FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION WILD TURKEY PERMIT PROGRAM 2011-2012 ANNUAL REPORT

EXECUTIVE SUMMARY

This report documents the Florida Fish and Wildlife Conservation Commission's (FWC) use of Wild Turkey Permit funds during Fiscal Year 2011-2012. Permit fund revenues and expenditures totaled \$774,520 and \$407,194, respectively. Program activities encompassed management projects, turkey restoration monitoring, data analysis, technical assistance, and research and development. Funds totaling \$247,319 were provided for 46 management projects on 30 public wildlife management areas (WMAs). The cost-share program resulted in \$637,420 of value when considering other cooperator dollars and inkind services. Staff used mail surveys of hunters to measure spring turkey season harvest and to determine hunter opinions regarding a rule request to allow dogs to be used to take turkeys on private lands during the fall turkey hunting season. The spring mail survey also determined that an estimated 8,307 youth hunters participated in an inaugural Youth Turkey Season. Several recently restored wild turkey populations were monitored in Holmes County, Guana River WMA, and Everglades National Park. FWC staff continued the analysis of the 2011 statewide assessment of wild turkey distributions. The United States Forest Service, the National Wild Turkey Federation, and FWC continued to cooperatively fund a wild turkey biologist position, and the contract for this position was renewed through Fiscal Year 2014-2015. Cooperative funding also continued for a wild turkey biologist to work primarily on state forests. Funding partners included the Florida Forest Service, the National Wild Turkey Federation, and FWC. The contract for this position is effective through May 2014. Additionally, 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 39 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 of Florida's 67 counties, a comprehensive program, involving management, restoration, technical assistance, data analysis, and research, is required. 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. FWC uses revenues primarily from the sale of turkey permits to accomplish this work.

Established in 1986, section 379.354(8)(b), Florida Statutes 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 Florida Legislature increased the cost for a non-resident turkey permit to \$100, and beginning July 1, 2010, the resident and non-resident turkey permit fees increased to \$10 and \$125 respectively. In 2007 and again this past year, the Florida Legislature appropriated additional funds for wild turkey management based on increased revenues from the sale of

turkey hunting permits. 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. 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 requirements in section 379.354(8), Florida Statute, this report documents the revenues and expenditures associated with the turkey permit fund for Fiscal Year 2011-2012 and summarizes activities conducted by FWC through the use of these funds.

TURKEY PERMIT REVENUES AND PROGRAM EXPENDITURES

During Fiscal Year 2011-2012, 23,310 one-year resident turkey permits (\$10 each), 240 five-year resident turkey permits (\$50 each) and 2,194 one-year 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 \$774,520, of which \$27,328 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 \$407,194.

PROGRAM ACTIVITIES

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 (http://myfwc.com/media/460317/Turkey_StrategicPlan.pdf), 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 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 it presents, 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 \$247,319 were made available for 46 management projects on 30 WMAs (Table 1). Historically, much of this management work has been accomplished through a cost-share program with the Florida Chapter of the

National Wild Turkey Federation. However, this fiscal year the Florida Chapter of the National Wild Turkey Federation was unable to contribute financially to cost-share these WMA activities. Consequently, the funding provided through the WTMP for these management projects was provided solely from turkey permit funds. In many cases, though, FWC or cooperating agencies provided equipment, personnel, or other funding for these projects. These matching contributions had a total value of \$390,101, resulting in a total WMA cost-share program value of \$637,420. Moreover, volunteers from the Florida Chapter of the National Wild Turkey Federation 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

