



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
red maple	Acer rubrum	WDH	High	82.6	445.6	12.2	No change	Sm. dec.	High	Common	Good	Fair			1	1
chestnut oak	Quercus prinus	NDH	High	67.4	365.0	11.8	No change	No change	High	Common	Good	Good			1	2
yellow-poplar	Liriodendron tulipifera	WDH	High	76.7	346.9	13.5	No change	Sm. dec.	High	Common	Good	Fair			1	3
black cherry	Prunus serotina	WDL	Medium	82.6	326.5	9.6	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor			0	4
white ash	Fraxinus americana	WDL	Medium	73.3	285.1	10.4	No change	Sm. dec.	Low	Common	Poor	Poor			0	5
northern red oak	Quercus rubra	WDH	Medium	60.5	231.5	7.7	No change	No change	High	Common	Good	Good			1	6
sweet birch	Betula lenta	NDH	High	60.5	214.4	8.9	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	7
white oak	Quercus alba	WDH	Medium	47.7	191.5	9.4	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	8
black oak	Quercus velutina	WDH	High	54.7	172.8	7.9	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	9
black walnut	Juglans nigra	WDH	Low	52.3	156.7	10.9	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	10
green ash	Fraxinus pennsylvanica	WSH	Low	19.8	139.6	14.8	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	11
blackgum	Nyssa sylvatica	WDL	Medium	59.3	109.0	4.4	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	12
sassafras	Sassafras albidum	WSL	Low	77.9	91.3	3.3	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	13
black locust	Robinia pseudoacacia	NDH	Low	32.6	79.1	9.0	No change	Sm. inc.	Medium	Common	Fair	Good			1	14
mockernut hickory	Carya alba	WDL	Medium	26.7	76.5	8.1	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	15
boxelder	Acer negundo	WSH	Low	32.6	75.0	8.4	Sm. dec.	No change	High	Common	Fair	Good			1	16
scarlet oak	Quercus coccinea	WDL	Medium	30.2	64.4	4.4	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	17
pitch pine	Pinus rigida	NSH	High	8.1	52.9	10.8	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	18
black willow	Salix nigra	NSH	Low	3.5	51.4	13.9	Sm. dec.	No change	Low	Common	Poor	Poor		Infill +	0	19
eastern white pine	Pinus strobus	WDH	High	22.1	47.6	4.3	No change	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	20
silver maple	Acer saccharinum	NSH	Low	7	47.4	14.1	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	21
Norway maple	Acer platanoides	NSL	FIA	32.6	44.5	7.5	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	22
pignut hickory	Carya glabra	WDL	Medium	38.4	44.0	3.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	23
ailanthus	Ailanthus altissima	NSL	FIA	20.9	39.4	5.1	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	24
eastern redcedar	Juniperus virginiana	WDH	Medium	8.1	39.2	8.2	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	2	25
sugar maple	Acer saccharum	WDH	High	8.1	38.9	9.1	Sm. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	26
shagbark hickory	Carya ovata	WSL	Medium	30.2	30.5	2.8	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	27
eastern hemlock	Tsuga canadensis	NSH	High	16.3	27.8	2.9	No change	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	28
bigtooth aspen	Populus grandidentata	NSL	Medium	19.8	25.8	3.4	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	29
Virginia pine	Pinus virginiana	NDH	High	1.2	24.4	19.8	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair	Infill +	Infill +	2	30
gray birch	Betula populifolia	NSL	Low	2.3	22.2	9.0	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	31
swamp white oak	Quercus bicolor	NSL	Low	1.2	20.6	16.7	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			2	32
sycamore	Platanus occidentalis	NSL	Low	11.6	19.8	4.4	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	33
bitternut hickory	Carya cordiformis	WSL	Low	22.1	16.0	3.2	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	34
American beech	Fagus grandifolia	WDH	High	38.4	11.4	1.6	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	35
flowering dogwood	Cornus florida	WDL	Medium	22.1	8.0	1.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	36
white spruce	Picea glauca	NSL	Medium	1.2	7.6	6.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	37
Norway spruce	Picea abies	NSH	FIA	5.8	7.1	5.3	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	38
American elm	Ulmus americana	WDH	Medium	25.6	6.7	1.4	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	39
yellow birch	Betula alleghaniensis	NDL	High	5.8	6.4	3.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	40
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	10.5	5.0	2.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	41
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	10.5	4.9	1.7	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	42
white mulberry	Morus alba	NSL	FIA	1.2	3.9	3.2	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	43
pin cherry	Prunus pensylvanica	NSL	Low	5.8	3.7	2.0	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	44
serviceberry	Amelanchier spp.	NSL	Low	11.6	3.4	0.9	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	45
Osage-orange	Maclura pomifera	NDH	Medium	4.7	2.9	9.3	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	46
pin oak	Quercus palustris	NSH	Low	14	2.6	2.9	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	1	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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tamarack (native)	Larix laricina	NSH	High	5.8	2.2	1.9	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	48
striped maple	Acer pensylvanicum	NSL	Medium	2.3	1.6	0.7	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	49
slippery elm	Ulmus rubra	WSL	Low	4.7	1.6	5.2	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	2	50
chokecherry	Prunus virginiana	NSLX	FIA	1.2	1.6	1.3	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	51
hackberry	Celtis occidentalis	WDH	Medium	9.3	1.4	2.3	Sm. inc.	Lg. inc.	High	Rare	Good	Good			2	52
rock elm	Ulmus thomasii	NSLX	FIA	4.7	1.2	4.0	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	53
red mulberry	Morus rubra	NSL	Low	4.7	1.1	3.7	Sm. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	2	54
American chestnut	Castanea dentata	NSLX	FIA	5.8	1.0	0.5	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	55
butternut	Juglans cinerea	NSLX	FIA	4.7	0.7	2.4	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	56
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	1.2	0.5	0.4	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	57
American basswood	Tilia americana	WSL	Medium	4.7	0.2	0.8	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	58
Scots pine	Pinus sylvestris	NSH	FIA	4.7	0.2	0.6	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	59
red pine	Pinus resinosa	NSH	Medium	4.7	0.1	0.4	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	60
quaking aspen	Populus tremuloides	WDH	High	4.7	0.1	0.3	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	61
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	62
loblolly pine	Pinus taeda	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	63
bald cypress	Taxodium distichum	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	64
florida maple	Acer barbatum	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	65
yellow buckeye	Aesculus flava	NSL	Low	0	0	0	Unknown	Unknown	Low	Modeled	Unknown	Unknown			0	66
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	67
shellbark hickory	Carya laciniosa	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	68
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	69
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	70
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	71
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	72
black ash	Fraxinus nigra	WSH	Medium	0	0	0	Unknown	Unknown	Low	Modeled	Unknown	Unknown			0	73
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	74
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	75
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	76
sourwood	Oxydendrum arboreum	NDL	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	77
balsam poplar	Populus balsamifera	NSH	Medium	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	78
southern red oak	Quercus falcata	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	79
cherrybark oak; swamp red o.	Quercus pagoda	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	80
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	81
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate ++	3	82
swamp chestnut oak	Quercus michauxii	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat		Likely +	3	83
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	84
water oak	Quercus nigra	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	85
willow oak	Quercus phellos	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	86
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	87
bluejack oak	Quercus incana	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	88
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	89