

APPENDIX B

WETLANDS PLANTINGS

NATIVE WETLAND PLANTS FOR THE HOCKANUM RIVER WATERSHED

Prepared by The Vernon Conservation Commission March, 2000

The purpose of this document is to ensure that proper native plantings will be used within wetlands and regulated areas, will create wildlife habitats, and will preclude the planting of invasive exotic species. The document is applicable for wetland restorations and detention basins. Included are three tables, one for trees, one for shrubs, and one for herbaceous plants.

The enclosed data was extracted from a document that was furnished by the U.S. Fish and Wildlife Service, Silvio O. Conte National Fish and Wildlife Refuge. The document was entitled "Planting Guide to Native Wetland Plants of the Connecticut River Watershed For Wetland Restoration Use" dated February, 1997. The document contained detailed descriptions about each plant and planting instructions.

Additional resources which are useful to select plants which will attract specific birds and mammals are: National Audubon Society's "The Bird Garden", by Stephen W. Kress; and "American Wildlife & Plants: A Guide to Wildlife Food Habits" by Alexander C. Martin, Herbert S. Zim and Arnold L. Nelson.

Table 1: Guide to native wetland trees of the Northeast

Common Name	Scientific Name	Scrub/shrub wetland	Forested wetland	Moist soils through spring	Moist soils through out growing season	Tolerates occasional flooding*	Low velocities tolerated	Medium velocities tolerated	High velocities tolerated	Full sun required	Prefers full sun	Prefers partial shade	Partial shade tolerant	Full shade tolerant	Suggested on center spacing
Red maple	<i>Acer rubrum</i>	X	X	X		X	X				X		X	X	15-20'
Silver maple	<i>Acer saccharinum</i>	X	X		X	X	X				X		X		15-20'
River birch	<i>Betula nigra</i>	X	X		X	X	X			X					15-20'
Black ash	<i>Fraxinus nigra</i>	X	X		X	X	X			X					15-20'
Green ash	<i>Fraxinus pennsylvanica</i>	X	X		X	X	X					X			15-20'
Black gum	<i>Nyssa sylvatica</i>	X	X	X		X	X				X		X		15-20'
Black spruce	<i>Picea mariana</i>	X	X		X	X	X				X		X		15-20'
Swamp white oak	<i>Quercus bicolor</i>	X	X		X	X	X				X		X		15-20'
Pin oak	<i>Quercus palustris</i>	X	X		X	X	X			X					15-20'
Black willow	<i>Salix nigra</i>	X	X		X	X	X			X					15-20'
American larch	<i>Larix laricina</i>	X	X		X	X	X				X		X		15-20'
American Hemlock	<i>Tsuga Canadensis</i>	X	X	X		X	X					X		X	15-20'
Balsam fir	<i>Abies balsamea</i>	X	X		X	X	X					X		X	15-20'
Cottonwood	<i>Populus deltoides</i>	X	X		X	X	X			X					15-20'

*Occasional flooding up to 18" for approximately 25 percent of the growing season

Table 2: Guide to native wetland shrubs .of the Northeast

Common name	Scientific name	Scrub/Shrub wetland	Forested wetland	Wet meadow	Drought tolerant	Moist soils through spring	Moist soils through out growing season	Tolerates occasional flooding*	Tolerates permanent flooding	Low velocities tolerated	Medium velocities tolerated	High velocities tolerated	Prefers full sun	Prefers partial shade	Partial shade tolerant	Full shade tolerant	Suggested on center spacing
Speckled alder	<i>Alnus rugosa</i>	X	X				X	X		X			X		X		6'
Shadblow/Serviceberry	<i>Amelanchier canadensis</i>		X	X	X	X		X						X		X	6'
Red chokeberry	<i>Aronia arbutifolia</i>	X	X	X	X		X	X					X		X		6'
Black chokeberry	<i>Aronia melanocarpa</i>	X	X	X	X	X		X					X		X		6'
Buttonbush	<i>Cephalanthus occidentalis</i>	X	X		X		X	X	X	X			X	X		X	6'
Sweet pepperbush	<i>Clethra alnifolia</i>	X	X	X	X	X		X					X	X		X	6'
Silky dogwood	<i>Cornus amomum</i>	X	X		X		X	X		X			X		X		6'
Red osier dogwood	<i>Cornus sericea</i>	X	X		X		X	X		X			X		X		6'
Winterberry holly	<i>Ilex verticillata</i>	X	X		X		X	X					X	X		X	6'
Common spicebush	<i>Lindera benzoin</i>		X	X	X		X	X						X		X	6'
Swamp azalea	<i>Rhododendron viscosum</i>	X	X				X	X	X				X		X		6'
Pussy willow	<i>Salix discolor</i>	X	X		X		X	X		X			X				6'
Common elderberry	<i>Sambucus canadensis</i>	X	X		X		X	X					X		X		6'
Meadowsweet	<i>Spiraea laqfolia</i>	X	X			X		X					X				6'
Highbush blueberry	<i>Vaccinium corymbosum</i>		X	X			X	X						X		X	6'
American cranberry	<i>Vaccinium macrocarpon</i>	X					X	X	X	X			X				6'
Nannyberry	<i>Viburnum lentago</i>		X	X	X	X		X						X		X	6'
Northern arrowwood	<i>Viburnum recognitum</i>	X	X		X		X	X					X		X		6'
American cranberrybush	<i>Viburnum trilobum</i>	X	X		X		X	X					X		X		6'
Sand bar willow	<i>Salix exigua</i>		X				X	X		X	X	X	X				6'
Purple osier willow	<i>Salix purpurea</i>	X	X	X	X		X	X		X	X		X		X		6'
Bankers willow	<i>Salix X cotteti</i>	X	X	X			X	X		X	X		X		X		6'
Swamp rose	<i>Rosa palustris</i>	X	X				X	X					X				6'
Northern bayberry	<i>Myrica pensylvanica</i>	X	X		X	X		X					X		X		6'
Wild raisin	<i>Vibrunum cassinoides</i>		X	X			X	X		X			X		X		6'
Mountain holly	<i>Nemopanthus mucronatus</i>		X	X			X	X					X		X		6'

