

# **High Falls Conservation Area Management Plan**

Claverack, New York

April 17, 2004

## **HIGH FALLS CONSERVATION AREA**

### **Philmont, New York**

Columbia Land Conservancy Design and Management Plan

April 17, 2004

#### **Purpose and Organization**

The purpose of this plan is to develop a site plan design and establish management goals for the High Falls Conservation Area. This plan will guide the management and improvement of the property over the next 5-10 years. To allow for flexibility and revision over time, this plan will be reviewed once every five years and updated as necessary.

This report is organized in three parts and each section has corresponding maps or plan.

- A. CONTEXT AND SITE ANALYSIS
  - B. COMPREHENSIVE SITE DESIGN
  - C. LAND MANAGEMENT
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#### **A. CONTEXT AND SITE ANALYSIS**

Note: See A.1 Context Map A.2 Topography Map A.3 Soils Map A.4 Site Opportunities and Constraints Map

##### **Overall Description**

This 47-acre property is located both in the Village of Philmont and the Town of Claverack. Philmont is an old mill town and one of Columbia County's most economically challenged and most densely settled communities. High Falls, although hidden from the downtown, is located in the village center. Pictured as the municipal logo, the falls has long been regarded as a symbol of the former mill town.

It is partly for this reason that in 1999 the Village passed a resolution to make the Falls publicly accessible. CLC also believes that this key and valued open space should be forever accessible to the community. This site's remarkable natural features, special habitat, and close proximity to the Village center make it an especially important conservation land. This property provides access to an important and symbolic natural feature one that captures the memories and imagination of local residents.

(Note: The 2003 Philmont Comprehensive Plan recommends that the Village should either provide safe access to the High Falls view shed or should change its banner symbol because High Falls is only visible in "photos and imagination." The 2003 Comprehensive Plan also concludes that the Village of Philmont needs to clarify and explore public access to the Falls and the potential to expand recreation and tourism.)

##### **Context**

The property sits on the edge of Philmont Village, within a five to ten minute walk from downtown. Over thirty residential lots abut this conservation land. Vehicular access to

the site is along Roxbury Road. The conservation area will offer Philmont's population of 1,480 residents (2000 U.S. Census) a local place to walk, fish and picnic.

This conservation property surrounds the High Falls waterfall and pool to the south and east and provides a public way to access High Falls following Agawamuck Creek from Roxbury Road. In contrast, there is no access to the falls from the north (or from the Village) as the terrain is too steep and rocky. The High Falls Conservation Area is situated within a Neighborhood Conservation Block consisting of three properties, protected by conservation easements with CLC, totaling 315 acres, all within a few miles of each other.

The proposed High Falls Conservation Area is less than two miles from the proposed Harlem Valley Rail Trail in the Town of Claverack and will provide a destination point for future rail trail users.

### **Natural Features**

The property is comprised of perennial and intermittent streams, riparian corridors, hemlock ravines (described by Hudsonia Ltd. as a *Cool Ravine*), young deciduous woodlands and a locust grove. Most of the land is on moderate to steep slopes with rock outcroppings except for the approximately five-acre flat gravelly area, which is populated by young black locust trees. The predominant soil type is Nassau Channery Loam (Nbc, Nbd, Nbe); Nassau channery varies from silt loam to shale and very rocky soils. It is an acidic mineral soil that is shallow (less than 20 feet to bedrock.) The presence of this shallow and acidic soil creates a distinct plant community and habitat.

#### ***The perennial and intermittent streams***

Agawamuck Creek is rated a Class C trout stream and considered a prime fly-fishing area for trout, perch and bass. Agawamuck in fact means, "creek of many fish". Agawamuck Creek collects water from the Philmont Reservoir and then Reservoir Lake (Summit Lake) before dropping down the High Falls.

High Falls, Columbia County's highest waterfall, cascades 250 feet over the course of several rocky falls. The falls culminate in a large pool before Agawamuck Creek flows northwest into the hamlet of Mellenville to join Claverack Creek, a tributary of the Hudson River. This conservation area includes 3,225 linear feet of stream frontage (riparian corridor) along Agawamuck Creek. Two other perennial streams flow from Stever and Moore Pond into Agawamuck Creek. The steep woodlands surrounding the Falls include other intermittent streams. What local residents refer to as "Snake Island" sits in Agawamuck Creek.

