WILD TURKEY MANAGEMENT SYSTEM AND DATA BASE

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MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE
WILDLIFE RESOURCE ASSESSMENT SECTION
BIRD GROUP

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PART I: WILD TURKEY MANAGEMENT SYSTEM

INTRODUCTION

The purpose of this wild turkey management system is to describe the system that is to be used by the Maine Department of Inland Fisheries and Wildlife (MDIFW) biologists to make wild turkey management decisions. Included are the process to translate data into management decisions (Part I) and techniques to estimate various wild turkey population parameters and guide hunting season administration and trap and transfer activities (Part II). A goal of the current management system was outlined in the updated 2000 Wild Turkey Assessment. This document does not address social, political, or economic questions related to wild turkey management.

REGULATORY AUTHORITY

Regulatory authority for the management of the wild turkey resource is vested in the Commissioner of MDIFW. Chapter 709, Section 7468 includes wildlife laws specific to wild turkeys (Appendix I).

MANAGEMENT GOAL AND OBJECTIVES

A goal and objectives for wild turkey management were established in 1985 and again in 2000 to guide the management of wild turkeys through 2015. The goal and objectives were defined through recommendations made to MDIFW by a working group comprised of several representatives of the public and was approved by the Commissioner and the Advisory Council.

Goal: Increase the size and distribution of the wild turkey population within all suitable habitat in Maine.

Objective 1: By 2010, increase the size and distribution of the wild turkey population within all suitable habitat in Maine via trap and transfer activities and habitat improvements. Suitable wild turkey habitat in Maine is described in the Wild Turkey Assessment (2000).

Objective 2: By 2010, provide unlimited spring hunting opportunity as long as the wild turkey population can support it and current (2000) hunt quality is maintained. The Working Group defined as hearing, seeing, working, and hopefully harvesting a turkey without interference from others.

Objective 3: By 2002, develop a component to the Department's Nuisance Wildlife Policy that addresses wild turkeys.

Objective 4: By 2003, implement a limited fall hunting season in areas where the wild turkey population can support it without adversely affecting Obj.2.

Objective 5: Develop a cooperative (*on-going*) habitat improvement program between landowners, the Maine Chapter of the National Wild Turkey Federation, and the Department.

ASSUMPTIONS

The wild turkey management goal and objectives are based on the following assumptions:

- (1) An increase in the wild turkey population within all suitable wild turkey habitat in Maine would be desirable to both the consumptive and nonconsumptive users of the wild turkey resource.
- (2) That a component of the Department's Nuisance Wildlife Policy that addresses wild turkeys will be developed.

Summary: The general management posture is to allow continued population growth, to protect and enhance spring gobbler hunting opportunities, and provide additional recreation by allowing limited fall hunting opportunity. The emphasis is on quality spring gobbler hunting (see Objective 2). Expanded fall hunting (beyond archery equipment) should not be entertained without better population data and fall harvest information (beginning fall 2002) because fall seasons, where the harvest of hens is legal, have a much greater potential to negatively influence the growth rate of a population than do spring hunting seasons.

MANAGEMENT DECISION PROCESS

Management decisions primarily address the goal of increasing the wild turkey population via trap and transfer activities and providing opportunity for consumptive and nonconsumptive use of the resource. Wildlife Division staff annually discusses and makes recommendations regarding hunting seasons (Appendix III), trap and transfer activities (Appendix II), habitat improvements (Appendix II) and the pen-raised wild turkey issue (Appendix IV).

Decision-making is a series of yes or no answers to questions related to wild turkey population status and trap and transfer programs (Figure 1). Responses to questions are based on evaluation of all input criteria and the flow chart guides the manager to the appropriate management option.

CRITERIA FOR WILD TURKEY DECISION-MAKING

The following criteria currently are used in evaluating wild turkey population, distribution, size, and stability. At present, there is no direct measure of population size on an annual basis. Estimates of population size and comments on population stability are largely derived from input to MDIFW from Department staff and private individuals using a variety of information gathering techniques. Harvest registration data and the Turkey Hunter Questionnaire (Appendix V) continue to provide important data on the status, distribution, and trend of the wild turkey population.

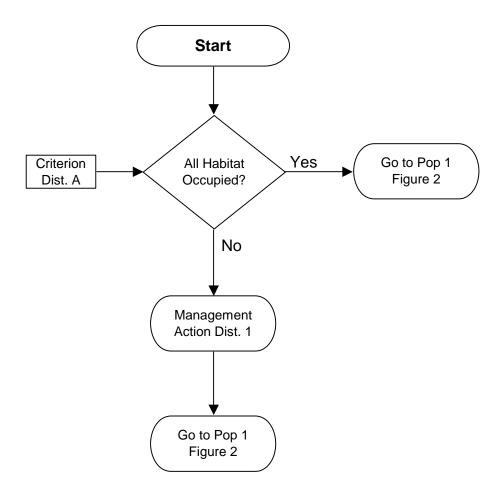


Figure 1. Wild turkey distribution decision-making process.

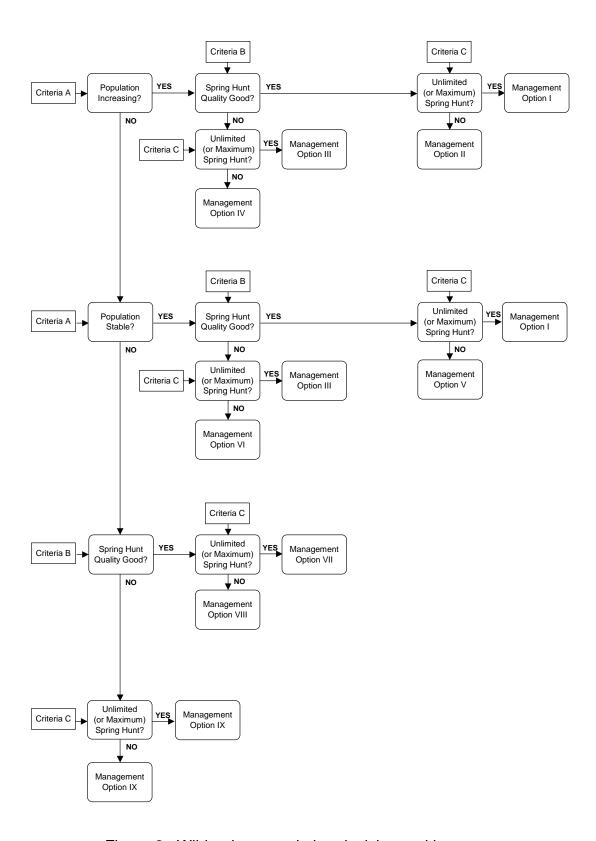


Figure 2. Wild turkey population decision-making process.

Criteria Distribution A

If all WMDs except 1-9, 19, 28, and 30 are occupied (*documentation of successful wild turkey reproduction for at least two years*) based on reliable brood sightings and reports to regional wildlife management section staff, then answer = "YES", if not, answer = "NO".

Availability of wild turkey habitat currently without turkeys varies considerably throughout the state. Wildlife Management District's (WMDs) 1-9, 19, 28, and 30 are considered to have little wild turkey habitat due to low amounts of cattle—based agriculture, low acreage's of mast-producing trees, and/or high annual snow depths. WMD 13, and the eastern portion of 27, have potential wild turkey habitat based on associations with favorable land use practices and conditions.

Management Action Distribution 1

Conduct a minimum of two trap-and-transfer efforts each winter based on guidelines in Appendix II.

Wild turkey populations are characterized by both short-term and long-term fluctuations related to unpredictable variation in nesting success and poult survival and, in northern ranges, winter mortality. Other limiting factors include predation, loss of habitat, and hunter harvest. With this being said, it remains feasible to increase wild turkey populations and distribution with an aggressive trap and transfer program and through habitat improvements. Given existing Department staff time limitations, it is assumed

that, on average, two new sites per winter in suitable habitat could be stocked. Wild turkey population expansion could be expedited with additional resources and staff.

Further, all wild turkey trap and transfer activities into suitable habitat will follow specific habitat guidelines for release sites (Appendix II).

WILD TURKEY POPULATION DECISION MAKING

Criteria A

This input attempts to address the question "Is the population increasing?" Whether or not a population is increasing will be based primarily on data and input collected by MDIFW from a variety of sources, particularly reliable reports to Department staff over the entire range of the wild turkey in Maine, harvest registration and hunter questionnaire results (gobblers and hens seen per hour of hunting, Table 1, Appendix V), and an index to May rainfall. This information is pertinent to turkey populations within the hunting zone. As turkey monitoring techniques improve, changes will be incorporated into this wild turkey management system.

Turkeys Seen/Hour. This variable is derived from the annual Turkey Hunter Questionnaire. It is calculated as the total number of females seen plus the total number of males seen divided by the total number of hours hunters reported hunting that year. The population is determined to be increasing when the slope of the line of the last three years of this statistic is positive. When the slope equals zero, the population is believed to be stable. When the slope is negative, the population is determined to be decreasing.

May Rainfall Index. This statistic will be calculated as the average amount of rainfall in May for the State of Maine. When the current year's May rainfall index is more than 10% below normal, the population will be considered to be increasing. When the average amount of rain is more than 10% greater than normal, the population will be considered to be decreasing. When the May rainfall index is ± 10% of the average, the population will be considered to be stable. The rainfall index is used because managers in Maine do not have the resources to conduct brood surveys and are not able to adjust fall hunting seasons because brood survey data are obtained after fall hunting regulations have been established. A rainfall index is more timely and inexpensive. The negative relationship between May rainfall and turkey populations results because annual changes in May precipitation are negatively correlated with annual variation in nest success, the population demographic that has the greatest influence on turkey abundance. Depredation of females and nests appears to related to the amount of rainfall received during the incubation period and is related positively to the ability of nest predators to detect female wild turkeys and their nests.

Ultimately, a determination as to whether the turkey population is increasing, decreasing, or stable will be made each year in late July when both input criteria agree. If the results of both input criteria are different, then the population is determined to be "stable".

Criteria B

Whether or not hunt quality is maintained will be based on results of the Interference variable of the Turkey Hunter Questionnaire. If the last years Interference statistic is 17% or less, (or exhibited an annual change of less than 10%), then "Hunt Quality Maintained?" equals "yes".

A quality hunt is defined in Objective 2 as "hearing, seeing, working, and hopefully harvesting a turkey without interference from others". For clarification, "without interference from others" is achieved when the interference variable from the previous year's Turkey Hunter Questionnaire is < 17% (the interference rate during the 2000 hunting season) or did not change more than 10% from the previous year. The rule of thumb for calculating this is HQ INTER = "YES"/#DID HUNT = "YES".

Criteria C

This input attempts to address the question "Has everyone who applied for a spring wild turkey hunting permit received one?" The decision will be based on whether the supply of spring wild turkey hunting permits exceeds the demand for those permits.

