NATURAL COMMUNITY SURVEY PART I: RECONNAISSANCE Maine Natural Areas Program

IDENTIFIERS / LOCATION

Survey area: Housatonic River [Area D1] = C5			Date: 2-3 September 1998
(Site name:)		(Quadcode:)	Airphoto (#, scale, date):
Surveyors: Arthur Haines, Eugenie Moore	Town: Lenox County: Berkshire, MA (Biophysical Region:)	USGS 7.5' Quad: 1:25,000 x15' East Lee, MA	

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 Parking Lot, north of Mill on Rd, walk north on RR tracks 1250 meters, and into swamp east for ca. 200 meters, until open areas of Housatonic backwaters are visable in distance.

VEGETATION / HABITAT

Observation Point 1 2 September	Observation Point 2 3 September	Observation Point 3
Community type: Circumneutral hardwood swamp – bur oak association	Community type: Circumneutral hardwood swamp	Community type:
Soil: Primarily mineral	Soil: mineral	Soil:
Slope, aspect, topography: Flat, uneven ground	Slope, aspect, topography: Flat, uneven 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 (%): 60% Quercus macrocarpa, Acer rubrum	Tree layer: Total cover (%): 70 Acer rubrum, Fraxinus nigra, Quercus macrocarpa	Tree layer: Total cover (%):
Sapling / tall shrub layer: Total cover (%) 40% Fraxinus nigra, Carpinus caroliniana	Sapling / tall shrub layer: Total cover (%) 40 Carpinus caroliniana, Fraxinus nigra	Sapling / tall shrub layer: Total cover (%)
Shrub (1-2 m) layer: Total cover (%) 10 Ilex verticillata	Shrub (1-2 m) layer: Total cover (%) 20 Hamamelis virginiana	Shrub (1-2 m) layer: Total cover (%)
Herb layer: Total cover (%) 60 Carex bromoides, Onoclea sensibilis, Symphyotrichum lateriflorum	Herb layer: Total cover (%) 70 Carex bromoides, Lysimachia nummularia, Onoclea sensibilis	Herb layer: Total cover (%)
Bryoid layer: Total cover (%) very sparse	Bryoid layer: Total cover (%) 15 Mosses	Bryoid layer: Total cover (%)
Other diagnostic or notable species: Carex grayi	Other diagnostic or notable species:	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?	Additional data collected / COMMENTS plots (size)? tree cores? photos?	Additional data collected / COMMENTS plots (size)? tree cores? photos?

ATURAL COMMUNITY SURVEY PART II: DESCRIPTION

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

)ENTIFIERS / LOCATION

Area (specific/general): Housatonic River, D1 (Northern Part)			Obs. Pt. # 1
Community type: Bur Oak association			Adjacent communities: Circumneutral hardwood swamp (red maple - black ash association) Circumneutral shrub swamp
Quad: East Lee, 1:25,000 Massachusetts	~~(Lat:)~~ Northing: 4691800	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: 0644620		

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):
75 feet	Quercus macrocarpa	Occasional fallen logs, largely of small diameter (< 10 inches).
supercanopy trees? NO	(1) 25 inch, 107 ybp (2) 19 inch dbh, 112 ybp	

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	no	adjacent areas have been flooded by Woods Pond Impoundment.

comment – Hydrologically intermediate between a swamp and floodplain forest

ADDITIONAL SPECIES LIST

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

Athyrium felix-femina
Sium suave
Carex intumescens
Alnus incana ssp. rugosa
Persicaria sagittata
Lindera benzoin
Equisetum sylvaticum
Carex lacustris
Solidago rugosa
Pinus strobus
Dryopteris cristata
Lyonia ligustrina
Symplocarpus foetidus
Spiraea alba var. latifolia
Boehmeria cylindrica
Carex stipata
Lycopus virginicus
Rubus pubescens
Geum cf. canadense
Eupatorium maculatum
Viburnum dentatum
Carex projecta
Ulmus americana
Doellingeria umbellata
Carpinus caroliniana
Cornus sericea
Lysimachia terrestris
Lythrum salicaria
Ilex verticillata
Symphyotrichum puniceum
Salix cf. alba
Lysimachia nummularia
Osmunda regalis
Toxicodendron radicans
Dryopteris cristata
Ludwigia palustris
Ranunculus flabellaris
Potamogeton virginiana
Carex gracillima
Lonicera morrowii
Thelypteris palustris
Senecio aureus
Arisaema virginicum
Solidago patula

