

The "Special Natural Places" of Columbia County

- help document the native plants and animals and the places where they live



- help document the places in nature that are important to people



Set of Characters:

The native plants and animals of Columbia County -
how many kinds are here???

Plants: ~ 1150

Mammals: ~ 60

Birds: ~ 250 (not all breeding, many just migrate through)

Reptiles and Amphibians: ~ 40

Fish: ~ 65

Butterflies: ~ 86

Dragonflies: ~ 100

Ants: ~70

Groundbeetles: ~270





BIODIVERSITY ASSESSMENT MANUAL

for the
Hudson River Estuary
Corridor

By Erik Kiviat & Gretchen Stevens



Hudsonia Ltd.



New York State Department of Environmental Conservation
Erin M. Crotty, Commissioner
George E. Pataki, Governor



HUDSON RIVER ESTUARY

WILDLIFE AND HABITAT CONSERVATION FRAMEWORK



An Approach for Conserving Biodiversity
in the Hudson River Estuary Corridor

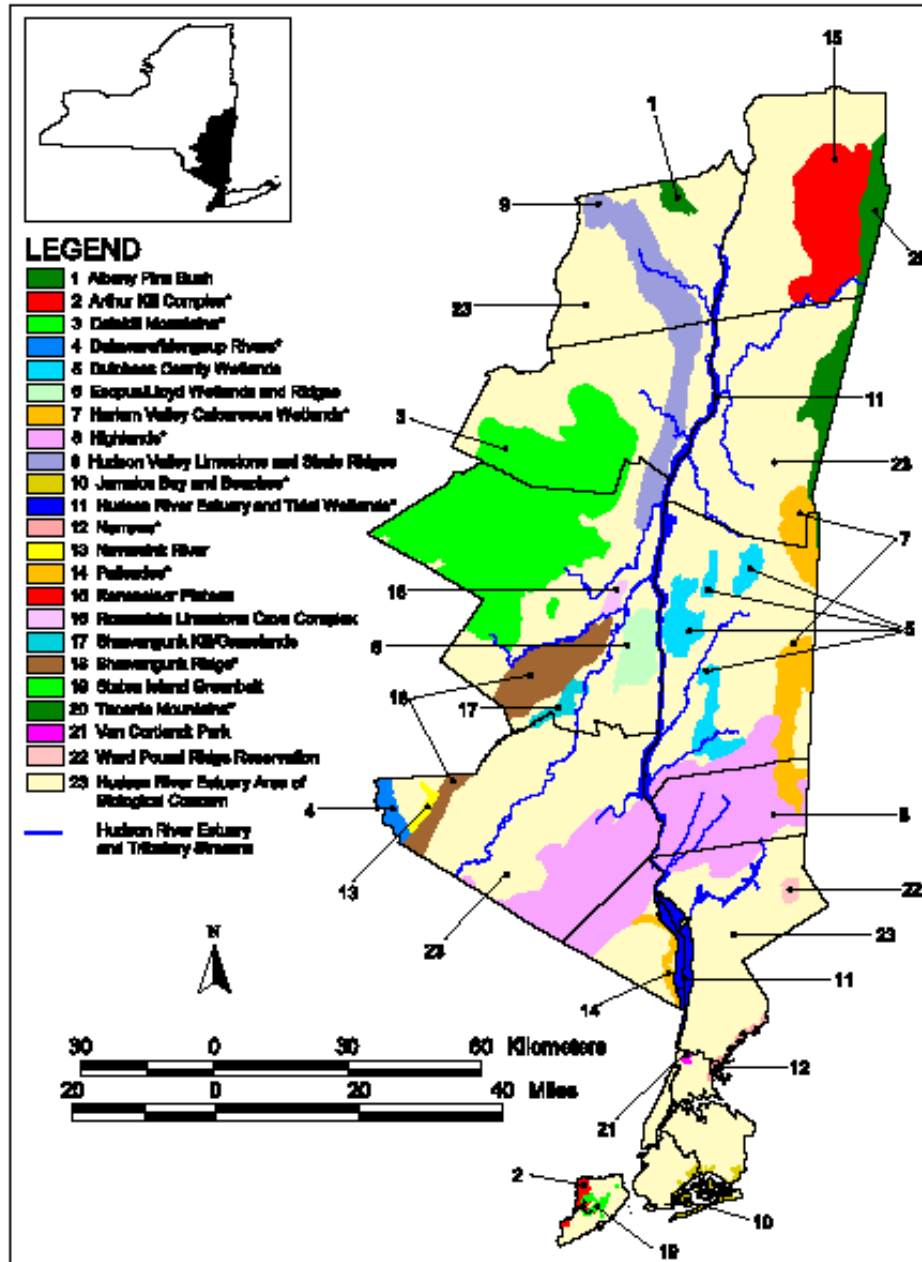


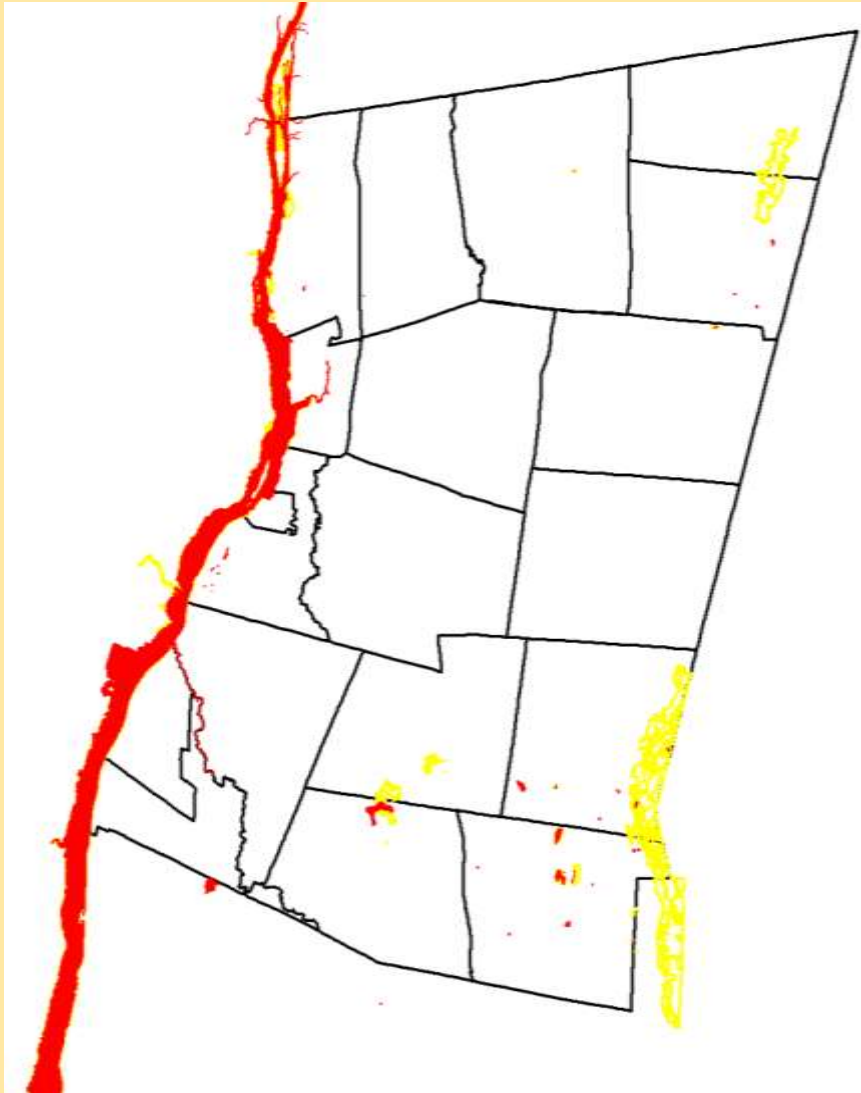
New York State Department of Environmental Conservation

Governor David A. Paterson

Commissioner Pete Grannis

"Significant Biodiversity Areas in the Hudson River Corridor"