MANAGEMENT OPTIONS

Management Option I

- Monitor wild turkey population and harvests
- Target legal harvest rate of hens during fall hunt of 8%

- Expand fall hunting zone where warranted if turkey population exhibits continued growth with two years of documented brood sightings in WMDs 12, 15-18, and 27
- Initiate investigations of nuisance wild turkey issues

Management Option 2

- Monitor wild turkey population and harvests
- Increase number of permits during spring season by 30%, rounding up to the nearest 100
- Conduct 2 week fall archery only hunt to target legal harvest rate of hens during fall hunt of 2%
- Expand fall hunting zone where warranted

Management Option 3

- Monitor wild turkey populations and harvests
- Expand hunter education program to address issues of reduced hunt quality
- Consider reduction in the number of spring permits if hunt quality remains poor
- Target legal harvest rate of hens during fall hunt of 8%
- Expand fall hunting zone where warranted

Management Option 4

- Monitor wild turkey populations and harvests
- Expand hunter education program to address issues of reduced hunt quality
- Address season structure

- Maintain or increase the number of permits during the spring season by 10%, rounding up to the nearest 100
- Target legal harvest rate of hens during fall hunt of 8%
- Expand fall hunting zone where warranted

Management Option 5

- Monitor wild turkey population and harvests
- Increase number of permits during spring hunt by 20%, rounding up to the nearest
 100
- Conduct 2 week fall archery only hunt to target legal harvest rate of hens during fall hunt of 2%
- Expand fall hunting zone where warranted

Management Option 6

- Monitor wild turkey population and harvests
- Maintain or increase the number of spring permits by 10%, rounding up to the nearest 100
- Expand hunter education program to address issues of reduced hunt quality
- Address season structure
- Target legal harvest rate of hens during fall hunt of 2%

Management Option 7

Monitor wild turkey population and harvests

- Maintain spring harvest management posture
- Target legal harvest rate of hens during the fall hunt of 2% and consider restricting
 fall archery only hunt to 1 week or close fall hunt if decline continues for 3 years
- Investigate wild turkey limiting factors

Management Option 8

- Monitor wild turkey population and harvests
- Hold number of spring permits stable at previous years number
- Target legal harvest rate of hens during the fall hunt at 2% and consider restricting
 fall archery only hunt to 1 week or close fall hunt if decline continues for 3 years
- Investigate wild turkey limiting factors

Management Option 9

- Monitor wild turkey population and harvests
- Expand hunter education program to address issues of reduced hunt quality
- Consider reduction in the number of spring permits if hunt quality remains poor
- Target legal harvest rate of hens during the fall hunt at 2% and consider restricting
 fall archery only hunt to 1 week or close fall hunt if decline continues for 3 years
- Investigate wild turkey limiting factors

MANAGEMENT RECOMMENDATIONS

Recommendations from the current management system can result in one or more of the following:

- expand or maintain number of permits issued to hunters during the spring season
- adjust length of fall wild turkey hunting season and consider allowing additional harvest of hens where population data show that population can support it
- increase hunter education program
- investigate wild turkey nuisance issues
- investigate wild turkey limiting factors

CHRONOLOGY OF WILD TURKEY MANAGEMENT ACTIVITIES

The majority of wild turkey management activities include a series of administrative tasks and discussions that involve hunting season proposals, rulemaking, the permit application process, turkey registration, and hunter questionnaires. Below is a chronological overview of the major administrative and biological components of wild turkey management activities. Throughout the year, Department biologists and wardens handle wild turkey nuisance complaints and miscellaneous requests for information on wild turkeys and wild turkey management. A complete table of the 2002 wild turkey schedule can be seen in Appendix III.

Month and Activity

January-

Turkey Application Period Ends (1/15/03) Print Turkey Hunter's Guide Order Registration Books and Tags Establish Registration Stations Begin Winter Trap and Transfer Activities

February-

Conduct Turkey Drawing (2/12/03)
Continue Trap and Transfer Activities

March-

Deadline for receipt of \$ and transfer information (3/14/03)
Prepare Turkey Hunter Questionnaire
Continue Trap and Transfer Activities
Begin Turkey Hunter Seminars
Conclude Trap and Transfer Activities

April-

Print and Mail Permits Wild Turkey Hunting Season (04/28/03) Issue Turkey Station Tagging Material

May-

Monitor Registration Stations Turkey Questionnaire Mailing

June-

Registration Books to Augusta
Enter Turkey Questionnaire Data
Enter Turkey Registration Data
Analyze Registration Data
Brief Advisory Council on Season and Options for Next Season
Calculate May Rain Index

July-

Analyze Turkey Questionnaire Data Meet with WMS to Review Season and Discuss Status of Wild Turkey Population

August-

Meet with Maine Chapter, National Wild Turkey Federation and Discuss Seasons Prepare Rulemaking Proposal Discuss Proposal with Advisory Council SeptemberStart Rulemaking Process Print and Issue Fall Turkey Hunting Permits Distribute Registration Station Materials

October-

Advisory Council Meeting To Adopt Turkey Regulations Fall Wild Turkey Hunting Season Develop Turkey Application and Instructions

November-

Update Turkey Hunter's Guide

December-

Revise Registration Books Distribute Turkey Application and Instructions PART II: WILD TURKEY DATA BASE

WILD TURKEY DATA COLLECTION SUMMARY

WILD TURKEY HARVEST DATA

Registration Data

The law requires that all harvested turkeys be registered and tagged at stations established for that purpose (Appendix VI). Registration data include the name and address of hunter, date of kill, time of kill, town of kill, and the sex and age of the harvested bird. All radios, leg bands, and wing tags must be submitted to MDIFW at the time the turkey is being presented for registration. Registration summaries are distributed to regional offices and the appropriate media.

Biological Data

Biological data are collected by registration agents or MDIFW personnel at the time the turkey is being presented for registration (Appendix VI). These data include: sex, age, beard length, and spur length of the harvested wild turkey. Any abnormalities and comments are recorded.

Hunter Questionnaire

Each turkey permit holder, including those who did not hunt or were unsuccessful, are requested to complete and send to MDIFW a hunter questionnaire (Appendix V).

Questionnaire responses are entered into a database in Augusta and analyzed at the Wildlife Resource Assessment Section in Bangor. A copy of the questionnaire and a

summary of hunter questionnaire results and harvests from 1986 - 2001 are included in two tables in Appendix V.

POPULATION MONITORING

A number of population monitoring techniques have been evaluated in the past but none of them have proved precise enough or feasible given personnel time limitations. It appears that observations by Department staff and others, nuisance complaints, and responses by hunters on turkey sightings in the Turkey Hunter Questionnaire are, at present, the most effective ways to gather information on the status of turkey populations and distributions (Appendix V).

Wild turkeys captured during trap and transfer activities are marked with metallic leg bands. Each bird is assigned a unique identification number and the age, sex, weight, and other data are recorded prior to release. All capture and biological data are filed in Regional offices and at the Wildlife Resource Assessment Section in Bangor.

HABITAT EVALUATION

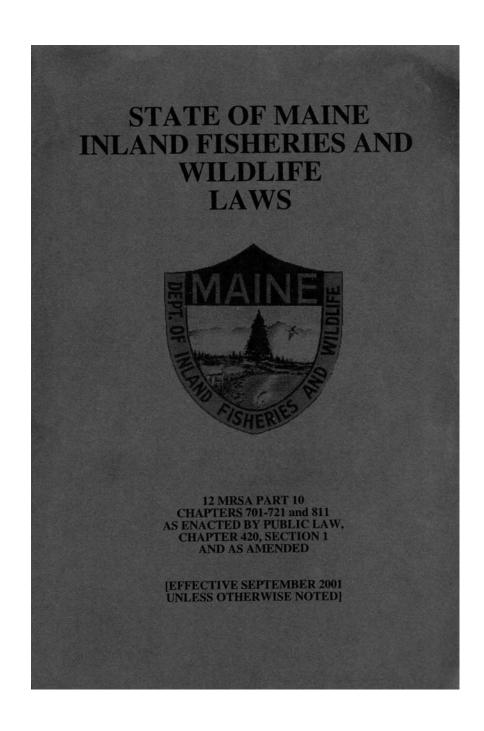
Habitat conditions were reevaluated in 2000 in the Wild Turkey Assessment Update and are updated every five years as part of the planning process or as new data becomes available.

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- III. Chronology of Events Wild Turkey Hunting Seasons
 - 1. Turkey Schedule 2002
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 - 4. Summary of Wild Turkey Permit Drawings 1986-2002
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- V. Wild Turkey Hunter Questionnaire and Summary Tables.
 - 1. Example of MDIFW Hunter Questionnaire
 - 2. Hunter Questionnaire results, 1986-2001
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APPENDIX I

1. Wildlife Laws Specific to Wild Turkeys



§7468 INLAND FISHERIES AND WILDLIFE

- **8-B. Driving moose.** A person is guilty of driving moose if that person participates in a hunt for moose during which an organized or planned effort is made to drive moose. [1989, c. 705, §3 (amd).]
- **8-C. Illegal hunting methods.** A person is guilty of using illegal hunting methods if that person uses electronic calling devices while hunting moose. [1993, c. 88, §1 (new).]

9. Exceptions.

- A. Notwithstanding subsection 8, the head, antlers, bones, feet and hide of any moose may be sold. [1999, c. 9, §1 (amd).]
- B. Notwithstanding subsection 3, paragraph A, that provision does not apply to moose legally registered in accordance with this subchapter. [1989, c. 493, §39 (new).]

Section History: 1979, c. 420, §1 (NEW); 1985, c. 369, §21 (AMD); 1987, c. 317, §22 (AMD); 1989, c. 493, §39 (AMD); 1993, c. 438, §34 (AMD); 1995, c. 455, §35 (AMD); 1999, c. 403, §24-27 (AMD); 1999, c. 790, §A16 (AMD); 1999, c. 9, §1 (AMD); 1979, c. 543, §50 (RPR); 1979, c. 723, §20,21 (AMD); 1981, c. 118, §3-9 (AMD); 1987, c. 696, §12-14 (AMD); 1989, c. 705, §3 (AMD); 1993, c. 88, §1 (AMD); 1999, c. 322, §13 (AMD); **2001, c. 269, §13 (amd).**

§7465. Muskrat (REPEALED)

Section History: 1979, c. 420, §1 (NEW); 1983, c. 797, §12 (RP).

§7466. Prohibited acts relating to muskrat (REPEALED)

Section History: 1979, c. 420, §1 (NEW); 1979, c. 732, §11,31 (AMD); 1991, c. 443, §26 (RP).

§7467. Raccoons

Any open season for hunting raccoons established by the commissioner shall be of uniform duration throughout the State. [1981, c. 575 (new).]

Section History: 1981, c. 575 (NEW).

§7468. Wild turkeys

1. Wild turkey hunting district. A wild turkey hunting district is established statewide, except for those areas closed to hunting described in chapter 713, subchapter I. [1985, c. 95, §1 (new).]

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- 2. Wild turkey hunting zones. The commissioner may establish wild turkey hunting zones to be delineated by recognizable physical boundaries such as roads, rivers or railroad rights-of-way. All areas of the State not included in the wild turkey hunting zones are closed to wild turkey hunting. [1985, c. 95, §1 (new).]
- 3. Wild turkey season. The commissioner may establish open seasons on wild turkeys, designate zones that are open to hunting wild turkeys and issue permits within those zones. [2001, c. 56, §1 (amd).]
- **4. Hunting permits.** The commissioner may establish the number of wild turkey permits for each wild turkey hunting zone and may issue those permits annually. The percentage of total wild turkey permits issued to nonresident and alien hunters may not exceed the average percentage of applicants for wild turkey permits over the previous 3 years who were nonresidents and aliens and may not be more than 10% of the total wild turkey permits issued statewide. A person whose application is selected may obtain a wild turkey hunting permit upon presentation of proof that the person possesses:
 - A. A valid Maine hunting license, if the person is a resident of the State; or [1999, c. 323, §2 (amd); §3 (aff).]
 - B. A valid Maine big game hunting license, if the person is a nonresident or alien. [1999, c. 323, §2 (amd); §3 (aff).]

An adult who holds a valid wild turkey permit may transfer the permit to a junior hunter or person 65 years of age or older by identifying the name, age and address of the transferee on the permit as well as any other information reasonably requested by the commissioner and then return the permit to the department prior to the start of the turkey season. The commissioner shall record the transfer and return the permit to the junior hunter or person 65 years of age or older. A valid permit must be in the possession of the transferee to hunt turkey. If the adult transfers the permit to the junior hunter or person 65 years of age or older, that adult is prohibited from hunting turkey. [2001, c. 6, §1 (amd).]

- 5. Eligibility. Any Maine resident, nonresident or alien who is eligible to obtain a Maine hunting license, or who will be eligible to obtain a Maine hunting license by the opening day of the wild turkey hunting season, is eligible to apply for a wild turkey hunting permit. [2001, c. 56, §1 (amd).]
- 6. Application procedure. Eligible persons wishing to apply for a permit shall apply in a manner prescribed by the commissioner. The application must be accompanied by an application fee of \$5 for residents and \$10 for nonresidents and aliens. The application fee may not be refunded. No person may file more than one application. Any person who submits more than one application is disqualified from the selection of permittees. [2001, c. 294, §4 (amd).]
- 7. Selection procedure. Permittees must be randomly selected. [2001, c. 56, §2 (amd).]