Species list sketchy or basically complete?
Comment: Basically complete

Helenium autumnale
Glyceria striata
Carex crinita

VEGETATION PLOT DATA

Area: Housatonic River | Obs. pt. #: 1

Community type: Bur Oak association | (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!	Quercus macrocarpa 25 Standing dead 6 inches Acer rubrum 14, 10	Quercus macrocarpa 25 Acer rubrum 9, 11	Quercus macrocarpa 7 Acer rubrum 11, 11, 36 Standing dead 10	Acer rubrum 14 Quercus macrocarpa 8 Fraxinus nigra 6
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	Carpinus caroliniana 19	Carpinus C. 37 Fraxinus nigra 3	Carpinus C. 37 Fraxinus n. 3	Rhamnus cathartica 9 Fraxinus nigra 3 Fraxinus americana 3 Carpinus c. 3
SHRUB cover class* by species of shrubs/trees 1 - 2 m tall. QUAD SIZE: 2.8 m radius or 25 m²	Carpinus caroliniana 9 Fraxinus nigra 1	Fraxinus nigra 1 Ilex verticillata 1	NA	Parthenocissus quinquefolius 1 Fraxinus nigra 1
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 Onoclea sensibilis 3 Carex bromoides 3 ② Onoclea sensibilis 1 Carex bromoides 3 Carex grayi 1 Ranunculus cf. hispidus 3	① Onoclea S. 3 Symphyotrichum lateriflorum 3 Carex bromoides 9 ② Cinna latifolia 1 Onoclea S. 1 Carex brom. 37	① Osmunda cinnamomea 37 ② Onoclea sen. 9 Equisetum arvense 1 Toxicodendron radicans 1 Fraxinus nigra 1 Carex cf. brom. 1	① Onoclea S. 9 Carex brom. 3 ② Onoclea S. 3 Toxicodendron radicans 9 Carex bromoides 19 Lysimachia nummularia 9 Lysimachia clethroides 1
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 Moss 3 ② Moss 0	① NA ② NA	① Moss 3 ② Moss 0	① Moss 3
REMARKS				

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. 3 of 7

TOPOGRAPHY / SOILS

Area: Housatonic River, D1 | Obs. pt. #: 1

Community type: bur oak association | (Regional alliance/community:)

Elevation: 294 meters

Aspect: NA magnetic or true?

Slope: 0° measured or estimated?

Microtopography: Uneven ground with very shallow pit and mound topography

pH (note kit or meter type)

Topographic position:

(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

Habitat patchiness (describe zones or patches if present): relatively uniform

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) alluvial
marine
aeolian
other:

Surface:

____% Bedrock
____% Boulders (>50 cm)
____% Cobbles/Gravel
____% Bare mineral soil
____% Organic soil
90 % Litter (note type)
____% Water
60 % 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

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 [D1]			Obs. Pt. # 2
Community type: Circumneutral Hardwood Swamp			Adjacent communities: Circumneutral Hardwood Swamp — burroak association
Quad: East Lee, MA	~~(Lat:)~~ Northing 4691800	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 0644550		

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	forb
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	① Quercus macrocarpa 15 inch dbh, 71 feet tall, 114 yrs bp	Few dead, fallen logs, largely of +/- small diameter (< 10 inches), damp and bryophyte covered.
supercanopy trees? (70 feet) Occasional Pinus strobus or large Quercus Macrocarpa	② Fraxinus nigra 11 dbh, 67 feet, 122 years bp	
	③ Acer rubrum 17 inch dbh, 65 feet, 96 years before Present	

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	woods found Impoundment nearby and may have affected hydrology here.

comment:

