FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION WILD TURKEY PERMIT PROGRAM 2014-2015 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 2014-2015. Permit fund revenues and expenditures totaled \$824,820 and \$664,548, respectively. Program activities encompassed management projects; wild turkey population restoration; data collection, management, and analysis; technical assistance; and research and development. Funding for 33 management projects on 28 conservation areas and a regional focal area was cost-shared with the Florida Chapter of the National Wild Turkey Federation (NWTF) for a total funding amount of \$343,123. When considering other cooperator dollars and in-kind services, the total FWC / NWTF cost-share program resulted in \$851,472 of value.

During the summer and fall of 2014, staff used a mail survey of hunters to estimate the 2014 spring turkey season harvest at 20,374. The survey also determined that an estimated 5,419 youth hunters participated in the special Youth Turkey Season. FWC staff began collecting data at 30 Wildlife Management Areas (WMAs) as part of a study to explore the impacts of extended shooting hours during spring turkey seasons on WMAs. Staff also continued a cooperative study to document breeding behavior chronology and investigate impacts of supplemental feeding on wild turkey behavior and hunting mortality rates. FWC contracted with the University of Florida, Center for Public Issues Education on a hunter survey project examining Florida turkey hunters' opinions and attitudes regarding wild turkey populations, management, and regulations. FWC staff again provided research assistance for a University of Florida study considering the role of wild turkeys in transmission of tick-borne diseases. The United States Forest Service, the NWTF, and FWC continued to cooperatively fund a wild turkey biologist position; the contract for this position was renewed at the end of 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 (Turkey Program) staff and cooperative wild turkey biologists provided technical assistance to various organizations, private citizens, and the media, including seven 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 Turkey Program 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, 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 (section 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 2014-2015 and summarizes activities conducted by FWC through the use of these funds.

TURKEY PERMIT REVENUES AND PROGRAM EXPENDITURES

During Fiscal Year 2014-2015, 21,627 one-year resident turkey permits (\$10 each), 272 five-year resident turkey permits (\$50 each) and 2,426 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 \$824,820. A portion of these revenues, \$30,038, 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 \$664,548.

PROGRAM ACTIVITIES

FWC's Turkey Program 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 Turkey Program 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, natural timberlands 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, \$343,123 was provided for 33 management projects on 28 conservation areas 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. The Florida Chapter donated \$40,000 during Fiscal Year 2014-2015 to cost-share these management activities through their Super Fund program. FWC provided \$303,123 of turkey permit funds as 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 \$508,349, resulting in a total WMA cost-share program value of \$851,472. 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, the FWC's Turkey Program continues to monitor the statewide population to determine if smaller-scale maintenance and restoration efforts are warranted. Staff met this past fiscal year with land managers from the South Florida Water Management District to consider the appropriateness of an area in south Florida, known as the Rocky Glades and Frog Pond area, as a restoration site. After reviewing available maps and visiting the site, it was determined that the amount of existing and potential turkey habitat would be insufficient to provide for a stable population of wild turkeys in this area. Therefore, no plans are being pursued relative to a restoration at this site.

Data Collection, Management, and Analysis

One role of the FWC Turkey Program 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 2014 spring turkey season, 17,000 survey forms (19% of licensed turkey hunters) were mailed in the summer and fall of 2014, and included two follow-up mailings to those who did not respond to previous mailings. A total of 4,013 responses were received (24% response rate). Harvest estimates derived from this survey between 1988 and 2014 are summarized in Table 2 and indicate a gradual decline in total harvest since 2008. The 2015 spring turkey season mail survey was mailed to 17,500 license holders (18% of licensed turkey hunters) during June 2015, with the third mailing scheduled to occur in September 2015.

During the 2014 mail survey, the FWC Turkey Program also 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 5,419 youth hunters to participate.

