

## Wildlife Interaction Plan

Our communities are home to both humans and wildlife. Extensive development such as that found in New Jersey not only impacts natural habitat but also brings people into close and frequent contact with wildlife that share our environment. Conflicts can arise when communities experience nuisances, health risks, or economic damage related to wildlife activities. Community leaders can promote coexistence and improve environmental stewardship by creating a Wildlife Interaction Plan.

The Wildlife Interaction Plan enables municipalities to develop and implement practical community-based approaches for fostering positive human-wildlife interactions and resolving wildlife conflicts with specific species. While the species and issues addressed by the Plan will vary by municipality, all solutions should seek to balance community members' needs. The goal is to reduce problems resulting from human-wildlife interaction to a manageable and acceptable level and to ensure that indigenous species can continue to thrive within the community.

This action provides the tools for a municipality to articulate an implementable plan for mitigating human-wildlife conflict using approaches that are:

- Appropriate to the geographical context of the community (rural, suburban, urban)
- Science-based
- Legal (reflect existing regulations)
- Safe for both people and the environment
- Effective in the long term
- Humane (minimize suffering)
- Consultative
- Reflecting the values of the community

The development of a Wildlife Interaction Plan will enable municipalities to earn 20 points when successfully completed. Although plans will vary according to the species and circumstances of individual municipalities, each must contain clearly defined goals, objectives, and methods of evaluation to demonstrate that successful implementation is measurable. The municipalities must demonstrate the involvement of relevant stakeholder groups in the development of the Plan.

#### Who should lead and be involved with this action?

Involvement and engagement by the full range of stakeholders in the process of developing, implementing, and evaluating a municipal Wildlife Interaction Plan is required in order to insure that all viewpoints are represented by the final Plan.

In addition to local, state, and federal government officials, potential stakeholders include: homeowners, wildlife damage service providers, farmers, forest owners, members of conservation and animal welfare organizations, hunters, outdoor and recreation groups, and many others. While all stakeholders are important, key stakeholders for your advisory/steering group should represent diverse points of view. Include animal control officers, or other personnel from the municipality engaged in animal welfare/management; members of the municipal Green Team, representatives from NJ DEP, and representatives from animal welfare and conservation organizations who could provide species-specific knowledge, as well as farmers, hunters, and interested members of the community.

#### **Time Frame**

Many of the activities below can occur concurrently. Implementation of an action plan could take 12-18 months with monitoring, evaluation, and adjustment on an ongoing basis beyond that time period.

- Determine specific wildlife species to address and establish steering group (1-3 months);
- Assess challenges/opportunities; Data collection (3-6 months);
- Review of science/ethics/practicalities (1 month);
- Determine preferred strategy and develop action plan integrated with planning processes and ordinances (3-6 months);
- Conduct public awareness campaign (3-6 months);
- Implement action plan tactics and monitor results (6-12 months);
- Evaluate, make adjustments as needed (ongoing).

For a municipality to receive points for this action, the Wildlife Interaction Plan needs to have been completed, or updated, \*\* from within 5.5 years of the June submission deadline\*\*.

## **Project Costs and Resource Needs**

Overall costs will depend on the action plan option selected. Actions require municipal and stakeholder staff time (and possibly consultant's fees) for research, planning, evaluation, and implementation. Additionally, some expenses may be incurred in the data collection phase, as well as the public awareness initiative (time and materials).

## Why is it Important?

This action promotes community well-being and the preservation of New Jersey's wildlife heritage. Improving human-wildlife interactions can provide valuable savings of community resources, a reduction in human-animal and human-human conflicts, elevated civic pride, improved human and animal health, preservation of biodiversity and ecological integrity, and new social and recreational opportunities.

Because issues surrounding wildlife in the community often involve conflicting values among stakeholders, any lasting, effective solution will require an inclusive process that engages the full range of stakeholders. By providing communities with a framework for informed participation in the decision-making process, a municipal wildlife interaction plan can help to avoid ill-informed decisions, or decisions that are not understood or supported by the community, which can then lead to conflict and an inevitable drain on valuable community resources.

## What to do and how to do it ("How to")

Below we have listed the requirements for earning points for this action.

