

# Alligator Hunting Season Report 2024



Submitted by:  
Rebecca Cavalier- Alligator Biologist  
Reviewed by:  
Morgan Hart- Alligator Project Leader

South Carolina Department of Natural Resources  
Wildlife & Freshwater Fisheries Division  
Alligator Project  
PO Box 167  
Columbia, SC 29202  
[www.dnr.sc.gov](http://www.dnr.sc.gov)



# TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	3
<b>HUNTER SELECTION</b> .....	3
<b>Selection Process</b> .....	3
<b>Fees</b> .....	4
Table 1. Fee breakdown for resident and non-resident hunters .....	4
<b>Huntable Lands</b> .....	4
Figure 1. Alligator Management Units .....	5
<b>SEASON RESULTS</b> .....	6
<b>Hunter Information</b> .....	6
Table 2. Hunter participation and harvest success per Hunt Unit .....	6
Figure 2. Total alligators harvested in 2024 per hunt unit and county. ....	7
Figure 3. Total “larger” alligators (10 feet and greater) harvested during the 2024 Public Hunting Season by size class and county. ....	8
<b>Harvested Alligator Information</b> .....	8
Figure 4. Total alligators harvested during the 2024 Public Hunting Season by size class and Hunt Unit.....	9
Figure 5. Comparison of the total alligators harvested in each size class in 2023 and 2024.....	9
<b>DISCUSSION &amp; RECOMMENDATIONS</b> .....	10
Figure 6. Percent success rate for all selected hunters, by year .....	10
Figure 7. Yearly totals of the largest alligators (10-13 ft.) harvested each year since 2008 .....	11
<b>APPENDIX</b> .....	12
Appendix I. Average length of alligators harvested during the 2024 Public Harvest Season by county .....	12
Appendix II. Alligators harvested, by size class, during all years of the Public Alligator Hunting Season.....	13
Appendix III. Total alligators taken during all years of the Public & WMA Hunting Season, by Hunt Unit .....	14

## INTRODUCTION

The successful return of the American alligator (*Alligator mississippiensis*), since its near demise and subsequent listing as “endangered” by the Endangered Species Act in the 1960s, has prompted most Southeastern states to implement hunting seasons to allow the public use of this unique natural resource. The hunts are also seen as an attempt to maintain the number of nuisance alligator complaints at a manageable level. The alligator is currently listed as “threatened,” not because of population numbers, which are stable, but because of its “similarity of appearance” to other rare and protected crocodilians worldwide. It is estimated that a minimum of 100,000 alligators occur in the state of South Carolina.

The 2024 Public Alligator Hunting Season marked the sixteenth general alligator hunting season after a closure of nearly 40 years. However, alligators have been legally hunted in South Carolina since 1995 under the Private Lands Alligator Harvest Program. The Private Lands Program was established as a means for large landowners having significant amounts of alligator habitat to manage their alligator numbers on a sustained-yield basis and included quotas for specific size-class alligators. The public hunt is open to all applicants, including nonresidents, and is conducted on public and private lands (not enrolled in the Private Lands Program) from the Midlands to the coast.

Because alligators can grow to considerable size, alligator hunters can have others assist them with the taking of an alligator during the season. Everyone who participates must have a South Carolina hunting license or be under the age of 16. To participate in the public alligator season, one must apply online, be selected, then pay a fee for a permit and harvest tag. By law, all fees collected for the alligator hunting program are used to support administration of the alligator program in South Carolina, and for research, monitoring, and management of this important and unique natural resource.

## HUNTER SELECTION

### **Selection Process**

The public alligator hunt is a limited, lottery-style hunt in which participants are selected in a randomized computer drawing. All potential hunters are required to apply online through the Go Outdoors South Carolina app or website (<https://gooutdoorssouthcarolina.com/>). A person must be 16 years of age or older to apply for any alligator lottery hunt. There is no age requirement to assist a permitted alligator hunter, although other fees may apply.

Alligator harvest tags and permits are issued specifically to the selected hunter and are non-transferable. In 2024, 1,200 permits (300 per hunt unit) were offered. The harvest tag is a numbered, permanently locking nylon tag that must be attached to the alligator’s tail immediately after harvest. The permit and tag allow a hunter to take one alligator greater than 4 feet in total length from either public or private waters in their selected hunt unit.

The lottery selection process began on June 1<sup>st</sup> and ended on July 15<sup>th</sup>. A total of 11,900 hunters applied for the alligator hunt, 1,913 of which chose the non-draw option to be excluded from the lottery and gain an additional preference point. The remaining 9,987 applicants entered in the lottery selection were from 47 states (including SC), along with two from Washington D.C. and one from Canada. 88% of the applicants were in-state residents. Similar to past years, North Carolina and Georgia had the second and third highest application rates at 4.2% and 1.1%, respectively. No other state's applicants made up more than 1% of the total.

No hunters with fewer than three preference points were selected for the Public Alligator Hunting season. The majority had three (25.7%) or four (69.8%) preference points. The remaining selected hunters had five to eight preference points. Applicants lose any accumulated preference points once selected for a permit, whether the permit is purchased or not.

