

One x One Degree
Climate Change Atlas Tree Species

USDA Forest Service
Northern Research Station
Landscape Change Research Group
Iverson, Peters, Prasad, Matthews

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
live oak	Quercus virginiana	NDH	High	47.4	394.3	36.2	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	1
post oak	Quercus stellata	WDH	High	51.3	293.7	19.0	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	2
sugarberry	Celtis laevigata	NDH	Medium	40.5	117.8	16.2	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	3
eastern redcedar	Juniperus virginiana	WDH	Medium	35.2	94.5	12.9	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	4
water oak	Quercus nigra	WDH	High	43.2	70.5	8.8	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	5
blackjack oak	Quercus marilandica	NSL	Medium	17.1	50.9	7.5	Lg. dec.	Lg. dec.	High	Common	Fair	Fair	Infill +	Infill +	1	6
cedar elm	Ulmus crassifolia	NDH	Medium	33.4	46.3	4.2	Sm. inc.	Sm. inc.	Low	Rare	Poor	Poor			1	7
American elm	Ulmus americana	WDH	Medium	20.6	45.3	12.7	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	8
pecan	Carya illinoensis	NSH	Low	26.9	39.6	11.5	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	9
green ash	Fraxinus pennsylvanica	WSH	Low	17.4	23.8	9.9	No change	No change	Medium	Rare	Poor	Poor			1	10
Osage-orange	Maclura pomifera	NDH	Medium	23.6	20.0	5.3	Sm. dec.	No change	High	Rare	Poor	Fair			1	11
loblolly pine	Pinus taeda	WDH	High	6.7	17.4	11.4	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	12
hackberry	Celtis occidentalis	WDH	Medium	2.4	16.3	6.4	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	2	13
white ash	Fraxinus americana	WDL	Medium	9.2	9.7	10.2	Very Lg. dec.	Very Lg. dec.	Low	Rare	Lost	Lost			0	14
boxelder	Acer negundo	WSH	Low	8	8.7	11.8	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	2	15
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	13.4	5.3	3.3	Sm. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	16
mockernut hickory	Carya alba	WDL	Medium	5	3.5	2.7	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	17
black willow	Salix nigra	NSH	Low	3.7	3.5	15.0	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	18
southern red oak	Quercus falcata	WDL	Medium	1.2	1.7	2.4	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	19
black hickory	Carya texana	NDL	High	3.8	1.2	1.1	No change	No change	Medium	Rare	Poor	Poor		Infill +	2	20
black cherry	Prunus serotina	WDL	Medium	1.4	1.2	2.0	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	21
red mulberry	Morus rubra	NSL	Low	3.7	1.2	5.0	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	22
slippery elm	Ulmus rubra	WSL	Low	1.8	1.1	0.7	No change	No change	Medium	Rare	Poor	Poor		Infill +	2	23
American holly	Ilex opaca	NSL	Medium	1.2	1.0	1.4	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	24
bald cypress	Taxodium distichum	NSH	Medium	0.1	0.8	0.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	25
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	0.5	0.5	0.3	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	26
bur oak	Quercus macrocarpa	NDH	Medium	3.6	0.4	1.6	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	27
sweetgum	Liquidambar styraciflua	WDH	High	1.2	0.4	0.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	28
durand oak	Quercus sinuata var. sinuata	NSL	FIA	1.2	0.3	0.4	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	29
black walnut	Juglans nigra	WDH	Low	3.6	0.2	0.9	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	30
sassafras	Sassafras albidum	WSL	Low	1.2	0.2	0.3	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	31
winged elm	Ulmus alata	WDL	Medium	1.2	0.2	0.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	32
redbay	Persea borbonia	NSL	Low	3.6	0.1	0.6	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	33
flowering dogwood	Cornus florida	WDL	Medium	3.6	0.1	0.5	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	34
sweetbay	Magnolia virginiana	NSL	Medium	3.7	0.1	0.5	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	35
waterlocust	Gleditsia aquatica	NSLX	FIA	3.7	0.1	0.4	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	36
common persimmon	Diospyros virginiana	NSL	Low	3.7	0.1	0.4	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	37
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	38
bitternut hickory	Carya cordiformis	WSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	39
shagbark hickory	Carya ovata	WSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	40
sourwood	Oxydendrum arboreum	NDL	High	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	41
black oak	Quercus velutina	WDH	High	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	42
American basswood	Tilia americana	WSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	43