CONNECTICUT'S COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY

Creating a vision for the future of wildlife conservation.

State of Connecticut
Department of Environmental Protection
Bureau of Natural Resources

CONNECTICUT'S

Comprehensive
Wildlife Conservation
Strategy

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Developed by the
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Bureau of Natural Resources
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Connecticut's DEP Bureau of Natural Resources Mission: To conserve, improve, and protect the natural resources and environment of the State of Connecticut and to do this in a way that encourages the social and economic development of Connecticut while preserving the natural environment and life forms it supports in a delicate, interrelated and complex balance to the end that the state may fulfill its responsibility to the environment for present and future generations.

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ACJV	Atlantic Coast Joint Venture
AOU	American Ornithologists Union
ASMFC	Atlantic State Marine Fisheries Commission
BBS	Breeding Bird Survey
BCR	Bird Conservation Region
BDJV	Black Duck Joint Venture
BMP	Best Management Practices
BNR	Bureau of Natural Resources
BWM	Bureau of Water Management
CA	Conservation action
CAC	Conservation Advisory Council
CAMP	Connecticut's Amphibian Monitoring Program
CELCP	Coastal and Estuarine Land Conservation Program
CLEAR	Center for Land Use Education and Research
COA	Connecticut Ornithological Association
CPO	Citizens Participation by Objective
CT-ESA	Connecticut Endangered Species Act
CWCS	Comprehensive Wildlife Conservation Strategy
DEP	Department of Environmental Protection
EGIC	Environmental and Geographical Information Center
EPA	Environmental Protection Agency
EPT	Ephemeroptera, Plecoptera, Trichoptera Taxa Richness Index
ESSAC	Endangered Species Scientific Advisory Committee
FAC	Fisheries Advisory Council
GCN	Greatest Conservation Need
GVI	Green Valley Institute
GIS	Geographic Information System
HBI	Hilsenhoff Biotic Index
IAFWA	International Association of Fish and Wildlife Agencies
IBA	Important Bird Area, National Audubon Society and American Birds Conservancy
IUCN	International Union for Conservation of Nature
LERIS	Laboratory for Earth Resources Information Systems

LIS	Long Island Sound
LISP	Long Island Sound Program
LISSP	Long Island Sound Study Program
MANEM	Mid-Atlantic/ New England/ Maritimes Regional Working Group
NAAT	National Advisory Assistance Team
NACWP	North American Colonial Waterbird Plan
NALCP	North American Landbird Conservation Plan
NAWCP	North American Waterbird Conservation Plan
NAWMP	North American Waterfowl Management Plan
NDDB	National Diversity Data Base
NGO	Non-governmental Organization
NEES & WDTC	Northeast Endangered Species &Wildlife Diversity Technical Committee
NHP	Natural Heritage Program
NLCD	National Land Cover Data
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRME	Natural Resources Management and Engineering
NVCS	National Vegetation Classification System
PAI	Potentially Affected Interests
PARC	Partners for Amphibian and Reptile Conservation
PIF	Partners in Flight
R	Research/survey/monitoring needs
RPA	Regional Plan Association
RPP	Resource Protection Project
SAMBI	South Atlantic Migratory Bird Initiative
SDIC	Systematic Development of Informed Consent
SNE GAP	Southern New England Gap Analysis Program
SWG	State Wildlife Grant
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
TWW	Teaming with Wildlife
UCONN	University of Connecticut
USACOE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USSCP	U.S. Shorebird Conservation Plan
WCRP	Wildlife Conservation and Restoration Program
WMA	Wildlife Management Area
WMP	Waterbird Monitoring Partnership

Executive Summary

This document presents a strategy for the conservation of wildlife in the state of Connecticut for the next decade. It is the Department of Environmental Protection's (DEP) response to an historic opportunity to help reverse the decline of wildlife populations and the loss of key habitats, with the goal of keeping common species common and minimizing the need to list additional species as endangered or threatened. Connecticut's wildlife is remarkably diverse for a small state. There are 84 species of mammals, 335 species of birds, 49 species of reptiles and amphibians, 168 species of fish and an estimated 20,000 species of invertebrates. This diversity is due to the state's wide range of landscapes, waterscapes, and habitat diversity, from the coastal plain and Long Island Sound in the south to the northwest hills.