A total of 997 of the 1,200 hunters selected in the 2024 season completed the application process and were issued a harvest tag and permit. The tag purchase rate (83.1%) was lower than last year's rate of 86.3%. This purchase rate remains at or above the predicted fulfillment rate of 75-80% relative to the targeted tag distribution. Currently, the targeted allotment is 1,000 tags, a number which is subject to change in future years based on harvest and/or alligator survey data.

The 2024 season began at noon on September 14<sup>th</sup> and ended at noon on October 12<sup>th</sup>.

### Fees

All applicants are required to pay a \$10 non-refundable *application fee*. Those selected must also pay a \$100 *permit fee* to receive a permit and tag.

Legislation passed in 2010 requires that all nonresident alligator hunters and nonresident assistants 16 years and older pay a *nonresident alligator hunting fee* of \$200. This fee is **in addition** to any application, licensing, and permit fees normally required to hunt alligators (Table 1). Nonresident assistants under 16 do not pay any fees. Other states have similar additional nonresident fees or prohibit nonresident participation altogether.

Table 1. Fee breakdown for resident and non-resident hunters.

Fee	Resident	Non-resident
Application (non-refundable)	\$10	\$10
Permit/tag	\$100	\$100
Hunting fee	\$0	\$200
Hunting license	\$12	\$40 (3-day)

### Huntable Lands

The four alligator hunt units (Figure 1) remain unchanged. Except for a small portion of Berkeley County located within Lake Marion, county lines bound all hunt units. Hunters could select the option to be considered for any or all units for the computer drawing, but if successful are only selected to hunt in one unit.

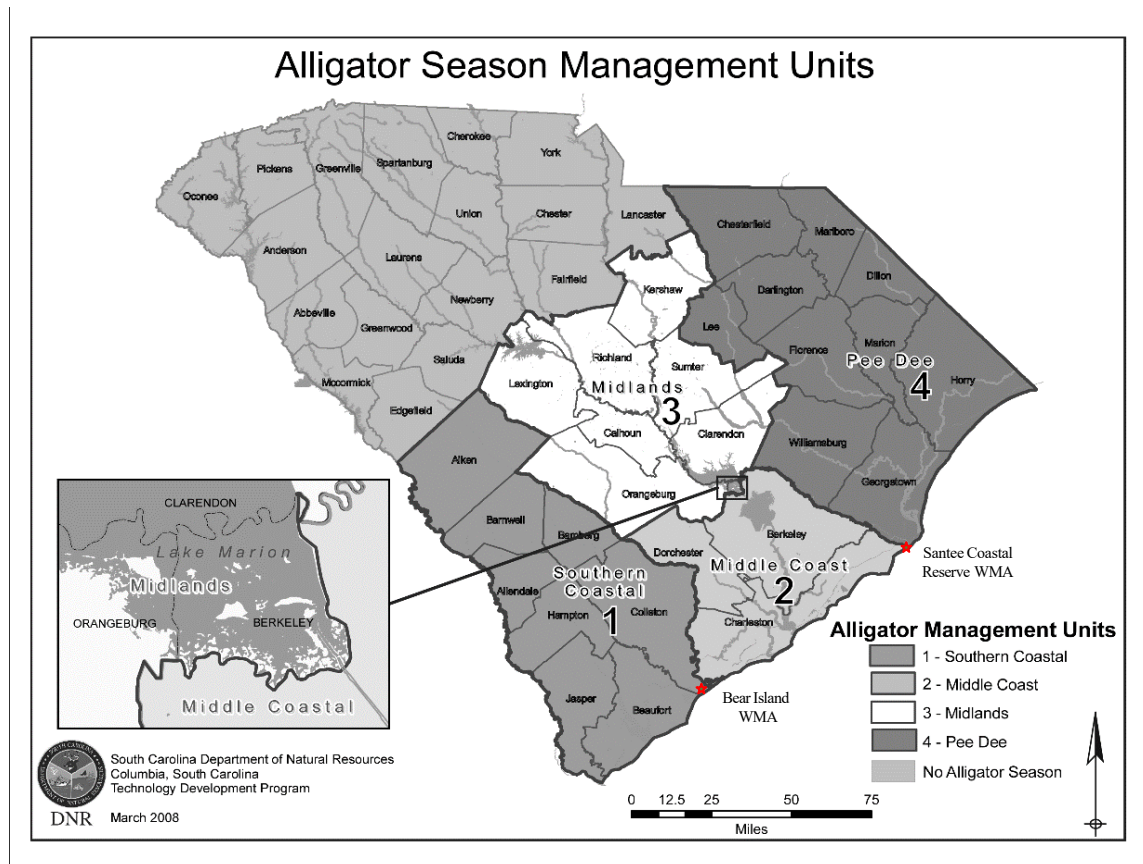


Figure 1. Alligator Management Units

No alligator hunting is allowed on certain public lands such as Wildlife Management Areas (except in navigable waters normally open to the public for hunting), State Parks, or Federal properties such as National Wildlife Refuges and their jurisdictional waters.

Two Wildlife Management Area (WMA) properties, Bear Island and Santee Coastal Reserve, were opened for alligator hunting beginning in 2011 and closed to alligator hunting after the 2018 season. These two WMAs were part of a special draw hunt held separately from the regular Public Alligator Hunting Season, but due to extremely long wait times for hunt selection and often disappointing hunt results these hunts were discontinued.

