NATURAL COMMUNITY SURVEY PART I: RECONNAISSANCE — Maine Natural Areas Program

IDENTIFIERS / LOCATION

Survey area: Housatonic River [B3]			Date: 3 September 1998
(Site name:)		(Quadcode:)	Airphoto (#, scale, date):
Surveyors: Arthur Haines	Town: Lenox County: Berkshire, MA (Biophysical Region:)	USGS 7.5' Quad:	

Mark all observation points on a copy of the topo. Add any comments or sketches here if necessary to clarify the topo.

Directions (if not obvious from topo or Maine Atlas):
From Bridge on New Lenox Road, head upstream on west side to prominent bend in river (to west facing upstream) below a large EMR Tower. Backwater area on NW bank of River, into floodplain forest.

VEGETATION / HABITAT

Observation Point 1	Observation Point 2	Observation Point 3
Community type: Robust Emergent Marsh	Community type: floodplain forest — silver maple - falsenettle - sensitive fern association	Community type:
Soil: wet silt	Soil: Alluvial	Soil:
Slope, aspect, topography: flat to gently sloped toward channel center	Slope, aspect, topography: flat, or sloped at drainages, relatively flat ground	Slope, aspect, topography:
STRATA*: cover & 1-2 dominant spp. for each	STRATA*: cover & 1-2 dominant spp. for each	STRATA*: cover & 1-2 dominant spp. for each
Tree layer: Total cover (%): 20 Acer saccharinum Salix nigra	Tree layer: Total cover (%): 75 Acer Saccharinum Salix nigra (scarce)	Tree layer: Total cover (%):
Sapling / tall shrub layer: Total cover (%): NA	Sapling / tall shrub layer: Total cover (%): 5 Crataegus punctata	Sapling / tall shrub layer: Total cover (%):
Shrub (1-2 m) layer: Total cover (%): 10 Cornus amomum Cephalanthus occidentalis	Shrub (1-2 m) layer: Total cover (%): 10 Cornus amomum	Shrub (1-2 m) layer: Total cover (%):
Herb layer: Total cover (%): 75 Persicaria hydropiperoides Eleocharis acicularis Sparganium americanum Dulichium arundinaceum	Herb layer: Total cover (%): 75 Onoclea sensibilis Boehmeria cylindrica Laportea canadensis Leersia virginica	Herb layer: Total cover (%):
Bryoid layer: Total cover (%): NA	Bryoid layer: Total cover (%): relatively absent	Bryoid layer: Total cover (%):
Other diagnostic or notable species: Sagittaria cuneata	Other diagnostic or notable species: Matteuccia struthiopteris forming homogeneous stands in areas in the floodplain.	Other diagnostic or notable species:
Condition / evidence of human use: none	Condition / evidence of human use: none	Condition / evidence of human use:
Additional data collected / COMMENTS plots (size)? yes tree cores? photos? yes Seasonally flooded areas that are dominated by herbs growing in wet silt/muck after water level drops in late summer.	Additional data collected / COMMENTS plots (size)? yes tree cores? photos? yes	Additional data collected / COMMENTS plots (size)? tree cores? photos?

date: initials: p. 1 of 7

NATURAL COMMUNITY SURVEY PART II: DESCRIPTION

→ complete separate description forms for each notable natural community on reconnaissance page.

IDENTIFIERS / LOCATION

Area (specific/general): Housatonic River [B3]			Obs. Pt. # 1
Community type: Robust Emergent Marsh			Adjacent communities: - floodplain forest - open water (ponded) - Circumneutral shrub swamp
Quad: (1:25,000) Pittsfield East	~~(Lat:)~~ Northing 4695300	Size (acres) of community EO (not site):	BE SURE TO MAP EXTENT OF COMMUNITY ON TOPO. Distinguish between portions ground-truthed vs. portions presumed to be part of community based solely on photo/map interpretation, where applicable.
(Quadcode:)	~~(Long:)~~ Easting 0644750		

