

Crocodile Specialist Group Steering Committee Meeting
Universidad Nacional del Litoral, Santa Fe, Argentina
(6 May 2018)

North America

Alabama (Chris Nix): Beginning in August of 2006, alligator hunting was allowed in a defined portion of the Mobile Tensaw Delta with 50 tags being distributed to hunters. Since then Alabama has expanded to three additional hunt zones across the southern portion of the state and offering a total of 260 available tags across the four hunt zones.

In 2015 a change was made by dividing the Lake Eufaula Zone into two individual zones. The first, remaining as the lake Eufaula Zone, consist of the lake Eufaula itself and its navigable tributaries. The second, further known as Southeast Zone, is the remaining portions consisting of public and private waters in Barbour, Coffee, Covington, Dale, Geneva, Henry, Houston and Russell Counties. This change was made due to a decrease in population on Lake Eufaula and allowing regulated harvest in each zone. Additionally, there was an 8' minimum length requirement implemented for the Lake Eufaula Zone. Hunts in 2015 resulted in a total of 150, 20, 40 and 50 permits being issued to hunters in the Southwest Zone, Lake Eufaula Zone, Southeast Zone and West Central Zone, respectively. Hunters harvested a total of 91, 12, 15 and 25 alligators in the Southwest Zone, Lake Eufaula Zone, Southeast Zone and West Central Zone, respectively.

The 2016 alligator hunting season in all zones were similar to those in 2015. Hunts in 2016 resulted in a total of 150, 20, 40 and 50 permits being issued to hunters in the Southwest Zone, Lake Eufaula Zone, Southeast Zone and West Central Zone, respectively. Hunters harvested a total of 86, 7, 12 and 30 alligators in the Southwest Zone, Lake Eufaula Zone, Southeast Zone and West Central Zone, respectively.

The 2017 alligator hunting season followed the same framework as in 2016. Hunts in 2017 resulted in a total of 150, 20, 40 and 50 permits being issued to hunters in the Southwest Zone, Lake Eufaula Zone, Southeast Zone and West Central Zone, respectively. Hunters harvested a total of 101, 5, 12 and 35 alligators in the Southwest Zone, Lake Eufaula Zone, Southeast Zone and West Central Zone, respectively.

Biologists within the Wildlife section continue to collect necessary data to ensure the longevity of this species. Data such as population counts taken on established routes within each zone as well as harvest data received at mandatory check stations is collected each year. Recently we have also partnered with other southeastern states in establishing an alligator harvest management plan. These efforts will hopefully assist in the sustainability of our current populations for future seasons.

Arkansas (Mark Barbee): Since 1984, alligator populations in Arkansas have increased and continue to be stable and in sufficient numbers to support a regulated sport hunt. The Commission's Alligator Management Team currently administers three alligator related management programs (Alligator Farmer, Nuisance and Harvest) in Arkansas. The Alligator Farmer Program was established in 1991 and provides for the permitted commercial captive propagation and sale of alligators. Currently, there are no permitted alligator farmers in Arkansas. In 2001, the AGFC initiated the Nuisance Alligator Program to provide improved coordination, response, and documentation of nuisance alligator complaints in Arkansas. This program is staffed by a network of regional nuisance alligator coordinators who respond to nuisance alligator complaints from the public or enforcement agencies by removing alligators that pose a threat to the welfare of the public, pets, livestock, or property. The Alligator Harvest Program was implemented in 2007 to enable the harvest of alligators (>4' TL) within specific zones open to alligator hunting. Each permit authorizes the take of one alligator within a specific harvest zone on either public or private lands. Hunting opportunity is allowed in two Alligator Management Zones (AMZ 1 and AMZ 3). These two zones represent the highest and most sustainable populations. All remaining AMZ's remain close to alligator harvesting.

2015 marked the 9th season for hunting in Arkansas. There was a total of 103 tags available with only 84 tags being issued to qualified recipients. Out of that 84 tags issued 49 CITES tags were issued to hunters for harvested alligators. This represented an 18% decrease over the previous year. The harvest sex ratio was 5.4:1 (M:F) with males making up 82% of the total harvest. AMZ 1 produced the second highest harvest rate with 21 alligators behind AMZ 3 with 28 alligators. The mean TL of males was 9.7' and of females it was 7.9'. AMZ 1 continues to yield a slightly higher mean TL for both male and female alligators harvested. A new harvest record of a 13' 10" male alligator was harvested in AMZ 3 from public lands.

