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Site 1120: Buffalo County, Township 24N, Range 12W, Section 18; Township 24N, Range 12W, Section 19. 1949

[s.l.]: [s.n.], 1949

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Stand No: **20** Name: _____
 County: *Buffalo* T: *24N* R: *12W* Sec: *19* Locality: *Center Township*
 Date: *July 22* Observers: *Brown - Auden*
 Size of Stand: *approx 25 acres* Size of Area Sampled: *25 acres*
 Forest Type: *Oak - Hickory* Soil Type: _____
 Topography: *west-facing slope -*
 Condition of Stand:

*ungrazed -
 very little cutting -
 rather steep west facing slope -*

Open Grown Trees:

Stumps:

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

Soil

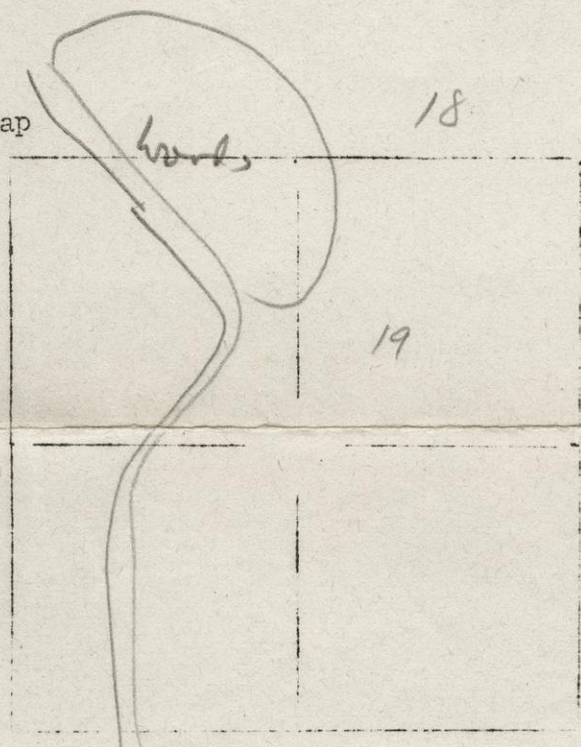
Sample No:	pH	N	P	K	Colloids	Vol/wt	WHC
A ₀ _____	—	—	—	—	—	—	—
A ₁ _____	—	—	—	—	—	—	—
A ₂ _____	—	—	—	—	—	—	—
Depth	Characteristics (Color, texture, etc.)						

A₀ *hwe*
 A₁ } *approx 2-3" hillside -*
 A₂ }
 B _____

Parent Material:

Remarks:

Map



782

1120 ✓

337

39

56

359

253

945

397

24

2386

Tree	#	#	Size Cl. sq. in.	#	#	F. %	F. %	D. %	Dom %	D F D	CI
	Pts.	Tr.	-80: -320: 321: Dom.	Sap.	Seed.	Seed.	Tr.	Tr.	Tr.	Index	
Acer rubrum											
A. sacchar.											
Carya cord.											
25 C. ovata	10	14	$\frac{16}{334}$ $\frac{4}{415}$	779	4		139	175	13.7	45.0	112
Fagus gran.											
Fraxinus am											
F. penn.											
Juglans cin											
J. nigra											
Ostrya vir.											
Populus gr.											
25 P. tremuloi	1	2	$\frac{1}{12}$ $\frac{1}{105}$	117			1.4	2.5	2.1	6.0	6
5.0 Prunus sero	2	2	$\frac{2}{120}$	120			2.8	2.5	2.2	7.3	26
32.5 Quercus al.	13	13	$\frac{13}{586}$	586	1		18.0	16.25	10.7	44.9	180
27.5 Q. macrocar	11	12	$\frac{10}{372}$ $\frac{2}{280}$	652			15.3	15.0	11.9	42.2	42
55.0 Q. rubra	22	22	$\frac{13}{198}$ $\frac{9}{1295}$	1993			30.5	27.5	36.5	94.5	567
30.0 Q. velutina	12	14	$\frac{10}{562}$ $\frac{4}{625}$	1237			16.6	17.5	22.7	56.8	114
Tilia amer.											
Ulmus amer.											
U. fulva											
Crataegus					1						
2.5 Betula papy	1	1	$\frac{1}{50}$	50			1.4	1.25	.9	3.5	5
Totals	80	66	$\frac{20}{2684}$ $\frac{20}{2770}$	5454	6		✓	✓	✓	✓	1052 ✓

Total Length of
Transect. 619.5'Total Area of
Transect. 4088.7 sq ftAve. Dist. Btw'n
Trees 15.5'

Saplings/unit area

Ave. BA (Total BA: 80)
68.2 sq in.No. Trees/acre
209

Dom./acre

14,254 sq in.

CI = 1052

	Sap.	12- 19	20- 28	29- 38	39- 50	51- 63	64- 78	79- 95	96- 113	114- 132	133- 153	154- 176	177- 201	202- 254	255- 314	315- 380	381- 452	
1120 - Buffalo																		
Pop. trem.		1							1									2
Crataegus Quercus ellip.	1																	
Q. macrocarp.		2	3	2		1	1	1		1								11
Q. velut.			1	1	1	3	3	2			2	1			1			15
Prun. serot.						1	1											2
Querc. alba	1	2	3	1	1	2	3	1										13
Pop. grand.																		
Carya ovata	4	3		2	4	1		2		2								14
Betula papyrifera					1													1
Querc. rubra		1	1	1	2	3	3	5	2	1		1			2			22
Juglans nig.																		
Frax. amer.																		
Acer rubrum																		
Tilia amer.																		
Jug. cinerea																		
Ulmus amer.																		
Celtis occ.																		
Ulm. rubra																		
Carya cord.																		
Ostrya virg.																		
Acer sacc.																		
	6																	80
Ave Dist between trees	15.5																	
Ave BA	68.2																	
Trees/acre	209																	
Dom/acre	14,254																	

{ Steep w. slp
Little cutting

III Hardwood Survey

Station Record-Trees

Stand No. 4720

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	255	
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol.			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	14		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance:		11 ft
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol.			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	12, 85		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance:		12 ft
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina	22	
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol.			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	30		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance:		9 1/2
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	14	
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	24	
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol.			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance:		16 1/2 ft

III Hardwood Survey

Station Record-Trees

Stand No. 1120

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa — 35		
Betula lutea			J. nigra			Q. rubra — 90		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance: — 13 ft		
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba — 35		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra — 275		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance: — 24 ft		
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra — 80 — 55		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance: — 9.5 ft		
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa — 65		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina — 16.5		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina			Distance: — 19 1/2 ft		

III Hardwood Survey

Station Record-Trees

Stand No. 20

18

20

22

24

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	13	
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus delto			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	40		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					
						Distance:	10 ft.	
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	65	
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Jugland cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	70	
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus delto			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					
						Distance:	13 1/2	
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	55	
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus delto			Robinia pseudo		
Carpinis carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	40		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					
						Distance:	14 ft.	
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	26	
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus delto			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	120		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					
						Distance:	19 1/2	

III Hardwood Survey

Station Record-Trees

Stand No.

21200

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	—	55, 26
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

12 ft.

Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Jugland cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	—	55
B. nigra			Ostrya virgin.			Q. velutina	—	55
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	—	40	Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

13 ft.

Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa	—	55
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina	—	140
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

9 1/2 ft

Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina	—	35, 300
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

13 ft

III Hardwood Survey Station Record-Trees Stand No.

34

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	— 50	
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa	— 25	
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 8 ft.

36

Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Jugland cinere			Q. macrocarpa	— 115"	
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera	— 50'		Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 23 ft.

