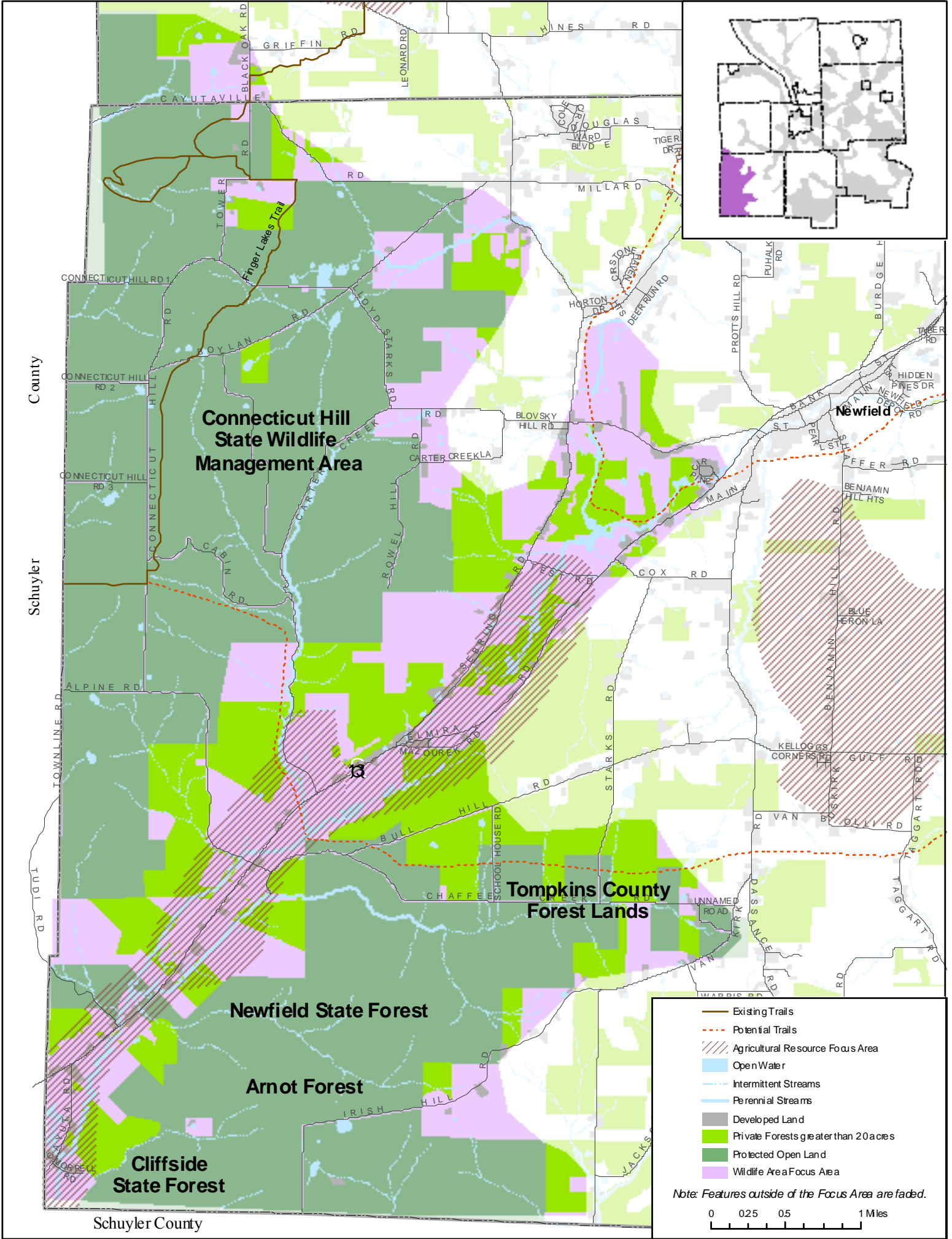


Wildlife Area





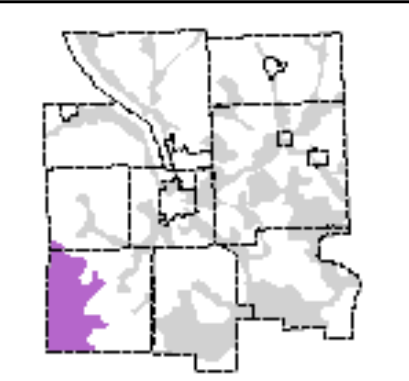
Connecticut Hill State Wildlife Management Area

Tompkins County Forest Lands

Newfield State Forest

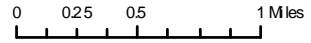
Arnot Forest

Cliffs State Forest



- Existing Trails
- - - Potential Trails
- /// Agricultural Resource Focus Area
- Open Water
- Intermittent Streams
- Perennial Streams
- Developed Land
- Private Forests greater than 20 acres
- Protected Open Land
- Wildlife Area Focus Area

Note: Features outside of the Focus Area are faded.



