

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
loblolly pine	Pinus taeda	WDH	High	73.3	2495.7	40.5	No change	No change	Medium	Abundant	Good	Good			1	1
sweetgum	Liquidambar styraciflua	WDH	High	70.9	547.6	9.0	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good			1	2
willow oak	Quercus phellos	NSL	Low	50	511.0	16.0	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	3
water oak	Quercus nigra	WDH	High	76.7	424.9	7.1	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	4
overcup oak	Quercus lyrata	NSL	Medium	44.2	262.4	10.5	No change	No change	Low	Common	Poor	Poor			0	5
shortleaf pine	Pinus echinata	WDH	High	31.4	243.2	7.8	No change	Sm. inc.	Medium	Common	Fair	Good			1	6
southern red oak	Quercus falcata	WDL	Medium	47.7	237.1	5.5	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	7
white oak	Quercus alba	WDH	Medium	46.5	232.7	5.4	Sm. dec.	No change	High	Common	Fair	Good			1	8
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	41.9	198.7	5.2	No change	No change	Medium	Common	Fair	Fair			1	9
bald cypress	Taxodium distichum	NSH	Medium	12.8	181.3	14.2	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	10
winged elm	Ulmus alata	WDL	Medium	69.8	165.3	3.6	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	11
green ash	Fraxinus pennsylvanica	WSH	Low	48.8	128.3	4.9	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			1	12
blackgum	Nyssa sylvatica	WDL	Medium	38.4	127.4	3.3	Sm. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	13
red maple	Acer rubrum	WDH	High	50	124.5	2.9	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	14
water hickory	Carya aquatica	NSL	Medium	23.3	124.1	8.6	No change	No change	Medium	Common	Fair	Fair			1	15
American elm	Ulmus americana	WDH	Medium	40.7	114.9	4.6	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			1	16
Nuttall oak	Quercus texana	NSH	Medium	18.6	110.4	10.2	No change	No change	High	Common	Good	Good			0	17
sugarberry	Celtis laevigata	NDH	Medium	39.5	102.0	6.1	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	18
American beech	Fagus grandifolia	WDH	High	16.3	93.5	5.8	Sm. inc.	No change	Medium	Common	Good	Fair	Infill ++	Infill +	1	19
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	31.4	80.1	2.9	No change	No change	High	Common	Good	Good			1	20
cedar elm	Ulmus crassifolia	NDH	Medium	26.7	67.3	5.1	Lg. inc.	Lg. inc.	Low	Common	Good	Good	Infill ++	Infill ++	1	21
mockernut hickory	Carya alba	WDL	Medium	36	66.3	2.4	Sm. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	22
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	26.7	60.7	2.6	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	23
black cherry	Prunus serotina	WDL	Medium	34.9	60.4	2.2	No change	Sm. inc.	Low	Common	Poor	Fair			1	24
post oak	Quercus stellata	WDH	High	33.7	55.5	2.7	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	25
honeylocust	Gleditsia triacanthos	NSH	Low	16.3	43.8	7.0	Sm. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	26
flowering dogwood	Cornus florida	WDL	Medium	33.7	41.9	1.4	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair			1	27
common persimmon	Diospyros virginiana	NSL	Low	27.9	39.3	3.7	Sm. inc.	Lg. inc.	High	Rare	Good	Good			1	28
water tupelo	Nyssa aquatica	NSH	Medium	5.8	37.2	6.4	No change	No change	Low	Rare	Very Poor	Very Poor			2	29
black willow	Salix nigra	NSH	Low	17.4	25.7	5.1	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	1	30
Shumard oak	Quercus shumardii	NSL	Low	5.8	23.9	4.1	Sm. dec.	No change	High	Rare	Poor	Fair		Infill +	2	31
swamp chestnut oak	Quercus michauxii	NSL	Low	8.1	22.9	2.8	No change	No change	Medium	Rare	Poor	Poor			1	32
pignut hickory	Carya glabra	WDL	Medium	10.5	21.6	2.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	33
American holly	Ilex opaca	NSL	Medium	14	21.4	1.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	34
water elm	Planera aquatica	NSL	Low	1.2	16.7	14.4	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	35
slash pine	Pinus elliotii	NDH	High	3.5	16.5	4.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	36
sassafras	Sassafras albidum	WSL	Low	12.8	16.5	1.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	37
swamp white oak	Quercus bicolor	NSL	Low	3.5	15.7	4.5	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	38
black oak	Quercus velutina	WDH	High	15.1	15.5	1.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	39
sweetbay	Magnolia virginiana	NSL	Medium	9.3	14.2	1.5	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair	Infill +	Infill +	1	40
black locust	Robinia pseudoacacia	NDH	Low	1.2	11.4	9.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	41
eastern redcedar	Juniperus virginiana	WDH	Medium	5.8	10.9	1.9	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	42
laurel oak	Quercus laurifolia	NDH	Medium	3.5	9.5	2.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	43
white ash	Fraxinus americana	WDL	Medium	9.3	9.2	1.0	Sm. dec.	No change	Low	Rare	Very Poor	Very Poor			0	44
eastern cottonwood	Populus deltoides	NSH	Low	4.7	9.2	31.6	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	45
slippery elm	Ulmus rubra	WSL	Low	18.6	7.3	2.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	46
black hickory	Carya texana	NDL	High	1.2	7.2	6.2	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	47

