

**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION  
WILD TURKEY PERMIT PROGRAM  
2008-2009 ANNUAL REPORT**

Abstract: This report documents activities of the Florida Fish and Wildlife Conservation Commission's (FWC) associated use of Wild Turkey Permit Funds during fiscal year 2008-2009. Permit fund revenues and expenditures totaled \$538,700.84 and \$471,098.70, respectively. Program activities encompassed management projects, turkey restoration monitoring, data analysis, technical assistance, and research and development. Funding for 39 management projects on 24 public wildlife management areas (WMAs) and one research project on two study sites was cost-shared with the Florida Chapter of the National Wild Turkey Federation (FCNWTF) for a total funding amount of \$263,903.90. Data management functions included the conducting and analysis of a spring turkey season harvest mail survey. Several recently restored wild turkey populations were monitored in Holmes County, Guana River WMA and Everglades National Park. Research continued on Three Lakes WMA and Longino Ranch to evaluate improvements to nesting and brood rearing habitat through the Upland Ecosystem Restoration Project (UERP). UERP is a landscape-scale habitat management effort designed to restore native uplands for the benefit of numerous wildlife species. A wild turkey biologist position funded cooperatively by the United States Forest Service (USFS), National Wild Turkey Federation (NWTF), and FWC was continued, and a new contract was executed to extend this position for three years. An individual was hired for the second cooperative wild turkey biologist position created during fiscal year 2007-08. This position is funded in cooperation with the Florida Division of Forestry (DOF), NWTF, and FWC to work primarily on State Forests. Additionally, the FWC's Wild Turkey Management Program (WTMP) staff and cooperative wild turkey biologists provided technical assistance to various organizations, private citizens, the media, and agency personnel, including site visits to 61 WMAs.

**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION  
WILD TURKEY PERMIT PROGRAM  
2008-2009 ANNUAL REPORT**

The public has a strong interest in wild turkey management and hunting. The Osceola subspecies, which occurs only in peninsular Florida, often draws particular interest. Because the wild turkey occupies a wide variety of habitat on private and public lands in all 67 counties of Florida, a comprehensive program, involving management, restoration, technical assistance, data analysis, and research, is required. The FWC's WTMP coordinates these activities with other FWC programs and personnel, other state and federal agencies, conservation groups, private landowners, and the general public. The FWC uses revenues primarily from the sale of turkey permits to accomplish this work.

Florida Statutes that became effective on June 1, 1986 requires all individuals hunting wild turkeys in Florida to purchase and possess either a turkey permit or other license that includes this permit fee, unless exempt from permit requirements. Between June 1, 1986 and June 30, 2003, turkey permits were \$5 for resident and non-resident turkey hunters. Beginning July 1, 2003, the cost for a non-resident turkey permit increased to \$100. In 2007, the Florida Legislature appropriated additional budget for wild turkey management based on increased revenues from the sale of non-resident turkey hunting permits. The focus for expenditure of these additional funds is on management with particular consideration for partnering and cost-sharing opportunities with other agencies or organizations. All funds generated from turkey permits and associated licenses that provide this hunting privilege are to expand ongoing wild turkey management and research without detracting from other fish and wildlife programs.

Pursuant to statutory requirements, this report documents the revenues and expenditures associated with the turkey permit fund for fiscal year 2008-2009 and summarizes activities conducted by the FWC through the use of these funds.

**TURKEY PERMIT REVENUES AND PROGRAM EXPENDITURES**

The Florida Wild Turkey Stamp Act requires that generated revenues be expended for wild turkey research and management, with no more than 5% of gross revenues to be expended for administrative costs. During fiscal year 2008-2009, 29,598 resident turkey permits (\$5 each), 428 five-year resident turkey permits (\$25 each) and 2,481 non-resident turkey permits (\$100 each) were sold. The revenues from these permit sales, plus those derived from the sale of other licenses that included turkey hunting privileges (e.g., sportsman's, gold sportsman's), totaled \$538,700.84. Total expenditures were \$471,098.70. Expenditures included \$117,015.40 for salaries and benefits and \$354,083.30 for management and research.