38

Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa	— 24', 32"	
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 22 ft.

40

Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides	12" 105'		Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 17 ft.

Tree	BA	S	Tree	BA	S	Tree	DA	S
✓Acer negundo			Fagus grandif.			✓Prunus virgin.		
A. rubrum			Fraxinus amer.			✓Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			✓Q. macrocarpa		
Betula lutea			J. nigra			✓Q. rubra		
B. nigra			Ostrya virgin.			✓Q. velutina		
✓B. papyrifera			✓Populus deltoi			Robinia pseudo		
Carpinus carol			✓P. grandident.			Sorbus americ.		
Carya cordifor			✓P. tremuloides			✓Tilia american		
✓C. ovata			✓Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			✓U. fulva		
✓Crataegus sp.			✓P. serotina					

Distance:

Shrubs & Herbs		
✓Actaea sp. <i>rubra</i>	✓Eupatorium purpur.	✓Polygonatum commut.
✓Adiantum pedat.	Eupatorium rugosum	Polygonatum pubesc.
✓Agrimonia gryp.	Festuca obtusa	Polygonum virgin.
Allium tricocc.	✓Fragaria virgin.	Potentilla simpl.
✓Amphicarpa brac.	Galium aparine	✓Prenanthes alba
✓Anemone quinque.	G. circaezans	✓Pteridium aquil.
A. virginiana	G. concinnum	Pyrola elliptica
Anemonella thal.	G. lanceolatum	✓Ranunculus abort.
Antennaria sp.	✓G. triflorum	R. recurvatus
Aplectrum hiem.	✓Geranium macul.	R. septentrion.
✓Apocynum andros.	Geum canadense	✓Rhus radicans
✓Aquilegia canad.	Goodyera pubesc.	Ribes americanum
✓Aralia nudicaul.	Habenaria bract.	R. cynosbati
✓A. racemosa	Hamamelis virg.	R. missouriense
Arenaria later.	✓Helianthus strum.	✓Rosa sp.
Arisaema atrov.	Hepatica acutil.	✓Rubus alleghen.
Asarum canad.	Heuchera richard.	R. occidentalis
✓Aster macrophyll.	Hydrastis canad.	✓R. strigosus
✓A. sagittifolius ?	Hydrophyllum virg.	Sambucus canad.
A. shortii	✓Hystrix patula	✓Sanguinaria can.
✓Athyrium angust.	Impatiens biflora	✓Sanicula gregaria
Aureolaria grandif.	I. pallida	S. marilandica
✓Botrychium vir.	Isopyrum bitern.	✓Smilacina racemosa
Brachyelytrum	✓Lactuca spicata	✓S. stellata
Campanula amer.	Laportea canad.	✓Smilax ecirrhata
✓Carex albursina	Lapoula virgin.	✓S. herbacea
✓C. pennsylvan. ?	Lathyrus ochrol.	✓S. hispida
Caulophyllum thal.	Lonicera proclif.	✓Solidago altissima
✓Celastrus scan.	Lysimachia quadr.	S. latifolia
Circaea latif.	Maianthemum can.	✓S. ulmifolia
Claytonia virg.	Menispermum can.	✓Thalictrum dioicum
Cornus altern.	✓Mitella diphylla	Trillium cernuum
✓C. femina	✓Monarda fistulosa	T. flexipes
✓C. rugosa	Orchis spectab.	T. grandiflorum
✓Corylus americana	Gryzopsis racem.	T. recurvatum
Cryptotaenia canad.	✓Osmorhiza clayton.	Triosteum perfoliatum
Cypripedium pubesc.	O. longistylis	✓Uvularia grandiflora
Cystopteris frag.	Osmunda clayton.	✓Veronicastrum virg.
Dentaria laciniata	Panax quinquef.	Viburnum acerifolium
✓Desmodium acumin.	✓Panicum latifolium	V. affine
✓D. nudiflorum	Parietaria pennsylv.	✓Viola cucullata
Dicentra cucullaria	✓Parthenocissus vit.	V. pubescens
Dodecatheon meadia	Phlox divaricata	✓Vitis aestivalis
Dryopteris spinulosa	✓Phryma leptostachya	✓V. riparia
Erigeron pulchellus	Podophyllum pelt.	✓Zanthoxylum americ.
Erythronium albidum	Polemonium reptans	✓Zizia aurea

1120

Agastache scrophul.
 Allium canadense
 ✓ Amorpha canesc.
 Anaphalis marg.
 Anemone cylindrica
 Arabis canadensis
 A. laevigata
 A. lyrata
 A. perstellata
 Aralia hispida
 Arisaema dracont.
 Asclepias ovalif.
 ✓ A. phytolaccoides
 Aster azureus
 A. paniculatus
 A. prenanthoides
 Athyrium thelypter.
 Besseyia bullii
 Boehmeria cylindr.
 Botrychium multif.
 ✓ Bromus burgans
 Camptosorus rhizop.
 Carex convoluta
 ✓ Ceanothus americ.
 Chimaphila umbell.
 Cirsium altissim.
 Clematis virgin.
 Clintonia boreal.
 Comandra umbellata
 Conopholis americ.
 Corallorrhiza mac.
 Corydalis semperv.
 Cynoglossum offic.
 Cystopteris bulbif.
 Desmodium bracteos.
 D. canadense
 Dicentra canad.
 ✓ Diervilla lonicera
 ✓ Dioscorea villosa
 Dirca palustris
 Elymus villosus
 Epifagus virgin.

Erigeron philadel.
 Erythronium americ.
 Evonymus atropur.
 Floerkea proserp.
 Fragaria vesca
 ✓ Galium boreale
 Gaultheria procumb.
 Gaylussacia baccata
 Gentiana quinquef.
 Geum virginianum
 Hedeoma hispida
 Hepatica americana
 Heracleum lanatum
 Hieracium canad.
 H. scabrum
 Hydrophyllum append.
 Hypoxis hirsuta
 Ilex verticillata
 Juncus tenuis
 Juniperus communis
 J. virginiana
 Krigia biflora
 Lathyrus venosus
 Lilium philadel.
 Liparis liliifolia
 Lobelia cardinalis
 ✓ Lonicera dioica
 L. hirsuta
 Luzula acuminata
 L. Multiflora
 Milium effusum
 Mitchellia repens
 Monotropa uniflora
 Onoclea sensibilis
 Oryzopsis asperif.
 Osmunda cinnamomea
 ✓ Oxalis violacea
 Panax trifolium
 Paronychia canad.
 ✓ Pedicularis canad.
 Physocarpus opul.
 Phytolacca decand.