2016 marked the 10th season for hunting in Arkansas. There was a total of 116 tags available with only 110 tags being issued to qualified recipients. Out of that 110 tags issued 66 CITES tags were issued to hunters for harvested alligators. This represented a 34% increase over the previous year. The harvest sex ratio was 2.3:1 (M:F) with males making up 70% of the total harvest. AMZ 1 produced the second highest harvest rate with 24 alligators behind AMZ 3 with 42 alligators. The male mean TL was 9.7' and the mean female TL was 7.3'. AMZ 1 continues to yield a slightly higher

mean TL for both male and female alligators harvested. The 2015 harvest record of a 13' 10" male alligator in AMZ 3 from public lands still remains the harvest record.

A complete analysis of harvest data from the 2017 season has not been finalized at this point. Preliminarily a total of 152 tags were available with 145 being issued to qualified recipients. Hunting was still restricted to AMZ 1 and AMZ 3 with all other zones remaining closed. There were 96 CITES tags issued to hunters for harvested alligators. Overall harvest rate was up from the 2016 season. The harvest sex ratio was 1.8:1 (M:F) with males making up 64.5% of the total harvest. The 13' 10" male alligator harvested in 2015 on public waters still remains the largest harvested alligator to date. The complete data analysis for 2017 will be made available and presented in the USFWS Annual Report.

Florida (Allan Woodward and Dwayne Carboneau): The Florida population of the American alligator has been relatively stable since 1988, when the statewide alligator harvest and ranching programs were implemented. The only significant change in the population over that time period has been an increase in the 1.2-2.7 m TL size class, as indicated from annual spotlight surveys conducted annually throughout the state. Florida has three alligator harvest programs (nuisance, statewide public waters, and private lands), which accounted for an average harvest of 18,328 alligators during 2007-2016. In 2016, 8036 nuisance alligators were harvested, 7180 alligators were harvested on public waters, and 3006 alligators were harvested on private lands. In 2016, wild alligator skins sold for about \$2.90/cm (belly width) and meat sold for about \$17/kg. Preliminary reports indicated that wild skin prices declined substantially in 2017 from 2016 levels. The Florida Fish and Wildlife Conservation Commission (FWC) received 16,094 complaints about alligators in 2016. During 2015-2017, the FWC documented 8-10 unprovoked alligator bites per year that resulted in moderate to severe injuries. Two incidents resulted in fatalities during that time period, one in 2015 and another in 2016.

The Florida alligator ranching program includes collections of wild eggs and hatchlings on both public waters and private lands. In 2016, 41,280 eggs were collected on public waters and 132,445 eggs were collected on private lands. A combined total of 5276 hatchings were collected from both public and private sources. Farms produced approximately 34,600 viable eggs from closed cycle production. In 2016, 42,291 eggs (all to Georgia) and 92,615 hatchlings (21,490 to Georgia, 66,040 to Louisiana, and 5085 to Texas) were transferred to other states for raising. Additionally, 10,465 non-hatchlings were transferred to Georgia farms and 26 non-hatchlings were transferred to Louisiana farms. Florida farms produced 29,273 skins (avg. 37 cm belly width) for sale in 2016, which sold for about \$12.00/cm. Most skins sold were 1st grade, as markets for lower quality skins are very weak. The increasing trend in exporting eggs and live alligators from Florida to other states reflects a shifting of production to large corporate farms in those states over the past few years.