In addition to wild turkey permit funds, the FWC received \$50,239 in donated funds from the FCNWTF, a conservation organization dedicated to promoting wild turkey management, research, habitat protection, and hunting opportunities.

## **PROGRAM ACTIVITIES**

The FWC's WTMP is charged with coordinating wild turkey management and research activities across the state and providing a statewide approach to conservation and management of Florida's wild turkey population. The goal, recently developed as part of the wild turkey strategic management plan, is to "Ensure healthy and sustainable wild turkey populations throughout the state while providing and promoting compatible uses of the resource." Such a broad program requires involvement of WTMP personnel in activities generally encompassed within five categories: management projects, population restoration, data analysis, technical assistance, and project development and research.

### **Management Projects**

With continuing changes in the quality and quantity of wild turkey habitat in Florida, habitat management efforts continue to be vital to the FWC's objective of maintaining turkey distributions across the state. Management funded by turkey permit revenue has primarily focused on the state's 5.8 million-acre WMA system because of the management opportunities they present, the recreational public-use of these lands, and their associated funding needs. Management activities, such as mowing, prescribed burning, wildlife plantings, and the creation of wildlife openings, have enhanced habitat on these areas for wild turkeys and many other wildlife species.

During this past fiscal year, funds totaling \$241,963.90 were made available for 39 management projects on 24 WMAs (Table 1). Much of this management work has been accomplished through a cost-share program with the FCNWTF. In this regard, the FCNWTF donated \$45,851.00 to cost-share these WMA activities through their Super Fund program. The FWC provided \$196,112.90 of turkey permit funds as the FWC's cost-share match. In many cases, FWC or cooperating agencies provided equipment, personnel, and/or other funding for these WMA projects, resulting in a total cost-share program value of \$545,186.90. Moreover, volunteers from the FCNWTF and other organizations assisted FWC personnel with projects on several WMAs. Thus, these projects generally provide substantial benefits for wild turkeys and other wildlife at a considerable cost savings relative to their overall value.

### **Wild Turkey Restoration**

Florida essentially completed its turkey population restoration efforts in 1970; however, areas have been identified from time to time where "maintenance" restoration efforts have been warranted. In this regard, in 1997, the FWC determined that turkey populations were low or non-existent in Holmes County. As a result, FWC closed the entire county to all turkey hunting and stocked 121 turkeys at 8 release sites. The FWC continues to monitor Holmes County for evidence of turkey population growth and expansion using annual bait-station surveys. No turkeys or turkey sign were observed at any of 29 bait stations in 1997, prior to stocking. However, use of the 28 established stations (1 station was discontinued due to landowner change) by wild turkeys increased from 3 in 2000 to 16 bait-stations visited in 2007. No bait-station survey was completed in 2008, however, plans are to complete the survey in September 2009.

As a result of the documented increase and expansion of the turkey population in Holmes County, FWC opened a 3-day spring turkey season (1 bird bag limit) in 2006. All indications were that the 2006, 2007, and 2008 spring turkey hunts were quite successful, and a 16-day spring turkey season was implemented for the 2009 spring season. All reports indicate that the 2009 spring hunt was a success even though there was significant flooding in portions of Holmes County during the season. Fall turkey hunting remains closed in Holmes County.