* Occasional flooding up to 18"for approximately 25 percent of the growing season

Table 3: Guide to native wetland herbaceous plants of the Northeast

Common Name	Scientific Name	Wet meadow	Shallow marsh	Deep marsh	Aquatic bed	Requires moist soils through out growing season	Water depth preferred	Water depths tolerated during drought/flooding	Low velocities tolerated	Medium velocities tolerated	High velocities tolerated	Full sun required	Prefers full sun	Prefers partial shade	Partial shade tolerant	Full shade tolerant	Suggested on center spacing*
Sweetflag	<i>Acorus calamus</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Swamp milkweed	<i>Asclepias incarnate</i>	X				X	0"	0-1'					X		X		1-2'
Marsh marigold	<i>Caltha palustris</i>	X				X	0-6"	0-1'					X		X		1-2'
Bearded sedge	<i>Carex comosa</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Fringed sedge	<i>Carex crinita</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Lurid sedge	<i>Carex lurinda</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Tussock sedge	<i>Carex stricta</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Fox sedge	<i>Carex vulpinoidea</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Three-way sedge	<i>Dulichium arundinaceum</i>	X				X	0-1'	0-2'	X				X		X		1-2'
Joe-pye weed	<i>Eupatoriadelphus spp.</i>	X				X	0"	0-1'					X		X		1-2'
Canada manna grass	<i>Glyceria canadensis</i>	X				X	0-1'	0-2'	X			X					1-2'
Blue flag iris	<i>Iris versicolor</i>	X				X	0-6"	0-2'					X		X		1-2'
Canada rush	<i>Juncus canadensis</i>	X				X	0-1'	0-2'					X				1-2'
Soft rush	<i>Juncus effuses</i>	X				X	0-1'	0-2'	X				X		X		1-2'
Rice cutgrass	<i>Leersia oryzoides</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Cardinal flower	<i>Lobelia cardinalis</i>	X				X	0"	0-1'					X		X		1-2'
Green bulrush	<i>Scirpus atrovirens</i>	X				X	0-6"	0-2'					X		X		1-2'
Woolgrass	<i>Scirpus cyperinus</i>	X				X	0-6"	0-2'				X					1-2'
Blue vervain	<i>Verbena hastata</i>	X				X	0"	0-2'					X				1-2'
Ostrich fern	<i>Metteuccia struthiopteris</i>	X				X	0-6"	0-2'	X				X		X		1-2'
Sensitive fern	<i>Onoclea sensibilis</i>	X				X	0"	0-1'					X	X		X	1-2'
Cinnamon fern	<i>Osmunda cinnamomea</i>	X				X	0"	0-6"						X		X	1-2'
Royal fern	<i>Osmunda regalis</i>	X				X	0-6"	0-1'					X	X		X	1-2'
Marsh fern	<i>Thelypteris thelypteroides</i>	X				X	0-3"	0-3"						X		X	1-2'
Walter plantain	<i>Alisma plantago-aquatica</i>		X			X	0-1'	0-2'	X			X					1-2'
Spike grass	<i>Distichlis spicata</i>					X	0-1'	0-2'	X	X		X					1-2'
Spike rush	<i>Eleocharis palustris</i>		X			X	0-1'	0-2'	X				X		X		1-2'
Yellow water lily	<i>Nuphar luteum</i>				X	X	2-3'	1-5'	X				X				1-2'
White water lily	<i>Nymphaea odorata</i>				X	X	2-3'	1-5'	X				X		X		1-2'
Arrow arum	<i>Peltandra virginica</i>		X			X	0-1'	0-2'	X				X		X		1-2'
Pickernelweed	<i>Pontederia cordata</i>		X			X	0-1'	0-2'	X				X		X		1-2'
The pond weeds	<i>Potamogeton spp.</i>				X	X	1-4'	1-6'	X	X			X		X		1-2'
Northern arrowhead	<i>Sagittaria latifolia</i>		X	X		X	1-2'	0-3'	X				X		X		1-2'
Hard-stem bulrush	<i>Scirpus acutus</i>			X		X	1-3'	0-5'	X				X				1-2'
Three-square bulrush	<i>Scirpus pungens</i>		X			X	0-6"	0-2'	X				X				1-2'
Burreed	<i>Sparganium americanum</i>		X			X	0-6"	0-2'	X	X			X		X		1-2'
Smooth cordgrass	<i>Spartina alterniflora</i>					X	0-5'	0-5'	X	X	X	X					1-2'
Saltmeadow cordgrass	<i>Spartina patens</i>					X	0-1'	0-1'	X	X		X					1-2'
Soft-stem bulrush	<i>Scirpus validus</i>		X			X	0-1'	0-2'	X			X					1-2'
Salt-marsh bulrush	<i>Scirpus robustus</i>		X			X	0-2'	0-3'+	X	X		X					1-2'
Narrow-leaved cattail	<i>Typha angustifolia</i>		X			X	6"-1'	0-2'	X			X					1-2'
Common cattail	<i>Typha latifolia</i>		X			X	6"-1'	0-2'	X				X		X		1-2'
Wild cerey	<i>Vallisneria Americana</i>				X	X	2-4'	1-6'	X	X			X				1-2'
Swithgrass	<i>Panicum virgatum</i>	X				X	0-6"	0-1'					X		X		1-2'
Inflated sedge	<i>Carex intumescens</i>	X				X	0-6"	0-1'					X		X		1-2'
Hop sedge	<i>Carex lupulina</i>	X				X	0-6"	0-1'					X		X		1-2'
New york ironweed	<i>Vernonia noveboracensis</i>	X				X	0-6"	0-1'									1-2'
Blue-joint reedgrass	<i>Calamagrostis Canadensis</i>	X				X	0-6"	0-1'					X				1-2'
Stout wood-reedgrass	<i>Cinna arundinacea</i>	X				X	0-6"	0-1'					X				1-2'