## SEASON RESULTS

The total number of alligators reported taken during the 2024 public alligator hunting season was 395, an increase of 15 alligators from the 2023 season. The Middle Coastal unit had the most alligators taken at 123, followed by Southern Coastal with 101, Pee Dee with 91, and Midlands with 80 (Table 2).

### Hunter Information

All permitted alligator hunters were required to report their hunting activities by November 1<sup>st</sup>, regardless of whether they went alligator hunting in South Carolina. Reporting compliance for 2024 was 54.4% for all fully permitted hunters, **therefor the results in this report only reflect the data submitted. Those hunters who did not report are not eligible to apply for the next hunting season.**

Of the fully permitted hunters (n=1,058), 550 reported going hunting and 395 reported a successful harvest (Table 2). The *reported* participation rate was highest in the Middle Coastal unit, with 52% of all selected hunters *for the unit* (n=300) going on at least one alligator hunting trip.

Table 2. Hunter participation and harvest success from each Hunt Unit.

Hunt Unit	Allotted Permits	Fully permitted hunters	Reported going hunting	Successful harvest	Hunted did <b>not</b> harvest
1 - Southern Coastal	300	248	138	101	37
2 - Middle Coastal	300	273	156	123	33
3 - Midlands	300	276	128	80	48
4 - Pee Dee	300	261	128	91	37
<b>Totals</b>	<b>1200</b>	<b>1058</b>	<b>550</b>	<b>395</b>	<b>155</b>

Alligator harvest was reported from 18 coastal plain counties. Reported take revealed that just three counties - Berkeley, Georgetown, and Colleton – comprised over half of the public alligator harvest (63.8%) (Figure 2). Those same counties have accounted for approximately 60% to 70% of the total harvest since the 2009 season. A total of 118 alligators *10 feet and larger* were harvested in 16 counties: Allendale, Horry, Jasper, Marion, and Sumter (n=1, each), Dorchester and Richland (n=2, each), Calhoun (n=3), Beaufort (n=5), Colleton (n=7), Charleston (n=8), Orangeburg (n=9), Clarendon (n=15), Georgetown (n=22), and Berkeley (n=39) (Figure 3).