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- **8. Bag limit.** The bag limit is one bearded wild turkey per permit holder per season. [1985, c. 95, §1 (new).]
- **9. Legal hunting time.** The legal hunting time, unless otherwise provided by rule of the commissioner, is 1/2 hour before sunrise to 11 a.m. each wild turkey hunting day. [1993, c. 574, §23 (amd).]
- 10. Registration of harvested wild turkeys. All wild turkeys legally harvested shall be presented for inspection at an official wild turkey registration station established by the commissioner to allow collection of biological and hunting data. The entire animal except the viscera shall be presented.
 - A. Each wild turkey legally presented for registration shall be tagged in the manner directed by and with materials furnished by the commissioner. A \$1 fee may be assessed for registration. [1985,; c. 506, Pt. A, §16 (amd).]
 - B. Any person killing a wild turkey under this section shall present it for registration at an official registration station and that wild turkey shall be registered in the name of the person who killed the turkey. No person may present a wild turkey for registration or allow to be registered in his name any wild turkey which he himself did not lawfully kill. [1985, c. 95, §1 (new).]
- 11. Questionnaires. Each permittee shall complete a questionnaire, to be provided by the commissioner, and return this questionnaire to the commissioner within a period of 10 days after the close of the wild turkey hunting season. [1985, c. 95, §1 (new).]
- 12. Authority of the commissioner. The commissioner may establish open hunting season dates on wild turkeys, issue applications for wild turkey hunting permits, set the number of permits to be issued, establish wild turkey hunting zones, issue permits, establish provisions giving special consideration to landowners who keep their lands open to hunting by the public and make all rules which the commissioner considers necessary for the protection of the wild turkey resource. [2001, c. 56, §3 (amd).]

Section History: 1985, c. 506, §A16 (AMD); 1985, c. 95, §1 (NEW); 1999, c. 323, §2 (AMD); 1999, c. 323, §3 (AFF); 1993, c. 574, §23 (AMD); 2001, c. 6, §1 (amd); 2001, c. 56, §1-3 (amd); 2001, c. 294, §4 (amd).

§7469. Prohibited acts relating to wild turkeys

- 1. Illegal hunting of wild turkeys. A person is guilty of illegally hunting wild turkeys, except in accordance with section 7468. [1985, c. 95, §1 (new).]
- 2. Illegal possession of wild turkeys. A person is guilty of illegal possession of wild turkeys if he possesses any wild turkey, except in accordance with section 7468. [1985, c. 95, §1 (new).]

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- 3. Illegally transporting wild turkeys. A person is guilty of illegally transporting wild turkeys if he, at any time in any manner, moves or transports any wild turkey, or any part of a wild turkey, and:
 - A. The wild turkey tag portion of the permit bearing the name and address of the person who killed the wild turkey is not securely attached to the wild turkey; or [1985, c. 95, §1 (new).]
 - B. The person who killed the wild turkey does not accompany the wild turkey while it is being moved or transported. [1985, c. 95, §1 (new).]
- **4. False registration of a wild turkey.** A person is guilty of false registration if he presents for registration, or allows to be registered in his name, any wild turkey which he did not lawfully kill. [1985, c. 95, §1 (new).]
- 5. Failure to register wild turkey. A person is guilty of failure to register a wild turkey if he kills a wild turkey and fails to present it for registration in his name at the first open wild turkey registration station on the route taken by him. [1985, c. 95, §1 (new).]
- 6. Keeping an unregistered wild turkey. A person is guilty of keeping an unregistered wild turkey if he keeps an unregistered wild turkey at his home, or any place of storage except at an official wild turkey registration station or at the office of an inland fisheries and wildlife warden, for more than 12 hours. [1985, c. 95, §1 (new).]
- 7. Failure to attach wild turkey tag to wild turkey. A person is guilty of failure to attach a wild turkey tag to a wild turkey if, prior to presenting a wild turkey for registration, he possesses or leaves in the fields or forests a wild turkey which he has killed which does not have securely attached, and plainly visible, the wild turkey tag portion of his permit, bearing his full name and address. [1985, c. 95, §1 (new).]
- 8. Illegal possession of wild turkey parts. A person is guilty, notwithstanding subsection 3, of illegal possession of wild turkey parts if he possesses any part or parts of a wild turkey taken in accordance with this section, unless each part is plainly labeled with the name and address of the person who registered the wild turkey. [1985, c. 95, §1 (new).]
- **9. Buying or selling wild turkey.** A person is guilty of buying or selling a wild turkey if he:
 - A. Buys, sells or offers for sale or barter any wild turkey; [1985, c. 95, §1 (new).]
 - B. Aids in buying, selling or offering for sale or barter any wild turkey; or [1985, c. 95, §1 (new).]

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- C. Counsels or otherwise aids in buying, selling, offering for sale or bartering any wild turkey. [1985, c. 95, §1 (new).]
- 10. Illegal hunting methods. A person is guilty of using illegal hunting methods if he:
 - A. Employs the use of a dog or dogs in any manner while hunting wild turkeys; [1985, c. 95, §1 (new).]
 - B. Uses electronic calling devices while hunting wild turkeys; [1985, c. 95, §1 (new).]
 - C. Engages in any organized drive of any manner while hunting wild turkeys; [1985, c. 95, §1 (new).]
 - D. Uses any bait; or [1985, c. 95, §1 (new).]
 - E. Uses any trap or other device intended or designed for the purpose of capturing or ensnaring wild turkeys. [1985, c. 95, §1 (new).]
- 11. Illegal weapons or ammunition. A person is guilty of using illegal weapons or ammunition if he uses any weapon or ammunition except the following:
 - A. Shotgun gauges 10 through 20 using shot sizes 2 through 6 inclusive; or [1985, c. 95, §1 (new).]
 - B. Bow and arrow. [1985, c. 95, §1 (new).]

Section History: 1985, c. 95, §1 (NEW).

§7470. Commercial harvest of snapping turtles

- 1. Commercial snapping turtle permit. Persons harvesting snapping turtles for purposes of resale are required to obtain a permit from the commissioner. [1987, c. 608 (new).]
- 2. Rules. The commissioner shall adopt rules pertaining to harvest methods, confinement and disposal of snapping turtles. The commissioner may by rule:
 - A. Require reporting of commercial harvest activities; [2001, c. 200, §1 (new).]
 - B. Establish a season including daily and season possession limits; [2001₄ c. 200, §1 (new).]
 - C. Establish size limits; and [2001, c. 200, §1 (new).]

APPENDIX II

WILD TURKEY MANAGEMENT GUIDELINES

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- 6. Release Site Requirements
- 7. Relocation/release Priority

INTRODUCTION

Wild Turkey Restoration Guidelines

The reestablishment of wild turkeys into former ranges was possible for two reasons. First, habitats suitable for wild turkeys has became available because of changes in land use patterns, primarily through the conversion of cleared farmland back to forestland. Second, a number of state wildlife agencies abandoned the liberation of pen-raised wild turkeys into the wild and developed capture techniques that enabled large numbers of wild-trapped birds to be trapped and transferred to new habitats. These wildlife agencies served as the primary sources of wild birds for several state restoration programs, including Maine's.

In the mid-1970s, MDIFW wildlife biologists took an active role in wild turkey restoration and acquired 41 birds from Vermont and released them in York County. These birds did reasonably well, and, by the spring of 1982, 33 birds were trapped in southern Maine and were released in Waldo County. These two geographically isolated populations expanded but at rates slower than desired. A more active role in wild turkey acquisition and trap and transfer became warranted. The key to the success of Maine's program began when MDIFW fostered a working relationship between Department personnel and members of the Maine Chapter of the National Wild Turkey Federation. A liaison group was formed and became known as the Wild Turkey Research/Relocation Committee. This committee is comprised of MDIFW biologists and members of the Maine Chapter. The committee meets each winter to discuss the status of the wild turkey program in Maine. The committee is comprised of the following:

WILD TURKEY RESEARCH/RELOCATION COMMITTEE

- 1. Director, Wildlife Division (Chairman)
- 2. President, State Chapter of the National Wild Turkey Federation
- 3. State Chapter Designee
- 4. Management Section Supervisor
- 5. Research Supervisor
- 6. Bird Group Leader
- 7. Regional Biologist, (Region A)
- 8. Regional Biologist (TBA)
- 9. Turkey Study Leader

WILD TURKEY POPULATION MONITORING

The inability to accurately census wild turkeys has proven to be a major wild turkey management shortcoming. In Maine, this is particularly true because of the relatively small number of birds involved, the fragmentation of marginal to good habitat, and the overall secretive behavior of the birds.

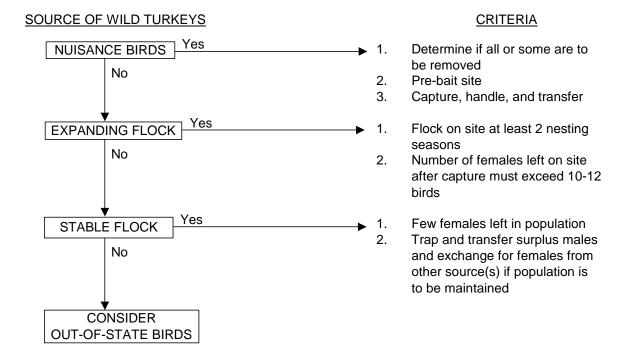
A number of census techniques were tested to monitor wild turkeys throughout their range in Maine. These included: field personnel estimates, brood counts, hunter success estimates, harvests, winter concentration counts, landowner estimates, hunter estimates, telephone surveys, gobbling counts, hunter questionnaires, postcard surveys, winter track counts, aerial surveys, and sightings by deer hunters. In 1986, Maine's first wild turkey research project was initiated. The principal objective of this study was to gather basic nesting ecology information on wild turkeys in Waldo County. A secondary objective was to determine if a spring gobbling survey could be used to determine population trends in Maine. Offshoots of this graduate research project provided useful information on a number of other survey techniques as well. Unfortunately, none of the surveys proved to be particularly effective or efficient given the Department's personnel limitations.

Using radio-marked birds in Waldo County, researchers investigated the advantages and disadvantages of a sighting card system, winter transacts and track counts, spring gobble counts, and aerial survey techniques. At that time, the technique that ultimately proved most useful in the determination of wild turkey numbers and distribution was the sighting card system. To employ this system, MDIFW personnel placed postage-paid sighting cards in conspicuous locations in grocery stores in areas where wild turkeys were believed to exist. Local residents willing to help would pick up a card and mail it to the Department with the number of birds seen, date, and location of sighting. Respondents were often called to obtain more information about the sighting. Reports of wild turkeys in previously unoccupied range were ground-checked for verification. At the end of each year, each cooperator was contacted and provided with a summary of sightings and wild turkey research and management status report.

In 1988, an attempt was made by the Maine Chapter (NWTF) to contact landowners with known concentrations of wild turkeys and ask them to keep a diary of their turkey sightings. This too failed to produce useable long-term results. In 1991, MDIFW experimented with a survey similar to one used by biologists in Minnesota to monitor their wild turkey populations. Here, a random sample of antlerless deer permit holders were provided a postcard questionnaire. Each survey participant was asked to report the number of days he or she hunted in a particular deer permit district and record the number of wild turkeys seen while hunting. This survey served to provide biologists with an index to wild turkey abundance and information on wild turkey distribution. MDIFW field tested this technique for one year with limited results. Further development of this technique may be useful now that the Department manages deer on a Wildlife Management District basis.

IDENTIFICATION OF WILD TURKEYS FOR TRAP AND TRANSFER

The following flow diagram is intended to be used to guide decision making when locating the source(s) of wild turkeys for trap and transfer activities.



CAPTURE AND HANDLING

The following discussion of capture and handling only briefly describes the two most frequently used capture techniques. For more information on wild turkey capture, the reader is encouraged to read the three references listed at the end of this section. These references provide detailed information on bait sight selection, baiting, pre-trapping operations, use of rocket-nets, capture with drugs, transportation of captive birds, release techniques and public relations.