County
Schuyler

Schuyler County

Description of Focus Area

The Wildlife Focus Area is located in the southwest corner of the County. This area is predominantly forested, with productive agricultural lands blanketing the valley. The Pony Hollow Valley is in active agriculture, is designated as an Agricultural Resource Focus Area, and contains some of the best agricultural soils found in New York State. The Connecticut Hill Wildlife Management Area dominates the landscape and includes almost the entire western hillside along the Pony Hollow Valley. The eastern side of the valley includes Newfield State Forest, Cliffside State Forest, Cornell University's Arnot Forest, and Tompkins County Forestry Lands.

These lands are also part of the area identified as a priority project in the 2006 New York State Open Space Plan as the "Emerald Necklace", an arc of forested hills and valleys that extends across three counties and includes nine State Forests, the Finger Lakes National Forest, Cornell University's Arnot Forest, and Connecticut Hill Wildlife Management Area. This Focus Area combined with the other protected land in the Emerald Necklace form an unusually large and particularly rich landscape, which is capable of providing long-term economic benefits to the region and supporting the habitat needs of a multitude of animal and plant species.

Major Benefits

Major benefits provided by this Focus Area are hunting; critical habitat and biodiversity; sustainable timber harvesting and agro-forestry; and agriculture. The 11,000-acre Connecticut Hill Wildlife Management Area, as well as other nearby public and private land, provides some of the best hunting in the County. Game species and a diversity of other plants and animals thrive in this largely unfragmented habitat. Agriculture in the valley, as well as sustainable timber harvesting and agroforestry, such as maple syrup production, on the surrounding hills are important components of this landscape.

Other important benefits include outdoor recreation, education and research, water quality and flood mitigation, and scenic views. Recreational opportunities include the Finger Lakes Trail, a snowmobile trail route, and excellent bird watching opportunities as reflected in the New York Audubon's designation of the

area as an Important Bird Area. Education and research benefits are provided at Cornell University's Arnot Forest, as well as at Connecticut Hill, which has been the site of many experimental programs and studies designed to gain insight into the habitats and needs of wildlife species.

The many wetlands and floodplains found in the Focus Area absorb and filter stormwater, and help to mitigate the frequency and magnitude of flooding within and downstream of the Focus Area, where the water flows into the Susquehanna River. The Pony Hollow Surficial Aquifer is found within this Focus Area just beneath the valley floor and, due to the local geology, is inherently vulnerable to contamination originating from land management practices that occur immediately above it.

Several scenic views are found in the Focus Area, including from the top of Connecticut Hill, which is one of the highest points in the area and provides magnificent views of the surrounding lowlands, and along the Pony Hollow Valley.

Hunting

The Connecticut Hill Wildlife Management Area and Arnot Forest make up 45 percent of the land area of the Focus Area and provide excellent hunting opportunities¹. The New York State Department of Environmental Conservation actively manages Connecticut Hill to enhance game species habitat and hunting conditions. The rich forested landscape, as well as scattered early successional and pond habitat, supports a wide range of game species. Many of the ponds were built between 1948 and 1950 specifically to attract waterfowl and diversify hunting opportunities in the Wildlife Management Area.

The management goals for Arnot Forest are less focused on hunting; however, it is a critical component of the overall management approach for the Forest. The adjacent Newfield and Cliffside State Forests and nearby County Forest Lands also provide hunting opportunities, and the surrounding large parcels of privately owned land are generally well suited for private hunting.

¹ A special hunting permit, available through Cornell University's Department of Natural Resources, is required to hunt in Arnot Forest.

Critical Habitat and Biodiversity

Protected land and sparse development in this Focus Area provide for a large unfragmented habitat area. Black bears make their home here, taking advantage of this area's connection to a much larger contiguous block of black bear habitat that extends into central Pennsylvania. A wide variety of characteristic forest bird species, such as the Black-and-white Warbler and Louisiana Waterthrush, as well as several at-risk species, such as the American Woodcock and Red-shouldered Hawk, thrive in the woods here. Because of the diversity of species and quality of habitat, this area is identified as a New York State Important Bird Area.

