

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	89.7	4367.1	37.6	No change	No change	Medium	Abundant	Good	Good			1	1
sweetgum	Liquidambar styraciflua	WDH	High	93.7	1201.4	9.3	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good				1 2
water oak	Quercus nigra	WDH	High	68.9	509.5	4.8	Lg. inc.	Lg. inc.	Medium	Abundant	Very Good	Very Good				1 3
eastern redcedar	Juniperus virginiana	WDH	Medium	84.5	500.2	4.6	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good				1 4
red maple	Acer rubrum	WDH	High	80.7	458.6	3.8	No change	No change	High	Common	Good	Good				1 5
white oak	Quercus alba	WDH	Medium	70.9	435.3	4.5	No change	No change	High	Common	Good	Good				1 6
shortleaf pine	Pinus echinata	WDH	High	60.5	344.9	4.0	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good				1 7
yellow-poplar	Liriodendron tulipifera	WDH	High	65.2	332.0	3.7	Lg. dec.	Lg. dec.	High	Common	Fair	Fair				1 8
winged elm	Ulmus alata	WDL	Medium	78.6	313.3	2.9	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good				1 9
southern red oak	Quercus falcata	WDL	Medium	61.7	186.5	2.1	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good				1 10
post oak	Quercus stellata	WDH	High	59.7	179.4	2.0	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good				1 11
willow oak	Quercus phellos	NSL	Low	47.8	171.2	2.6	Sm. inc.	Sm. inc.	Medium	Common	Good	Good				1 12
green ash	Fraxinus pennsylvanica	WSH	Low	48	149.5	2.7	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good				1 13
mockernut hickory	Carya alba	WDL	Medium	49.9	128.5	1.8	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good				1 14
pignut hickory	Carya glabra	WDL	Medium	39.3	121.5	2.0	No change	Sm. dec.	Medium	Common	Fair	Poor				1 15
northern red oak	Quercus rubra	WDH	Medium	43.8	119.8	2.2	Lg. dec.	Lg. dec.	High	Common	Fair	Fair				1 16
black cherry	Prunus serotina	WDL	Medium	65.6	113.8	1.2	Lg. inc.	Lg. inc.	Low	Common	Good	Good				1 17
sourwood	Oxydendrum arboreum	NDL	High	34.3	104.9	2.2	Lg. dec.	Lg. dec.	High	Common	Fair	Fair				1 18
flowering dogwood	Cornus florida	WDL	Medium	56.4	104.8	1.3	No change	Sm. inc.	Medium	Common	Fair	Good				1 19
Virginia pine	Pinus virginiana	NDH	High	15.5	99.5	3.7	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor				0 20
scarlet oak	Quercus coccinea	WDL	Medium	19.4	89.0	2.5	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor				0 21
black oak	Quercus velutina	WDH	High	30.6	80.8	1.9	Sm. inc.	Sm. inc.	Medium	Common	Good	Good				1 22
American elm	Ulmus americana	WDH	Medium	29.9	77.6	1.9	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good				1 23
sugarberry	Celtis laevigata	NDH	Medium	20.2	76.2	2.7	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good				1 24
blackgum	Nyssa sylvatica	WDL	Medium	47.1	75.5	1.1	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good				1 25
American hornbeam; musclev	Carpinus caroliniana	WSL	Low	29.1	74.6	1.8	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good				1 26
American beech	Fagus grandifolia	WDH	High	28.4	73.6	2.2	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good				1 27
white ash	Fraxinus americana	WDL	Medium	28.5	69.0	1.8	Sm. inc.	Lg. inc.	Low	Common	Fair	Good				1 28
shagbark hickory	Carya ovata	WSL	Medium	25.1	66.4	1.9	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor				0 29
river birch	Betula nigra	NSL	Low	14.5	61.4	2.8	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good				1 30
sycamore	Platanus occidentalis	NSL	Low	18.1	54.9	2.6	Sm. dec.	No change	Medium	Common	Poor	Fair				1 31
common persimmon	Diospyros virginiana	NSL	Low	27.4	46.1	1.4	Lg. dec.	Sm. dec.	High	Rare	Poor	Poor				1 32
black willow	Salix nigra	NSH	Low	10.8	43.6	3.2	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair				1 33
American holly	Ilex opaca	NSL	Medium	20.7	43.4	1.4	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good				1 34
red mulberry	Morus rubra	NSL	Low	16	36.7	1.6	No change	Sm. inc.	Medium	Rare	Poor	Fair				1 35
boxelder	Acer negundo	WSH	Low	10.9	32.4	2.3	Lg. dec.	Sm. dec.	High	Rare	Poor	Poor				1 36
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	11.7	31.8	2.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++		1 37
slippery elm	Ulmus rubra	WSL	Low	16.8	29.9	1.2	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor				0 38
florida maple	Acer barbatum	NSL	Low	20.8	28.8	1.1	No change	Lg. inc.	High	Rare	Fair	Good				1 39
black locust	Robinia pseudoacacia	NDH	Low	3.1	27.1	4.9	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0 40
longleaf pine	Pinus palustris	NSH	Medium	3.2	23.8	3.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++		2 41
eastern cottonwood	Populus deltoides	NSH	Low	2.9	18.0	6.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor				0 42
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	10.3	17.9	1.5	Lg. inc.	Lg. inc.	High	Rare	Good	Good				1 43
ailanthus	Ailanthus altissima	NSL	FIA	5	17.8	2.4	Unknown	Unknown	NA	Rare	NNIS	NNIS				0 44
bitternut hickory	Carya cordiformis	WSL	Low	12.1	17.5	1.2	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor				1 45
blackjack oak	Quercus marilandica	NSL	Medium	5.1	16.2	1.2	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++		2 46
black walnut	Juglans nigra	WDH	Low	13.3	16.1	0.9	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost				0 47

