

CONSERVATION ADVISORY COUNCIL

To the Town of Ancram

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The Conservation Advisory Council (CAC) provides information, tools, and advice for use in town planning; reviews land use proposals, and advises town government in the protection of our environment. The CAC conducts townwide natural resource inventories, reviews development proposals, and gathers and distributes information to town agencies, land use applicants, and the general public.

(Adapted from Gretchen Stevens, CAC Hillsdale)

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Biodiversity Assessment: Mandatory for Major Subdivisions and Recommended for Minor Subdivisions

A. INTRODUCTION - from the Ancram Comprehensive Plan, pg. 29, 2.23 "Natural Habitats - Incorporate into land use laws the review and protection of critical natural habitats by requiring a biodiversity assessment before a major subdivision is presented for consideration. New projects should avoid fragmenting forestlands, and should protect vernal pools and their associated upland habitats... This requirement to review natural habitats as part of the development process will be mandatory for major subdivisions, and recommended for minor subdivisions."

B. OVERALL CONCEPTS

What is biodiversity and why should Ancram residents care about biodiversity?

1. The concept of "biodiversity" encompasses the "natural system of all species-plants, animals, fungi, and microorganisms - the habitats where they live and the broader landscape." (Strong 2008, pg. 1) Our quality of life relies upon the quality of our fields, forests, wetlands and woodlands, in that each supports the plants, animals, water resources, landscapes, and ecosystems that make our world habitable and sustain our local economies. It's much more than wildlife that's at stake.
2. "Forests, wetlands, and stream corridors work together to keep our water supply clean and abundant." (Strong 2008, pg. 2) These natural services are free. If lost, replacing them with human-made substitutes, such as engineered drainage or artificial wetland, is costly and rarely (if ever) as effective as nature itself.
3. Natural areas promote tourism and reduce costs of town services. "Studies of the cost of community services from the Hudson Valley have shown that open space and commercial development cost towns and school districts less in services than they pay in taxes, while single-family detached housing costs towns and school districts more in services than it pays. (Freegood 2002, Strong 2008, pg. 3)

4. Clean air and water keeps us healthy, while protected natural areas, with abundant wildlife and scenic vistas provide vital recreational opportunities.
5. Intact habitats and native biodiversity helps to keep vector-borne diseases such as West Nile Virus (NRCS 2008) and Lyme disease (Ostfeld and Keesing 2004) at bay; when forests have greater small mammal diversity, there tends to be less Lyme disease in humans."(Strong 2008, pg. 4)
6. "The greatest threat to Hudson Valley biodiversity today is habitat loss and fragmentation. Fragmentation is a result of land consumptive development, also called sprawl. This is the carving up of forests into smaller and smaller lots and this process decreases habitat quality and the ecosystem health by increasing access for predators, parasites, invasive plants, disrupting wildlife movement and disturbing groundwater flow." (Strong 2008, pg. 4)

For all these reasons, planning with nature in mind will help to maintain our harvestable resources, wildlife resources, water resources, and recreational resources, and promote the health and well-being of the human community.

Ancram Biodiversity Map – Ecologically significant habitats have been identified and mapped by trained volunteers in approximately 3500 acres of the Roeliff-Jansen Kill corridor, out of 24,000 acres in the entire town. The CAC is committed to continuing this mapping to someday include the entire town. This process may take many years but will provide the town and the planning board with important background information for planning decisions. Any subdivision applicant will need to verify and expand on the information provided in the biodiversity map. (See Biodiversity Map)

C. Biodiversity Mapping and the Subdivision Process

1. A biodiversity map and report shall be submitted to the Ancram planning board before sketch plan submission so that all of the applicant's design components (regarding driveways, house sites, septic, etc) are shown in the context of the habitats on and near the site. This will ensure that the proposals are responsive to the protection of valuable habitats. Doing this first will save expense and time for the applicant and will speed the project review process.
2. The applicant must submit the biodiversity assessment report and map to the Planning Board prior to submitting either the short or long Environmental Assessment Form (EAF) in the SEQ process. Section C3 of the short EAF asks questions that can only be answered by completing the biodiversity assessment. Numerous questions in the long EAF can only be answered upon completion of a biodiversity assessment.
3. The Planning Board must provide to the applicant a model biodiversity map and standard report form, outlining the necessary requirements. This will ensure that reporting expectations and requirements will be the same for all applicants. An acceptable habitat report must include assessment methods, site-specific habitat descriptions, discussion of biodiversity implications, location-specific wildlife observations, and recommended development alternatives to minimize disturbance to sensitive habitats and species. The habitat map data must be delivered in a digital format such that they can be incorporated into the town's