U.S. Census Bureau Urban Areas
Climate Change Atlas Tree Species

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

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blackjack oak	Quercus marilandica	NSL	Medium	3.5	7.1	2.0	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	48
shellbark hickory	Carya laciniosa	NSL	Low	1.2	5.9	5.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	49
red mulberry	Morus rubra	NSL	Low	5.8	4.7	0.8	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	50
pecan	Carya illinoensis	NSH	Low	1.2	4.2	3.6	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	51
pin cherry	Prunus pensylvanica	NSL	Low	3.5	3.7	1.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	52
bitternut hickory	Carya cordiformis	WSL	Low	2.3	3.5	1.5	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	53
sourwood	Oxydendrum arboreum	NDL	High	2.3	2.9	1.3	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	54
yellow-poplar	Liriodendron tulipifera	WDH	High	1.2	2.9	2.5	Sm. dec.	No change	High	Rare	Poor	Fair			0	55
sycamore	Platanus occidentalis	NSL	Low	1.2	2.3	2.0	No change	Sm. dec.	Medium	Rare	Poor	Very Poor			0	56
shagbark hickory	Carya ovata	WSL	Medium	1.2	2.3	2.0	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	57
river birch	Betula nigra	NSL	Low	1.2	1.7	1.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	58
boxelder	Acer negundo	WSH	Low	1.2	1.2	1.1	Sm. dec.	No change	High	Rare	Poor	Fair		Infill +	2	59
American basswood	Tilia americana	WSL	Medium	1.2	0.7	0.6	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	60
serviceberry	Amelanchier spp.	NSL	Low	1.2	0.5	0.4	No change	No change	Medium	Rare	Poor	Poor			0	61
swamp tupelo	Nyssa biflora	NDH	Medium	1.2	0.4	0.4	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	62
Atlantic white-cedar	Chamaecyparis thyoides	NSH	Low	0	0	0	Unknown	Unknown	Low	Modeled	Unknown	Unknown			0	63
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	64
pond pine	Pinus serotina	NSH	Medium	0	0	0	Unknown	Unknown	Low	Modeled	Unknown	Unknown			0	65
florida maple	Acer barbatum	NSL	Low	0	0	0	Unknown	Unknown	High	Modeled	Unknown	Unknown			0	66
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	67
sugar maple	Acer saccharum	WDH	High	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	68
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	69
black ash	Fraxinus nigra	WSH	Medium	0	0	0	New Habitat	Unknown	Low	Absent	New Habitat	Unknown			3	70
silverbell	Halesia spp.	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	71
southern magnolia	Magnolia grandiflora	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	72
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	New Habitat	Unknown	Medium	Absent	New Habitat	Unknown	Likely +		3	73
redbay	Persea borbonia	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	74
scarlet oak	Quercus coccinea	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	75
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	76
northern red oak	Quercus rubra	WDH	Medium	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	77
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	78