FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION WILD TURKEY PERMIT PROGRAM 2010-2011 ANNUAL REPORT

EXECUTIVE SUMMARY

This report documents activities of the Florida Fish and Wildlife Conservation Commission's (FWC) use of Wild Turkey Permit Funds during fiscal year 2010-2011. Permit fund revenues and expenditures totaled \$768,294 and \$467,410, respectively. Program activities encompassed management projects, turkey restoration monitoring, data analysis, technical assistance, and research and development. Funding for 44 management projects on 28 public wildlife management areas (WMAs) and a statewide wild turkey population assessment was cost-shared with the Florida Chapter of the National Wild Turkey Federation (FCNWTF) for a total funding amount of \$250,207. When considering other cooperator dollars and in-kind services, the total FWC / FCNWTF cost-share program was valued at \$636,370. Data management functions included the conducting and analysis of a spring turkey season harvest mail survey and a survey to determine hunter opinions regarding a rule request to allow dogs during fall turkey season on private lands. Several recently restored wild turkey populations were monitored in Holmes County, Guana River WMA, and Everglades National Park. Research concluded 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 the contract for this position is effective through fiscal year 2011-12. A second wild turkey biologist position cooperatively funded by Florida Forestry Service, NWTF, and FWC to work primarily on State Forests was continued as well with a new contract executed last year to extend this position through May 2014. Additionally, the FWC's Wild Turkey Management Program (WTMP) staff and cooperative wild turkey biologists provided technical assistance to various organizations, private citizens, and the media, including site visits to 41 WMAs, State forests, national forests, national wildlife refuges, and military installations.

INTRODUCTION

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.

Established in 1986, Florida law requires all individuals hunting wild turkeys in Florida to purchase and possess a turkey permit, 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. Beginning July 1, 2010, the Florida Legislature increased resident and non-resident turkey permit fees to \$10 and \$125 respectively. The law stipulates that revenue generated from the sale of wild turkey permits or that pro rata portion of any license that includes turkey hunting privileges shall be used for the conservation, research, and management of wild turkeys or to promote the cultural heritage of hunting. The FWC is authorized to expend up to ten percent of permit revenues to promote hunting and sport fishing activities with an emphasis on youth participation (s. 379.354, Florida Statutes).

Pursuant to statutory requirements, this report documents the revenues and expenditures associated with the turkey permit fund for fiscal year 2010-2011 and summarizes activities conducted by the FWC through the use of these funds.

TURKEY PERMIT REVENUES AND PROGRAM EXPENDITURES

During fiscal year 2010-2011, 24,819 resident turkey permits (\$10 each), 241 five-year resident turkey permits (\$50 each) and 2,237 non-resident turkey permits (\$125 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., annual sportsman's, gold sportsman's, etc.), totaled \$768,294, of which \$18,818 of those revenues were set aside to promote youth hunting programs in Florida (e.g., Beau Turner Youth Conservation Center in Jefferson County, Florida Youth Hunting Program, Ocala Youth Conservation Camp, etc.). Total expenditures for conservation, research, and management were \$467,410. Expenditures included \$91,006 for salaries and benefits and \$376,404 for conservation, research, and management activities. In addition to wild turkey permit funds, the FWC received \$23,220 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, developed as part of the 10 year (i.e., 2008-2018) 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 research and development.

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 wildlife management area (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, native ground cover restoration, exotic species control, 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 \$240,207 were made available for 44 management projects on 28 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 \$22,221 during fiscal year 2010-2011 to cost-share these WMA activities through their Super Fund program. The FWC provided \$207,851 of turkey permit funds as the FWC's cost-share funding. The remaining \$10,135 of funding provided was unspent FCNWTF Super Fund dollars donated during fiscal year 2009-2010. In many cases, FWC or cooperating agencies provided equipment, personnel, and/or other funding for these WMA projects with a value of \$366,163, resulting in a total WMA cost-share program value of \$606,370. 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 monitored Holmes County for evidence of turkey population growth and expansion using annual bait-station surveys from 2000-2007 and with further expansion of the population began conducting these surveys biennially thereafter (no survey conducted in 2008 or 2010). The WTMP is planning to conduct a bait station survey during September 2011.