Connecticut's Comprehensive Wildlife Conservation Strategy (CWCS) addresses each of the criteria required by congress under Public Laws 107-063, 108-447, and 109-54. These laws provide funding and administration through the U.S. Fish and Wildlife Service (USFWS), Office of Federal Assistance. This document is organized in a manner that addresses each required element in the order they are identified in the Law. It presents the species of greatest conservation need (GCN), their key habitats, problems, research needs, and conservation actions. The Strategy also addresses how DEP will monitor effectiveness, coordinate with conservation partners, periodically review and update the strategy, and foster public participation.

This CWCS was developed after an exhaustive two-year planning and coordination process that included the compilation and review of an extensive inventory of natural resource information and conservation programs, in consultation with a diversity of stakeholders in the state, region and nation. In addition, information on the full array of wildlife and wildlife conservation efforts in Connecticut was solicited, researched, and compiled. From these data, DEP Bureau of Natural Resources (BNR) staff, the Endangered Species Scientific Advisory Committee (ESSAC), and conservation partners identified those species of greatest conservation need. Altogether, 475 species of greatest conservation need were identified, including 27 mammals, 148 birds, 30 reptiles and amphibians, 74 fish and 196 invertebrates. A lack of information on the status of many GCN species, especially invertebrates confirms the need for targeted research so that these species can be addressed in future revisions of this Strategy.

Internal and external scientific experts and stakeholders associated the GCN species with 12 key habitats and 43 sub-habitats located throughout Connecticut. Each of these habitats was linked to standardized state, regional and national vegetation classification systems. These habitats, including both terrestrial and aquatic, were identified as those of greatest conservation need in Connecticut. They include several types of forest, wetlands, and other unique communities such as sparsely vegetated areas, caves, and coastal beaches. The location, distribution and condition of each of these habitats were researched and summarized. Threats facing the key habitats and GCN species along with priority research, survey and monitoring needs, and conservation actions to address these threats were then developed for each habitat. Key partnership opportunities for

implementation, priority areas for conservation, proposed performance measures for each research and conservation action, and a list of sources for more information were developed for each key habitat.

The most significant threats to Connecticut's land and waterscapes include habitat loss, degradation, and fragmentation from development; changes in land use; and competition from non-native, invasive species. Other threats include insufficient scientific knowledge regarding wildlife and their habitats (distribution, abundance and condition); the lack of landscape–level conservation; insufficient resources to maintain or enhance wildlife habitat; and public indifference toward conservation.

To address these threats, conservation actions were developed for GCN species and key habitats. Some examples include the need to:

1. determine the distribution, abundance, condition and limiting factors for GCN species and key habitats

2. assess and minimize the impact of invasive plant and animal species on GCN species and their habitats

3. develop and implement applicable management strategies

4. develop statewide guidelines and best management practices to address the impacts of development on GCN species

5. continue efforts to participate in regional conservation efforts for GCN species;

6. implement current recovery and managment plans and

7. enhance efforts to provide information and guidance on GCN species and key habitats to land use planners, decision-makers and the public at the local , regional and statewide scale

Connecticut's conservation actions address threats at multiple scales and levels. For this reason, implementation of these actions will be coordinated with key partners, including the U.S. Fish and Wildlife Service, U.S. Forest Service, Natural Resources Conservation Service, U.S. Army Corps of Engineers, Office of Policy and Management, The Nature Conservancy, Partners in Flight, Connecticut Audubon, Audubon Connecticut, Connecticut Forest and Parks Association, Ducks Unlimited, Trout Unlimited, tribal groups, watershed groups, land trusts, and many others. These local, state and federal agencies as well as tribal partners were asked for input throughout the process, and to review the draft CWCS.