Scientists in Florida continue research on wild alligators in Florida. Frank Mazzotti (University of Florida), Mike Cherkiss (U.S. Geological Survey), Laura Brandt (U.S. Fish and Wildlife Service), and staff continue research on alligators in the greater Everglades ecosystem, focusing on the effects of Everglades restoration on alligator and American crocodile populations. Russ Lowers (Kennedy Space Center at Cape Canaveral), in association with Satomi Kohno (St. Cloud State University) and Ben Parrott (Savannah River Ecology Laboratory), continued with investigations into the effects of environmental contaminants on alligator health and development in the Merritt Island National Wildlife Refuge area. The FWC is continuing to monitor mercury levels in alligator meat to assess the human health risk of consuming alligator meat. The FWC is also analyzing and synthesizing population dynamics information for contribution to an alligator harvest modeling effort by the Georgia Cooperative Fish and Wildlife Research Unit. A collaborative study by the FWC and the University of Florida will investigate the effectiveness of translocation of problem American crocodiles in south Florida using GPS/Satellite transmitters.

The American crocodile population has increased substantially over the last 10 years and complaints about problem crocodiles have increased accordingly. Since 2005, the average number of crocodile sightings reported to the FWC each year has been approximately 130. Of those, an average of less than 10% have resulted in translocating/handling a crocodile.

Georgia (Greg Waters): No update available; the report from 2016 was as follows: Nuisance alligator harvest is averaging around 350 per year for 2014 and 2015. Alligator farms are harvesting around 50,000 per year for 2014 and 2015. Georgia's hunter harvest (1 alligator per selected hunter):

Year	# Permits	# Harvested	% Success	Avg. Length
2014	850	238	28	100"
2015	1121	325	29	102"

Louisiana (Ruth M. Elsey and Jeb Linscombe): Improvement from the worldwide economic recession in 2009 led to better prices and more demand for wild and farm-raised alligator skins since early 2010, although there was less demand for wild skins in 2017. Alligator egg and wild alligator harvests increased and remain high in recent years.

In 2016, near perfect habitat conditions with optimal water levels led to a record total of 616,546 wild alligator eggs were collected in the ranching program, producing 548,416 hatchling alligators. As of January 2017 there were 55 licensed farmers in Louisiana with on farm inventories totaling a record high of 923,072 alligators. During the 2016 tag year (January 2016 to December 2016) an estimated 328,228 farm-raised alligators were harvested, with hides averaging 26.16 cm belly width. The total estimated value of these alligators was \$US71.1 million. In 2017, an estimated 50,989 nests were counted on the coast-wide survey, the second highest on record. However, Tropical Storm Cindy hit the Louisiana coast on 21-22 June, and extensive flooding led to only 387,373 eggs being collected, and 332,711 hatchlings produced from the ranching program. An additional 3542 hatchlings were produced by captive alligators on farms in 2017. As of January 2018, Louisiana's 56 licensed farmers were maintaining 857,728 alligators in inventory; reflecting excellent nesting and high egg ranching efforts for several years in a row; although down from the record of 923,072 last year due to flooding from Tropical Storm Cindy.

Wild alligators have been harvested in Louisiana for over 40 years, as a sustained use management program was developed. The majority of licenses are commercial licenses, although some recreational "sport" hunting licenses are also issued. In 2016 some 33,613 wild alligators were harvested by 3281 trappers. Alligators harvested averaged 7.51' TL, with an estimated value of \$US9.6 million. LDWF staff checked the sex ratio of 16,875 wild harvested alligators, which were 67.03% male and 32.97% female. Low demand for wild hides led to a reduced harvest of wild alligators in 2017; final numbers harvest and shipped are currently being tallied; but approximately 15,000 alligators were harvested.

In order to streamline the alligator hide inspection process for validation prior to in-state tanning or export, the LDWF worked closely with the USFWS and manufacturers to develop, test, and implement the use of bar codes on CITES tags starting in 2008. Some technical difficulties were encountered as expected with this new technology, but over time various scanners have been tested and reliable models selected for use. Occasionally we encounter a few defective CITES tags wherein the locking mechanism appears faulty, and current etching and human readability of the lettering is less than ideal but overall this technology has proven to minimize the human errors associated with data entry errors during mandatory hide inspections.

In 2011, the Department of Wildlife and Fisheries and the LSU School of Veterinary Medicine in conjunction with the Louisiana Alligator Farmers and Ranchers Association developed a document entitled "Best Management Practices for Louisiana Alligator Farming". The document details recommended practices to ensure animal welfare of captive reared alligators in Louisiana, including egg collection, hatching, rearing, release to the wild and slaughter methods. This document was again updated in January 2016 and distributed to all farmers, and has been useful to educate persons interested in alligator farming or exhibiting alligators.