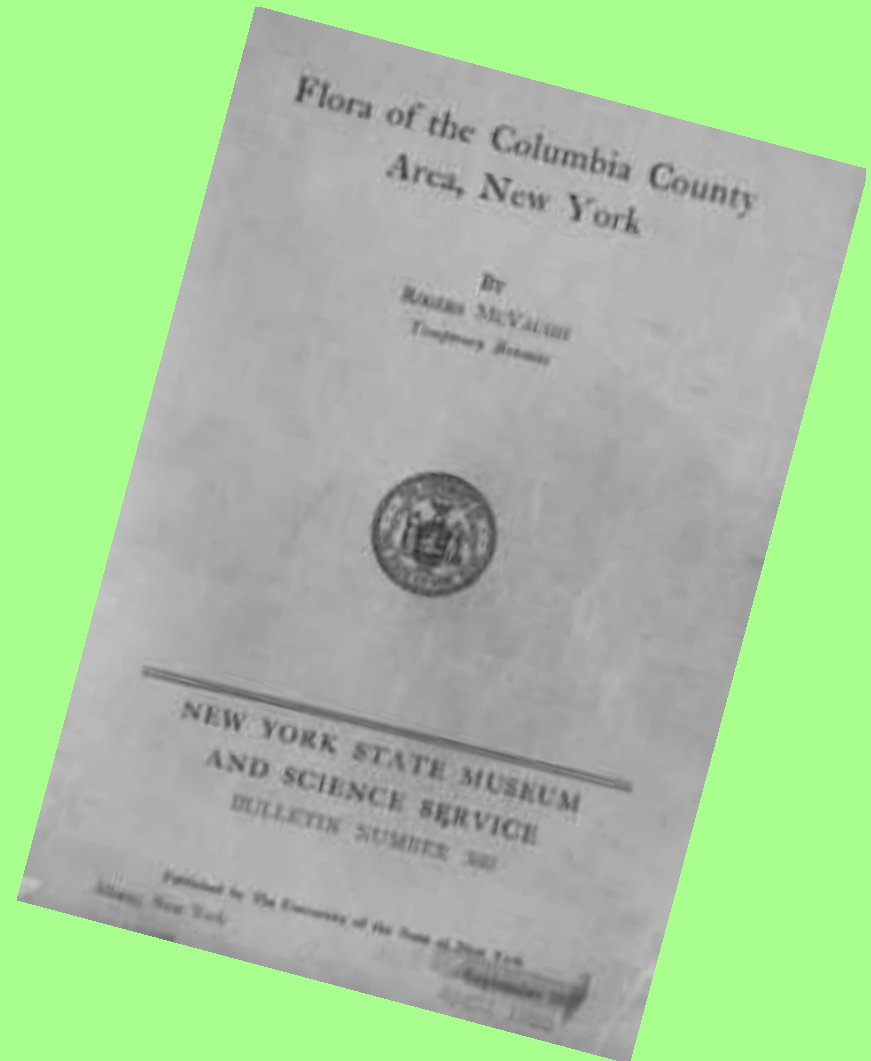


NY Natural Heritage Program (map likely incomplete!!!)

