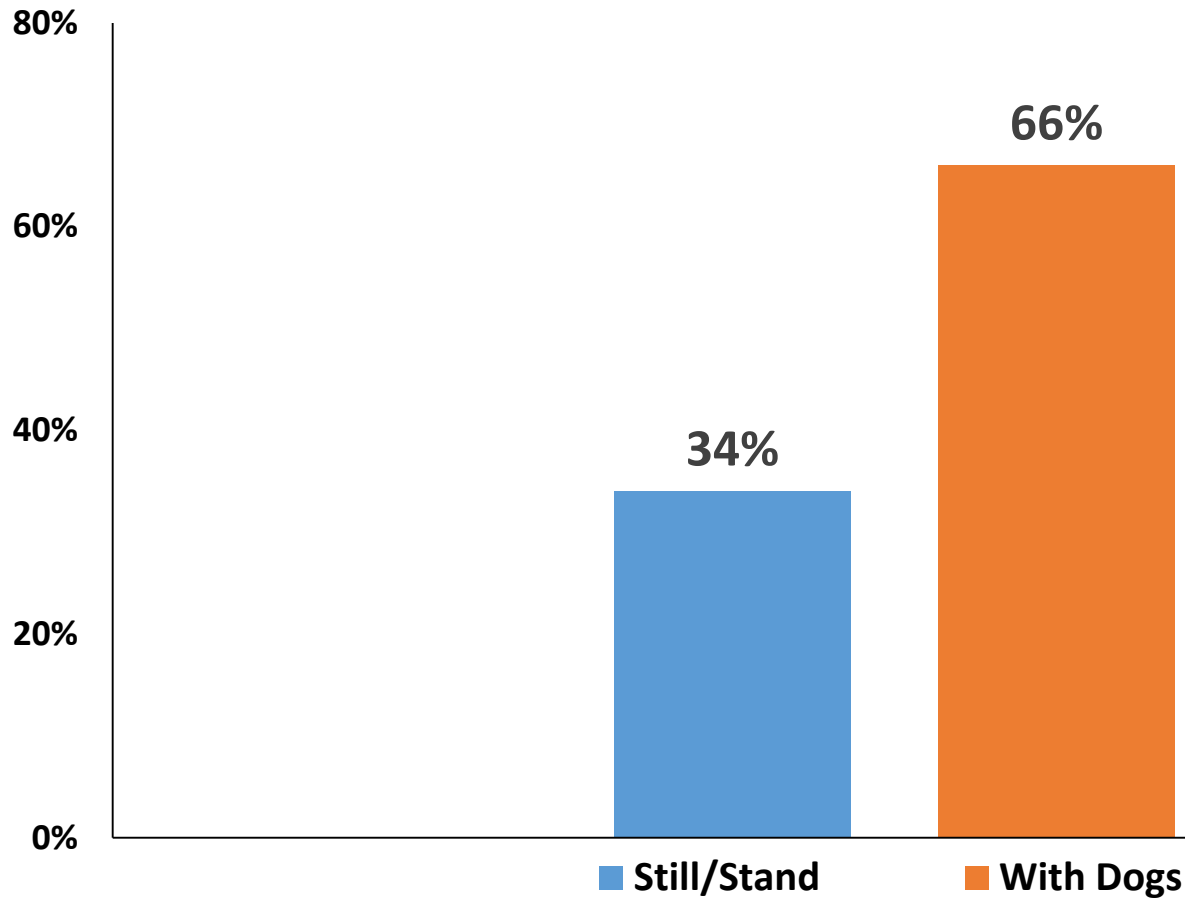


Zone 2 Hunting Methods (2015 e-Stamp Survey)

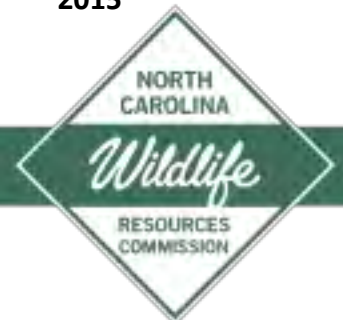
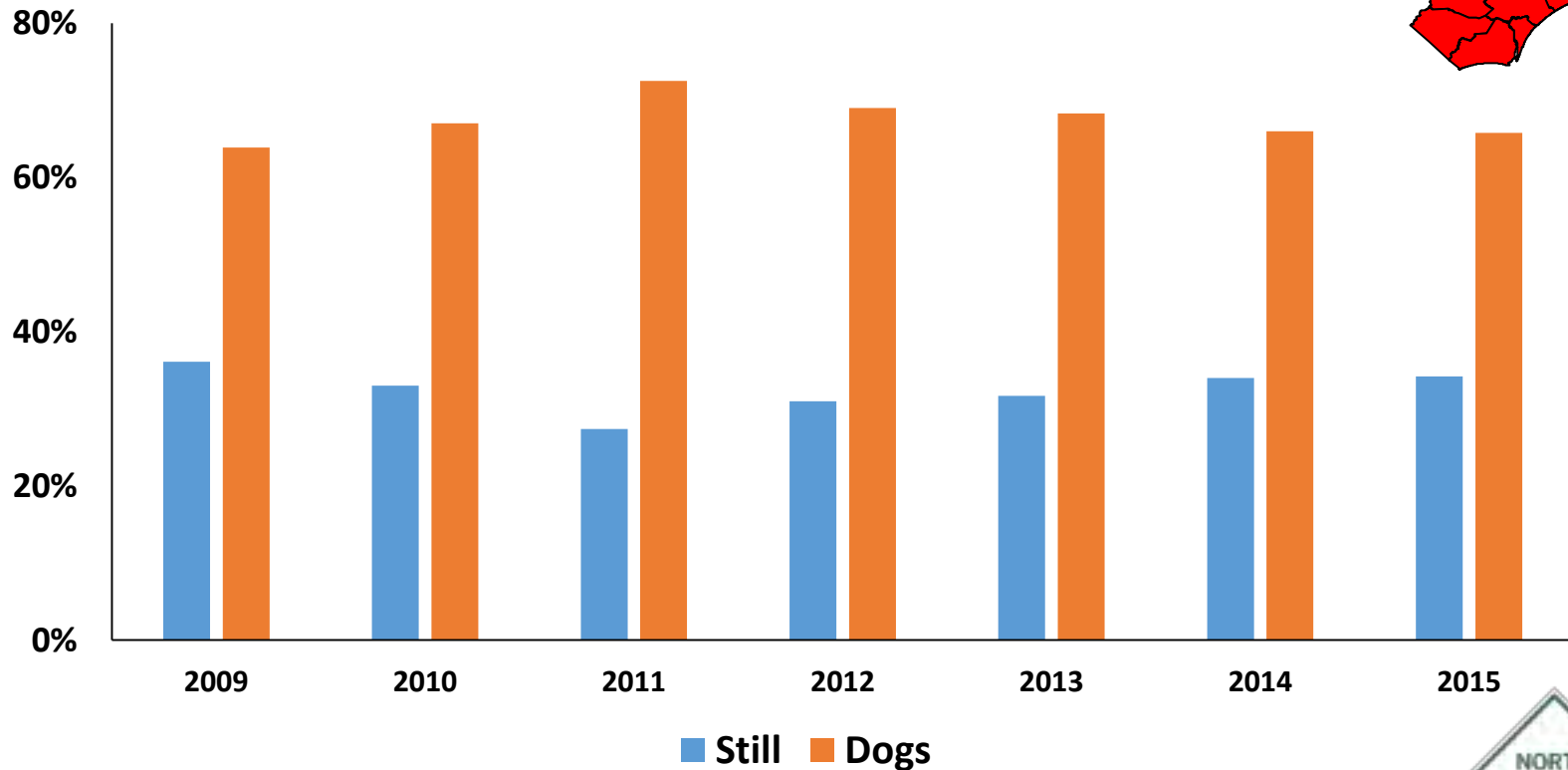
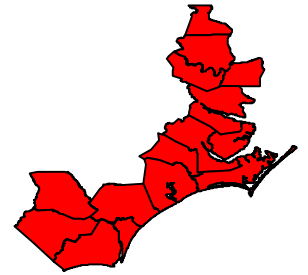


Zone 2 Harvest by Hunting Methods

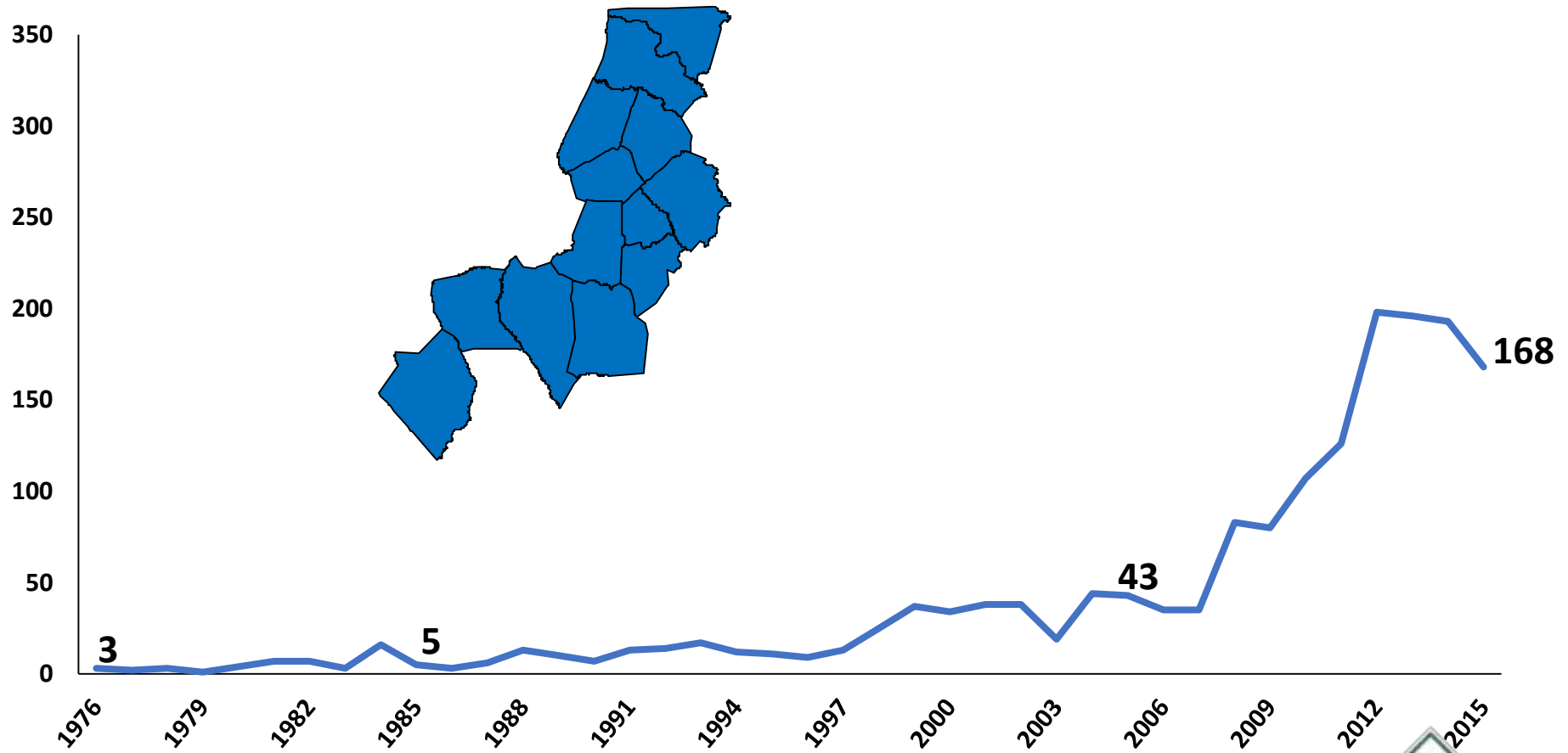
(2015 Reported Harvest)