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 - 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 - 2011 spring hunts were a success under the 16-day season. Fall turkey hunting remains closed in Holmes County. Within the next year, FWC plans to further evaluate increasing turkey hunting opportunity in Holmes County based on the success of the hunts, results of the 2011 bait-station survey, and stakeholder input.

The 10,000-acre Guana River WMA in St. Johns County 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 spring turkey hunt (6 quota permits for each of two 3-day hunts) was implemented for the 2009 spring turkey season and has continued to date. Check-station data indicate 5 turkeys were harvested during 31 man-days of hunting effort during the 2011 spring turkey season, making it a very successful turkey hunt. 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 (MOA) between the FWC and the NPS called for improved monitoring by the NPS of these recently released birds. Preliminary results documented successful reproduction during the 2006 – 2009 nesting seasons. While the MOA only included monitoring through the 2009 nesting season, FWC is currently working with the NPS to continue monitoring efforts.

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 random sample of licensed turkey hunters is surveyed to generate estimates of turkey harvest, hunter effort, and hunter satisfaction. For the 2010 spring turkey season, 15,400 survey forms were mailed (21% of licensed turkey hunters) and included two follow-up mailings to those who did not respond to previous mailings. A total of 4,643 valid responses were received (30.4 percent response rate). Harvest estimates derived from this survey between 1988 and 2010 are summarized in Table 2.

The 2011 spring turkey season mail survey was mailed to 16,000 license holders (22% of licensed turkey hunters) during June 2011, with the third mailing scheduled to occur sometime in September 2011. In addition, the WTMP is currently evaluating an email and internet survey method that will allow for reduced costs. In this regard, survey invitations were sent via email to 10,000 randomly selected licensed turkey hunters that were not selected to receive a postcard survey. Email invitations included a link to an internet based survey to collect the required information. The WTMP will compare data collected through the online method to

data from the postcard survey to ensure results are comparable such that long-term trends are not compromised. If the online method is determined to be comparable, it would significantly decrease costs associated with printing, postage, data entry, and staff time to administer future surveys.

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 and/or the quality of its turkey hunting opportunities. Hunter success rates for the 2011 Special-Opportunity Turkey Hunts are presented in Table 3.

The WTMP conducted a survey to determine hunter opinions regarding a rule request to allow dogs during fall turkey season on private lands, which is currently prohibited in Florida. The use of dogs for fall turkey hunting has a long tradition in the northeast United States, and several southeastern states have recently allowed the use of dogs to increase fall turkey hunting opportunity. In addition to evaluating the potential biological impacts, the FWC believes the opinions of Florida's hunters are a critical component in evaluating rule requests. Because fall turkey season in Florida is concurrent with other hunting seasons (e.g., deer, small game, etc.) and the use of dogs has potential to disturb other hunters, the opinions of both turkey and non-turkey hunters were solicited. The WTMP sent surveys to 7,000 licensed turkey hunters and 7,000 licensed hunters who did not have turkey hunting privileges for the previous three years. One half of the surveys were sent via a postcard survey form and the other half were sent via email with a link to an internet survey form. Data from this survey is currently being analyzed and the results are not yet available.

Technical Assistance

The WTMP, other FWC personnel, and the two cooperative wild turkey biologists are often called upon to provide information to 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 history and management, survey techniques, nuisance and crop depredation complaints, 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 other public hunting lands, and funding for management projects. During 2010-2011, the WTMP and the cooperative wild turkey biologists visited 41 WMAs, State forests, national forests, national wildlife refuges, and military installations to provide input on wild turkey management, hunting regulations, 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 in Holmes Co. to provide positive public relation values and improve turkey habitat.