The 10,000-acre Guana River WMA in northeastern Florida historically supported turkeys, but indiscriminant hunting and habitat degradation due to lack of prescribed fire, are believed to have resulted in the population decline. Improved habitat management since state acquisition of the property has restored wild turkey habitat values on this area. Natural and man-made barriers (i.e., urban development) isolated this WMA from other wild turkey populations. Therefore, the chances were low for turkeys to repopulate the area by moving in from surrounding property. Consequently, in December 2002, FWC biologists and volunteers from the FCNWTF trapped 35 wild turkeys (15 males and 20 females) from nearby private lands and released them on Guana River WMA. Camera surveys and routine observations by FWC personnel, and other reliable sources, indicated successful reproduction and population increase. As a result, a limited hunt (6 quota permits for each of 2, 3-day hunts) was implemented for the 2009 spring turkey season. Check-station data indicate 7 turkeys were harvested during 25 man-days of hunting effort, making it one of the most successful turkey hunts on public land for the 2009 spring season. Monitoring of this turkey population will continue so that staff can ensure that the reestablished hunting opportunities are consistent with population status.

A turkey restoration project began in 2000 for the Everglades National Park at the request of the National Park Service (NPS) and the FCNWTF. The original release of 29 turkeys (7 males and 22 females) resulted in documented reproduction, but monitoring by the NPS suggested that while these turkeys survived, numbers were not increasing as desired. A supplemental stocking occurred in January 2006, which involved the release of 31 turkeys (11 males and 20 females). A Memorandum of Agreement between the FWC and the NPS called for improved monitoring by the NPS of these recently released birds. Preliminary results have documented successful reproduction during the 2006, 2007, and 2008 nesting seasons, with efforts currently underway to document reproduction for the 2009 nesting season. Monitoring will continue through the summer of 2009.

### **Data Collection, Management, and Analysis**

One role of the WTMP is to conduct an annual mail survey of spring turkey hunters. Through this process, a sample of eligible turkey hunters is surveyed to generate estimates of turkey harvest, hunter effort, and hunter satisfaction (Table 2). The WTMP also collects and maintains harvest data from WMAs with check stations. These data are used to determine area-specific hunter success rates. Harvest data and hunter success rates can, in some instances, be useful as an

indicator of the status of an area's wild turkey population or the quality of its turkey hunting opportunities.

Additionally, the WTMP, with primary assistance from the FWC's Fish and Wildlife Research Institute (FWRI), analyzed data from an annual survey (1998-2006) of hunters participating in Special-Opportunity Turkey Hunts and prepared and submitted a manuscript for consideration of the upcoming Southeastern Association of Fish and Wildlife Agencies conference. These hunts were created in 1997 to provide quality hunting opportunities and increase interest in hunting in Florida, particularly on public land. The analysis investigated elements affecting permit application rates, current trends in and determinants of hunter satisfaction, and the relationship between hunter success and level of satisfaction. Taken as a whole, the goals established for the program were achieved during these first 10 years. The harvest index for this period averaged 8.7 hunter-days per turkey harvested, and the harvest was composed of greater than 89% adult gobblers. More than 90% of hunt participants were either satisfied or very satisfied with their experience. Hunter success rates for the 2009 Special-Opportunity Turkey Hunts are presented in Table 3.

### **Technical Assistance**

The WTMP, other FWC personnel, and the two cooperative wild turkey biologists are often called upon to provide information to internal agency personnel, personnel with other agencies, various organizations, private landowners, the media, and the general public concerning wild turkeys. Such assistance covers a wide range of topics including questions on wild turkey management, survey techniques, hunting information and opportunities, data collection, and research issues.

Agency Assistance -- FWC and other agency personnel frequently request assistance concerning turkey population surveys, turkey management on WMAs, and funding for management projects. During 2008-2009, the WTMP and the cooperative wild turkey biologists visited 61 WMAs to provide input on wild turkey management, participate in turkey surveys, or discuss funding opportunities for management projects. In addition, the WTMP continued to work cooperatively with the Northwest Florida Water Management District to maintain wildlife openings on the Choctawhatchee River WMA to provide positive public relation values and habitat benefits to the restored turkey population in Holmes County.