In addition to the predominant forest habitat, a variety of other habitats help to form a diverse habitat mosaic. Grassland habitat is found in the valley and in smaller patches within the forests on the hills, including approximately 100 acres of contiguous grassland that is actively managed for grassland species in Arnot Forest. Several large wetlands are located in the low-lying valley, and manmade wildlife ponds are scattered in the higher elevations of Connecticut Hill.

Sustainable Timber Harvesting and Agro-forestry

Forests in this Focus Area are particularly valuable for commercial timber harvesting, given the quality of the soils and proximity to markets. New York hardwoods are prized around the world, and some of the best soils for growing red oak, ash and maple are found in this area. Active timber management in Connecticut Hill, the State and County Forest Lands and Arnot Forest also means that sustainable timber management occurs over a large area, which makes individual management on smaller private parcels more viable. A sustainable forest management plan is currently being developed for the County Forest Land, which will allow that land to be managed under the same Forest Stewardship Council certification goals and objectives currently followed for management of State Forest Lands.

Steep slopes along the valley may limit timber harvesting, and certainly suggests that additional conservation practices may be needed when timber harvesting does occur. These steep slope areas, particularly the southwestern facing slopes, are generally better suited for maple syrup production than for commercial timber harvesting. Maple syrup production is also an impor-

tant component of education, research and revenue at Arnot Forest.

Sustainable Agriculture

Farming is an important part of the landscape and economy in this Focus Area. The Focus Area includes an Agricultural Resources Focus Area, which has some of the best soil in Tompkins County. Although planning efforts for sustainable agriculture will be explored as part of the Agricultural Resources Focus Areas Project when that project is undertaken by County Planning in the future, it is identified here because it is a key benefit provided by the natural resources and soils in this Area. The farmland in this valley is also a central component of one of the most scenic gateways into the County



Farming is an important part of the landscape and economy in this Focus Area.

Outdoor Recreation

The Finger Lakes Trail, a 562-mile hiking only trail, winds through Connecticut Hill, connecting the Catskill Mountains with the Allegheny Mountains. In addition, two potential trails cross through the Focus Area. One potential route follows an abandoned railroad bed through Newfield Hamlet up to Enfield Center. Another follows the Chaffee Creek Valley to the Van Buskirk Gulf Focus Area to the west, connecting with the Finger Lakes Trail in two locations to form a wilderness trail loop. Snowmobiling is also a popular activity, with a snowmobile route running through Connecticut Hill, Newfield State Forest, and the County Forest.



The Finger Lakes Trail winds through Connecticut Hill.

Excellent bird watching opportunities are found here, with almost the entire Focus Area located within a National Audubon Society designated Important Bird Area “This extensive forest habitat supports characteristic species, including the Sharp-shinned Hawk, Black-billed Cuckoo, Northern Flicker, Eastern Wood Pewee, Least Flycatcher, Blue-gray Gnatcatcher, Wood Thrush, Black-throated Blue Warbler, Black-and-white Warbler, Louisiana Waterthrush, Hood Warbler, Canada Warbler, Scarlet Tanager, and Rose-breasted Grosbeak. At-risk species breeding include the Cooper’s Hawk, Northern Goshawk, Red-shouldered Hawk, American Woodcock, Willow Flycatcher, Wood Thrush, Blue-winged Warbler, and Canada Warbler”¹.

¹ Burger and Liner. *Important Bird Areas of New York*, 2005.

Protection and Management Issues

Hunting

- Opportunities for hunting are decreasing as the amount of development increases. Lands that provide existing hunting opportunities should be managed to sustain this benefit. The Wildlife Focus Area provides some of the best hunting in the County. Limited development on private land and significant amounts of protected land in the Focus Area helps to sustain hunting opportunities.
- Wetlands and riparian areas are sometimes filled or degraded, which negatively impacts important habitat for waterfowl and decreases the amount and quality of waterfowl hunting. Pony Hollow has some of the most extensive wetland and riparian areas, with scattered smaller wetlands and riparian areas found in the hillsides. These wetland and riparian areas support various ducks, geese, fish and other water-dependant game species, and provides important drinking water for other game species.
- Fragmentation of game species habitat can inhibit species propagation and movement between adjacent habitats, which negatively impacts hunting opportunities for those species. Pony Hollow provides a critical connecting link between the eastern and western forested hillsides.