- 1. The Wildlife Interaction Plan must be officially adopted by the municipal government and needs to have been completed or updated \*\* from within 5.5 years of the June submission deadline\*\*.
- 2. The Wildlife Interaction Plan must be a species-specific plan that includes the components in the What to Do section bulleted list under step #5.
- 3. The municipality must significantly engage a variety of stakeholders in the development of the plan and perform outreach to raise public awareness of the plan and the issues it intends to resolve.

We have provided extensive guidance and recommendations for implementing the action. You do not need to follow this guidance exactly as long as your final product meets the requirements. Since communities and wildlife populations are dynamic in nature, a management plan must consider changing community needs or new management tools to be effective over the long term. A long-lasting and successful plan will take an adaptive resource management approach that incorporates stakeholder input, establishes clear and measurable goals, implements management actions, monitors those management actions, evaluates management actions based on established goals, and adapts policy and management actions as necessary.

Stakeholder engagement and satisfaction with the decision-making process has been cited as the single most important component in identifying, developing, implementing, and evaluating a successful Wildlife Interaction Plan that is effective over the long term. The keys to achieving this engagement are providing adequate opportunities for stakeholders to participate in the process and ensuring that stakeholder input has genuine influence on the decisions that are made.

The Northeast Wildlife Damage Management Coop guide to Human-Wildlife Conflict Management: <a href="http://wildlifecontrol.info/pubs/Documents/Human-Wildlife/H-W%20Guide.pdf">http://wildlifecontrol.info/pubs/Documents/Human-Wildlife/H-W%20Guide.pdf</a> is a good resource on best practices for engaging stakeholders to address human-wildlife conflicts in local communities.

Consultation with stakeholders is assumed in all the steps outlined below for developing the municipal wildlife action plan.

- 1) To develop a plan, first identify and convene stakeholders from all relevant groups and establish a steering/advisory committee to lead the action. While these entities may vary based on the issue at hand, they are likely to include non-profit conservation organizations, animal welfare organizations, wildlife rehabilitation centers, state agencies, residents, and municipal staff.
- 2) With the full committee, discuss the current species-specific wildlife interaction conflicts that you hope to resolve and articulate a vision for what the community would be like if you are successful in addressing them. Using this vision, develop goals that need to be achieved in order to realize it.
- 3) Collect data on the issue or species concerned and on human attitudes, behavior, and values in relation to the issue or species.
- 4) Review science-based options and practical and ethical consideration(s). Then identify one or more strategies that can be implemented to achieve each goal. Identify measures to evaluate the outcome of each strategy.
- 5) Based on the best practice resources (See Resources section) and guidelines for human-wildlife conflict mitigation, develop a plan that includes the following

#### components:

- Introduction and problem statement: Brief description of the area, its location or address, and size as well as a definitive statement of the species-specific wildlife issue will provide context for the plan. Vision: Long-term purpose of the management program and what it aims to achieve.
- Program Goal(s) and Objectives: Specific descriptions of the overall management goals as well as the individual strategies to be employed to implement this plan.
- Site Description: Detailed description of the area (human population, housing density, open space, parks, etc) and history of species management activities.
- Data: Document wildlife-related damage, potential safety hazards, and complaints. You may include quantitative and cost estimates of damage; potential or actual safety hazards to the public, number and scope of complaints, or other parameters to describe the issues the plan will address.
- Proposed methods and procedures: Describe the strategies that will be employed to accomplish the short and long term goals. These may include adopting new policies or ordinances, educational campaigns, or techniques to be used and number of animals to be removed. Include names and phone numbers of urban officials to be contacted by the media and general public concerning the project.
- Evaluation of management program: Description of the quantifiable criteria used to determine the progress of the management program.
- Schedule: Timetable for implementation of the program and parties responsible for accomplishing each component.
- Supporting Documents: Additional support documents as necessary.

Successful action plans will outline goals, tactics, and solutions that adhere to the following principles:

- Are appropriate to the geographical context of the community (rural, suburban, urban) and to the sites where human-wildlife interaction/conflict is occurring.
- Are practical, legal (based on existing legislation) and science-based (reflecting reliable information and scientific data).
- Reflect carefully evaluated alternatives and integrate a range of techniques, experimentation, and creative approaches.
- Are safe for both people and the environment and effective in the long term.
- Are humane, which means utilizing actions and tactics that minimize unnecessary pain or stress to the animal. There are circumstances in which a lethal technique may be the most humane solution.
- Specify specific, measurable targets and outline when and where implementation is to occur.
- Include a monitoring strategy to determine efficacy of the tactics and allow for modification of the chosen tactics as appropriate on an ongoing basis.