Public Assistance – The public frequently requests information on turkey hunting and management. The FWC usually handles such requests by phone, e-mail, or regular mail service to distribute appropriate information. Sometimes requests are best addressed through personal contact and on-site visits. This fiscal year, WTMP personnel and cooperative wild turkey biologists made 3 on-site visits to private landowners to discuss how to reduce nuisance or crop depredation problems caused by wild turkeys and 23 on-site visits to discuss habitat management options for benefiting wild turkeys. The FWC also provided information to the public through various news releases and media contacts.

The WTMP and wild turkey cooperative biologists gave presentations to the following groups: FWC's Northwest Region Terrestrial Habitat Conservation and Restoration staff at their annual fall meeting, private landowners at the FWC's Landowner Field Days in Crestview, Laurel Hill, Green Cove Springs, and Inverness, landowners and other agency staff at the Natural Resource Conservation Service (NRCS) Field Day in LaBelle, attendees of the Florida Vegetation Management Association Conference, attendees of the University of Florida Institute of Food and Agricultural Sciences (IFAS) youth field day, wild turkey management workshop, and Wildlife Expo, members of the Hendry County Audubon Chapter, DOF staff at DOF's Withlacoochee Training Center, members of the Avon Park Hunt Club, and attendees of multiple NWTF chapter events, youth events (JAKES), and Women in the Outdoors (WITO) events.

The FWC works closely with the NWTF throughout the year. This relationship was highlighted at the February 2007 FWC Commission meeting with the formal signing of a Memorandum of Understanding among the FWC, the NWTF, and the FCNWTF. This document provides support to continue the many mutually beneficial interests and activities of each party. Some of the related activities in which the FWC participated last year included attendance at several FCNWTF board meetings, the FCNWTF Superfund committee meeting, the annual FCNWTF Florida State Turkey Calling Contest, the annual NWTF Convention and associated NWTF Technical Committee meetings.

The WTMP administers a wild turkey registry program, which awards certificates to hunters harvesting an outstanding gobbler. Depending on the area where the turkey was harvested, either an Osceola (Florida) subspecies or the Eastern subspecies Outstanding Gobbler certificate is awarded for gobblers meeting minimum standards (at least an 11-inch beard and 1 ¼-inch spurs). A certificate is also awarded for youth hunters who harvest their first gobbler. Since the program's inception in 2001, 385 Outstanding Osceola, 108 Outstanding Eastern, and 209 First Gobbler certificates have been awarded.

### **Research and Development**

FWC has been conducting research to document wild turkey nesting and brood-rearing success and habitat-use associated with management treatments designed to improve "native range" vegetation in central and southern Florida. These management treatments, primarily prescribed burning, roller-chopping, or a combination of the two, are being applied at a landscape level as part of the Upland Ecosystem Restoration Project (UERP). The UERP is a large-scale initiative, involving numerous landowners and agencies, designed to improve upland habitat for northern bobwhites and other plant and wildlife species.

Currently, research is being conducted on a 15,000-acre segment of Three Lakes WMA in Osceola County and the 10,000 acre Longino Ranch in Sarasota County. FWC staff, University of Florida students, and volunteers captured and radio-tagged 39 female turkeys (20 on Longino Ranch; 19 on Three Lakes WMA) during January through early March 2009. Along with 2 hens on Longino Ranch and 7 hens on Three Lakes surviving from the previous year, these birds are being

monitored during the nesting and brood-rearing period to obtain habitat-use and home-range information. Additionally, researchers working in tandem are collecting simultaneous, close-range ( $\leq 250$  m) telemetry locations of non-incubating hens. Researchers then sample vegetation at these close-range locations and at all documented nest sites, as well as at an equal number of randomly selected comparison upland sites. Vegetation sampling includes measurements of basal area, tree stem counts, lateral cover, palmetto canopy cover, other ground cover, and shrub height. These measurements will be used to determine characteristics of upland vegetation associated with use by wild turkeys and then compared to management treatment responses. Portions of this research project were funded through the cost-share program with the FCNWTF in the amount of \$21,940. In this regard, the FCNWTF donated \$4,388 to cost-share this research project through their Super Fund program and the FWC provided \$17,522 of turkey permit funds as the FWC's cost-share match. Cost-share funds were primarily used for seasonal employees and operating expenses.