For several years now, the FWC Turkey Program has been evaluating an email and internet survey method in an effort to reduce costs of the annual hunter survey. Beginning with the 2011 survey, electronic invitations were sent via email to randomly-selected

licensed turkey hunters who were not selected to receive a survey through the regular postcard mail 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. Following analysis of the 2014 surveys, FWC statisticians compared the internet-based and regular mail survey data. The analysis indicated that internet surveys could feasibly be used to obtain some of the survey metrics desired, but not all of them. The problem is twofold. First, some of the results are dramatically different between the two survey methods. If this were the only problem, reliable estimates could potentially still be obtained by applying a correction factor to the internet survey data to estimate results of a mail survey. Unfortunately, the analysis found there is not a consistent bias between the internet and mail survey results. In other words, the magnitude of the difference for a particular metric between the two survey approaches varies from year to year. This inconsistency precludes using a correction factor to adjust results from internet surveys to confidently estimate the mail survey results. Because internet-based surveys cannot be used to reliably duplicate mail survey results, FWC's Turkey Program has determined it is best to continue conducting the annual hunter survey using the standard postcard mail survey approach.

The FWC Turkey Program 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 2015 Special-Opportunity Turkey Hunts are presented in Table 3.

In February of 2014, the FWC Turkey Program 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. 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, FWC staff proposed, and the Commission subsequently approved, extending shooting hours on 16 WMAs where pertinent data could be collected to inform these management decisions. Although the change to all-day hunting on these areas does not take effect until spring of 2016, staff with the Turkey Program worked with FWC staff that operate check stations to begin collecting baseline data for these and 14 control areas. Information such as hunter participation rates and activity patterns, time of harvest and hunter experiences, observations, and satisfaction was collected. Data collection at these sites will continue for at least an additional 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.

Part of the overall goal of the FWC Turkey Program is to manage the wild turkey resource for the benefit of people. An understanding of hunters' attitudes and opinions related to wild turkey management and recreational opportunities is critical to achieving this end. Regular program activities, such as annual harvest and hunter satisfaction surveys and regulation-specific polls and surveys, obtain useful information. A broad-

based, general examination of Florida turkey hunter attitudes and opinions has not been conducted for over 20 years, however. Since the last broad-scaled survey took place in 1988, many changes affecting wild turkeys in Florida have occurred. How these changes have affected the demographics, the attitudes and the perceptions of turkey hunters in Florida is important for FWC to understand to direct management decisions into the future. Consequently, the FWC Turkey Program has contracted with the University of Florida/Institute of Food and Agricultural Sciences Center for Public Issues Education to examine the opinions and attitudes of resident wild turkey hunters regarding wild turkey population status, management and associated hunting regulations. This information will be useful in guiding ongoing wild turkey population and harvest management activities as well as for providing direction for development of a new 10-year strategic plan for wild turkey management (the existing management plan will conclude in 2018). The first step in this process—a series of exploratory focus groups—was conducted this past spring, during which the contractors met with 29 turkey hunters to gain their perspective on issues related to turkey management in the State. This information is now being used to guide development of the actual survey instrument. A mail survey with an online option will be administered once the survey questionnaire is designed and approved.

Technical Assistance

The FWC Turkey Program, 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 2014-2015, the FWC Turkey Program 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 Turkey Program 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 Turkey Program personnel and cooperative wild turkey biologists made seven 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, social media posts, videos, and media contacts both internally and through media outlets provided by the NWTF.