The implementation of CWCS conservation actions will be monitored via the BNR's CWCS database that tracks Connecticut's wildlife resources. As conservation actions are implemented, their effectiveness will be reviewed biennially by BNR's technical staff, while the status of species and habitats will be reassessed by both the Endangered Species Scientific Advisory Committee (ESSAC) and the Department's technical staff. As determined by this review, conservation actions will be refined or new actions will be developed based upon whether the original actions were effective, as intended, in aiding

the state's GCN species and habitats (i.e. adaptive management.) In addition to these adaptations, the CWCS will undergo a complete review every 10 years.

The CWCS was developed using guidance provided by the International Association of Fish and Wildlife Agencies (IAFWA) and National Advisory Assistance Team (NAAT). To illustrate how each of the eight required elements was applied to a GCN species, the piping plover (*Charadrius melodus*) is used as an example. BNR staff, the ESSAC, and other partners assessed the abundance and distribution of fauna in Connecticut, identifying GCN species based on the current scientific information (Element 1). The piping plover was identified as a GCN species following an evaluation of its status, abundance and distribution in the state, and existing conservation efforts that have identified it as a high priority species. The breeding population of piping plover found in Connecticut is federally threatened, state threatened, globally ranked as G3, and state ranked as S1B. Furthermore, the International Union for Conservation of Nature (IUCN) classifies the piping plover as *Vulnerable*, the U.S. Shorebird Conservation Plan as *Highly Imperiled*, the Northern Atlantic Regional Shorebird Plan as *Highly Imperiled*, and the South Atlantic Migratory Bird Initiative as a *priority species*. As a result, the piping plover was ranked as *Most Important* in the CWCS. Following its proposal as a GCN species, the public was invited to provide comments (as with all GCN species and key habitats) through the DEP website (Element 8).

The piping plover nests within two community types that were identified as key habitats: *Coastal Dunes* and *Intertidal Beaches and Shores* (Element 2). These habitats are restricted to coastal areas and as such are relatively rare in Connecticut (Element 2). Coastal Dunes were found to be in good to fair condition, as were Intertidal Beaches and Shores. Connecticut's piping plover population is threatened by habitat loss and degradation from development and natural processes, nest predation and harassment, and human and vehicle disturbance of nesting areas (Element 3). Conservation actions needed to address these threats were then determined, and included using fences and other barriers to reduce nest predation and restrict access to nest sites from mid-April through early August (Element 4). A priority research need was identified: to determine why the breeding piping plover population is not expanding to existing, suitable, unused habitat in Connecticut (Element 3). Monitoring data will provide additional information necessary to assess the status and condition of the piping plover (Element 5). These data will also contribute to regional and national conservation efforts in which Connecticut is a partner, such as the U.S. Fish and Wildlife Service (USFWS) Piping Plover Recovery Plan, US Geological Survey Breeding Bird Survey, International Shorebird Survey, Atlantic Coast Joint Venture, Northern Atlantic Regional Shorebird Plan, and the U.S. Shorebird Conservation Plan (Element 7).

The conservation of breeding populations of piping plover through habitat protection, restoration and enhancement was identified as a priority conservation action (Element 4). By monitoring the implementation and degree of success of this conservation action, DEP and its partners will be able to quantify the performance measures for each – the number of known breeding pairs based on a regional annual survey and the number of habitat areas protected (Element 5). The results of monitoring for piping plovers will

provide information on whether the conservation actions are increasing the number of piping plover nests or nest productivity each year. If the status and condition of breeding piping plovers show no significant improvement, conservation actions can then be appropriately modified (adaptive management). The DEP may, for example, intensify habitat protection measures. Alternatively, DEP may focus efforts on key sites or promote cooperative projects with partners if a lack of funds limits the intensification of the conservation efforts (Elements 1, 3, 5 & 7). By applying this adaptive management approach, a feedback loop between monitoring, conservation actions and management objectives will be established (Elements 1-5). A similar process was applied to all GCN species throughout this document.

