

The Position of the  
Mattabeseck Audubon Society  
with regards to the  
Future Development  
and Preservation  
of the  
Natural Resources  
of the  
Maromas

**Title:                   The Position of the Mattabeseck Audubon Society  
with regards to the Future Development and Preservation  
of the natural resources of the Maromas.**

**Biome:                 Forested Uplands; flood plain; swamp.**

**Reviewed by:   Mattabeseck Audubon Society.**

## **Introduction.**

In October 2000 a special I-3 Industrial Zone study committee was established to examine the future of the Maromas. Previous decisions with regards to the future development of the Maromas are as follows:

In May of 1992 the Middletown Planning and Zoning Commission rezoned 400 acres owned by Northeast Utilities in the Maromas section of Middletown from Rural Residential (R-60) to Special Industrial (I-3). Buildings up to 150 feet tall would be allowed in the Industrial zone. Since the zone change also inadvertently applied to sensitive land directly adjacent to the Connecticut River and the southern boundary of property owned by United Technologies Pratt & Whitney Aircraft, Northeast Utilities petitioned the Middletown Planning and Zoning Commission to rezone the river frontage from I-3 to Riverfront Recreation (RF). This petition was approved October 14, 1992. Thus, the entire Maromas riverfront is now zoned Riverfront Recreation including land owned by United Technologies Pratt & Whitney Aircraft.

This land along the river is also designated as the Connecticut River Assembly Preservation Area. The boundary begins at the center line of the Mattabassett River at its junction with RT. 72. It then proceeds south along the center line of the Mattabassett River to where it joins the Conrail track near RT. 9. From this point it goes south along the center line of the Conrail track to where it meets the center line of Northeast Utilities R.O.W. which crosses the Connecticut River near Bodkin Rock. It then proceeds south 200 feet from the center line of the railroad, then easterly and southerly parallel to the Haddam town line.

The significance of the Connecticut River Assembly Preservation Area is to allow for an overview by the Connecticut River Assembly, a Governor-appointed local advisory board, of any development plans that would affect the integrity of the Connecticut River green belt.

## **The Natural Characteristics of The Maromas.**

From 450 to 250 million years ago, during the Paleozoic Era, several crustal plates, including Africa and Eurasia, collided with the North American plate to create the Appalachian Mountains and the supercontinent Pangea. During this collision, Avalonia, a small continent believed to have been part of the African plate, was thrust against the continent of Proto-North America, closing and collapsing the intervening Iapetus Ocean. The collision deformed and metamorphosed both the continental rocks of Proto-North America and Avalonia and the oceanic rocks and sediments of the Iapetus Ocean floor.<sup>1</sup> This process created the schists, gneisses, and granites exposed in the Maromas. The Maromas lies in what geologists refer to as the Eastern Uplands, Iapetus (oceanic) Terrane, Bronson Hill Anticlinorium. Anticlinorium refers to the dome-like upward warping and folding of the rocks.

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1           The Connecticut Geological & Natural History Survey, Department of Environmental Protection, 1990

## 2.

Of particular significance is the coarse-grained intrusive igneous rock, Pegmatite, a compound of feldspar, quartz, and micas.

Soils above bedrock were formed primarily by the glaciers, mainly from material that weathered from the gneiss, schist, and granite. There are considerable pockets of organic soil within the Maromas. A section of outwash terrace lies adjacent to the Connecticut River. Alluvial soils are formed in long strips along the river.

Hubbard Brook and other unnamed streams drain into a large swamp that defines the Maromas's southeastern edge. The Maromas reaches to a height of 648 feet above mean sea level near Bear Hill. The upland terrain is primarily wooded, dominated by Red, Black, Chestnut, and White oak, Black birch, American beech, Sugar maple, and Red maple in the wetter pockets. Dominant understory is Witchhazel, Dogwood, Mountain laurel, Viburnum, and High and Low bush blueberry. Vernal pools are interspersed throughout. The dominant trees along the Connecticut River are Silver maple, Eastern cottonwood, and Sycamore. The Maromas is habitat for numerous species of mammals, birds, reptiles, and amphibians including:

The Bald Eagle, a Connecticut-listed endangered species that uses the large trees along the river for winter perching. An individual was observed resting on a pier of the United Technologies Pratt & Whitney dock during one winter census.

The Northern Harrier, a raptor on the endangered species list in Connecticut that hunts in the swamp and low lying areas adjacent to it.

The Northern Parula, a song bird on the Connecticut species of special concern list that feeds in the canopies of flowering trees during spring migration.