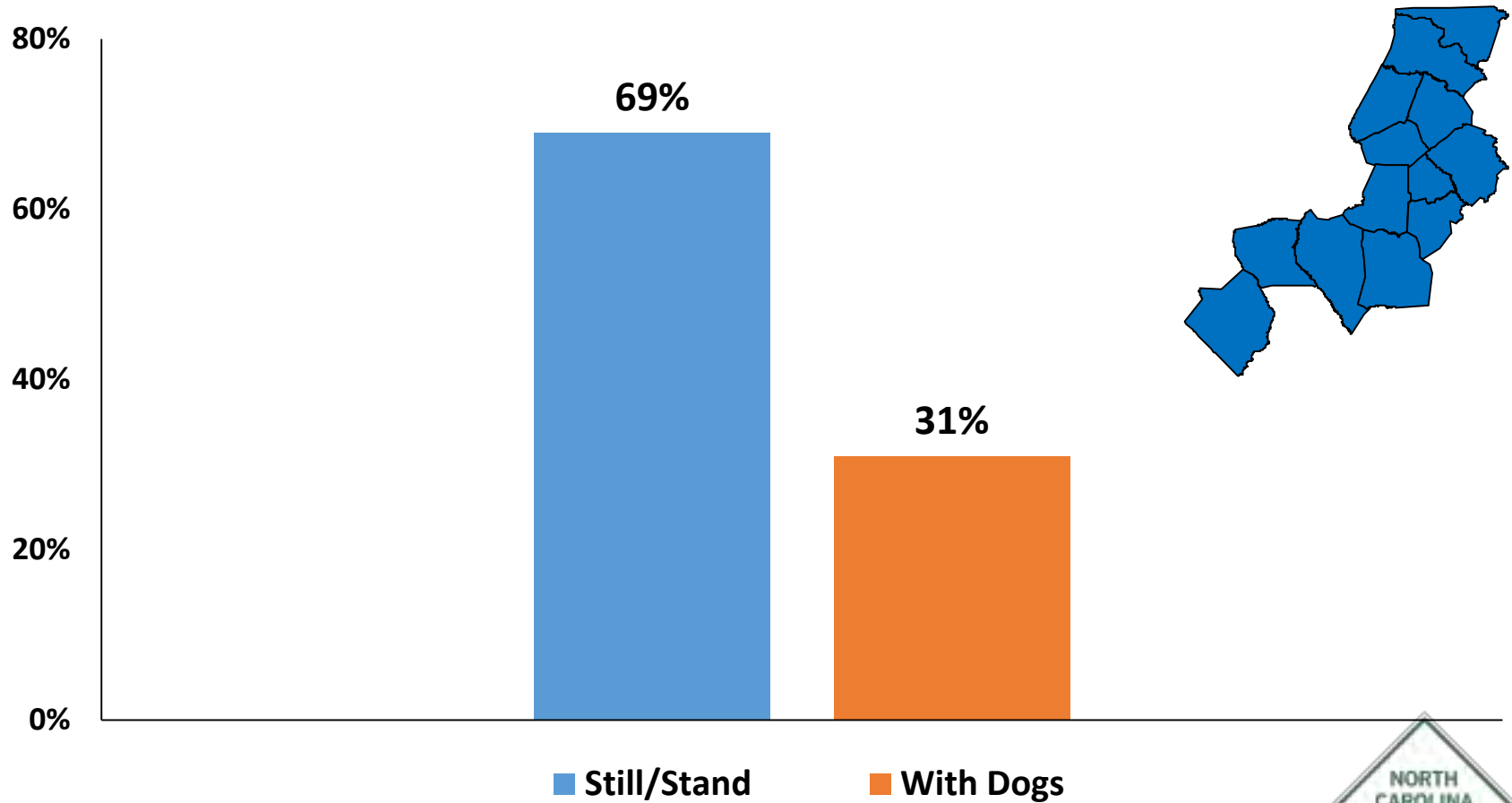
Zone 2 Harvested Bears by Method (2009-2015)



CBMU Zone 3 Harvest Trend

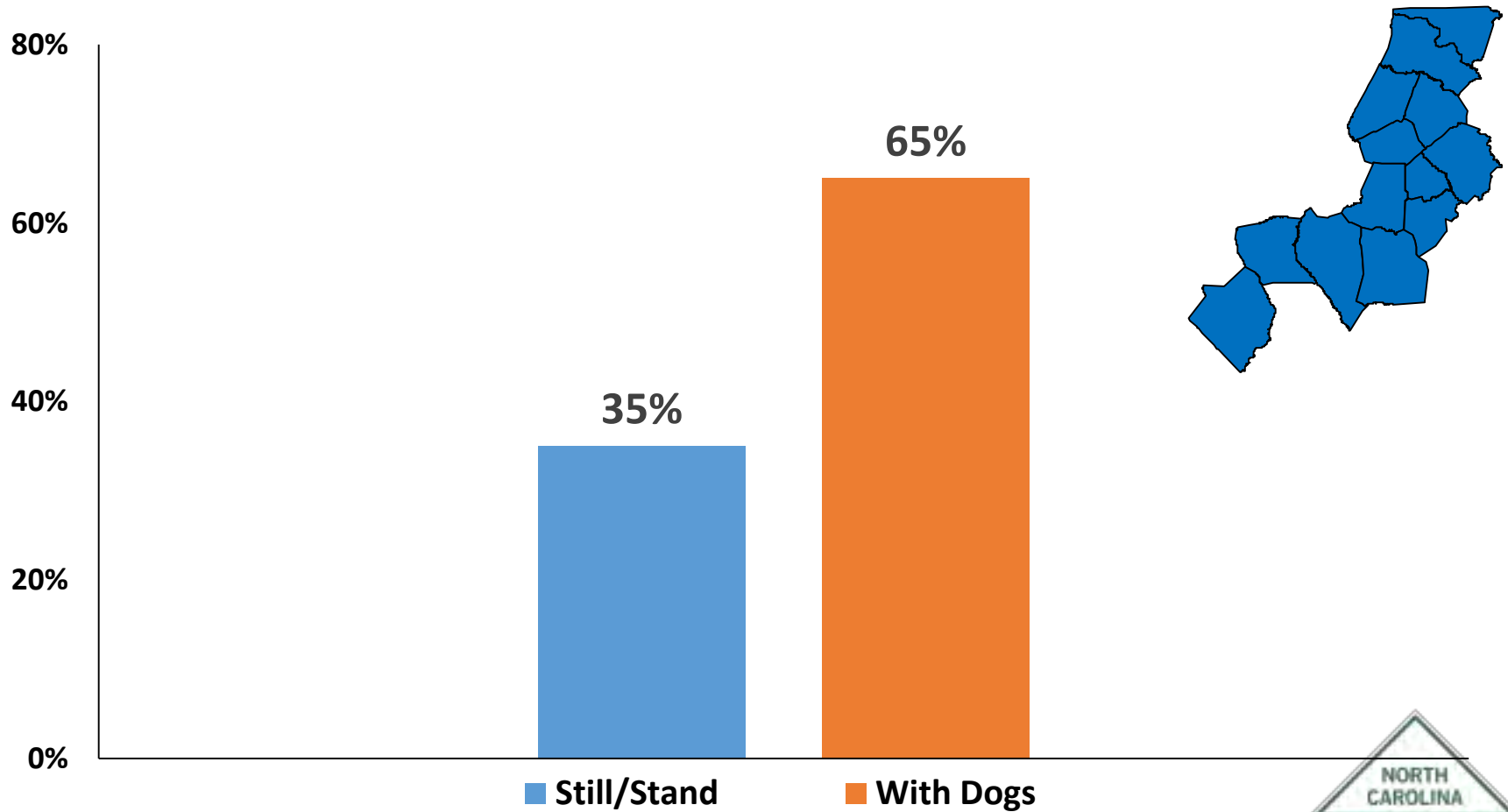


Zone 3 Hunting Methods (2015 e-Stamp Survey)