In general, most wild turkey captures are accomplished by Wildlife Management Section staff employing the rocket-net system at pre-baited sights. In certain instances, wild turkey capture may be more effective with orally administered drugs. MDIFW personnel and Maine Chapter volunteers generally work cooperatively in determining capture locations. Each winter, Wildlife Management Section staff develop a list of capture and release sites and accomplish these activities as time and conditions permit. Captured birds are transported to each release sight in specially designed carrying boxes acquired through the National Wild Turkey Federation.

References:

- Bailey, W., D. Dennett, H. Gore, J. Pack, R. Simpson, G. Wright. Basic considerations and general recommendations for trapping Wild Turkey.
- Grubb, T.G. 1988. A portable rocket-net system for capturing wildlife. Research Note RM-484. USDA Forest Service. Rocky Mountain Forest and Range Experiment Station.
- Williams, L. E., Jr., D. H. Austin, T. E. Peoples, and R. W. Phillips. Capturing Wild Turkeys with oral drugs. <u>in</u> Wild Turkey Management.
- **** For copies of the literature noted above, contact MDIFW Bird Group, 650 State Street, Bangor, Maine 04401.

RELEASE SITE REQUIREMENTS

The following is a list of site components and characteristics deemed necessary for proper restocking of wild turkeys into suitable habitat in Maine. These listed requirements are meant to serve as a guideline and have proved to be successful to date. Any deviation from this would require that the habitat to be stocked has an extensive habitat improvement program designed to enhance habitat conditions in place for wild turkeys. An evaluation of the release and outcome would also be required.

- I. Release wild turkeys within 10-25 miles of established wild turkey population.
- II. Optimum habitat/site components include:
 - 1. Dairy farms with silage or kernel corn
 - 2. Open land/forest mixture within 1 mile radius of release should be comprised of:
 - A. minimum of 25-50% open land
 - B. forest land to be 50-75% mixed hardwoods, preferably pole stage and larger
 - 3. Open land
 - A. crop land
 - B. active hay fields
 - C. pastures
 - D. forest openings
 - 4. Hardwoods to be predominantly oak or other mast-producing species
 - 5. Composition softwood stands should be pine or hemlock
 - 6. Habitat should include spring seeps
 - 7. No game farm turkeys in the area of release
- III. Landowner cooperation
 - 1. Adequate public relations prior to release
 - 2. Inform landowner of future trap/transfer activities
 - 3. Assistance with population monitoring
- IV. Local sportsman's involvement
 - 1. Poaching deterrent

SITE SELECTION (ALTERNATIVE APPROACH)

1. Site 10 - 25 miles from established wild turkey population

$$Yes - go to 2$$

No – do not stock

2. Are there game farm turkeys in area?

3. Within 1 mile of release site, can the habitat be described as >25% open land and forest land composed of 50-75% mixed hardwoods pole stage and larger?

$$Yes - go to 4$$

No – do not stock

4. Is the annual snow depth in the area less than 80 inches?

$$Yes - go to 5$$

No – do not stock

5. Has landowner agreed to transfer activities?

6. Adequate public relations been done to have public support and decrease likelihood of poaching

RELOCATION/RELEASE PRIORITY

Under no circumstances should wild turkeys be released at or near sites where free-ranging pen-raised wild turkeys are known to exist.

Release birds:

- Priority 1. where previous, restocking attempt failed to achieve the restocking goal of 10 females and 5 males.
- Priority 2. to initiate next restocking attempt when significant number of birds are available or are expected to be available in the same season.
- Priority 3. to improve genetic composition of turkey populations at sites where population is stable or slowly increasing. This will allow the best use of birds when less than the desired number of birds necessary for a new release are captured.

APPENDIX III

- 1. Turkey Schedule 2002
- 2. Maine Turkey Hunters Guide
- 3. 2002 Permit Application Booklet
- 4. Summary of Wild Turkey Permit Drawings 1986-2001.

2002 Turkey Schedule (May 2001 - June 2002)

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Turkey Hunter O Turkey Process Season) Turkey Process Season) Turkey Process Season) Turkey Hunter O Turkey Process Season) Turkey Process Season) Turkey Process Season)	uestionnaire Data (From 2001 uestionnaire Data (From 2001 uestionnaire	2001 Turkey Questionnaire 1st Mailing 2001 Turkey Registration Books to Augusta Enter 2001 Turkey Questionnaire Data Account for 2001 Turkey Registration Books	05/23/01	05/24/01	J. Bourque		(2)
	Data (From 2001 uestionnaire Data (From 2001 Data (From 2001	2001 Turkey Registration Books to Augusta Enter 2001 Turkey Questionnaire Data Account for 2001 Turkey Registration Books	100000	06/08/01			
	uestionnaire Data (From 2001 Data (From 2001	Enter 2001 Turkey Questionnaire Data Account for 2001 Turkey Registration Books	10/67/60		Dumont	Dist. Wardens	
	Data (From 2001 Data (From 2001	Account for 2001 Turkey Registration Books	06/01/01	06/29/01	J. Bourque		
	ss Data (From 2001 un)		06/11/01	06/12/01	J. Bourque		
	r Questionnaire	Enter 2001 Turkey Registration Data	06/12/01	06/21/01	J. Bourque		
		2001 Turkey Questionnaire 2nd Mailing	06/13/01	06/14/01	J. Bourque		
	Process Data (From 2001 Season)	Transfer 2001 Turkey Registration Data to Bangor 06/22/01	06/22/01	06/23/01	Horn Olsen		
	ss Data (From 2001 nn)	Process Data (From 2001 Analyze 2001 Turkey Registration Data (Season)	06/25/01	07/31/01	Allen	Weik	
Turkey Depar	Department Proposal	Brief Advisory Council on 2001 Turkey Season of and Potential Rule Making Options for 2002 Season	06/27/01		Stadler	Dumont	Weik
Turkey Hunter	Hunter Questionnaire	Close 2001 Turkey Questionnaire Returns	06/27/01		J. Bourque	٠	
	Hunter Questionnaire		07/02/01	07/06/01	Horn Olsen		
Turkey Depar	Department Proposal	Meet with WMS to Review 2001 Season and Discuss 2002 Season Proposal	07/11/01	07/12/01	Dumont	Allen	
Turkey. Depar	Department Proposal	Meet with Nat'l Wild Turkey Federation to Review (2001 Season and Discuss 2002 Season Proposal	08/01/01	08/08/01	Dumont	Allen	
Turkey Hunte	Hunter Questionnaire	Analyze 2001 Turkey Questionnaire Data	08/01/01	08/15/01	Allen	Weik	
Turkey Depar	Department Proposal	Prepare 2002 Turkey Rulemaking Proposal	08/13/01	08/17/01	Stadler	Dumont	
Turkey Rule N	Rule Making	Input from Advisory Council re 2002 Turkey Regulation	08/29/01		Stadler		
Turkey Rule N	Rule Making	2002 Turkey Regulation to Governor's Office	09/03/01		Erskine		
Turkey Rule N	Rule Making	2002 Turkey Regulation to Secretary of State	09/11/01		Erskine		
Turkey Rule N	Rule Making	2002 Turkey Regulation Advertised	09/19/01				
Turkey Rule N	Rule Making	2002 Turkey Comment Period (1 Hearing if Needed)	09/19/01	10/19/01	Stadler		
Turkey Applic	Application/Instructions	Develop 2002 Turkey Application & Instructions	10/01/01	11/01/01	Ritchie	Billing)!
Turkey Rule N	Rule Making	Advisory Council Meeting - Adopt 2002 Turkey Regulation	10/31/01		Stadler		
Turkey Rule A	Rule Making	File 2002 Turkey Regulation with Secretary of State	11/01/01		Erskine		

Prepared by Sandy Ritchie 6/26/01

2002 Turkey Schedule (May 2001 - June 2002)

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Season	lask Group	Lask	Start	LIEST	Responsible	responsible (z)	responsible (3)
Turkey	Computer Lottery Application	Develop 2002 Turkey Computer Lottery Application if Process Changes	1-1/01/01	02/18/01	Horn Olsen		
Turkey	Application/Instructions	Print Mailing Labels for 2002Turkey Application & 11/05/01 Instructions	11/05/01	11/07/01	Hom Olsen		
Turkey	Application/Instructions	Print 2002 Turkey Application & Instructions	11/02/01	11/09/01	Contractor		
Turkey	Rule Making	2002 Turkey Regulation Adopted	11/06/01				
Turkey	Application/Instructions	Distribute 2002 Turkey Application & Instructions	11/19/01	11/23/01	Hall		
Turkey	Application and Instructions	Mall 2002 Turkey Application & Instructions to Previous Applicants	11/19/01	11/21/01	Hom Olsen	22	
Turkey	Advertising	Advertise Availability of 2002 Turkey Applications 11/19/01	11/19/01	01/31/02	Kleiner		
Turkey	Application Period	2002 Turkey Application Period	11/19/01	02/01/02		-	
Turkey	Applications Processed	Process 2002 Turkey Applications	11/20/01	02/15/02	Billing	Horn Olsen	
Turkey	Registration	Revise 2002 Turkey Registration Books & Quantities	12/01/01	01/01/02	Hom Olsen	Ritchie	
Turkey	Turkey Hunter's Guide	Prepare 2002 Turkey Hunter's Guide	12/15/01	01/15/02	Ritchie	Kleiner	Dumont
Turkey	Registration	Order 2002 Turkey Registration Books	01/01/02	02/01/02	Storehouse		
Turkey	Registration	Order 2002 Turkey Registration Tags	01/01/02	02/01/02	Storehouse		
Turkey	Registration	Establish 2002 Turkey Registration Stations	01/15/02	02/15/02	Horn Olsen	Dumont	Dist. Wardens
Turkey	Turkey Hunter's Guide	Print 2002 Turkey Hunter's Guide	01/15/02	02/15/02	Kleiner		
Turkey	Drawing	Conduct 2002 Turkey Drawing	02/18/02	02/22/02	Horn Olsen		
Turkey	Permits	Notify 2002 Successful Turkey Applicants	02/25/02	03/15/02	Billing		
Turkey	Hunter Questionnaire	Prepare 2002 Turkey Hunter Questionnaire	03/01/02	03/31/02	Ritchie	Allen	
Turkey	Permits	Input 2002 Turkey License Numbers	03/18/02	04/05/02	Horn Olsen		
Turkey	Hunter Questionnaire	Print 2002 Turkey Hunter Questionnaire & Business Reply Envelope	04/01/02	05/15/02	Ritchie		
Turkey	Permits	Print 2002 Turkey Permits	04/05/02	04/10/02	Horn Olsen		
Turkey	Permits	Issue 2002 Turkey Permits	04/11/02	04/12/02	Billing		
Turkey	Registration	Issue 2002 Turkey Station Tagging Material	04/15/02	04/30/02	Horn Olsen	Storehouse	Dumont
Turkey	Hunter Questionnaire		05/23/02	05/24/02	J. Bourque		
Turkey	Process Data (From 2002 Season)	2002 Turkey Registration Books to Augusta	06/01/02	06/08/02	Dumont	Dist. Wardens	
Turkey	Turkey Schedule	Prepare 2003 Turkey Schedule	06/01/02	06/30/02	Ritchie		
Turkey	Hinter Orgetionnaire	Enter 2009 Turkey, Ougation Date	00,700				

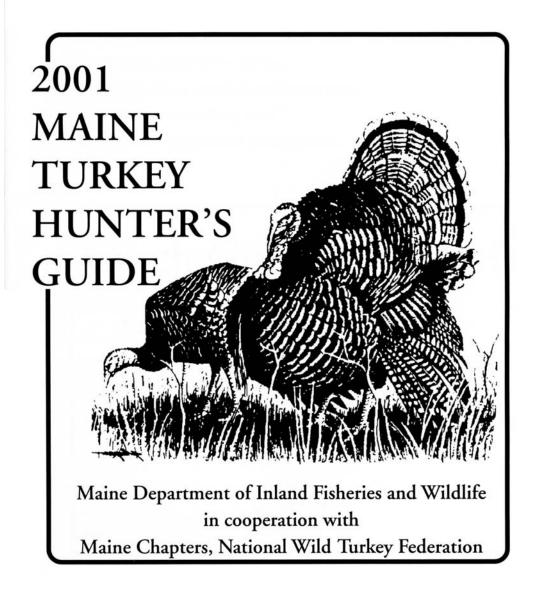
Prepared by Sandy Ritchie 6/26/01

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Season	Task Group	Task	Start	Finish	Responsible	Responsible (2)	Responsible (3)
Turkey	Process Data (From 2002 Season)	12002 Account for 2002 Turkey Registration Books	06/10/02	06/11/02	J. Bourque		
Turkey	Process Data (From 2002 Season)	n 2002 Enter 2002 Turkey Registration Data	06/12/02	06/20/02	J. Bourque		
Turkey	Hunter Questionnaire	2002 Turkey Questionnaire 2nd Mailing	06/13/02	06/14/02	J. Bourque		
Turkey	Process Data (From 2002 Season)	n 2002 Transfer 2002 Turkey Registration Data to Bangor 06/21/01	06/21/01	06/22/01	Horn Olsen		
Turkey	Process Data (From 2002 Season)	Process Data (From 2002 Analyze 2002 Turkey Registration Data Season)	06/25/01	07/31/01	Allen	Weik	
Turkey	Hunter Questionnaire	Close 2002 Turkey Questionnaire Returns	06/26/02		J. Bourque		
Turkey	Department Proposal	Brief Advisory Council on 2002 Turkey Season and Potential Rule Making Options for 2003 Season	06/26/02		Stadler	Dumont	Allen

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NOTIFICATION

- Each successful applicant in the permit drawing will be notified by mail shortly after the drawing. It is very important that you provide a mailing address where you can be reached at this time.
- The letter will indicate a deadline for responding with the appropriate fee and hunting license number. Permit fees are \$10.00 for residents and \$40.00 for nonresidents.
- Applicants not selected in the drawing will NOT be notified.
- The winners' names will be posted on our web site www. mefishwildlife.com and will be published in many newspapers the day after the drawing.