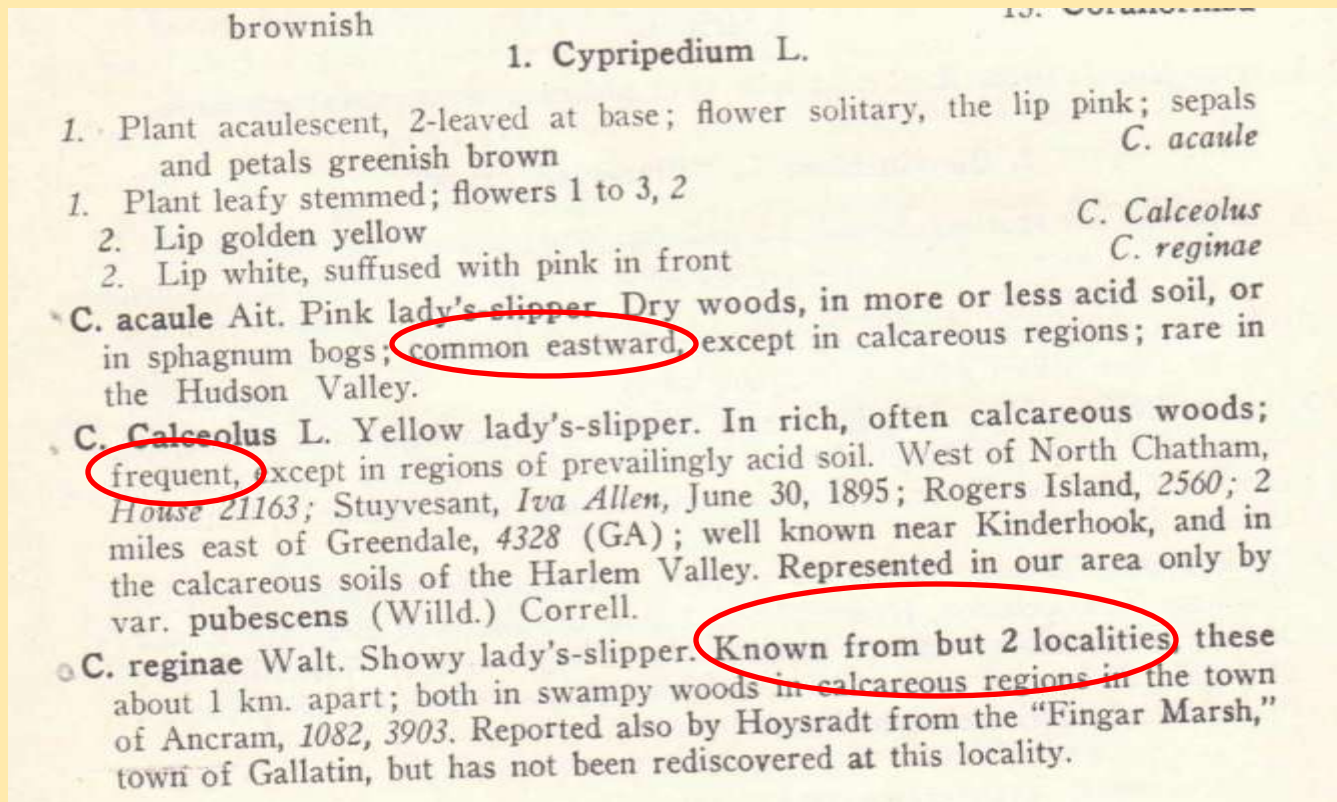
Occurrences of rare plant or animal species, as well as concentration areas of groups of animals that are rare throughout NYS (red)

Occurrences of ecological communities that are rare or significant throughout NYS (yellow)

The "Flora of Columbia County" by Rogers McVaugh (1909-2009)



Information found for each of ~ 1300 plant species (native and non-native) in "The Flora of Columbia County"



From "The Flora of Columbia County" and the unpublished field notes of Rogers McVaugh, we are compiling:

- a list of rare, uncommon, and declining native plant species in Columbia County (current working list has > 800 species)
- a map of localities with rare plants in the 1930s (~ 100 locations)

