

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIaiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
chestnut oak	Quercus prinus	NDH	High	65.9	635.18	15.15	Sm. dec.	Lg. dec.	High	Abundant	Good	Good	Infill ++	Infill ++	1	1
red maple	Acer rubrum	WDH	High	59.8	523.94	10.92	Sm. dec.	Sm. dec.	High	Abundant	Good	Good	Infill ++	Infill ++	1	2
white oak	Quercus alba	WDH	Medium	61	482.41	11.46	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	3
yellow-poplar	Liriodendron tulipifera	WDH	High	45.1	468.72	12.88	Sm. dec.	Lg. dec.	High	Common	Fair	Fair	Infill +	Infill +	1	4
eastern redcedar	Juniperus virginiana	WDH	Medium	19.5	319.94	20.41	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good	Infill ++	Infill ++	1	5
black cherry	Prunus serotina	WDL	Medium	57.3	290.72	7.33	No change	No change	Low	Common	Poor	Poor	Infill +	Infill +	0	6
black locust	Robinia pseudoacacia	NDH	Low	43.9	257.3	7.99	Lg. dec.	No change	Medium	Common	Poor	Fair	Infill +	Infill +	1	7
white ash	Fraxinus americana	WDL	Medium	45.1	226.24	6.04	No change	Sm. inc.	Low	Common	Poor	Fair	Infill +	Infill +	1	8
pignut hickory	Carya glabra	WDL	Medium	54.9	222.56	6.21	No change	Sm. dec.	Medium	Common	Fair	Poor	Infill +	Infill +	1	9
northern red oak	Quercus rubra	WDH	Medium	51.2	201.73	6.22	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	10
black oak	Quercus velutina	WDH	High	52.4	197.5	7.02	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good	Infill ++	Infill ++	1	11
black walnut	Juglans nigra	WDH	Low	42.7	180.9	6.03	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	12
mockernut hickory	Carya alba	WDL	Medium	34.1	172.51	6.64	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	13
scarlet oak	Quercus coccinea	WDL	Medium	34.1	150.84	6.3	Sm. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	14
Virginia pine	Pinus virginiana	NDH	High	31.7	150.13	7.79	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	15
bitternut hickory	Carya cordiformis	WSL	Low	26.8	128.2	8.93	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	16
boxelder	Acer negundo	WSH	Low	9.8	124.85	12.8	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	17
blackgum	Nyssa sylvatica	WDL	Medium	40.2	123.39	4.42	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	18
hackberry	Celtis occidentalis	WDH	Medium	25.6	112.45	5.14	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	19
American beech	Fagus grandifolia	WDH	High	14.6	106.87	7.3	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	2	20
ailanthus	Ailanthus altissima	NSL	FIA	36.6	100.89	4.13	Unknown	Unknown	NA	Common	NNIS	NNIS			0	21
sweet birch	Betula lenta	NDH	High	14.6	98.83	6.75	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	22
sassafras	Sassafras albidum	WSL	Low	30.5	80.83	3.53	Sm. inc.	Sm. inc.	Medium	Common	Good	Good	Infill ++	Infill ++	1	23
shagbark hickory	Carya ovata	WSL	Medium	22	80.55	4.62	Sm. inc.	Sm. inc.	Medium	Common	Good	Good	Infill ++	Infill ++	1	24
pin oak	Quercus palustris	NSH	Low	17.1	72.91	9.51	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor		Infill +	2	25
eastern white pine	Pinus strobus	WDH	High	8.5	67.87	7.95	Sm. dec.	Lg. dec.	Low	Common	Poor	Very Poor	Infill +		0	26
sycamore	Platanus occidentalis	NSL	Low	22	67.34	4.86	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good	Infill ++	Infill ++	1	27
silver maple	Acer saccharinum	NSH	Low	3.7	52.54	14.36	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	2	28
American elm	Ulmus americana	WDH	Medium	23.2	49.13	3.26	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	29
green ash	Fraxinus pennsylvanica	WSH	Low	9.8	44.26	7.53	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	30
sugar maple	Acer saccharum	WDH	High	7.3	39.54	5.4	Sm. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	31
American basswood	Tilia americana	WSL	Medium	6.1	32.5	5.33	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	32
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	4.9	24.12	4.94	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	33
loblolly pine	Pinus taeda	WDH	High	3.7	23.76	6.49	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	34
slippery elm	Ulmus rubra	WSL	Low	14.6	23.63	2.31	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	35
eastern redbud	Cercis canadensis	NSL	Low	15.9	22.27	1.94	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	36
red mulberry	Morus rubra	NSL	Low	7.3	22.01	11.02	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	37
southern red oak	Quercus falcata	WDL	Medium	7.3	17.89	5.41	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	38
white mulberry	Morus alba	NSL	FIA	8.5	17.57	6.65	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	39
swamp chestnut oak	Quercus michauxii	NSL	Low	2.4	16.28	6.67	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	40
common persimmon	Diospyros virginiana	NSL	Low	3.7	15.89	4.34	No change	Lg. inc.	High	Rare	Fair	Good	Infill +	Infill ++	2	41
pitch pine	Pinus rigida	NSH	High	9.8	14.51	2.53	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	42
eastern hemlock	Tsuga canadensis	NSH	High	2.4	11.95	4.9	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	43
flowering dogwood	Cornus florida	WDL	Medium	22	11.94	0.87	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	44
Osage-orange	Maclura pomifera	NDH	Medium	2.4	11.73	4.81	Sm. dec.	No change	High	Rare	Poor	Fair		Infill +	2	45
serviceberry	Amelanchier spp.	NSL	Low	8.5	9.21	1.08	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	46
pawpaw	Asimina triloba	NSL	Low	9.8	8.96	1.69	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	47
honeylocust	Gleditsia triacanthos	NSH	Low	2.4	8.23	3.38	No change	Sm. inc.	High	Rare	Fair	Good			2	48
river birch	Betula nigra	NSL	Low	2.4	5.21	2.13	Sm. dec.	Sm. inc.	Medium	Rare	Very Poor	Fair		Infill +	2	49
willow oak	Quercus phellos	NSL	Low	3.7	4.18	1.14	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	50
Table Mountain pine	Pinus pungens	NSL	Low	1.2	4.06	3.33	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	51
black willow	Salix nigra	NSH	Low	1.2	3.66	3	No change	Lg. inc.	Low	Rare	Very Poor	Fair		Infill +	2	52
Norway maple	Acer platanoides	NSL	FIA	1.2	3.35	2.75	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	53