KEEP THIS RECEIPT UNTIL MAY. IT IS YOUR ONLY PROOF OF HAVING APPLIED

PERMITTEES WILL BE SELECTED BY A COMPUTERIZED RANDOM DRAW-ING IN MID-FEBRUARY 2003

APPLY ON THE WEB AND GET AN INSTANT RECEIPT! www.mefishwildlife.com

2003 WILD TURKEY SPRING HUNT PERMIT APPLICATION RECEIPT

TO OBTAIN PROOF THAT YOUR APPLICATION WAS RECEIVED:

- 1. FILL IN YOUR ADDRESS ON THE RECEIPT CARD (ABOVE THE APPLICATION FORM)
- 2. AFFIX A FIRST CLASS U.S. POSTAGE STAMP
- INCLUDE THE RECEIPT WITH YOUR APPLICATION.

WE WILL VALIDATE AND RETURN THE CARD WHEN WE PROCESS YOUR APPLICATION.

NO ONE ELSE IS WATCHING.

Maine is a unique place.

You can be completely alone in the wild, practicing ethical behavior and no one may be there to notice. However, the landowner as well as the hunters and anglers that follow you, will appreciate it greatly. Your ethical behavior contributes significantly to Maine's sporting future, and it encourages landowners to keep important habitat property available for all to enjoy.

So remember, always respect the rights of landowners and please ...

ASK FIRST

We urge all hunters and anglers to Supersport their license. The fee is only \$15.00 and all proceeds fund the Maine Department of Inland Fisheries & Wildlife's vital Landowner Relations Program. Thus far, this program has helped prevent the posting of over 63,000 acres of private land. If you have already purchased your license, you may still become a Supersport at any time.

Ask your local license agent or sport shop about Supersport when buying your license or visit our website at:

www.mefishwildlife.com

or call 207-287-8000

As a Supersport you will receive discounts with our numerous retail partners, half-price subscriptions and a Supersport decal.

2003 WILD TURKEY SPRING HUNT PERMIT APPLICATION

NEW APPLICATION DEADLINE: JANUARY 15, 2003

(Applications must be postmarked by midnight or delivered to 284 State St., Augusta before 5:00 p.m.)

APPLY ON THE WEB UNTIL 11:59 P.M. JANUARY 15!! www.mefishwildflife.com

SEASON DATES:

SEASON A:

April 28, 2003 - May 3, 2003, and

(See map on reverse side)

May 19, 2003 - May 24, 2003, and

May 26, 2003 - May 31, 2003

SEASON B:

May 5, 2003 - May 10, 2003, and

May 12, 2003 - May 17, 2003, and May 26, 2003 - May 31, 2003

NUMBER OF PERMITS:

SEASON A:

Permits

Permits

FOR ASSISTANCE CALL (207) 287-8000 or E-MAIL webmaster_ifw@state.me.us

YOU ARE ELIGIBLE TO APPLY IF:

- You are eligible to obtain a Maine Big Game Hunting License or will be eligible to obtain a Maine Big Game Hunting License by the opening day of the Wild Turkey hunting season.
- You will be at least 10 years old by the opening day of the Wild Turkey hunting season.

NOTE: Hunting during any fall turkey season does not prevent you from applying for a permit to hunt in the spring.

APPLICATION INSTRUCTIONS: Fill out all information. Any application that is not filled out completely, legibly, and accurately will be disqualified.

- No person may file more than one application. Any person submitting more than one application will be disqualified from the drawing.
- . Applicants are NOT required to have a hunting license to APPLY for a permit.
- Make sure the receipt postcard is correctly addressed and affix the correct postage if you want the receipt card returned to you as verification that
 your application has been received and processed.
- . Enter your name, mailing address, legal residence, and date of birth.
- . Check one box indicating your filing status (resident or nonresident).
- Check one box indicating your season preference.
- Sign and date your application. <u>Please be sure to include your phone number</u>. This will only be used to contact you for additional information to compl your application. Provide payment in U.S. funds by credit card, check or money order for the application fee (resident \$5.00, nonresident \$10.00) m payable to "Treasurer, State of Maine". **Do not send cash**. A fee of \$20 is charged for each insufCONTINUED BELOW

 CONTINUED BELOW

Wild Turkey Spring Hunt Permit Application
Maine Department of Inland Fisheries and Wildlife
284 State Street
41 State House Station
Augusta, ME 04333-0041

Applicant's Name

Mailing Address

State

Zip

City

Place US Postage Stamp Her

APPLICATION INSTRUCTIONS (CONT)

- Return your completed application and receipt f with proper payment in an envelope with proper postage.
- Send it to:

Wild Turkey Spring Hunt Permit Application Maine Department of Inland Fisheries and Wildl 284 State Street 41 State House Station Augusta, ME 04333-0041

- Applications must be postmarked no later than <u>January 15, 2003</u>, or delivered in person no late than 5 pm on <u>January 15, 2003</u> or you may app via the internet at www.mefishwildlife.com no la than 11:59 p.m. <u>January 15, 2003</u>.
- Permittees will be selected by a computerized ra dom drawing conducted in mid-February 2003.

2003 WILD TURKEY SPRIN	G HUNT LOTTERY APPLICATION	ON	APPLICATION DEADLINE: JANUARY 15, 2003!!
ADDRESS			APPLY ON THE WEB AT:
CITY	STATE	ZIP	www.mefishwildlife.com
LEGAL RESIDENCE TOWN	STATE/PROVINCE	DATE OF BIRTH	
CHECK ONE: RESIDENT \$5.00 NON RESIDENT \$10.00	I PREFER SEASON A, BUT WILL I PREFER SEASON B, BUT WIL	_	I certify that this is the Only application being submitted the undersigned applicant, and that all the information true and accurate.
	I WANT A PER	MIT IN SEASON A ONLY	APPLICANT'S SIGNATURE DATE TELEPHONE NUMBER
PAYMENT METHOD:	NO SEASON PREFERENCE, I WILL	L ACCEPT ANY SEASON	CARD EXPIRATION: MONTH: YEAR:
CHECK/MONEY VISA VISA	MASTERCARD CARD#		

MAP and WMD INFO (if necessary)

Summary of Wild Turkey Permit Drawings: 1986-Present

	# of Ap	plicants	Total	% Total	Applicants	# Perm	its Issued	Total #	% of To	tal Permits	# of	% of Appli	cants Selected
Year	Resident	Nonresident	Applicants	Resident	Nonresident	Resident	Nonresident	Permits	Resident	Nonresident	Zones	Resident	Nonresident
2002	25,221	733	25,954	97.2	2.8	8,730	270	9,000	97.0	3.0	1	34.6	36.8
2001	18,187	498	18,685	97.3	2.7	6,792	208	7,000	97.0	3.0	1	37.3	41.8
2000	14,450	459	14,909	96.9	3.1	3,880	120	4,000	97.0	3.0	1	26.9	26.1
1999	9,016	278	9,294	97.0	3.0	2,741	259	3,000	91.4	8.6	1	30.4	93.2
1998	6,252	197	6,449	96.9	3.1	2,065	185	2,250	91.8	8.2	2	33.0	93.9
1997	4,937	154	5,091	97.0	3.0	1,596	154	1,750	91.2	8.8	2	32.3	100.0
1996	3,866	86	3,952	97.8	2.2	1,164	86	1,250	93.1	6.9	2	30.1	100.0
1995	1,651	61	1,712	96.4	3.6	689	61	750	91.9	8.1	1	41.7	100.0
1994	1,148	37	1,185	96.9	3.1	463	37	500	92.6	7.4	1	40.3	100.0
1993	1,053	26	1,079	97.6	2.4	474	26	500	94.8	5.2	1	45.0	100.0
1992	867	19	886	97.9	2.1	481	19	500	96.2	3.8	1	55.5	100.0
1991	499	9	508	98.2	1.8	491	9	500	98.2	1.8	1	98.4	100.0
1990	489	11	500	97.8	2.2	489	11	500	97.8	2.2	1	100.0	100.0
1989	453	11	464	97.6	2.4	453	11	464	97.6	2.4	1	100.0	100.0
1988	339	16	355	95.5	4.5	339	16	355	95.5	4.5	1	100.0	100.0
1987	513	23	536	95.7	4.3	477	23	500	95.4	4.6	1	93.0	100.0
1986	584	21	605	96.5	3.5	479	21	500	95.8	4.2	1	82.0	100.0

APPENDIX IV

Pen-raised Wild Turkey Issue

- 1. Description of the Problem
- 2. NWTF Resolution on Pen-raised Wild Turkeys

Pen-raised Wild Turkey Issue

It has been documented through the restoration efforts of numerous wildlife agencies, sportsmen's clubs and others that the propagation and subsequent release of pen-raised wild turkeys into the wild for the establishment of viable self-sustaining populations is clearly ineffective. It has been shown that pen-raised wild turkeys do not have the natural instincts to successfully produce and establish an expanding population in the wild. Moreover, some researchers have shown that the release of pen-raised wild turkeys into areas where wild turkeys already exist further hampers restoration efforts by introducing parasites and diseases that may not be present in the wild.

In Maine, in the mid-1960s, sportsmen in the Bangor and Sebago Lake areas raised and released pen-raised wild turkeys into the wild. This activity was conducted at a time when these efforts were acceptable and techniques for live-capture were in early developmental stages. By 1985, all of the pen-raised birds and their descendants were dead. As recent as 1986, a few descendants of the Sebago Lake turkey population were reported. Today, no pen-raised turkeys exist there either.

The issue of pen-raised wild turkeys as restoration stock is one that has raised much debate on the national level and the National Wild Turkey Federation takes a strong stand on the issue (see next page). The relatively new wild turkey restoration program in Maine was fortunate to be able to use the experience and advice of numerous professional biologists that have spent several years experimenting with wild turkey restoration. Today, MDIFW and the Maine Chapter of the National Wild Turkey Federation condemn the release of pen-raised wild turkeys into the wild. In 1987, MDIFW requested that the USDA exclude wild turkeys and eggs from import into the state for biological reasons. This was granted. In addition, the wild turkey Research/Relocation Committee agreed that no wild turkeys will be relocated into areas where unconfined pen-raised wild turkeys are known to exist.

As of 2002, no one in Maine is permitted to possess pen-raised wild turkeys. Unfortunately, some individuals continue to order these birds through the mail from out of state sources without knowing they need a permit to possess them. They will be denied a permit when they request one.

