

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	69.5	921.0	14.2	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	1
red pine	Pinus resinosa	NSH	Medium	30	845.1	25.8	Lg. dec.	Lg. dec.	Low	Abundant	Poor	Poor			0	2
white oak	Quercus alba	WDH	Medium	47.8	605.7	13.4	No change	No change	High	Abundant	Very Good	Very Good			1	3
black cherry	Prunus serotina	WDL	Medium	61.1	489.8	8.7	Sm. inc.	No change	Low	Common	Fair	Poor			1	4
northern red oak	Quercus rubra	WDH	Medium	54.5	476.9	7.8	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	5
silver maple	Acer saccharinum	NSH	Low	27.4	471.9	19.8	No change	No change	High	Common	Good	Good			1	6
black oak	Quercus velutina	WDH	High	27.3	459.5	16.4	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	7
eastern white pine	Pinus strobus	WDH	High	48.7	434.2	9.0	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	8
Scots pine	Pinus sylvestris	NSH	FIA	24.9	349.7	20.0	Unknown	Unknown	NA	Common	NNIS	NNIS			0	9
green ash	Fraxinus pennsylvanica	WSH	Low	43.5	301.5	10.1	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	10
sugar maple	Acer saccharum	WDH	High	35.7	243.5	7.7	Sm. inc.	No change	High	Common	Very Good	Good			1	11
eastern hemlock	Tsuga canadensis	NSH	High	18	194.7	9.5	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	12
jack pine	Pinus banksiana	NSH	Medium	21.3	176.2	6.1	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	13
quaking aspen	Populus tremuloides	WDH	High	24.9	173.7	6.8	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	14
American elm	Ulmus americana	WDH	Medium	44.8	170.1	5.3	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			1	15
northern pin oak	Quercus ellipsoidalis	NSH	Medium	25.8	167.6	6.2	Lg. dec.	Lg. dec.	High	Common	Fair	Fair			1	16
white ash	Fraxinus americana	WDL	Medium	24.9	160.6	7.9	No change	Sm. inc.	Low	Common	Poor	Fair			1	17
American beech	Fagus grandifolia	WDH	High	30	159.5	4.1	No change	Sm. dec.	Medium	Common	Fair	Poor			1	18
bigtooth aspen	Populus grandidentata	NSL	Medium	35.1	154.5	4.9	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	19
American basswood	Tilia americana	WSL	Medium	24.9	148.2	7.0	No change	Sm. dec.	Medium	Common	Fair	Poor			1	20
black ash	Fraxinus nigra	WSH	Medium	22.4	136.1	5.9	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	21
sassafras	Sassafras albidum	WSL	Low	32.4	114.1	2.9	Lg. inc.	Sm. inc.	Medium	Common	Very Good	Good			1	22
eastern cottonwood	Populus deltoides	NSH	Low	14.2	108.9	12.6	Sm. inc.	Sm. inc.	Medium	Common	Good	Good	Infill ++	Infill ++	1	23
black willow	Salix nigra	NSH	Low	5	76.6	15.0	Sm. dec.	No change	Low	Common	Poor	Poor		Infill +	0	24
northern white-cedar	Thuja occidentalis	WSH	High	12.4	66.9	5.3	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	25
black locust	Robinia pseudoacacia	NDH	Low	1.8	39.3	12.3	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	26
yellow birch	Betula alleghaniensis	NDL	High	12.4	37.7	3.0	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	27
serviceberry	Amelanchier spp.	NSL	Low	15.9	36.8	2.2	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	28
paper birch	Betula papyrifera	WDH	High	12.7	29.4	2.0	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	29
shagbark hickory	Carya ovata	WSL	Medium	3.7	28.3	7.4	No change	Sm. dec.	Medium	Rare	Poor	Very Poor	Infill +		2	30
Norway spruce	Picea abies	NSH	FIA	2.5	27.5	10.8	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	31
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	16.2	26.4	2.3	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			1	32
swamp white oak	Quercus bicolor	NSL	Low	8.7	23.3	2.6	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	33
bitternut hickory	Carya cordiformis	WSL	Low	6.2	21.2	3.3	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	1	34
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	17.4	21.1	1.2	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	35