<u>Public Assistance</u> -- The public frequently requests information on turkey hunting and management. The FWC usually handles such requests by phone, email, 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 two on-site visits to private landowners to discuss techniques to reduce nuisance or crop depredation problems caused by wild turkeys and 22 on-site visits to discuss habitat management options for wild turkeys. The FWC also provided information to the public through various news releases, magazine articles, brochures, and media contacts both internally and through media outlets provided by the NWTF.

The WTMP and wild turkey cooperative biologists gave presentations, staffed displays and interacted with attendees at the following events: Florida/Georgia Game Series – White-tailed Deer Management workshop in Perry; Wild Turkey Workshop at the Bradford County Sportsman Farm; Financing Conservation on Private Lands workshop in Tallahassee; Balancing Timber and Wildlife for Upland Game in Gadsden County Prescribed Fire Recommendations for Wild Turkey at the Prescribed Fire for Wildlife Training Course at Cecil Field in Duval County; National Public Lands Day event at Joe Budd WMA in Gadsden County; FWC/University of Florida Institute of Food and Agricultural Sciences (IFAS)/NWTF Landowner Field Days in Crestview, Quincy, Teneroc Fish Management Area in Polk Co., and Withlacoochee State Forest near Brooksville; landowners and other agency staff at IFAS Stewardship workshops in Lake, Okaloosa, Santa Rosa and Alachua counties; More Kids in the Woods Grant work at the Beau Turner Youth Conservation Center in Jefferson County; Wildlife Heritage and Outdoor Festival at the St. Marks National Wildlife Refuge in Wakulla County; Tall Timbers Youth Hunting Field Day in Leon County;, Florida/Georgia Invitational Turkey Hunt in Jefferson County; Champion Elementary and Stetson Baptist schools in Volusia County; Creating the Next Generation That Cares event at the Florida State Capitol; Big Buck Expo in Lakeland; UF Milton Wildlife Expo in Santa Rosa County; Turkey Program at the Chinsegut Nature Center in Hernando County; FWC "Project Wild" Educator workshop at the Ocala Youth Conservation Camp; Open House at the Beau Turner Youth Conservation Center; Gander Mountain Wild Turkey Workshop in Jacksonville; Florida Chapter of the Wildlife Society – Spring Conference in Safety Harbor, Fall and Spring Hunting Classics at Bass Pro Shops in Orlando; Alabama/Florida Gamebird Program in Geneva, AL; Florida/Georgia Game Series -Vegetation Management for Upland Wildlife workshop in Baker Co. GA; several state agency meetings including the Florida Forest Service, St. John's River Water Management District, South Florida Water Management District and Southwest Florida Water Management District; several federal agency meetings including the USFS, United States Fish and Wildlife Service (USFWS), and the Natural Resources Conservation Service (NRCS); multiple State and local NWTF chapter events, youth events (JAKES), disabled (Wheelin' Sportsmen), and Women in the Outdoors (WITO) events; and various presentations to civic organizations.

The FWC works closely with the NWTF throughout the year. A 2007 Memorandum of Understanding between the FWC, the NWTF, and the FCNWTF provides support to continue the many mutually beneficial interests and activities of each party. The WTMP currently serves on the Technical Committee of the NWTF

and serves as Technical Advisor to the FCNWTF Board of Directors. Some of the related activities in which the FWC participated last year included attendance of three FCNWTF board meetings and the FCNWTF superfund committee meeting.

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, 457 Outstanding Osceola, 129 Outstanding Eastern, and 283 First Gobbler certificates have been awarded. Of the thirty-three First Gobbler certificates awarded last year, sixteen were awarded to youth harvesting their first turkey during the inaugural youth turkey hunt weekend that was offered for the 2011 spring turkey season on private lands.