Critical Habitat and Biodiversity

- Although specific habitat size requirements vary by habitat type and from species to species, contiguous open space of at least 135 acres is generally needed to support diversity and abundance in plant and animal communities, and to enhance species survival by providing habitat for larger populations of animals and allowing for species movement and migration. Many species however, are more sensitive to habitat size and generally require a much larger contiguous area of at least 6,000 acres for suitable habitat. There are almost 10,000 acres of protected land in this Focus Area, with an additional 8,500 acres of adjacent protected land in Schuyler County. Outside of the Adirondacks and Catskills, this provides one of the largest blocks of protected open space in New York State. Maintaining the connectivity of this protected land, however, is key to sustaining the habitat benefits provided by this unfragmented landscape.
- The introduction of non-native species, pesticides, herbicides, and fertilizer can inhibit growth of native plants critical to biodiversity.

- There is not enough protected or actively managed grassland habitat in the County. Patches of at least 150 acres in size (or smaller patches located in close proximity) are necessary to support viable grassland species. Pony Hollow Valley currently provides approximately 1,600 acres of key grassland habitat. Several grassland species are threatened in the County and require specific land management practices to provide high-quality habitat.
 - Some timber harvesting practices can adversely impact forest habitat for particular species (for example, by reducing canopy coverage and forest litter, damaging understory vegetation, and increasing erosion on steep hillsides and along creeks). Some forest species, such as the Canada Warbler, benefit from modest timber harvesting. Timber harvesting practices should include considerations for plant and animal species and water quality.
 - Some species are sensitive to disturbance by humans straying off trails. Off road vehicles and bicycles can also be particularly detrimental in sensitive areas.
 - Overgrazing of forested areas by whitetail deer can inhibit native plant growth, forest diversity, and forest regeneration. Hunting in this Focus Area helps to manage the whitetail deer populations.
 - Wetlands and ponds are sometimes filled or degraded, which has a negative impact on the ability of those systems to support wetland and pond species. Large wetlands (>5 acres), like those found in the northeastern portion of the valley in this Focus Area, provide critical habitat. Smaller wetlands scattered along the creek corridor and up in the hillsides serve as “stepping stones” to provide habitat connections. Wetlands and pond areas that are isolated and small in size cannot support certain wetland and pond species of greatest conservation need. Many wetland bird communities depend on their local habitat, as well as the wetlands within a two-mile radius.
 - Species that live in and around wetlands and ponds require clean water to thrive. Poorly managed wetlands, ponds, and upland areas have a negative impact on water quality and reduce the viability of these habitat areas.
 - Some pond species, such as snapping turtles, are vulnerable to high mortality on roads during the nesting season.
 - Beavers physically alter habitats by cutting down trees, building dams, digging canals and building lodges. This activity affects the distribution of many other plant and animal species. In some situations beavers are desirable, whereas in other circumstances their presence may be detrimental to habitat management goals. As a result, areas inhabited by beaver may require active beaver management. The nature of the management depends on the particular conditions and resource priorities of the site.
 - When people try to control the location of streams and limit the natural flooding and channel meandering characteristics of streams, the streams are less adept at promoting the growth of native stream and wetland vegetation, which wetland and pond species need to thrive.
 - Illegal collection of seeds, plants, and animals can have a negative impact on plant and animal populations that are critical to biodiversity in this area.
- ### Sustainable Timber Harvesting and Agro-forestry
- Forests can become fragmented when large parcels are subdivided into smaller parcels, due to the increased potential for development among multiple owners. This can impact the commercial viability of the forests. Smaller forest parcels (e.g., <20 acres) may have more limited commercial timber harvesting opportunities than larger forest parcels due to limited access or economies of scale for use of machinery and labor. The quality of trees found in a forest, as well its proximity to other working forests, also influence the commercial viability of forests. This Focus Area currently has numerous large, high quality forest parcels.
 - Forest management practices affect the forest health of a given property as well as the adjacent properties. Sustainable forest management is most successful when implemented over large areas that may include multiple properties.
 - Sustainable forest management practices are critical for controlling invasive species, limiting diseases and insect problems, protecting water quality, and providing for the long-term ability to harvest high-quality timber.
 - Some landowners are unaware of the income opportunities available to them from their forest-

lands. Landowners that earn some income from their forestlands are more likely to retain that land (especially as larger parcels) than landowners that earn little or no income from forestlands.

- ▢ White-tailed deer can overgraze forested areas, and limit forest regeneration. Deer particularly like eating saplings of higher-value species (e.g. maple and oak). Their preference for these species changes the makeup and character of the forest ecosystem over time, and undermines the value of future timber harvests. Deer management is essential for long-term sustainable timber harvesting. Alternate silviculture practices may help to mitigate deer damage.
- ▢ Demand for local products, tax incentives, and a comprehensive strategy for resource land protection have been successfully used to support agriculture in Tompkins County; however, working forests lack a comparable support structure.

