



The Commission's Alligator Management Program includes three elements that result in taking wild alligators:

1. The Private Lands Alligator Management Program element provides landowners, management authorities, and program participants maximum flexibility and sustainable commercial hunting opportunities, primarily on private lands.
2. The Statewide Nuisance Alligator Program addresses the threat alligators pose to people, pets, and property.
3. The Statewide Alligator Harvest Program provides maximum sustainable hunting opportunities to the general public, primarily on sovereign waters and public land.

Florida's Statewide Alligator Harvest Program has received tremendous national and international media attention and continues to be a model to other states. FWC has modified the program over the years to address specific needs and concerns, and program staff remains committed to continual improvement. The purpose of this staff report is to update the Commission on this program and seek any guidance for future improvements.

11/15/2012

Background and Purpose

- Implemented in 1988
- Based on experimental harvest research in early 1980's
 - Established 6% sustainable harvest rate of adult animals
- Program has changed over time from commercial to pseudo-commercial to recreational
- Program is designed to maximize long-term recreational hunting opportunities for the general public



The Statewide Alligator Harvest Program was implemented in 1988 as part of the Commission's comprehensive Alligator Management Program. This would not have been possible without Commission-initiated research that showed that the alligator resource could sustain harvests again after once being in danger of extinction. This research concluded that a 6% harvest of the adult alligators (those that are 6 feet and greater in length) was sustainable over the multiple-year research period. The initial program was meant to provide a level of harvest adequate for a person to make a profit, in order to develop an advocacy group for alligator conservation. The program was extremely popular, resulting in greater demand for participation opportunities. As a result, the agency expanded the opportunities by reducing the number of tags issued with each harvest permit from 15 tags to 5 tags (circa 1993). At this level, more persons could participate and participants could still make a profit. Program popularity continued to grow, revealing that the general public craved a true recreational style program, as opposed to being profit-motivated. Consequently, in 2000, FWC further expanded the opportunity by issuing only 2 tags per harvest permit. The program now provides recreational alligator hunting opportunities to as many individuals of the general public as possible, despite common requests to reserve tags for special interest user groups (e.g., guides, clubs, special events).

How Permits Are Issued

- Permits issued under a 3 phase approach
 - Phase I - Random Drawing (one per person)
 - Phase II - First Come, First Served (one per person)
 - Phase III - First Come, First Served (no limitations)



Permits are issued through 3 phases. Phase I uses a random drawing process, using a long application period and a shorter time period for successfully selected applicants to purchase their assigned permit. Only one permit is issued per person in Phase I. All unassigned and unpaid assigned permits are made available in Phase II. In Phase II, permits are issued on a first-come, first-served process but only to persons who have not purchased a permit in Phase I and only one permit is issued per person in Phase II. Any permits that remain available after Phase II are carried forward to Phase III. In Phase III, anybody can purchase an available permit but can only buy one additional permit at a time. Buying multiple permits requires multiple transactions to ensure everyone who desires additional permits has equal opportunity of obtaining them.

Hunt Details

- Hunting season is August 15 to November 1 (78 days)
- Hunting hours are 5 p.m. until 10 a.m. (17 hours)
- Many methods-of-take allowed, but not baited hooks or firearms
- 2 alligators authorized per harvest permit



The hunting season starts on August 15, the earliest date determined through research that would not jeopardize successful recruitment of hatchlings into the population, and ends on November 1 each year. The first four weeks of the season are partitioned into 1 week periods, with one of the four periods being assigned to a permit holder to ensure hunting pressure is evenly distributed. Each day during the established season, permit holders may hunt on their assigned areas from 5 p.m. in the evening until 10 a.m. the following morning. Legal methods of take include nearly anything that results in a restraining line being attached to the alligator, but no baited hook sets or firearms are allowed. Each permit issued authorizes the permittee to take two alligators from an assigned area.