To further aid the reader, the strategy includes a section entitled "Guide to the Elements" which clearly identifies the chapters, tables, figures and appendices along with page numbers(s) where pertinent information can be found that addresses each of the eight required elements.

Connecticut CWCS – Guide to the Elements

This guide to Connecticut's Comprehensive Wildlife Conservation Strategy (CWCS) will assist the National Advisory Acceptance Team (NAAT) and others to readily locate pertinent information that addresses each of the eight required elements.

Connecticut's CWCS consists of two parts: 1) the main body of text; and, 2) a series of technical appendices that provide more detailed information and supporting documentation. The main body of the CWCS has eight chapters, each of which focuses on one or more of the eight elements. Pages, figures, tables and appendices are labeled throughout the document with the first number referring to the corresponding chapter. The second number or letter identifies the sequential order in which the figure, table or appendix is introduced in the text. For example, Table 4.7 is the seventh table in chapter 4 and Appendix 1e is the fifth appendix supporting chapter 1.

The Connecticut CWCS and its supporting appendices are available through the DEP website (http://dep.state.ct.us/burnatr/wildlife/geninfo/fedaid/cwcs/home.htm) as Adobe PDF files. The website provides detailed information about each of the GCN species and key habitats.

This CWCS addresses the eight elements identified by Congress, following guidance provided by the International Association of Fish and Wildlife Agencies (IAFWA) and the NAAT. The following table provides a key to finding where each of the eight required elements is addressed in the Connecticut CWCS.

Element 1: Information on the distribution and abundance of species of wildlife, including low and declining populations as the state deems appropriate, that are indicative of the diversity and health of the state's wildlife:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The Strategy indicates sources of information (e.g., literature, databases, agencies, individuals) on wildlife abundance and distribution consulted during the planning process.	Chapter 1

Literature Cited

Appendix 1a

Appendix 1e

Appendix 8a | 1.1-24 | | |

Description	Reference	Pages	Figures / Tables	
B. The Strategy includes information about both abundance and distribution for species in all major groups to the extent that data are available. There are plans for acquiring information about species for which adequate abundance and/or distribution information is unavailable.	Chapter 1 Chapter 4 Appendix 1b Appendix 1c Appendix 1d	1.1-1.12 1.14-24 4.3-4.6 4.11 4.15 4.20 4.25-26 4.29-.30 4.34 4.35 4.39 4.43 4.44 4.48 4.49 4.53 4.54 4.57 4.58 4.66 4.69 4.70 4.77 4.78 4.80 4.81 4.83 4.84 4.85 4.86 4.90	Figures 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11 1.12 Tables 1.2 1.3 1.4 1.5 1.6	1.4 1.7 1.10 1.12 1.13 1.14 1.16 1.17 1.19 1.21 1.22 1.26 1.4 1.8-9 1.15 1.17 1.20
C. The Strategy identifies low and declining populations to the extent data are available.	Chapter 1 Appendix 1b Appendix 1c Appendix 1d	1.1-12 1.14-23	Figure 1.12 Tables 1.1 1.2 1.3 1.4 1.5 1.6 1.8	1.26 1.1 1.4 1.8-9 1.15 1.17 1.20 1.25
D. All major groups of wildlife have been considered or an explanation is provided as to why they were not (e.g., including reference to implemented marine fisheries management plans). The State may indicate whether these groups are to be included in a future Strategy revision.	Chapter 1 Appendix 1e	1.1-26		
E. The Strategy describes the process used to select the species in greatest need of conservation. The quantity of information in the Strategy is determined by the State with input from its partners, based on what is available to the State.	Chapter 1 Appendix 1c	1.23-26		