CLASSIFICATION HIERARCHY

Physiognomy (Class)	Phenology (Subclass)	Leaf type (Group)
forest	evergreen woody	broad-leaf woody
woodland	deciduous woody	needle-leaf woody
shrubland	mixed woody	graminoid
dwarf shrubland	perennial	fern
herbaceous	annual	pteridophyte
sparse vascular/nonvascular		non-vascular

(ALLIANCE:)

ADDITIONAL DATA FOR FORESTS

Tree canopy height	Core data: ring counts (~ 5 cores) of larger trees (give sp. & dbh)	Deadwood (describe distribution, abundance, degree of decay):
60 feet (neighboring trees)	N/A	A few large branches have fallen into open areas.
supercanopy trees? NO		

HISTORY (describe evidence or lack thereof; please do not leave boxes blank. Indicate approximately how recent where possible.)

Fire:	Wind:	Cutting:	Agriculture:	Impoundment:
no	no	no	no	no

comment: Disturbance is only through seasonal flooding during spring high water.

ADDITIONAL SPECIES LIST

List additional plant species in community not included in the plot data that follows.

Scirpus cyperinus
Nuphar variegatum
Eleocharis obtusa
Potamogeton amplifolius
Peltandra virginica
Boehmeria cylindrica
Cornus omomum
Cephalanthus occidentalis
Pontederia cordata
Sium suave

Species list sketchy or basically complete? Comment:

relatively complete

VEGETATION PLOT DATA

Area: Housatonic River [B3]	Obs. pt. #:
Community type: Backwater Channel Emergent Marsh	(Regional alliance/community:)

LAYER	plot # 1A	1B	1C	1D
TREE list species and dbh for all trees >= 5 cm dbh; count standing dead as 1 species. note units: inches QUAD SIZE: note which size used 5.64 m radius for 1/100th ha 7.98 m radius for 2/100th ha use same size throughout!	Salix nigra 16	NA	NA	Acer saccharinum 6, 8
SAPLING / TALL SHRUB cover class by species of: trees > 2 m tall but < 5 cm dbh; and shrubs > 2 m tall QUAD SIZE: 2.8 m radius or 25 m²	NA	NA	NA	NA
SHRUB cover class* by species of shrubs/trees 1 - 2 m tall. QUAD SIZE: 2.8 m radius or 25 m²	NA	NA	NA	NA
HERB cover class* by species for all herbaceous plants plus any woodies < 1 m tall QUAD SIZE: 1 m², 2-4 herb quads per tree plot. Enter individual values in left-hand column and average in right-hand column. Remember the zeros for spp present in some but not all herb quads when figuring averages!	① Sagittaria latifolia 37 Dulichium arundi. 37 Alisma triviale 3 ② Persicaria hydropiperoides 37 Sagittaria latifolia 3 Alisma triviale 3 Sparganium americanum 9	① Sparganium amer. 19 Persicaria hydropiperoides 3 Alisma triviale 1 Eleocharis acicularis 19 ② Pontederia cordata 9 Sparganium americanum 9 Eleocharis acicularis 37 Leersia virginica 3 Sagittaria cuneata 9 Penthorum sedoides 1	① Lythrum salicaria 19 Sparganium americanum 3 Persicaria hydropiperoides 37 Sagittaria latifolia 9 Dulichium arundin. 1 ② Scirpus cyperinus 19 Eleocharis acicularis 19 Dulichium arund. 37 Sagittaria cuneata 3 Ludwigia palustris 3	① Lythrum salicaria 3 Onoclea sens. 3 Persicaria hydropiperoides 37 Thelypteris palus. 3 Eleocharis acicul. 9 ③ Leersia virgica 9 Sagittaria cuneata 37 Lemna minor 1 Persicaria hydropiperoides 3 Eleocharis acicularis 19
BRYOID ground-layer mosses, liverwort, lichens in herb quads. resolution (check one): __"moss"/"liverwort"/"lichen" only; __identified to major group; __identified to genus; __identified to species.	NA	NA	NA	NA
REMARKS	Trees confined to edge of community. (other edge, if present, is open water)		Cornus amomum forming a shrub border at edge of plot.	Trees at edge of Plot and shading the narrow channel

In box on previous page, list plant spp. present in the community but not in the sample plots so we have a complete species list.

