FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION WILD TURKEY PERMIT PROGRAM 2013-2014 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 2013-2014. Permit fund revenues and expenditures totaled \$827,894 and \$646,819, respectively. Program activities encompassed management projects; wild turkey population restoration; data collection, management, and analysis; technical assistance; and research and development. Funds totaling \$373,412 were provided for 49 management projects on 32 public wildlife management areas (WMAs), a national wildlife refuge, and a regional focal area. The costshare program resulted in \$942,993 of value when considering other cooperator dollars and in-kind services. During the summer and fall of 2013, staff used a mail survey of hunters to estimate the 2013 spring turkey season harvest at 20,471. The survey also determined that an estimated 5,697 youth hunters participated in the special Youth Turkey Season. Staff also conducted an online poll to determine hunter opinions regarding a proposal to extend shooting hours during spring turkey seasons on WMAs. Several recently restored wild turkey populations were monitored in Holmes County, Guana River WMA (St. Johns County), and Everglades National Park. FWC staff continued analysis of the 2011 statewide assessment of wild turkey distributions and began a cooperative study to document breeding behavior chronology and investigate impacts of supplemental feeding on wild turkey behavior and hunting mortality rates. Staff provided research assistance for a University of Florida study considering the role of wild turkeys in transmission of tickborne diseases. The United States Forest Service, the National Wild Turkey Federation (NWTF), and FWC continued to cooperatively fund a wild turkey biologist position; the contract for this position is in effect 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 NWTF, and FWC. The contract for this position continues through March 2016. 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 11 site visits to private landowner properties and 10 site visits to publicly held properties.

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 law requires all individuals hunting wild turkeys in Florida to purchase and possess a turkey permit, in addition to their hunting license, unless exempt from license requirements. The fee for the turkey

permit is \$10 for residents and \$125 for non-residents. 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 Statutes, this report documents the revenues and expenditures associated with the turkey permit fund for Fiscal Year 2013-2014 and summarizes activities conducted by FWC through the use of these funds.

TURKEY PERMIT REVENUES AND PROGRAM EXPENDITURES

During Fiscal Year 2013-2014, 22,203 one-year resident turkey permits (\$10 each), 310 five-year resident turkey permits (\$50 each) and 2,389 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 license, gold sportsman's license), totaled \$827,894. A portion of these revenues, \$29,020, was 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 \$646,819.

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 (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 FWC WTMP personnel in activities generally encompassed within five categories: management projects; wild turkey population restoration; data collection, management, and analysis; technical assistance; and research and development.

Management Projects

With continuing changes in the quality and quantity of wild turkey habitat in different locations 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, \$373,412 was provided for 49 management projects on 32 WMAs, one national wildlife refuge, and one regional focal area (Table 1). Historically, much of this management has been accomplished through a cost-share program with the Florida Chapter of the NWTF. In this regard, the Florida Chapter donated \$8,200 during Fiscal Year 2013-2014 to cost-share these management activities through their Super Fund program. The FWC provided \$365,212 of turkey permit funds as the FWC's cost-share funding. In many cases, FWC or cooperating agencies provided equipment, personnel, or other funding for these projects. These matching contributions had a total value of \$569,581, resulting in a total WMA cost-share program value of \$942,993. Moreover, volunteers from the Florida Chapter of the NWTF and other organizations assisted FWC personnel with projects on several WMAs. These projects provide substantial benefits for wild turkeys and other wildlife at a considerable cost savings relative to their overall value.

Wild Turkey Population Restoration

Widespread efforts to restore wild turkey populations in all suitable areas of Florida essentially were completed in 1970; however, areas have been identified from time to time where smaller-scale maintenance and restoration efforts have been warranted.

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 relocated 121 wild turkeys from other parts of the state to eight release sites in Holmes County, with a goal to re-establish a huntable population of wild turkeys in the County. FWC has since 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, 2010 or 2012). During the fall 2013 survey, FWC documented turkeys at or near 17 of 28 stations. Across all years since the restoration occurred, turkeys have been documented at 23 of the 28 long-term bait-stations, indicating success of the reintroduction.

Restoration also took place during 2002 in the 10,000-acre Guana River WMA in St. Johns County, which had historically supported wild turkeys. Following reintroduction, FWC documented successful reproduction and population increase. As a result, a limited spring turkey hunt (six quota permits for each of two three-day hunts) began in the spring of 2009 and has continued to date. During the 2014 spring turkey season, hunters harvested seven turkeys during 25 hunter-days of effort, making it the top hunt 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.