In October 2017, the LDWF organized an alligator session at the 71st annual conference of the Southeastern Association of Fish and Wildlife Agencies held in Louisville, Kentucky, to discuss issues relevant to all management programs. The session was well attended by representatives from most southeastern states. Topics discussed included movement of live alligators between states, nuisance alligator programs, issues with marketing and hide prices, and enforcement of various aspects of these programs.

The LDWF has an active research program in addition to management and administration of our wild harvest, nuisance alligator control program, and commercial farming oversight. In 2016 our staff published 12 abstracts and 11 full papers; many in collaboration with university researchers and graduate students. In 2017 we published 7 abstracts and 12 full papers on a variety of topics related to alligators (physiology, ecology, food habits, nesting, etc.).

We are saddened to report the passing of our colleague Edmond C. Mouton, Jr., in early March 2018. Edmond was the Program Manager for the Alligator Research and Management Section since 2014 and an employee of LDWF since 1994. Additional details on Edmond's career and contributions to alligator conservation are in the January-March 2018 issue of the CSG Newsletter.

Mississippi (Ricky Flynt): Mississippi offered its first public alligator sport hunting season in 2005. From 2005 until 2011, opportunities expanded gradually to include 480 permits on portions of two major waterways, one coastal and one inland. In 2012, Mississippi expanded sport hunting opportunities on public waters to over two-thirds of the state and in 2013 alligator hunting on public waters was opened statewide. The state was divided into 7 geographical zones with a 10-day season total of 920 available in a web-based application/drawing and permit sales process. An alligator hunting training course is provided by the Mississippi Department of Wildlife, Fisheries & Parks. Permit holders may harvest 2 alligators over 4' long, only one of which may exceed 7' TL. The bag limit restrictions are intended to distribute harvest among adults and juvenile alligators. Alligators over 7' long comprised 50%, 47%, 48% and 43% from 2014-2017, respectively. Total alligator harvests were 682, 982, 784 and 741 on public waterways from 2014-2017, respectively. Females comprised 30%, 35%, 31% and 31% of the harvest from 2014-2017, respectively. The average length of all harvested alligators from 2014-2017 was 7.77' (males 8.28', females 6.55'). Alligators that were 10' or longer comprised 23%, 27%, 28% and 26% of harvest from 2014-2017, respectively.

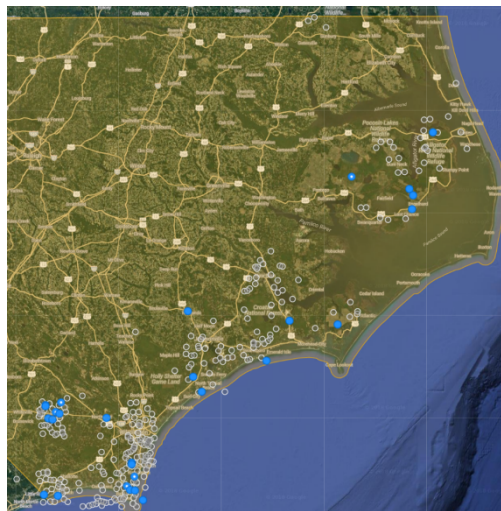
Private lands alligator hunting opportunities are offered in 33 counties. In 2017, there were a record of 126 landowner applications approved for permits that totaled 307 available harvest vouchers on 23,278 acres of alligator habitat. There were 84, 115, 95 and 117 alligators harvested on private lands from 2014-2017, respectively. Properties in the open counties must contain a minimum of 20 acres of privately owned permanent surface water to qualify for an alligator

harvest voucher. Additional vouchers are issued for each additional 100 acres of privately owned permanent surface water. Each voucher allows the harvest of 2 alligators over 4' long, only one of which may exceed 7' long.

There are two permitted alligator farms in Mississippi, and neither is commercially active. One alligator egg production facility was permitted in 2016 and began commercial production in 2017.

