

Town of Cornwall & Village of Cornwall-on-Hudson Open Space Inventory

Cornwall - Blooming Grove Natural Heritage Project

Prepared by the Cornwall Conservation Advisory Council

Parcel Selection Criteria

The parcels in this inventory were reviewed and selected based on criteria balancing community input with expert knowledge that should be carefully considered when making land use and preservation decisions. The majority of the parcels selected are vacant land (no structures present), although some parcels with one or more structures present may have been selected due to the significant natural resources present on part of the parcel. Large parcels that represent significant open space were given priority. Proximity to existing open and protected spaces was another criterion in the prioritization process, as was the presence of significant natural resources as identified by the *Cornwall Natural Resources Inventory (Cornwall NRI)*. Parcels that are already protected by conservation easements have been included in this inventory because, while technically protected, many conservation easements retain reserved rights for certain kinds of development. Publicly protected lands such as state, county, and municipal parklands were excluded from this inventory. Parcels that were maximally developed or otherwise not subdividable were also not included. Finally, parcel ownership was blinded during the review and selection process and played no part in this prioritization.

Parcel priority characteristics key

Community Value		<i>Scenic viewshed</i>	Areas that fall within a scenic viewshed offer opportunities for tourism and represent a resource highly valued by existing residents.
		<i>Recreational resources</i>	Areas that currently do, or potentially could, support hiking, fishing, boating, and biking. These resources can drive eco-tourism in the region and are highly valued by existing residents.
		<i>Agricultural resources (either active or fallow)</i>	Areas that are important to sustaining agriculture on the landscape. They provide habitat and scenic value, while potentially generating revenue for owners and the municipality.
Environmental Value		<i>Significant forest cover</i>	Forest cover that provides vital habitat, scenic beauty, cleans the air of particulate pollution, produces oxygen, recharges aquifers, and reduces flood risk.
		<i>Known wetlands</i>	Areas that are classified as wetland or probable wetland by the DEC and the National Wetlands Inventory (NWI). Wetlands can reduce flooding, purify water, buffer against storm surge, and provide critical habitat for numerous species.
		<i>Climate change resilience</i>	Natural characteristics that help reduce or protect against the effects of climate change. These include flood and drought mitigation, moderation of local climate, and carbon sequestration.

Water Resource Concerns		<i>Water supply concern</i>	Resources that contribute to municipal and private water supply, whether in the form of reservoirs, watershed terrain, streams, or aquifers, and that are vulnerable to degradation.
		<i>Flooding mitigation/management concern</i>	Areas that are prone to flooding or where flooding poses a significant threat to municipal and private infrastructure.
Wildlife/Habitat Value		<i>Significant terrestrial wildlife habitat</i>	Terrestrial wildlife habitat ranges from the microhabitats of amphibians, reptiles, and small mammals, to some large predators that require large, undeveloped areas.
		<i>Waterway or body supporting migratory fish species</i>	Migratory fish species include diadromous species, such as herring and shad, as well as catadromous species, like glass eel. Tributaries and streams that are uncontaminated, not blocked by dams and culverts, and have a generally uncompromised flow are the best candidates for hosting these species
		<i>Important bird habitat</i>	Areas that are important for both local and migratory species of birds. These areas can range from forest to riparian buffer to open meadow.

NHP Priority Areas

Black Rock Forest/Schunne-munk Corridor (829 acres)



Bordered on the south by the Town of Cornwall boundary, on the west by Interstate 87, on the east by Mineral Springs Rd., and on the north by residential and industrial development in the hamlet of Mountainville.

While this area is intersected by State Rt. 32 and Interstate 87, the parcels selected represent an important linkage of forest cover and other terrestrial habitat between the regionally significant matrix forest of Black Rock Forest and the regionally significant forest of Schunne-munk State Park. Both Black Rock Forest and Schunne-munk State Park are home to significant natural communities, as identified by the NY Natural Heritage Program, and the parcels included in this area represent an important habitat corridor. The protection of these lands has the potential to prevent Schunne-munk Mountain from becoming an isolated habitat island. In addition, this area could provide connectivity between well-established recreational resources. Most of this priority area lies within the Hudson Highlands West Important Bird Area identified by the NY Audubon Society. Woodbury Creek and its tributaries, which support migratory fish populations, run through this area and a number of the parcels selected contain important riparian forest and other habitats that buffer the creek from negative impacts. Much of this land also lies within the Woodbury Creek 100-year floodplain, and these same parcels lie over a large, regionally significant stratified clay and silt aquifer that provides well water for much of Mountainville and other private residences on the Rt. 9 corridor. In addition to creek and riparian habitat, the former Houghton Farms parcel and other adjacent parcels within the floodplain consist of farmland of statewide importance or prime farmland.