mountain maple	Acer spicatum	NSL	Low	1	19.4	12.4	Very Lg. dec.	Very Lg. dec.	High	Rare	Lost	Lost			0	36
hackberry	Celtis occidentalis	WDH	Medium	2.5	17.9	7.0	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	37
blackgum	Nyssa sylvatica	WDL	Medium	9.9	17.4	4.5	No change	Sm. inc.	High	Rare	Fair	Good	Infill +	Infill ++	1	38
boxelder	Acer negundo	WSH	Low	8	15.5	8.7	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	39
pignut hickory	Carya glabra	WDL	Medium	1.2	14.4	11.3	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	40
yellow-poplar	Liriodendron tulipifera	WDH	High	2.5	12.1	4.8	Sm. inc.	Lg. inc.	High	Rare	Good	Good			2	41
scarlet oak	Quercus coccinea	WDL	Medium	1.2	10.5	8.3	No change	No change	Medium	Rare	Poor	Poor		Infill +	2	42
slippery elm	Ulmus rubra	WSL	Low	5	10.5	2.1	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	43
bur oak	Quercus macrocarpa	NDH	Medium	5	9.1	1.8	Sm. dec.	No change	High	Rare	Poor	Fair			0	44
sycamore	Platanus occidentalis	NSL	Low	1.8	7.9	2.2	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	45
white spruce	Picea glauca	NSL	Medium	1.2	7.0	5.5	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	46
tamarack (native)	Larix laricina	NSH	High	2.5	6.5	2.6	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			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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black walnut	Juglans nigra	WDH	Low	1.2	4.0	3.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	48
flowering dogwood	Cornus florida	WDL	Medium	3.7	4.0	1.1	Sm. dec.	No change	Medium	Rare	Very Poor	Poor				49
peachleaf willow	Salix amygdaloides	NSLX	FIA	1.2	3.8	3.0	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only				50
Siberian elm	Ulmus pumila	NDH	FIA	1.2	3.2	2.5	Unknown	Unknown	NA	Rare	NNIS	NNIS				51
chokecherry	Prunus virginiana	NSLX	FIA	3.7	2.6	0.7	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only				52
eastern redcedar	Juniperus virginiana	WDH	Medium	2.5	2.4	1.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good				53
white mulberry	Morus alba	NSL	FIA	1.2	2.2	1.7	Unknown	Unknown	NA	Rare	NNIS	NNIS				54
ailanthus	Ailanthus altissima	NSL	FIA	5	1.4	4.4	Unknown	Unknown	NA	Rare	NNIS	NNIS				55
balsam fir	Abies balsamea	NDH	High	1.2	1.2	0.9	Very Lg. dec.	Very Lg. dec.	Low	Rare	Lost	Lost				56
pin cherry	Prunus pensylvanica	NSL	Low	1.2	0.7	0.6	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost				57
balsam poplar	Populus balsamifera	NSH	Medium	1.2	0.5	0.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				58
chinkapin oak	Quercus muehlenbergii	NSL	Medium	5	0.4	1.3	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				59
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +		60
loblolly pine	Pinus taeda	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +		61
Virginia pine	Pinus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				62
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				63
mockernut hickory	Carya alba	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +		64
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				65
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +		66
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +		67
Osage-orange	Maclura pomifera	NDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +		68
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown				69
red mulberry	Morus rubra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				70
southern red oak	Quercus falcata	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				71
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				72
pin oak	Quercus palustris	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Likely +	Likely +		73
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				74
American mountain-ash	Sorbus americana	NSL	Low	0	0	0	Unknown	New Habitat	Low	Absent	Unknown	New Habitat				75
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				76