

Climate Change Atlas Tree Species

Current and Potential Future Habitat, Capability, and Migration

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCI45	ChngCI85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
post oak	Quercus stellata	WDH	High	65	954.79	28.93	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	1
cedar elm	Ulmus crassifolia	NDH	Medium	67.3	265.72	14.17	No change	No change	Low	Common	Poor	Poor			0	2
water oak	Quercus nigra	WDH	High	49.9	262.55	10.51	No change	No change	Medium	Common	Fair	Fair			1	3
eastern redcedar	Juniperus virginiana	WDH	Medium	48.6	219.06	8.75	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	4
winged elm	Ulmus alata	WDL	Medium	42.2	214.98	9.9	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	5
blackjack oak	Quercus marilandica	NSL	Medium	32.2	119.86	7.35	No change	No change	High	Common	Good	Good			1	6
loblolly pine	Pinus taeda	WDH	High	6.1	112.27	10.82	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	7
sugarberry	Celtis laevigata	NDH	Medium	55.6	106.9	6.59	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	8
American elm	Ulmus americana	WDH	Medium	34.6	80.92	6.19	No change	No change	Medium	Common	Fair	Fair			1	9
pecan	Carya illinoensis	NSH	Low	26.3	76.52	8.92	No change	No change	Low	Common	Poor	Poor			0	10
green ash	Fraxinus pennsylvanica	WSH	Low	36.9	67.19	6.46	Sm. dec.	No change	Medium	Common	Poor	Fair			1	11
Osage-orange	Maclura pomifera	NDH	Medium	17.9	49.24	5.73	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	1	12
black hickory	Carya texana	NDL	High	16.3	39.25	3.97	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	13
mockernut hickory	Carya alba	WDL	Medium	13.2	38.22	4.6	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	1	14
white ash	Fraxinus americana	WDL	Medium	14.7	30.57	4.81	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	15
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	NSL	Low	22.9	27.01	2.31	Sm. inc.	Sm. inc.	High	Rare	Good	Good			1	16
hackberry	Celtis occidentalis	WDH	Medium	10.6	26.33	4.41	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	1	17
live oak	Quercus virginiana	NDH	High	14.8	24.46	5.16	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	18
honeylocust	Gleditsia triacanthos	NSH	Low	12.3	17.82	2.59	Lg. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	1	19
common persimmon	Diospyros virginiana	NSL	Low	3.1	13.72	8.58	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor		Infill +	1	20
American holly	Ilex opaca	NSL	Medium	2.7	13.17	7.17	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			2	21
willow oak	Quercus phellos	NSL	Low	8.3	10.09	6.05	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	22
bluejack oak	Quercus incana	NSL	Low	1.7	8.69	3.81	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	23
boxelder	Acer negundo	WSH	Low	9.1	8.13	2.79	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	1	24
flowering dogwood	Cornus florida	WDL	Medium	4.1	7.58	2.88	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	25
slippery elm	Ulmus rubra	WSL	Low	7.4	7.42	2.92	Sm. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	1	26
black willow	Salix nigra	NSH	Low	3.5	6.78	6.04	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			2	27
southern red oak	Quercus falcata	WDL	Medium	3.8	6.42	2.02	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	28
black walnut	Juglans nigra	WDH	Low	3.8	5.62	5.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	29
water elm	Planera aquatica	NSL	Low	0.5	5.05	10.35	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	30
sassafras	Sassafras albidum	WSL	Low	4	3.82	1.78	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	31
eastern cottonwood	Populus deltoides	NSH	Low	3.6	3.52	13.67	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	32
red mulberry	Morus rubra	NSL	Low	12.6	3.45	2.27	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	33
water hickory	Carya aquatica	NSL	Medium	5.3	2.37	1.91	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	34
laurel oak	Quercus laurifolia	NDH	Medium	0.3	2.33	3.07	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	35
Shumard oak	Quercus shumardii	NSL	Low	4	1.82	2.71	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	2	36
eastern redbud	Cercis canadensis	NSL	Low	2.9	1.7	1.97	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	37
river birch	Betula nigra	NSL	Low	2.1	1.61	3.43	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	38
sweetgum	Liquidambar styraciflua	WDH	High	1.7	1.34	1.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	39
blackgum	Nyssa sylvatica	WDL	Medium	2.4	1.07	1.46	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	40
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	0.6	0.92	0.46	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	41
black cherry	Prunus serotina	WDL	Medium	0.5	0.78	1.6	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	42
shagbark hickory	Carya ovata	WSL	Medium	0.5	0.72	1.48	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	43
sycamore	Platanus occidentalis	NSL	Low	0.7	0.63	1.91	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	44
ashe juniper	Juniperus ashei	NDH	High	0.5	0.43	0.9	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair			0	45
bald cypress	Taxodium distichum	NSH	Medium	0.6	0.4	0.96	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	46
durand oak	Quercus sinuata var. sinuata	NSL	FIA	0.1	0.38	0.12	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	47
sweetbay	Magnolia virginiana	NSL	Medium	0.1	0.35	0.09	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	48
black oak	Quercus velutina	WDH	High	0.1	0.24	0.08	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	49
bitternut hickory	Carya cordiformis	WSL	Low	3.8	0.23	0.93	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	50
bur oak	Quercus macrocarpa	NDH	Medium	1.4	0.2	1.16	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	51
black locust	Robinia pseudoacacia	NDH	Low	2	0.17	1.42	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	52
pignut hickory	Carya glabra	WDL	Medium	2	0.13	1.04	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	53

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	54
florida maple	Acer barbatum	NSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	55
shellbark hickory	Carya laciniosa	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	56
American beech	Fagus grandifolia	WDH	High	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	57
redbay	Persea borbonia	NSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	58
American basswood	Tilia americana	WSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	59