* cover classes (record midpoint): < 2 1 2-5% 3 6-12% 9 13-24% 19 25-49% 37 50-74% 63 75-100% 87

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TOPOGRAPHY / SOILS

Area: Housatonic River [B3] | Obs. pt. #: 1

Community type: Robust Emergent Marsh | (Regional alliance/community:)

Elevation:	Aspect:	Slope:	Microtopography:
294 meters	Flat magnetic or true?	0-5° measured or estimated?	relatively Flat

pH	Topographic position:			Habitat patchiness (describe zones or patches if present):
(note kit or meter type)	P low plain, level T toe of slope LS lower slope MS middle slope	TB hillside terrace/bench US upper slope E cliff/ledge	C crest M high plateau N narrow valley D drainage channel	Patchy - floodplain forest, shrub swamp, Emergent Marsh, and open water all present in close proximity.

Mineral Soil Profile:

horizon	depth (cm)	color	mottling	other
O				
A				
E				
B				
C				

Organic Soil Profile:

peat depth: _____ cm OR > 1 m _____

vonPost decomposition: _____

ALL SOILS:

DEPTH TO WATER TABLE: _____

DEPTH to OBSTRUCTION: _____

Soil temperature reading _____ F/C at _____ (depth)

Surficial deposit:
- bedrock
- talus slope
- glacial till
- moraine
- esker/outwash
- glacial delta
- lacustrine/fluvial
- marine
- aeolian
- other:

Surface:
- ____% Bedrock
- ____% Boulders (>50 cm)
- ____% Cobbles/Gravel
- 10 % Bare mineral soil
- ____% Organic soil
- 1 % Litter (note type) Broadleaf
- 15 % Water
- 74 % Total vegetation
- ____ Other:

Average Texture:
- gravel
- sand
- loamy sand / sandy loam
- loam
- silt loam
- clay loams
- sandy clay / clay
- peat
- muck

Bedrock type:
- Igneous
  - granite
  - dioritic
  - gabbroic
  - other igneous
  - _____
- Metamorphic
  - slate/phyllite
  - schist/gneiss
  - other metamorphic
  - _____
- Sedimentary
  - limestone
  - other sedimentary
  - _____

details?

Soil stoniness:
- v. little (< 1%)
- moderate (2-25%)
- very (25-100%)

Drainage & moisture regime (see MAPPSS key):
- very poorly drained
- poorly drained
- somewhat poorly drained
- moderately well drained
- well drained
- somewhat excessively drained
- excessively drained

Hydrologic regime:
- upland
- nontidal wetland:
  - permanently flooded
  - semiperm'ly flooded
  - seasonally flooded
  - saturated
- tidal - irregularly
- tidal - regularly
  - saltwater
  - brackish
  - freshwater
- unknown

ATURAL COMMUNITY SURVEY — PART II: DESCRIPTION

> complete separate description forms for each notable natural community on reconnaissance page.

DENTIFIERS / LOCATION

Area (specific/general): Housatonic River [B3]	Obs. Pt. # 2
Community type: Silver Maple floodplain forest	Adjacent communities: Robust Emergent Marsh, Low Gradient Stream
Quad: Pittsfield East 1:25,000	~~(Lat.:)~~ Northing: 4695290
(Quadcode:)	~~(Long.:)~~ Easting: 064480
Size (acres) of community EO (not site):	BE SURE TO MAP EXTENT OF COMMUNITY ON TOPO. Distinguish between portions ground-truthed vs. portions presumed to be part of community based solely on photo/map interpretation, where applicable.