Boulevard to Hudson Corridor (256 acres)



Bordered on the west by Continental Rd., to the south and east by the Dear Hill Road and Maple Road elevations, and to the north by the Hudson River.

This area is a non-contiguous corridor of parcels that run from the Hudson River southwest to Rt. 9W. Much of the area follows the Boulevard, which is an important connector between the Village of Cornwall-on-Hudson and its riverfront and Rt. 9W and the center of the Town of Cornwall. The route is a popular recreational corridor used for walking, biking, and running, and the parcels along the road are important to the scenic character of the Town and Village. The Storm King Golf Course is included in this area due to its scenic and recreational value. Most of the parcels on the north side of the Boulevard are primarily wooded with intermittent open meadow areas, and have a small number of structures present on them. The parcels on the south side of the Boulevard are largely vacant and wooded. The entire length of the Boulevard is within a hollow and, along with its locally significant forest cover, plays an important role in draining the elevated areas to the south and east. At the northern end of the corridor in the Village, the area includes one large agricultural parcel with open meadow habitat, and numerous small, Village-owned properties on either side of Dock Hill Rd. descending down to the riverfront. While these parcels are Village-owned, they are not protected and therefore have been included. Tree cover on these parcels is vital to the stabilization of the steeply sloped terrain on either side of the road and creek.

Schunнемunk Meadows (769 acres)



Bordered on the west by Schunнемunk State Park, the east by Pleasant Hill Rd., the south by Interstate 87, and the north by Orrs Mills and Otterkill roads.

The regionally significant forest of Schunнемunk State Park covers many of the parcels along this area's western border. As stated in the *Schunнемunk Buffer* description, the state park is home to significant biodiversity and natural communities, and is a known important area for rare species identified by the NY Natural Heritage Program. In addition to the parcels bordering the state park, much of this priority area is covered by regionally significant forest that provides important terrestrial and bird habitat. The Moodna Creek, which provides habitat for a number of migratory fish, flows south through this area and a number of the smaller parcels selected lie completely or partially within the 100-year flood plain. A significant portion of this priority area lies over stratified sand and gravel or clay and silt surface aquifers that are an important part of the Town and Village's water infrastructure. That infrastructure includes four public wellheads that are located within this priority area. Five parcels along the north side of this priority area lie either fully or partially within a scenic area of county-wide significance (the Moodna Valley and Viaduct). Much of this area that is not forested is covered by active and abandoned agricultural land, which provides important wildlife habitat. Two of the largest parcels in this area are active farmland, and a majority of this priority area is comprised of farmland soils of statewide importance, with certain parcels containing significant amounts of prime farmland. Also present in a parcel at the northeast corner of this area is a large portion of a DEC-regulated wetland.

Moodna Creek Corridor (979 acres)



Bordered to the south and east by development along State Rt. 32, to the west by Interstate 87, and to the north by the Moodna Creek.

This corridor of parcels follows the Moodna Creek from the southwest corner of the Town to the mouth of the creek, but also includes some large parcels of open meadow/agricultural land and wetlands to the west of the creek. The Moodna Creek is a vital part of the Hudson River estuary and watershed, and is home to a number of migratory and other fish populations that provide recreation and ecological benefits. The north end of this corridor encompasses one of the largest remaining wooded parcels within the Town. The parcels on either side of the creek tend to be wooded and steeply sloped, especially the stretch of creek between the bridge over Rt. 32 and the Hudson River where significant erosion along the creek banks has been attributed to recent storm events. Portions of many of these parcels fall within the 100-year and 500-year floodplains of the creek. To the west are a number of parcels that are mostly covered by DEC-regulated wetland and are heavily wooded. These have been included because of habitat connectivity, the relatively large size of the parcels, and the fact that DEC wetland regulation only limits development potential. Further south, the open spaces of the Storm King Art Center have been included because of their important habitats, their unique position in between two regional viewsheds (Hudson Highlands and Schunnemunk Mountain), and their cultural importance to the Town. A number of parcels in this area lie over stratified sand and gravel aquifers. The Cornwall NRI also notes that a stretch of this corridor running from the old Firth Carpet Factory to the northern border of the Town is a DEC remediation site.