Widespread efforts to restore wild turkey populations in all suitable areas of Florida were essentially completed in 1970; however, areas have been identified from time to time where smaller-scale maintenance restoration efforts have been warranted. For example, in 1997, 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. FWC monitored Holmes County for evidence of turkey population growth and expansion using bait-station surveys conducted annually from 2000 through 2007 and, as satisfactory expansion of the population occurred, biennially thereafter (no survey was conducted in 2008 or 2010). During the 2011 survey, FWC documented turkey presence at 15 of 28 stations. Of those sites where turkeys were documented during 2011, six were at sites that did not document turkeys during the 2009 survey; however, five of the sites where turkeys were documented during 2009 did not document turkeys during 2011. It should be noted that this fluctuation in turkey observations does not necessarily mean turkeys are entirely leaving and returning to the larger area surrounding these stations, but is likely a result of a change in habitat conditions in the immediate vicinity of the bait station whereby turkeys are not encountered during the brief duration of the survey. This point is supported by the fact that although turkeys were not observed at two stations in 2011, turkeys were documented near both of these sites just outside the 0.5-mile established bait-station, indicating that turkeys were still in the general area. Across all years since the restoration occurred, turkeys have been documented at 23 of the 28 longterm bait-stations.

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 FWC expanded the turkey season to 16 days beginning with the 2009 spring season. All reports indicate that the 2009-2012 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 the possibility of increasing turkey hunting opportunity in Holmes County based on success of the hunts, results of the 2011 bait-station survey, and stakeholder input.

Another example of smaller-scale restoration efforts occurs in the 10,000-acre Guana River WMA in St. Johns County, which has historically supported wild turkeys. Prior to State acquisition of the property, however, indiscriminant hunting and habitat degradation due to lack of prescribed fire, are believed to have resulted in a severe population decline.

Following State acquisition, improved habitat management enhanced wild turkey habitat on the area, but natural and man-made barriers (i.e., urban development) isolated it from other wild turkey populations. Therefore, chances were low that turkeys would move back into the area from surrounding property. Consequently, in December 2002, FWC biologists and volunteers from the Florida Chapter of the National Wild Turkey Federation 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. During the 2012 spring turkey season, hunters harvested 5 turkeys during 16 hunter-days of effort, making it one of the top hunts of the year on WMAs in terms of hunter success rates. FWC staff will continue to monitor this turkey population to ensure that the reestablished hunting opportunities are appropriate with regard to turkey populations.

A final example of restoration efforts began in 2000 for the Everglades National Park at the request of the National Park Service and the Florida Chapter of the National Wild Turkey Federation. The original release of 29 turkeys (7 males and 22 females) resulted in documented reproduction, but monitoring by the National Park Service suggested that while these turkeys survived, numbers were not increasing as desired. In January 2006, 31 additional turkeys (11 males and 20 females) were released. A Memorandum of Agreement (MOA) between FWC and the National Park Service called for improved monitoring 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 National Park Service 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 estimate turkey harvest, hunter effort, and hunter satisfaction. For the 2011 spring turkey season, 16,000 survey forms were mailed (22% of licensed turkey hunters) and included two follow-up mailings to those who did not respond to previous mailings. A total of 4,911 responses were received (31% response rate). Harvest estimates derived from this survey between 1988 and 2011 are summarized in Table 2 and indicate a slight dip in total harvest since 2008. The 2012 spring turkey season mail survey was mailed to 17,500 license holders (24% of licensed turkey hunters) during June 2012, with the third mailing scheduled to occur sometime in September 2012.

In addition to the regular postcard mail survey, the WTMP is currently evaluating an email and internet survey method in an effort to reduce costs. In this regard, during the 2011 survey, invitations were sent via email to 10,000 randomly selected licensed turkey hunters who were not selected to receive a postcard survey. Email invitations included a link to an internet-based survey to collect the required information. Just as with the postcard survey, up to two follow-up email messages were sent to individuals who did not respond to previous survey invitations. The response rate for the 2011 online survey (19.1%) was much lower than with the standard postcard survey. The number of individuals that indicated they had hunted during the spring season also was quite different between the online and postcard surveys (70% and 45%, respectively). The

WTMP will continue to compare data collected through the online method to data from the postcard survey to determine whether internet-based survey responses are consistent from year to year such that long-term harvest trends would not be compromised by using the different survey approach. If the online method produces reliable results, it would significantly decrease costs associated with printing, postage, data entry, and staff time to administer future surveys.