ADDITIONAL SPECIES LIST

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

Alnus incana
Equisetum sylvaticum
Carex lacustris
Solidago rugosa
Lyonia ligustrina
Spiraea alba var. latifolia
Boehmeria cylindrica
Carex stipatata
Lycopus virginicus
Doellingeria umbellata
Cornus sericea
Lysimachia terrestris
Lythrum salicaria
Ilex verticillata
Symplyotrichum puniceum
Lysimachia nummularia
Osmunda regalis
Dryopteris cristata
Ludwigia palustris
Peltandra virginica
Carex gracillima
Lonicera morrowii
Thelypteris palustris
Prunus virginiana
Solidago patula

Species list sketchy or basically complete? Comment:

relatively complete

VEGETATION PLOT DATA

Area: Housatonic River [D1] | Obs. pt. #: 2

Community type: Circumneutral Hardwood Swamp | (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: 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 rubrum 5,5,11 Fraxinus nigra 6 Quercus macrocarpa 10	Acer rubrum 5,7 Fraxinus nigra 5,7 Quercus macrocarpa 10	Fraxinus nigra 6,6,7,5,5 Acer rubrum 7,11	Fraxinus nigra 5 Quercus macrocarpa 6 Tsuga canadensis 6 Pinus strobus 5
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	Acer rubrum 9 Fraxinus nigra 3 Carpinus caroliniana 37	Ulmus americana 9 Carpinus caroliniana 19 Fraxinus nigra 9	Tsuga canadensis 3 Carpinus caroliniana 37	Carpinus caroliniana 9 Hamamelis virginiana 3 Pinus strobus 9
SHRUB cover class* by species of shrubs/trees 1 - 2 m tall. QUAD SIZE: 2.8 m radius or 25 m²	Cornus amomum 3	Cornus amomum 9	Carpinus caroliniana 3	Fraxinus nigra 3 Quercus macrocarpa 3 Cornus amomum 1 Lindera benzoin 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 Carex bromoides 19 Onoclea sensibilis 3 Thelypteris palustris 1 Galium cf. trifidum 1 ② Carex bromoides 19 Athyrium filix-f. 3 Senecio aureus 1 Tiarella cordifolia 3 Galium triflorum 1 Rubus pubescens 1 Toxicodendron rad. 3	① Carex bromoides 19 Onoclea sensibilis 9 Toxicodendron rad. 3 Lycopus uniflorus 3 Viola sororia 3 ② Lysimachia num. 3 Rubus pubescens 3 Athyrium f.-f. 3 Solidago patula 1 Carex gracillima 3 Carex bromoides 19	① Athyrium f.-f. 3 Onoclea sensibilis 9 Carex bromoides 9 Carex intumescens 3 Osmunda cinnamomea 9 ② Carex bromoides 37 Rubus pubescens 3 Carex projecta 1 Toxicodendron radicans 3	① Boehmeria cyl. 9 Onoclea sensibilis 3 Carex bromoides 37 Lycopus uniflorus 19 Galium cf. trifidum 3 ② Senecio aureus 19 Solidago patula 3 Carex bromoides 19 Rubus pubescens 9 Doellingeria umbellata 1 Onoclea sens. 3 Symphyotrichum lateriflorum 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 Moss 9 ② Moss 19	① Moss 3 ② Moss 19	① Moss 3 ② Moss 3	① NA ② Moss 3
REMARKS				

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 [D1] | Obs. pt. #: 2

Community type: Circumneutral Hardwood Swamp | (Regional alliance/community:)

Elevation:	Aspect:	Slope:	Microtopography:
294 meters	Flat magnetic or true?	0° measured or estimated?	Uneven, shallow pits and low mounds, sedges tussock-forming

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, though wetter in some areas with open water vs. somewhat drier with damp depressions.

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:	Surface:	Average Texture:
bedrock	____% Bedrock	gravel
talus slope	____% Boulders (>50 cm)	sand
glacial till	____% Cobbles/Gravel	loamy sand / sandy loam
moraine	5 % Bare mineral soil	loam
esker/outwash	____% Organic soil	silt loam
glacial delta	20 % Litter (note type)	clay loams
lacustrine/fluvial	____% Water	sandy clay / clay
marine	75 % Total vegetation	peat
aeolian	____ Other:	muck
other:		

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