Hunt Details, continued

- Costs \$270 for residents and \$1,020 for non-residents (\$60 for additional permits)
- Unused tags and harvest report forms used to measure and monitor success and impacts
- Hides and meat can be sold to help recoup expenses



While there is no cost assigned to the harvest permit, a participant must purchase an Alligator Trapping License (or be in possession of one that is valid through November 1 of the hunt year) and pay the fee for the two hide validation (CITES – Convention on the International Trade of Endangered Species) tags issued with each permit. CITES tags are important to ensuring alligator hides entering the international marketplace are legally acquired. The cost is \$270 for a resident and \$1,020 for a non-resident. The cost of additional permits purchased is \$60 (tag fees only), regardless of residency. Permit holders are required to return unused CITES tags and/or completed copies of alligator harvest report forms for each alligator harvested. This feedback on harvest is a critical component of measuring and monitoring the success and impacts of the harvests. Participants are allowed to sell the hide and the meat, which helps them recoup the expenses of participating.

Budget and Revenue

- Annual Recurring Allocation (FY 2012-13)
 - Provided by HGM's annual LBR appropriation
 - ~\$150,000
 - Funding source: alligator licenses and tag fees
- Major Program Expenditures
 - Salaries and wages: (6 staff/2 temp) - \$83,000
 - Night-light surveys - \$47,000
 - Printed hunt materials/postage - \$20,000
- Annual Recurring Revenue: >\$1.5M



For fiscal year 2012-13, the Statewide Alligator Harvest Program has been provided an approximate \$150,000 budget allocation from the Division of Hunting and Game Management's annual legislative appropriation. This funding originates from the State Game Trust Fund – with alligator licenses and tag fees covering the cost of program implementation.

Major recurring program expenditures include salaries, wages, and benefits of Alligator Management Program staff. Portions of time from 6 staff and 2 temporary employees are spent on this program element equaling 1.5 person years. Other costs include travel, fuel, equipment maintenance associated with night-light surveys, printed hunt materials and postage.

The Statewide Alligator Harvest Program generates, through alligator trapping and trapping agent license sales and tag fees, more than \$1.5 million annually.

Types of Harvest Units

- Traditional Units
 - Discrete lakes, rivers, and other wetlands
 - Quotas vary from year to year
 - 67 areas (e.g., lakes Kissimmee, George, Okeechobee)
- Countywide Units
 - Can include private and public wetlands
 - Quotas are set from year to year
 - 65 areas (only Monroe and Dade counties excluded)

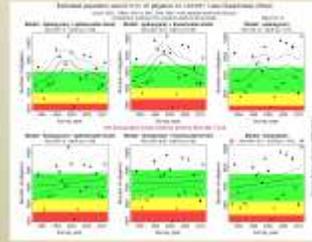


There are two types of alligator harvest units: (1) traditional units, which are discrete bodies of waters or wetlands, such as lakes, rivers, or marshes and (2) countywide units that allow hunting in all other areas (excludes the traditional units) within a county, both private and public land, for which a hunter has permission to hunt from the landowner.

Currently, there are 67 traditional hunt units and 65 countywide units.

