



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	50	1063.8	22.5	Lg. inc.	Lg. inc.	Medium	Abundant	Very Good	Very Good			2	1
sweetgum	Liquidambar styraciflua	WDH	High	82.9	922.2	12.3	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good			2	2
yellow-poplar	Liriodendron tulipifera	WDH	High	78	858.7	12.2	Lg. dec.	Lg. dec.	High	Abundant	Good	Good			2	3
Virginia pine	Pinus virginiana	NDH	High	67.1	627.5	10.3	Lg. dec.	Lg. dec.	Medium	Abundant	Fair	Fair	Infill +		2	4
red maple	Acer rubrum	WDH	High	82.9	517.6	6.8	No change	No change	High	Abundant	Very Good	Very Good			2	5
shortleaf pine	Pinus echinata	WDH	High	62.2	496.8	9.2	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			2	6
white oak	Quercus alba	WDH	Medium	65.9	380.0	6.7	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			2	7
black cherry	Prunus serotina	WDL	Medium	67.1	362.0	6.0	Sm. dec.	No change	Low	Common	Poor	Poor	Infill +	Infill +	2	8
eastern redcedar	Juniperus virginiana	WDH	Medium	64.6	297.6	5.2	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			2	9
water oak	Quercus nigra	WDH	High	39	277.5	6.9	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			2	10
southern red oak	Quercus falcata	WDL	Medium	64.6	273.3	4.8	Sm. inc.	Lg. inc.	High	Common	Very Good	Very Good			2	11
northern red oak	Quercus rubra	WDH	Medium	48.8	193.0	4.6	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	2	12
white ash	Fraxinus americana	WDL	Medium	30.5	182.2	7.8	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor	Infill +	Infill +	2	13
mockernut hickory	Carya alba	WDL	Medium	50	180.0	3.9	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			2	14
sourwood	Oxydendrum arboreum	NDL	High	48.8	164.7	3.9	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	2	15
chestnut oak	Quercus prinus	NDH	High	15.9	163.7	10.1	Lg. dec.	Lg. dec.	High	Common	Fair	Fair			0	16
scarlet oak	Quercus coccinea	WDL	Medium	34.1	144.9	4.7	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	2	17
river birch	Betula nigra	NSL	Low	12.2	141.6	11.3	No change	Sm. inc.	Medium	Common	Fair	Good	Infill +		2	18
winged elm	Ulmus alata	WDL	Medium	42.7	131.2	3.3	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			2	19
American beech	Fagus grandifolia	WDH	High	39	127.6	4.1	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	2	20
flowering dogwood	Cornus florida	WDL	Medium	67.1	120.3	2.1	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	2	21
post oak	Quercus stellata	WDH	High	39	113.9	3.6	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			2	22
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	28	103.2	3.6	No change	Sm. inc.	Medium	Common	Fair	Good	Infill +		2	23
pignut hickory	Carya glabra	WDL	Medium	48.8	103.0	2.5	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			2	24
willow oak	Quercus phellos	NSL	Low	32.9	102.0	3.4	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	2	25
green ash	Fraxinus pennsylvanica	WSH	Low	23.2	89.3	3.8	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			2	26
blackgum	Nyssa sylvatica	WDL	Medium	51.2	82.9	1.7	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			2	27
shagbark hickory	Carya ovata	WSL	Medium	11	78.3	7.0	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	28
pecan	Carya illinoensis	NSH	Low	1.2	62.5	50.0	No change	No change	Low	Common	Poor	Poor		Infill +	2	29
ailanthus	Ailanthus altissima	NSL	FIA	4.9	61.8	12.4	Unknown	Unknown	NA	Common	NNIS	NNIS			0	30
American elm	Ulmus americana	WDH	Medium	32.9	60.3	2.5	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			2	31
slippery elm	Ulmus rubra	WSL	Low	14.6	57.2	5.3	Lg. dec.	Sm. dec.	Medium	Common	Poor	Poor		Infill +	2	32
black oak	Quercus velutina	WDH	High	32.9	56.1	2.0	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			2	33
common persimmon	Diospyros virginiana	NSL	Low	22	49.8	2.7	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	34
sycamore	Platanus occidentalis	NSL	Low	9.8	46.9	4.7	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	35
black willow	Salix nigra	NSH	Low	2.4	38.5	15.4	No change	No change	Low	Rare	Very Poor	Very Poor			2	36
eastern white pine	Pinus strobus	WDH	High	4.9	35.3	7.1	Sm. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	37
