Van Buskirk Gulf





Description of Focus Area

The Van Buskirk Gulf Focus Area is a small Focus Area located in the Town of Newfield, just west of the border with the Town of Danby. From the southern portion of the Focus Area, a tributary of Cayuga Inlet flows north through a wide valley and then through the steep gorge walls that form the spectacular Van Buskirk Glen in the northern section of the Focus Area. The landscape surrounding this stream and glen is dominated by forest cover, and is part of a larger contiguous swath of forestland that reaches from the southern portion of Tompkins County into Schulyer and Tioga Counties.

Major Benefits

Major benefits provided by lands in this Focus Area are critical habitat and biodiversity and education and research. Forest and riparian habitat support a diverse array of animals and plants, including abundant spring wildflowers. The Robert "Bob" Robinson Family Preserve and the Ithaca College Natural Resources Reserve, which include over one-quarter of the land within the Focus Area, are owned and managed by Ithaca College as a nature preserve and educational and research facility.

Other important benefits of this Area include scenic views of the glen and the surrounding landscape mosaic of forests and agricultural lands and sustainable timber harvesting and agro-forestry and scenic views. Much of the surrounding landscape is actively managed for timber, and the Focus Area itself provides opportunities for agro-forestry, such as maple syrup and ginseng production, as well as limited timber harvesting.

Critical Habitat and Biodiversity

This Focus Area is comprised mostly of forest and riparian habitat that supports numerous birds, reptiles, and amphibians, including the Cerulean Warbler, Louisiana Waterthrush, and vernal pool salamanders. This Area is also noted for its rare and scarce plants and abundance of spring wildflowers.

The location and proximity of this Area to the Wildlife Area, Gorges, and Forest Lands Focus Areas also make it an important component of a much larger and contiguous area of rich habitat, including an area of black bear habitat that extends as far south as central Pennsylvania. Ithaca College is in the process of developing a management plan for the Robert Robinson Family Preserve, much of which lies within the northern portion of this Focus Area. Just to the east of this Focus Area, though not within the boundaries of the Area, important habitat for the Northern Harrier lies in a valley with diverse terrain and abundant birds.



Van Buskirk Gulf is noted for abundance of spring wildflowers.

Education and Research

Portions of the Ithaca College Natural Resources Reserve and Robert "Bob" Robinson Family Preserve, donated to Ithaca College in the 1970s, are located in the northern half of this Focus Area and together encompass over one-quarter of the lands within the Area.

Though sustaining the biological and ecological resources of each area is of paramount importance to Ithaca College, the two areas will be managed as distinct units. The "Bob" Robinson Family Preserve, on the east side of Piper Road, will be managed to preserve biodiversity and ecological integrity and to enhance teaching opportunities about natural forest processes. West of Piper Road, the Ithaca College Natural Resources Reserve will be managed to further research about sustainable production of agro-forestry crops.

Protection and Management Issues

Critical Habitat and Biodiversity

- n 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. To protect habitat for species that require large areas of habitat and to eliminate the possibility of creating a habitat island within this Focus Area, management efforts for this Area should be coordinated with the management efforts for The Gorges, Wildlands, and Forest Lands Focus Areas.
- Wildlife corridors promote genetic diversity among species and help counter the negative effects of habitat fragmentation by connecting otherwise isolated patches of suitable habitat.
- The introduction of non-native species, pesticides, herbicides, and fertilizer can inhibit growth of native plants critical to biodiversity.
- Vernal pools, found in forests and other landscapes, provide critical habitat for species of greatest conservation need, such as the Jefferson Salamander. A vernal pool is a depression in the ground that periodically fills with rainwater, snowmelt or a rising water table. This unique habitat is particularly sensitive to alterations or destruction resulting from development, and vernal pool species are vulnerable to road mortality during migrations to and from breeding sites.
- Some timber harvesting practices can adversely impact forest and riparian habitat (for example, by reducing canopy coverage, damaging understory vegetation and forest litter, altering vernal pools, and increasing erosion along streambanks). While most riparian birds tolerate timber harvesting, and others (such as the Canada Warbler) benefit from it, it is important to encourage harvesting practices that are compatible with habitat requirements of species of greatest conservation need in the area.

- Some species are sensitive to disturbance by humans straying off trails. Off road vehicles and bicycles can also be particularly detrimental in sensitive areas. When designing new trail routes consideration should be given to potential impacts on fragile plants and animals in the area.
- Overgrazing by whitetail deer can inhibit native plant growth, forest diversity, and forest regeneration.
- Many riparian forest birds are particularly sensitive to habitat fragmentation. Fragmentation of riparian forest habitat decreases the ability of certain species to utilize migration corridors and increases competition from species that dominate edge habitats. In addition, fragmentation increases light penetration into riparian forests, which can alter understory composition and forest microclimates. There are two critical components of functioning and unfragmented riparian habitat: 1) forested buffers along creeks of at least 330 feet; and 2) large contiguous tracts of adjacent forestlands.
- Species that live in and around stream corridors and floodplains require clean water to thrive. Poorly managed riparian areas, and riparian areas that are cleared for development, negatively impact water quality and reduce the viability of these habitat areas. Erosion originating from the Focus Area flows into Cayuga Inlet and may negatively impact fish habitat in The Gorges Focus Area.
- Illegal collection of seeds, plants, and animals can have a negative impact on plant and animal populations that are critical to biodiversity in this region.
- Illegal dumping of waste and animal carcasses can negatively impact habitat within and the aesthetic, recreational, and educational benefits provided by this Area.

Education and Research

 School groups, as well as conservation volunteers and members of the public, frequently use publicly owned natural areas as outdoor classrooms. Additional access to lands that represent a broad range of natural environments would enhance learning opportunities and facilitate greater use of nature as an educational resource.

- Public use of education and research lands is usually restricted in some way, in some cases because unauthorized visitors to these properties may inadvertently trample sensitive species used for research purposes or interfere with specialized management practices in use. Where restricted, these lands should not be visited without permission from the owner or manager of the property.
- Some education and research lands are generally open to the public for personal enjoyment and relaxation. For these areas, staying on the trail is important, especially where off-trail use may cause

damage to the site or trampling of sensitive species. Certain sites are very sensitive, and may not be appropriate for large groups or children.

- The spread of invasive species, herbicides, pesticides and fertilizers from adjacent lands can compromise the integrity of the ecological, plant and animal communities being studied.
- Overgrazing by whitetail deer negatively impacts the quality and regeneration of ecological, plant and animal communities being studied.

Priority Actions for Van Buskirk Gulf

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 Van Buskirk Gulf. 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.

Critical Habitat and Biodiversity

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.
- 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.

Rural Landowner Outreach and Education

- Enhance existing rural landowner education efforts with an emphasis on sustainable forestry practices, impacts of ATV use, invasive species, wetlands management, and targeted outreach to new rural landowners.
- E 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.
- 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.