According to the Hudsonia Ltd. Biodiversity Manual, some of the species of conservation concern that typically occur in perennial and intermittent streams are as follows:

#### ***Perennial streams***

Plants: Winged Monkey Flower, Riverweed, and Spiny Coontail. Invertebrates: Sable Clubtail (dragonfly) and Brook Floater. Fishes: Tadpole Madtom, Creek

Chubsucker, Longnose Sucker, Bridle Shiner, Brook Trout, Eastern Mudminnow, Mud sunfish, and Slimy Sculpin. Amphibians and Reptiles: Long-Tailed Salamander, Mountain Dusky, Northern Dusky Salamander, Red Salamander, Spring Salamander, and Wood Turtle. Birds: Wood Duck, American Black Duck, Bank Swallow, and Louisiana Waterthrush.

### ***Intermittent streams***

Plants: Goldenseal. Invertebrates: Arrowhead Spiketail (dragonfly), Mocha Emerald (dragonfly), Marstonia Decepta (snail) and Pisidium adamsi (fingernail clam). Amphibians and Reptiles: Mountain Dusky Salamander, Northern Dusky Salamander, Red Salamander, and Spring Salamander.

### ***The Riparian Corridors***

The stream corridor/riparian corridor in Agawamuck Creek includes locusts, willows, loosestrife, silver maples, red maple, elms, ash, alder and other plants that can endure periodic flooding and ice damage. The riparian corridors along the small woodland perennial streams from Stever and Moore Ponds are smaller (and less differentiated from the surrounding woodland) than the Agawamuck stream corridor.

According to the Hudsonia Ltd. Biodiversity Manual, some of the species of conservation concern that typically occur in riparian corridors are as follows:

Plants: Cattail Sedge, Diarrhena, Davis' sedge, Wingstem, River Birch, Small-Flowered Agrimony, Winged Monkey-Flower, Goldenseal, False Mermaid, and Swamp Rose-Mallow. Amphibian and Reptiles: Woodturtle. Birds: Wood Duck, Red-Shouldered Hawk, American Woodcock, and Cerulian Warbler. Mammals: River Otter.

### ***Hemlock Ravine***

The hemlock ravine follows the southern edge of Agawamuck Creek and the northern slope of the property and follows the banks of the perennial stream that flows from Stever Pond. Hemlock groves and lone hemlocks also occur in pockets throughout the upper woodlands. The understory plants of the hemlock ravines include striped maples, witchhazel, patches of blueberries, black birch, and yellow birch. Ferns and wildflowers include bloodroot, leatherwort, trillium, jack-in-the-pulpit, christmas fern, dyropteris ferns, trout lilies, and columbine. Mosses and ferns are especially prevalent in the moister locations.

According to the Hudsonia Ltd. Biodiversity Assessment Manual, hemlock ravines or *cool ravines* include many rare and uncommon flora and fauna often found in more northern habitats. The steep rocky faces to the south of the waterfall create an especially unique habitat that is cool and moist with crevices that support uncommon vegetation. Some of the species of conservation concern listed for *cool ravines* are as follows:

Plants: Purple Cliffbrake, Walking Fern, Plaintain Sedge, Fly Honeysuckle, Spikenard, American Ginseng, Leatherwood, and American Yew. Birds: Acadian

Flycatcher, Blue-headed Vireo, Winter Wren, Black-Throated Green Warbler, Louisiana Waterthrush, and Dark-Eyed Junco.

### ***Mixed Deciduous Woodlands***

Upland from Agawamuck Creek, on the more modest slopes, sugar maples and red oaks dominate the young mixed deciduous woodland. This land was once farmed and used as woodlots. This woodland is characterized by underlying shallow and acidic soils, which alters the composition of the plant community. This habitat is mainly characteristic of what Hudsonia Ltd. defines as a Mature Mesophytic Lowland Forest with the following species of conservation concern:

Plants: Silvery Spleenwort, American Ginseng, Red Baneberry and Blue Cohash, and Leatherwood. Birds: Northern Goshawk, Red-Shouldered Hawk, Barred Owl, Eastern Wood-Pewee, Acadian Flycatcher, Wood Thrush, Cerulean Warbler, Black-Throated Green Warbler, Black-Throated Blue Warbler, Black-Throated Green Warbler, and Ovenbird. Mammals: Southern Bog Lemming.