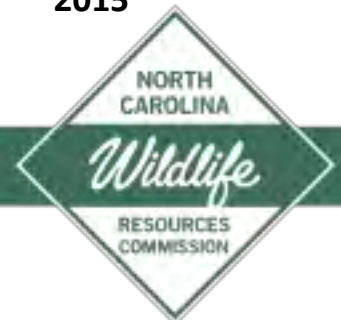
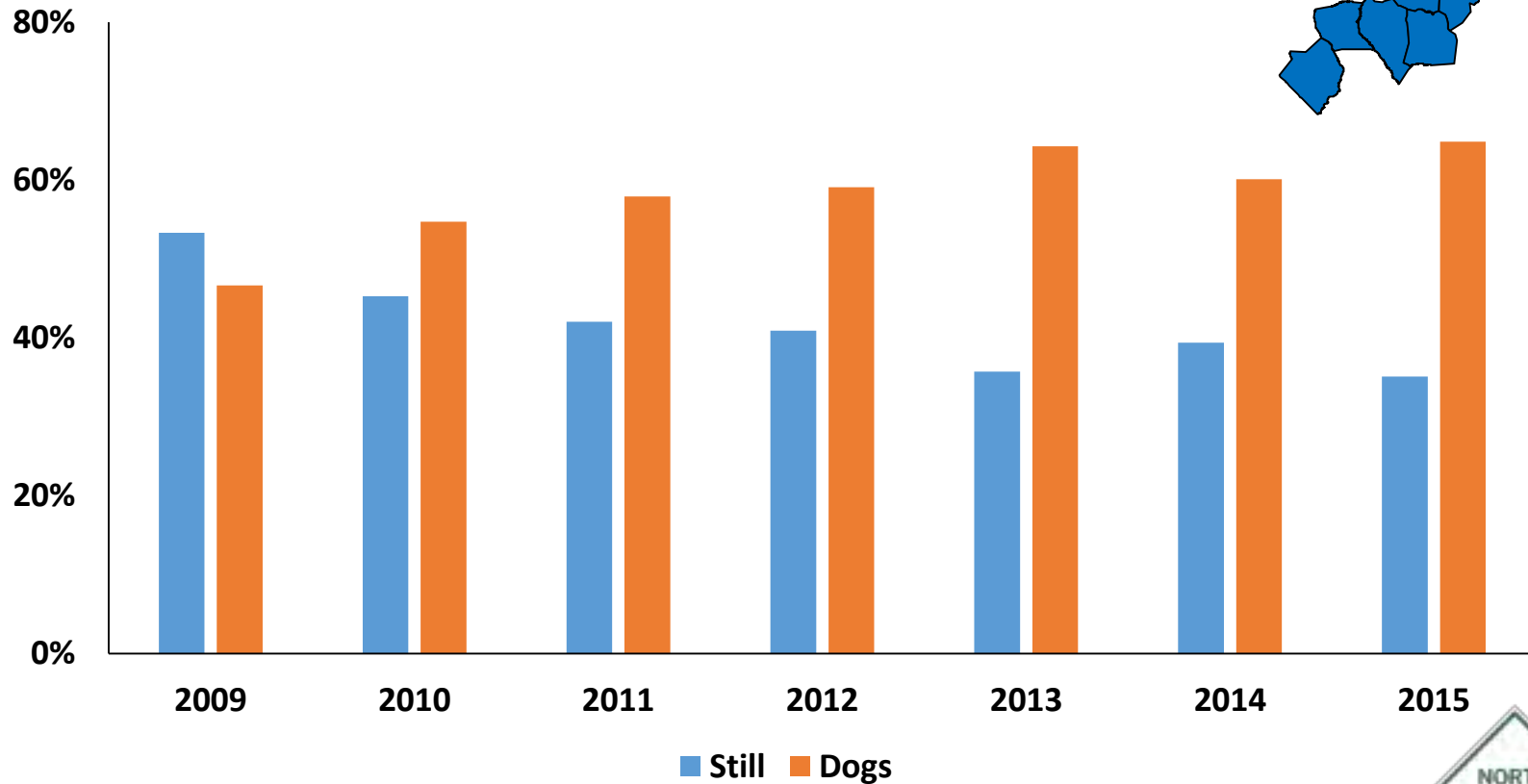
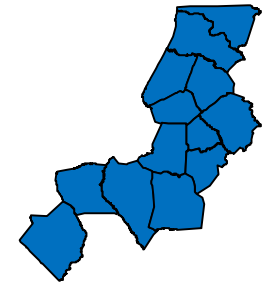


Zone 3 Harvest by Hunting Methods

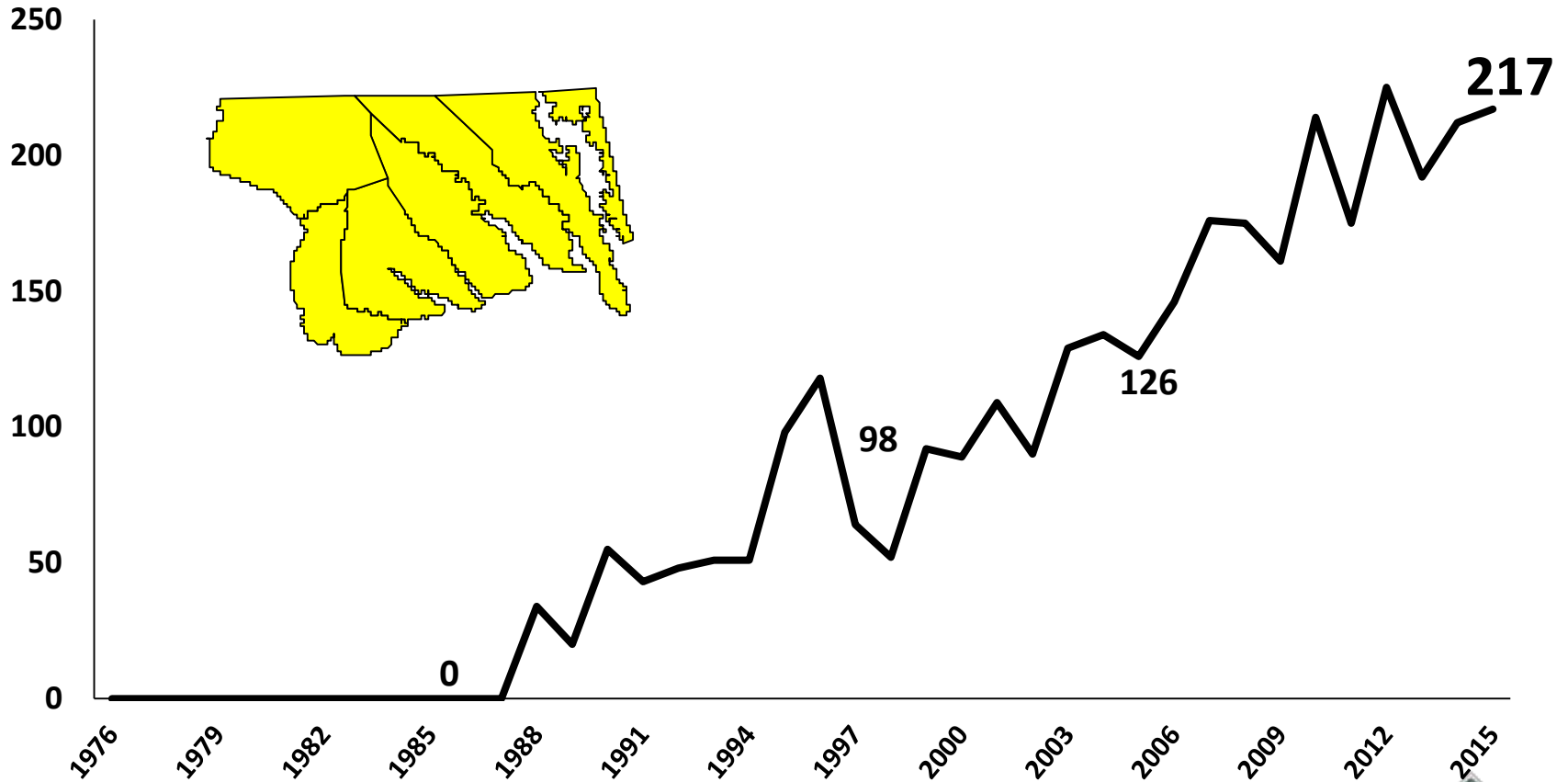
(2015 Reported Harvest)



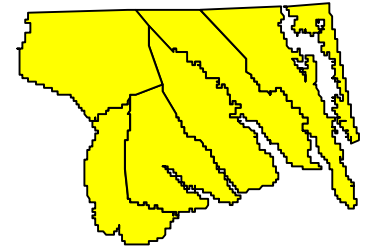
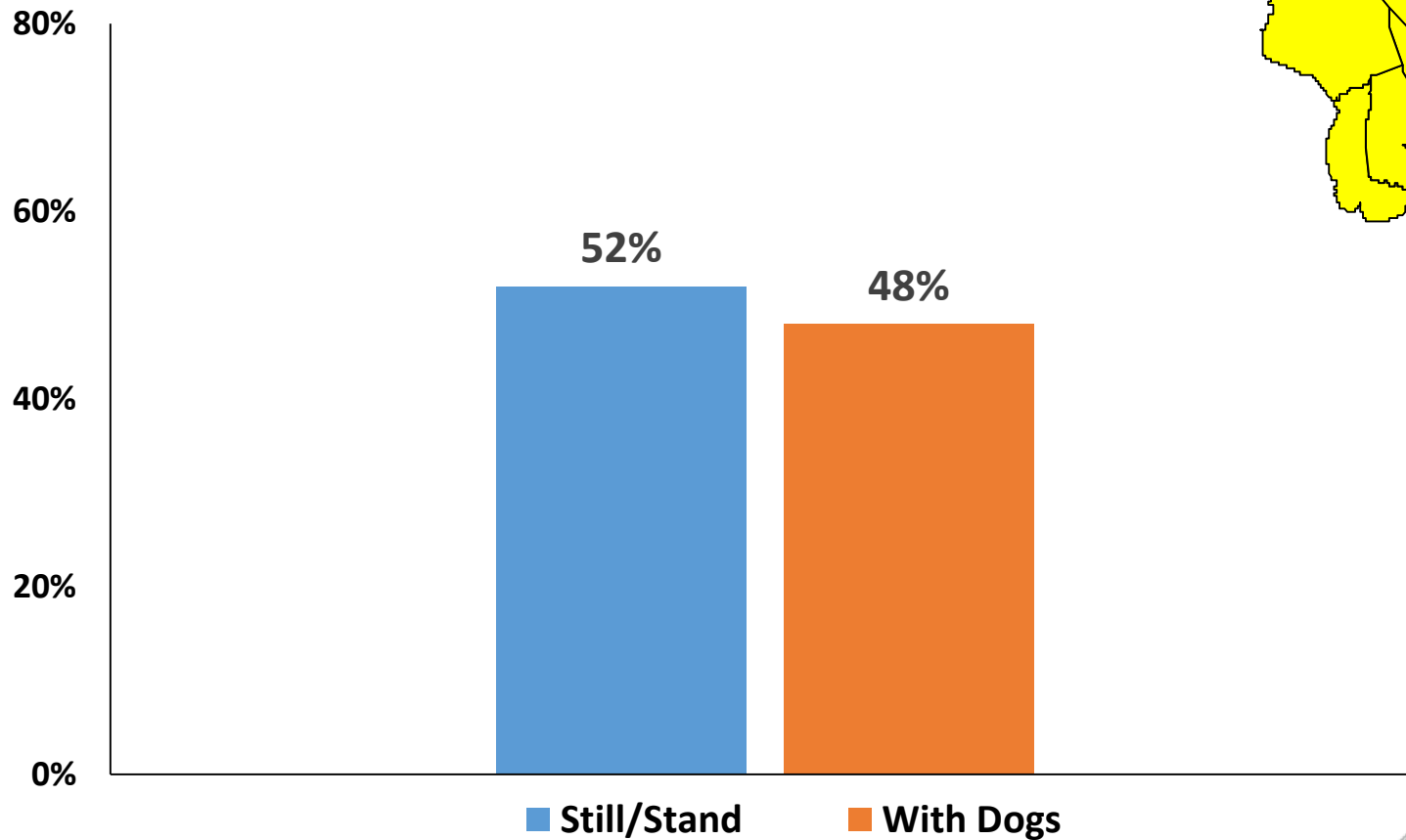
Zone 3 Harvested Bears by Method (2009-2015)