RESOLUTION ON PEN-RAISED WILD TURKEYS

WHEREAS, in the last two decades the wild turkey has made significant population recoveries throughout the United States and now occurs in many areas outside of its Ancestral range; and

WHEREAS that recovery and expansion has been largely due to live-trapping and relocating established native wild turkeys into suitable but unoccupied habitat; and

WHEREAS said live-trapping has been markedly improved through the scientific techniques of mortar, rocket, and drop netting and by the use of sleep-inducing drugs, enabling wild turkeys to be effectively and economically relocated; and

WHEREAS research studies by professional wildlife biologists and trained conservationists have clearly shown the ineffectiveness and waste of time and money in releasing pen-raised turkeys into the wild; and

WHEREAS such studies have also demonstrated that release of pen-raised turkeys into habitat already occupied by wild turkeys can result in the decline or extirpation of this valuable bird since pen-raised turkeys are poorly adapted for survival and they transmit diseases and parasites to the wild stock; and

WHEREAS of the hundreds of university-trained persons currently engaged in wild turkey research and management, few, if any, would condone the pen-raising system of management; and

WHEREAS such persons generally <u>condemn</u> the practice as being unsound, outmoded, dangerous to the resource, and financially wasteful; and

WHEREAS several states have experienced these factors to a degree that caused them to enact laws against releasing pen-raised turkeys into the wild; NOW

THEREFORE BE IT RESOLVED that the National Wild Turkey Federation, ecologists, outdoorsmen, conservationists and all people in the areas <u>assist the cause of the wild turkey by courageously and resolutely opposing the release into the wild of pen-raised turkeys from any source, for any purpose, by an individual, club, organization, or governmental agency, except that private shooting preserves shall have the privilege of using such stock provided adequate precautions are taken against the possible escape of these birds onto occupied or potential Wild Turkey habitat on public or private lands.</u>

NATIONAL WILD TURKEY FEDERATION

Definition 1

Game farm or pen-raised turkeys - - those birds hatched from eggs taken by humans from a Wild Turkey nest or hen turkey raised under human control, and therefore imprinted to humans or domestic poultry instead of a wild hen. Wild turkeys are birds from native genetic stock living under the control of the laws of nature.

Definition 2

A game farm or pen-raised wild turkey is any turkey which has been maintained in captivity or associated with domestic poultry stock at any time.

APPENDIX V

Turkey Hunter Questionnaires

- 1. Example of MDIFW Hunter Questionnaire
- 2. Hunter Questionnaire Results, 1986-2001.
- 3. Highlights from the 1989 Survey of Maine Turkey Hunters.
- 4. Wild Turkey Hunting Effort and Harvests, 1986-2001.

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE Lee E. Perry, Commissioner



Dear Turkey Hunter:

The legislation which established the turkey hunting season requires all permit holders to complete and return a questionnaire on their Maine hunting experience. This is the questionnaire. The information which you provide is an important part of our turkey management program.

Complete the questions with the best answers you can provide. Even if you did not hunt turkeys in Maine in 1999, that information is very important as well and you should complete Question #1 and return the questionnaire. Use the back for your comments. Since we will be sending reminders to those who do not respond, your name, address, and permit number is recorded on the return envelope. The envelope will be separated from your survey when it is received to guarantee confidentiality of your responses. If for some reason you do not use the envelope provided, please put your name on the one you use.

I want to thank you in advance for your assistance.

Commissioner

Inland Fisheries & Wildlife

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE 1999 TURKEY HUNTER SURVEY

This report must be completed by the permittee and returned to the Department of Inland Fisheries and Wildlife within 10 days of the closing of the 1999 turkey hunt. Please be sure to fill in the blanks or circle the correct response. When completed, fold and place in the "Business Reply" envelope provided. No postage is necessary.

1. Did you hunt turkey in Maine in 1999? YES NO	 Did you flush any hens off nests while turkey hunting in Maine in 1999? YES
2. How many different towns did you hunt in 1999?	ot at in M
3. How many different days did you hunt in 1999?	10. Did you register a turkey during the 1999 season in Maine? YES NO
4. Approximately how many total hours did you spend hunting turkey during the 1999 season in Maine? (hours)	 Do you feel other turkey hunters interfered with your your ability to successfully harvest a turkey? YES NO
5. Approximately how many gobblers did you see while turkey hunting in Maine in 1999?	12. Did you use a decoy while turkey hunting in Maine in 1999? YES NO
6. Approximately how many hens did you see while turkey hunting in Maine in 1999?	13. Did you use a call while turkey hunting in Maine in 1999? YES NO
7. Approximately how many hens with a brood (poults) did you see while turkey hunting in Maine in 1999?	14. Did you use a guide while turkey hunting in Maine in 1999? YES NO

heet(s)

DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

Staff Paper Series in Resource Economics

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ARE 413

HIGHLIGHTS FROM THE 1989 SURVEY OF MAINE TURKEY HUNTERS*

By Deanna M. Potter, Kevin J. Boyle and Stephen D. Reiling**

Turkey hunting is a relatively new sport in the State of Maine. Requests from fish and game clubs. and successful wild turkey reintroduction programs in Vermont and New Hampshire, motivated the Maine Department of Inland Fisheries and Wildlife (IF&W), to develop a wild turkey reintroduction program for Maine.1 In 1977 and 1978, Maine wildlife biologists live-trapped 41 wild turkeys in Vermont and released these birds in the towns of Eliot and York. Important habitat conditions, such as a good supply of oak and beech trees for feed and a normally light snowfall making mobility and feeding easier for the turkeys during the winter months, were considered when choosing these release sites. In 1987 and 1988, 17 and 53 birds, respectively, were obtained from Connecticut and released in Cumberland and York Counties. In recent years, turkeys have been transplanted from York County to other areas of the state as the resident population of wild turkeys has grown. Presently, it is conservatively estimated that there are between 700 and 900 birds statewide, with 500 to 700 in York County where the hunt occurs.

Maine's first turkey hunt took place in the spring of 1986 and a hunt has occurred in all subsequent years.

1*1989 Maine Turkey Hunters's Guide.* Jointly published by the Maine Department of Inland Fisheries and Wildlife and the Maine Chapter, National Wild Turkey Federation. The current hunt takes place in May and runs for three weeks. A maximum of 500 permits are issued to turkey hunters each year through a lottery system, with no more than 50 permits being allocated to nonresident hunters. Permit holders are allowed to take one male turkey during the season.

The legislation that created the Maine turkey hunt requires each permit holder to complete a questionnaire about their turkey hunting effort in Maine immediately following the hunt. This survey is usually conducted by IF&W. However, the 1989 survey was designed and administered by the Department of Agricultural and Resource Economics at the University of Maine as part of its research for the Maine Legislative Commission to "Study the Impact of Game and Nongame Species on Maine's Economy." Permit holders were asked to provide information on their turkey hunting methods, effort and expenses. Highlights from this survey of 1989 Maine turkey hunters are presented here.

THE 1989 TURKEY HUNT

There were 464 applications for Maine turkey hunting permits in 1989, but only 443 permits were issued because some applicants either did not pick up their permits from IF&W or were unable to provide proof that they held a valid Maine hunting license. Surveys were mailed to each of the 443 permit holders following the 1989

turkey hunting season. A total of 420 surveys were completed and returned to the University, and two surveys were returned as undeliverable. The response rate to the survey, as a percent of deliverable surveys, was 95 percent.

Only 220 (52 percent) of the permit holders actually hunted turkeys in Maine during 1989, and the information provided here is based on the responses of these individuals. Many reasons were given for not participating in the 1989 hunt, ranging from bad weather to not being able to get time off from work. There was no single reason that dominated why permit holders did not participate in the 1989 Maine turkey hunt.

There were only six nonresident permit holders who hunted turkeys in Maine during the 1989 season. Due to the small number of nonresident hunters, no distinction will be made between resident and nonresident hunters when reporting the results of the 1989 turkey hunt.

CHARACTERISTICS OF TURKEY HUNTERS

Selected characteristics of the 220 individuals who actively hunted turkeys in Maine during 1989 are presented in Table 1. The average turkey hunter is a 38-year-old male. He has some college education and had an average household income of \$37,200 in 1988.



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**The authors are Graduate Research Assistant, Assistant Professor, and Associate Professor, respectively, in the

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DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

Turkey hunters are involved in multiple wildlife-related activities in Maine. Ninety-four percent hunted other species of wildlife in Maine during 1988/89 (June 1, 1988 to May 31, 1989). In fact, hunters reported that they first hunted in Maine 25 years ago and that they hunt in Maine every year. Seventy-nine percent of the turkey hunters open water fished on Maine's lakes and rivers, 50 percent ice fished and 54 percent went marine sport fishing on Maine's tidal bays and ocean waters. Trapping had the lowest participation rate of all of the categories of other wildlife-related activities with seven percent of the turkey hunters stating that they trapped in Maine during 1988/89.

Table 1. Characteristics of 1989 Maine Turkey Permit Holders Who Actually Hunted

Characteristic	
Socioeconomic:	
Sex (Percent Male)	99%
Average Age	38
Average Education	Some College
Average Annual Household Income (1988)	\$37,200
Hunting Experience in Maine:	
First Year Hunted in Maine (Overall)	1965
How Often Hunted in Maine	Every Year
Participated in Other Wildlife Related	
Activities in Maine During 1988/89:	
Hunted Other Than Turkey	94%
Open Water Fished	79%
Ice Fished	50%
Marine Fished	54%
Trapped	7%

HUNTING DISTRIBUTION

Turkey hunting is restricted to 25 towns in southern York County, comprising the southern tip of the State of Maine. Eventually, turkey hunting may be allowed in other parts of the state as the populations of turkeys in these areas increase. Table 2 lists two different groups of towns. The towns with the highest hunting concentration are those in which the largest number of the hunters indicated they spent time hunting. All of the towns in the high concentration category are located in the southern half of the turkey hunting zone, with Eliot having the highest concentration of hunters. Conversely, towns with low hunting concentrations are those in which relatively few hunters sought to call and shoot a turkey. Kennebunkport is the only town with a low hunting concentration in the southern portion of the turkey hunting zone. All of the other towns with low hunting concentrations are located in the northern half of the hunting zone.

HUNTING EFFORT AND RESULTS

There were nineteen turkeys, primarily juveniles, shot and tagged during the 1989 turkey hunting season. A certain level of skill is required to bag a

Table 2. Hunting Distribution for the 1989 Maine Turkey Hunt

Towns	Hunting Use
Highest Hunting Concentration:	
Eliot	37%
Wells	26
North Berwick	22
Kennebunk	21
Sanford	21
Lowest Hunting Concentration:	
Acton	0%
Parsonsfield	0
Cornish	1
Kennebunkport	1 -
Limington	1

turkey; familiarity with the turkey's behavior and perfecting a turkey call being a few examples. Given these considerations, we asked the turkey hunters to indicate all methods they used to learn how to hunt turkeys (Table 3). A split was done between the hunters who bagged a turkey and those who did not. All of the successful hunters watched videos on turkey hunting. In contrast, a significantly smaller percentage (66 percent) of the unsuccessful hunters used a video as a method for learning about turkey hunting. Reading was the most popular learning method used by unsuccessful hunters (82 percent), while 79 percent of successful hunters also read about turkey hunting. Actually going out and hunting was another method used by the majority of both groups of turkey hunters. Note, that with the exception of reading, the participation percentages for the successful hunters are higher than those of the unsuccessful hunters for all categories. This indicates that the successful hunters put more effort into preparing themselves for the turkey hunt.

Along with the methods used to learn how to hunt turkeys, actual hunting experience could contribute to whether or not the season was successful. The majority of both successful and unsuccessful hunters (63 and 51 percent, respectively) had hunted turkey in Maine before 1989. However, nearly three times as many successful hunters had experience hunting outside of Maine (37 percent versus 13 percent).