Black Rock Forest Buffer (867 Acres)



Bordered on the south and east by Black Rock Forest, on the west by development along Mineral Springs Rd. and Angola Rd. (Rt. 9), and on the north by State Rt. 9W.

Primarily abutting Black Rock Forest, the parcels in this priority area are almost entirely covered by unbroken, regionally significant forest and lie within an area identified as matrix forest as referenced in the *Cornwall NRI*. Matrix forest is defined by its contiguous habitat and ability to maintain ecological processes. Black Rock Forest is home to numerous rare species and has a number of specific sites where state threatened or endangered species have been recorded by the NY Natural Heritage Program. In addition to providing continuum to the important forest cover and terrestrial habitat of Black Rock Forest, portions of this priority area lie within the Hudson Highlands West Important Bird Area identified by the NY Audubon Society. The largest parcel in this area is the Hudson Highlands Nature Museum, which is protected by a conservation easement and is currently open to the public. Many of the parcels in this area feature varied topography and elevation, or are steeply sloped. These elevations provide scenic value, and the existing tree cover reduces stormwater runoff to the downslope residential development to the northwest along Angola Road (Rt. 9) during storm events. Much of this area also falls within the Mountain and Conservation Residence or Agricultural Rural Residence zoning overlays

within the Town. Protection of parcels bordering Black Rock Forest presents the opportunity for expanded recreational access.

Scenic Gateway and Wildlife Corridor (154 acres)



Bordered on the west by State Rt. 9W, on the south by Academy Ave., on the east by Curie Rd., and on the north by the Hudson River.

This area is dominated by four large parcels, two of which make up the bulk of the New York Military Academy (NYMA), a private preparatory school, and which are characterized by sparse development and numerous open fields that are part of the scenic gateway along Rt. 9W. These parcels provide an important buffer between the residential development of the Town and Village to the south and east, and the Moodna Creek estuary to the north, which is home to rare plant species, significant natural communities, and submerged aquatic vegetation that is vital for numerous spawning fish populations, all of which are identified by the NY Natural Heritage Program. This priority area is divided between land that is located on the bluffs above the riverfront, which affords views of the Hudson Highlands and Hudson River valley, and land that is steeply sloped or runs along the waterfront and is wooded. Also contained in the area is the unique and historic Idlewild Creek gorge. This natural feature channels precipitation and runoff away from existing development and contains riparian forest habitat that buffers the Idlewild creek just upstream from the important tidal habitats of the Moodna Creek. To the north and east are a number of smaller parcels that lie within the floodplain of the Hudson and contain portions of DEC-protected wetlands. Interspersed with these open space parcels are important Town and Village infrastructure such as the wastewater treatment plant and the Department of Public Works building. At the eastern edge of this area is a single wooded parcel owned by the Village that lies along the shore of the Hudson and to the north of the CSX rail line. Finally, this area, combined with the open spaces in the northern portion of the Moodna Creek corridor, provides a scenic gateway to Cornwall for those entering from the north.

Unused Rail Beds (~6 miles)



These parcels follow the remnants of the old Erie and O&W rail lines and present potential opportunities for conversion to alternate uses. These parcels are largely wooded and, in general, are bordered by other open space parcels of either forest or meadow. Portions of these rail beds are at significant elevation affording scenic views of the surrounding highlands. Proximity to Cornwall High School and Storm King Art Center could allow for alternative access to these locations from points further west in the Town and the Salisbury Mills commuter rail station. These rail beds continue into the Town of Blooming Grove, offering the potential for intermunicipal recreation.

Schunнемunk Buffer (374 acres)



Bordered on the east and south by Schunнемunk State Park, on the west by the Town of Cornwall boundary with the Town of Blooming Grove, and on the north by Moodna Creek.