Pilea pumila
 Polymnia canad.
 Polypodium vulgare
 Prunella vulgaris
 Pteretis nodulosa
 Pyrus coronaria
 P. ioensis
 Ranunculus fascicul.
 R. rhomboideus
 ✓ Rhus glabra
 ✓ R. typhina
 Rubus hispidus
 R. pubescens
 Rudbeckia laciniata
 Salix sp.
 Sambucus pubens
 Saxifraga pennsylv.
 ✓ Scrophularia lan.
 S. marilandica
 Senecio balsamitae
 Silene stellata
 Solanum nigrum
 Solidago speciosa
 Staphylea trifolia
 Steironema ciliatum
 S. lanceolatum
 Streptopus roseus
 Symplocarpus foet.
 ✓ Taenidia integerr.
 Taxus canadensis
 Thalictrum dasycarp.
 Thaspium aureum
 Tradescantia ohio.
 Uvularia sessilif.
 Vaccinium canad.
 Veronica serpyllif.
 Viburnum lentago
 V. trilobum
 Vicia americana
 Viola conspersa
 V. incognita

Additional Species:

✓ *Ratibida*
 ✓ *Gynandria conollata*

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba -22		1
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			✓Tilia american		
✓C. ovata 45			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			✓U. fulva		
✓Crataegus sp.			P. serotina					

Distance: 12.5 ft

Tree	BA	S	Tree	BA	S	Tree	BA	S
Actaea sp.			Shrubs & Herbs			Polygonatum commut.		
Adiantum pedat.			Eupatorium purpur.			Polygonatum pubesc.		
Agrimonia gryp.			Eupatorium rugosum			Polygonum virgin.		
Allium tricocc.			Festuca obtusa			Potentilla simpl.		
Amphicarpa brac.			Fragaria virgin.			Prenanthes alba		
Anemone quinque.			Galium aparine			Pteridium aquil.		
A. virginiana			G. circaeans			Pyrola elliptica		
Anemonella thal.			G. concinnum			Ranunculus abort.		
Antennaria sp.			G. lanceolatum			R. recurvatus		
Aplectrum hiem.			G. triflorum			R. septentrion.		
Apocynum andros.			Geranium macul.			Rhus radicans		
Aquilegia canad.			Geum canadense			Ribes americanum		
Aralia nudicaul.			Goodyera pubesc.			R. cynosbati		
A. racemosa			Habenaria bract.			R. missouriense		
Arenaria later.			Hamamelis virg.			Rosa sp.		
Arisaema atrov.			✓Helianthus strum.			Rubus alleghen.		
Asarum canad.			Hepatica acutil.			R. occidentalis		
✓Aster macrophyll.			Heuchera richard.			R. strigosus		
A. sagittifolius			Hydrastis canad.			Sambucus canad.		
A. shortii			Hydrophyllum virg.			Sanguinaria can.		
Athyrium angust.			Hystrix patula			✓Sanicula gregaria		
Aureolaria grandif.			Impatiens biflora			S. marilandica		
Botrychium vir.			I. pallida			✓Smilacina racemosa		
Brachyelytrum			Isopyrum bitern.			S. stellata		
Campanula amer.			Lactuca spicata			Smilax ecirrhata		
Carex albursina			Laportea canad.			✓S. herbacea		
✓C. pennsylvan.			Lapoula virgin.			S. hispida		
Caulophyllum thal.			Lathyrus ochrol.			Solidago altissima		
✓Celastrus scan.			Lonicera prolif.			S. latifolia		
Circaea latif.			Lysimachia quadr.			S. ulmifolia		
Claytonia virg.			Maianthemum can.			Thalictrum dioicum		
Cornus altern.			Menispermum can.			Trillium cernuum		
C. femina			Mitella diphylla			T. flexipes		
C. rugosa			Monarda fistulosa			T. grandiflorum		
Corylus americana			Orchis spectab.			T. recurvatum		
Cryptotaenia canad.			Oryzopsis racem.			Triosteum perfoliatum		
Cypripedium pubesc.			Osmorhiza clayton.			✓T. grandiflora		
Cystopteris frag.			C. longistylis			Veronicastrum virg.		
Dentaria laciniata			Osmunda clayton.			Viburnum acerifolium		
Desmodium acumin.			Panax quinquef.			V. affine		
D. nudiflorum			✓Panicum latifolium			Viola cucullata		
Dicentra cucullaria			Parietaria pennsylv.			V. pubescens		
Dodecatheon meadia			Parthenocissus vit.			✓Vitis aestivalis		
Dryopteris spinulosa			Phlox divaricata			V. riparia		
Erigeron pulchellus			Phryma leptostachya			✓Zanthoxylum americ.		
Erythronium albidum			Podophyllum pelt.			Zizia aurea		
			Polemonium reptans					

✓g boreale
✓Sis. arca

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra — 65		
B. nigra			Ostrya virgin.			Q. velutina — 140		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 ✓ Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atrop.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 ✓ Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 C. femina
 C. rugosa
 Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs
 Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaeazans
 G. concinnum
 G. lanceolatum
 G. triflorum
 Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 ✓ Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lapoula virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 ✓ Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 ✓ Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Ixularia grandiflora
 Veronicastrium virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

✓ Ag boreale
 ✓ Brainerd pines

Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra — 40		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata — 35"			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 21 ft

Shrubs & Herbs	
Actaea sp.	Polygonatum commut.
Adiantum pedat.	Polygonatum pubesc.
Agrimonia gryp.	Polygonum virgin.
Allium tricocc.	Potentilla simpl.
Amphicarpa brac.	Prenanthes alba
Anemone quinque.	Pteridium aquil.
A. virginiana	Pyrola elliptica
Anemonella thal.	Ranunculus abort.
Antennaria sp.	R. recurvatus
Aplectrum hiem.	R. septentrion.
Apocynum andros.	Rhus radicans
Aquilegia canad.	Ribes americanum
Aralia nudicaul.	R. cynosbati
A. racemosa	R. missouriense
Arenaria later.	Rosa sp.
Arisaema atror.	Rubus alleghen.
Asarum canad.	R. occidentalis
Aster macrophyll.	R. strigosus
A. sagittifolius	Sambucus canad.
A. shortii	Sanguinaria can.
Athyrium angust.	Sanicula gregaria
Aureolaria grandif.	S. marilandica
Botrychium vir.	Smilacina racemosa
Brachyelytrum	S. stellata
Campanula amer.	Smilax ecirrhata
Carex albursina	S. herbacea
C. pennsylvan.	S. hispida
Caulophyllum thal.	Solidago altissima
Celastrus scan.	S. latifolia
Circaea latif.	S. ulmifolia
Claytonia virg.	Thalictrum dioicum
Cornus altern.	Trillium cernuum
C. femina	T. flexipes
C. rugosa	T. grandiflorum
Corylus americana	T. recurvatum
Cryptotaenia canad.	Triosteum perfoliatum
Cypripedium pubesc.	Wularia grandiflora
Cystopteris frag.	Veronicastrum virg.
Dentaria laciniata	Viburnum acerifolium
Desmodium acumin.	V. affine
D. nudiflorum	Viola cucullata
Dicentra cucullaria	V. pubescens
Dodecatheon meadia	Vitis aestivalis
Dryopteris spinulosa	V. riparia
Erigeron pulchellus	Zanthoxylum americ.
Erythronium albidum	Zizia aurea

✓ Diervilla
✓ G. boreale

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra — 70, 50		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 7 ft