North Carolina (Alicia C. Davis):

1. The NC Wildlife Resources Commission adopted the Alligator Management Plan in October 2017 (see *Adoption of the Alligator Management Plan* section below for more details).
2. A rule establishing a season and legal manner of take was adopted 28 February 2018. Outside of municipalities that request local population reduction hunts (see *Adoption of a rule that establishes a season and manner of take for alligators* section below for more details), NCWRC does not plan to issue alligator hunting permits until further research is conducted to determine the conditions under which alligator populations would be sustained while allowing limited harvest.
3. In 2017, spotlight surveys were conducted by NCWRC staff to estimate the number of alligators in developed areas of Brunswick and Columbus counties. Ponds, lakes, ditches, rivers, streams, and creeks were surveyed by boat, canoe, and on foot. A total of 901 alligators was estimated to occur across 10,790 acres of alligator habitat.
4. A new marking and data collection protocol was initiated in spring of 2017 for all alligators handled by our staff, Nuisance Alligator Agents, and researchers. This requires scanning for/the insertion of a PIT tag, collection of tissue samples (scutes), gender determination by cloacal examination, measuring total length and snout-vent length, and recording GPS coordinates of locations of capture and release. Thus far approximately 80 individuals have been marked.
5. A citizen science project called NC Alligators was launched in April 2017 on the iNaturalist platform for the public to report alligator sightings. As sightings reported on this platform tend to reflect more positive human-wildlife interactions, this effort reaches a different audience than we tend to connect with through other channels (e.g. records of calls to the Wildlife Helpline typically represent more negative human-wildlife interactions). Thus far, 332 observations have been added to the project (see map below).



Adoption of the Alligator Management Plan

Two years ago, a rule establishing an alligator hunting season was proposed as part of NCWRC's annual rulemaking cycle. Although the proposal received quite a bit of support during the public comment period, a considerable amount of opposition was also expressed from the public and conservation groups. For reasons outlined in a [resolution](#), the proposal was not adopted in February of 2016 and WRC staff was directed to assemble an Alligator Task Force charged with developing an Alligator Management Plan (AMP) for North Carolina. The task force consisted of 15 stakeholders representing various perspectives on alligator management, including WRC staff (biologists and law enforcement), academic researchers, staff from NC State Parks and NC Museum of Natural Sciences, land managers, hunters, and private residents. In November of 2016, NCWRC staff hosted [3 public input forums](#) to help the task force gauge public opinion regarding alligator management in the state. A draft version of the AMP was published on NCWRC's website in May of 2017 for public review. In June of 2017, feedback on the draft AMP was solicited from the public through [6 public input forums and an online survey](#). Following edits made by the task force in response to public comments, a final version of the [Alligator Management Plan](#) was adopted by the Commission in October 2017. The 5 goals outlined in the Alligator Management Plan are to:

1. Maintain viable populations of alligators in North Carolina.

2. Conduct research to support science-based management of alligators.
3. Promote public safety through management of alligator populations.
4. Provide comprehensive information about alligators and alligator management.
5. Provide opportunities for public enjoyment of alligators through hunting and wildlife viewing.

Adoption of a rule that establishes a season and manner of take for alligators

At their February 2018 meeting, the NCWRC adopted a rule to allow limited take of American alligators as prescribed by the North Carolina Alligator Management Plan. Effective 1 August 2018, this rule establishes the season and legal manner of take for American alligators as described below:

15A NCAC 10B .0224 AMERICAN ALLIGATOR

- (a) The season for taking American alligators shall be September 1 to October 1.
- (b) Take shall be by permit only.
- (c) The bag limit shall be one per permit and the season limit is one.
- (d) American alligators shall be restrained before being killed. American alligators shall only be restrained using a hand-held restraining line or catch pole; a snatch hook attached to a hand-held restraining line or rod and reel; a harpoon or gig attached to a hand-held restraining line; a baited wooden peg less than two inches in length attached to a hand-held restraining line; or archery equipment with an arrow-attached restraining line.
- (e) American alligators restrained by any method specified in Paragraph (d) of this Rule shall be killed immediately upon capture.
- (f) Alligators may be taken day or night and with the use of artificial lights.
- (g) The use of baited hooks is prohibited.

Outside of municipalities that request local population reduction hunts as described below, NCWRC does not plan to issue alligator hunting permits until further research is conducted to determine the conditions under which alligator populations would be sustained while allowing limited harvest.