LASSIFICATION HIERARCHY

Physiognomy (Class)	Phenology (Subclass)	Leaf type (Group)
(forest)	evergreen woody	(broad-leaf woody)
woodland	(deciduous woody)	needle-leaf woody
shrubland	mixed woody	graminoid
dwarf shrubland	perennial	forb
herbaceous	annual	pteridophyte
sparse vascular/nonvascular		non-vascular

(ALLIANCE:)

DDITIONAL DATA FOR FORESTS

Tree canopy height:	Core data: ring counts (~ 5 cores) of larger trees (give sp. & dbh)	Deadwood (describe distribution, abundance, degree of decay):
80 feet	① Acer saccharinum 26 inch dbh, 67 feet high, 45 ybp	Very little deadwood, what is present is mostly large, fallen branches of Silver Maples.
supercanopy trees? no	② Acer saccharinum 15 inch dbh, 34 ybp	
	③ Acer saccharinum 29 inch dbh, 81 feet tall, 75 years before present	

IISTORY (describe evidence or lack thereof; please do not leave boxes blank. Indicate approximately how recent where possible.)

Fire:	Wind:	Cutting:	Agriculture:	Impoundment:
no	no	no	On opposite side of River and downstream of Plot river is bordered by open fields (old farms in area)	No

comment:

ADDITIONAL SPECIES LIST

List additional plant species in community not included in the plot data that follows.

Circaea lutetiana
Lysimachia nummularia
Geum aleppicum
Rudbeckia laciniata
Phalaris arundinacea
Argeratina altissima
Persicaria virginiana
Impatiens capensis
Echinocystis lobata
Cardamine pratensis
Urtica dioica
Matteuccia struthiopteris
Oxalis stricta
Cinna latifolia
Galium
Rubus frondosus
Persicaria pensylvanica

Species list sketchy or basically complete?
Comment:

VEGETATION PLOT DATA

Area: Housatonic River [LB3] | Obs. pt. #: 2

Community type: Silver Maple Floodplain Forest | (Regional alliance/community:)

LAYER	plot # 2A	2B	2C	2D
TREE list species and dbh for all trees >= 5 cm dbh; count standing dead as 1 species. note units: inches QUAD SIZE: note which size used 5.64 m radius for 1/100th ha 7.98 m radius for 2/100th ha use same size throughout!	Acer saccharinum 9,7,12,12,5,14,9,12,8 (A single, branched clump) Crataegus punctata 6,6	Acer saccharinum 14,6,9,8,15,12,39 (Branched tree) single tree -15	Acer saccharinum 10,10,6,5,24,8,17	Acer saccharinum 27, 18,10 Salix nigra 12,7 Standing dead 7
SAPLING / TALL SHRUB cover class by species of trees > 2 m tall but < 5 cm dbh; and shrubs > 2 m tall QUAD SIZE: 2.8 m radius or 25 m²		Crataegus punctata 3	NA	NA
SHRUB cover class* by species of shrubs/trees 1 - 2 m tall. QUAD SIZE: 2.8 m radius or 25 m²	NA	Cornus amomum 9	NA	Cornus amomum 9 Salix nigra 3
HERB cover class* by species for all herbaceous plants plus any woodies < 1 m tall QUAD SIZE: 1 m², 2-4 herb quads per tree plot. Enter individual values in left-hand column and average in right-hand column. Remember the zeros for spp present in some but not all herb quads when figuring averages!	① Pilea pumila 3 ② Pilea pumila 1	① Leersia virginica 3 Pilea pumila 3 Toxicodendron radicans 1 Lysimachia nummularia 1 Boehmeria cylindrica 1 ② Boehmeria c. 9 Laportea can. 3 Leersia virgin. 37 Lysimachia nummularia 9	① Onoclea sensibilis 9 Leersia virginica 9 Matteuccia Struth. 9 Carduamine prat. 3 ② Laportea cana 9 Boehmeria cyl. 9 Pilea pumila 19 Matteuccia Struth. 3 Geum canadense 3 Lysimachia nummularia 3 Cinna latifolia 1	① Boehmeria cyl. 9 Onoclea sens. 9 Lycopus amer. 3 ② Boehmeria cyl. 9 Lythrum Salicaria 37 Cinna latifolia 1 Pilea pumila 3
BRYOID ground-layer mosses, liverwort, lichens in herb quads. resolution (check one): X "moss"/"liverwort"/"lichen" only; __identified to major group; __identified to genus; __identified to species.	① NA ② Moss 1	NA	NA	
REMARKS	This plot with a dried up vernal pool/backwater area and relatively devoid of herbs.	Most trees in plots are multistemmed clumps, with wide spaces (10-20 meters) between clumps.		