The FWC Turkey Program and wild turkey cooperative biologists gave presentations, staffed displays, and interacted with attendees at numerous workshops, expos, and speaking engagements during Fiscal Year 2014-2015. The following list is a sample of some of the events attended: Forest Stewardship workshops (Madison County and at the Austin Cary State Forest); ARSA Longleaf Pine workshop (at the Apalachicola Bluffs and Ravines Preserve in Liberty County), Prescribed Fire for Wildlife course (Highlands County); Sportsman's Trust meeting (Okeechobee County); Brooksville Ridge and Lake Wales Ridge Working Group meetings (Sumter and Highland counties); Lake City Lion's Club (Columbia County); Madison Kiwanis Club (Madison County); Apopka Rotary Club (Orange County); Boy Scouts of America groups (Bay and Duval counties); FWC's "Creating the Next Generation that Cares" Earth Day event at the Capitol (Leon County); the Big Buck Expo (Polk County); Wildlife Heritage and Outdoor Festival at the St. Marks National Wildlife Refuge (Wakulla County); and a Women in the Outdoors event (Okeechobee 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 Suwannee River Water Management District, and the South 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 Rayonier, Plum Creek, The Nature Conservancy, Pheasants Forever/Quail Forever, Ducks Unlimited, 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 Turkey Program 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 three board meetings of the Florida Chapter of the NWTF, the Florida Chapter of the NWTF Super Fund committee meeting, a District Volunteer coordination meeting, a State Volunteer Recognition banquet, and the second annual Florida Chapter of the NWTF "Osceola Invitational" Spring Turkey Hunt Challenge (as official scorer of the event).

The FWC Turkey Program 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, 569 Outstanding Osceola, 162 Outstanding Eastern, and 421 First Gobbler certificates have been awarded. Of the 32 First Gobbler certificates awarded during Fiscal Year 2014-2015, 12 went to youth harvesting their first turkey during the youth turkey hunt weekend.

Research and Development

During this fiscal year, the FWC Turkey Program continued its involvement in a multi-faceted research project being conducted in coordination with FWC's Fish and

Wildlife Research Institute - Upland Game Bird Program, Tall Timbers Research Station, and the University of Tennessee. This project 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) an investigation of how supplemental feeding of quail influences movement, habitat use, and home range size of wild turkeys; 2) documenting wild turkey harvest rates and hunter success in relation to supplemental feeding; 3) testing of novel approaches for using thermal imagery in sampling of wild turkeys; and 4) estimating mortality and survival rates of male and female wild turkeys. This past winter, FWC staff and cooperators trapped 11 female and four male turkeys on Tall Timbers and 22 females and seven male turkeys on wildlife management areas near Gainesville. Captured birds were fitted with either standard VHF radio transmitters or innovative GPS transmitters programmed to automatically collect 31 locations per week. Researchers have monitored these birds through the breeding and nesting period, tracking survival, movements, nesting attempts, and brood survival. Besides tracking of individually marked turkeys, remote audio recording devices (Song Meters) collected gobbling activity at each of the study sites throughout the spring. Using special software, the recordings will be analyzed to identify individual gobbling events, which when combined with the other recordings will produce a chronology of gobbling behavior. In addition, researchers attempted to monitor hunter activity in relation to the Song Meter recorders to investigate the effect of hunting pressure on gobbling behavior. Unfortunately, the monitoring devices used on the Gainesville sites failed to function properly, so devices of a different type will be used in subsequent years to obtain this information. When completed, the FWC Turkey Program will use information gained from this study to better manage statewide turkey populations and associated hunting opportunities.

Again this fiscal year, the FWC Turkey Program 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, coyotes, and wild hogs. The UF study is investigating tick-borne diseases (*Ehrlichia* and *Rickettsia*) and the role of wild turkeys and other hosts in disease transmission. FWC check station operators, other hunters, and private ranchers together have submitted to UF for analysis over 300 samples containing 1,765 ticks from wild turkeys since the study began. Forty-five percent of turkeys checked were infested with ticks, predominantly in the nymph stage, and all but one of the ticks found were lone star (*Amblyomma americanum*) ticks. This was the last year of spring season collections, but the student would like more fall samples to increase his fall sample size. FWC staff will continue to assist the student where we can. The student is also working now to complete analysis of all the samples and then write his dissertation.