CBMU Zone 4 Harvest Trend

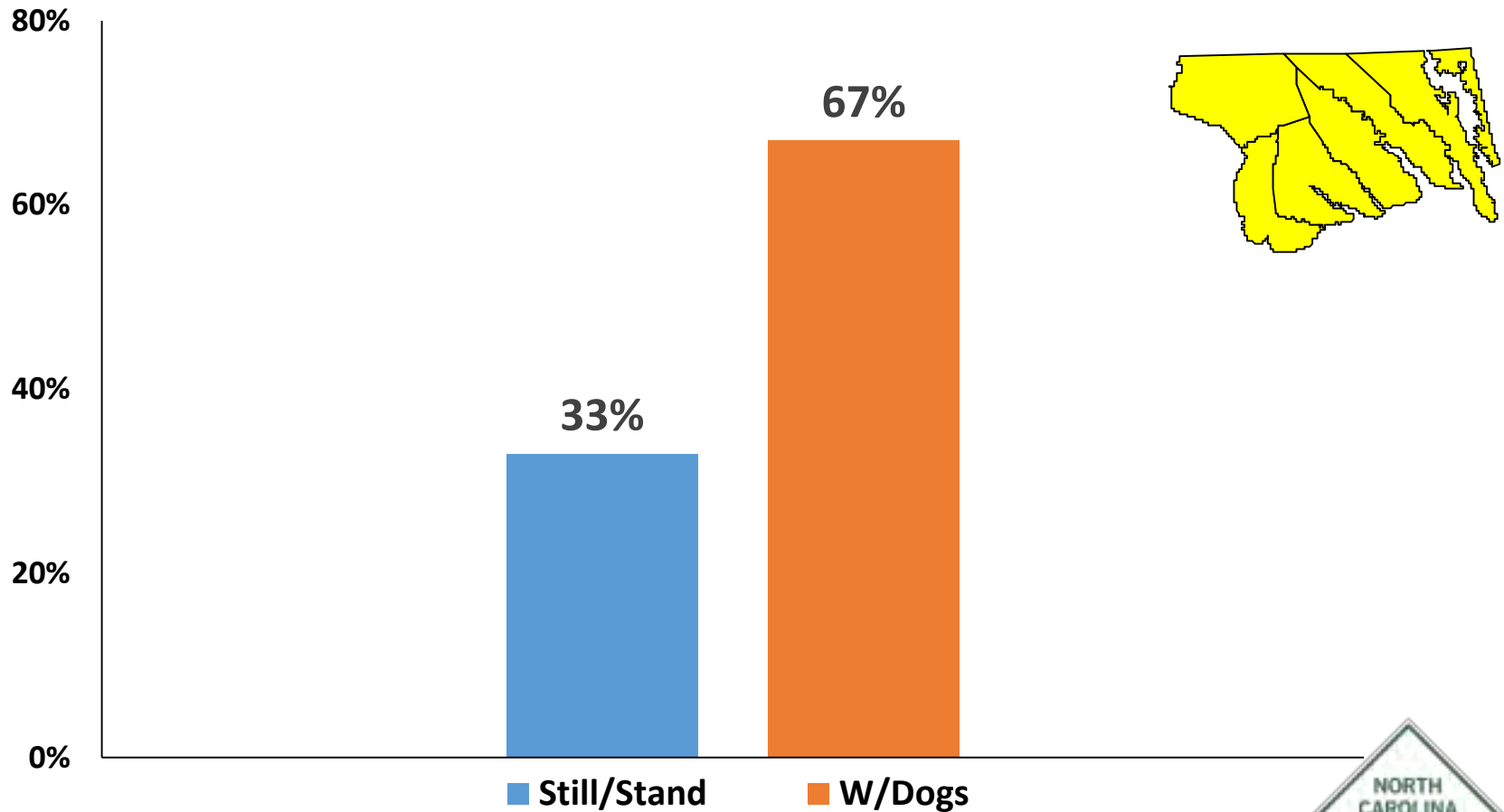


Zone 4 Hunting Methods (2015 e-Stamp Survey)

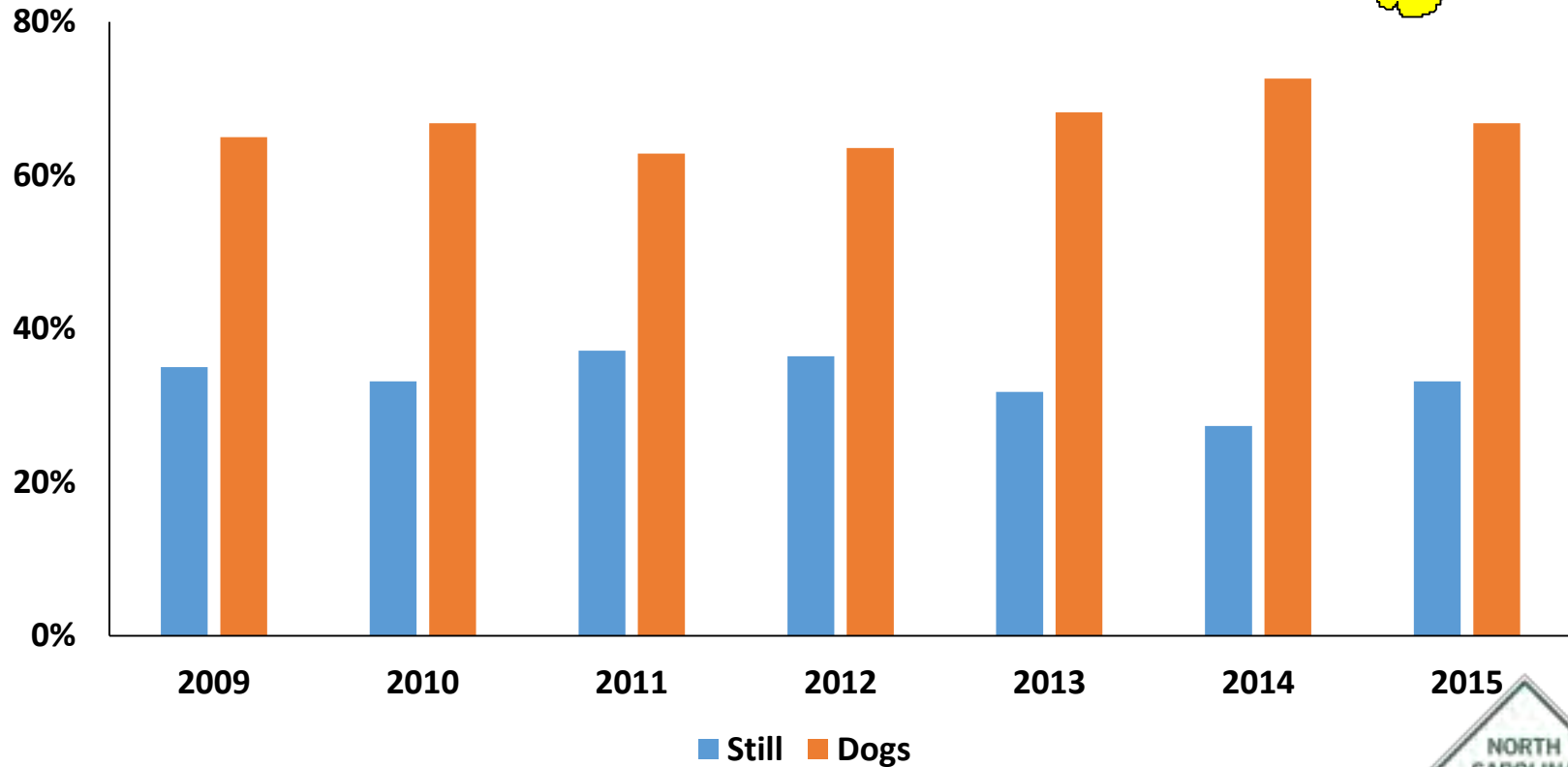
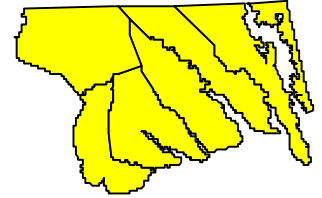


Zone 4 Harvest by Hunting Methods

(2015 Reported Harvest)



Zone 4 Harvested Bears by Method (2009-2015)

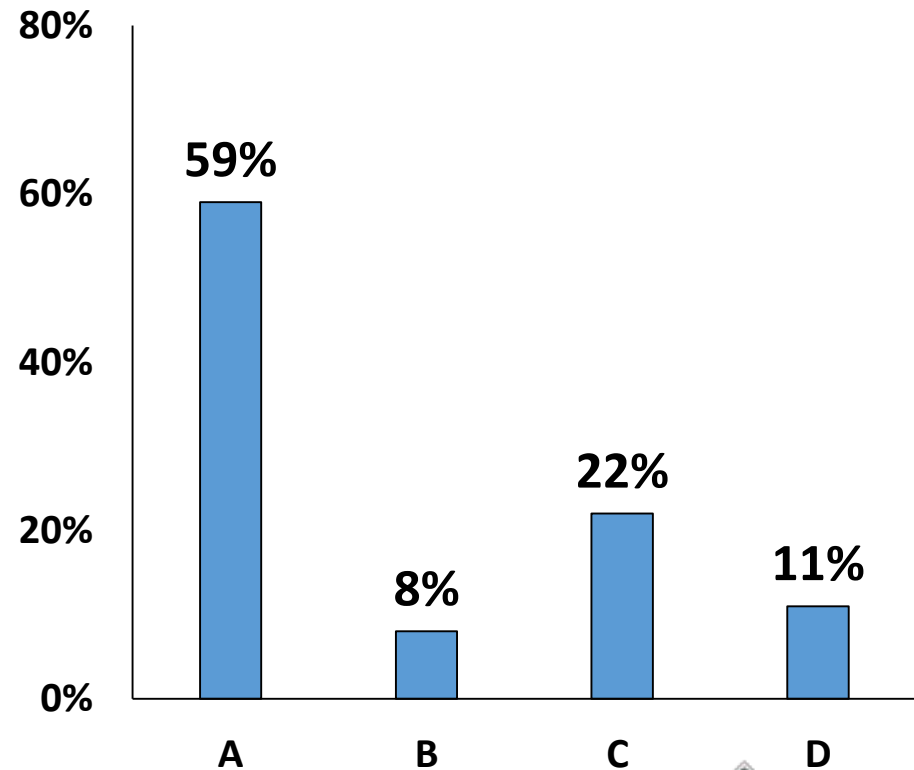


Discussion and Input Time!