Due to the small population of turkeys in Maine, the fact that the flocks are widely dispersed and that turkeys are elusive birds, preparation on the part of the hunter can be an important factor in a successful hunt. For example, scouting can help a hunter to select a site where he is able to call in birds and, hopefully, bag a turkey. The relationship between scouting and a successful hunt becomes apparent when comparing responses of hunters who bagged a turkey to responses of hunters who did not bag a turkey (Table 4). Ninety-five percent of the successful hunters stated that they

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scouted, and they averaged 20 days of scouting prior to the hunt. In contrast, seventy-four percent of the unsuccessful hunters scouted, and of those who did, they only averaged nine days of scouting. Both of these statistics are significantly larger for hunters who bagged a turkey than for those hunters who did not.

Hunting pressure was the heaviest during the first week of the hunt with 94 percent of the active permit-holders actually hunting. Whereas, only 69 percent of the active permit-holders hunted during the third week of the season. Hunters who bagged a bird hunted on three different days during the first week of the season, while other hunters only hunted on two days during the first week. The fact that successful hunters spent more time hunting during the first week of the season when the largest number of hunters were in the field may explain why they reported being "moderately crowded" when responding to a scale ranging from "not at all crowded" to "slightly crowded" to "moderately crowded" to "extremely crowded." In contrast, unsuccessful hunters stated they felt only "slightly crowded."

Overall, the time spent hunting turkeys varied little between successful and unsuccessful hunters. The hunters who bagged a turkey averaged 22 hours of hunting, and those who did not bag a turkey averaged 20 hours. To calculate how many hours it takes over all hunters to bag a turkey, the average number of hours hunted per active hunter is multiplied by the number of active hunters (4350 hours). This number is then divided by the number of turkeys bagged, which results in an average of 229 hours of hunting time to bag one turkey.

Turkey hunters were asked to provide an overall rating of their turkey hunt by choosing one of the following categories: "poor," "fair," "good," "very good," "excellent," and "perfect." It is not surprising that there were significantly different reponses for the hunters who were successful and those who were not. The hunters who bagged a turkey rated their hunt as "very good" and

those who did not bag a turkey rated their hunt as "good." Hunters who did not get a bird may still have rated their hunt as "good" if they were able to call in a turkey, or just enjoyed being out in the spring.

Summing up, successful turkey hunters spent more time learning about turkey hunting, generally had more experience hunting turkeys, spent more time scouting prior to the hunt and spent more time hunting during the first week of the hunt. Overall, it is not surprising that these hunters bagged a turkey. From the current data, however, we can not say which of these factors were more or less important in their success in bagging a turkey. A clear result is that a casual turkey hunter is not likely to bag a turkey in Maine

Table 3. Methods of Learning to Hunt Turkeys and Previous Turkey Hunting Experience

Learning/Experience	Bagged a Turkey	Did Not Bag a Turkey
Learning Methods:		
Watched a Video	100%	66%*
Read About Turkey Hunting	79	82
Went Out and Hunted	79	68
Listened to Audio Cassettes	74	58*
Attended a Seminar	68	43*
Friend or Family Member	63	52
Turkey Hunting Experience:		
Turkey Hunting in Maine Before 1989	63%	51%
Bagged a Turkey in Maine Before 1989	16	10
Turkey Hunted Out of State in 1988/89	37	13*

Note: An asterisk indicates a significant difference at a 10 percent confidence level between the responses of hunters who bagged a turkey and the responses of hunters who did not bag a turkey.

Table 4. Hunting Effort and Results of the 1989 Maine Turkey Hunt

Effort/Results	Bagged a Turkey	Did Not Bag a Turkey
Hunting Effort:	netrationes	estratu e terrar
Scouted Prior to Hunt	95%	74%*
Average Number of Days Scouted	20	9*
Days Hunted First Week	3	2*
Days Hunted Second Week	2	2
Days Hunted Third Week	1	2
Average Number of Hours Hunted	22	23
Results of Hunt:		
Crowding With Other Hunters	Moderately	Slightly
With the second	Crowded	Crowded*
Overall Rating of the Hunt	Excellent	Good*
Bagged a Turkey	19	_
Age of Turkey (% Adult)	21%	_

Note: An asterisk indicates a significant difference at a 10 percent confidence level between the responses of hunters who bagged a turkey and the responses of hunters who did not bag a turkey.

EXPENDITURES OF MAINE TURKEY HUNTERS

In the survey, permit holders were also asked about their expenditures for turkey hunting in Maine during 1989. Expenditure information is important for determining the economic impact that turkey hunting has on Maine's economy. Two different types of expense categories are reported. The first, trip-related expenditures, include such things as food, transportation, and ammunition. These are items that are purchased and consumed on a hunting or scouting trip. In other words, once the item is used it can not be reused. The other expenditure category is equipment, and includes the purchases of items such as shotguns, turkey calls and camouflage clothing which can be reused over a number of hunting trips or for other recreational activities. The cost of equipment is adjusted based on the percent of use

University of Maine
Fish and Wildlife Study
Department of Agricultural and Resource Economics
Winslow Hall
Orono, ME 04469-0163

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dedicated to turkey hunting. For example, if a hunter purchased a shotgun for \$250 and reported that turkey hunting would account for 10 percent of the shotgun's use, \$25 is the adjusted cost of the shotgun for turkey hunting ($$250 \times 0.10$).

Turkey hunters spent an average of \$77 on trip-related expenses during the 1989 turkey hunting season (Table 5.). The largest portion of the trip-related expenditures were for travel and scouting. The portion of all expenditures made in Maine represents the economic impact that the turkey hunt had on Maine's economy. Ninety percent of the trip-related expenses were made in Maine. Thus the economic impact per hunter from trip-related expenses is \$69 (\$77 x 0.90).

Table 5. Average Trip-Related Expenditures Per Hunter During the 1989 Maine Turkey Hunt

Item	Average Expense Per Hunter	
Turkey Hunting Application and Tagging Fee	\$ 5	
Travel Expenditures (Gas, Oil, Tolls, Etc.)	25	
Public Transportation	4	
Food and Beverages	12	
Lodging	4	
Ammunition	6	
Preseason Scouting	21	
Total Trip-Related Expenditures	\$77	
Percent of Expenditures in Maine	90%	
Total Trip-Related Expenditures in Maine	\$69	

Table 6. Average Equipment Expenditures Per Hunter, in Maine, for the 1989 Maine Turkey Hunt

Item	Average Expense Per Hunter					
Shotgun	\$27					
Bow and Arrows	1					
Turkey Decoys	1					
Turkey Calls	9					
Turkey Hunting Instructional Material	3					
Camouflage Clothing	11					
Other Miscellaneous Equipment	i					
Total Hunter Equipment Purchases in Maine	\$53					

The prorated cost of equipment purchased for use during the turkey hunt which can also be used for other activities is reported in Table 6. Turkey hunters, on average, spent an adjusted total of \$53 for equipment purchases in Maine during 1989. This figure may have been higher in the earlier years of turkey hunting in Maine as first time hunters invested in the equipment necessary to hunt turkeys. Fifty-one percent of the turkey hunters had hunted turkey in Maine prior to 1989.

The total expenditure per hunter in Maine for the 1989 turkey hunt is \$122 (\$69 + \$53). Thus, the aggregate economic impact on Maine's economy of the turkey hunt is \$26,840 (\$122 x 220).

HOW WILL THE RESULTS OF THE SURVEY BE USED?

Management of Maine's fish and wildlife resources requires an understanding of the resources and the people who use them. The data collected from the survey of turkey hunters will help the Department of Inland Fisheries and Wildlife learn more about the turkey population and the users of this resource. The success of turkey hunting in Maine is dependent upon the information provided in surveys of hunters to develop management plans that reflect the existing turkey population, its growth rate and the users of this resource.

Table 1. Hunter Questionnaire Results, 1986-2001

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
No. Applicants	605	536	355	464	500	508	886	1079	1185	1712	3952	5091	6649	9294	14450	18685
No. Permits Issued	500	500	355	464	500	500	500	500	500	750	1250	1750	2250	3000	4000	7000
Questionnaires Received	211	222	158	420	396	385	411	417	424	628	1075	1546	1961	2517	3350	5776
Proportion that Hunted	0.75	0.72	0.7	0.52	0.64	0.65	0.66	0.73	0.78	0.72	0.82	0.87	0.85	0.86	0.88	0.88
Hunter sample	158	160	111	218	253	250	271	304	331	452	882	1345	1667	2165	2948	5083
Days Hunted																20088
Days Hunted/Hunter																4.0
Hours Hunted	2690	2393	2351		4694	4665	5205	7031	7690	9743	18116	31489	34588	46913	61200	77041
Hours Hunted/Hunter	17.0	15.0	21.3		18.5	18.6	19.2	23.1	23.3	21.5	20.6	23.4	20.8	21.7	20.8	15.2
Gobblers Seen	88	41	143		177	200	403	513	815	1202	3586	5548	7587	11043	14382	25762
Gobblers Seen/Hour	0.03	0.02	0.06		0.04	0.04	0.08	0.07	0.11	0.12	0.20	0.18	0.22	0.24	0.24	0.33
Hens Seen	41	48	124		138	223	371	923	960	1624	5174	7175	10747	13499	17748	34834
Hens Seen/Hour	0.02	0.02	0.05		0.03	0.05	0.07	0.13	0.12	0.17	0.29	0.23	0.31	0.29	0.29	0.45
Proportion Interfered With	0.24	0.18	0.21		0.32	0.31	0.23	0.27				0.21	0.21		0.17	0.15
No. Hunters Interfered With (Total)	7	29	23		83	79	62	81				286	350		507	774
Hunting Accidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proportion Used Call																0.87
Proportion Used Decoy																0.63
Number Turkeys Registered	9	8	16	19	15	21	53	46	62	117	288	417	594	890	1559	2544
Number Adult Males							36	17	20		175	240	294	467	734	1523
Number Juvenile Males							17	29	42		113	176	300	422	816	981
Adult:Juvenile Male Ratio							2.1	0.59	0.48		1.55	1.36	0.98	1.11	0.90	1.55
Number Females							0	0	0		0	1	0	1	2	5
Hunter Success Rate	0.02	0.02	0.06	0.08	0.05	0.06	0.16	0.13	0.16	0.22	0.28	0.27	0.31	0.34	0.44	0.41

APPENDIX VI

Wild Turkey Registration

- 1. Turkey Check Station Instructions
- 2. Example of a Registration Form

TURKEY CHECK STATION INSTRUCTIONS

SEASON DATES: May 3 to May 31, 1999 SEASON HOURS: ½ Hour before sunrise to 11:00 am

REGISTRATION:

1.

- Complete one page in the Turkey Registration Book for each bird registered.
- Collect \$1.00 from the hunter.
- Punch turkey hunting permit only.
- 4. Attach metal seal to the wing of the turkey. (Where wing meets body).

VIOLATIONS: Should a hunter bring in a beardless turkey, follow these procedures:

- Fill out the Turkey Registration Form as you normally would for a bearded bird.
- 2. Have the hunter sign the registration form.
- 3. Punch a hole in the hunter's permit.
- 4. Attach the metal seal to the turkey.
- 5. If no Warden is present at the registration station, then, as an agent of the Commissioner:
 - a. For the Plymouth, Newburgh, Dixmont, Hampden area, contact IF&W Headquarters in Bangor (weekdays 8 a.m. 5 p.m.) at 941-4440, or Orono State Police at 1-800-432-7381 and have the dispatcher make contact with the closest warden for these areas.
 - b. For areas in Central Maine, i.e.: Pittsfield to Richmond, contact the IF&W Headquarters in Sidney (weekdays 8 a.m. 4:30 p.m.) at 547-5300 or the Augusta State Police at 1-800-452-4664 and have the dispatcher make contact with the closest warden for these areas.
- Request that the hunter remain at the check station until a warden arrives, but do not talk about anything relating to the evidence (turkey).
- Allow the hunter to leave if he/she insists. Enforcement personnel will follow up with the information that you have collected on the registration affidavit. *

*The check station attendant will be expected to serve as an expert witness during court proceedings.

Questions regarding Turkey Registrations or the hunting season may be referred to the Regional Wildlife Headquarters or the Warden Service Division B at Sidney **547-5300**.

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

Turkey Registration Booklet

STATION NO:

INSTRUCTIONS: Move this cover behind each set of forms before you start to write. Write in ink. If you make a mistake, mark the form VOID and use the next form. DO NOT REMOVE forms from this booklet.