* Spacing is dependent upon the desired density, 1-2' initial spacing will provide dense cover within two growing seasons. Spacings of 2-4' on center will result in initial gaps in vegetation which will fill within two to five years.

Table 4: Salt tolerant plants

Trees

<i>Acer saccharin urn</i>	(Silver maple)**
<i>Fraxinus pennsylvanica</i>	(Green ash)**
<i>Nyssa sylvatica</i>	(Black gum) **
<i>Populus deltoides</i>	(Cottonwood)**
<i>Quercus bicolor</i>	(Swamp white oak) **
<i>Quercus palustris</i>	(pin oak) **

Shrubs

<i>Amelanchier canadensis</i>	(Shadbush) **
<i>Aronia arbutifolia</i>	(Red chokeberry)**
<i>Aronia melanocarpa</i>	(Black chokeberry)**
<i>Cephalanthus occidentalis</i>	(Buttonbush)**
<i>Clethra alnifolia</i>	(Sweet pepperbush)
<i>Lindera benzoin</i>	(Spicebush)**
<i>Myrica pensylvanica</i>	(Bayberry)
<i>Sambucus canadensis</i>	(Common elderberry)**
<i>Vaccinium corymbosum</i>	(Highbush blueberry)**
<i>Viburnum dentatum</i>	(Northern arrowwood) **

Herbaceous plants

<i>Acorus calamus</i>	(Sweetflag)**
<i>Distichlis spicata</i>	(Spike grass)
<i>Iris versicolor</i>	(Blueflag iris)**
<i>Peltandra virginica</i>	(Arrowarum)**
<i>Panicum virgatum</i>	(Switchgrass)**
<i>Pontederia cordata</i>	(Pickerelweed) **
<i>Scirpus acutus</i>	(Hard-stem bulrush)**
<i>Scirpus pungens</i>	(Three-square bulrush)
<i>Scirpus valid us</i>	(Soft-stem bulrush)**
<i>Scirpus robustus</i>	(Saltmarsh bulrush)
<i>Spartina alterniflora</i>	(Smooth cordgrass)
<i>Spartina patens</i>	(Saltmeadow cordgrass)
<i>Typha angustifolia</i>	(Narrow-leaf cattail)**
<i>Vallisneria americana</i>	(Wild celery) **

** These less salt tolerant species would be appropriate for road side plantings where winter salt run-off may effect plantings.

Wetland Cross-Section