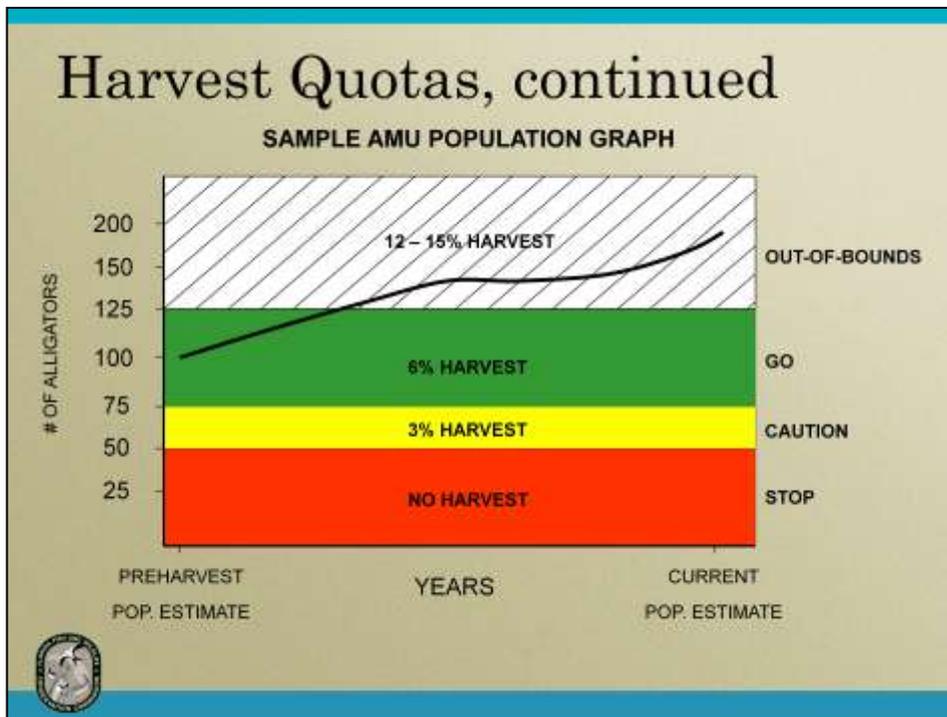
Harvest Quotas

- Determined annually using state-of-the-art statistical modeling
- Quotas established to ensure
 - no long-term negative impacts
 - alligator populations aren't too numerous
- Most populations managed to be within +/- 25% of 1988 population levels (green zone)
- May apply unsustainable rates as high as 15% of adults to decrease populations
- Harvest cut in half if population falls in the yellow zone and is stopped if in the red zone



While harvest quotas for countywide units do not change from year to year, harvest quotas for most of the traditional units are determined annually. Annual onsite counts of alligators through night-light surveys accumulated over the years serve the basis for a state-of-the-art statistical modeling routine to estimate current hunt unit populations. Implementing a robust population monitoring program is central to ensuring alligators are not overexploited while providing for as many hunting opportunities that is responsibly possible. Population monitoring, too, can provide an early indication of problems, and provide resource managers an opportunity to make appropriate adjustments to successfully achieve population management objectives and avoid large swings in population over abundance and population declines.

The adult size class (6 feet and greater in length) is the primary driver of harvest quota decisions. This size class represents the breeding segment of the population, which is critical to maintaining a given population. For most areas, the management objective is to maintain the adult segment within +/- 25% of the estimated adult population before harvests were initiated in 1988 (the green zone). This bench mark was considered the safe point at which alligators were declared fully recovered and shown to be capable of sustaining harvests. If the current adult population estimate is within the green zone, a sustainable harvest rate of 6% of adults is normally prescribed in an effort to maintain the population within the green zone. If the current adult population estimate is above the green zone, temporary unsustainable harvest rates as high as 15% of adults are prescribed to force the population back down into the green zone. If the current adult population estimate falls into the yellow zone, the harvest rate is cut in half (3% of adults) to allow the population to rebuild itself back into the green zone. If the adult population continues to decline after applying the 3% harvest rate and the adult population estimate falls into the red zone, harvests are stopped until the population rebuilds.



There are four action zones based on the population modeling when considering harvest quotas:

(1) A "red" zone (evoking a "stop" response) that depicts that area of a population model graph that is below 50% of the preharvest population estimate. When the current population estimate is within this zone, a zero quota will be recommended.

(2) A "yellow" zone (evoking a "caution" response) that depicts that area of a population model graph that is between 50 and 75% of the preharvest population estimate. When the current population estimate is within this zone, a quota expected to achieve a 3% harvest will be recommended.

(3) A "green" zone (evoking a "go" response) that depicts that area of a population model graph that is between 75 and 125% of the preharvest population estimate. When the current population estimate is within this zone, a quota expected to achieve a 6% harvest will be recommended.

(4) A "white with black hash marks" zone (evoking an "out of bounds" response) that depicts that area of a population model graph that is above 125% of the preharvest population estimate. When the current population estimate is within this zone, a quota expected to achieve a 12% harvest will be recommended. If after applying this rate for three years the population estimate remains in this zone, the rate will be elevated to 15%.