Shrubs & Herbs

Actaea sp.	Eupatorium purpur.	Polygonatum commut.
Adiantum pedat.	Eupatorium rugosum	Polygonatum pubesc.
Agrimonia gryp.	Festuca obtusa	Polygonum virgin.
Allium tricocc.	Fragaria virgin.	Potentilla simpl.
Amphicarpa brac.	Galium aparine	Prenanthes alba
Anemone quinque.	G. circaezans	Pteridium aquil.
A. virginiana	G. concinnum	Pyrola elliptica
Anemonella thal.	G. lanceolatum	Ranunculus abort.
Antennaria sp.	G. triflorum	R. recurvatus
Aplectrum hiem.	Geranium macul.	R. septentrion.
Apocynum andros.	Geum canadense	Rhus radicans
Aquilegia canad.	Goodyera pubesc.	Ribes americanum
Aralia nudicaul.	Habenaria bract.	R. cynosbati
A. racemosa	Hamamelis virg.	R. missouriense
Arenaria later.	Helianthus strum.	Rosa sp.
Arisaema atror.	Hepatica acutil.	Rubus alleghen.
Asarum canad.	Heuchera richard.	R. occidentalis
Aster macrophyll.	Hydrastis canad.	R. strigosus
✓ A. sagittifolius ?	Hydrophyllum virg.	Sambucus canad.
A. shortii	Hystrix patula	Sanguinaria can.
Athyrium angust.	Impatiens biflora	✓ Sanicula gregaria
Aureolaria grandif.	I. pallida	S. marilandica
Botrychium vir.	Isopyrum bitern.	Smilacina racemosa
Brachyelytrum	Lactuca spicata	S. stellata
Campanula amer.	Lamortea canad.	Smilax ecirrhata
Carex albursina	Lappula virgin.	S. herbacea
C. pennsylvan.	Lathyrus ochrol.	S. hispida
Caulophyllum thal.	Lonicera proclif.	Solidago altissima
Celastrus scan.	Lysimachia quadr.	S. latifolia
Circaea latif.	Maianthemum can.	S. ulmifolia
Claytonia virg.	Menispermum can.	Thalictrum dioicum
Cornus altern.	Mitella diphylla	Trillium cernuum
✓ C. femina	Monarda fistulosa	T. flexipes
C. rugosa	Orchis spectab.	T. grandiflorum
Corylus americana	Oryzopsis racem.	T. recurvatum
Cryptotaenia canad.	Osmorhiza clayton.	Triosteum perfoliatum
Cypripedium pubesc.	O. longistylis	Uvularia grandiflora
Cystopteris frag.	Osmunda clayton.	Veronicastrum virg.
Dentaria laciniata	Panax quinquef.	Viburnum acerifolium
✓ Desmodium acumin.	Panicum latifolium	V. affine
✓ D. nudiflorum	Parietaria pennsylv.	Viola cucullata
Dicentra cucullaria	✓ Parthenocissus vit.	V. pubescens
Dodecatheon meadia	Phlox divaricata	Vitis aestivalis
Dryopteris spinulosa	Phryma leptostachya	V. riparia
Erigeron pulchellus	Podophyllum pelt.	Zanthoxylum americ.
Erythronium albidum	Polemonium reptans	Zizia aurea

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa — 80		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata — 95			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

13.5 ft

Distance:

			Shrubs & Herbs					
Actaea sp.			Eupatorium purpur.			Polygonatum commut.		
Adiantum pedat.			Eupatorium rugosum			Polygonatum pubesc.		
Agrimonia gryp.			Festuca obtusa			Polygonum virgin.		
Allium tricocc.			Fragaria virgin.			Potentilla simpl.		
Amphicarpa brac.			Galium aparine			Prenanthes alba		
Anemone quinque.			G. circaezans			Pteridium aquil.		
A. virginiana			G. concinnum			Pyrola elliptica		
Anemonella thal.			G. lanceolatum			Ranunculus abort.		
Antennaria sp.			G. triflorum			R. recurvatus		
Aplectrum hiem.			Geranium macul.			R. septentrion.		
Apocynum andros.			Geum canadense			Rhus radicans		
Aquilegia canad.			Goodyera pubesc.			Ribes americanum		
Aralia nudicaul.			Habenaria bract.			R. cynosbati		
A. racemosa			Hamamelis virg.			R. missouriense		
Arenaria later.			Helianthus strum.			Rosa sp.		
Arisaema atror.			Hepatica acutil.			Rubus alleghen.		
Asarum canad.			Heuchera richard.			R. occidentalis		
Aster macrophyll.			Hydrastis canad.			R. strigosus		
A. sagittifolius			Hydrophyllum virg.			Sambucus canad.		
A. shortii			Hystrix patula			Sanguinaria can.		
Athyrium angust.			Impatiens biflora			Sanicula gregaria		
Aureolaria grandif.			I. pallida			S. marilandica		
Botrychium vir.			Isopyrum bitern.			Smilacina racemosa		
Brachyelytrum			Lactuca spicata			S. stellata		
Campanula amer.			Laportea canad.			Smilax ecirrhata		
Carex albursina			Lappula virgin.			S. herbacea		
C. pennsylvan.			Lathyrus ochrol.			S. hispida		
Caulophyllum thal.			Lonicera prolif.			Solidago altissima		
Celastrus scan.			Lysimachia quadr.			S. latifolia		
Circaea latif.			Maianthemum can.			S. ulmifolia		
Claytonia virg.			Menispermum can.			Thalictrum dioicum		
Cornus altern.			Mitella diphylla			Trillium cernuum		
C. femina			Monarda fistulosa			T. flexipes		
C. rugosa			Orchis spectab.			T. grandiflorum		
Corylus americana			Oryzopsis racem.			T. recurvatum		
Cryptotaenia canad.			Osmorhiza clayton.			Triosteum perfoliatum		
Cypripedium pubesc.			O. longistylis			Uvularia grandiflora		
Cystopteris frag.			Osmunda clayton.			Veronicastrum virg.		
Dentaria laciniata			Panax quinquef.			Viburnum acerifolium		
Desmodium acumin.			Panicum latifolium			V. affine		
D. nudiflorum			Parietaria pennsylv.			Viola cucullata		
Dicentra cucullaria			Parthenocissus vit.			V. pubescens		
Dodecatheon meadia			Phlox divaricata			Vitis aestivalis		
Dryopteris spinulosa			Phryma leptostachya			V. riparia		
Erigeron pulchellus			Podophyllum pelt.			Zanthoxylum americ.		
Erythronium albidum			Polemonium reptans			Zizia aurea		

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	30	
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	115		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

13.5 ft

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atrov.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 C. femina
 C. rugosa
 Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lappula virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsyl.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

G. boreale

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			✓ Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra — 60		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina — 65					

Distance: 25 ft

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atrov.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 ✓ C. pennsylvan.
 Caulophyllum thal.
 ✓ Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 C. femina
 C. rugosa
 Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 ✓ Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 ✓ Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lapoula virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Cryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 ✓ S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

✓ L. lucida

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		1
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	55	
B. nigra			Ostrya virgin.			Q. velutina	80	
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atrop.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 C. femina
 C. rugosa
 Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Lapeetea canad.
 Lappula virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

✓ G. boreale
 ✓ Dioscorea

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	14"	
B. nigra			Ostrya virgin.			Q. velutina	20	
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 14 ft

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 ✓ Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atror.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 ✓ C. femina
 C. rugosa
 ✓ Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lapoula virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 ✓ Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 ✓ Uvularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 ✓ Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra — 100'		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata — 60"		3	Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 20.5

Actaea sp.
 Adiantum pedat.
 ✓ Agrimonia gryp.
 Allium tricocc.
 ✓ Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atrov.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 ✓ Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 C. femina
 C. rugosa
 Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 ✓ Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Gallium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lapula virgin.
 Lathyrus ochrol.
 Lonicera proclif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsyl.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 ✓ Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 ✓ Trivularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 ✓ Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

✓ 19
 ✓ 100' 100'
 ✓ 100' 100'
 ✓ 100' 100'

Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	175	
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata	18"		Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