Data Collection, Management, and Analysis

One role of the FWC 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 statewide estimates of turkey harvest, hunter effort, and hunter satisfaction. For the 2013 spring turkey season, 17,000 survey forms (20% of licensed turkey hunters) were mailed in the summer and fall of 2013, and included two follow-up mailings to those who did not respond to previous mailings. A total of 4,205 responses were received (25% response rate). Harvest estimates derived from this survey between 1988 and 2013 are

summarized in Table 2 and indicate a gradual decline in total harvest since 2008. The 2014 spring turkey season mail survey was mailed to 17,000 license holders (19% of licensed turkey hunters) during June 2014, with the third mailing scheduled to occur in September 2014.

In addition to the regular postcard mail survey, the FWC WTMP is currently evaluating an email and internet survey method in an effort to reduce costs. In this regard, beginning with the 2011 survey, invitations were sent via email to 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. During the 2013 survey, 17,000 hunters were selected to receive invitations to participate in the survey. The response rate for the 2013 online survey (17.2%) was lower than with the standard postcard survey (24.9%). The number of individuals who indicated they had hunted during the spring season also was quite different between the online and postcard surveys (68% and 42%, respectively). The differences are significant because these values are used to extrapolate to a total harvest estimate. The FWC 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. If responses are consistent, FWC can account for any differences between survey methods and still obtain a reliable harvest estimate, such that long-term harvest trends would not be interrupted 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.

During the 2013 mail survey, the FWC WTMP inquired about the level of participation during the youth hunt. Based on survey responses, 13.3% of turkey hunters supervised a youth during the special 2-day hunt, providing opportunity for as many as 5,697 youth hunters to participate.

The FWC 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 2014 Special-Opportunity Turkey Hunts are presented in Table 3.

In February of 2014, the FWC WTMP conducted an online poll of turkey hunters to obtain information about opinions regarding all-day hunting during spring turkey season on WMAs. Currently, shooting hours during the spring turkey season end at 1pm on WMAs, whereas hunting may continue until sunset on private land. With increasing numbers of hunters calling for shooting hours to be extended on WMAs, the FWC was interested in determining opinions of turkey hunters on this subject. Over 69,000 invitations to participate in the online poll were sent by email to all potential turkey hunters who: 1) had purchased a Turkey Permit or a hunting license that included Turkey Permit privileges during the three year period extending from May 2010 to April 2013; and 2) had a valid email address in the Recreational License Issuance System. The online questionnaire was completed by 4,589 individuals. Results of the online poll indicated

strong support among turkey hunters for expanding the shooting hours on WMAs. Unclear, however, is what impact an expansion of spring season shooting hours would have on the turkey resource, hunting pressure, and other management concerns. Therefore, in order to determine these impacts, the FWC staff is proposing a study wherein shooting hours on select WMAs would be extended and pertinent data collected to inform these management decisions. If approved, the study period would extend for at least two hunting seasons. Then, based on the findings, FWC can evaluate if there is good reason to allow all-day hunting on WMAs, and if so, on what type of area such a change would be appropriate.

During this fiscal year, the FWC WTMP worked with FWC's Office of Information Technology, with input from FWC WMA staff, to develop a database for archiving wild turkey biological data collected at WMA check stations from hunter harvested birds. The database was designed to work in conjunction with existing WMA data storing and reporting database interfaces. The database serves as a central repository for all check station wild turkey biological data (such as age class, spur length and beard length) and allows staff to search the data and produce user-generated reports.

Technical Assistance

The FWC 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 development of funding proposals for habitat management projects. During Fiscal Year 2013-2014, the FWC WTMP and the cooperative wild turkey biologists visited 10 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 FWC WTMP continued to work cooperatively with the Northwest Florida Water Management District to maintain wildlife openings on the Choctawhatchee River WMA in Holmes County, providing positive public relations and improving turkey habitat.

<u>Public Outreach</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, FWC WTMP personnel and cooperative wild turkey biologists made 11 on-site visits to discuss habitat management options for wild turkeys and wildlife in general. FWC also provided information to the public through various news releases, magazine articles, brochures, and media contacts (including a Tallahassee sportsman's show radio interview) both internally and through media outlets provided by the NWTF.