In February 2010, the FWC Commissioners approved a youth turkey season to occur the weekend prior to the regular spring turkey season. FWC offered this special, youth-only hunt during the 2011 spring turkey season on private lands statewide and expanded it to public lands in 2012. These hunts are designed for youth under 16 years of age that are supervised by an adult 18 years of age or older. FWC has received considerable positive feedback concerning these youth turkey hunts and the positive experiences they offer Florida's youth. During the 2011 spring turkey mail survey, the WTMP inquired about the level of participation during the youth hunt. Based on survey responses, 8.1% of eligible turkey hunters supervised a youth during the inaugural 2-day hunt, providing opportunity for as many as 8,307 youth hunters to participate.

The WTMP also collects and summarizes 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 2012 Special-Opportunity Turkey Hunts are presented in Table 3.

The WTMP conducted a survey in 2011 to determine hunter opinions regarding a rule request to allow the use of 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 opinions and preferences of Florida's hunters are important to consider when evaluating changes to rules regarding hunting opportunity. Because fall turkey season in Florida is concurrent with other hunting seasons (e.g., deer, small game) and the use of dogs has potential to disturb other hunters, staff solicited the opinions of both turkey and non-turkey hunters. WTMP staff 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 postcard survey form and the other half were sent via email with a link to an internet survey form, which resulted in a combined total of 1,240 responses. Most respondents (49%) did not support allowing dogs during the fall turkey season, while 31% of respondents supported the rule change, 16% were neutral on the subject, and 4% were undecided.

Technical Assistance

The WTMP, other FWC personnel, and the two cooperative wild turkey biologists often are 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 2011-2012, the WTMP and the cooperative wild turkey biologists visited 39 WMAs, state forests, national forests, national wildlife refuges, and military installations to provide input on wild turkey management or hunting regulations, to participate in turkey surveys, or to 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 County to provide positive public relations and improve turkey habitat.

<u>Public Assistance</u> -- The public frequently requests information on turkey hunting and management. 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 42 on-site visits to discuss habitat management options for wild turkeys. FWC also provided information to the public through various news releases, magazine articles, brochures, and media contacts (including an ESPN radio interview and a YouTube youth hunting video) both internally and through media outlets provided by the National Wild Turkey Federation.

The WTMP and wild turkey cooperative biologists gave presentations, staffed displays and interacted with attendees at the following events: Hunters Night Out in Alachua; 4-H camp in Levy County; Turkey Hunting seminar at Bass Pro Shop in Orlando; Easton Newberry Outdoor Expo in Newberry; Timber Management and Forest Stewardship workshops, tours, and field days in Alachua, Lake City, Madison and in Suwannee County; Invasive Species Workshop in Bronson; National Bobwhite Technical Committee conference in Tallahassee; public meetings and tours related to the Everglades Headwaters National Wildlife Refuge and Conservation Area in Kissimmee; Wal-Mart "Bone Collectors" event in Tallahassee; JAKES Outdoor Extravaganza in Sumter County; Sandhill Working Group at Tall Timbers in Leon County; Florida Bass Conservation Center outdoor event in Sumter County; CEMEX Earth Day celebration in Center Hill; Florida/Georgia Game Series – Fish Pond workshop in Monticello; Florida Vegetation Management Association Conference in Daytona Beach; Florida Chapter of the Wildlife Society – Spring Conference in Ocala; Florida Outdoor Ministries in Gainesville; Prescribed Fire Techniques for Wildlife workshop for private landowners in Tallahassee; National Tree Farmers Convention in Jacksonville; Tree Farmer of the Year field tour and recognition event in Tallahassee; private landowner workshop at Watermelon Pond WMA in Gainesville; Summer Youth Camps at the Ocala Youth Camp in Ocala and the Beau Turner Youth Conservation Center in Monticello; Bethel Baptist Beast Feast in Lakeland; Big Buck Expo in Lakeland; Florida/Georgia Game Series - Turkey Extravaganza in Thomasville, GA; Natural Resources Conservation Service field day in Starke; National Fish and Wildlife Foundation field day in Defuniak Springs; More Kids in the Woods event at the Beau Turner Youth Conservation Center: 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; University of Florida Milton Wildlife Expo in Santa Rosa County; FWC Pollinator Short-Course in Marianna; the Beau Turner Youth Conservation Center Outdoor Extravaganza; Gander Mountain Wild Turkey

