

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
pitch pine	Pinus rigida	NSH	High	63	2288.0	39.3	Lg. dec.	Lg. dec.	Medium	Abundant	Fair	Fair	Infill +	Infill +	0	1
white oak	Quercus alba	WDH	Medium	52.3	769.8	18.9	Sm. dec.	Lg. dec.	High	Abundant	Good	Good	Infill ++	Infill ++	1	2
red maple	Acer rubrum	WDH	High	59.4	616.2	13.3	Sm. inc.	Sm. inc.	High	Abundant	Very Good	Very Good	Infill ++	Infill ++	1	3
Atlantic white-cedar	Chamaecyparis thyoides	NSH	Low	22.7	489.8	21.2	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	4
scarlet oak	Quercus coccinea	WDL	Medium	47.7	373.6	9.9	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	5
black oak	Quercus velutina	WDH	High	52.7	310.7	7.9	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	6
sweetgum	Liquidambar styraciflua	WDH	High	23.1	242.4	12.3	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good	Infill ++	Infill ++	1	7
blackgum	Nyssa sylvatica	WDL	Medium	54	223.2	5.1	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	8
black cherry	Prunus serotina	WDL	Medium	24.2	208.7	12.2	No change	No change	Low	Common	Poor	Poor	Infill +	Infill +	0	9
American holly	Ilex opaca	NSL	Medium	26	147.4	6.0	Sm. inc.	Sm. inc.	Medium	Common	Good	Good	Infill ++	Infill ++	1	10
Virginia pine	Pinus virginiana	NDH	High	14.3	111.5	8.6	No change	Lg. dec.	Medium	Common	Fair	Poor	Infill +		1	11
shortleaf pine	Pinus echinata	WDH	High	12	111.4	11.8	Lg. dec.	Sm. dec.	Medium	Common	Poor	Poor		Infill +	0	12
sassafras	Sassafras albidum	WSL	Low	48.6	89.1	2.8	Sm. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	13
chestnut oak	Quercus prinus	NDH	High	19.5	82.8	6.6	No change	Lg. dec.	High	Common	Good	Fair	Infill ++		2	14
southern red oak	Quercus falcata	WDL	Medium	28.9	80.0	4.5	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	15
eastern redcedar	Juniperus virginiana	WDH	Medium	9.9	47.3	10.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	16
black walnut	Juglans nigra	WDH	Low	4.4	42.7	26.5	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	17
post oak	Quercus stellata	WDH	High	19.4	39.2	2.2	Lg. dec.	Lg. inc.	High	Rare	Poor	Good		Infill ++	2	18
eastern white pine	Pinus strobus	WDH	High	11.2	37.0	4.9	Lg. dec.	Very Lg. dec.	Low	Rare	Very Poor	Lost			0	19
yellow-poplar	Liriodendron tulipifera	WDH	High	7.1	31.0	8.2	Lg. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	20
sweetbay	Magnolia virginiana	NSL	Medium	21.1	26.9	1.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	21
northern red oak	Quercus rubra	WDH	Medium	19.6	25.8	6.8	Lg. inc.	Sm. dec.	High	Rare	Good	Poor	Infill ++	Infill +	2	22
blackjack oak	Quercus marilandica	NSL	Medium	12.4	25.5	1.9	Lg. dec.	Very Lg. dec.	High	Rare	Poor	Lost			0	23
American beech	Fagus grandifolia	WDH	High	8.4	17.4	3.9	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	24
loblolly pine	Pinus taeda	WDH	High	5.6	16.1	6.6	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	25
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	11.2	13.5	1.1	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	26
slippery elm	Ulmus rubra	WSL	Low	1.2	10.8	7.9	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	27
pin oak	Quercus palustris	NSH	Low	6.1	9.2	10.0	Sm. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	28
silver maple	Acer saccharinum	NSH	Low	5.9	9.0	6.4	No change	No change	High	Rare	Fair	Fair		Infill +	2	29
green ash	Fraxinus pennsylvanica	WSH	Low	1.2	8.0	5.9	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +		2	30
pond pine	Pinus serotina	NSH	Medium	1.2	7.2	5.3	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	31
black willow	Salix nigra	NSH	Low	2.5	7.1	2.6	No change	Lg. inc.	Low	Rare	Very Poor	Fair		Infill +	2	32
American hornbeam; muscley	Carpinus caroliniana	WSL	Low	1.2	7.0	5.1	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	33
willow oak	Quercus phellos	NSL	Low	6.8	6.2	1.2	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +		2	34
common persimmon	Diospyros virginiana	NSL	Low	4.4	4.4	2.5	Sm. dec.	No change	High	Rare	Poor	Fair		Infill +	2	35
Norway maple	Acer platanoides	NSL	FIA	6.1	3.8	2.4	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	36
white ash	Fraxinus americana	WDL	Medium	2.5	3.8	1.4	No change	No change	Low	Rare	Very Poor	Very Poor			2	37
gray birch	Betula populifolia	NSL	Low	7.5	3.6	1.2	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	38