- Acknowledge the importance of a long-term stakeholder commitment and municipal support as quick fixes are seldom effective.
- 6) Determine how the plan will be monitored and reviewed.
- 7) Develop a process for integrating the action plan goals with municipal planning.
- 8) Conduct a multi-channel public awareness campaign. Outreach should take into account variations in perception and viewpoints among community members about wildlife issues.

Strategies for this outreach can be found in the Northeast Wildlife Damage Management Research and Outreach Cooperative's report on Human-Wildlife Conflict Management: http://wildlifecontrol.info/pubs/Documents/Human-Wildlife/H-W%20Guide.pdf

- 9) Facilitate municipal adoption of the action plan.
- 10) Evaluate the measures identified in the plan to determine how well the Plan's goals and objectives are being achieved. With continued stakeholder input, adapt the management strategies based on the evaluation for improved outcomes. Report publicly on successes and challenges.

## What to submit to get credit/points

In order to earn points, your submission must meet the following standards:

- 1. The Wildlife Interaction Plan must be officially adopted by the municipal government and needs to have been completed or updated \*\* from within 5.5 years of the June submission deadline\*\*.
- 2. The Wildlife Interaction Plan must be a species-specific plan that includes the components in the What to Do section bulleted list under step #5 The municipality must significantly engage stakeholders in the development of the plan and perform outreach to raise public awareness of the plan and the issues it intends to resolve.

Submit the following documentation to verify the action was completed to the above standards.(Log in to the password protected webpage where you submit your online application for certification to write in the text box and upload documents).

1. In the text box, please provide a short narrative (300 word max) to summarize what was accomplished and the general steps taken to accomplish it.

- Upload: Wildlife Interaction Plan and provide verification that it was officially adopted.
- Upload: Documentation of significant stakeholder involvement. This may include meeting minutes with a list of attendees and their affiliations.
- Upload: Outreach materials. These may include media reports, newsletter articles, etc.

IMPORTANT NOTES: You can upload up to six separate documents for each action. Please excerpt relevant information from large documents. Please remember that your submissions will be viewable by the public as part of your certified report.

## **Spotlight**

The Hopewell Valley Deer Management Task Force (HVDMTF) was formed to address community issues related to the overpopulation of deer. The Task Force invited the neighboring communities of Hopewell Borough and Pennington to join the effort to develop a management plan for deer. The Task Force, which consists of township staff, members of boards/commissions, private residents, and non-profit environmental organizations, held numerous public meetings, performed public outreach, and solicited feedback through surveys to ensure public engagement in the process. After gathering data on perceptions as well as deer-related impacts and populations, the Task Force worked with property owners, farmers, hunters, police, and animal rights advocates to create a plan with goals, strategies to achieve them, and a plan to evaluate implementation and progress on an ongoing basis. Strategies go beyond hunting to include education and avoidance of impacts to create a comprehensive management plan.

#### Resources

**CROSS-CUTTING RESOURCES:** 

"Best Practices for Nuisance Wildlife Control Operators"

Manual created by the New York State Department of Environmental Conservation and Cornell University. http://nwco.net/

#### **Control tips for common nuisance species:**

http://nwco.net/08-AppendixBNuisanceSpecies/factsheets.asp

Critter Control: Prevention, damage control, and removal.

Professional staff includes biologists, zoologists, wildlife managers, animal control officers and anti-cruelty personnel. www.crittercontrol.com.

#### **Falcon Environmental Services,**

Wildlife management and control, environmental impact studies, and other services - www.falcon.bz

#### **Human Wildlife Conflict Collaboration**

(Conflict Resolution to facilitate collaborative approaches among diverse conservation-minded stakeholders) – www.humanwildlifeconflict.org

#### **Humane Society of the United States**

(HSUS) series of fact sheets on solving problems with wild neighbors: http://www.humanesociety.org/animals/wild neighbors/

#### **MSPCA Intruder Excluder -**

http://www.mspca.org/intruderexcluder/

#### **National Park Service:**

Research papers on a variety of human-animal interaction issues. http://www.nps.gov.