Workshop in Jacksonville; Fall and Spring Hunting Classics at Bass Pro Shops in Orlando; several WMA Management Advisory Group planning meetings; several state agency meetings including the Florida Forest Service, the Suwannee River Water Management District, the St. John's River Water Management District, the South Florida Water Management District and the Southwest Florida Water Management District; several federal agency meetings including the United States Forest Service, United States Fish and Wildlife Service, and the Natural Resources Conservation Service; multiple state and local National Wild Turkey Federation chapter events, youth events (JAKES, which stands for Juniors Acquiring Knowledge, Ethics, and Sportsmanship), disabled (Wheelin' Sportsmen), and Women in the Outdoors events; and various presentations to civic organizations.

FWC works closely with the National Wild Turkey Federation throughout the year. A 2007 Memorandum of Understanding between FWC, the National Wild Turkey Federation, and the Florida Chapter of the National Wild Turkey Federation provides support to continue the many mutually beneficial interests and activities of each party. The WTMP currently serves on the Technical Committee of the National Wild Turkey Federation and serves as Technical Advisor to the Florida Chapter of the National Wild Turkey Federation Board of Directors. Some of the related activities in which FWC participated last year included participation in two Florida Chapter of the National Wild Turkey Federation board meetings, the Florida Chapter of the National Wild Turkey Federation Technical Committee meeting, and the National Wild Turkey Federation Technical Committee meeting. Acknowledging this working relationship, this past year the National Wild Turkey Federation awarded FWC the 2011 Land Stewardship Award in recognition of the agency's proactive habitat-focused programs and management activities.

The WTMP administers a wild turkey registry program, which awards certificates to hunters harvesting an outstanding gobbler (male turkey). 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 this recognition program began in 2001, 485 Outstanding Osceola, 139 Outstanding Eastern, and 326 First Gobbler certificates have been awarded. Of the 44 First Gobbler certificates awarded last year, 23 went to youth harvesting their first turkey during the youth turkey hunt weekend.

Research and Development

In 1973 and 1977, the Game and Fresh Water Fish Commission (predecessor to 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 specialists at Michigan State University to develop an internet mapping system to conduct a similar survey during 2011. The WTMP then worked with staff from FWC, the Florida Forest Service, the Florida Department of Environmental Protection, each of the five Water Management Districts, the University of Florida's Institute of Food and Agricultural Sciences, the United States Forest Service, the United States Fish and Wildlife Service, the United States Department of Agriculture - Wildlife Services and Natural Resources Conservation Service, the Department of Defense, industrial timber companies, the Florida Chapter of the National Wild Turkey Federation, the Florida Chapter of The Wildlife

Society, and antlerless deer permit holders to assist in completing the wild turkey population assessment. With the help of FWC Geographic Information System specialists and research staff, the WTMP began to analyze these 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.

Planning is also under way to begin a multi-year study of the timing of the timing of male courtship behavior (specifically their vocalizations or "gobbling") and nesting across the state. Given the latitudinal distance across Florida, spring phenology—or the advancement of annual natural phenomena such as plant flowering—and timing of wild turkey reproductive behaviors vary as one moves from south to north. How much these behaviors vary is not well known for turkeys in Florida. Additionally, hunters routinely request that season dates begin earlier or that boundaries between management zones be adjusted in order for certain areas of the state to begin hunting earlier. Turkey biologists suggest, however, that hunting seasons should not start prior to the peak onset of incubation by nesting hens. Unfortunately, data from multiple areas across the state is lacking thereby precluding an understanding of the natural chronology of these events. Therefore, the WTMP plans to study these events at multiple sites across the state to better guide decisions relative to hunting season dates and zonal boundaries.