The FWC WTMP and wild turkey cooperative biologists gave presentations, staffed displays, and interacted with attendees at numerous workshops, expos and speaking engagements during Fiscal Year 2013-2014. The following list is a sample of some of the

events attended: Forest Stewardship Ground-nesting Birds workshops (Columbia and Hamilton counties); Forest Stewardship Timber Management workshops (Alachua and Levy counties); NWTF/FWC Land Management field day (Washington County); Prescribed Fire for Wildlife course in Jacksonville (Duval County); Florida Chapter of the Wildlife Society – Spring Conference (Pinellas County); Project Wild Education workshop (Hillsborough County); Nature's Classroom workshop (Pasco County); FWC's "Creating the Next Generation that Cares" Earth Day event at the Capitol (Leon County); Columbia County Rotary Club; the Big Buck Expo (Polk County); Hunter's Night Out event (Alachua County); Wildlife Heritage and Outdoor Festival at the St. Marks National Wildlife Refuge (Wakulla County); the CEMEX company's Earth Day celebration (Sumter County); the Women in the Outdoors event (Okeechobee County); and the Big Doe Challenge and Youth Turkey Challenge (both in Jefferson County). In addition, staff and cooperative biologists attended several WMA Management Advisory Group planning meetings; met with representatives of several other State agencies (including the Florida Forest Service, the St. Johns River Water Management District, the Suwannee River Water Management District and the Northwest Florida Water Management District), federal agencies (including the United States Forest Service, the United States Fish and Wildlife Service, the Natural Resources Conservation Service and the United States Air Force) and private institutions and NGOs (including The Nature Conservancy, Pheasants Forever/Quail Forever, CF Industries/Mosaic, and the Disney Wilderness Preserve); and attended multiple local NWTF chapter events.

FWC works closely with the NWTF throughout the year. A 2007 Memorandum of Understanding between FWC, the NWTF, and the Florida Chapter of the NWTF provides support to continue the many mutually beneficial interests and activities of each party. The FWC WTMP Coordinator currently serves on the Technical Committee of the NWTF and serves as Technical Advisor to the Florida Chapter of the NWTF Board of Directors. Some of the related activities in which FWC participated during this fiscal year included four board meetings of the Florida Chapter of the NWTF, the Florida Chapter of the NWTF Super Fund committee meeting, two District Volunteer coordination meetings, the NWTF Technical Committee meeting, and the inaugural Florida Chapter of the NWTF "Osceola Invitational" Spring Turkey Hunt Challenge (as official scorer of the event).

The FWC 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, in an effort to encourage these young hunters to continue hunting as they get older. Since this recognition program began in 2001, 528 Outstanding Osceola, 156 Outstanding Eastern, and 390 First Gobbler certificates have been awarded. Of the 28 First Gobbler certificates awarded during Fiscal Year 2013-2014, 13 went to youth harvesting their first turkey during the youth turkey hunt weekend.

Research and Development

A new multi-year, multi-faceted research project also began this fiscal year, in coordination with FWC's Fish and Wildlife Research Institute—Upland Game Bird Program and the Tall Timbers Research Station. This stemmed from an interest in documenting the breeding chronology of wild turkeys in Florida to better inform decisions

related to timing of spring hunting seasons. The project now also includes: 1) testing of a novel technique using thermal imagery and distance sampling for wild turkey population estimation; 2) an investigation of how supplemental feeding of quail influences movement, habitat use, and home range size of wild turkeys; 3) wild turkey harvest rates and hunter success; and 4) estimates of mortality and survival rates of male and female wild turkeys. Five female and two male turkeys were trapped in early 2014 and fitted with innovative GPS radio transmitters programmed to collect multiple locations per day and remotely download these points to a receiver. Staff has closely monitored these birds and conducted testing of additional radio transmitters to determine how well the relatively new GPS-radio technology functions. Initial results indicate that the units work very well and will provide a level of monitoring capability heretofore unattainable. Fourteen remote audio recording devices (Song Meters) now are monitoring gobbling behavior during the spring. The recordings will be analyzed this fall and additional testing of these devices is being done to fine-tune the techniques to prepare for increased trapping and data collection efforts in spring of 2015. The FWC WTMP will use information gained from this study to better manage statewide turkey populations and associated hunting opportunities.

During this fiscal year, the FWC WTMP also coordinated with a graduate student from the University of Florida (UF) and FWC staff at select WMAs to collect ticks and blood samples from hunter-harvested wild turkeys. The UF study is investigating tick-borne diseases (*Ehrlichia* and *Rickettsia*) and the role of wild turkeys and other hosts in disease transmission. Check station operators submitted a total of 144 sample kits to UF for analysis. Other hunters and private ranches submitted 22 additional kits for a total of 166 kits. All returned kits had blood samples (although many were not usable) and half had tick samples. In all, over 1,100 ticks were collected, including 581 nymphs and 573 larvae. All the nymphs have been identified as lone star ticks; identification of the larvae is in progress. Collections likely will occur again for at least one more year, and the FWC WTMP plans to work with WMA staff to collect additional samples for the study.