This area on the western border of Cornwall consists of a number of large undeveloped parcels. Portions of the parcels at the southern end of this area that border Schunнемunk State Park are steeply sloped at a grade of over 25%, and are covered by unbroken blocks of forest of regional significance, creating a continuum of wildlife habitat with the park. Schunнемunk State Park is home to significant natural communities as identified by the NY Natural Heritage Program. The state park and significant areas adjacent to it lie within the Hudson Highlands (West) Significant Biodiversity Area, and is a known important area for rare species. A single parcel in this priority area is a known breeding habitat for a state endangered species. Other parcels in this area are characterized by open meadow habitat, and much of this portion is classed as farmland of statewide importance by the USDA and Natural Resources Conservation Service (NRCS). A number of the wooded parcels in this area fall within the Hudson Highlands West Important Bird Area identified by the NY Audubon Society. Parcels on the north side of this area bordering the Moodna Creek, a waterbody supporting migratory fish, lie primarily within the 100-year flood plain. In addition, a significant portion of this area lies over stratified sand and gravel aquifer that is an important source of well water for area residents. Much of this area connects across the municipal border to a similar priority area identified by the Town of Blooming Grove.

Orrs Mills Corridor (414 acres)



Bordered on the south by Orrs Mills Rd., the north by development along Rt. 94, the east by Interstate 87, and the west by residential development along Jackson Ave.

This priority area is made up of a number of large agricultural or forested parcels. There is one active farmland parcel in the area, and much of the land in this area is characterized by farmland soils of statewide importance by the USDA and NRCS. There is varied topography in this area with some steeply sloped elevations interspersed with hollows that contain portions of DEC-protected wetland, NWI wetland or probable wetland. The majority of the parcels are linked together by their proximity to old, unused rail beds that have the potential for reuse (see *Unused Rail Beds*). The parcels surrounding these rail beds provide the kind of forest habitat and undeveloped open space ideal for supporting eco-tourism and regional recreational activity. Additionally, a number of parcels in this area along Orrs Mills Rd. are within the viewshed of Schunнемunk Mountain and the Moodna Valley Viaduct scenic area of county-wide significance, which encompasses most of Orrs Mills Rd. between the Interstate 87 and the western border of Cornwall.

Salisbury Mills Agricultural and Scenic Area (160 acres)



Bordered on the north by the Town of Cornwall boundary and residential development off of Jackson Ave., to the south by State Rt. 94, to the east by the *Orrs Mills Corridor* Priority Area, and to the west by the Metro North commuter rail line.

This area is comprised of a small number of large, mostly agricultural parcels that represent some of the last remaining open, rural farmland within the Town. These parcels contain unmaintained meadows or are used for hay; both important habitats for imperiled bird species. One of the parcels is actively farmed as the only remaining dairy operation in the Town. Not surprisingly, most of the area is covered by farmland soils of statewide importance as defined by the USDA and NRCS. The elevation of these lots means that they have views of and are visible from Schunnemunk Mountain and the Hudson Highlands to the south. The one parcel that is located on the south side of Rt. 94 contains a large portion of a DEC-regulated wetland.

Deer Hill / Round Top Scenic Area (211 acres)



Bordered on the south by State Rt. 9W, on the east by residential development along Mountain Rd., on the west by the *Boulevard to Hudson Corridor* Priority Area, and to the north by Roe Park.

This area is primarily situated on a densely wooded and often steeply sloped elevation that is a shoulder of Storm King Mountain. The area is a sparsely populated mix of residential and vacant parcels. Almost the entire area is zoned within the Conservation Residential (Scenic) or Conservation Residential (Rural) districts within the Village. Almost the entire area is classified as locally significant forest and provides important habitat connectivity between Storm King State Park and Black Rock Forest. The exception is portions of two parcels that are open meadow. The forested elevation of this area is visible from multiple points in the Town and Village and provides important scenic value. The northern end of this priority area connects to Roe Park and the recreational trails of the Hudson Highlands Nature Museum.

Storm King Buffer Area (50 acres)



Bordered on the east and south by Storm King State Park, and to the west by Mountain Rd. This is a non-contiguous priority area with parcels linked by their proximity to preserved state park land.

This area consists of a small number of parcels that border Storm King State Park on its northern and western boundaries. They were prioritized because of their size, their proximity to already protected state parkland, and their locally important forest cover that provides important wildlife habitat and rural scenic character. All but one of these lots have existing structures on them, but are large enough to contribute to the rural, forested character of an area that is immediately adjacent to state parkland.

Maintaining these parcels as they are could prevent further fracturing of contiguous habitat, slope erosion, and alteration of stormwater runoff patterns.

Jones Farm and Vicinity



Bordered by Angola road to the south and east, and low-density residential development on the west and north.