18 ft

			Shrubs & Herbs					
Actaea sp.			Eupatorium purpur.			Polygonatum commut.		
Adiantum pedat.			Eupatorium rugosum			Polygonatum pubesc.		
Agrimonia gryp.			Festuca obtusa			Polygonum virgin.		
Allium tricocc.			Fragaria virgin.			Potentilla simpl.		
Amphicarpa brac.			Galium aparine			✓ Prenanthes alba		
Anemone quinque.			G. circaezans			Pteridium aquil.		
A. virginiana			G. concinnum			Pyrola elliptica		
Anemonella thal.			G. lanceolatum			Ranunculus abort.		
Antennaria sp.			G. triflorum			R. recurvatus		
Aplectrum hiem.			Geranium macul.			R. septentrion.		
Apocynum andros.			Geum canadense			Rhus radicans		
Aquilegia canad.			Goodyera pubesc.			Ribes americanum		
Aralia nudicaul.			Habenaria bract.			R. cynosbati		
A. racemosa			Hamamelis virg.			R. missouriense		
Arenaria later.			✓ Helianthus strum.			Rosa sp.		
Arisaema atrov.			Hepatica acutil.			Rubus alleghen.		
Asarum canad.			Heuchera richard.			R. occidentalis		
✓ Aster macrophyll.			Hydrastis canad.			R. strigosus		
A. sagittifolius			Hydrophyllum virg.			Sambucus canad.		
A. shortii			Hystrix patula			Sanguinaria can.		
Athyrium angust.			Impatiens biflora			Sanicula gregaria		
Aureolaria grandif.			I. pallida			S. marilandica		
Botrychium vir.			Isopyrum bitern.			Smilacina racemosa		
Brachyelytrum			Lactuca spicata			S. stellata		
Campanula amer.			Laportea canad.			Smilax ecirrhata		
Carex albursina			Lappula virgin.			S. herbacea		
C. pennsylvan.			Lathyrus ochrol.			S. hispida		
Caulophyllum thal.			Lonicera proclif.			Solidago altissima		
✓ Celastrus scan.			Lysimachia quadr.			S. latifolia		
Circaea latif.			Maianthemum can.			S. ulmifolia		
Claytonia virg.			Menispermum can.			Thalictrum dioicum		
Cornus altern.			Mitella diphylla			Trillium cernuum		
C. femina			Monarda fistulosa			T. flexipes		
C. rugosa			Orchis spectab.			T. grandiflorum		
Corylus americana			Oryzopsis racem.			T. recurvatum		
Cryptotaenia canad.			Osmorhiza clayton.			Triosteum perfoliatum		
Cypripedium pubesc.			O. longistylis			Uvularia grandiflora		
Cystopteris frag.			Osmunda clayton.			Veronicastrum virg.		
Dentaria laciniata			Panax quinquef.			Viburnum acerifolium		
Desmodium acumin.			Panicum latifolium			V. affine		
D. nudiflorum			Parietaria pennsylv.			Viola cucullata		
Dicentra cucullaria			Parthenocissus vit.			V. pubescens		
Dodecatheon meadia			Phlox divaricata			✓ Vitis aestivalis		
Dryopteris spinulosa			✓ Phryma leptostachya			V. riparia		
Erigeron pulchellus			Podophyllum pelt.			Zanthoxylum americ.		
Erythronium albidum			Polemonium reptans			Zizia aurea		

Tree			Tree			Tree		
: BA	: S	:	: BA	: S	:	: BA	: S	:
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	100", 60"	
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atrop.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 ✓ Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 ✓ C. femina
 C. rugosa
 ✓ Corylus americana
 Cryptotaenia canad.
 Cypridium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 ✓ Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 ✓ Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lapoula virgin.
 Lathyrus ochrol.
 Lonicera proclif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 ✓ Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 ✓ Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 ✓ S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 ✓ Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

✓ Asclepias syriaca

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba — 75		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina — 53		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			✓ P. tremuloides			Tilia american		
✓ C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			✓ U. fulva		
Crataegus sp.			P. serotina					

Distance: 10 ft

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atror.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 C. femina
 C. rugosa
 Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaeazans
 G. concinnum
 G. lanceolatum
 G. triflorum
 ✓ Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 ✓ Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lapoula virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 ✓ Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 ✓ Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 ✓ Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba — 80		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
✓ Crataegus sp.			P. serotina — 55					

Distance:

1/8

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atror.
 Asarum canad.
 Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 C. pennsylvan.
 Caulophyllum thal.
 Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 C. femina
 C. rugosa
 Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 ✓ Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Laportea canad.
 Lapolla virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 ✓ Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 ✓ Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Trivularia grandiflora
 Veronicastrium virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

Tree : BA : S : Tree : BA : S : Tree : BA : S

Acer negundo
A. rubrum
A. saccharinum
A. saccharum
Amelanchier sp.
Betula lutea
B. nigra
B. papyrifera
Carpinus carol
Carya cordifor
C. ovata
Celtis occiden
Crataegus sp.

Fagus grandif.
Fraxinus amer.
F. nigra
F. pennsylvan.
Juglans cinere
J. nigra
Ostrya virgin.
Populus deltoi
P. grandident.
P. tremuloides
Prunus americ.
P. pennsylvan.
P. serotina

Prunus virgin.
Quercus alba
Q. bicolor
Q. ellipsoid.
Q. macrocarpa
Q. rubra
Q. velutina
Robinia pseudo
Sorbus americ.
Tilia american
Ulmus american
U. fulva

80"
75"

Distance:

175

Actaea sp.
Adiantum pedat.
Agrimonia gryp.
Allium tricocc.
Amphicarpa brac.
Anemone quinque.
A. virginiana
Anemonella thal.
Antennaria sp.
Aplectrum hiem.
Apocynum andros.
Aquilegia canad.
Aralia nudicaul.
A. racemosa
Arenaria later.
Arisaema atror.
Asarum canad.
Aster macrophyll.
A. sagittifolius
A. shortii
Athyrium angust.
Aureolaria grandif.
Botrychium vir.
Brachyelytrum
Campanula amer.
Carex albursina
C. pennsylvan.
Caulophyllum thal.
✓Celastrus scan.
Circaea latif.
Claytonia virg.
Cornus altern.
C. femina
✓C. rugosa
✓Corylus americana
Cryptotaenia canad.
Cypripedium pubesc.
Cystopteris frag.
Dentaria laciniata
Desmodium acumin.
✓D. nudiflorum
Dicentra cucullaria
Dodecatheon meadia
Dryopteris spinulosa
Erigeron pulchellus
Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
Eupatorium rugosum
Festuca obtusa
Fragaria virgin.
Galium aparine
G. circaezans
G. concinnum
G. lanceolatum
G. triflorum
Geranium macul.
Geum canadense
Goodyera pubesc.
Habenaria bract.
Hamamelis virg.
Helianthus strum.
Hepatica acutil.
Heuchera richard.
Hydrastis canad.
Hydrophyllum virg.
Hystrix patula
Impatiens biflora
I. pallida
Isopyrum bitern.
Lactuca spicata
Laportea canad.
Lapoula virgin.
Lathyrus ochrol.
Lonicera prolif.
Lysimachia quadr.
Maianthemum can.
Menispermum can.
Mitella diphylla
Monarda fistulosa
Orchis spectab.
Oryzopsis racem.
Osmorhiza clayton.
O. longistylis
Osmunda clayton.
Panax quinquef.
Panicum latifolium
Parietaria pennsylv.
Parthenocissus vit.
Phlox divaricata
Phryma leptostachya
Podophyllum pelt.
Polemonium reptans

Polygonatum commut.
Polygonatum pubesc.
Polygonum virgin.
Potentilla simpl.
Prenanthes alba
Pteridium aquil.
Pyrola elliptica
Ranunculus abort.
R. recurvatus
R. septentrion.
Rhus radicans
Ribes americanum
R. cynosbati
R. missouriense
Rosa sp.
Rubus alleghen.
R. occidentalis
R. strigosus
Sambucus canad.
Sanguinaria can.
Sanicula gregaria
S. marilandica
Smilacina racemosa
S. stellata
Smilax ecirrhata
S. herbacea
S. hispida
Solidago altissima
S. latifolia
S. ulmifolia
Thalictrum dioicum
Trillium cernuum
T. flexipes
T. grandiflorum
T. recurvatum
Triosteum perfoliatum
Uvularia grandiflora
Veronicastrum virg.
Viburnum acerifolium
V. affine
Viola cucullata
V. pubescens
Vitis aestivalis
V. riparia
Zanthoxylum americ.
Zizia aurea

✓Dierella

Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.	18"	
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina	65"	
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 22 ft.