### ***Black Locust Grove***

The surface of this relatively flat area at the most western edge of the conservation area and along Roxbury Road contains glacial outwash or gravel. After this site was mined for gravel, black locusts colonized it. Due to the underlying shallow and acidic soil type, this area may have once shared qualities with a “non-carbonate crest or ledge habitat” and may have the potential to support rare species that typically occur in that habitat.

According to the Hudsonia Ltd. Biodiversity Assessment Manual, old gravel beds may include the following species of conservation concern:

Plants: Hair-Rush, Toad Rush, Orangeweed, Field Dodder, Slender Pinweed, Rattlebox, Blunt Mountain-Mint, Slender Knot-Weed, and River Birch. Amphibians and Reptiles: Fowler’s Toad, Timber Rattlesnake, Northern Copperhead, and Eastern Hognose Snake. Birds: Peregrine Falcon, American Black-Duck, Common Raven, Grasshopper Sparrow, and Henslow’s Sparrow.

## **Cultural History**

### ***Memories and Associations***

High Falls captures Philmont’s imagination as a secret place associated with childhood exploration. Knowing these memories and associations is important to making design decisions that are sensitive to this overall social context.

Many lifelong Philmont residents have never seen the Falls or have not been to the Falls since childhood. Elderly residents recount their childhood stories of spending time playing in the Falls without telling their parents. Mothers tell about how their sons kept secret the times they spent climbing the rocks of the Falls until much later when they were adults.

Philmont residents also retell tragic stories of the Falls. “One woman was found in her housedress floating in the pool.” Another man at the senior center said, “25 years ago, an old fella named Pop Ringer threw out a fish line into the High Falls pool and hooked a man. It was Nemen’s brother. He jumped from the top.” There are also the mysterious stories associated with the dumped VW beetle, hermits living in the woods, and snakes inhabiting “Snake Island” or “Snake Pit” (on the north side of the Creek).

People’s fascination with this place has a lot to do with these stories - stories that may be part real and part fiction. These stories reveal the meaning and importance of having a “wild place”—a place that holds a town’s secret stories and memories. By making this conservation area accessible to the public, CLC honors the value of this place and makes this area more secure because it will be monitored and open to the public.

#### Agricultural and Forestry History

While the land was never prime agricultural land, it has been used as both farmland and woodlots over the history of Philmont. More recently the land has been cut for firewood and locust posts. Older trees remain on some of the steeper slopes that are more difficult to access. The stone piles and stone walls reveal old properties lines and the use of this land for farming.

#### Mill History

In the early 19<sup>th</sup> century Philmont was known as Factory Hill and was renamed after both the owner of Phillips Mill and its topographical character (mount). In 1845, the dam above High Falls was constructed and in 1847, High Rock Mill was constructed for the manufacturing of fine woolen goods. The dam provided waterpower for the Mills. At its economic height in the mid 1800’s, Philmont had 17 mills including knitting mills (making garments like underwear/shirt waists,) paper mills and a feed mill. About a century (1930’s-1950’s) later most of these mills began to close. In part, the invention of electricity made waterpower less profitable.

One of the conclusions of the 2003 Philmont Comprehensive Plan is to “preserve and promote the mill district which contains many of the features people like most about Philmont today and remember fondly from its past.” Also, the Comprehensive Plan recommends the creation of a Mill Association District.

Significant remaining cultural features on this property:

1. Stone walls and barbed wired fences that mark old agricultural fields and property lines.
2. Stone piles made by farmers who cleared the fields.
3. Remains of a suspension bridge that provided access from Prospect Avenue across Agawamuck Creek to this land. This same crossing was used during the fall season when the waters were low to bring lumber across the Creek. In the winter this suspension bridge provided access across the creek for snowmobiles.
4. The lower dam above Roxbury Road Bridge and near the proposed parking area is part of Philmont’s mill history.