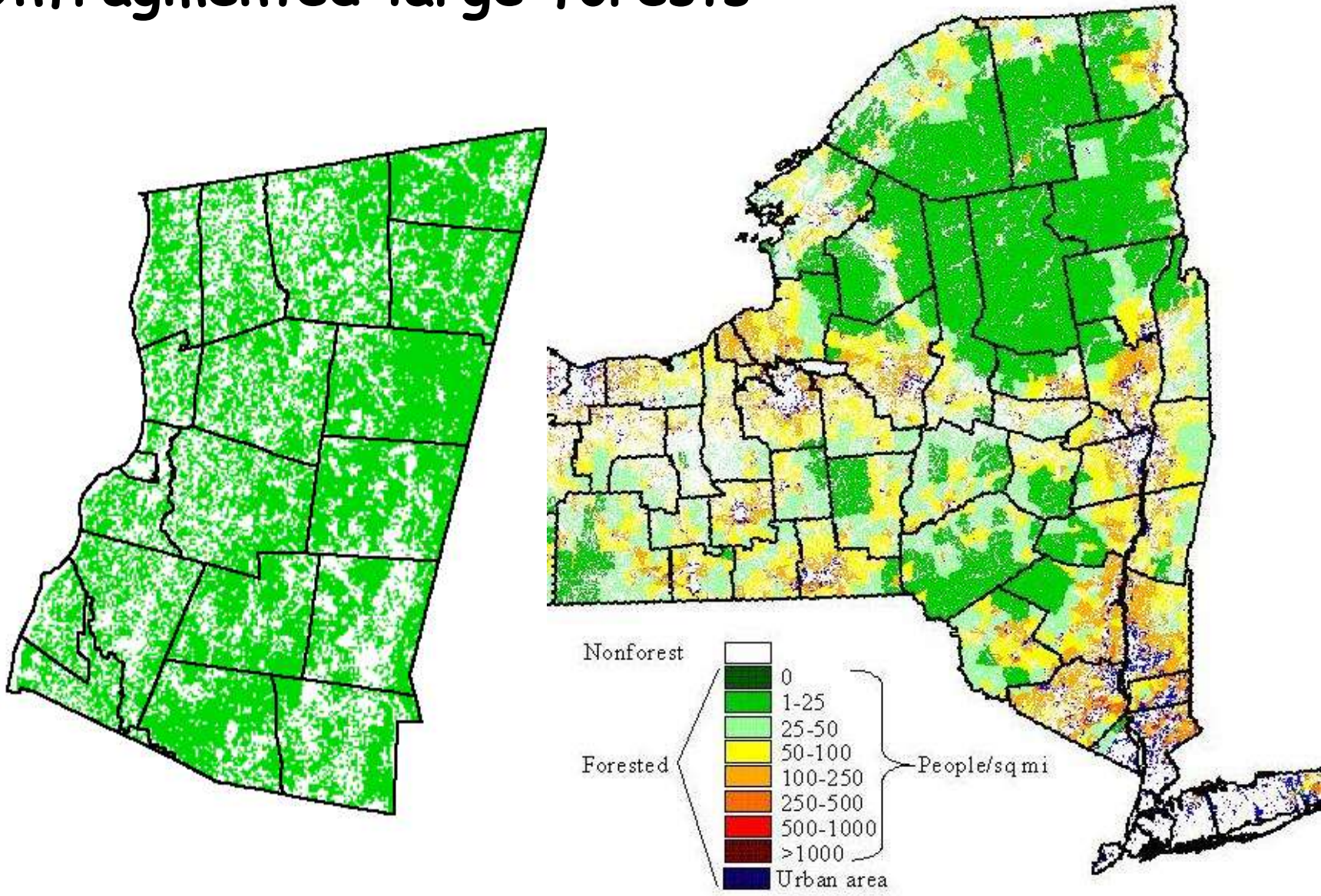
Examples of Special Places for native plants and animals in Columbia County that we are looking for:

- Large, unfragmented forests
- Calcareous outcrops and rich mesic forests
- "Ancient" floodplain forests
- "Ancient" upland forests
- Marshes and swamps
- Wet meadows
- Calcareous wet meadows and fens
- Acidic bogs
- Vernal pools
- Large grasslands
- Sterile meadows
- Shrubland
- Gravel pits and quarries

Unfragmented large forests
(habitat and corridors for large mammals,
breeding habitat for forest interior birds)



Unfragmented large forests



Unfragmented large forests



Painting by Jean Gawalt



**Calcareous outcrops
and boulders
(habitat for a
specialized set of
calcicole plants)**

Calcareous outcrops and boulders (habitat for a specialized set of calcicole plants)



“Ancient” floodplain forests

(habitat for specialized set of floodplain plants)