This area mainly consists of the Jones Farm parcel, which is covered by an agricultural conservation easement held by the Hudson Highlands Land Trust. A tree farm is also included in this area due to its size and agricultural value to the Town. Most of this priority area is covered by farmland soils of statewide importance as defined by the USDA and NRCS. Like the Storm King Art Center parcels, much of this area is notable for being at a considerable elevation and in between two regional viewsheds (Hudson Highlands and Schunne-munk Mountain). In terms of open spaces, this area is part of a locally identified contiguous wildlife corridor from Black Rock Forest, through the Hudson Highlands Nature Museum, across the *Moodna Creek Corridor* Priority Area and the Storm King Art Center, and on to the *Schunne-munk Meadows* Priority Area. Portions of this area are unmaintained meadows or used for hay, which offers important breeding habitat for imperiled bird species.

Terminology and Abbreviations

NY Natural Heritage Program

The New York DEC Natural Heritage Program (NYNHP) keeps the most comprehensive database available on the status and location of rare species and natural communities. The specific location of rare, threatened, and endangered species are not identified in this report for their protection and in conformance with DEC policy.

Important Bird Area

The Important Bird Area (IBA) Program of Audubon New York has identified 136 critical bird breeding, migratory stop-over, feeding, and over-wintering areas in the state. Important Bird Areas have been identified throughout New York in all types of habitats, including forests, shrub/scrub, grasslands, freshwater and saltwater wetlands, and bodies of water.

Prime Farmland

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land (excluding highly developed areas and open water). The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. Soils that are designated as Prime Farmland if Drained meet all the prime farmland criteria except for depth to seasonal high water table, and are suitable for drainage. In New York, somewhat poorly drained soils are designated as prime farmland if drained, if they meet all criteria for prime farmland other than depth to water table.

Farmland of Statewide Importance

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be farmland of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. In New York, Farmland of Statewide Importance soils are soils that do not meet all the criteria for Prime Farmland or Prime Farmland if Drained, but are mineral soils in land capability classes 2e, 2s, 2w, 3e, 3s, 3w, or 4w.

DEC-regulated wetlands

All DEC regulated wetlands, that is wetlands over 12.4 acres in size or smaller wetlands of unusual local importance, in New York State are classified by law into four classes; Class I, II, III, and IV. Class I is the most important, unique and valuable, Class IV is less important and less unique. The National Wetland Inventory (NWI) is a federally recognized database of wetlands divided into what is called a Cowardin Classification system. ([http://www.fws.gov/nwi/Pubs/Reports/Class Manual/class titlepg.htm](http://www.fws.gov/nwi/Pubs/Reports/Class%20Manual/class%20titlepg.htm)) This database is larger overall than the DEC regulated wetland database because it includes wetlands of all sizes that were mapped using "high altitude aerial photography"

Matrix Forest

Matrix forest blocks are large contiguous areas of a size and natural condition that allows for the maintenance of ecological processes, viable occurrences of matrix forest communities, embedded large and small patch communities, and embedded species populations. The goal of the matrix forest selection was to identify viable examples of the dominant forest types that, if

protected and allowed to regain their natural condition, would serve as critical source areas for all species requiring interior forest conditions or associated with the dominant forest types. The matrix forest block mentioned in this report and the *Cornwall NRI* was developed in partnership between the New York Natural Heritage Program and The Nature Conservancy.

Hudson Highlands (West) Significant Biodiversity Area

The New York State Department of Environmental Conservation (NYSDEC) Hudson River Estuary Program worked with the New York Cooperative Fish and Wildlife Research Unit at Cornell University and the NY Natural Heritage Program to develop Significant Biodiversity Areas (SBAs) for the Hudson River estuary region. SBAs are landscape areas with a high concentration of biological diversity or value for regional biodiversity. SBAs are defined by unique topography, geology, hydrology, and biology that distinguish them from neighboring areas. Significant Biodiversity Areas carry no regulatory designation. Instead, it is hoped that recognition of these areas will serve as a basis for their voluntary conservation through conservation partnerships involving multiple stakeholders. Landscape conservation initiatives focusing on the Shawangunk Ridge, Hudson Highlands, and Albany Pine Bush involve partners such as non-profit organizations, landowners, businesses, and government agencies and serve as regional models for conservation of SBAs. The identification of SBAs supports research, monitoring, and conservation efforts focused on conserving the patterns and processes that maintain biodiversity at the local to northeast regional scales.

USDA: United States Department of Agriculture

NRCS: Natural Resources Conservation Service