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

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Scotch pine	Pinus sylvestris	NSH	FIA	1.2	3.01	2.47	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	54
chinkapin oak	Quercus muehlenbergii	NSL	Medium	1.2	3.01	2.47	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	55
paulownia	Paulownia tomentosa	NSL	FIA	1.2	2.48	2.03	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	56
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	7.3	2.32	1.18	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	57
cucumber tree	Magnolia acuminata	NSL	Low	1.2	2.11	1.73	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	58
shortleaf pine	Pinus echinata	WDH	High	1.2	2.01	1.65	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	59
chokecherry	Prunus virginiana	NSLX	FIA	1.2	1.95	1.6	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	60
pin cherry	Prunus pensylvanica	NSL	Low	1.2	1.71	1.4	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	61
bigtooth aspen	Populus grandidentata	NSL	Medium	1.2	1.34	1.1	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	62
yellow birch	Betula alleghaniensis	NDL	High	1.2	1.06	0.87	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	63
shingle oak	Quercus imbricaria	NDH	Medium	1.2	0.85	0.7	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	64
butternut	Juglans cinerea	NSLX	FIA	4.9	0.73	2.4	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	65
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	4.9	0.21	0.7	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	66
ashe juniper	Juniperus ashei	NDH	High	0	0	0	New Habitat	New Habitat	NA	Absent	New Habitat	New Habitat			0	67
red spruce	Picea rubens	NDH	High	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	68
bald cypress	Taxodium distichum	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	69
florida maple	Acer barbatum	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	70
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	71
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	72
shellbark hickory	Carya laciniosa	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	73
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	74
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	75
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	76
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	77
sourwood	Oxydendrum arboreum	NDL	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	78
quaking aspen	Populus tremuloides	WDH	High	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	79
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	80
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate +	3	81
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	82
water oak	Quercus nigra	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	83
Shumard oak	Quercus shumardii	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	84
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	85
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	86
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	87
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	88