The non-venomous Eastern Hognose snake, a species of special concern in Connecticut that breeds in the uplands.

The Box turtle, a species of special concern in Connecticut and a victim of illegal wildlife trade.

Notable among the more than 40 species of birds known to breed within the Maromas are: the Virginia Rail, the Hooded Warbler, and the Pileated Woodpecker.

## Conclusions.

The biological diversity of the Maromas is being examined but has not yet been fully explored, including the flood plain areas belonging to United Technologies Pratt & Whitney Aircraft. The natural resources that have been quantified show the area to have excellent potential as a biological storehouse with varied and superb wildlife habitat. The uplands and the flood plain adjacent to the Connecticut River are important water bearing and holding areas, groundwater aquifers vital to health and security. The swamp adjacent to the river has important flood water holding capabilities. The uplands of the Maromas and its riparian habitat afford impressive scenic vistas and have great scenic values, especially important in that much of Northeast Utilities and United Technologies Pratt & Whitney Aircraft property is visible to visitors of Hurd State Park, situated on the opposite side of the river. The Maromas is one of the largest wooded tracts on the western side of the lower Connecticut River, a signature parcel within the watershed of the Silvio O. Conte Connecticut River National Wildlife Refuge, and a bold pillar complementing the lower river's designation as a Wetland of International Significance (under the Ramsar Convention).

### 3.

The Riverfront Recreation designation for the Maromas boundary with the Connecticut River is problematical because of the allowed uses in the RF zone:

1. Any non-residential use may be proposed and such proposed development shall be considered as a Special Exception following the procedures of Zoning Code Section 44. (Middletown Planning and Zoning codes page 97).

Other uses specifically allowed in the RF zone include:

1. Utility buildings and structures.
2. Restaurants.
3. Marinas, boatyards for the building, storage, repair, sale, or rental of boats; docks, wharfs, piers for the storage and transport of goods, merchandise and/or people.

Since the Connecticut River Assembly is solely a local advisory body with no regulatory powers, they can review proposals affecting ten acres or more within the river preservation area, but cannot pass binding judgments upon those proposals.

Intense development may cause the ecosystem of the Maromas to spiral into disequilibrium. The threshold response of a system forced into disequilibrium might include erosion, cutting and filling of streams, and severe hydraulic pattern change. Habitat disturbance will reduce the amount and variety of wildlife. Scenic vistas, so vital to tourism, will be adversely compromised.

### **Recommendations.**

In order to preserve the natural characteristics of the Maromas, including riverfront property owned by Northeast Utilities and United Technologies Pratt & Whitney Aircraft, the Mattabesett Audubon Society suggests that a Habitat Conservation Plan (HCP) be implemented. One of the keystones of this HCP would be the low-lying area adjacent to the Connecticut River, running north from Scovill Rock to the juncture of land owned by United Technologies Pratt & Whitney Aircraft and Northeast Utilities, just south of the site of the Northeast Utilities powerplant. This keystone parcel would include the entire swamp on both sides of the railroad right of way in the southeast portion of the Maromas. The swamp would have a buffer zone which would include all of the previously I-3 zoned land south of Aircraft Road. This parcel could be protected through a conservation easement where development would be restricted. Present uses of the land that include sustainable forestry, permitted hunting, and tourist attractions such as hiking and biking would be allowed.

Other keystone parcels include land surrounding the blue-blazed Mattabesett Trail and the NU-Maromas Cooperative Area totaling 1400 acres that is presently leased to the State of Connecticut for the purpose of hunting.

An important element of the HCP is to properly catalogue the natural diversity of the Maromas. When this data is in hand, further recommendations may be made as to the conditions and terms of conservation easements. Funds already appropriated for open space by the city of Middletown may be used to buy select parcels. Land acquisition funds from the State of Connecticut may be used to purchase the parcels of land within the NU-Maromas Cooperative area for inclusion into the existing Cockaponset Forest Preserve within the Maromas, or the State may enter into a long term lease to protect the habitat.

Another aspect of the HCP allows for the altering of some habitat for development. The habitat most suitable for development in the Maromas is in the area of the abandoned feldspar quarries. The developer would put an amount of money, negotiated previous to alteration, into escrow for every acre developed. The money would then be used to protect sensitive habitat elsewhere in the Maromas.

#### **4.**

A Habitat Conservation Plan is the best option available to protect the Maromas while still allowing some development to proceed. The HCP should be put in place before any infrastructure funds are dedicated to the area. This will ensure that science, not economics or politics, determines the future of the Maromas.

#### **Prepared by:**

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