6. Remains of children's forts reveal how this land has informally provided a local playground.

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## **B. COMPREHENSIVE SITE DESIGN**

See B.1 Comprehensive Site Design Plan

### **Overall Design and Interpretive Content**

High Falls provides a dramatic geological feature and gives distinction to this conservation area. The cultural history of Philmont as a water-powered mill town and the natural processes associated with this water feature and watershed provide great content to guide the design and interpretive program for this conservation area.

### **Interpretive Content**

Water and water process provide key interpretive content for this site. The signage system, educational programs and brochures could feature information on water power (the dam, the falls and canal systems; the flood of 1938 when waters broke out of the Reservoir at Ark Street and "carved a swath of destruction all the way to Mellenville."); water processes (erosion, micro-climate and floodplains); watershed (interpretive signs could discuss the management issues associated with the shared watershed from Philmont village streets and backyards, the ponds and hills, to the creeks and tributaries of the Hudson River); water resources (the mill history and its importance to Philmont's economic development); and water quality (how the water supports unique fauna and flora). Furthermore, the power of natural processes could also be told in terms of the geological history of this site. The rock rubble and faces below the Falls show how plates were thrust upright along this fault line.

This interpretive content fits well with one of the recommendations of the Philmont 2003 Comprehensive Plan which is to make people more aware and better stewards of their water supply.

### **Proposed Uses**

Proposed uses for this conservation area include walking on woodland trails, fishing in the Creek, picnicking in the woodlands and enjoying spectacular views of the Falls. In addition, CLC will conduct free educational programs throughout the year for area schools, youth groups, after-school programs and the general public.

### **Circulation and Trail Design**

Vehicular access will be from Roxbury Road where a small parking area for ten to fifteen cars will be created. This area works well for parking because it is flat and the soils are porous and gravelly. The parking lot will be located to provide an ample visual buffer between parking and neighbors. A second emergency vehicle access point is furnished via a legal deeded right-of-way through a nearby residential property.

The layout of the trails will create a dramatic sequence through the various and distinct habitats - a sequence that also conveys key site stories. The trail will begin at the open and sunny locust grove and then will dramatically shift to a cool and dark hemlock ravine. The trail then proceeds upstream towards the main spectacle of High Falls. The sound of the Falls will draw visitors towards this destination. The return trip winds through the mixed deciduous woodlands, and past stone walls - telling of the site's lumbering and agricultural history. A spur trail takes visitors down to the Creek edge where it is proposed that there be a picnic area, streamside walk, and fishing access.

### **Design Language**

The design of the site furnishings will be consistent with those at other CLC sites so that visitors will immediately recognize that this is a Columbia Land Conservancy site. If the budget is sufficient, the rustic cedar-style improvements found at the Greenport Conservation Area would be appropriate for this woodland site. If economically feasible, both black locusts and hemlocks that are growing on this site could be used to build bridges, fences and other structures. The kiosk design is the same that has been used at the Drowned Lands Swamp Conservation Area and the new entrance to the Greenport Conservation Area from the Greenport Town Park.

The design of the site furnishings including the picnic benches, kiosks and signs will refer to the two main landscape narratives- Philmont's mill history and the water processes that shaped the High Falls. By using water worn stones for benches or stones that are softly bowled out by water processes, visitors will be reminded of how the water power of the Falls constantly changes this landscape. Also, mechanical gages and mill parts could be integrated into the structural components of the site furnishings reminding visitors of how important the mills were to Philmont's history.

### **Key Design Criteria**

1. Locate picnic areas and layout trails in order to maximize the educational and recreational experience while minimizing impact on sensitive habitats.
2. Site picnic areas and lay out trails to minimize conflict with adjoining property owners. Because there are many existing woodland trails that wind from private residential properties onto this property, the trail system and adjoining property edges will be clearly marked so that the public does not intentionally or unintentionally wander onto adjoining private lands.
3. Route trails to accommodate emergency vehicular access (ATVs).
4. Create a trail system that avoids steep slopes and rocky edges.
5. Site the parking area so that it will respect neighbors on Roxbury Road.
6. Keep the parking area on the disturbed gravel bed and set it back a minimum of 100 feet from Agawamuck Creek and the perennial stream.