At the February 2010 Commission meeting, a youth turkey season was approved beginning spring of 2011, and occurs the weekend prior to the regular spring turkey season statewide on private lands. These hunts are designed for youth under 16 years of age that are supervised by an adult 18 years of age or older. After the statewide youth turkey season was approved, WTMP staff worked with other FWC staff to identify public lands that could support a quality turkey hunting experience. FWC staff then sought support of WMA cooperators or landowners for offering additional youth turkey hunting opportunities. Rule proposals to offer these youth turkey hunts on 78 WMAs were approved at the February 2011 Commission meeting and will be offered for the 2012 spring turkey season. The FWC received considerable positive feedback concerning the 2011 youth turkey hunt and is hopeful the additional public land youth turkey hunting opportunities being offered for 2012 will increase the amount of positive experiences for Florida's youth.

Research and Development

FWC concluded research on wild turkey survival, reproductive success, and habitat-use associated with management treatments (i.e. prescribed fire, roller-chopping, and timber thinning) designed to restore "native range" vegetation in central and southern Florida. To determine the effects of upland habitat restoration on wild turkeys, research was performed on the portion of Three Lakes WMA (2007 – 2010) enrolled in the Upland Ecosystem Restoration Project (UERP) in Osceola County (24,700 acres) and on Longino Ranch (2008 – 2010; 8,000 acres), a private ranch in Sarasota County managed for multiple objectives, which included upland habitat restoration. UERP is a large-scale initiative involving numerous landowners and agencies designed primarily to improve habitat for northern bobwhite quail and to restore native plant and wildlife communities through the use of frequent prescribed fire at the landscape scale.

FWC staff, University of Florida (UF) students, and volunteers captured and radio-tagged a total of 157 female turkeys (89 on Three Lakes WMA; 68 on Longino Ranch) during January to early March over the course of this study. Hens were located during the nesting and brood-rearing period to obtain habitat-use and homerange information. To determine microhabitat characteristics at nesting and turkey-

use sites, researchers sampled vegetation at nest sites and at close-range telemetry locations of non-incubating hens. Researchers sampled vegetation at these locations and at randomly selected comparison sites within the same Florida Natural Areas Inventory habitat type at each location. These measurements were used to determine vegetation characteristics of upland areas used by wild turkeys and compared to the vegetation characteristics of areas where management actions occurred. Overall, the results of this research suggests that the greatest benefit for improving turkey habitat and nest success results from creating areas with a mixture of habitats (types and ages/time since treatment) that provide clumps of vegetation and edges for nesting and more open areas for foraging and brood-rearing that are in close proximity to one another.

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, with a similar survey completed by the WTMP during 2001. To further evaluate recent trends in the distribution and abundance of the statewide turkey population, the WTMP worked closely with Geographic Information System (GIS) specialists at Michigan State University to develop an internet mapping system to conduct a similar survey during 2011 that resulted in significantly reduced costs to the State as compared to previous survey methods. The WTMP then worked with staff from the FWC, Florida Forestry Service, Florida Department of Environmental Protection, each of the five Water Management Districts, IFAS, USFS, USFWS, United States Department of Agriculture - Wildlife Services and NRCS, Department of Defense, industrial timber companies, FCNWTF, Florida Chapter of The Wildlife Society, and antlerless deer permit holders to assist in completing the wild turkey population assessment. The 2011 wild turkey assessment was accomplished through the cost-share program with the FCNWTF. The FCNWTF donated \$1,000 for this assessment through their Super Fund program and the FWC provided \$8,000 of turkey permit funds. When the 2011 assessment is complete, the WTMP will oversee additional analysis of this data, specifically, using geographic modeling to relate current turkey population distributions and relative abundance to previous assessments, vegetative communities, land ownership, harvest records, and other pertinent 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.

Over the last year, the WTMP has worked with FWC's Wild Turkey Standing Team and Florida NWTF biologists to develop and prioritize wild turkey research needs required to address identified turkey management issues in Florida. This effort will allow the WTMP to better focus on the highest priority turkey research needs as funds become available for conducting research, for partnering with other research agencies and organizations, and/or for soliciting outside research grant funding.