American holly	Ilex opaca	NSL	Medium	25.6	33.2	1.3	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	38
boxelder	Acer negundo	WSH	Low	6.1	26.8	4.3	Sm. dec.	No change	High	Rare	Poor	Fair	Infill +	Infill +	2	39
florida maple	Acer barbatum	NSL	Low	8.5	25.8	3.0	No change	No change	High	Rare	Fair	Fair			0	40
blackjack oak	Quercus marilandica	NSL	Medium	3.7	23.0	6.1	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	41
black walnut	Juglans nigra	WDH	Low	9.8	22.0	2.2	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	42
hackberry	Celtis occidentalis	WDH	Medium	3.7	20.3	5.4	Sm. dec.	No change	High	Rare	Poor	Fair		Infill +	2	43
pitch pine	Pinus rigida	NSH	High	2.4	15.4	6.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	44
eastern redbud	Cercis canadensis	NSL	Low	13.4	15.3	1.1	Lg. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	2	45
sand hickory	Carya pallida	NSL	FIA	8.5	14.6	1.7	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	46
red mulberry	Morus rubra	NSL	Low	7.3	13.1	1.8	No change	No change	Medium	Rare	Poor	Poor		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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sugar maple	Acer saccharum	WDH	High	2.4	12.5	5.0	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor				0	48
laurel oak	Quercus laurifolia	NDH	Medium	4.9	10.6	2.1	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +			2	49
black locust	Robinia pseudoacacia	NDH	Low	2.4	9.9	4.0	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0	50
honeylocust	Gleditsia triacanthos	NSH	Low	1.2	9.3	7.4	No change	Sm. inc.	High	Rare	Fair	Good				2	51
sugarberry	Celtis laevigata	NDH	Medium	4.9	5.2	1.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good				2	52
eastern cottonwood	Populus deltoides	NSH	Low	1.2	4.6	3.7	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor				0	53
American basswood	Tilia americana	WSL	Medium	3.7	4.2	1.1	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0	54
sassafras	Sassafras albidum	WSL	Low	3.7	3.6	1.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good				2	55
pawpaw	Asimina triloba	NSL	Low	3.7	3.3	0.9	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0	56
bitternut hickory	Carya cordiformis	WSL	Low	2.4	3.2	1.3	Lg. dec.	Very Lg. dec.	High	Rare	Poor	Lost				0	57
shellbark hickory	Carya laciniosa	NSL	Low	1.2	2.3	1.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor				0	58
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	2.4	1.5	0.6	Lg. inc.	Lg. inc.	High	Rare	Good	Good				2	59
serviceberry	Amelanchier spp.	NSL	Low	1.2	0.5	0.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0	60
American chestnut	Castanea dentata	NSLX	FIA	1.2	0.4	0.3	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only				0	61
ashe juniper	Juniperus ashei	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				0	62
slash pine	Pinus elliottii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +		3	63
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				3	64
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				3	65
yellow buckeye	Aesculus flava	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown				0	66
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				0	67
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				3	68
black ash	Fraxinus nigra	WSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat				3	69
silverbell	Halesia spp.	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown				0	70
cucumbertree	Magnolia acuminata	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown				0	71
southern magnolia	Magnolia grandiflora	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				3	72
sweetbay	Magnolia virginiana	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				3	73
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown				0	74
swamp tupelo	Nyssa biflora	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat				3	75
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +			3	76
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++		3	77
bluejack oak	Quercus incana	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +		3	78
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat				0	79