Since 2006, National Wild Turkey Federation National Technical Committee members have documented a declining trend in reproductive output from wild turkeys throughout the southeastern U.S. In several states these declines have been followed by declines in wild turkey population indices and harvest estimates. These declines, which in some states have been rather severe, prompted collaborative efforts of the member states comprising the Southeastern Association of Fish and Wildlife Agencies' Wild Turkey Working Group to investigate this decline. The intent of this work is ultimately to identify possible causes of the declines to better guide future management. Because of the potential for these declines to impact Florida's wild turkey populations, the WTMP, which represents Florida on this working group, has cooperated with this effort that began in earnest in 2012. Along with the other southeastern states, the WTMP committed to contribute financially (\$8,700 for two years) to the study and is working with the principle investigators to provide historical wild turkey population data, harvest estimates, and any other relevant information available for Florida.

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 among FWC, the United States Forest Service, and the National Wild Turkey Federation. The contract for that position expired near the end of Fiscal Year 2011-2012 and was renewed for another 3-year term. Due to the success of this initial cooperative position, another 3-year partnership contract was executed in 2008 between FWC, the Florida Division of Forestry (now the Florida Forest Service), and the National Wild Turkey Federation 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 National Wild Turkey Federation 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 bi-annually. 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.

FWC maintains a Wild Turkey Standing Team composed of FWC staff as well as two associate members from the National Wild Turkey Federation. This team provides input and assistance to ongoing program activities and emerging issues and specific tasks are assigned as appropriate. The team's ongoing efforts are primarily guided by the priority tasks and the implementation schedule outlined in the 10-year Strategic Plan for Wild Turkey Management which they completed writing during Fiscal Year 2007-2008.

Turkey permit fees were increased effective July 1, 2010, raising turkey permit revenues by more than \$250,000 based on Fiscal Year 2010-2011 license sale totals. In light of this additional revenue from permit sales, the 2012 Florida Legislature approved a \$200,000 increase in spending authority for the WTMP. 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 and further the conservation, research, and management goals of the wild turkey resource as required by s. 379.354, Florida Statutes.

The goal of the wild turkey strategic plan is to "Ensure healthy and sustainable wild turkey populations throughout the state while providing and promoting compatible uses of the resource." All of the efforts discussed in this report are undertaken to work toward achieving that goal. 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 the citizens of the State of Florida, and wild turkeys.

Table 1. Wildlife Management Area projects funded through the FWC/National Wild Turkey Federation cost-share program during Fiscal Year 2011-2012 (WMA = Wildlife Management Area, WEA = Wildlife and Environmental Area, SF = State Forest, NF = National Forest)