#### **NJ** Audubon

http://www.njaudubon.org/SectionConservation/StewardshipProgam.aspx

#### **NY DEC Wildlife Management Unit:**

Best practices in Nuisance Wildlife Control: http://nwco.net/

#### **Northeast Wildlife Damage and Control Coop:**

This unique partnership between state and federal wildlife agencies and universities in the Northeast aims to develop new approaches for addressing important wildlife management issues.

http://wildlifecontrol.info/newdm/Pages/default.aspx

#### **Northeast Wildlife Damage Management Coop:**

http://wildlifecontrol.info/newdm/Pages/default.aspx

#### Professional Wildlife Removal-

http://www.aaanimalcontrol.com/Professional-Trapper/proabout.htm

#### **Rutgers Center for Wildlife Damage Control**

Seeks a balance between conflicting needs of animals and people. Research on small mammals, deer management, and non-migratory Canada Geese combines scientific inquiry with a realistic emphasis on solving the problem.

http://njaes.rutgers.edu/centers/quickinfo.asp?WDCC

**BY SPECIES:** 

BATS

#### **Bat Conservation International:**

http://www.batcon.org/

BIRDS (GEESE, ET AL.)

# Cormorant Issues and Management Guide from the Northeast Wildlife Management and Control Coop:

http://wildlifecontrol.info/pubs/Documents/Cormorant/Cormorant.pdf

#### NJ Division of Fish and Wildlife

http://www.state.nj.us/dep/fgw/waterfowl info.htm

**Critter Control:** Prevention, damage control, and removal. Professional staff includes biologists, zoologists, wildlife managers, animal control officers and anticruelty personnel. www.crittercontrol.com.

**Falcon Environmental Services** (wildlife management and control, environmental impact studies, and other services) - www.falcon.bz

**Geese Peace** utilizing aversive techniques near airports, industrial sights and residences, et al -www.geesepeace.com

**BFARS:** 

#### **Bear Trust**

http://www.beartrust.org/NJ project.html)

#### **Bear Resistant Equipment: Interagency Grizzly Bear Committee**

(a project of the US Fish and Wildlife Service) -

http://www.igbconline.org/index.php/safety-in-grizzly-country/resources-for-bear-safety/112-product-testing/149-bear-resistant-equipment

#### **HSUS Solving Problems with Black Bears:**

http://www.humanesociety.org/animals/coyotes/tips/solving problems.html

#### NJ Division of Fish and Wildlife

http://www.state.nj.us/dep/fgw/bearfacts.htm

Save NJ Bears

www.savenjbears.com

**BFAVFR:** 

**Beaver Solutions** (beaver management, education and control)

www.beaversolutions.com

**COYOTES:** 

**Critter Control** 

Prevention, damage control, and removal.www.crittercontrol.com.

#### **HSUS Solving Problems with Coyotes**

http://www.humanesociety.org/animals/coyotes/tips/solving\_problems\_coyotes.htm

#### NJ Division of Fish and Wildlife

http://www.state.nj.us/dep/fgw/coyote info.htm

**NY Coyote** 

www.nycoyote.org

**Project Coyote** 

www.projectcoyote.org

**GOPHERS:** 

http://www.messinawildlife.com/category/wild-animal-control/groundhog-repellents

WHITE-TAILED DEER

There are many approaches that may be taken to produce a community deer management plan. A comprehensive review and guide to these approaches can be found in *Community-Based Deer Management: a practitioners' guide* produced by Northeast Wildlife Damage Management Research and Outreach Cooperative. http://wildlifecontrol.info/pubs/Documents/Deer/DeerGuide.pdf

### **Managing White Tailed Deer (paper)**

http://www.whitebuffaloinc.org/Managing%20White-tailed%20Deer.pdf

#### **NJ** Audubon

http://www.njaudubon.org

\*\*NJ Division of Fish and Wildlife \*\*

http://www.state.nj.us/dep/fgw/deer.htm

#### White-Tailed Deer:

Tufts School of Vet Med (Allen Rutberg)

http://www.tufts.edu/vet/facpages/rutberg\_a.html