

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 cherry	Prunus serotina	WDL	Medium	72	363.89	21.66	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	1
sassafras	Sassafras albidum	WSL	Low	29.5	215.65	10.44	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +		0	2
black oak	Quercus velutina	WDH	High	55.4	189.16	9.44	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	3
American elm	Ulmus americana	WDH	Medium	55.6	180.36	10.04	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	4
red maple	Acer rubrum	WDH	High	21	178.46	10.31	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	1	5
Siberian elm	Ulmus pumila	NDH	FIA	1.2	117.01	100	Unknown	Unknown	NA	Common	NNIS	NNIS			0	6
white ash	Fraxinus americana	WDL	Medium	36.8	109.38	8.38	No change	No change	Low	Common	Poor	Poor	Infill +	Infill +	0	7
pin oak	Quercus palustris	NSH	Low	24.3	107.22	13.32	Lg. dec.	Sm. dec.	Low	Common	Very Poor	Poor		Infill +	0	8
sugar maple	Acer saccharum	WDH	High	18.3	103.92	10.45	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	2	9
white oak	Quercus alba	WDH	Medium	28.8	101.46	8.86	Sm. inc.	Sm. dec.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	10
black walnut	Juglans nigra	WDH	Low	30.4	98.97	8.27	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	11
yellow-poplar	Liriodendron tulipifera	WDH	High	9.4	92.35	16.5	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	2	12
green ash	Fraxinus pennsylvanica	WSH	Low	28.6	88.08	9.79	Sm. inc.	Sm. inc.	Medium	Common	Good	Good	Infill ++	Infill ++	1	13
silver maple	Acer saccharinum	NSH	Low	20.9	84.3	18.23	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	14
shagbark hickory	Carya ovata	WSL	Medium	17.6	67.13	11.62	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	2	15
eastern cottonwood	Populus deltoides	NSH	Low	13.9	60.41	12.35	Sm. inc.	Sm. inc.	Medium	Common	Good	Good	Infill ++	Infill ++	1	16
northern red oak	Quercus rubra	WDH	Medium	34.7	54.25	5.09	Sm. inc.	No change	High	Common	Very Good	Good	Infill ++	Infill ++	1	17
red pine	Pinus resinosa	NSH	Medium	5.6	45.55	28.4	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	18
Osage-orange	Maclura pomifera	NDH	Medium	7	40.5	11.81	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	19
boxelder	Acer negundo	WSH	Low	17.4	36.75	5.98	Sm. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	20
American basswood	Tilia americana	WSL	Medium	18.4	36.33	5.25	No change	Sm. dec.	Medium	Rare	Poor	Very Poor	Infill +		1	21
black willow	Salix nigra	NSH	Low	15.2	35.5	4.97	Sm. dec.	Sm. inc.	Low	Rare	Very Poor	Poor		Infill +	1	22
hackberry	Celtis occidentalis	WDH	Medium	4.2	33.01	5.06	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	23
bitternut hickory	Carya cordiformis	WSL	Low	29.1	31.97	3.53	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	1	24
blackgum	Nyssa sylvatica	WDL	Medium	20	30.74	4.88	Lg. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	1	25
slippery elm	Ulmus rubra	WSL	Low	16.2	30.01	4.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	26
pignut hickory	Carya glabra	WDL	Medium	7	20.7	6.57	No change	Sm. dec.	Medium	Rare	Poor	Very Poor	Infill +		2	27
bur oak	Quercus macrocarpa	NDH	Medium	15.1	17.81	7.81	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	28
Scotch pine	Pinus sylvestris	NSH	FIA	7	16.38	5.37	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	29
northern pin oak	Quercus ellipsoidalis	NSH	Medium	10.5	14.71	10.24	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor	Infill +		2	30
mockernut hickory	Carya alba	WDL	Medium	1.2	11.35	9.7	Sm. dec.	No change	High	Rare	Poor	Fair	Infill +	Infill +	2	31
northern catalpa	Catalpa speciosa	NSHX	FIA	1.2	10.57	9.03	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	32
white mulberry	Morus alba	NSL	FIA	16.4	10.4	3.11	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	33
river birch	Betula nigra	NSL	Low	5.9	8.04	4.21	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	34
swamp white oak	Quercus bicolor	NSL	Low	18.7	7.51	6.42	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	35
red mulberry	Morus rubra	NSL	Low	12.9	7.28	2.51	No change	Sm. dec.	Medium	Rare	Poor	Very Poor	Infill +		1	36
black locust	Robinia pseudoacacia	NDH	Low	19.9	7	3.75	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	37
jack pine	Pinus banksiana	NSH	Medium	9.4	5.17	8.85	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	38
chokecherry	Prunus virginiana	NSLX	FIA	1.2	3.98	3.4	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	39
American beech	Fagus grandifolia	WDH	High	7	3.9	1.59	No change	Very Lg. dec.	Medium	Rare	Poor	Lost	Infill +		2	40
bigtooth aspen	Populus grandidentata	NSL	Medium	14	2.95	3.37	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	41
serviceberry	Amelanchier spp.	NSL	Low	9.4	2.43	4.17	Sm. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	42
eastern white pine	Pinus strobus	WDH	High	4.7	1.99	6.8	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	43
quaking aspen	Populus tremuloides	WDH	High	5.7	1.98	2.23	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	44
ailanthus	Ailanthus altissima	NSL	FIA	2.2	1.84	0.72	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	45
honeylocust	Gleditsia triacanthos	NSH	Low	4.7	1.52	5.2	Sm. inc.	Sm. inc.	High	Rare	Good	Good			2	46
sycamore	Platanus occidentalis	NSL	Low	9.4	1.37	2.34	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	47
balsam poplar	Populus balsamifera	NSH	Medium	4.7	1.33	4.55	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	48
pawpaw	Asimina triloba	NSL	Low	1.2	1.11	0.95	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	49
butternut	Juglans cinerea	NSLX	FIA	4.7	0.94	3.18	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	50
black maple	Acer nigrum	NSH	Low	4.7	0.69	2.38	Very Lg. dec.	Very Lg. dec.	High	Rare	Lost	Lost			0	51
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	4.7	0.51	1.75	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	52
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	4.7	0.08	0.27	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	53

**National Park**  
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eastern redcedar	Juniperus virginiana	WDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	54
slash pine	Pinus elliottii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	55
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	56
loblolly pine	Pinus taeda	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	57
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	58
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	59
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	60
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	61
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	62
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	63
shingle oak	Quercus imbricaria	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	64
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	65
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	66
Shumard oak	Quercus shumardii	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	67
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	68
bluejack oak	Quercus incana	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	69
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	70