Since 2006, NWTF National Technical Committee members have documented a declining trend in reproductive output from wild turkeys in other parts of 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. Because of the potential for declines to impact Florida's wild turkey populations, the FWC WTMP, which represents Florida on this working group, is involved with this effort, which began in 2012. Along with the other southeastern states, the FWC WTMP committed to contribute financially (\$8,700 for two years) to the study and has worked with the principle investigators to provide historical wild turkey population data, harvest estimates, and any other relevant information available for Florida. This fiscal year, the principle investigators concluded their analysis and presented the working group their findings with recommendations for further research that should be done to test their hypotheses on the cause of the perceived declines. The FWC WTMP will continue to be engaged and work with other working group members on this issue.

PROGRAM DIRECTION

To further expand wild turkey management efforts throughout Florida, a

cooperative wild turkey biologist position was established, beginning in 2006, through a partnership contract among FWC, the United States Forest Service, and the NWTF. The contract 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 partnership contract began in 2008 between FWC, the Florida Division of Forestry (now the Florida Forest Service), and the NWTF for a second cooperative wild turkey biologist to further promote and achieve the mission of the FWC WTMP. This second position was established in part to promote habitat and forest restoration work on State forests. This contract was renewed in Fiscal Year 2012-2013 and runs through March 2016. 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 bi-annually. The FWC 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. Foremost, these positions are used to promote improved turkey habitat management on private lands, through both their involvement with workshops and by providing individual landowner assistance. This past year, site visits by the cooperative wild turkey biologists provided habitat management recommendations impacting a combined 5,345 acres of private land. Another priority area in which the cooperative biologists have been directed to focus is promotion of the hunting heritage, especially among youth and young hunters. As one aspect of meeting this objective, the cooperative biologists provide direct assistance to the Youth Hunting Program of Florida, an FWC-sponsored program designed to introduce young people to the sport of hunting through safe, mentored hunts. This fiscal year, the cooperative biologists assisted with three youth hunts for 16 young hunters. The biologists also were instrumental in identifying new landowners willing to host youth hunts in the future.

FWC maintains a Wild Turkey Standing Team composed of FWC staff as well as 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. 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.

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 FWC 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 2013-2014 (WEA = Wildlife and Environmental Area, WMA = Wildlife Management Area, NF = National Forest, NWR = National Wildlife Refuge, SF = State Forest)