Population Trends

- Statewide population stable over the period 1988-2011
 - Decreasing over the period 2005-11 due to high harvests to bring populations into the green zone
- 16 units above green zone, 16 within green zone, one in yellow zone, and one in red zone

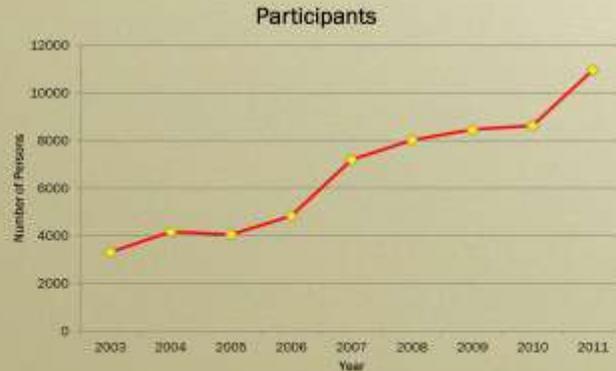


Over the broad 25-year period (1988 – 2011), the overall statewide alligator population is considered statistically stable. However, over the last 7 years (2005 – 2011) the overall statewide alligator population is declining. We believe this short term trend is the result of the elevated harvest rates being applied temporarily to achieve management objectives of driving alligator populations back down into the “green zone” on some areas. The negative trend should stabilize as harvest rates are lessened as populations return to the green zone.

There are 16 areas, among the 34 intensively monitored harvest units, where populations are above the green zone (subjected to the elevated harvest rates), 16 areas within the green zone (subjected to the sustainable harvest rate), 1 area in the yellow zone (Lake Pierce, subjected to half quotas), and 1 area in the red zone (Lake Griffin where harvests have been stopped).

Program Statistics -- Participation

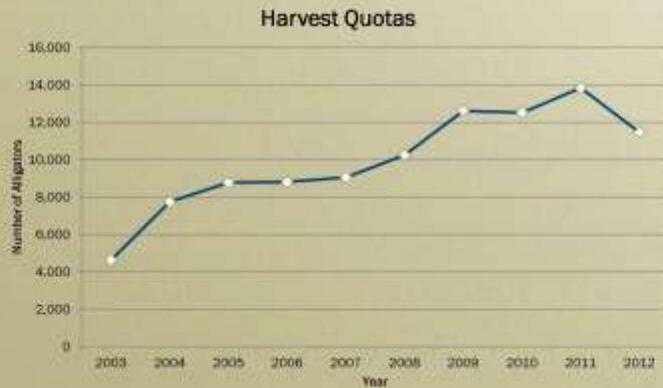
- Permits have “sold out” 3 out of last 4 years since implementing 3 phase permit process and individuals participating is on the rise



The demand for participation remains very high (usually nearly two times more applicants than permits available), and permits have sold out in 3 of the last 4 years. The number of persons participating is on the rise.

Program Statistics -- Quotas

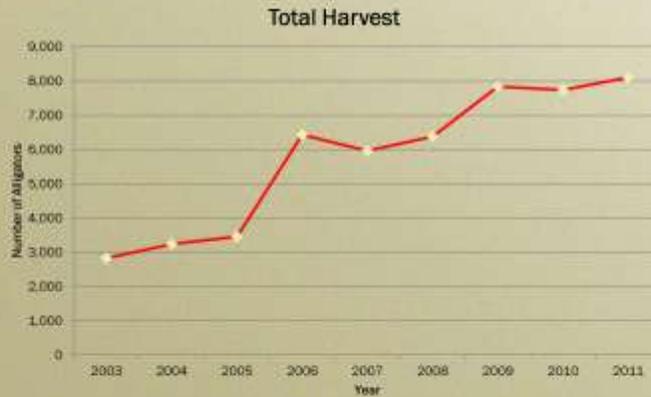
- Quotas trending down as population objectives are being achieved



Harvest quotas, while still at high levels, are tapering downwards slightly as populations are being brought down into the desired range.