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## **C. LAND MANAGEMENT**

See C.1 Land Management Map

## **Overall Management Goals**

1. Protect the diverse natural resources and wildlife habitat of the High Falls Conservation Area.
2. Provide public access to views of the High Falls and its distinct habitats.
3. Provide trails and places for appropriate passive recreation including picnicing, walking and fishing.
4. Foster a land stewardship and water stewardship ethic by providing locations for environmental education programs for the citizens of Columbia County, particularly school age children.
5. Protect the rare plants and biological communities that occur on this property.

## **Natural Areas Management Objectives**

### **A. Streams and Stream Corridors**

1. Protect riparian corridor plants from sedimentation and erosion.

#### **Immediate Objectives**

- Keep human activity (trails, fishing and sitting areas) away from erosion-prone slopes and stream edges.
- Maintain woody vegetative buffers along streams and creeks.
- Protect intermittent streams and steep woodland slopes from erosion by keeping the public on the trails and using footbridges at crossings. Provide signage that asks visitors to stay on trails.

#### **Long- Range Objectives**

- Inventory rare fauna and flora populations and update data periodically.
- Control the spread of invasive exotic species such as the loosestrife in the Agawamuck Creek bed.

### **B. Woodland Management Zone**

1. Manage the Hemlock Ravine and woodland to promote a diversity of wildlife habitats.
  - Control any over dominant and nuisance species.
  - Try to leave snags (dead trees) standing in the forest if they are not dangerous, not obstructing trails or not within falling distance of trails.
  - Maintain as a woodland. Remove only those trees necessary for safety, ecological management, and limited viewshed and recreational improvements from trails. Create small framed views of streams and Falls from picnic areas by cutting branches and small trees.

### **C. Locust Grove/Parking Area Management**

1. Manage parking area for safety and security
  - Mow around the parking area.
  - Prune locust branches as needed for visual and physical clearance.
  - Locate kiosk structures and parking within view of road so that area can be monitored from the road.
2. Protect and improve the distinct habitat of this locust grove

- Seed bare areas with native meadow/grass mix suited for this dry location.
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### **Constructed Features Management Objectives**

#### **A. Recreational Structures and Human Activity Areas**

1. Maintain recreational structures.
  - Evaluate the structural and aesthetic condition of recreational features annually.
  - Repair any damage or vandalism in a timely manner.
  - Add benches and other amenities as needed.
2. Define and maintain human activity areas in the Conservation Area.
  - Monitor the Conservation Area for unauthorized motor vehicle activity on a regular basis.
  - Limit motor vehicle access to emergency, maintenance, and special access for the physically challenged by creating vehicular barriers.
  - Evaluate the impact of human recreational use of the property annually and modify if necessary.
  - Relocate trails if human impact threatens the biological management goals of the Conservation Area. (i.e. erosion, disturbance of important habitat, or noise.)
  - Keep the kiosk and picnic areas pruned, mowed and generally tidy.
  - Control poison ivy along trails and around kiosks, gazebo, picnic areas, and other public gathering areas.
  - Remove dead or dangerous trees around activity areas and trails.
  - Concentrate group trips (bird walks, school groups and picnics) around human activity areas during sensitive wildlife periods (nesting).
3. Maintain trails in a safe condition with a minimum 6.5' side by 7' high corridor free of obstruction.
  - Remove vegetation obstruction along trails as soon as possible.
  - Provide gates to control vehicular access to only emergency vehicles, maintenance vehicles and for special programs for the physically challenged.
  - Weed whack woodland trails as needed during growing season.
  - Create trail detours if necessary after damage by storms or high impact.
  - Install culverts, water bars and gravel at the designated stream crossings to prevent erosion and trail damage.

### **Conservation Area Entrance Management Objectives**

#### **A. Monitor the property on a regular basis for security and safety purposes.**

- Walk the trails on an average of twice per month. Train and coordinate volunteer trail monitors.
- Keep a trail log of visitors and work needed.
- Maintain a record of user comments and sign-ins on a monthly basis.
- Walk property boundary a minimum of once a year, prior to hunting season. Post boundaries as needed.
- Maintain and update information kiosks seasonally.