| | | FWC/NWTF | Other |
|--|----------------------------|------------|------------|
| | | Cost-share | Cooperator |
| Location | Project Description | Funding | Funding |
| Apalachicola River WEA | Wildlife Plantings | \$4,780 | \$8,000 |
| Apalachicola WMA/NF | Wildlife Plantings | \$2,723 | \$12,064 |
| Apalachicola WMA/NF | Wildlife Plantings | \$4,564 | \$9,300 |
| Belmore WMA/SF | Wildlife Plantings | \$2,730 | \$2,960 |
| Big Bend WMA | Wildlife Plantings | \$5,880 | \$3,145 |
| Big Bend WMA | Mower Purchase | \$13,700 | \$0 |
| Big Bend WMA - Snipe Island Unit | Prescribed Burning | \$2,800 | \$0 |
| Big Shoals WMA/SF | Wildlife Plantings | \$2,400 | \$4,000 |
| Blackwater WMA/SF | Wildlife Plantings | \$15,765 | \$31,008 |
| Blackwater WMA/SF | Wildlife Plantings | \$1,930 | \$800 |
| Blackwater WMA/SF | Wildlife Plantings | \$1,890 | \$18,256 |
| Blackwater WMA/SF - Hutton Unit | Habitat Enhancement | \$20,376 | \$7,000 |
| Blackwater WMA/SF - Hutton Unit | Wildlife Plantings | \$6,000 | \$0 |
| Blackwater WMA/SF and Yellow River WMA | Wildlife Plantings | \$3,420 | \$5,008 |
| Box R WMA | Heavy Brush Mowing | \$7,000 | \$7,000 |
| Camp Blanding WMA | Prescribed Burning | \$6,125 | \$5,000 |
| Camp Blanding WMA | Wildlife Plantings | \$3,850 | \$3,000 |
| Camp Blanding WMA | 2013 summer brood survey | \$1,500 | \$500 |
| Cary WMA/SF | Heavy Brush Mowing | \$7,000 | \$1,500 |
| Chassahowitzka WMA | Mowing and Firelines | \$7,500 | \$15,000 |
| Dinner Island Ranch WMA | Exotic Plant Control | \$12,000 | \$6,050 |
| Dinner Island Ranch WMA | Exotic Plant Control | \$15,000 | \$2,550 |
| Dinner Island Ranch WMA | Mower Parts and Burning | \$3,000 | \$0 |
| | Equipment Purchases | | |
| Goethe WMA/SF | Heavy Brush Mowing | \$14,000 | \$2,240 |
| Green Swamp WMA | Roller Chopping | \$13,000 | \$10,000 |
| Green Swamp WMA | Mowing | \$4,000 | \$2,000 |
| Hilochee WMA | Exotic Plant Control | \$20,000 | \$17,500 |
| Hilochee WMA | Wildlife Plantings | \$7,000 | \$5,000 |
| Hilochee WMA | Mowing | \$7,000 | \$5,000 |
| J.W. Corbett WMA | Wildlife Plantings | \$9,720 | \$12,000 |
| Juniper Creek WMA | Wildlife Plantings | \$4,825 | \$17,300 |
| L. Kirk Edwards WEA | Ground Cover Restoration | \$3,304 | \$14,161 |
| Lake Woodruff NWR | Wildlife Plantings | \$500 | \$0 |
| Little River WMA | Sand Hill Restoration | \$4,600 | \$0 |
| OK Slough WMA/SF | Exotic Plant Control | \$10,000 | \$35,000 |
| OK Slough WMA/SF | Ground Cover Restoration | \$17,500 | \$10,147 |
| OK Slough WMA/SF | Swamp Buggie Repairs | \$1,250 | \$1,250 |
| Osceola WMA/NF and John Bethea WMA/SF | Wildlife Plantings | \$12,000 | \$1,000 |
| Pine Log WMA/SF | Wildlife Plantings | \$13,425 | \$27,000 |
| Point Washington WMA/SF | Wildlife Plantings | \$6,290 | \$13,100 |
| Raiford WMA | Wildlife Plantings | \$380 | \$4,000 |
| Raiford WMA | Heavy Brush Mowing | \$10,000 | \$1,000 |
| Richloam WMA/SF | Wildlife Plantings | \$2,000 | \$1,120 |
| Tates Hell WMA/SF | Wildlife Plantings | \$13,130 | \$13,250 |
| Tates Hell WMA/SF | Heavy Brush Mowing | \$6,500 | \$7,000 |
| Tiger Bay WMA/SF | Heavy Brush Mowing | \$3,000 | \$7,000 |

Table 1. Continued.

| Location | Project Description | FWC/NWTF Cost-share Funding | Other Cooperator Funding |
|--|-----------------------|-----------------------------------|--------------------------------|
| Triple N Ranch WMA | Roller Chopping | \$12,000 | \$7,300 |
| Wakulla WMA/SF | Wildlife Plantings | \$2,055 | \$5,000 |
| Brooksville/Mt. Dora Ridges Focal Area | FFS Rx Fire Burn Team | \$24,000 | \$209,071 |
| | TOTAL | \$373,412 | \$569,581 |
| | GRAND TOTAL | \$942,993 | |

Table 2. Spring turkey season harvest estimates and upper and lower values from mail survey with 95% confidence limits (the true harvest is within these numbers with 95% certainty).

| 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 | 21,005 | 19,873 - 22,136 |
| 2013 | 20,471 | 19,173 - 21,770 |
| 2014^{d} | - - | - - |

^a A mail survey was not conducted.

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

 $^{^{\}rm c}$ The survey was conducted through Florida State University using scan forms that resulted in data interpretation errors; the results may not be comparable to other years.

^d Data are 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 2014 spring turkey season.

| Wildlife Management Area | Harvest | Hunter Pressure | Hunter Success |
|--------------------------|---------|--------------------|-------------------|
| Dexter/Mary Farms WMA | 21 | 119 | 5.7 |
| Fisheating Creek WMA | 12 | 68 | 5.7 |
| Ft. Drum WMA | 7 | 43 | 6.1 |
| Green Swamp West WMA | 25 | 319 | 12.8 |
| Homosassa WMA | 2 | 38 | 19.0 |
| Lake Panasoffkee WMA | 4 | 73 | 18.3 |
| Triple N Ranch WMA | 22 | 97 | 4.4 |
| Overall | 93 | 757 | 8.1a |

 $^{^{\}mathrm{a}}$ This number represents the total combined pressure divided by total combined harvest for all listed WMAs.