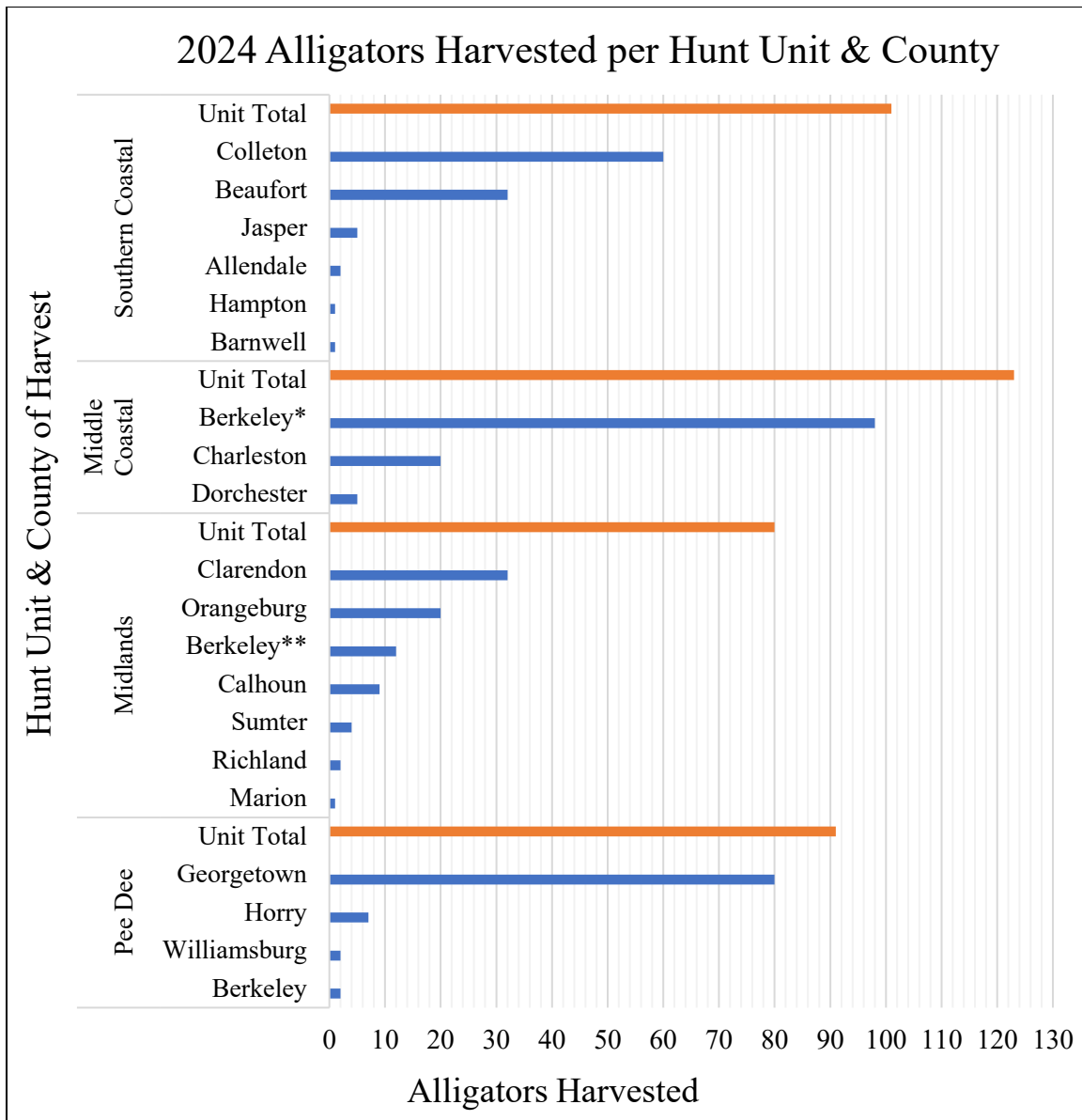


Figure 2. Total alligators harvested in 2024 per hunt unit and county.

\*Does not include the portion of Berkeley County in the lower end of Lake Marion

\*\*Includes only the portion of Berkeley County in the lower end of Lake Marion

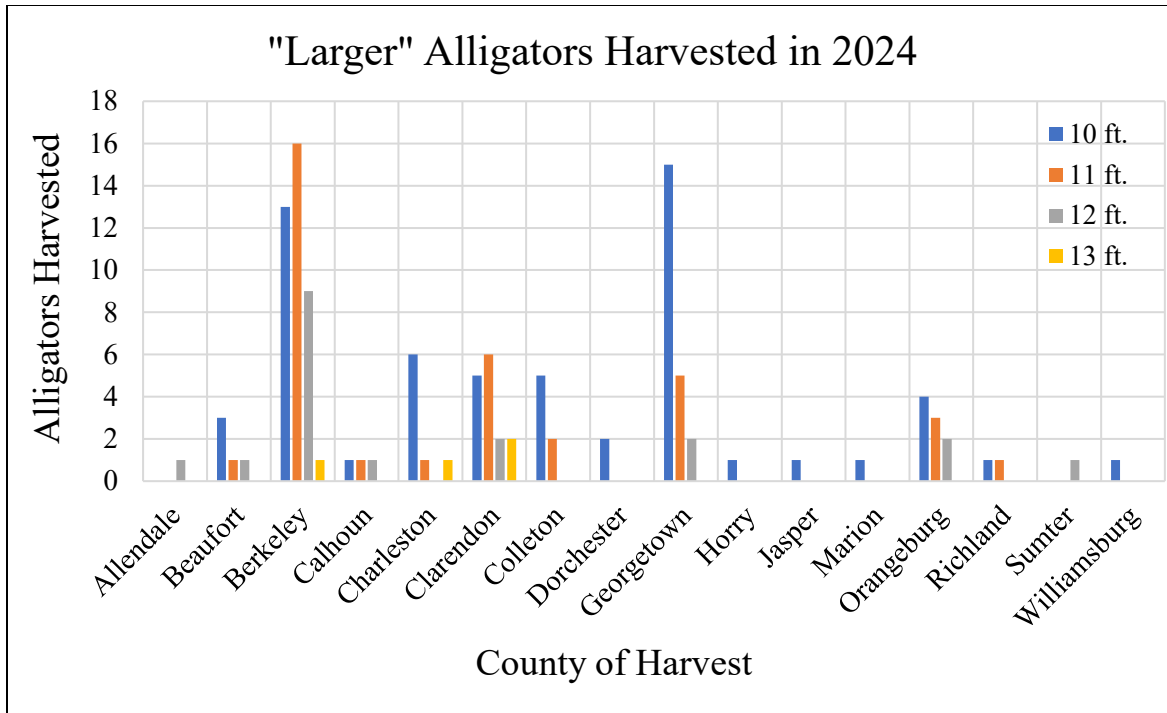


Figure 3. Total “larger” alligators (10 feet and greater) harvested during the 2024 Public Hunting Season by size class and county.

### Harvested Alligator Information

The average size of all alligators taken during the 2024 public season was 8.4 feet, a decrease from 2023. The average size of alligators taken in the Midlands unit was 9.1 ft., followed by the Middle Coastal unit at 8.7 feet, Pee Dee at 8.1 feet, and lastly, the Southern Coastal unit at 7.8 feet (Appendix 1).

Twenty alligators harvested this season were reported to be *six feet and smaller*, a decrease from last year’s twenty-one. The greatest number of alligators *10 feet and larger* came from the Middle Coastal unit with 44, followed by the Midlands with 36, Pee Dee with 24, and Southern Coastal with 14.

Four alligators harvested were reported to be *13 feet or greater*, which is the same as 2023. Two were harvested in the Middle Coastal unit and two in the Midlands unit, all 13 feet in length. The smallest alligator harvested was 4 feet and was taken from the Southern Coastal unit (Figure 4). Consistent with previous years, over half of the alligators harvested were between seven and ten feet in length (Appendix III). There was a slight increase in the harvest of alligators *10 feet and larger* from the 2023 to 2024 public hunt (Figure 5).

Reported meat yield from all harvested alligators was 7,303 lbs. The most reported alligator capture technique was a hook and line (71.1%), followed by the crossbow, harpoon, gig, and snare.