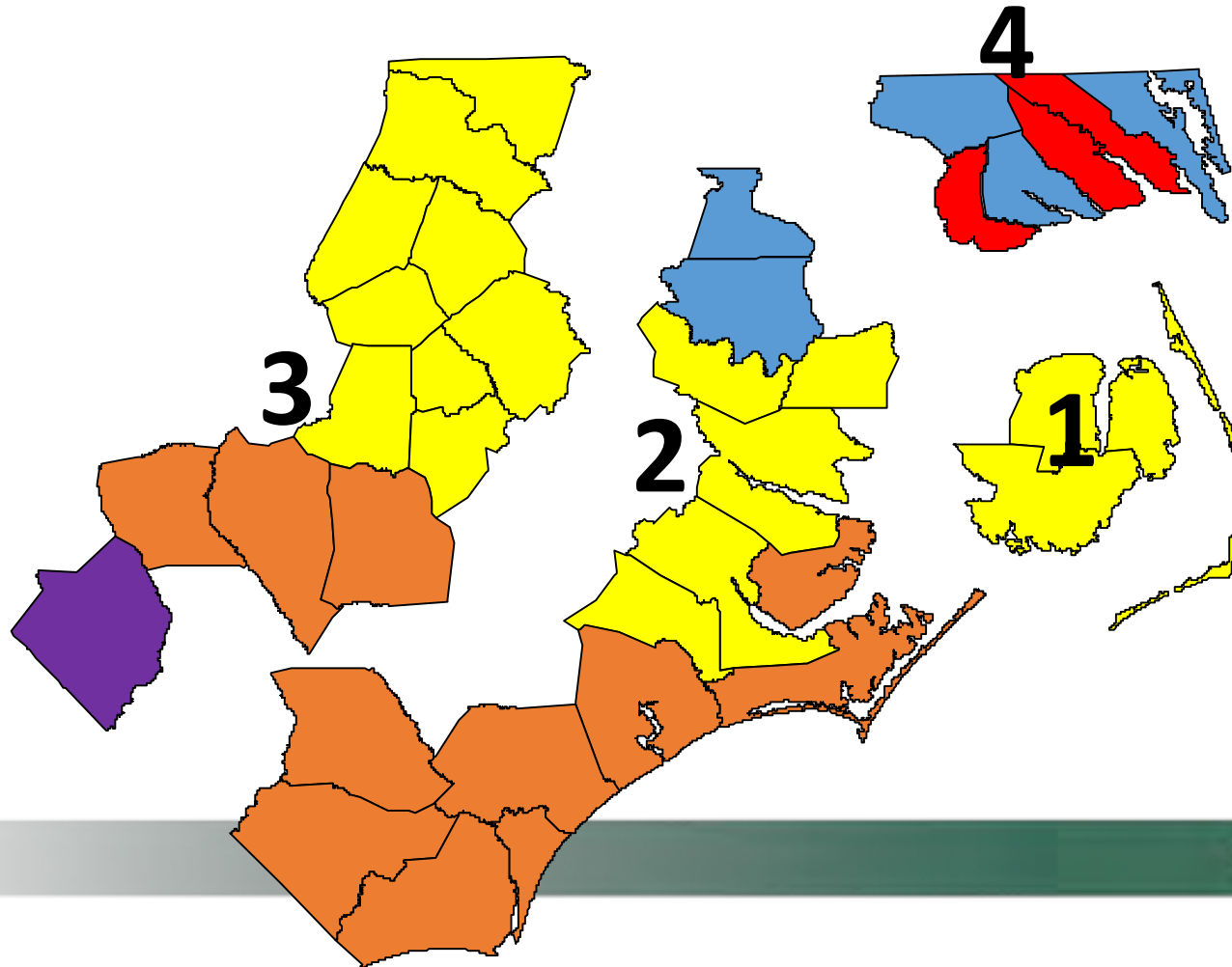


Where you hunt the most.....

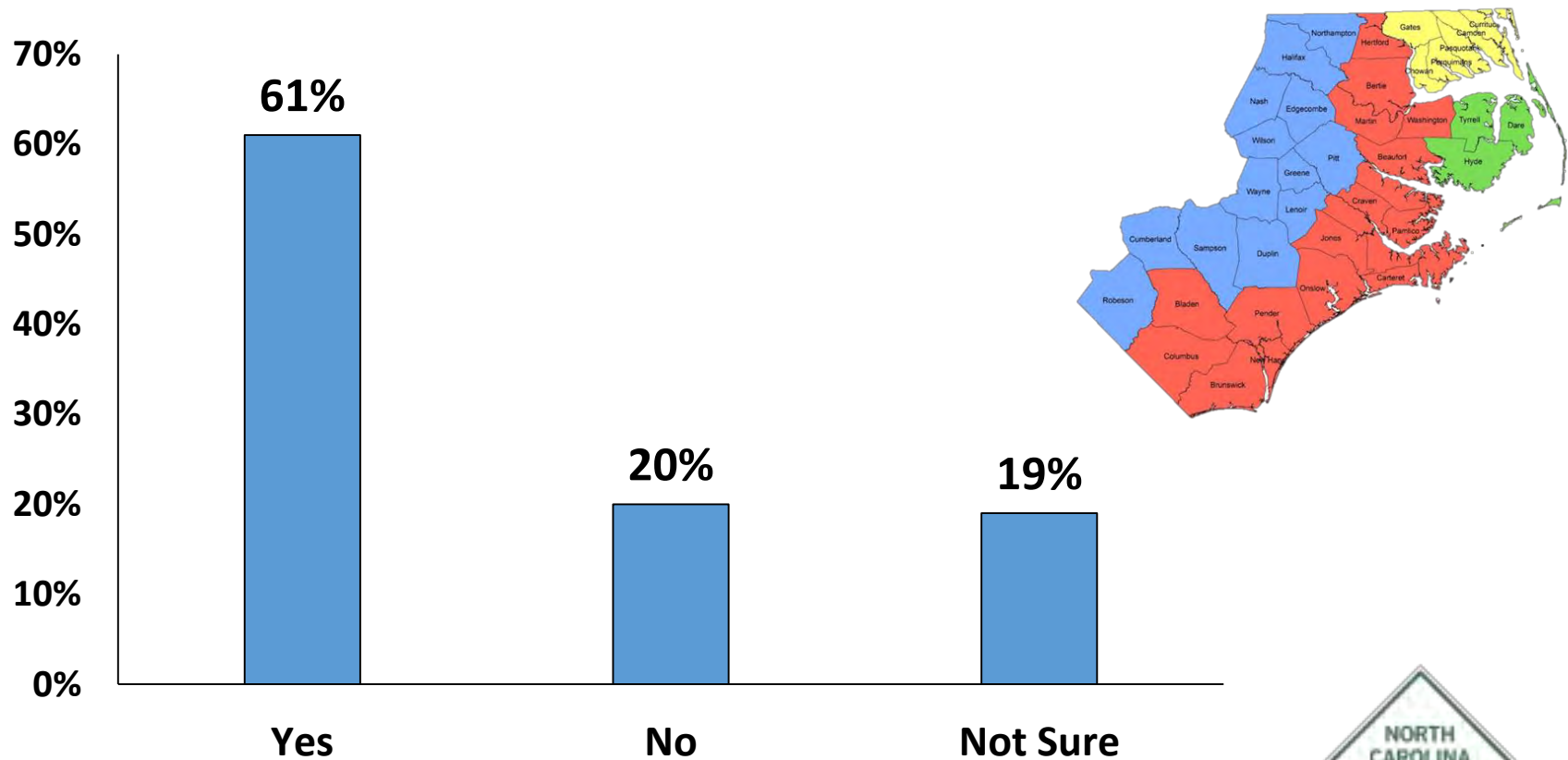
- A. The bear population is INCREASING
- B. The bear population is DECREASING
- C. The bear population is STABLE
- D. I'm NOT SURE



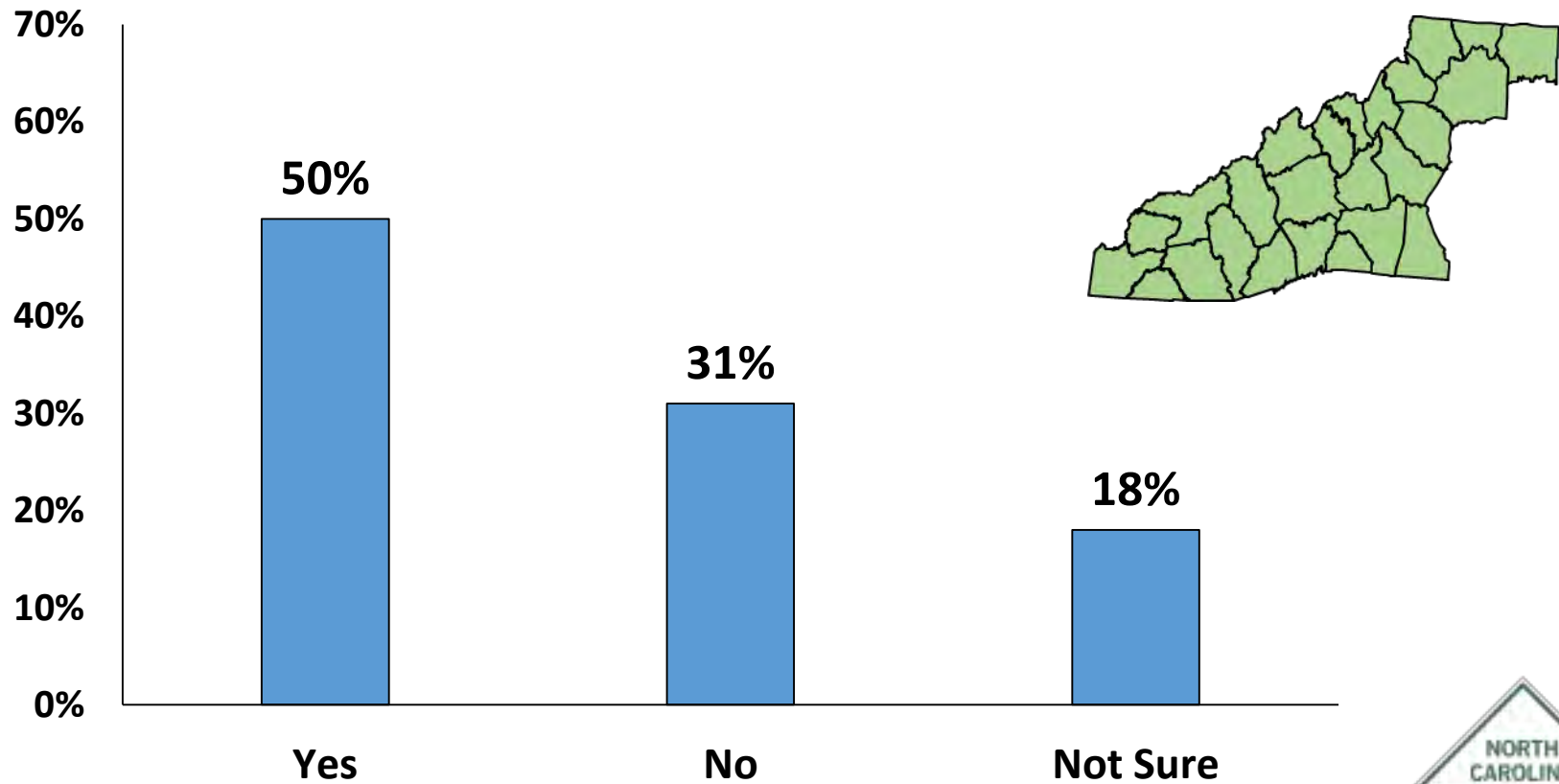
How our current bear seasons overlay on the CBMU Zones!