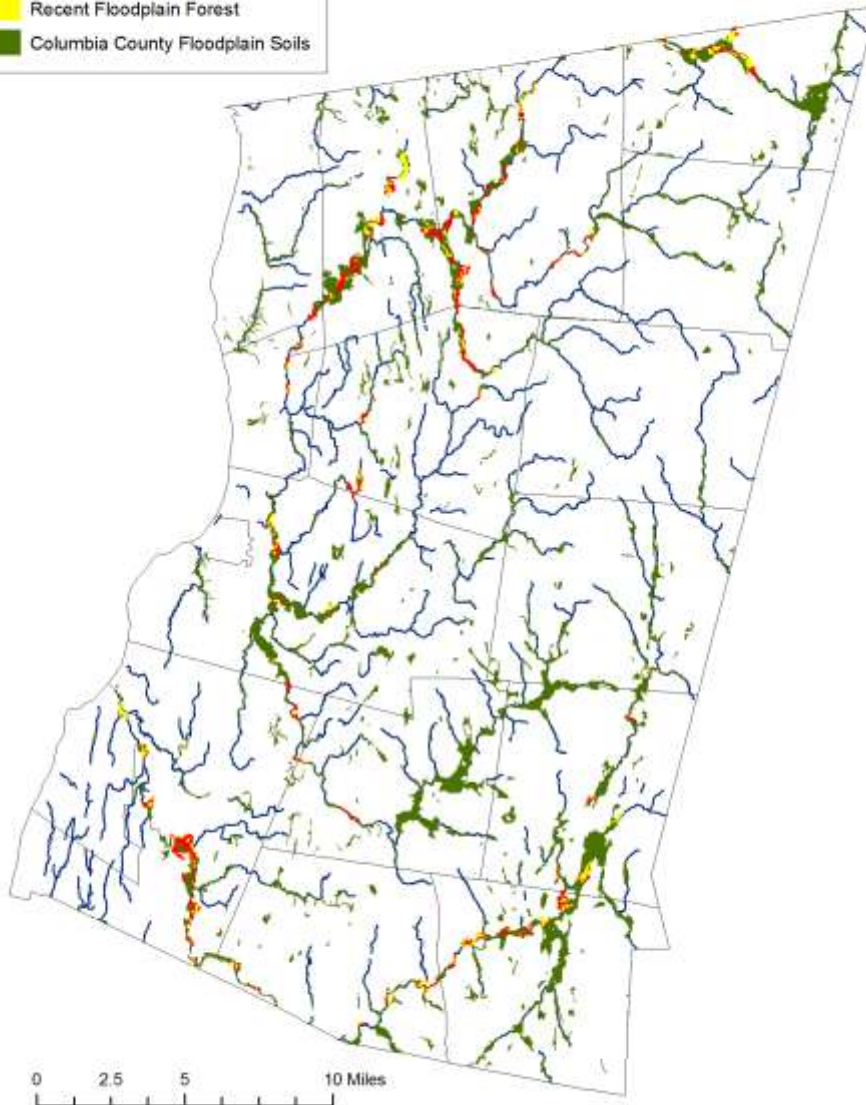


Floodplain Forests in Columbia County

~ 25,000 acres of floodplain (according to soil survey)

~ 20% of floodplains are currently forested

~ 10% of floodplains have "ancient" forests



"Ancient" floodplain forests



Green Dragon



Cardinal Flower

Ancient" upland forests (might be habitat to native forest plants that don't come back easily after clearing and are sensitive to displacement by invasive species)



Marshes and swamps (habitat for many native plants and animals)



Marshes and swamps



Random dark blotches circled with white



dy L. Emmitt © 2003 www.rlephoto.com



Wet meadows (habitat for many native plants and their associated insects, as well as reptiles and amphibians)







Bronze Copper (caterpillars feed on docks and knotweeds)