Program Statistics -- Harvests

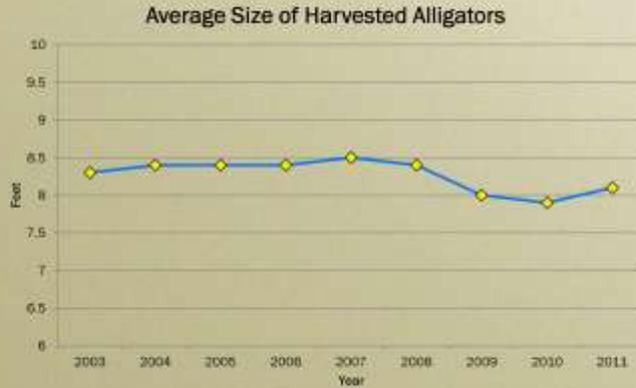
- Harvests still increasing



Total harvest is still increasing, and in 2011 a record number of alligators was taken under this program, 8,103 animals.

Program Statistics – Avg. Size

- Average size of alligators harvested relatively stable



The average size of harvested alligators has remained relatively stable, ranging from 7.9 feet to 8.5 feet, and above any biologically significant impact level.

Striving For Balance

- Alligator hunters
 - Providing harvest opportunity
- Eco-tour operators/conservationists
 - Recognizing values for viewing and role in the ecosystem
- Alligator farming industry
 - Ensuring harvests do not overly impact egg or hatchling collections
- General public
 - Addressing concerns about public safety threat



The Statewide Alligator Harvest Program element strives for balance among competing demands. Alligator hunters want as much hunting opportunity of the resource as possible. Eco-tour operators and other conservationists desire minimal impacts of harvests to ensure plentiful viewing opportunities of all sizes of alligators and to ensure that alligators play their role in wetland systems. The alligator farming industry desires no impacts to egg and hatchling collections caused by harvests, and many citizens in the general public want harvest strategies to address public safety concerns. Recently, eco-tour operators and wildlife watchers voiced concerns about reduced opportunity to view large alligators in some public water bodies. In response, staff analyzed the situations and concluded that in some areas where harvest pressure was especially high, alligators had become unusually wary. As a result, in 2012, staff made a small adjustment to quota-setting protocols for a number of areas, which led to reduced quotas, to improve wildlife viewing opportunities and hunter success.

Future

- Maintaining sustainable harvest principles
 - Preserving USFWS finding of “no detriment” important
- Increasing opportunities for 2013
 - Enhanced monitoring on certain units



Staff welcome discussions of possible adjustments to the Statewide Alligator Harvest Program, as directed by the Commission, to maintain sustainable use while balancing the competing demands on the resource.

Because the program necessarily employs CITES tags to validate the legal taking of alligators from the wild for possible use in the commercial marketplace, credibility is essential to maintaining the program’s finding of “no detriment” issued by the U.S. Fish and Wildlife Service. The American alligator is classified as a CITES Appendix II species, and consequently, management programs must provide adequate regulation and oversight to maintain the finding of “no detriment” and continuance of the species’ commercial use.

Additional funds have been appropriated that will provide for more rigorous monitoring of some specific harvest units, which should result in more alligator hunting opportunities by as much as 1007 permits, an approximately 18% increase, for 2013.

Possible Rule Changes

- Commissioner Input and Direction Appreciated
- Plans are to discuss various ideas in future such as:
 - replacing countywide permits with statewide permits
 - allowing the use of handguns to dispatch alligators
 - 24 hour hunting within season
- Staff plans to return with Alligator Management Program rule changes in June 2013



Staff seeks direction at this time from the Commissioners on the program and any proposed changes.

Staff will be vetting rule change proposals regarding some Alligator Management Program elements, and we plan on using this vetting process for ideas that might impact the Statewide Alligator Harvest Program. Some suggestions include: replacing countywide permits with statewide permits, allowing the use of handguns to dispatch captured alligators, 24 hour hunting, and other ideas that are intended to provide program participants greater flexibility and options.

The results of this vetting process will be presented at the June 2013 Commission meeting along with draft rule proposals.