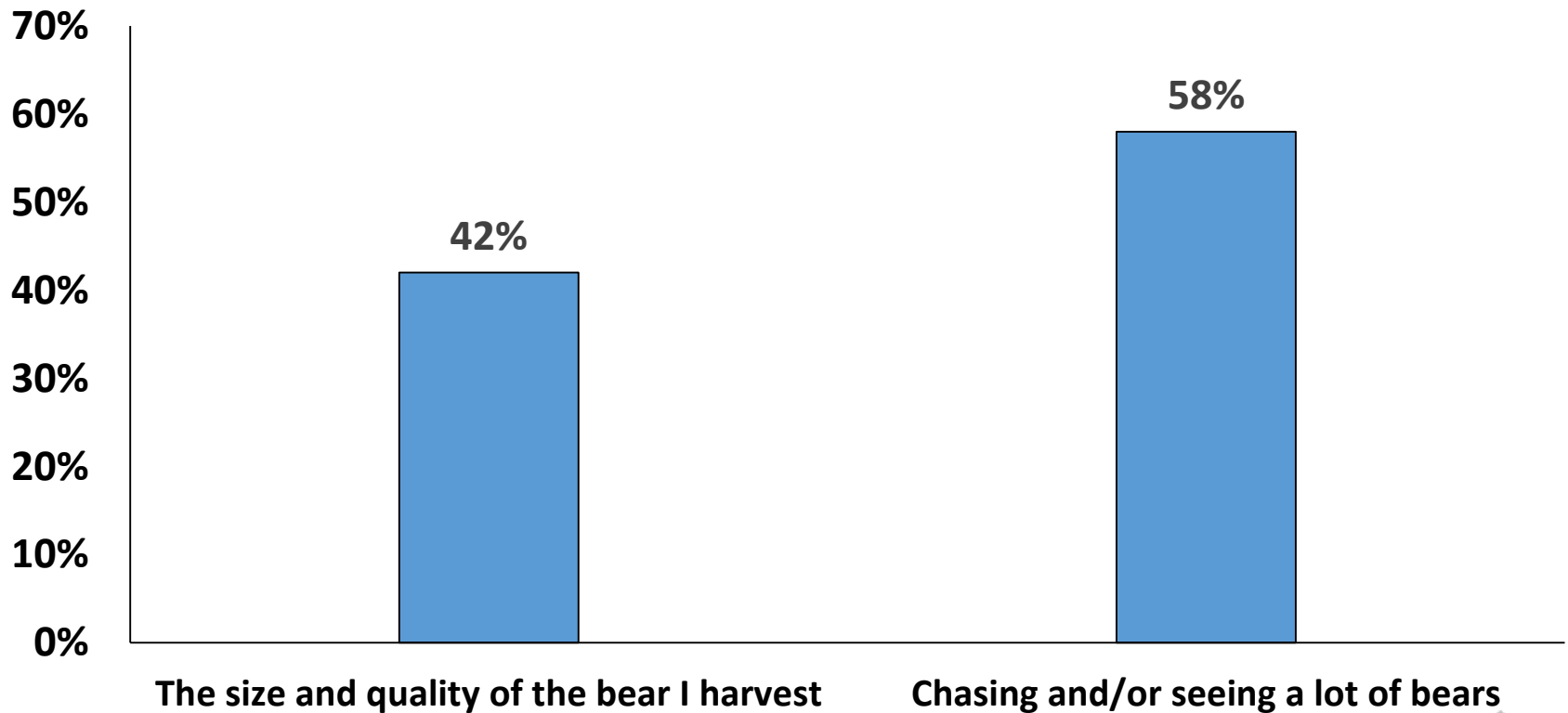
Should Coastal Bear Seasons be aligned with the new Zones?



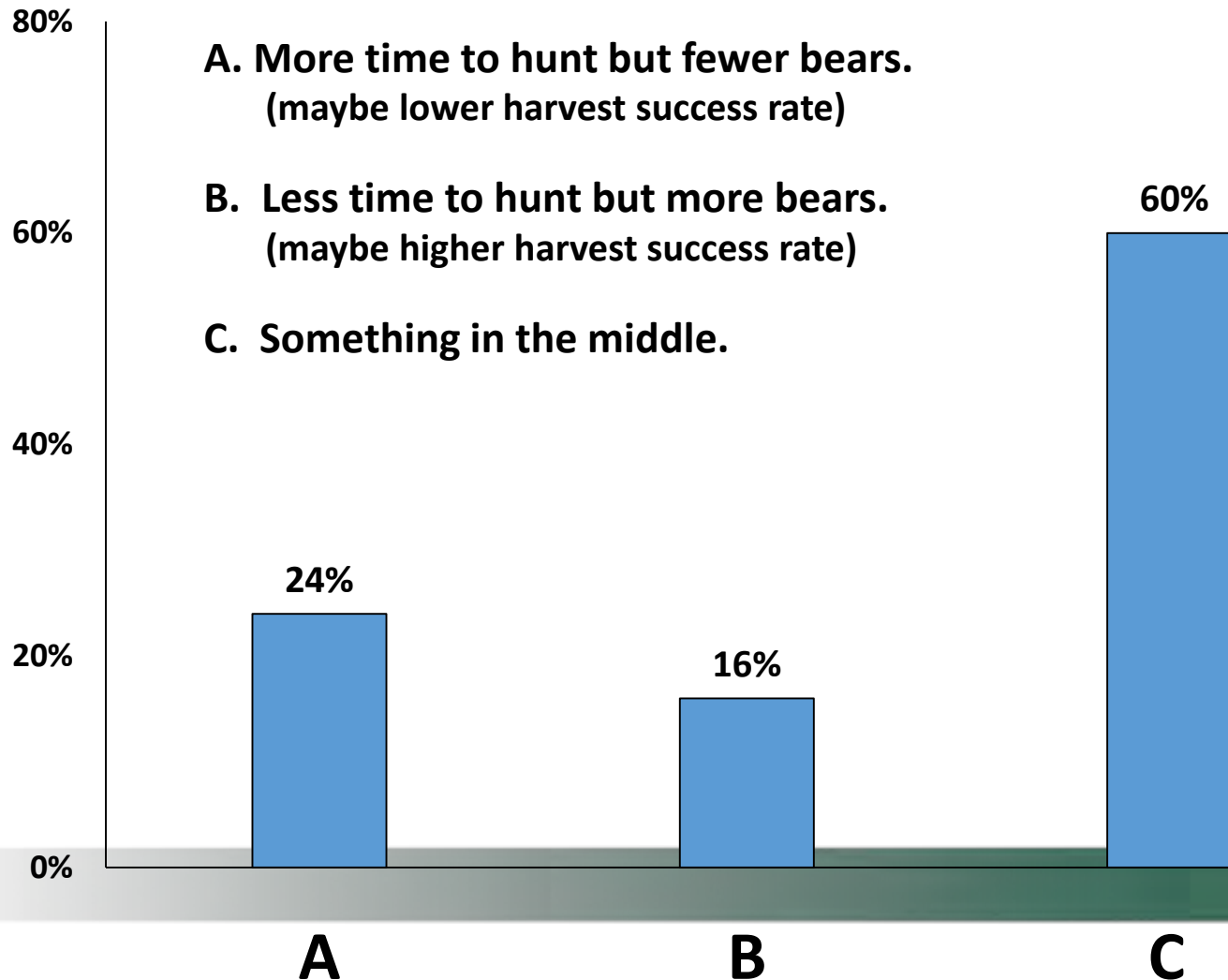
Should we examine the mountain bear unit for biological Zones?



On a given bear hunt, which is more important to you?

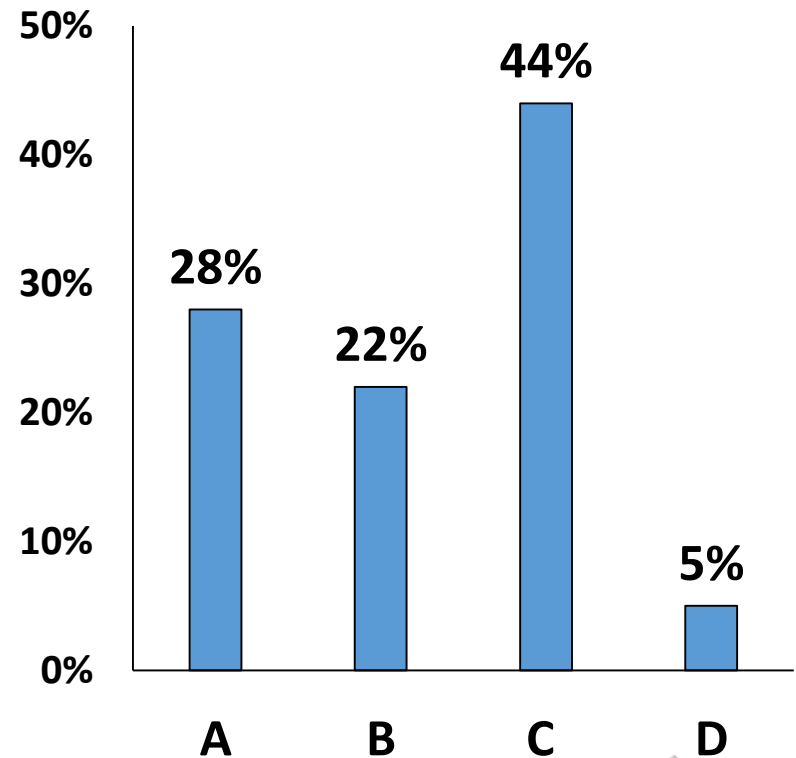


Which is more important to you?