Black Dash

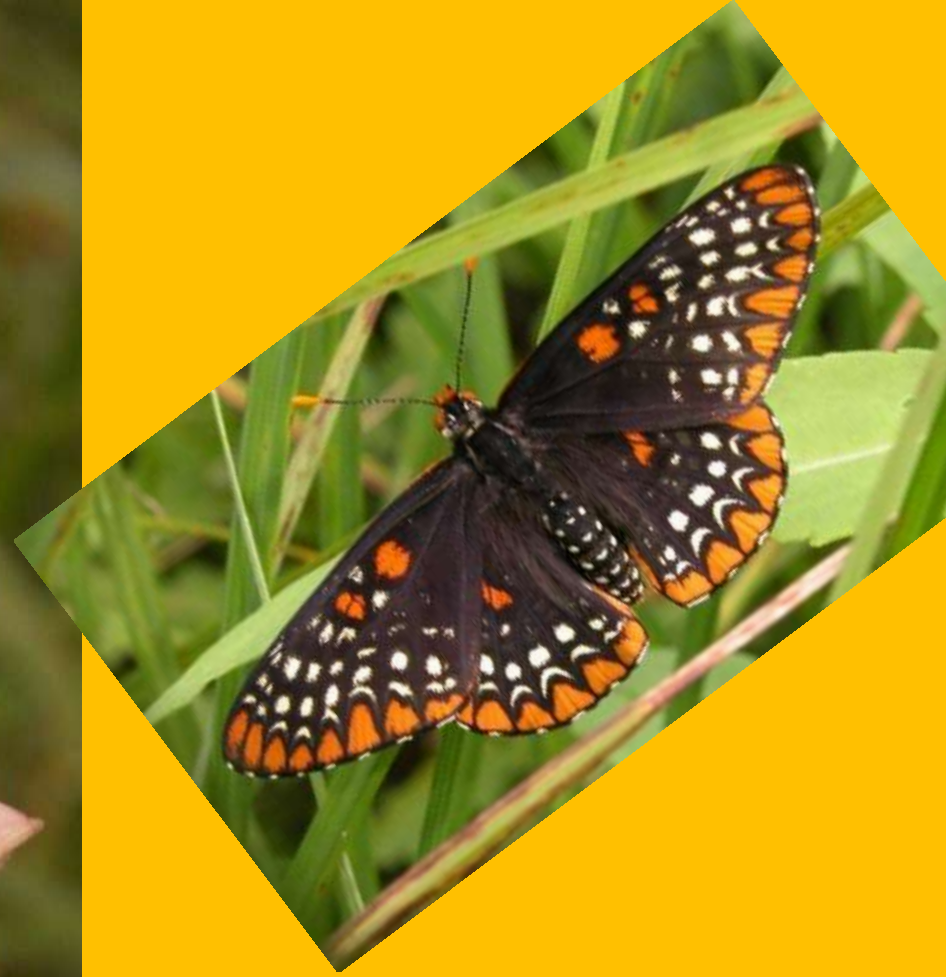


Mulberry Wing

(caterpillars feed on Tussock Sedge)



Monarch
(caterpillars feed
on milkweeds)



Baltimore Checkerspot
(caterpillars feed on
Turtlehead)



Wet meadow



Ribbon snake



Leopard frog



Spotted Turtle

Bogs (habitat for a specialized set of plants, butterflies, and dragonflies)



Bogs



Vernal pools (breeding habitat for certain amphibians)





Spotted salamander

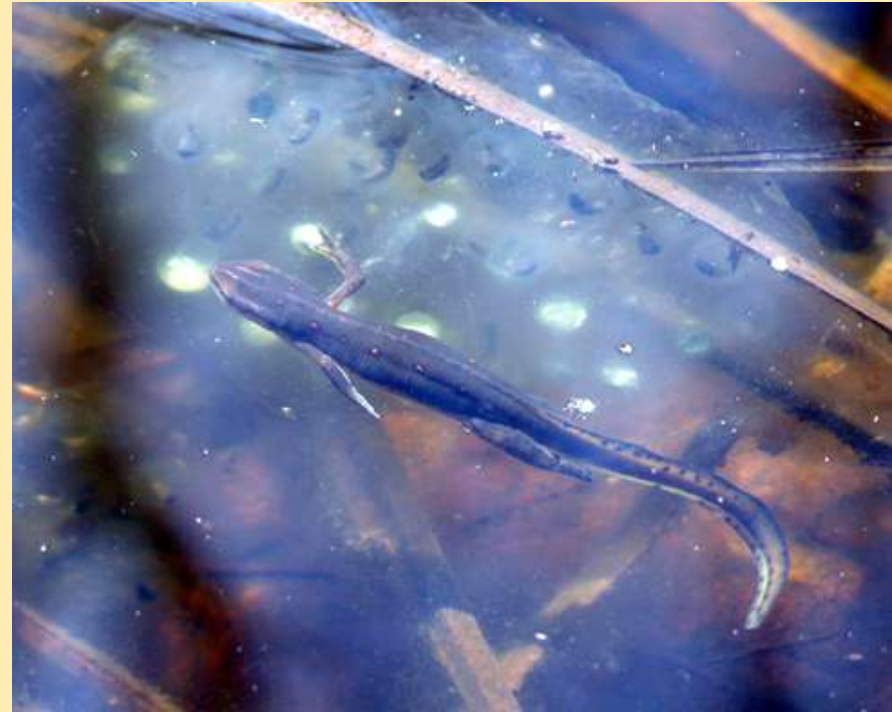


Woodfrog

Farm Ponds - can provide breeding habitat for vernal pool amphibians



Spotted Salamander
and Woodfrog
eggs/larvae are
particularly susceptible
to predation



Large, extensively managed hay meadows
(habitat for grassland-breeding birds and some native plants)



Large, extensively managed hay meadows





more
creckerspot



**Large, extensively
managed hay meadows**

Sterile meadows (habitat for a number of rare or uncommon native plants, including Little Bluestem; habitat for rare butterflies, such as Leonard, Dusky, and Indian Skipper)



Little Bluestem

Wild Indigo on a recently discovered sterile meadow in Lake Taghkanic SP



Shrublands harbor rare native plants, declining songbirds, and sometimes even the nation-wide rare New England Cottontail Rabbit