In accordance with the Alligator Management Plan, a municipality may formally request support from NCWRC to manage the local alligator population. NCWRC will then work cooperatively with the municipality to assess alligator numbers, define areas of public safety concern, and identify those areas where alligator take could be safely conducted by hunters. If advisable to promote public safety, the Director may then issue an appropriate number of permits to accomplish the desired take of alligators. NCWRC will retain decision-making authority on the number of take permits issued. Local officials and NCWRC staff will jointly plan and implement the local population reduction hunt.

In addition to publication on NCWRC's website, any opportunities that become available for hunters to apply for alligator hunting permits will be announced through NCWRC news releases and Wildlife Update emails.

Oklahoma (Robert Bastarache): Southeastern Oklahoma represents the approximate northwestern-most distribution of American alligators. They are listed as a state species of special concern, and take is prohibited. The Oklahoma population is restricted to a few counties in the extreme southeast corner of the state, and most of the population is in McCurtain County (the southeastern-most county, adjacent to southwest Arkansas and northeast Texas). Within McCurtain County, there are two locations known to contain a breeding population: Red Slough Wildlife Management Area (part of the Ouachita National Forest) and Ward Lake (private land). Critical habitat is also provided within the Little River National Wildlife Refuge, though breeding has not been confirmed but would be expected.

The only location within Oklahoma that regularly monitors alligators is at Red Slough WMA. In 2016, the annual survey found 32 individuals, ranging in size from 1-12'. Of the 32 alligators recorded, 11 of them were young from the previous year's hatch. This is the most young that have been counted on any annual survey, indicating a very successful overwintering of the 2015 hatch. Numbers were further enhanced due to young hatched in years prior to 2015 surviving to a detectable size (approximately 3-4'). Six alligator nests were found in 2016, which is the most recorded during a single nesting season. Two nests produced a total of 46 young, three nests were predated, and one nest did not have any eggs laid within it.

In 2017, the annual survey found 36 individuals ranging in size from 1-13'. This is the highest count ever recorded at Red Slough WMA since surveys began in 2005. A higher than expected amount of large gators (9 ft. and above) were documented. These may have come onto Red Slough from Ward Lake, which experienced a breach in December 2015 that has yet to be fixed. The number of under 4 ft. gators was noticeably decreased, possibly due to the influx of the large gators pushing smaller individuals off the reservoirs. Five alligator nests were found in 2017. Three nests produced a total of 51 young and two nests were predated. One nest was predated by a sow feral hog and two piglets and the other by raccoons (game camera documentation). The raccoon predation occurred was a multi-day event interspersed with efforts by the mother gator to protect the nest and run off the raccoon.

The Ouachita National Forest was contacted by Johnny Konvalina, a PhD student at the University of Central Florida, who is interested in working the Oklahoma gators into his dissertation on alligator population genetics across their range. The Forest has put him in contact with Dr. Paul Gignac, Oklahoma State University, who has nine dead juvenile gators from Red Slough WMA. The current plan is for Dr. Gignac to transfer those juveniles to Johnny for use in his genetics research. The Ouachita National Forest and Oklahoma Department of Wildlife Conservation will continue to work with Johnny and Dr. Gignac on the next phase of genetics research.

South Carolina (Andrew Grosse): In 2016, public alligator hunters took a total of 396 alligators during the public hunting season in South Carolina with an average size of 8.7'. For 2017, 352 alligators were taken during the public season with an average size of 8.8'. The public hunting season consists of 4 hunt units in the coastal plain of South Carolina with 1,000 harvest tags available (250 in each hunt unit). In 2014, harvest tags were reduced from 1200 (300 per hunt unit) to 1000 (250 per hunt unit). Hunters are chosen in a computerized lottery drawing with a preference system to ensure all hunters that continue to apply annually will eventually be chosen. In addition, two SC Department of Natural Resources' Wildlife Management Area (WMA) properties have limited alligator hunting and are included as a separate computerized drawing.