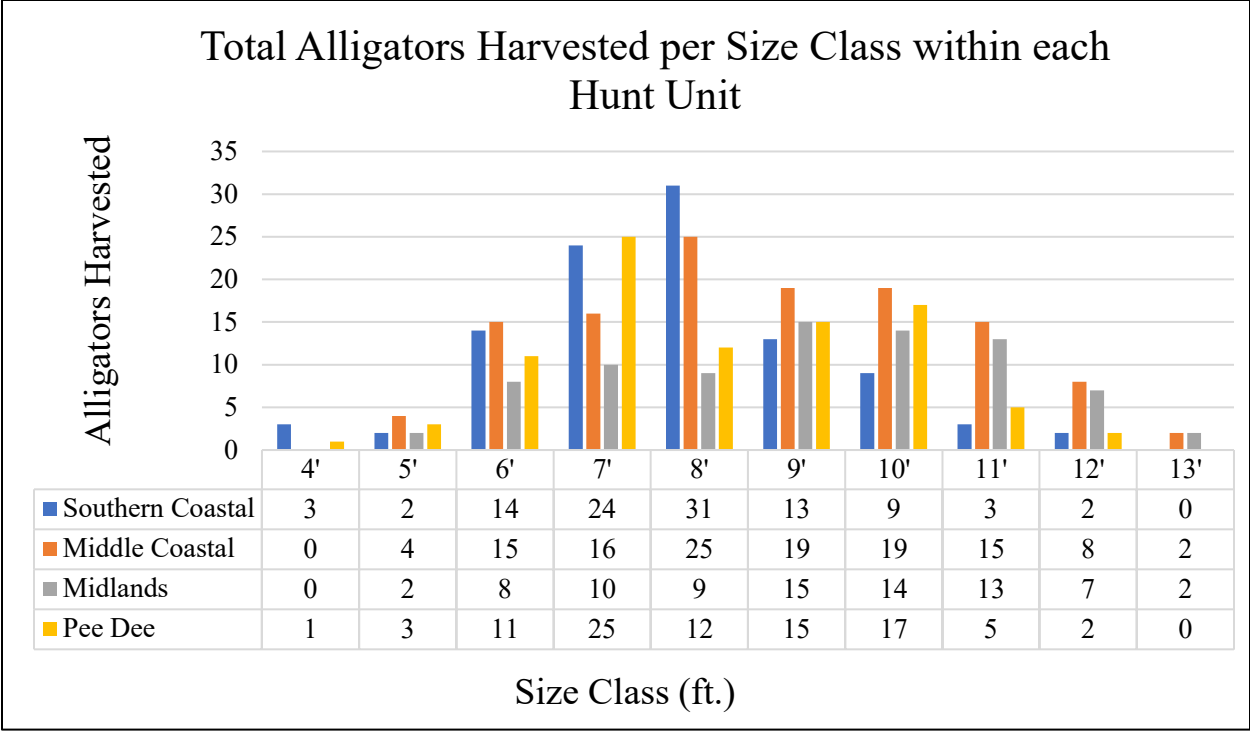


Figure 4. Total alligators harvested during the 2024 Public Hunting Season by size class and Hunt Unit.

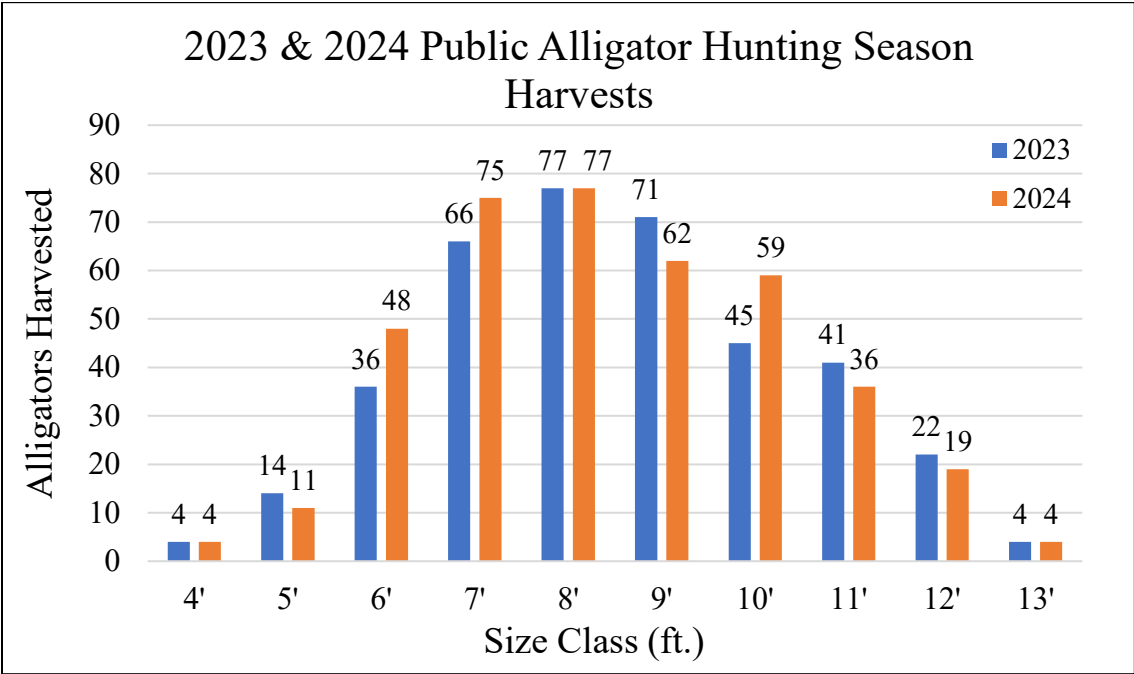


Figure 5. Comparison of the total alligators harvested in each size class in 2023 and 2024.