- GIS.. (CAC will provide these standards to the zoning revisions committee at a later date.)
4. When a subdivision application is submitted for a parcel within the study area for the Biodiversity Map, the planning board will refer to the Map which will provide some preliminary and specific information on the habitats. If the subdivision takes place in an area yet unmapped, the planning board shall contact the CAC for more information about this parcel.
 5. When a subdivision application is first submitted, the planning board will forward the application to the CAC. The CAC will first review aerial photographs, the USGS topographic and the County Soil map (Case 1989) to gain a preliminary understanding of the habitats present on and near the parcel. Then the CAC will walk the property for an overview of the habitats and to identify areas of special concern. To make their initial assessment, the CAC will refer to the Biodiversity Assessment Manual for the Hudson River Estuary Corridor (Kiviat and Stevens 2001), and the Harlem Valley and Ridges Supplement (to the Manual) (Barbour and Kiviat 2009), and the Ecological Communities of New York State (Edinger et al. 2002).
 6. In the case of a minor subdivision the CAC will advise the planning board about the needs for a biodiversity assessment. In the case of all major subdivisions, the CAC will provide the planning board with a description of the particular concerns on this property and what in particular needs to be mapped for a biodiversity assessment. CAC will also advise the planning board on the required map scale needed for this particular project. The recommended scale will depend upon the complexity of land, size of land and diversity of habitats on the land.
 7. The Subdivision applicant will hire a well-qualified biologist, approved by the planning board and CAC, to conduct the biodiversity assessment. The biologist must have demonstrated knowledge and experience identifying biodiversity resources in the region.
 8. The biodiversity survey must occur in the seasons and conditions appropriate for the habitats on the property. (For example winter conditions will limit the visibility of key plant indicator species.)
 9. Upon submittal, the CAC will review the biodiversity map and report and the preliminary sketch plan, and will provide comments and advice to the planning board within a month, so that their comments can be considered prior to the Final Design Submission.
 10. The CAC will provide comments and advice to the planning board on the final design submission. The planning board will take into consideration all of the CAC comments and advice. The planning board will act as the final decision makers.

RESOURCES

Barbour, J. and E. Kiviat. 2009. Harlem Valley and Ridges Supplement to the Biodiversity Assessment Manual for the Hudson River Estuary Corridor. (Hudsonia.org/current-projects/harlem-valley-ridges-supplement, accessed August 2010.) Hudsonia Ltd., Annandale, NY.

Case, R.J. 1989. Soil Survey of Columbia County, New York. Soil Conservation Service, U.S. Department of Agriculture, Washington, DC. 266 p. + maps.

Edinger, G.J. D.J Evans, S. Gebauer, T.J. Howard, D.M Hunt, and A.M. Olivero. (eds.) 2002. Ecological Communities of New York State. Second Edition. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany.

Freegood, J. 2002. Cost of Community Services Studies: Making the Case for Conservation. American Farmland Trust, Northampton, Mass.

Kiviat, E. and Stevens, G. 2001 Biodiversity Assessment Manual for the Hudson River Estuarine Corridor. New York State Department of Environmental Conservation, Albany. 508 p.

Strong, K. 2008. Conserving Natural Areas and Wildlife in Your Community: Smart Growth Strategies for Protecting the Biological Diversity of New York's Hudson River Valley. New York Cooperative Fish and Wildlife Research Unit, Cornell University, and New York State Department of Environmental Conservation, Hudson River Estuary Program. Ithaca. 101 p.

NOTE:

The Town of Milan Planning Board (www.milan-ny.gov) has adopted habitat assessment guidelines to conserve the town's natural assets and the Town of Cortlandt Planning Board in 2002 adopted biodiversity review standards which outline detailed methods by which a survey must be conducted by a qualified biologist. www.townofcortlandt.com.

Hudsonia has offered to help us design the outline for a biodiversity assessment that the planning board will give each applicant. This will be simpler than the Milan guidelines.