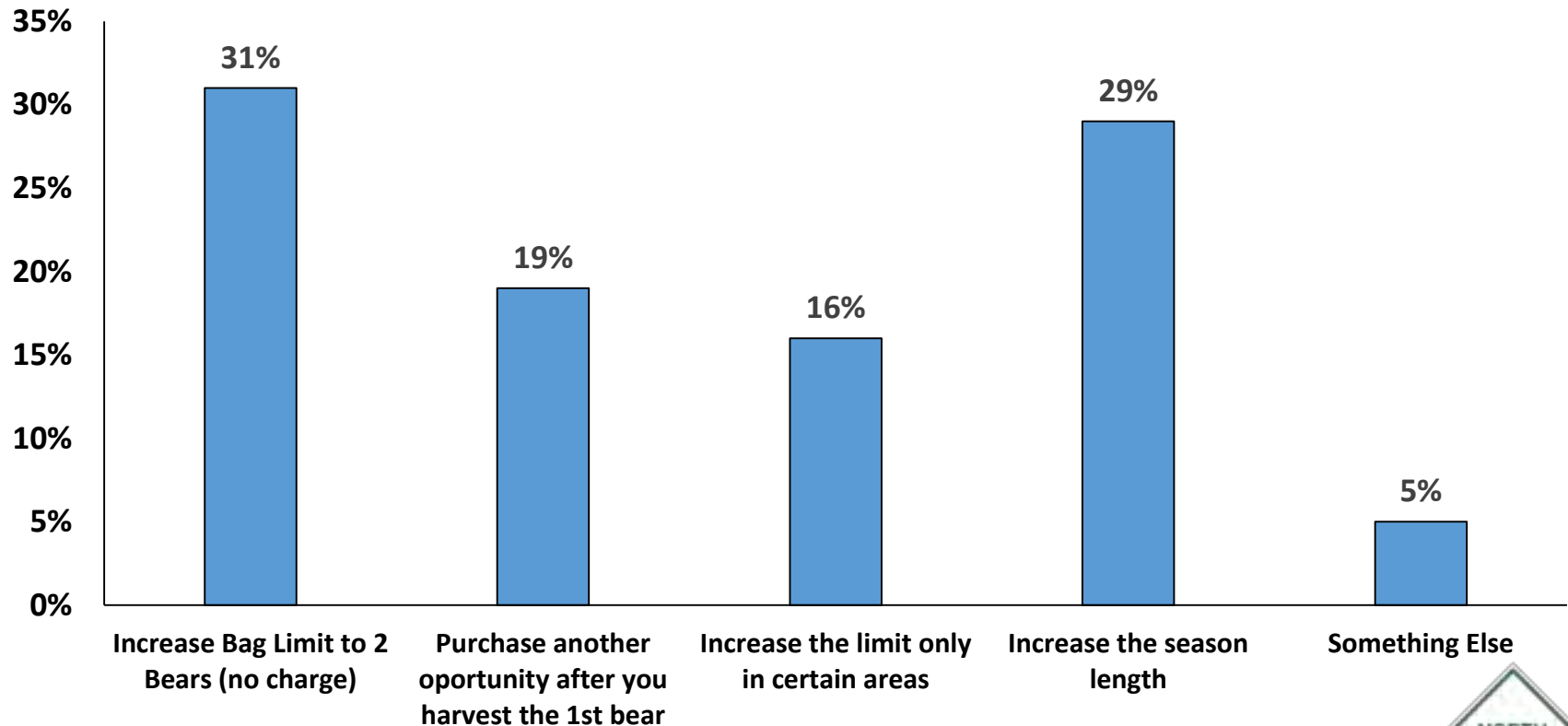


Where you hunt the most.....

- A. The bear population should be INCREASED
- B. The bear population should be DECREASED
- C. The bear population should be LEFT AS IS
- D. I'm NOT SURE

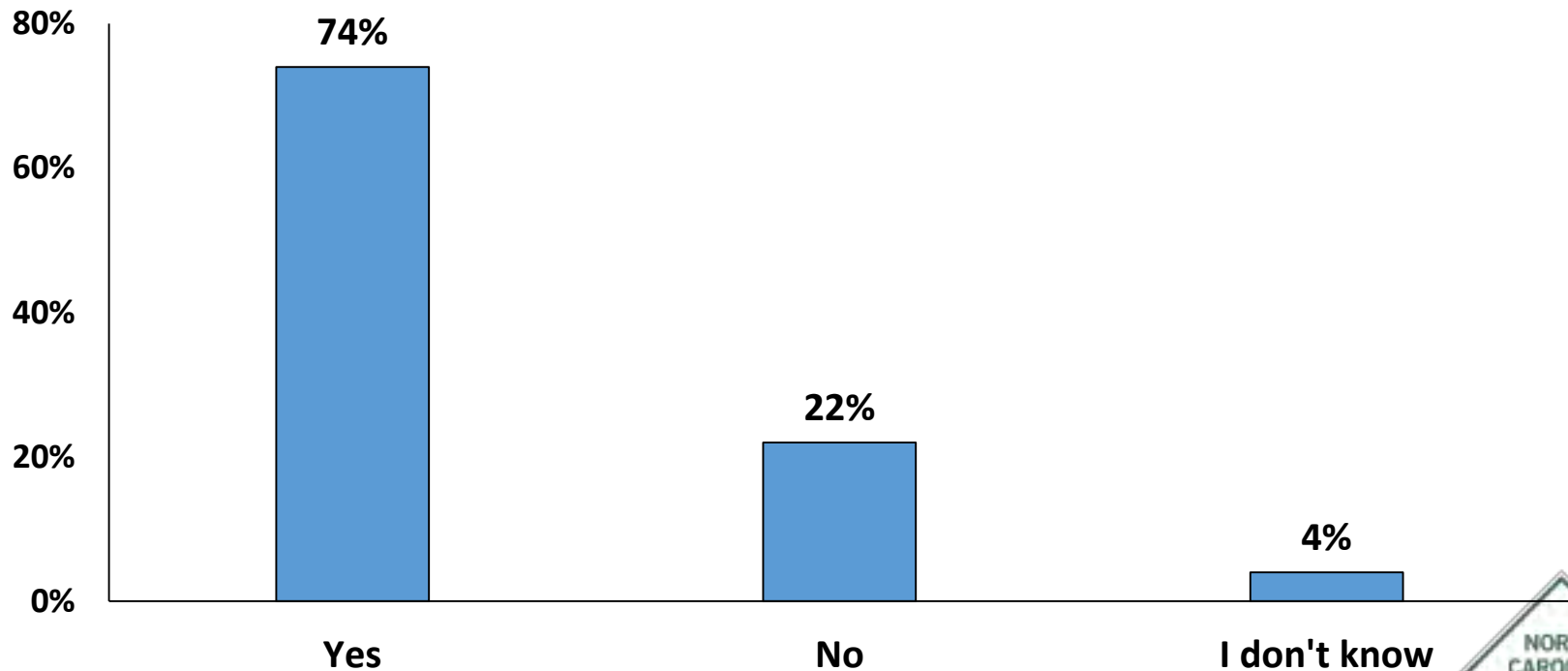


If necessary, what do you think would be the best way to increase the bear harvest?

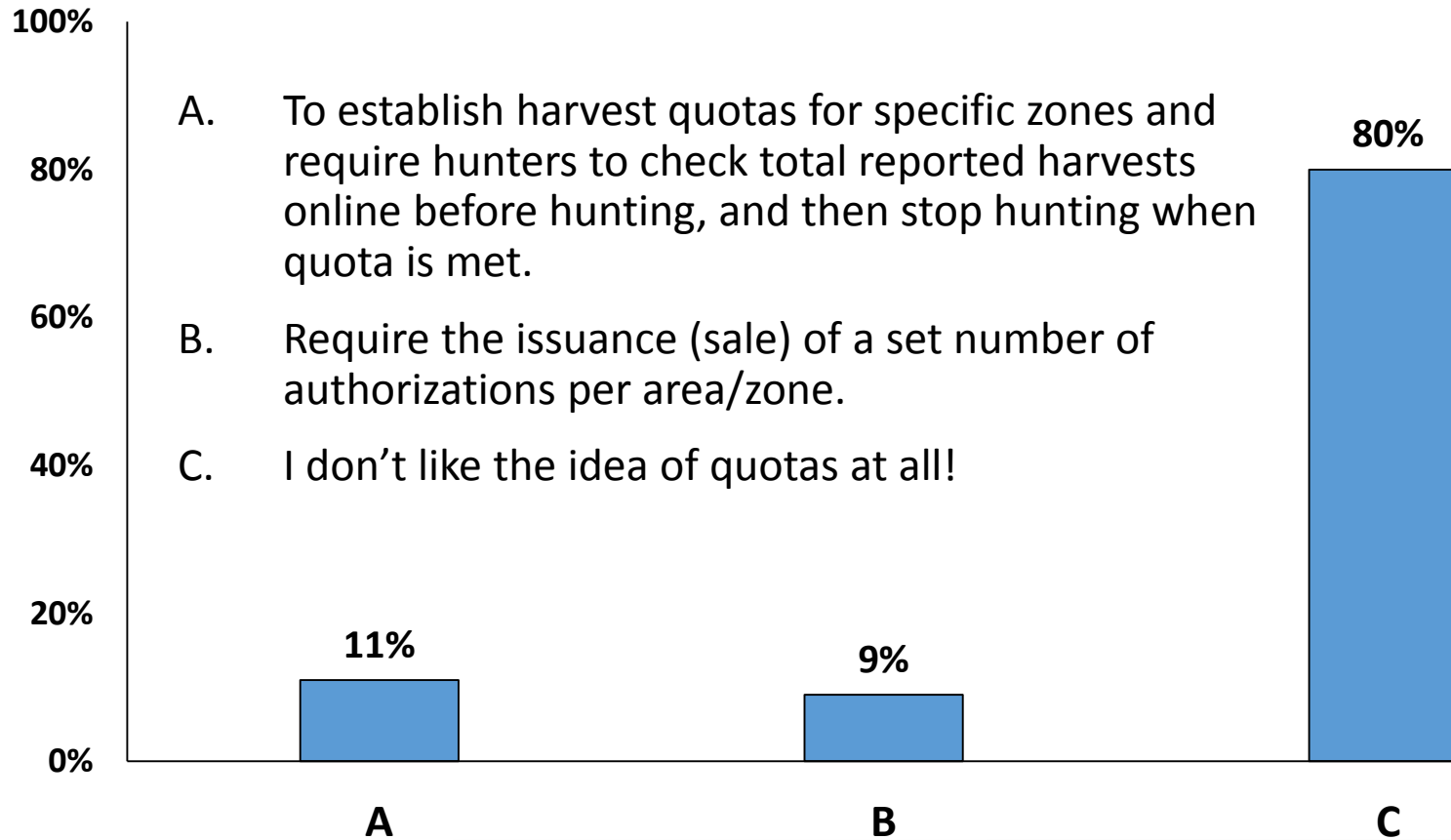


Would you support this idea?