## DISCUSSION AND RECOMMENDATIONS

The number of applicants for this season's alligator hunt continued to increase from last year and made up a new all-time high. Many hunters apply annually, and as the human population growth in South Carolina continues to climb, the number of applicants climbs too. A continued increase every year suggests there is still strong interest in South Carolina's public alligator hunting program.

The success rate among all selected hunters decreased from last year to 32.9%, below the long-term average of 36% (Figure 6).

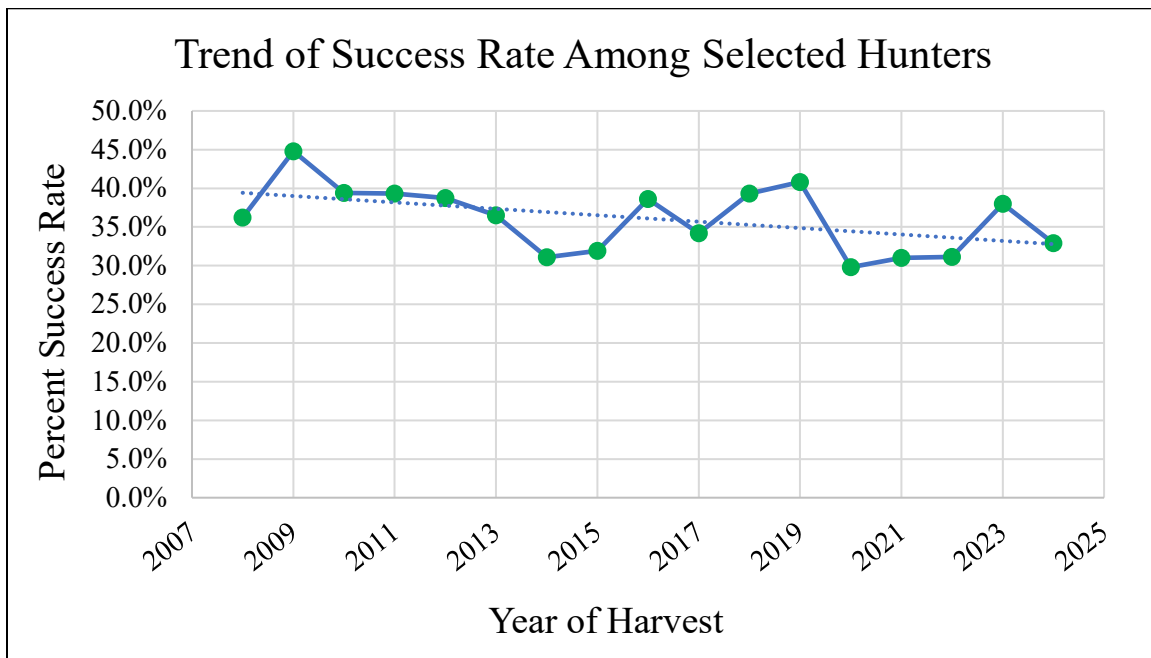


Figure 6. Percent success rate for all selected hunters, by year.

One concern regarding the public alligator hunt is the over harvest of “larger” alligators. Total harvest per hunt unit and total harvest of “larger” alligators increased from last year, likely due to the constantly evolving methods hunters use to find and hunt alligators and may continue to follow this pattern for the next few years. However, trends from the start of the public alligator hunt in 2008 still show an overall decline in “larger” alligators that are being harvested (Figure 7). While this does not necessarily represent a true decline in the number of large alligators available, it does suggest that fewer large alligators are being harvested and reported.

Possible explanations for this apparent trend include but are not limited to:

1. An overall reduction in participation and/or reporting of harvest
2. An overall reduction in total alligators harvested
3. Behavioral changes in alligators resulting from negative anthropogenic interactions
4. Reduced accessibility to larger alligators
5. It represents a true decline in the larger size classes.

Harvest numbers will continue to be closely monitored as there is still uncertainty as to how many of these animals can be taken annually on a sustainable basis. See the Appendix for alligator harvest totals based on hunt unit and size class from the opening of the Public Alligator Hunting Season in 2008. Future management decisions will consider sustainable harvest of all size classes to avoid over harvest.