In 1973 and 1977, the Game and Fresh Water Fish Commission (now the Fish and Wildlife Conservation Commission) conducted statewide assessments of wild turkey distributions. The WTMP completed a similar survey during 2001. The WTMP is overseeing additional analysis of this distribution and relative abundance data, specifically, using modeling to relate turkey population distributions and relative abundance to vegetative communities, land ownership, harvest records, and other suitable information. When these models are completed, the WTMP will be better able to focus management on particular areas of the state that have suitable turkey habitat but low turkey populations.

## **PROGRAM DIRECTION**

To further expand wild turkey management efforts throughout Florida, a cooperative wild turkey biologist position was established through a 3-year partnership contract beginning in 2007 with the FWC, USFS, and NWTF and was recently extended for an additional three year period. A similar 3-year partnership contract was executed in 2008 between the FWC, DOF, and NWTF for a second cooperative wild turkey biologist, and an individual was hired for this position in September 2008. The NWTF serves as the employer for both of these positions, but the partners coordinate closely on the development of an annual work plan and provide specific oversight for accomplishment of defined activities.

FWC's Wild Turkey Standing Team is composed of staff from several organizational units (i.e., Hunting and Game Management, Law Enforcement, FWRI, Habitat and Species Conservation, and Community Relations) and includes 2 associate members from the NWTF. This team provides input and assistance to ongoing program activities and emerging issues such that broad-based viewpoints from within the agency are represented and specific tasks are assigned as appropriate. In this regard, the team completed a 10-year wild turkey strategic management plan during fiscal year 2007-08, and efforts are currently underway to implement this plan based on priority tasks and the included implementation schedule.

The FWC embraces the goal of the wild turkey strategic plan, which is to “Ensure healthy and sustainable wild turkey populations throughout the state while providing and promoting compatible uses of the resource.” Moreover, the WTMP will continue to provide excellent customer service, increase positive contacts with conservation organizations, develop additional partnerships, and provide quality hunting areas, all of which benefit wild turkeys in the State of Florida.



Table 1. Wildlife Management Area projects funded through the FWC/NWTF cost-share program during fiscal year 2008-2009.

