

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
red maple	Acer rubrum	WDH	High	88.9	1320.49	14.86	No change	Sm. dec.	High	Abundant	Very Good	Good			1	1
sugar maple	Acer saccharum	WDH	High	80.2	1240.15	15.45	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	2
eastern white pine	Pinus strobus	WDH	High	69.1	1080.95	15.63	Sm. dec.	Lg. dec.	Low	Abundant	Fair	Poor			0	3
American beech	Fagus grandifolia	WDH	High	63	618.89	9.83	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	4
northern red oak	Quercus rubra	WDH	Medium	58	603.94	10.41	Sm. inc.	Sm. inc.	High	Abundant	Very Good	Very Good			1	5
eastern hemlock	Tsuga canadensis	NSH	High	53.1	542.41	10.22	Sm. dec.	Sm. dec.	Low	Abundant	Fair	Fair			0	6
white ash	Fraxinus americana	WDL	Medium	67.9	522.85	7.7	No change	No change	Low	Abundant	Fair	Fair			0	7
black cherry	Prunus serotina	WDL	Medium	63	401.68	6.38	Sm. inc.	No change	Low	Common	Fair	Poor			1	8
American elm	Ulmus americana	WDH	Medium	45.7	322.43	7.06	No change	No change	Medium	Common	Fair	Fair			1	9
yellow birch	Betula alleghaniensis	NDL	High	40.7	269.38	6.61	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	10
sweet birch	Betula lenta	NDH	High	46.9	215.73	4.6	Sm. inc.	No change	Low	Common	Fair	Poor			1	11
bitternut hickory	Carya cordiformis	WSL	Low	32.1	213.78	6.66	Sm. dec.	No change	High	Common	Fair	Good			1	12
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	48.1	191.9	3.99	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	13
shagbark hickory	Carya ovata	WSL	Medium	27.2	181.73	6.69	No change	No change	Medium	Common	Fair	Fair			1	14
white oak	Quercus alba	WDH	Medium	23.5	150.05	6.4	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	15
quaking aspen	Populus tremuloides	WDH	High	29.6	139.88	4.72	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	16
American basswood	Tilia americana	WSL	Medium	40.7	133.79	3.28	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	17
black oak	Quercus velutina	WDH	High	16	131.27	8.18	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	18
chestnut oak	Quercus prinus	NDH	High	17.3	106.12	6.14	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	19
paper birch	Betula papyrifera	WDH	High	39.5	105.22	2.66	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	20
red spruce	Picea rubens	NDH	High	17.3	98.89	5.72	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	21
tamarack (native)	Larix laricina	NSH	High	4.9	77.43	15.68	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	22
black locust	Robinia pseudoacacia	NDH	Low	7.4	74.85	10.11	No change	Sm. inc.	Medium	Common	Fair	Good			1	23
pitch pine	Pinus rigida	NSH	High	4.9	74.32	15.05	No change	No change	Medium	Common	Fair	Fair			1	24
eastern cottonwood	Populus deltoides	NSH	Low	3.7	73.09	19.73	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	25
bigtooth aspen	Populus grandidentata	NSL	Medium	18.5	71.7	3.87	No change	No change	Medium	Common	Fair	Fair			1	26
boxelder	Acer negundo	WSH	Low	4.9	51.21	10.37	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	27
Norway maple	Acer platanoides	NSL	FIA	3.7	44.57	12.03	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	28
striped maple	Acer pensylvanicum	NSL	Medium	29.6	42.43	1.43	Sm. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	29
bur oak	Quercus macrocarpa	NDH	Medium	2.5	35.74	14.47	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	30
balsam fir	Abies balsamea	NDH	High	11.1	34.47	3.1	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	31
red pine	Pinus resinosa	NSH	Medium	3.7	29.21	7.89	Lg. dec.	Very Lg. dec.	Low	Rare	Very Poor	Lost			0	32
serviceberry	Amelanchier spp.	NSL	Low	19.8	28.17	1.43	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	33
pin cherry	Prunus pensylvanica	NSL	Low	7.4	26.95	3.64	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	34
Scotch pine	Pinus sylvestris	NSH	FIA	3.7	26.81	7.24	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	35
gray birch	Betula populifolia	NSL	Low	9.9	24.25	2.45	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	36
black ash	Fraxinus nigra	WSH	Medium	8.6	23.95	2.77	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	37
pignut hickory	Carya glabra	WDL	Medium	8.6	20.36	2.36	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	38
green ash	Fraxinus pennsylvanica	WSH	Low	4.9	19.65	3.98	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	39
Norway spruce	Picea abies	NSH	FIA	2.5	18.49	7.49	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	40
eastern redcedar	Juniperus virginiana	WDH	Medium	2.5	16.67	6.75	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	41
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	18.5	16.14	0.87	Lg. dec.	Sm. inc.	Medium	Rare	Very Poor	Fair			1	42
swamp white oak	Quercus bicolor	NSL	Low	2.5	9.88	4	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	43
yellow-poplar	Liriodendron tulipifera	WDH	High	1.2	8.06	6.53	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	44
scarlet oak	Quercus coccinea	WDL	Medium	3.7	6.73	1.82	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	45
sycamore	Platanus occidentalis	NSL	Low	1.2	6.54	5.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	46
butternut	Juglans cinerea	NSLX	FIA	4.9	6.1	1.24	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	47
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	1.2	5.68	4.6	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	48
sassafras	Sassafras albidum	WSL	Low	1.2	5.1	4.13	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	49
black walnut	Juglans nigra	WDH	Low	1.2	3.89	3.15	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	50
slippery elm	Ulmus rubra	WSL	Low	2.5	2.1	0.85	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	2	51
mockernut hickory	Carya alba	WDL	Medium	2.5	1.83	0.74	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	52
chokecherry	Prunus virginiana	NSLX	FIA	1.2	1.73	1.4	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	53

National Park
 Climate Change Atlas Tree Species
 Current and Potential Future Habitat, Capability, and Migration

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
black willow	Salix nigra	NSH	Low	1.2	1.52	1.23	Very Lg. dec.	No change	Low	Rare	Lost	Very Poor			2	54
mountain maple	Acer spicatum	NSL	Low	3.7	1.35	0.36	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			1	55
flowering dogwood	Cornus florida	WDL	Medium	1.2	0.93	0.75	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good		Infill ++	2	56
wild plum	Prunus americana	NSLX	FIA	1.2	0.84	0.68	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	57
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	58
loblolly pine	Pinus taeda	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	59
Virginia pine	Pinus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	60
silver maple	Acer saccharinum	NSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	61
yellow buckeye	Aesculus flava	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	62
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	NSL	Low	0	0	0	Unknown	New Habitat	High	Absent	Unknown	New Habitat			0	63
pecan	Carya illinoensis	NSH	Low	0	0	0	Unknown	New Habitat	Low	Absent	Unknown	New Habitat			0	64
shellbark hickory	Carya laciniosa	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	65
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	66
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	67
hackberry	Celtis occidentalis	WDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	68
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	69
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	70
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	71
cucumbertree	Magnolia acuminata	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat		Migrate +	3	72
southern magnolia	Magnolia grandiflora	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	73
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	74
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	0	0	0	Unknown	Unknown	NA	Absent	Unknown	Unknown			0	75
blackgum	Nyssa sylvatica	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	76
sourwood	Oxydendrum arboreum	NDL	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	77
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	78
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	79
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	80
pin oak	Quercus palustris	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	81
willow oak	Quercus phellos	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	82
Shumard oak	Quercus shumardii	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	83
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	84
American mountain-ash	Sorbus americana	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	85
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	86