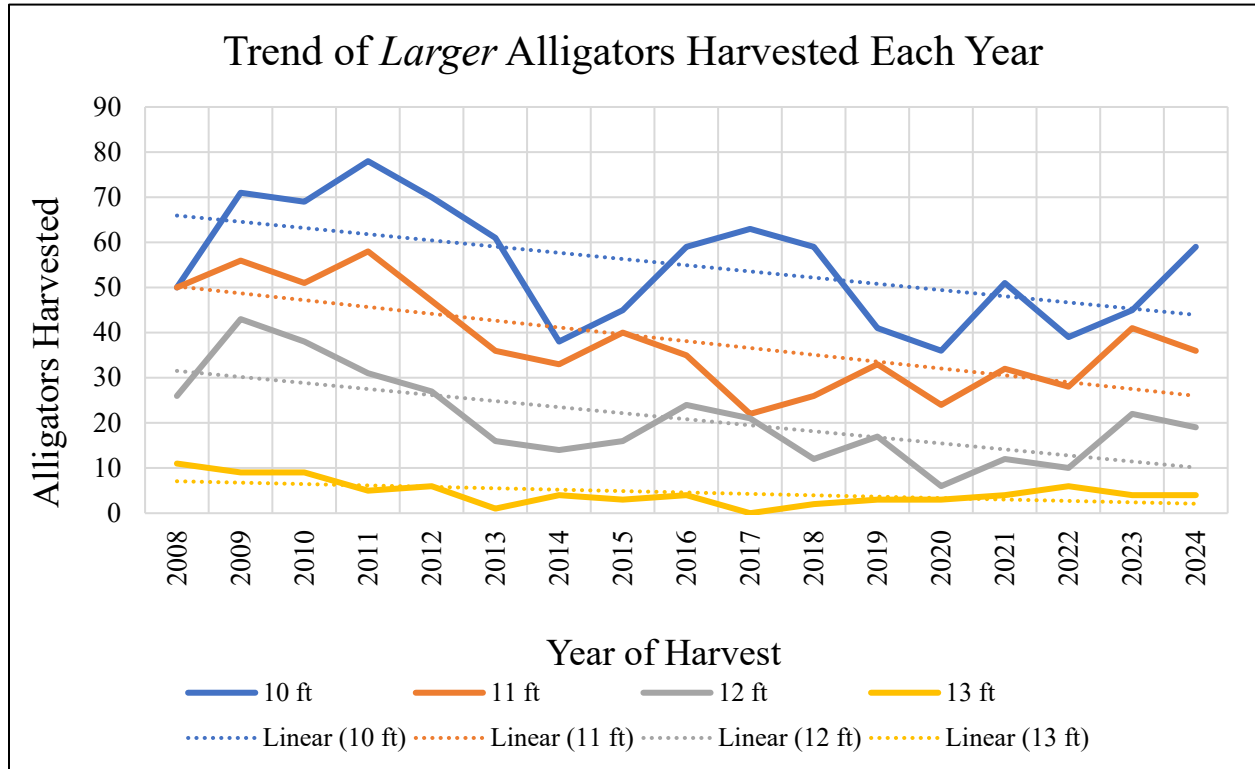
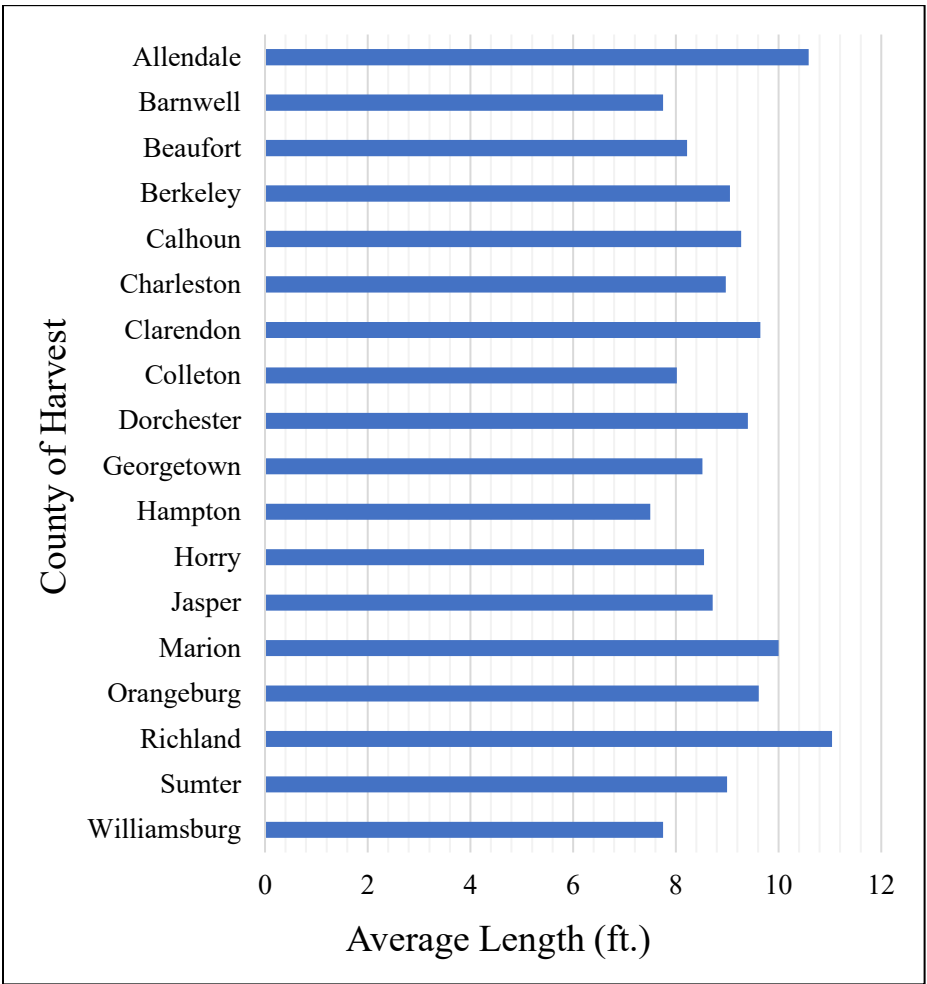
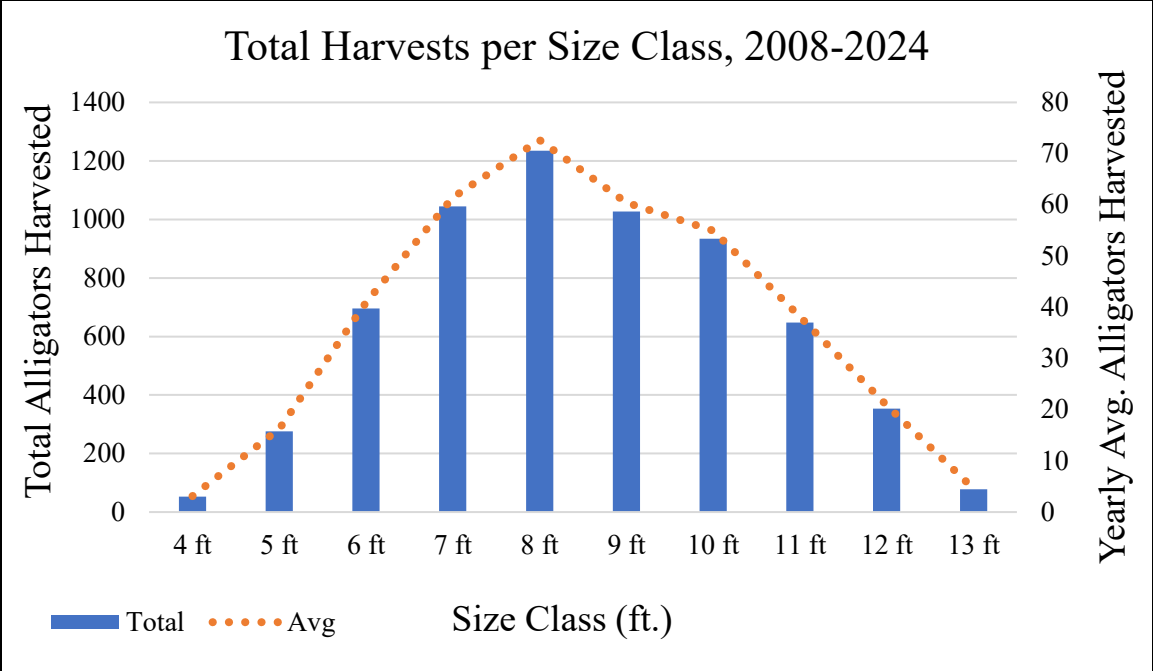