			Shrubs & Herbs					
Actaea sp.			Eupatorium purpur.			Polygonatum commut.		
Adiantum pedat.			Eupatorium rugosum			Polygonatum pubesc.		
Agrimonia gryp.			Festuca obtusa			Polygonum virgin.		
Allium tricocc.			Fragaria virgin.			Potentilla simpl.		
Amphicarpa brac.			Galium aparine			Prenanthes alba		
Anemone quinque.			G. circaezans			Pteridium aquil.		
A. virginiana			G. concinnum			Pyrola elliptica		
Anemonella thal.			G. lanceolatum			Ranunculus abort.		
Antennaria sp.			G. triflorum			R. recurvatus		
Aplectrum hiem.			Geranium macul.			R. septentrion.		
Apocynum andros.			Geum canadense			Rhus radicans		
Aquilegia canad.			Goodyera pubesc.			Ribes americanum		
Aralia nudicaul.			Habenaria bract.			R. cynosbati		
A. racemosa			Hamamelis virg.			R. missouriense		
Arenaria later.			Helianthus strum.			Rosa sp.		
Arisaema atrop.			Hepatica acutil.			Rubus alleghen.		
Asarum canad.			Heuchera richard.			R. occidentalis		
Aster macrophyll.			Hydrastis canad.			R. strigosus		
A. sagittifolius			Hydrophyllum virg.			Sambucus canad.		
A. shortii			Hystrix patula			Sanguinaria can.		
Athyrium angust.			Impatiens biflora			Sanicula gregaria		
Aureolaria grandif.			I. pallida			S. marilandica		
Botrychium vir.			Isopyrum bitern.			Smilacina racemosa		
Brachyelytrum			Lactuca spicata			S. stellata		
Campanula amer.			Laportea canad.			Smilax ecirrhata		
Carex albursina			Lapoula virgin.			S. herbacea		
✓ C. pennsylvan.			Lathyrus ochrol.			S. hispida		
Caulophyllum thal.			Lonicera proclif.			Solidago altissima		
Celastrus scan.			Lysimachia quadr.			S. latifolia		
Circaea latif.			Maianthemum can.			S. ulmifolia		
Claytonia virg.			Menispermum can.			Thalictrum dioicum		
Cornus altern.			Mitella diphylla			Trillium cernuum		
✓ C. femina			Monarda fistulosa			T. flexipes		
✓ C. rugosa			Orchis spectab.			T. grandiflorum		
✓ Corylus americana			Oryzopsis racem.			T. recurvatum		
Cryptotaenia canad.			Osmorhiza clayton.			Triosteum perfoliatum		
Cypripedium pubesc.			C. longistylis			Uvularia grandiflora		
Cystopteris frag.			Osmunda clayton.			Veronicastrum virg.		
Dentaria laciniata			Panax quinquef.			Viburnum acerifolium		
Desmodium acumin.			Panicum latifolium			V. affine		
D. nudiflorum			Parietaria pennsylv.			Viola cucullata		
Dicentra cucullaria			Parthenocissus vit.			V. pubescens		
Dodecatheon meadia			Phlox divaricata			Vitis aestivalis		
Dryopteris spinulosa			Phryma leptostachya			V. riparia		
Erigeron pulchellus			Podophyllum pelt.			Zanthoxylum americ.		
Erythronium albidum			Polemonium reptans			Zizia aurea		

Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra		
B. nigra			Ostrya virgin.			Q. velutina — 95", 50" 1		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance: 157 ft

			Shrubs & Herbs					
Actaea sp.			Eupatorium purpur.			Polygonatum commut.		
Adiantum pedat.			Eupatorium rugosum			Polygonatum pubesc.		
Agrimonia gryp.			Festuca obtusa			Polygonum virgin.		
Allium tricocc.			Fragaria virgin.			Potentilla simpl.		
Amphicarpa brac.			Galium aparine			Prenanthes alba		
Anemone quinque.			G. circaeazans			Pteridium aquil.		
A. virginiana			G. concinnum			Pyrola elliptica		
Anemonella thal.			G. lanceolatum			Ranunculus abort.		
Antennaria sp.			G. triflorum			R. recurvatus		
Aplectrum hiem.			Geranium macul.			R. septentrion.		
Apocynum andros.			Geum canadense			Rhus radicans		
Aquilegia canad.			Goodyera pubesc.			Ribes americanum		
Aralia nudicaul.			Habenaria bract.			R. cynosbati		
A. racemosa			Hamamelis virg.			R. missouriense		
Arenaria later.			Helianthus strum.			Rosa sp.		
Arisaema atror.			Hepatica acutil.			Rubus alleghen.		
Asarum canad.			Heuchera richard.			R. occidentalis		
Aster macrophyll.			Hydrastis canad.			R. strigosus		
A. sagittifolius			Hydrophyllum virg.			Sambucus canad.		
A. shortii			Hystrix patula			Sanguinaria can.		
Athyrium angust.			Impatiens biflora			Sanicula gregaria		
Aureolaria grandif.			I. pallida			S. marilandica		
Botrychium vir.			Isopyrum bitern.			Smilacina racemosa		
Brachyelytrum			Lactuca spicata			S. stellata		
Campanula amer.			Laportea canad.			Smilax ecirrhata		
Carex albursina			Lapoula virgin.			S. herbacea		
C. pennsylvan.			Lathyrus ochrol.			S. hispida		
Caulophyllum thal.			Lonicera prolif.			Solidago altissima		
Celastrus scan.			Lysimachia quadr.			S. latifolia		
Circaea latif.			Maianthemum can.			S. ulmifolia		
Claytonia virg.			Menispermum can.			Thalictrum dioicum		
Cornus altern.			Mitella diphylla			Trillium cernuum		
C. femina			Monarda fistulosa			T. flexipes		
C. rugosa			Orchis spectab.			T. grandiflorum		
Corylus americana			Oryzopsis racem.			T. recurvatum		
Cryptotaenia canad.			Osmorhiza clayton.			Triosteum perfoliatum		
Cypripedium pubesc.			C. longistylis			Uvularia grandiflora		
Cystopteris frag.			Osmunda clayton.			Veronicastrum virg.		
Dentaria laciniata			Panax quinquef.			Viburnum acerifolium		
Desmodium acumin.			Panicum latifolium			V. affine		
D. nudiflorum			Parietaria pennsylv.			Viola cucullata		
Dicentra cucullaria			Parthenocissus vit.			V. pubescens		
Dodecatheon meadia			Phlox divaricata			Vitis aestivalis		
Dryopteris spinulosa			Phryma leptostachya			V. riparia		
Erigeron pulchellus			Podophyllum pelt.			Zanthoxylum americ.		
Erythronium albidum			Polemonium reptans			Zizia aurea		

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			✓ Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa — 20'		
Betula lutea			J. nigra			Q. rubra — 120'		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoii			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

9 ft

Actaea sp.
 Adiantum pedat.
 Agrimonia gryp.
 Allium tricocc.
 Amphicarpa brac.
 Anemone quinque.
 A. virginiana
 Anemonella thal.
 Antennaria sp.
 Aplectrum hiem.
 Apocynum andros.
 Aquilegia canad.
 Aralia nudicaul.
 A. racemosa
 Arenaria later.
 Arisaema atror.
 Asarum canad.
 ✓ Aster macrophyll.
 A. sagittifolius
 A. shortii
 Athyrium angust.
 Aureolaria grandif.
 Botrychium vir.
 Brachyelytrum
 Campanula amer.
 Carex albursina
 ✓ C. pennsylvan.
 Caulophyllum thal.
 Celastrus scan.
 Circaea latif.
 Claytonia virg.
 Cornus altern.
 ✓ C. femina
 C. rugosa
 ✓ Corylus americana
 Cryptotaenia canad.
 Cypripedium pubesc.
 Cystopteris frag.
 Dentaria laciniata
 Desmodium acumin.
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum

Shrubs & Herbs

Eupatorium purpur.
 Eupatorium rugosum
 Festuca obtusa
 Fragaria virgin.
 Galium aparine
 G. circaezans
 G. concinnum
 G. lanceolatum
 G. triflorum
 Geranium macul.
 Geum canadense
 Goodyera pubesc.
 Habenaria bract.
 Hamamelis virg.
 Helianthus strum.
 Hepatica acutil.
 Heuchera richard.
 Hydrastis canad.
 Hydrophyllum virg.
 Hystrix patula
 Impatiens biflora
 I. pallida
 Isopyrum bitern.
 Lactuca spicata
 Lapportea canad.
 Lapoula virgin.
 Lathyrus ochrol.
 Lonicera prolif.
 Lysimachia quadr.
 Maianthemum can.
 Menispermum can.
 Mitella diphylla
 Monarda fistulosa
 Orchis spectab.
 Oryzopsis racem.
 Osmorhiza clayton.
 O. longistylis
 Osmunda clayton.
 Panax quinquef.
 Panicum latifolium
 Parietaria pennsylv.
 Parthenocissus vit.
 Phlox divaricata
 Phryma leptostachya
 Podophyllum pelt.
 Polemonium reptans

Polygonatum commut.
 Polygonatum pubesc.
 Polygonum virgin.
 Potentilla simpl.
 Prenanthes alba
 Pteridium aquil.
 Pyrola elliptica
 Ranunculus abort.
 R. recurvatus
 R. septentrion.
 Rhus radicans
 Ribes americanum
 R. cynosbati
 R. missouriense
 Rosa sp.
 Rubus alleghen.
 R. occidentalis
 R. strigosus
 Sambucus canad.
 Sanguinaria can.
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa
 S. stellata
 Smilax ecirrhata
 ✓ S. herbacea
 S. hispida
 Solidago altissima
 S. latifolia
 S. ulmifolia
 Thalictrum dioicum
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virg.
 Viburnum acerifolium
 V. affine
 Viola cucullata
 V. pubescens
 Vitis aestivalis
 V. riparia
 Zanthoxylum americ.
 Zizia aurea

Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba		
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa — 18"		
Betula lutea			J. nigra			Q. rubra — 85		
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus delto			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			✓ P. tremuloides — 2			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Distance:

22 1/2 ft

			Shrubs & Herbs					
Actaea sp.			Eupatorium purpur.			Polygonatum commut.		
Adiantum pedat.			Eupatorium rugosum			Polygonatum pubesc.		
Agrimonia gryp.			Festuca obtusa			Polygonum virgin.		
Allium tricocc.			Fragaria virgin.			Potentilla simpl.		
Amphicarpa brac.			Galium aparine			Prenanthes alba		
Anemone quinque.			G. circaezans			✓ Pteridium aquil.		
A. virginiana			G. concinnum			Pyrola elliptica		
Anemonella thal.			G. lanceolatum			Ranunculus abort.		
Antennaria sp.			G. triflorum			R. recurvatus		
Aplectrum hiem.			Geranium macul.			R. septentrion.		
Apocynum andros.			Geum canadense			Rhus radicans		
Aquilegia canad.			Goodyera pubesc.			Ribes americanum		
Aralia nudicaul.			Habenaria bract.			R. cynosbati		
A. racemosa			Hamamelis virg.			R. missouriense		
Arenaria later.			✓ Helianthus strum.			Rosa sp.		
Arisaema atror.			Hepatica acutil.			Rubus alleghen.		
Asarum canad.			Heuchera richard.			R. occidentalis		
Aster macrophyll.			Hydrastis canad.			R. strigosus		
A. sagittifolius			Hydrophyllum virg.			Sambucus canad.		
A. shortii			Hystrix patula			Sanguinaria can.		
Athyrium angust.			Impatiens biflora			Sanicula gregaria		
Aureolaria grandif.			I. pallida			S. marilandica		
Botrychium vir.			Isopyrum bitern.			Smilacina racemosa		
Brachyelytrum			Lactuca spicata			S. stellata		
Campanula amer.			Laportea canad.			Smilax ecirrhata		
Carex albursina			Lapoula virgin.			S. herbacea		
C. pennsylvan.			Lathyrus ochrol.			S. hispida		
Caulophyllum thal.			Lonicera prolif.			Solidago altissima		
Celastrus scan.			Lysimachia quadr.			S. latifolia		
Circaea latif.			Maianthemum can.			S. ulmifolia		
Claytonia virg.			Menispermum can.			Thalictrum dioicum		
Cornus altern.			Mitella diphylla			Trillium cernuum		
C. femina			Monarda fistulosa			T. flexipes		
C. rugosa			Orchis spectab.			T. grandiflorum		
✓ Corylus americana			Oryzopsis racem.			T. recurvatum		
Cryptotaenia canad.			Osmorhiza clayton.			Triosteum perfoliatum		
Cypripedium pubesc.			O. longistylis			Uvularia grandiflora		
Cystopteris frag.			Osmunda clayton.			Veronicastrum virg.		
Dentaria laciniata			Panax quinquef.			Viburnum acerifolium		
Desmodium acumin.			Panicum latifolium			V. affine		
D. nudiflorum			Parietaria pennsylv.			Viola cucullata		
Dicentra cucullaria			Parthenocissus vit.			V. pubescens		
Dodecatheon meadia			Phlox divaricata			Vitis aestivalis		
Dryopteris spinulosa			Phryma leptostachya			V. riparia		
Erigeron pulchellus			Podophyllum pelt.			Zanthoxylum americ.		
Erythronium albidum			Polemonium reptans			Zizia aurea		

✓ Amorpha canescens
✓ Amphibia corollata

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fagus grandif.			Prunus virgin.		
A. rubrum			Fraxinus amer.			Quercus alba	70	
A. saccharinum			F. nigra			Q. bicolor		
A. saccharum			F. pennsylvan.			Q. ellipsoid.		
Amelanchier sp.			Juglans cinere			Q. macrocarpa		
Betula lutea			J. nigra			Q. rubra	95	
B. nigra			Ostrya virgin.			Q. velutina		
B. papyrifera			Populus deltoi			Robinia pseudo		
Carpinus carol			P. grandident.			Sorbus americ.		
Carya cordifor			✓ P. tremuloides			Tilia american		
C. ovata			Prunus americ.			Ulmus american		
Celtis occiden			P. pennsylvan.			U. fulva		
Crataegus sp.			P. serotina					

