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 often mirrors plant biodiversity, both species and structure diversity. In the absence of natural disturbances, active management that mimics natural disturbances 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 is 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.



Black-Throated Blue Warbler

Many sources of assistance are available.

For specific information and advice regarding the CWCS, contact your regional NYS DEC wildlife biologist.

Reg. 8 - Jenny Landry 585-226-5491 jalandry@

Reg. 8 - Amy Mahar 585-226-5337 ammahar@

Reg. 9 - Vacant

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 or call your Cornell Cooperative Extension Office.





For a wide variety of forestry and wildlife information visit 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



Lake Erie/Southwest Lake Ontario Watershed Regions*

Almost half of the Lake Erie/Southwest Lake Ontario watershed regions are 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). 60 of these species inhabit the forested landscapes in these basins.

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. **Because most of the critical habitats for these species exists on private lands, 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:** Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans and Wyoming



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

Public reluctance to practice appropriate forestry, coupled with the absence of natural disturbances, may result in a homogenous 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
- human disturbance
- degraded water quality/pesticide use
- inappropriate forest/agricultural practices
- poor regeneration of diverse hardwood forests due to deer browsing and competing understory plants
- flood plain/hydrology alteration
- invasive species
- The amount of land in agriculture in the Southwest Lake Ontario basin has been reduced from 92% in 1900 to 55% in 2002.
- The Southwest Lake Ontario Basin is home to the only oak savannah in New York State; the Rush Oak Opening Unique area. Oak savannahs were common in the pre-settlement midwest where the prairie met the eastern forests.
- Based on original survey records, up to 14 distinct forest community types may have occurred in the Lake Erie basin. Today, remnants of these matrix communities can be found in about 30,000 acres of contiguous forested areas unbounded by roads.

Management Suggestions for Woodland and Forested Habitats:

Northern Hardwood (beech, birch, maple)

- 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 inclusions, snag trees).
- A shelterwood system creates a partial overstory and promotes regeneration of an even-aged early successional forest.
- Both clear-cutting and shelterwood techniques lead to an increase in raptor (birds of prey)hunting areas.
- Silvicultural selection and thinning techniques have little impact on wildlife if done correctly.
- Profuse root and stump sprouting of beech can impede regeneration of desired species.

Swamp Hardwoods (red and silver maple, elm, ash)

- 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.

Allegheny Hardwoods (red and sugar maple, black cherry, white ash).

- Associated tree species vary by geographic region but often include hemlock, oaks, birch, and hickories. Such diversity contributes to overall wildlife diversity.
- Regeneration can be problematic due to deer browsing and interfering understory plants.
- Appropriate silviculture techniques for regeneration must take into consideration of shade tolerance of desired tree species.

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.

Lake Erie/Southwest Lake Ontario Watershed Region



Ecoregions:

- Great Lakes
- High Alleghany Plateau
- Western Alleghany Plateau

Watersheds:

- Southwest Lake Ontario: 38% forest, 55% agriculture
- Lake Erie: 42% forest, 46% agriculture

Priority issues in the basin

- Protection and management of large, contiguous forest blocks for SGCN-30% of native species have been extirpated from the Lake Erie basin.
- Addressing poor forestry practices.
- Management, restoration, and protection of stream buffers to protect SGCN.
- Stream protection including sedimentation and nutrient reduction.
- Reduction of point source, non-point source pollution and nutrient overloading.
- Slowing the rate of habitat fragmentation and sprawl.