Figure 7. Yearly totals of the largest alligators (10-13 ft.) harvested each year since 2008. Trend lines (linear) represent trajectory of harvest numbers over time.

APPENDIX



Appendix I. Average length of alligators harvested during the 2024 Public Harvest Season by county.



Appendix II. Alligators harvested, by size class, during all years of the Public Alligator Hunting Season. The bars represent total alligator harvests from 2008-2024 (left Y-axis). The dotted line represents the average amount of alligators harvested per size class from the 2008-2024 seasons (right Y-axis).

	<b>Hunt Unit</b>				
<b>Year</b>	<b>Southern Coastal<sup>a</sup></b>	<b>Middle Coastal<sup>b</sup></b>	<b>Midlands</b>	<b>Pee Dee</b>	<b>Annual Total</b>
<b>2008</b>	94	121	87	60	362
<b>2009</b>	108	147	93	104	452
<b>2010</b>	141	117	104	111	473
<b>2011</b>	136	140	87	120	483
<b>2012</b>	144	134	90	115	483
<b>2013</b>	121	128	82	121	452
<b>2014</b>	81	88	57	85	311
<b>2015</b>	102	88	74	69	333
<b>2016</b>	118	108	79	91	396
<b>2017</b>	91	94	71	86	342
<b>2018</b>	100	105	72	60	337
<b>2019</b>	79	78	89	90	336
<b>2020</b>	75	72	52	54	253
<b>2021</b>	79	76	80	74	309
<b>2022</b>	67	103	71	81	322
<b>2023</b>	103	114	74	89	380
<b>2024</b>	101	123	80	91	395
<b>Totals</b>	<b>1639</b>	<b>1713</b>	<b>1262</b>	<b>1410</b>	<b>6024</b>

\*Includes alligators taken during the WMA Alligator Hunting Program beginning in 2011 and ending in 2018.

<sup>a</sup>Includes alligators taken at Santee Coastal Reserve WMA

<sup>b</sup>Includes alligators taken at Bear Island WMA

Appendix III. Total alligators harvested during all years of the Public & WMA Hunting Season,  
by Hunt Unit.