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; the contract for that position is effective through fiscal year 2011-2012. Due to the success of this initial cooperative position, a second 3-year partnership contract was executed in 2008 between the FWC, DOF, and NWTF for a second cooperative wild turkey biologist to further promote and achieve the mission of the WTMP; the contract for this position was recently extended through fiscal year 2013-2014. The NWTF serves as the employer for both of these positions and provides the necessary funding to complete work on the ground; however, the multiple partners coordinate closely on the development of an annual work plan and provide specific oversight for accomplishment of defined activities during Steering Committee meetings held biannually. The WTMP works to incorporate priority items identified in Florida's 10-year strategic plan for wild turkey management into the annual work plans for each of these positions.

As mentioned earlier, turkey permit fees were increased effective July 1, 2010. These fee increases increased turkey permit revenues by more than \$250,000 based on fiscal year 2010-2011 license sale totals. Over the next year, WTMP staff will be working with FWC's Wild Turkey Standing Team and stakeholders to develop a plan for these additional revenues to best meet the needs of the wild turkey resource in Florida. In addition, FWC staff has developed a legislative budget request for consideration by the 2012 Florida Legislature to increase spending authority for the WTMP by \$200,000 such that these increased revenues can be utilized to further the conservation, research, and management of the wild turkey resource as required by s. 379.354, Florida Statutes.

The FWC hosted the 37th annual Southeastern Wild Turkey Working Group meeting June 6 – 8, 2011, at Camp Weed near Live Oak. This working group is associated with the Southeastern Association of Fish and Wildlife Agencies and includes representatives from fifteen state wildlife agencies. Annual meeting locations rotate between the member states, and Florida was selected to host the 2011 meeting. This working group is primarily charged with sharing information concerning wild turkeys between states and addressing regional wild turkey conservation needs. At this year's meeting, the group continued to address the potential decline of wild turkey populations over a large geographic area of the southeastern U.S. All meeting costs were paid through donations by FCNWTF (\$1,500), NWTF (\$500), and registration fees collected from attendees, with the FCNWTF handling all financial transactions.

FWC's Wild Turkey Standing Team is composed of staff from several organizational units (i.e., Hunting and Game Management, Law Enforcement, Fish and Wildlife Research Institute, Habitat and Species Conservation, and Community Relations) and includes two associate members from the NWTF. This team provides input and assistance to ongoing program activities and emerging issues and specific tasks are assigned as appropriate. In this regard, the team completed a 10-year strategic plan for wild turkey management during fiscal year 2007-08, and efforts are ongoing 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 and the citizens of the State of Florida.

Table 1. Wildlife Management Area projects funded through the FWC/NWTF cost-share program during fiscal year 2010-2011. (WMA = Wildlife Management Area, WEA = Wildlife and Environmental Area, SF = State Forest, NF = National Forest)