The WMA alligator hunts allow two hunt parties each week (4 weeks total in the season) on each of the two WMAs to take one alligator during their selected hunt week. In addition, the selected WMA hunters have the option to purchase an additional "smaller" alligator tag that permits the take of another alligator from 1.22 m to 2.13 m (4-7'). Thus, a total of 16 hunters have up to 32 WMA harvest tags available for the WMA alligator hunts. The harvest figures above include both public lands and WMA properties.

A total of 4558 hunters applied for the 2016 public hunt, a decrease of 2.9%, and 224 hunters applied for the WMA hunt, an increase of 6.2% from the previous season. For 2017, 5582 hunters applied for the public hunt, an increase of 22.5%. A total of 295 hunters applied for the WMA hunts, an increase of 31.7%.

In the Private Lands Program, landowners with significant amounts of alligator habitat can apply for harvest tags that are issued for use only on their specific property. Private Lands tags cannot be used on public waters. The Private Lands season runs from September 1 from one year to May 31 the following year. In 2015-2016 and 2016-2017, 228 and 375 alligators, respectively, were harvested in the Private Lands Program.

A minimum of 251 alligators were taken in 2016, and in 2017, 300 were taken as nuisance animals in South Carolina.

Alligator propagation (farming) legislation was passed in 2014 and subsequent regulations were promulgated in 2015. To date, we still have not received any applications for a permit.

A research project involving Clemson University has been underway since 2013 and has been looking at historical and current night light surveys to try to estimate abundance and distribution throughout the alligator's range in South Carolina. In addition, 25 animals were instrumented in 2015 with GPS transmitters in an effort to reveal movement patterns in two portions of the state, the Santee Delta and the ACE Basin. The results of these projects are expected this spring (2018).

Texas (Jonathan Warner): Texas Parks and Wildlife Department has conducted American Alligator population spotlight surveys and aerial nesting surveys for the last four decades. Concurrent with many other regions of the southeastern USA the Texas alligator population has steadily increased over that time period. A limited public hunting program was initiated in 1984, with nuisance control harvest and wild egg collection programs following in the decade thereafter. Alligators have been documented in 123 Texas counties, with highest population densities and nesting occurring along the Gulf Coast region in the southeast. The statewide population likely approaches 500,000 individuals.

Texas allows alligator hunting primarily on private lands but also provides a number of lottery or "drawn" hunts on Wildlife Management Areas and State Parks. Texas currently offers a relatively liberal harvest of the species, with both a 3-month spring hunting season and 20-day autumn season. Subsequent to the widespread decline in wild hide prices the majority of Texas alligator hunters now harvest for personal use (eg meat) or provide outfitting services for resident and non-resident hunters. Egg collection is allowed only on private lands.

In 2016, 1,836 alligators were successfully hunted in Texas (spring = 186, fall = 1650). For 2017, 1,355 individuals were harvested (spring = 221, fall = 1134). The average alligator killed in Texas is 2.26 m (7' 5"). Egg collectors removed 35,283 eggs from the wild in 2016 of which 30,234 hatched. In 2017, 29,397 eggs were removed of which 23,875 produced hatchlings. In the US, overall market price for alligator eggs dropped significantly in 2017, but the destruction of a significant number of alligator nests in neighboring Louisiana due to Tropical Storm Cindy unexpectedly spiked demand for alligator eggs from Texas at the onset of collection season. In turn, Hurricane Harvey brought record rainfall to southeast Texas in autumn of 2017 resulting in a sharp decrease of hunting effort and take.

There were two reported incidents of alligator-human conflict in 2017, both involving fisherman wading in shallow, murky waters that stepped on alligators and were consequently bitten in defense. TPWD fields approximately 1000 reports of nuisance alligators from the public each year of which ~300 legitimate nuisance animals are removed from the wild by nuisance control hunters specially permitted by the Department.

Expanding alligator research and monitoring activities in Texas include the examination of behavioral and hormonal activity in nesting females, disease and environmental contaminant surveillance, and new population surveys in the Rio Grande, San Antonio and Neches River watersheds.

The TPWD Alligator Program would like to thank Amos Cooper, who retired in August 2016, for his 31 years of service to the Department and dedication to keeping the American alligator a sustainable natural resource in Texas.

Prepared by: Ruth Elsey and Woody Woodward, Regional Chairs for North America

Date prepared: 27 March 2018