bigtooth aspen	Populus grandidentata	NSL	Medium	4.4	3.0	1.6	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	39
Scots pine	Pinus sylvestris	NSH	FIA	1.2	3.0	2.2	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	40
boxelder	Acer negundo	WSH	Low	1.2	2.7	2.0	Sm. dec.	Very Lg. dec.	High	Rare	Poor	Lost			0	41
Norway spruce	Picea abies	NSH	FIA	9.6	2.6	3.7	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	42
black locust	Robinia pseudoacacia	NDH	Low	4.9	1.9	5.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	43
swamp chestnut oak	Quercus michauxii	NSL	Low	1.2	1.2	0.9	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	44
ailanthus	Ailanthus altissima	NSL	FIA	6.1	1.1	1.0	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	45
pignut hickory	Carya glabra	WDL	Medium	1.2	1.0	0.7	No change	Lg. inc.	Medium	Rare	Poor	Good			2	46
black ash	Fraxinus nigra	WSH	Medium	1.2	0.9	0.7	Very Lg. dec.	Very Lg. dec.	Low	Rare	Lost	Lost			0	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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serviceberry	Amelanchier spp.	NSL	Low	1.2	0.9	0.6	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	48
yellow birch	Betula alleghaniensis	NDL	High	1.2	0.9	0.6	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	49
mockernut hickory	Carya alba	WDL	Medium	4.6	0.8	2.2	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	50
laurel oak	Quercus laurifolia	NDH	Medium	4.9	0.4	1.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	51
slash pine	Pinus elliottii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	52
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	53
bald cypress	Taxodium distichum	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	54
pond cypress	Taxodium ascendens	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	55
sugar maple	Acer saccharum	WDH	High	0	0	0	New Habitat	Unknown	High	Absent	New Habitat	Unknown			3	56
pawpaw	Asimina triloba	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	57
river birch	Betula nigra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	58
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	59
water hickory	Carya aquatica	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	60
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate +	3	61
shagbark hickory	Carya ovata	WSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	62
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	63
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	64
hackberry	Celtis occidentalis	WDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	65
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	66
loblolly-bay	Gordonia lasianthus	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	67
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	68
water tupelo	Nyssa aquatica	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	69
swamp tupelo	Nyssa biflora	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	70
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	0	0	0	Unknown	New Habitat	High	Absent	Unknown	New Habitat		Migrate +	3	71
sourwood	Oxydendrum arboreum	NDL	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +		3	72
redbay	Persea borbonia	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	73
water elm	Planera aquatica	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	74
sycamore	Platanus occidentalis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	75
pin cherry	Prunus pensylvanica	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	76
swamp white oak	Quercus bicolor	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	77
cherrybark oak; swamp red o.	Quercus pagoda	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	78
turkey oak	Quercus laevis	NSH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	79
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate +	3	80
water oak	Quercus nigra	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	81
Nuttall oak	Quercus texana	NSH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	82
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	83
bluejack oak	Quercus incana	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			3	84
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	85
American elm	Ulmus americana	WDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	86