Element 2: Descriptions of locations and relative condition of key habitats and community types essential to conservation of species identified in the 1st element:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The Strategy provides a reasonable explanation for the level of detail provided; if insufficient, the Strategy identifies the types of future actions that will be taken to obtain the information.	Chapter 2 Chapter 4 Appendix 2a	2.1-18 4.7-9 4.12-13 4.16-18 4.22-23 4.27-28 4.32-33 4.37-38 4.40-41 4.45-46 4.50-51 4.54-55 4.59 4.61-64 4.67-68 4.72-75 4.79 4.81-85 4.87-88		
B. Key habitats and their relative conditions are described in enough detail such that the State can determine where (i.e., in which regions, watersheds, or landscapes within the State) and what conservation actions need to take place.	Chapter 2 Chapter 4 Appendix 2a Appendix 2b	2.1-2.18 4.7-9 4.12-13 4.16-18 4.22-23 4.27-28 4.32-33 4.37-38 4.40-41 4.45-46 4.50-51 4.54-55 4.59 4.61-64 4.67-68 4.72-75 4.79 4.81-85 4.87-88	Figures 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 Tables 2.1	2.6 2.7 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.15 2.16-18

Element 3: Descriptions of problems which may adversely affect species identified in the 1st element or their habitats, and priority research and survey efforts needed to identify factors which may assist in restoration and improved conservation of these species and habitats:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The Strategy indicates sources of information (e.g., literature, databases, agencies, or individuals) used to determine the problems or threats.	Chapter 3 Chapter 4 Appendix 1a, 1d Appendix 3	3.1-6 4.1-2	Figures 3.1 3.2	3.6 3.6
B. The threats/problems are described in sufficient detail to develop focused conservation actions (for example, "increased highway mortalities" or "acid mine drainage" rather than generic descriptions such as "development" or "poor water quality").	Chapter 3 Chapter 4 Appendix 3	3.1-6 4.10-11 4.14 4.19 4.24 4.29 4.34 4.38-39 4.42-43 4.48 4.52-53 4.56-57 4.60 4.65-66 4.68-69 4.76-77 4.80-82 4.84-85 4.89-90	Table 3.1 3.2	3.2-3 3.3
C. The Strategy considers threats/problems, regardless of their origins (local, State, regional, national and international), where relevant to the State's species and habitats.	Chapter 3 Chapter 4 Appendix 3	3.1-6 4.10-11 4.14 4.19 4.24 4.29 4.34 4.38-39 4.42-43 4.48 4.52-53 4.56-57 4.60 4.65-66 4.68-69 4.76-77 4.80-82	Tables 3.1 3.2 3.3	3.2-3 3.3 3.4

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
		4.84-85 4.89-90		
D. If available information is insufficient to describe threats/problems, research and survey efforts are identified to obtain needed information.	Chapter 3 Chapter 4 Appendix 3	3.6 4.2-6 4.11 4.15 4.20 4.25 4.29-30 4.34-35 4.39 4.43-44 4.48-49 4.53-54 4.57-58 4.60 4.66-67 4.69-70 4.77-78 4.80 4.83-85 4.90		
E. The priority research and survey needs, and resulting products, are described sufficiently to allow for the development of research and survey projects after the Strategy is approved.	Chapter 4	4.3-6 4.11 4.15 4.20-21 4.25-26 4.29-31 4.34-36 4.39 4.43-44 4.48-50 4.53-54 4.57-59 4.60-61 4.66-67 4.69-70 4.77-78 4.80-86 4.90-91		

Element 4: Descriptions of conservation actions determined to be necessary to conserve the identified species and habitats and priorities for implementing such actions:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The Strategy identifies how conservation actions address identified threats to species of greatest conservation need and their habitats.	Chapter 4 Appendix 3 Appendix 4	4.3-6 4.11 4.15 4.20-21 4.25-26 4.30-31 4.35-36 4.39 4.44 4.49-50		