Location	Project Description	FWC/NWTF Cost- share Funding	Other Cooperator Funding
Spirit of the Wild WMA	Tree/Shrub Planting	\$7,000	\$7,010
Apalachicola River WEA	Equipment - Disc Harrow	\$7,000	\$15,000
Chassahowitzka WMA	Mowing/Disking	\$7,000	\$15,000
Apalachicola River WEA	Wildlife Plantings	\$7,000	\$15,000
OK Slough WMA/SF	Old Field Restoration	\$9,361	\$8,809
Big Bend WMA	Tree/Shrub Planting	\$2,620	\$1,526
J.W. Corbett WMA	Wildlife Plantings	\$10,000	\$9,000
Hungryland WEA	Palmetto Reduction	\$7,000	\$53,000
Tate's Hell WMA/SF	Prescribed Burning	\$10,000	\$25,000
Blackwater WMA/SF - Hutton Unit	Wildlife Plantings	\$7,000	\$29,370
Green Swamp WMA	Roller Chopping	\$7,000	\$10,000
Camp Blanding WMA	Prescribed Burning	\$4,125	\$3,000
Big Bend WMA	Gate Construction	\$2,448	\$790
Blackwater WMA/SF	Wildlife Plantings	\$6,999	\$38,675
Green Swamp West Unit WMA	Camera Survey	\$600	\$2,000
Apalachee WMA	Wildlife Plantings	\$3,345	\$26,000
Hungryland WEA	Transfer Fuel Tank And Pump	\$1,200	\$0
Hungryland WEA	Bulk Fuel	\$1,000	\$0
J.W. Corbett WMA	Seeder; Bulk Fuel Tank Pump	\$4,350	\$0
Pine Log WMA/SF	Wildlife Plantings	\$7,000	\$21,500
Joe Budd WMA/SF	Stump Removal	\$9,000	\$4,249
Lake George WMA/SF -	Mechanical Treatment	\$5,500	\$2,050
Dexter/Mary Farms Unit	Weenamear Treatment	Ψ5,500	Ψ2,030
Box-R WMA	Wildlife Plantings	\$4,865	\$5,000
Apalachicola WMA/NF	Wildlife Plantings	\$7,000	\$11,000
Tate's Hell WMA	Wildlife Plantings	\$12,000	\$14,000
Point Washington WMA/SF	Wildlife Plantings	\$6,940	\$13,300
Hilochee WMA	Mowing	\$7,000	\$5,000
Jennings Forest WMA/SF	Herbicide	\$7,000	\$4,000
Juniper Creek WMA/NF	Wildlife Plantings	\$3,880	\$22,000
Hilochee WMA	Wildlife Plantings	\$7,000	\$5,000
Big Bend WMA	Wildlife Plantings	\$3,750	\$750
Twin Rivers WMA/SF	Wildlife Plantings	\$3,500	\$1,500
Blackwater WMA/SF	Wildlife Plantings	\$1,746	\$784
Camp Blanding WMA	Wildlife Plantings	\$4,850	\$2,500
Green Swamp West Unit WMA	Mowing	\$3,000	\$2,000
Big Shoals WMA	Wildlife Plantings	\$1,450	\$800
Camp Blanding WMA	Turkey Survey	\$1,500	\$500
Green Swamp WMA	Mowing	\$4,000	\$2,000
Raiford WMA	Wildlife Plantings	\$1,000	\$1,500
Richloam WMA/SF	Wildlife Plantings	\$1,800	\$1,120
Osceola WMA/NF	Wildlife Plantings	\$12,000	\$500
Belmore WMA/SF	Wildlife Plantings	\$7,000	\$5,340
J.W. Corbett WMA	Bulk Fuel	\$5,000	\$0
J.W. Corbett WMA	Transport Trailer	\$6,540	\$0
Tate's Hell WMA	Rx Fire – PyroShot Ignition Device	\$2,000	\$0
Cary WMA/SF	Mechanical Fuel Reduction	\$5,950	\$4,528
	TOTAL	\$247,319	\$390,101

GRAND TOTAL \$247,319 \$390,10 GRAND TOTAL \$637,420

Table 2. Spring turkey season harvest estimates and upper and lower values which we are 95% confident the true harvest is within (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	23,006	21,827 - 24,185
2012^{d}	-	-

^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.

 $^{^{\}rm c}$ 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 2012 spring turkey season.

Wildlife Management Area	Harvest	Hunter Pressure	Hunter Success
Dexter/Mary Farms WMA	19	150	7.9
Fisheating Creek WMA	10	78	7.8
Ft. Drum WMA	7	44	6.3
Green Swamp West WMA	39	331	8.5
Homosassa WMA	6	23	3.8
Lake Panasoffkee WMA	8	68	8.5
Triple N Ranch WMA	22	97	4.4
Overall	111	791	7.1