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 in the spring of 2012 and again this past spring (2015). 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 Turkey Program. 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 Turkey Program 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 4,085 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 four 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 Turkey Program 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 2014-2015 (AFB = Air Force Base, AFR = Air Force Range, NF = National Forest, NP = National Preserve, NWR = National Wildlife Refuge, SF = State Forest, WEA = Wildlife and Environmental Area, WMA = Wildlife Management Area)

Location	Project Description	FWC/NWT F Cost-share Funding	Other Cooperator Funding
Apalachicola River WEA	Heavy Brush Mowing	\$11,000	\$14,000
Apalachicola WMA/NF	Heavy Brush Mowing	\$29,000	\$32,168
Apalachicola WMA/NF	Underbrush Herbiciding	\$12,500	\$12,500
Avon Park AFR	Heavy Brush Mowing	\$24,000	\$3,000
Belmore WMA/SF	Wildlife Plantings	\$925	\$1,960
Big Bend WMA	Wildlife Plantings	\$4,700	\$3,250
Big Bend WMA (Snipe Island Unit)	Prescribed Burning	\$2,345	\$18,000
Big Cypress WMA/NP	Prescribed Burning	\$20,498	\$33,700
Blackwater River WMA/SF (Hutton Unit)	Upland Restoration	\$18,400	\$7,250
Blackwater River WMA/SF (Juniper Tract)	Wildlife Plantings	\$2,480	\$18,000
Box-R WMA	Heavy Brush Mowing	\$7,000	\$7,000
Camp Blanding WMA	Prescribed Burning	\$1,962	\$2,000
Camp Blanding WMA	Wildlife Plantings	\$3,113	\$2,500
Chassahowitzka WMA	Mowing, Firelines & Burning	\$8,000	\$15,000
Florida Panther NWR	Prescribed Burning	\$17,440	\$22,360
Goethe WMA/SF	Heavy Brush Mowing	\$1,675	\$280
Goethe WMA/SF	Underbrush Herbiciding	\$32,570	\$7,500
Green Swamp WMA	Roller Chopping	\$8,630	\$10,000
Hilochee WMA	Roller Chopping	\$10,000	\$1,000
Hilochee WMA (Osprey Unit)	Exotic Plant Control	\$19,000	\$5,000
JW Corbett WMA	Wildlife Planting/Mowing	\$7,470	\$12,000
Lake Woodruff NWR	Wildlife Plantings	\$675	\$500
Mallory Swamp WMA	Prescribed Burning	\$5,100	\$3,400
Osceola WMA/NF and John Bethea	Wildlife Plantings	\$7,300	\$1,000
WMA/SF Pine Log WMA/SF	Wildlife Plantings	\$7,710	\$12,000
Raiford WMA	Heavy Brush Mowing	\$20,000	\$500
Richloam WMA/SF	Wildlife Plantings	\$930	\$0
Tates Hell WMA/SF	Wildlife Plantings	\$8,420	\$14,890
Tiger Bay WMA/SF	Mowing/Chopping	\$3,860	\$13,520
The Nature Conservancy (TNC) Properties	Prescribed Burning	\$20,000	\$20,000
Tyndall AFB	Wild Turkey Survey	\$570	\$0
Wakulla WMA/SF	Wildlife Plantings	\$1,850	\$5,000
Brooksville/Mt. Dora Ridges	FFS Rx Fire Burn Team	\$24,000	\$209,071
	TOTAL	\$343,123	\$508,349
	GRAND TOTAL	\$851	,472

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^{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	20,374	18,588 - 22,159
2015^{d}	-	· ·

^a A mail survey was not conducted.

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

^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 2015 spring turkey season.

Wildlife Management Area	Harvest	Hunter Pressure	Hunter Success
Dexter/Mary Farms WMA	21	118	5.6
Fisheating Creek WMA	14	61	4.4
Ft. Drum WMA	5	35	7.0
Green Swamp West WMA	26	309	11.9
Homosassa WMA	2	25	12.5
Lake Panasoffkee WMA	4	62	15.5
Triple N Ranch WMA	24	67	2.8
Overall	96	677	7.1a

^a This number represents the total combined pressure divided by total combined harvest for all listed WMAs.