		4.54 4.58-59 4.61 4.66-67 4.70 4.78 4.81-84 4.86 4.90-91		
B. The Strategy describes conservation actions sufficiently to guide implementation of those actions through the development and execution of specific projects and programs.	Chapter 4	4.3-6 4.11 4.15 4.20-21 4.25-26 4.30-31 4.35-36 4.39 4.44 4.49-50 4.54 4.58-59 4.61 4.66-67 4.70 4.78 4.81-84 4.86 4.90-91		
C. The Strategy links conservation actions to objectives and indicators that will facilitate monitoring and performance measurement of those conservation actions (outlined in Element #5).	Chapter 4	4.3-6 4.11 4.15 4.20-21 4.25-26 4.30-31 4.35-36 4.39 4.44 4.49-50 4.54 4.58-59 4.61 4.66-67 4.70 4.78 4.81-84 4.86 4.90-91		
	Chapter 5	5.1-4		

D. The Strategy describes conservation actions (where relevant to the State's species and habitats) that could be addressed by Federal agencies or regional, national or international partners and shared with other States.	Chapter 4 Appendix 4	4.1-2		
E. If available information is insufficient to describe needed conservation actions, the Strategy identifies research or survey needs for obtaining information to develop specific conservation actions.	Chapter 4	4.2-6 4.11 4.15 4.20 4.25 4.29-30 4.34-35 4.39 4.43-44 4.48-49 4.53-54 4.57-58 4.60 4.66-67 4.69-70 4.77-78 4.80 4.83-85 4.90		
F. The Strategy identifies the relative priority of conservation actions.	Chapter 4 Appendix 4	4.1		

Element 5: Descriptions of the proposed plans for monitoring species identified in the 1st element and their habitats, for monitoring the effectiveness of the conservation actions proposed in the 4th element, and for adapting these conservation actions to respond appropriately to new information or changing conditions:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The Strategy describes plans for monitoring species identified in Element #1, and their habitats.	Chapter 5 Appendix 1e	5.1-4		
B. The Strategy describes how the outcomes of the conservation actions will be monitored.	Chapter 5	5.3-4	5.1	5.3 5.4
C. If monitoring is not identified for a species or species group, the Strategy explains why it is not appropriate, necessary or possible.	Chapter 5	5.2		
D. Monitoring is to be accomplished at one of several levels including individual species, guilds, or natural communities.	Chapter 5	5.1 5.2		
E. The monitoring utilizes or builds on existing monitoring and survey systems or explains how information will be obtained to determine the effectiveness of conservation actions.	Chapter 5 Appendix 7a	5.3 5.4		
F. The monitoring considers the appropriate geographic scale to evaluate the status of species or species groups and the effectiveness of conservation actions.	Chapter 5	5.1 5.2		

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
G. The Strategy is adaptive in that it allows for evaluating conservation actions and implementing new actions accordingly.	Chapter 5	5.4		

Element 6: Descriptions of procedures to review the Strategy at intervals not to exceed 10 years:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The State describes the process that will be used to review the Strategy within the next 10 years.	Chapter 6	6.1		

Element 7: Descriptions of the plans for coordinating, to the extent feasible, the development, implementation, review, and revision of the Strategy with Federal, State, and local agencies and Indian tribes that manage significant land and water areas within the state or administer programs that significantly affect the conservation of identified species and habitats:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The State describes the extent of its coordination with and efforts to involve Federal, State and local agencies, and Indian Tribes in the development of its Strategy.	Chapter 7 Appendix 7a Appendix 8a	7.1-3		
B. The State describes its continued coordination with these agencies and tribes in the implementation, review and revision of its Strategy.	Chapter 7 Appendix 7a	7.3		

Element 8: Descriptions of the necessary public participation in the development, revision, and implementation of the Plan:

NAAT Guidance	CWCS Section	Pages	Table or Figure	Pages
A. The State describes the extent of its efforts to involve the public in the development of its Strategy.	Chapter 8 Appendix 8a Appendix 8b Appendix 8c	8.1-4		
B. The State describes its continued public involvement in the implementation and revision of its Strategy.	Chapter 8 Appendix 8b	8.4		