		FWC/NWTF	
		Cost-share	Other Cooperator
Location	Project Description	Funding	Funding
J.W. Corbett WMA	Prescribed Burning	\$6,540	\$23,336
Chassahowitzka WMA	Mowing & Roller Chopping	\$7,000	\$15,000
Big Bend WMA	Hammock Restoration	\$7,000	\$21,000
J.W. Corbett WMA	Wildlife Plantings	\$6,438	\$9,000
Fisheating Creek WMA	Exotic Plant Control	\$7,000	\$17,240
Green Swamp West Unit	Turkey Survey	\$693	\$2,500
J.W. Corbett WMA	Exotic Plant Control	\$7,000	\$6,000
Hungryland WEA	Prescribed Burning	\$6,540	\$23,336
Hilochee WMA & Osprey Unit	Shredding	\$7,000	\$7,000
Camp Blanding WMA	Prescribed Burning	\$5,625	\$7,300
Apalachicola River WEA	Wildlife Planting	\$7,000	\$15,000
Pine Log WMA/SF	Wildlife Planting	\$7,000	\$19,500
Blackwater WMA/SF	Wildlife Planting	\$7,000	\$38,255
Blackwater WMA/SF - Hutton Unit	Wildlife Planting	\$7,000	\$27,270
Apalachee WMA	Wildlife Planting	\$3,345	\$26,000
Apalachicola WMA/NF - Bradwell Unit	Mowing	\$2,350	\$4,100
Hungryland WEA	Mechanical Treatment	\$7,000	\$3,000
Fisheating Creek WMA	Wildlife Planting	\$2,499	\$981
Big Bend WMA	Wildlife Planting	\$2,500	\$650
Point Washington WMA/SF	Wildlife Planting	\$7,000	\$18,500
Apalachicola WMA/NF	Wildlife Planting	\$7,000	\$9,000
Dinner Island WMA	Native Grass/Forb Planting	\$7,000	\$4,105
Hilochee WMA & Osprey Unit	Mowing	\$7,000	\$5,000
Tate's Hell WMA/SF	Wildlife Planting	\$7,000	\$18,000
Box R WMA	Wildlife Planting	\$3,870	\$4,000
OK Slough WMA/SF	Herbicide and Native Plants	\$13,000	\$15,070
Green Swamp West Unit	Mowing	\$3,000	\$2,000
Osceola WMA/NF	Wildlife Planting	\$15,000	\$1,500
Blackwater WMA/SF	Wildlife Planting	\$1,733	\$763
Spirit of the Wild WMA	Native Vegetation Planting	\$7,000	\$6,807
Jennings Forest WMA/SF	Herbicide	\$7,000	\$500
Green Swamp WMA	Mowing	\$3,000	\$2,000
Twin Rivers WMA/SF	Wildlife Planting	\$4,102	\$1,500
Big Bend WMA	Equipment - Rotovator	\$4,300	\$650
Camp Blanding WMA	Wildlife Planting	\$3,600	\$500
Camp Blanding WMA	Turkey Survey	\$1,500	\$0
Big Shoals WMA	Wildlife Planting	\$1,387	\$800
Raiford WMA	Wildlife Planting	\$2,062	\$500
Big Bend WMA	Rx Fire - Pyro-shot and ignition spheres	\$3,200	\$5,500
Big Bend WMA	Boom Sprayer	\$924	\$0
Big Bend WMA	Tree Planting	\$6,000	\$0
JW Corbett WMA	Shredding of dense palmetto	\$8,000	\$3,000
Hungryland WEA	Shredding of dense palmetto	\$8,000	\$3,000
	TOTAL	\$240.207	\$366,163

TOTAL \$240,207 \$366,163 GRAND TOTAL \$606,370

Table 2. Spring turkey season harvest estimates and 95% confidence limits from mail survey.

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^{a}	-	·
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
$2000^{\rm b}$	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
$2005^{\rm c}$	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	25,859	24,705 - 27,014
2010	23,821	22,578 - 25,065
2011^{d}	-	<u>-</u>

^a Mail survey was not conducted.

 $^{^{\}rm b}$ The survey instrument was substantially changed, thus the harvest estimate is not readily comparable to previous years.

^c Survey conducted through Florida State University using scan forms that resulted in data interpretation errors; results may not be comparable to other years.

^d Data not yet available.

Table 3. Harvest, hunter pressure (hunter-days), and hunter success (number of days of hunting effort per turkey harvested) for Special-Opportunity Turkey Hunts for the 2011 spring turkey season.

Wildlife Management Area	Harvest	Hunter Pressure	Hunter Success
Dexter/Mary Farms WMA	19	124	6.5
Ft. Drum WMA	5	40	8.0
Fisheating Creek WMA	14	71	5.1
Lake Panasoffkee WMA	9	86	9.6
Triple N Ranch WMA	21	77	3.7
Homosassa WMA	6	31	5.2
Green Swamp West WMA	37	288	7.8
Overall	111	717	6.5