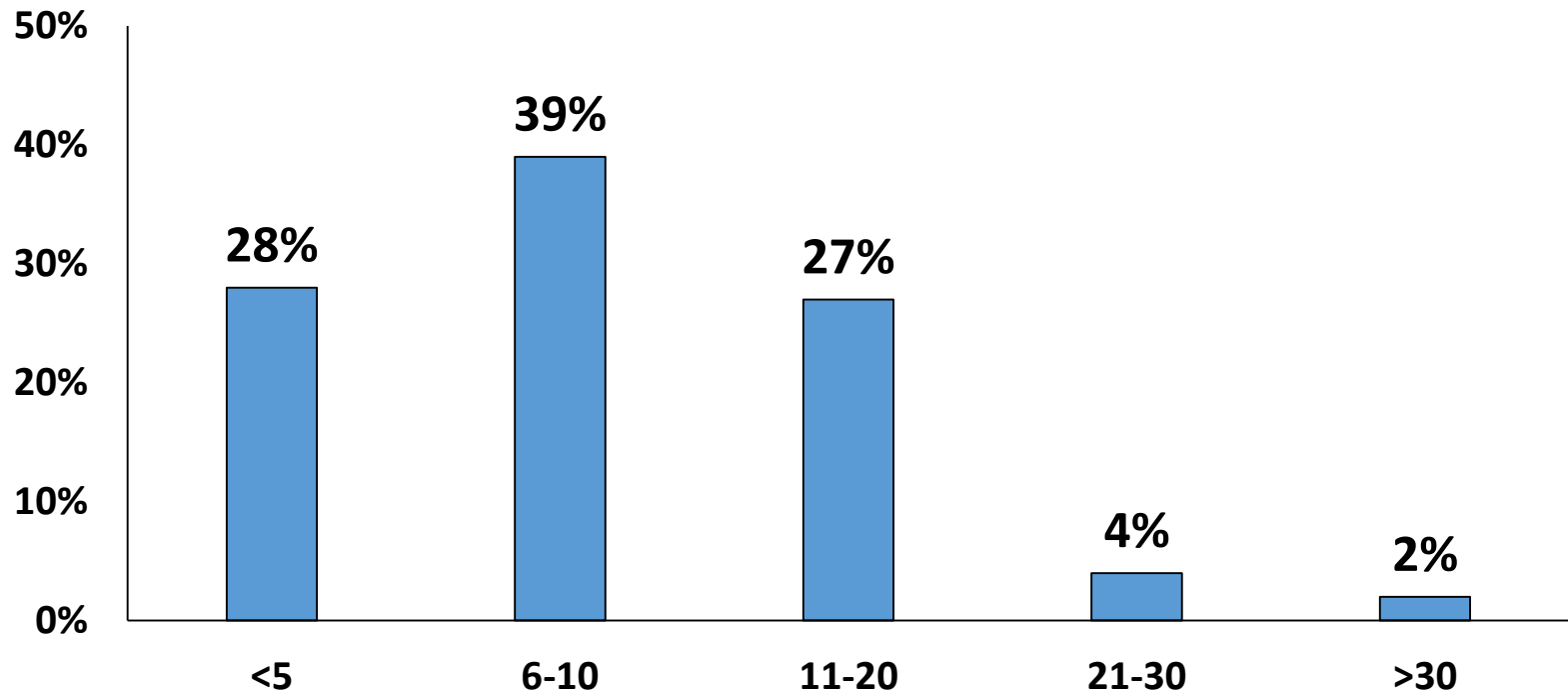
Allow any appropriately licensed hunter that is actively participating in a hunt to validate and reporting the harvest of a bear shot by an other appropriately licensed hunter participating in the same hunt (applies to both dog and still/stand hunts).



If a specific zone was allotted a “quota” of bears, would you prefer:



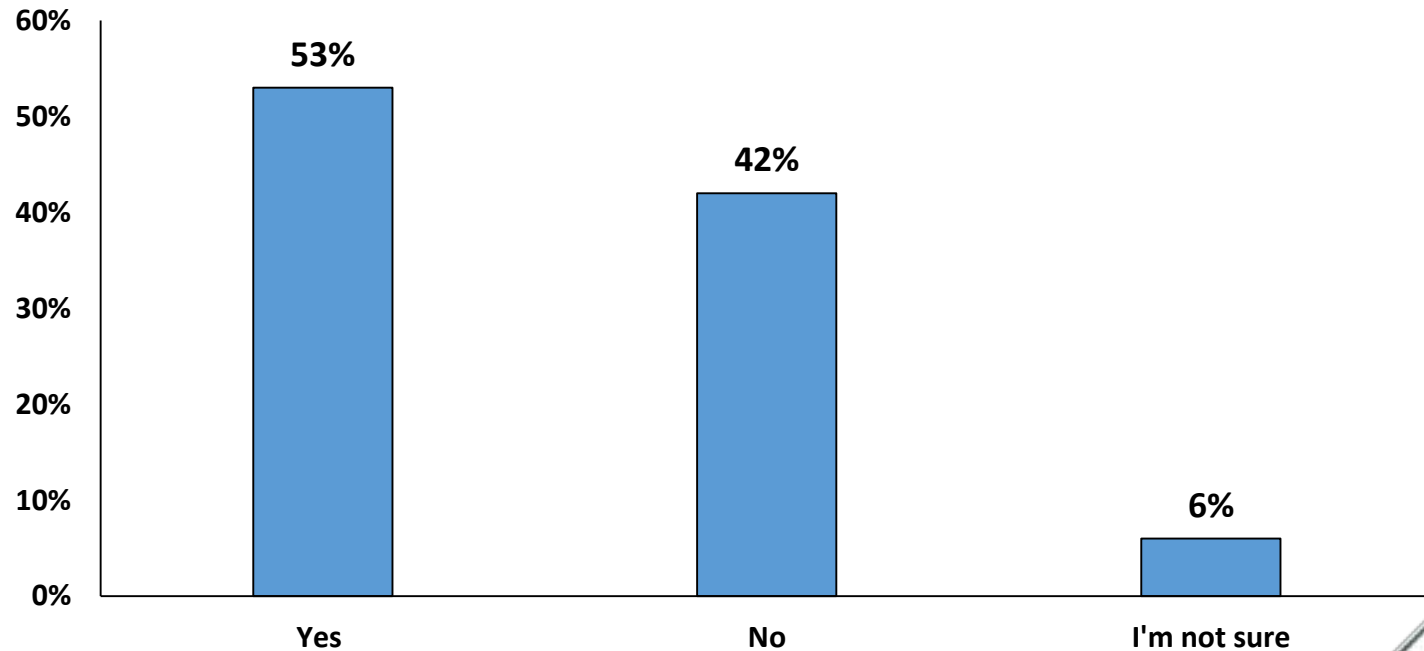
If you hunt with a group, what is the average number of hunters in your group?



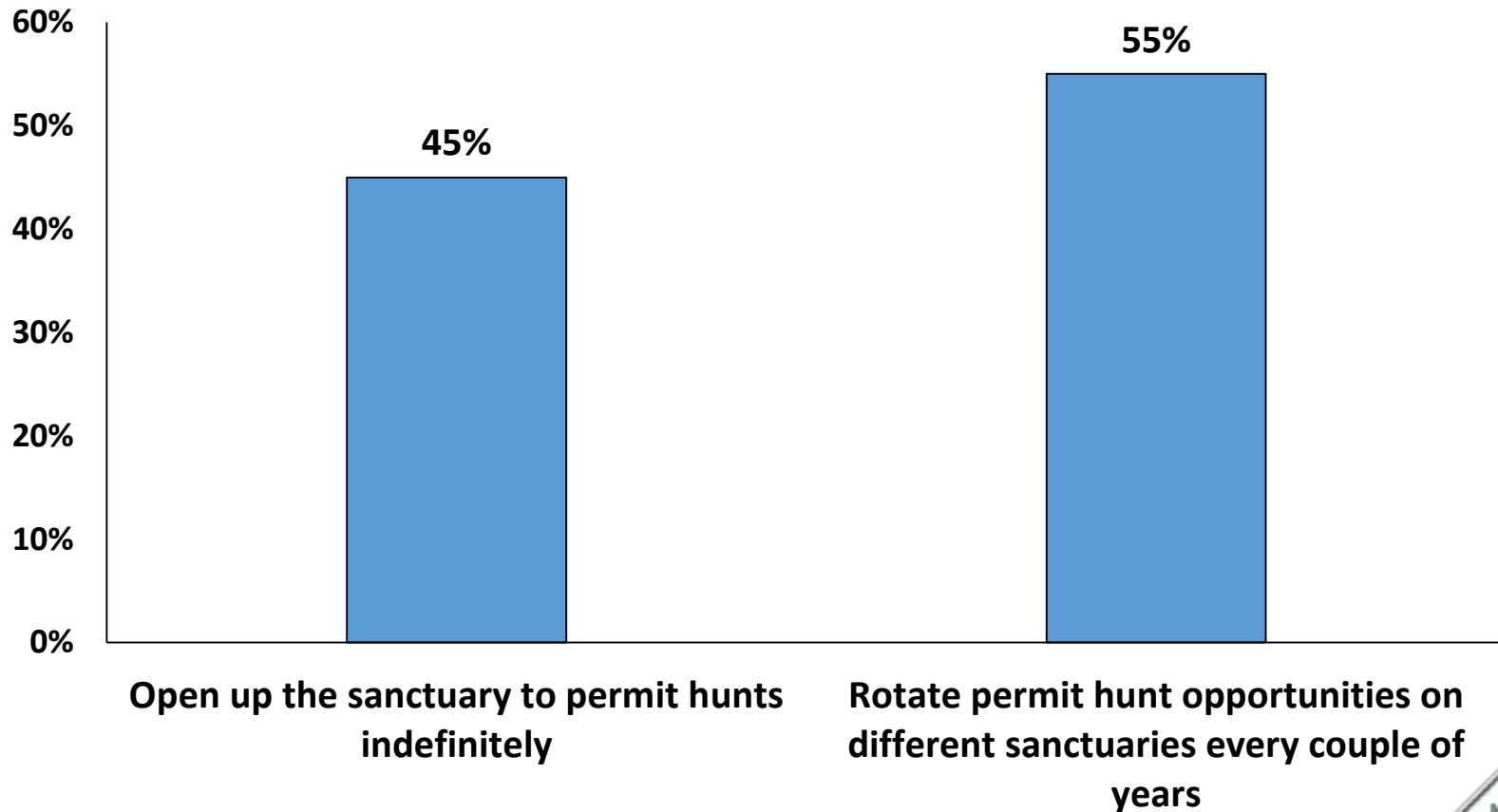
Two Sanctuary Questions

Asked in Sylva, Morganton, Thomasville and Raleigh

1. Do you support the idea of opening bear sanctuaries to hunting?



2. If we opened selected sanctuaries would you prefer:

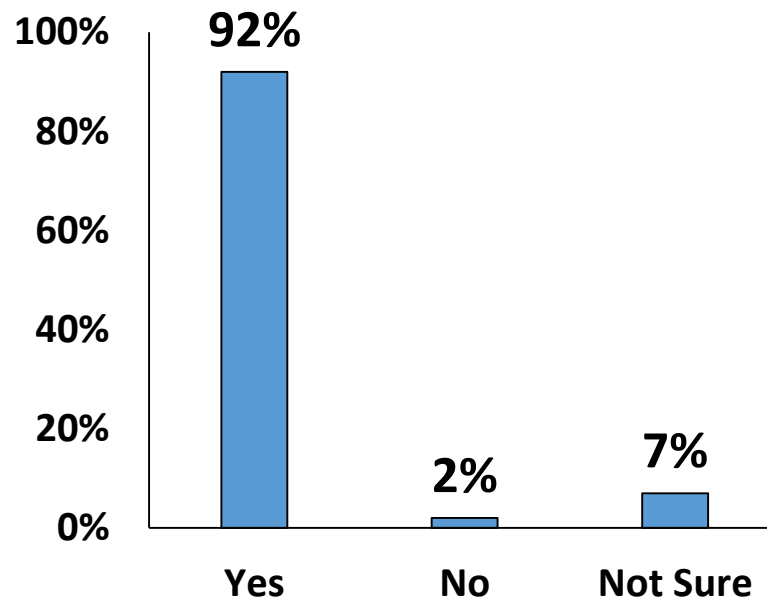


One Last Thing...



Is this type of forum helpful?

- A. Yes
- B. No
- C. Not sure



Would you like to see more forums or something similar?

- A. Yes
- B. No
- C. Not sure