One x One Degree
Climate Change Atlas Tree Species

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

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eastern redbud	Cercis canadensis	NSL	Low	15.1	13.0	0.7	Sm. dec.	Sm. inc.	Medium	Rare	Very Poor	Fair			1	48
sand hickory	Carya pallida	NSL	FIA	4.1	10.7	1.9	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	49
laurel oak	Quercus laurifolia	NDH	Medium	5.9	8.8	0.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	50
pecan	Carya illinoensis	NSH	Low	2.1	8.6	1.6	No change	Lg. inc.	Low	Rare	Very Poor	Fair		Infill +	2	51
cucumbertree	Magnolia acuminata	NSL	Low	3.9	7.6	1.9	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	52
slash pine	Pinus elliotii	NDH	High	1.5	6.4	2.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	53
sassafras	Sassafras albidum	WSL	Low	7.2	5.8	0.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	54
hackberry	Celtis occidentalis	WDH	Medium	3.9	4.0	1.0	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	55
honeylocust	Gleditsia triacanthos	NSH	Low	2	3.0	1.6	Sm. inc.	Lg. inc.	High	Rare	Good	Good		Infill ++	2	56
pawpaw	Asimina triloba	NSL	Low	1.4	2.6	1.1	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	57
shellbark hickory	Carya laciniosa	NSL	Low	0.4	1.7	0.7	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	58
chestnut oak	Quercus prinus	NDH	High	2.5	1.6	0.5	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	59
Shumard oak	Quercus shumardii	NSL	Low	1	1.6	1.6	Sm. dec.	No change	High	Rare	Poor	Fair			0	60
pond pine	Pinus serotina	NSH	Medium	1	1.2	1.2	Very Lg. dec.	Very Lg. dec.	Low	Rare	Lost	Lost			0	61
American basswood	Tilia americana	WSL	Medium	1	1.1	1.1	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	62
white mulberry	Morus alba	NSL	FIA	2	1.0	0.5	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	63
silverbell	Halesia spp.	NSL	Low	2	0.7	0.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	64
sugar maple	Acer saccharum	WDH	High	0.7	0.5	0.4	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	65
serviceberry	Amelanchier spp.	NSL	Low	1	0.4	0.4	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	66
turkey oak	Quercus laevis	NSH	Medium	0.8	0.3	0.2	No change	No change	High	Rare	Fair	Fair			0	67
water tupelo	Nyssa aquatica	NSH	Medium	1	0.3	0.3	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	68
bluejack oak	Quercus incana	NSL	Low	1	0.3	0.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	69
wild plum	Prunus americana	NSLX	FIA	1	0.2	0.2	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	70
bald cypress	Taxodium distichum	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	71
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			3	72
yellow buckeye	Aesculus flava	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	73
yellow birch	Betula alleghaniensis	NDL	High	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	74
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	75
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	76
black ash	Fraxinus nigra	WSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	77
southern magnolia	Magnolia grandiflora	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	78
sweetbay	Magnolia virginiana	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	79
swamp tupelo	Nyssa biflora	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Likely +	Likely +	3	80
redbay	Persea borbonia	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	81
pin cherry	Prunus pensylvanica	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	82
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	83
swamp chestnut oak	Quercus michauxii	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	84
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	85
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	86
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	87