- 1. Collect \$1.00 registration fee from hunter.

2. Read carefully separate instructions on taking measurements, determining age and sex, and attaching seal.

- Fill in registration form completely.
- 4. Place seal securely on wing or around leg.
- 5. Write seal number on back of permit in ink.
- 6. If you make a mistake, do not erase; mark the form (VOID) and use the next one.
- 7. Punch hole in Turkey Permit ONLY.

BINDING END

## Page# XXXXXX month day year	3) Date month Killed: Town/Townst was turkey County: killed? Wildlife Man Age and sex of turke Abutt Male	month day vear 3) Turkey Registered: Bate month day vear Killed: Time Sealed: Time and Sealed: Time and sex of turkey (check one) was turkey (check one) was and is a class D crime. District (WMD): Signature of person who killed turkey Muzzleloader
Turkey Registration Form Station#	1) Seal Info: Seal # Date Sealed: 2) Hunter Info: License # Turkey Permit Number:	1) Seal Info: Seal # Date Sealed: 2) Hunter Info: License # Turkey Permit Number: Name: Address: City: State: Zip: Date of Birth: Address: City: State Date of Birth: Address: Legal Residence Town: State A) Measurements to nearest 1/8": Beard Length inches Spur Length right left X Signature of registration station attendant
15% SCREENING	From Check-off Licenses Only: when and where was licensed issued? Agent Number: (from license) month aby issue Time: (from license) issue Time: (from license)	From Check-off Licenses Only: when and where was licensed issued? Agent Number: (from license) month day Issue Time: (from license) am pm

APPENDIX VII

Miscellaneous Forms and Memorandum of Understanding

WILD TURKEY FEMALES IN WALDO COUNTY, MAINE

By Beatrix E. Treiterer

An Abstract of the Thesis Presented in Partial
Fulfillment of the Requirements for the Degree
of Master of Science (in Wildlife)
December, 1987

Abstract: Survival, productivity and habitat preferences of 22 female wild turkeys (Meleagris gallopavo sylvestris) were studied during 1985-1987 in a recently established population in Waldo County, Maine. The population was estimated at 50-75 birds in March 1987 and has not increased at the rate seen of other newly established populations in the Northeast and Midwest. Mortality rates of juvenile females were higher (P < 0.05) during the severe winter of 1987 than the mild winter of 1986; all deaths were due to predation. Eleven 11 females surviving to either the 1986 or 1987 breeding seasons attempted to nest, although no juvenile females survived to breed in 1987. Nesting. success was lower (P < 0.05) in 1987 (51%) than 1986 (74%), as were clutch sizes and hatching success (P < 0.05). Poult survival (N = 77) to 10 weeks after hatch was 38% and 25% in 1986 and 1987. Most mortality (43%) occurred during the first 2 weeks after hatch. Natality and recruitment rates of females were lower (P < 0.05) in 1987 than 1986. Body weights of turkeys in Maine were lower than those recorded in other northern states. Standing corns, an important food source when snow depths exceed 12 cm, occurs on only 3% of the study area. Acorn producing oaks (Quercus spp.) are found on only 6.7% of the area. Foods such as sensitive fern and persistent fruits also are less available during deep snows.

Females preferred dense understory vegetation (50-75% cover) at nest sites. Shrubs were more common and vegetation and/or slash ground cover was denser (P < 0.05) at nest than random sites. Slash provided cover early in incubation when herbaceous cover was not available. During the breeding season old fields, hayfields, cornfields, and hardwood stands were used more than expected based upon availability; softwood stands and mixed forests were used less (P_ < 0.05). Brood rearing areas included both open fields and adjacent hardwood stands with adequate herbaceous ground cover that provided animal and plant foods and cover from predators.

Management plans should include the release of additional adult hens in Waldo County to offset the low survival, natality and recruitment rates of 1987. The selection of future release sites should consider the availability of fields (hay, corn and pasture) and hardwood stands.

MEMORANDUM OF UNDERSTANDING

BETWEEN THE

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

AND

NATIONAL WILD TURKEY FEDERATION

I. <u>INTRODUCTION AND PURPOSE</u>

The National Wild Turkey Federation, Inc. (NWTF), a nonprofit corporation, and the Maine Department of Inland Fisheries and Wildlife (MEDIFW), have either responsibilities or interests in the management of Maine's wildlife habitat and the wild turkey resource that is dependent on these habitats. The parties agree that habitat in Maine needs to be preserved and properly managed to optimize wildlife habitat conditions and to meet the growing public concern for education, development, and preservation of wildlife habitat and the wild turkey.

The purpose of this document is to provide a continuing foundation for cooperative development of projects administered by MEDIFW in order to maintain and increase wild turkey populations for the best interests of the people of Maine.

II. SCOPE OF THE AGREEMENT

The parties agree as follows:

- A. National Wild Turkey Federation, Inc., and the Maine Department of Inland Fisheries' and Wildlife mutually agree:
 - 1. That each and every provision of the Memorandum of Understanding is subject to the bylaws of the NWTF and the laws of the state of Maine.
 - 2. To identify and develop research, management, and educational project proposals, including description, objectives, costs, anticipated outputs, etc., for wild turkey projects and programs on lands administered by the MEDIFW.
 - 3. To review annually the development of projects identified, accomplishments, and future plans developed under the program.
 - 4. All improvements, to the extent constructed on Maine lands, shall be and will remain the property of the State.

- 5. The development of projects identified under this program may be detailed under, and subject to, specific agreements entered into by MEDIFW and NWTF, if necessary.
- 6. To cooperate in the recognition of each parties participation in this program and on specific projects.
- 7. Each party agrees that it will be responsible for its own acts and the results thereof and shall not be responsible for the acts of the other party and the results thereof. Each party, therefore, agrees that it will assume all risk and liability to itself, its agents or employees, for any injury to persons or property resulting in any manner from the conduct of its own operations, and the operation of its agents or employees under this Agreement, for any loss, cost, damage, or expense resulting at any time from any and all causes due to any act or acts, negligence, or the failure to exercise proper precautions, of or by itself or its own agents or its own employees, while occupying or visiting the premises under and pursuant to the Agreement. Nothing in this Agreement shall be construed to be a waiver of the sovereign immunity of the State or qualified immunity of any of its employees or agents.

B. The State agrees:

- To make project proposals from time to time for the furtherance of this
 program through the designated state wild turkey project leader. The State
 will provide the NWTF access for inspection of proposed projects, subject to
 applicable state and federal laws, regulations, and comprehensive plans for
 the affected area, if any, and subject to approval by the executive officer of
 the state wildlife agency.
- 2. To prepare the appropriate specific recommendations as to the needs of the wild turkey in the State.
- 3. To provide NWTF with appropriate background information including, but not limited to, management plans as needed.
- 4. To obtain all permits, clearances, and coordination as required by federal agencies or state and local governments for any projects where they are necessary.
- 5. To assume operation, maintenance and other management costs and responsibilities upon completion of projects.
- 6. To provide appropriate on site recognition of NWTF involvement.
- 7. To be represented at NWTF committee activities by the state technical committee representative(s), including the annual meeting of the committee.

C. The NWTF agrees:

- To review, as necessary, proposals for the wild turkey to include, but not limited to, research, management, education, habitat development, land acquisition, and enhancement, and to make the final determination on which projects will be funded by NWTF. To provide assistance to the department on wild turkey projects as requested by the State.
- To cooperate by reimbursing the State reasonable expenditures made by the State for the furtherance of cooperative programs. The amount of said reimbursement shall not exceed the amounts stipulated in the specific agreements for approved projects.
- 3. Maintain a Wild Turkey Super Fund with the NWTF to handle the administration of funds for use in the State to support wild turkey projects. All funds withdrawn from the account will have the approval of the state appointed wild turkey project leader(s).

III. <u>EXECUTION, MODIFICATION, AND DURATION OF AGREEMENT</u>

This agreement will become effective upon the date subscribed by the last signatory, and shall continue in force until terminated by either party upon thirty (30) days written notice.

Amendments to this basic Memorandum of Understanding may be proposed by either party and shall become effective upon written approval by both parties.

	NATIONAL	WILD TURKEY FEDERATION, INC.
	//	1.
Date_	7/27/88	By All Keck
	/ /	Rob Keck Executive <u>Vi</u> ce President
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Date_	7/27/88	By James Carl Kennamu
	1 1	James Earl Kennamer, Ph.D.
		Dir. of Research & Management

Date 11 16 88 By R. Brack Of Que

APPENDIX VIII

Nuisance Wild Turkey Policy

Addendum to MDIFW Nuisance Wildlife Policy

<u>Wild Turkey</u> – The successful reintroduction of the wild turkey in Maine, begun in the late 1970s, has resulted in wild turkeys occupying habitat that had been vacant since the early 1800s. Current occupied habitat in Maine now likely exceeds the historical occupied range. This newly established population has provided popular new opportunities for hunting and wildlife viewing, but also has contributed to new landowner conflicts, particularly among farmers and gardeners.

Landowner conflicts have been most prevalent among dairy-based farming operations. These concerns include eating and defecating on exposed bunker-stored corn silage, and to a lesser extent, direct crop damage. There is no scientific evidence to suggest that soiled silage causes any risk to cows; nor are any known wildlife diseases linked to wild turkeys and trenched-stored silage.

It is imperative that crop depredation be verified before measures to control turkeys are implemented; wild turkeys, which are highly visible due to their large size and diurnal behavior, commonly have been blamed for damage caused by other species, such as raccoons, rodents, deer, and crows.

Prevention and Extension

Measures to avoid or prevent turkey damage are as varied as the sites on which problems may occur. Presence of wild turkeys should not be tolerated at sites where they may pose a problem. The following list includes examples of preventative measures that may apply:

- 1. Simply chase turkeys away from problem sites, such as a bunker silo, barn, strawberry patch, etc. Hazing with dogs may also prove to be an effective deterrent measure. The longer wild turkeys are allowed to feed on silage or visit barns, the more difficult it will be to prevent it in the future.
- 2. Keep bunker silos covered (tarps, plastic), out of view of turkeys
- 3. Establish manure storage piles early in the winter at sites away from silage silos.
- 4. Use electric fencing, regular fencing such as plastic snow fencing and/or mylar strips, around silos, gardens, row crops, fruit trees.
- 5. Use deterrents, such as screamers, scare-a-ways, cracker shells, etc.
- 6. Encourage local NWTF chapters or other volunteers to work with farmers to plant winter food plots, or locate spoiled silage dumpsites, far enough away from silos and barns so as to attract turkeys away from these food sources.

Regulations

Spring hunting (toms only) will not appreciably reduce turkey populations or solve nuisance turkey problems; turkey mortality resulting from fall hunting (either sex) is considered additive, and as such would have the potential to reduce turkey populations at a large (Wildlife Management District) scale -- if management goals and objectives dictate a population reduction. However, a reduced wild turkey population would not necessarily reduce or eliminate turkey nuisance concerns, as they tend to be quite local in nature.

Non-Lethal Control Methods

<u>Live-capture and relocation:</u> This method serves a dual purpose in both removing problem birds and frightening remaining members of the flock from returning for a while. This method limited application as a widespread solution, it will be used only if it helps the department meet population enhancement/distribution objectives – it is not intended to solve numerous complaints.

Lethal Control

"The Department shall encourage the use of preventative measures to reduce the occurrence of nuisance wildlife problems, and when necessary, provide for the selective removal of wildlife, which pose a significant threat to other wildlife, human health, safety, or property." (Dept. Nuisance Wildlife Policy)

<u>Lethal removal</u>: **Sec 12. 12 MRSA Sections 7501 and 7502** allow landowners to protect their property, orchards or growing crops, except grasses, clover and grain fields, through the lethal removal of nuisance animals including **wild turkeys.** Under Sections 7501 and 7502, lethal removal by the landowner requires no permit. Lethal removal for any purpose other than to protect their property, orchards or growing crops (except grasses, clover and grain fields) requires a permit.

Limited use of lethal removal (with or without a permit) may be very effective in discouraging turkey flocks from returning to silos or barns especially in conjunction with the use of deterrents.