<b>Location</b>	<b>Project Description</b>	<b>FWC/NWTF Cost-share Funding</b>	<b>Other Cooperator Funding</b>
Big Bend WMA	Roadside / Food-plot Day-lighting	\$10,000	\$41,400
Apalachicola River WEA	Tree Planting / Wildlife Openings	\$10,000	\$15,000
J.W. Corbett WMA	Prescribed Burning	\$9,990	\$23,336
J.W. Corbett WMA	Tree Planting / Habitat Restoration	\$6,000	\$5,750
J.W. Corbett WMA	Wildlife Openings	\$5,250	\$11,000
Green Swamp West Unit	Turkey Infrared Camera Survey	\$1,100	\$2,500
Fisheating Creek WMA	Mowing / Prescribed Burning	\$10,000	\$13,160
Apalachicola River WEA	Equipment Purchase	\$10,000	\$15,000
Blackwater SF/WMA	Wildlife Plantings	\$10,000	\$38,825
Chassowitzka WMA	Roller Chopping	\$10,000	\$10,000
Pine Log SF/WMA	Wildlife Plantings	\$9,975	\$18,786
Blackwater - Hutton Unit	Wildlife Plantings	\$10,000	\$28,270
Green Swamp WMA	Roller Chopping	\$10,000	\$10,000
Jennings SF/WMA	Prescribed Burning	\$3,836	\$5,636
Jones/Hungryland WEA	Tree Planting	\$5,000	\$2,500
Fisheating Creek WMA	Wildlife Plantings	\$2,499	\$981
Osceola WMA	Wildlife Plantings	\$15,100	\$12,000
Camp Blanding WMA	Wildlife Plantings	\$3,600	\$2,500
Big Bend WMA	Wildlife Plantings	\$4,000	\$2,500
J.W. Corbett WMA	Root-raking / Site preparation	\$6,000	\$0
Apalachicola WMA	Wildlife Plantings - gas line	\$10,000	\$7,000
Box R WMA	Wildlife Plantings	\$3,870	\$4,000
OK Slough WMA	Infrared Cameras	\$1,889	\$2,000
Apalachicola WMA	Wildlife Plantings - power line	\$10,000	\$5,640
Tates Hell SF/WMA	Wildlife Plantings	\$7,530	\$5,000
Chassowitzka WMA	Mowing	\$7,000	\$3,000
Green Swamp West Unit	Mowing	\$4,000	\$2,000
Hilochee WMA	Mowing	\$10,000	\$5,000
Blackwater SF/WMA	Wildlife Plantings	\$1,975	\$839
Twin Rivers SF/WMA	Wildlife Plantings	\$3,500	\$2,000
Raiford WMA	3rd Row Mowing	\$10,000	\$2,000
Camp Blanding WMA	Turkey Survey	\$1,100	\$500
Apalachicola - Bradwell Unit	Mowing	\$2,350	\$1,100
Twin Rivers SF/WMA	3rd Row Mowing	\$10,000	\$2,000
Raiford WMA	Wildlife Plantings	\$3,000	\$2,000
Seminole Forest	Wildlife Plantings	\$900	\$0
Richloam WMA	Wildlife Plantings	\$2,500	\$0
<b>TOTAL</b>		<b>\$241,964</b>	<b>\$303,223</b>
<b>GRAND TOTAL</b>			<b>\$545,187</b>

Table 2. Spring turkey season harvest estimates and 95% confidence limits for available mail survey data analyzed since 1988.

Year	Estimated Harvest	95% Confidence Limits
1988	15,774	12,249 - 19,298
1989	17,245	15,518 - 18,972
1990	16,173	14,463 - 17,883
1991	15,675	11,647 - 19,701
1992	10,897	9,786 - 12,007
1993	12,569	10,938 - 14,201
1994	14,237	12,487 - 15,988
1995 <sup>a</sup>	na	na
1996	15,067	13,624 - 16,510
1997	19,358	18,185 - 20,531
1998	23,419	21,546 - 25,291
1999	21,613	19,687 - 23,538
2000 <sup>b</sup>	15,446	14,749 - 16,144
2001	14,214	13,571 - 14,856
2002	15,495	14,814 - 16,176
2003	15,509	14,752 - 16,265
2004	17,241	16,529 - 17,953
2005	25,057	23,521 - 26,593
2006	21,507	20,366 - 22,648
2007	24,353	23,391 - 25,315
2008	27,296	25,930 - 28,662
2009 <sup>c</sup>		

<sup>a</sup> Mail survey was not conducted.

<sup>b</sup> The survey instrument was substantially changed, thus the harvest estimate is not readily comparable to previous years. Additionally, inconsistencies with the license database have likely contributed to the observed fluctuations in estimates.

<sup>c</sup> Data not yet available.

Table 3. Harvest, hunter pressure (total man-days of effort), and hunter success (number of days of effort per turkey harvested) for Special-Opportunity Turkey Hunts for the 2009 spring turkey season.

Wildlife Management Area	Harvest	Hunter Pressure	Hunter Success
Ft. Drum WMA	4	15	3.8
Fisheating Creek WMA	12	47	3.9
Dexter/Mary Farms WMA	11	47	4.3
Triple N Ranch WMA	18	109	6.1
Lake Panasoffkee WMA	12	73	6.1
Green Swamp West WMA	28	297	10.6
Homosassa WMA	1	25	25.0
<b>Overall</b>	<b>86</b>	<b>613</b>	<b>7.1</b>