Shrubs & Herbs

Actaea sp.	Eupatorium purpur.	Polygonatum commut.
Adiantum pedat.	Eupatorium rugosum	Polygonatum pubesc.
Agrimonia gryp.	Festuca obtusa	Polygonatum virgin.
Allium tricocc.	Fragaria virgin.	Potentilla simpl.
Amphicarpa brac.	Galium aparine	Prenanthes alba
Anemone quinque.	G. circaezans	Pteridium aquil.
A. virginiana	G. concinnum	Pyrola elliptica
Anemonella thal.	G. lanceolatum	Ranunculus abort.
Antennaria sp.	G. triflorum	R. recurvatus
Aplectrum hiem.	Geranium macul.	R. septentrion.
Apocynum andros.	Geum canadense	Rhus radicans
Aquilegia canad.	Goodyera pubesc.	Ribes americanum
Aralia nudicaul.	Habenaria bract.	R. cynosbati
A. racemosa	Hamamelis virg.	R. missouriense
Arenaria later.	Helianthus strum.	Rosa sp.
Arisaema atror.	Hepatica acutil.	Rubus alleghen.
Asarum canad.	Heuchera richard.	R. occidentalis
Aster macrophyll.	Hydrastis canad.	R. strigosus
A. sagittifolius	Hydrophyllum virg.	Sambucus canad.
A. shortii	Hystrix patula	Sanguinaria can.
Athyrium angust.	Impatiens biflora	Sanicula gregaria
Aureolaria grandif.	I. pallida	S. marilandica
Botrychium vir.	Isopyrum bitern.	Smilacina racemosa
Brachyelytrum	Lactuca spicata	S. stellata
Campanula amer.	Lamortea canad.	Smilax ecirrhata
Carex albursina	Lapoula virgin.	S. herbacea
✓ C. pennsylvan. ?	Lathyrus ochrol.	S. hispida
Caulophyllum thal.	Lonicera prolif.	Solidago altissima
✓ Celastrus scan.	Lysimachia quadr.	S. latifolia
Circaea latif.	Maianthemum can.	✓ S. ulmifolia
Claytonia virg.	Menispermum can.	Thalictrum dioicum
Cornus altern.	Mitella diphylla	Trillium cernuum
C. femina	✓ Monarda fistulosa	T. flexipes
C. rugosa	Orchis spectab.	T. grandiflorum
Corylus americana	Oryzopsis racem.	T. recurvatum
Cryptotaenia canad.	Osmorhiza clayton.	Triosteum perfoliatum
Cypripedium pubesc.	O. longistylis	Uvularia grandiflora
Cystopteris frag.	Osmunda clayton.	✓ Veronicastrum virg.
Dentaria laciniata	Panax quinquef.	Viburnum acerifolium
Desmodium acumin.	Panicum latifolium	V. affine
D. nudiflorum	Parietaria pennsylv.	Viola cucullata
Dicentra cucullaria	Parthenocissus vit.	V. pubescens
Dodecatheon meadia	Phlox divaricata	Vitis aestivalis
Dryopteris spinulosa	Phryma leptostachya	V. riparia
Erigeron pulchellus	Podophyllum pelt.	Zanthoxylum americ.
Erythronium albidum	Polemonium reptans	Zizia aurea

HARDWOOD SURVEY

TYPE:

STATION NO. 120	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
TREES:																							
Acer negundo	✓																						
A. rubrum																							
A. saccharinum																							
A. saccharum																							
Amelanchier sp.																							
Betula lutea																							
B. nigra																							
B. papyrifera	✓																						
Carpinus carol.																							
Carya cordiform.																							
C. ovata	✓	✓	✓	✓		✓	✓				✓	✓		✓				✓				9	45
Celtis occident.																							
Crataegus sp.	✓	✓																			✓	3	15
Fagus grandif.																							
Fraxinus americ.																							
F. nigra																							
F. pennsylvanica																							
Gleditsia tria.																							
Gymnocladus dio.																							
Juglans cinerea																							
J. nigra																							
Ostrya virgin.																							
Platanus occid.																							
Populus deltoid.	✓																						
P. grandident.	✓																						
P. tremuloides	✓																						
Prunus american.	✓																						
P. nigra																							
P. pennsylvan.																							
P. serotina	✓								✓							✓						2	10
P. virginiana	✓			✓				✓									✓		✓		✓	5	25
Quercus alba	✓								✓												✓	4	20
Q. bicolor																							
Q. ellipsoid.																							
Q. macrocarpa	✓						✓										✓		✓	✓		4	20
Q. rubra	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	16	80
Q. velutina	✓		✓	✓					✓	✓				✓		✓	✓	✓	✓	✓		8	40
Robinia pseudo.																							
Salix nigra																							
Sorbus americana																							
Tilia americana	✓	✓																				1	5
Ulmus americana																							
U. fulva	✓	✓											✓	✓								3	15
U. thomasi																							
SHRUBS & HERBS:																							
Actaea sp. (Rubra)	✓																						
Adiantum pedat.	✓																						
Agastache scrophul.																							
Agrimonia gryp.	✓																						
Aletris farin.																							

[illegible]

Hardwood Survey (Cont'd)

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
1120																							
SHRUBS & HERBS (Cont'd)																							
Caulophyllum thal.																							
Ceanothus americ.	✓																						
Celastrus scand.	✓	✓		✓				✓			✓	✓	✓			✓					✓	8	40
Chimaphila umbel.																							
Circaea alpina																							
Circaea latifolia																							
Cirsium altissim.																							
Claytonia virg.																							
Clematis virgin.																							
Clintonia boreal.																							
Comandra umbell.																							
Conopholis amer.																							
Corallorrhiza mac.																							
C. odontorrhiza																							
Cornus alternif.																							
C. canadensis																							
C. femina	✓					✓	✓		✓	✓			✓			✓	✓	✓	✓			9	45
C. rugosa	✓															✓	✓	✓				3	15
Corydalis semper.																							
Corylus americana	✓									✓			✓			✓	✓		✓	✓		6	30
Cryptotaenia can.																							
Cynoglossum virg.																							
Cypripedium pub.																							
Cystopteris bulb.																							
C. fragilis																							
Dentaria lacin.																							
Desmodium acumin.	✓				✓		✓	✓	✓		✓											5	25
D. bracteosum																							
D. canadense																							
D. nudiflorum	✓			✓	✓	✓										✓						4	30
Dicentra canad.																							
D. cucullaria																							
Diervilla lonic.	✓			✓												✓						2	10
Dioscorea villosa	✓	✓						✓	✓													3	15
Dirca palustris																							
Dodecatheon mead.																							
Dryopteris Goldiana																							
D. spinulosa																							
D. thelypteris																							
Ellisia nyctelea																							
Elymus villosa																							
Epifagus virgin.																							
Erigeron philadel.																							
E. pulchellus																							
Erythronium alb.																							
E. americanum																							
Eupatorium pur.	✓																						
E. rugosum																							
Euphorbia corollata	✓																			✓		1	5
Evonymus atrop.																							
Festuca obtusa																							

STATION NO. 120	p.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
SHRUBS & HERBS (Cont'd)																							
Floerkea proserp.																							
Fragaria vesca																							
F. v. var. amer.																							
F. virginiana	✓																						
Galium aparine																							
G. boreale	✓	✓	✓	✓			✓		✓		✓											6	30
G. circaezans																							
G. concinnum																							
G. lanceolatum																							
G. triflorum	✓				✓																	1	5
Gaultheria proc.																							
Gaylussacia bacc.																							
Gentiana quinq.																							
Geranium maculat.	✓				✓			✓	✓				✓	✓	✓			✓				7	35
Geum canadense																							
G. virginianum																							
Goodyera pubesc.																							
Habenaria bract.																							
H. hyperborea																							
H. hookeri																							
Hamamelis virg.																							
Hedeoma hispida																							
Helianthemum canadense																							
Helianthus strum.	✓	✓	✓	✓		✓	✓					✓	✓						✓			8	40
Hepatica acutil.																							
H. americana																							
Heracleum lanatum																							
Heuchera richard																							
Hieracium canad.																							
H. scabrum																							
Hydrastis canad.																							
Hydrophyllum appendiculatum																							
H. vir.																							
Hypoxis hirsuta																							
Mystrix patula	✓								✓					✓								2	10
Ilex verticillata																							
Impatiens biflor																							
I. pallida																							
Isopyrum bitern.																							
Jeffersonia diphylla																							
Juncus tenuis																							
Juniperus communis																							
J. virginiana																							
Krigia biflora																							
Lactuca spicata	✓																						
Laportea canad.																							
Lappula virgin.																							
Lathyrus ochroleucus																							
L. venosus																							
Lilium philadel.																							
Liparis liliif.																							

[illegible]