Introduction

The Department of Environmental Protection, through its Bureau of Natural Resources has a long and successful record in wildlife management. This is credited to a dedicated professional staff, and the science-based wildlife management that has been implemented with the help of many conservation partners. Most of the success, to date, has involved the restoration of game species including birds, fish and mammals, such as the wild turkey, the striped bass and the fisher. These and other efforts were made possible by the revenue derived from both the sale of fishing and hunting licenses, and the payment, by anglers and hunters, of federal excise taxes on fishing and hunting equipment as required pursuant to the public laws known today as Pittman-Robertson and Dingell-Johnson. These laws were enacted many decades ago because congress recognized that a stable, long-term funding mechanism was needed to reverse the decline in the populations of many of these species across the nation. In keeping with the Department's commitment to wildlife management, this document lays out a comprehensive strategy for wildlife conservation for the next decade.

Prior to 2000, funding for non-game wildlife programs has been minimal in most states and at the federal level. Notwithstanding limited resources, there have been several success stories in Connecticut including the recovery of the osprey and bald eagle. However, much work needs to be undertaken to address the broader array of wildlife that historically has received little or no attention, in particular, reptiles, amphibians and invertebrates. In the context of this strategy wildlife includes amphibians, birds, fish (freshwater, anadromous and marine), invertebrates (principally insects, mollusks and crustaceans), mammals, and reptiles.

Recognizing the need to conserve all of America's wildlife, Congress approved annual appropriations beginning in 2001 under Public Act 106-553, the Wildlife Conservation and Restoration Program, and subsequently, under Public Laws 107-063, 108-447, and 109-54, otherwise known as the State Wildlife Grant Program. The approval of funding under these laws was the culmination of over a decade of effort made by all the states working through the International Association of Fish and Wildlife Agencies (IAFWA), and with thousands of governmental, non-governmental and corporate conservation partners, to demonstrate the need for additional funding. With the approval of funding came the mandate that all states, territories and the District of Columbia shall prepare and submit by October 1, 2005 a Comprehensive Wildlife Conservation Strategy (CWCS) to the U.S. Fish and Wildlife Service for review and approval.

The CWCS must address the following eight criteria identified by Congress:
1) abundance and distribution of wildlife species
2) location and relative condition of key habitats
3) threats that may adversely affect species
4) conservation actions and priorities for implementing such actions

5) monitoring plans for species and habitats to measure the effectiveness of conservation actions

6) review procedures to develop the next strategy

7) plans for coordinating the development, implementation, review, and revision of the strategy with federal, state, and local agencies, as well as Indian tribes, and

8) public participation

Connecticut's strategy presents the best available and most current information on the distribution and abundance of wildlife. With the advent of a stable funding source, resources are available to develop a conservation program to address all species. This CWCS focuses on the species of greatest conservation need (GCN) and the key habitats essential to their survival. The strategy identifies the threats to these species and key habitats, as well as the conservation actions designed to address these threats. In addition, monitoring, review, and adaptive management protocols have been incorporated into the strategy, as have the efforts made to coordinate with other agencies, Indian tribes and the public. A tremendous effort over the past two years was devoted to the preparation of this document, which included input form a diverse group of public, private, governmental and non-governmental conservation stakeholders, and many agency staff members. Guidance materials developed by IAFWA's Teaming with Wildlife Committee and the U.S. Fish and Wildlife Service's National Advisory Acceptance Team were instrumental in organizing this report and ensuring that all the required elements were satisfactorily addressed.

At the heart of this strategy are conservation actions. Implementing these actions over the next decade will improve the quality of life for the citizens of Connecticut by conserving the diversity of ecosystems and wildlife in the state. Additionally, the likelihood of new species being listed as endangered or threatened will be minimized, helping to keep today's common species common in the future.

As the Department moves forward with implementation, we will continue to use the best scientific information available, while communicating and collaborating with conservation partners and constituents. New information on species distribution and abundance derived from implementing this strategy will help our partners make informed decisions on issues that affect wildlife and their habitats in Connecticut.

At a time when Connecticut's wildlife species and their habitats face formidable threats, the Department looks forward to working with its partners over the next decade, providing both the vision and the leadership necessary to conserve Connecticut's wildlife.