Sustainable Agriculture

- ▢ Planning for sustainable agriculture will largely be done as part of the Agricultural Resources Focus Areas Project, and protection and management issues will be identified at that time.

Outdoor Recreation

- ▢ Scenic views and tranquility are important components of the outdoor experience, and are threatened in some areas by human development and incompatible land uses.
- ▢ When trails are not properly maintained, they are less inviting for people to use. Well-maintained trails that are clearly marked not only provide for a better recreational experience, but also encourage people to stay on the trail, thereby limiting the impact of recreational use on sensitive areas and adjacent private property. When designing new trail routes consideration should be given to potential impacts on fragile plants and animals in the area.
- ▢ Generating awareness of available recreational opportunities can facilitate greater public enjoyment and appreciation of public resources and natural amenities. Education of the public about the nature and purpose of particular trails is also necessary to protect the amenities and designated use of the trail (be it a footpath, horse trail, or mechanized use trail) and to ensure that trail users have the experience they anticipate.
- ▢ The extensive recreation opportunities in this Focus Area provide a potential draw for tourists. Unfortunately, there is currently little tourism infrastructure (such as Bed and Breakfasts), so few tourist dollars stay in Newfield.

Priority Actions for Wildlife Area

The Natural Features Focus Area Project has identified 35 priority action items to be initiated over the next five years. The action items have been established to bolster and coordinate the region's many existing conservation efforts. They are not intended to replace or replicate those efforts. The action items reflect the broad range of unique uses in the identified Focus Areas. Below is a list of actions that are particularly relevant to the Wildlife Focus Area. For a complete list of actions and designation of principal agencies that will lead implementation efforts please see the *Implementation of Priority Actions* section of the complete county-wide plan.

Forestry

- è Determine feasibility of a local forestry cooperative.
- è Assess the feasibility of establishing a Forestry District to provide tax relief for landowners that are actively managing their forests and are willing to commit to keeping their land forested.

Hunting and Deer Management

- è Maintain a list of certified hunters interested in hunting on private land.

Outdoor Recreation

- è Provide maps and educational signage perhaps in the form of an information kiosk, at State Forests to improve access to recreational resources and

encourage appropriate uses. Provide emergency responders with better trail maps to improve incident response time. Create and distribute a guidebook for the county's recreational amenities that highlights trails, swimming areas, and bird watching opportunities.

Critical Habitat and Biodiversity

- è Work with municipalities to protect wetlands and vernal pools smaller than 12.4 acres in size and not regulated by the NYS Department of Environmental Conservation.
- è Map small wetlands and vernal pools using data on hydrologically sensitive areas.

Invasive Species and Native Plants

- è Inventory and identify high priority areas for the control of invasive species.
- è Establish a coordinated approach for distributing invasive species information to landowners throughout identified high priority areas.
- è Develop and distribute a list of popular landscaping plants and appropriate native species substitutions.
- è Conduct a comprehensive "natural lawns and gardens" campaign to limit the use of pesticides, herbicides, and fertilizer, and increase the use of native plants in landscaping.
- è Develop a policy for using native plants for all county maintenance activities and on all county properties, and work with local municipalities to institute a similar policy.
- è Provide a wide selection of native plants as part of annual plant sale, and eliminate all invasive species from the sale.

Rural Landowner Outreach and Education

- è Enhance existing rural landowner education efforts with an emphasis on sustainable forestry practices, impacts of ATV use, invasive species, wetlands management, grassland habitat, and targeted outreach to new rural landowners.
- è Identify and coordinate the dissemination of information about grants available to private landowners for habitat management and enhancement.

Technical Assistance for Municipalities

- è Provide technical assistance to municipalities working on projects that implement the recommendations of the plan.
- è Provide training and information to municipalities on the full-range of conservation tools available, the Plan and the Natural Resources Inventory, flood plain management strategies, and vernal pool and small wetland habitat conservation.

Coordination

- è Convene a group of partners (Tompkins County Conservation Partners) involved in local conservation efforts twice a year. Meetings will facilitate regular information sharing as well as coordinated educational efforts such as periodic field trips for municipal officials to key sites in the Focus Areas.

Land Protection in Priority Areas

- è Protect priority protection areas through partnerships with area agencies and municipalities by purchasing land and acquiring conservation easements.
- è Educate landowners about tax incentives available for conservation efforts through various formats including town/village newsletters with special emphasis on landowners within the open space system.
- è Develop or identify a model conservation zoning ordinance for use in key portions of the Focus Areas.
- è Engage key land protection stakeholders to assess the financial resources available for land conservation and work to establish additional funding as needed.