In box on previous page, list plant spp. present in the community but not in the sample plots so we have a complete species list.

* cover classes (record midpoint): < 2 1 2-5% 3 6-12% 9 13-24% 19 25-49% 37 50-74% 63 75-100% 87

date: initials: p. 6 of 7

TOPOGRAPHY / SOILS

Area: Housatonic River [B3] | Obs. pt. #: 2

Community type: Silver Maple floodplain forest | (Regional alliance/community:)

Elevation:	Aspect:	Slope:	Microtopography:
294 meters	flat magnetic or true?	0-10° measured or estimated?	Flat, or sloped toward drainage channels.

pH	Topographic position:			Habitat patchiness (describe zones or patches if present):
(note kit or meter type)	P low plain, level T toe of slope LS lower slope MS middle slope	TB hillside terrace/bench US upper slope E cliff/ledge	C crest M high plateau N narrow valley D drainage channel	Relatively uniform - canopy with some breaks, understory largely herb dominated but occasionally replaced by shrub thickets.

Mineral Soil Profile:

horizon	depth (cm)	color	mottling	other
O				
A				
E				
B				
C				

Organic Soil Profile:

peat depth: _____ cm OR > 1 m _____

vonPost decomposition: _____

ALL SOILS:

DEPTH TO WATER TABLE: _____

DEPTH to OBSTRUCTION: _____

Soil temperature reading _____ F/C at _____ (depth)

Surficial deposit:
- bedrock
- talus slope
- glacial till
- moraine
- esker/outwash
- glacial delta
- (lacustrine/fluvial)
- marine
- aeolian
- other:

Surface:
- ____% Bedrock
- ____% Boulders (>50 cm)
- ____% Cobbles/Gravel
- 10 % Bare mineral soil
- ____% Organic soil
- 10 % Litter (note type) Broadleaf
- ____% Water
- 80 % Total vegetation
- ____ Other:

Average Texture:
- gravel
- sand
- loamy sand / sandy loam
- loam
- silt loam
- clay loams
- sandy clay / clay
- peat
- muck

Bedrock type:
- Igneous
  - granite
  - dioritic
  - gabbroic
  - other igneous
  - _____
- Metamorphic
  - slate/phyllite
  - schist/gneiss
  - other metamorphic
  - _____
- Sedimentary
  - limestone
  - other sedimentary
  - _____

details?

Soil stoniness:
- v. little (< 1%)
- moderate (2-25%)
- very (25-100%)

Drainage & moisture regime (see MAPPSS key):
- very poorly drained
- poorly drained
- somewhat poorly drained
- moderately well drained
- well drained
- somewhat excessively drained
- excessively drained

Hydrologic regime:
- upland
- nontidal wetland:
  - permanently flooded
  - semiperm'ly flooded
  - (seasonally flooded)
  - saturated
- tidal - irregularly
- tidal - regularly
  - saltwater
  - brackish
  - freshwater
- unknown