

**Q: Why can't we just let nature take its course to enhance wildlife?**

**A:** As long as humans make an effort to suppress natural disturbances such as fire, floods, disease and pest outbreaks, we are no longer dealing with a natural forest system. These disturbances are needed to create grasslands, shrublands and young forest habitats across the landscape. Many wildlife "species of greatest conservation need" rely on these disappearing habitats. The number of wildlife species present in a given area usually mirrors the species and structural biodiversity of plants in the area. In the absence of natural disturbances, active management must be substituted to maintain the region's unique biodiversity.

**Q: Does clear-cutting destroy the environment?**

**A:** Although feared and often misunderstood, clear-cutting is a legitimate silvicultural tool for hardwood forests. It is an efficient way to create even-aged forest regeneration and the most practical way to generate early successional forest habitat in the absence of natural disturbances. Many wildlife species depend on these young forest habitats and others need a variety of young, intermediate and mature forests to meet their requirements. Be sure to preserve wildlife trees such as snag trees and maintain a vegetative buffer in surrounding riparian zones.



*Eastern Tiger Salamander*

**Many Sources of Assistance are Available.**  
For specific information and advice regarding the CWCS, contact your regional NYS DEC wildlife biologist

**Reg. 2-**Jason Smith  
718-482-4919  
jysmith@

**Reg. 4-** Paul Novak  
518-357-2071  
pgnovak@

**Reg. 3-**Gregg Kenney  
845-256-3069  
ghkenney@

All email addresses above end with: gw.dec.state.ny.us

For a free on-site visit from a MFO volunteer, visit [www.cornellmfo.info](http://www.cornellmfo.info) or call your Cornell Cooperative Extension Office.



For a wide variety of forestry and wildlife information visit [www.ForestConnect.info](http://www.ForestConnect.info).

For woodland owners, please consider joining the New York Forest Owners Association at: <http://www.nyfoa.org>.



.....  
**The Comprehensive Wildlife Conservation Strategy (CWCS)** was completed by the Division of Fish, Wildlife and Marine Resources (DFWMR) of NYSDEC in September of 2005 to address the wildlife species in greatest need of conservation in the state. The CWCS utilizes the best available data on the status of fish and wildlife species to define a vision and establish a strategy for state wildlife conservation and funding.

<http://www.dec.ny.gov/animals/30483.html>



**Lower Hudson-Long Island Watershed Region\***

**Over 41% of the Lower Hudson-Long Island watershed region is covered in forest, most of which is privately owned.** Consequently, the health and prosperity of the watershed's wildlife populations depend on how well these owners protect and enhance the habitat on which the hundreds of species of insects, amphibians, reptiles, fish, birds and mammals depend. The good news is that most forest wildlife species are thriving, but unfortunately many are not. These species of greatest conservation need (SGCN) have been identified in the NY Comprehensive Wildlife Conservation Strategy (CWCS). 229 of these species call the Lower Hudson-Long Island watershed region their home.

A major goal of the CWCS is to inform forest owners of the need for management practices that will enhance forest biodiversity and thereby keep these SGCN from becoming rare or endangered. **So much of the critical habitats for these species exists on private lands that landowner cooperation will be the ultimate deciding factor on whether species declines can be halted.** The plan further lists the threats to these species and management strategies that will improve their habitat. Fortunately, for forest owners and wildlife alike, many species will benefit from sustainable forest practices, including sawtimber production, when implemented in accordance with NYS best management practices (BMPs).

**\*Counties:** Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester, and a portion of Columbia County

## New York's forests are now predominantly even-aged northern hardwoods.

Public reluctance to practice forestry, coupled with the absence of natural disturbances, may result in a forested landscape with relatively little structural and vegetative species diversity. It is important that forest owners and managers consider the wildlife benefits that both early and late successional forest management and restoration provides. These habitat attributes include the development of coarse woody debris, standing dead wood, structural variability, and multiple successional stages across the forested landscape. Contact a forester to develop a plan that meets your ownership objectives and incorporates habitat for SGCN.

### Threats to the SGCN in the watershed:

- habitat loss and fragmentation
- contaminants, excess nutrient loading
- degraded water quality
- invasive species competition
- altered hydrology and natural processes
- inappropriate silvicultural and agric. practices
- human-wildlife interactions (collection, poaching, recreation, vehicular collisions, public misconception of predators)
- disease
- climate change, rising sea level

- The population density in the Lower Hudson-Long Island watershed ranges from 0-380,000 people per square mile with an average density of 35,000 people per square mile.
- Almost all of the threats to SGCN in the basin can be traced back to the density and extent of human development.
- The watershed has more SGCN than any other basin in NYS; overall 43% of the state species. This high level of diversity is due to being at the southern end of the geographic range of many northern species and at the northern end of the range of many southern species.

## Management Suggestions for Woodland and Forested Habitats:

### Northern Hardwoods

- Clear-cutting creates dense shrub, herbaceous ground cover layers, soft mast, slash and low exposed perches that support more wildlife than untreated sawtimber stands. Leave some wildlife trees (high exposed perches, cavity trees, coniferous overstory inclusion, snag trees).
- A shelterwood system leads to a partial overstory, partial early successional forest and promotes regeneration.
- Both clear-cutting and shelterwood techniques lead to an increase in raptor hunting areas.
- Silvicultural selection and thinning techniques have little impact on wildlife if done correctly.

### Swamp Hardwoods

- Home to salamanders, frogs, turtles and snakes
- Swamp hardwoods are usually of low economic value so wildlife management is often the primary reason for timber harvest
- Clear-cutting with reserved patches and wildlife, den, nest and cavity trees is the most common and effective silvicultural technique

### Spruce-Fir

- High biodiversity exists during early successional stages due to the herbaceous shrub layer.
- Lowest biodiversity occurs during the pole timber stage because the early shrub layer is shaded out.
- Highest biodiversity exists in mature and over-mature stands because of the increase in tree bole users.
- The shelterwood system is the most effective method at regeneration.

- Clear-cutting results in conversion to hardwood forests, in the absence of herbicide use and planting

### Eastern Hemlock

- Occurs with a broad array of associate tree species and provides conifer component.
- Valuable for den and cavity using wildlife
- Shelterwood method most effective at regeneration.

### Oak-Pine (including Pine Barrens)

- The number of wildlife species is high because species associated with both coniferous and deciduous forest types are brought together.
- Species diversity follows the same pattern as spruce-fir forests (high during regeneration, low during pole stage, high in mature forest).
- High trees provide perching and nesting sites for hawks, great blue herons, osprey and bald eagles.
- Prescribed fire may be needed for forest types such as pitch pine-scrub oak barrens.

## Lower Hudson-Long Island Watershed Region

