

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
white ash	Fraxinus americana	WDL	Medium	84.5	568.0	15.6	Sm. dec.	Sm. dec.	Low	Abundant	Fair	Fair			0	1
sugar maple	Acer saccharum	WDH	High	59.7	500.9	17.8	No change	Sm. dec.	High	Abundant	Very Good	Good			1	2
green ash	Fraxinus pennsylvanica	WSH	Low	58.8	313.3	19.0	No change	No change	Medium	Common	Fair	Fair			1	3
red maple	Acer rubrum	WDH	High	66.8	259.9	9.8	Sm. inc.	No change	High	Common	Very Good	Good			1	4
silver maple	Acer saccharinum	NSH	Low	31.1	233.1	19.3	No change	Sm. dec.	High	Common	Good	Fair			1	5
northern red oak	Quercus rubra	WDH	Medium	39.2	215.3	10.3	No change	No change	High	Common	Good	Good			1	6
bitternut hickory	Carya cordiformis	WSL	Low	40.3	166.8	10.0	Lg. dec.	Lg. dec.	High	Common	Fair	Fair			1	7
black cherry	Prunus serotina	WDL	Medium	48.4	147.7	6.2	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair			1	8
eastern cottonwood	Populus deltoides	NSH	Low	15.5	128.2	13.0	No change	No change	Medium	Common	Fair	Fair			1	9
American basswood	Tilia americana	WSL	Medium	51.7	126.0	6.8	No change	Sm. dec.	Medium	Common	Fair	Poor			1	10
black walnut	Juglans nigra	WDH	Low	43.9	121.5	6.7	No change	No change	Medium	Common	Fair	Fair			1	11
shagbark hickory	Carya ovata	WSL	Medium	47.3	98.3	4.9	No change	No change	Medium	Common	Fair	Fair			1	12
quaking aspen	Populus tremuloides	WDH	High	37.6	97.1	7.6	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	13
eastern white pine	Pinus strobus	WDH	High	16.3	77.6	7.0	No change	Sm. dec.	Low	Common	Poor	Poor	Infill +	Infill +	0	14
American beech	Fagus grandifolia	WDH	High	40.7	75.1	4.9	Sm. inc.	No change	Medium	Common	Good	Fair			1	15
bigtooth aspen	Populus grandidentata	NSL	Medium	11.1	70.2	7.8	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	16
Norway spruce	Picea abies	NSH	FIA	18.4	65.7	8.4	Unknown	Unknown	NA	Common	NNIS	NNIS			0	17
red pine	Pinus resinosa	NSH	Medium	8.1	63.4	14.2	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	18
pignut hickory	Carya glabra	WDL	Medium	18.4	63.1	5.5	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	19
black willow	Salix nigra	NSH	Low	28.8	58.3	10.5	Sm. dec.	No change	Low	Common	Poor	Poor			0	20
black locust	Robinia pseudoacacia	NDH	Low	15.5	55.3	9.8	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	21
Scots pine	Pinus sylvestris	NSH	FIA	16.3	42.7	7.4	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	22
white oak	Quercus alba	WDH	Medium	17.3	40.0	3.8	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	23
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	34.5	37.0	2.6	No change	No change	High	Rare	Fair	Fair			1	24
boxelder	Acer negundo	WSH	Low	28.2	36.3	9.0	Sm. inc.	Lg. inc.	High	Rare	Good	Good			1	25
American elm	Ulmus americana	WDH	Medium	51.7	32.5	2.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	26
black oak	Quercus velutina	WDH	High	5.8	17.6	2.9	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	27
eastern hemlock	Tsuga canadensis	NSH	High	9.1	17.6	2.9	No change	No change	Low	Rare	Very Poor	Very Poor			0	28
chokecherry	Prunus virginiana	NSLX	FIA	30.5	13.2	2.3	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	29
chestnut oak	Quercus prinus	NDH	High	3.5	11.2	3.1	Sm. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	30
pin cherry	Prunus pensylvanica	NSL	Low	6.9	9.1	2.9	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	31
American hornbeam; musclev	Carpinus caroliniana	WSL	Low	13.8	8.9	1.5	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	32
paper birch	Betula papyrifera	WDH	High	0.7	8.4	4.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	33
butternut	Juglans cinerea	NSLX	FIA	6.9	7.7	4.4	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	34
sweet birch	Betula lenta	NDH	High	7.9	5.9	1.5	No change	No change	Low	Rare	Very Poor	Very Poor			2	35
black ash	Fraxinus nigra	WSH	Medium	12.8	5.8	1.9	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	36
northern white-cedar	Thuja occidentalis	WSH	High	1.2	5.1	4.2	Sm. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	37
eastern redcedar	Juniperus virginiana	WDH	Medium	5.8	4.7	2.6	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	38
pin oak	Quercus palustris	NSH	Low	5.8	4.3	2.1	No change	Sm. inc.	Low	Rare	Very Poor	Poor		Infill +	2	39
swamp white oak	Quercus bicolor	NSL	Low	21.3	4.3	2.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	40
white spruce	Picea glauca	NSL	Medium	5.8	3.4	1.8	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	41
Norway maple	Acer platanoides	NSL	FIA	5.8	3.3	2.8	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	42
mockernut hickory	Carya alba	WDL	Medium	1.2	2.5	2.1	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	43
bur oak	Quercus macrocarpa	NDH	Medium	18.4	2.0	1.6	No change	Lg. dec.	High	Rare	Fair	Poor			0	44
serviceberry	Amelanchier spp.	NSL	Low	6.9	1.8	0.6	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	45
yellow birch	Betula alleghaniensis	NDL	High	5.6	1.3	1.4	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	46
sassafras	Sassafras albidum	WSL	Low	1.2	1.2	1.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	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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yellow-poplar	Liriodendron tulipifera	WDH	High	9.2	1.1	1.7	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	48
pitch pine	Pinus rigida	NSH	High	4.6	0.7	2.4	Sm. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	49
striped maple	Acer pensylvanicum	NSL	Medium	1.2	0.3	0.3	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	50
slippery elm	Ulmus rubra	WSL	Low	4.6	0.3	1.1	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	51
balsam fir	Abies balsamea	NDH	High	0	0	0	Unknown	Unknown	Low	Modeled	Unknown	Unknown			0	52
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	53
Table Mountain pine	Pinus pungens	NSL	Low	0	0	0	Unknown	Unknown	High	Modeled	Unknown	Unknown			0	54
loblolly pine	Pinus taeda	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	55
black hickory	Carya texana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	56
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	57
hackberry	Celtis occidentalis	WDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	58
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	59
flowering dogwood	Cornus florida	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	60
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	61
honeylocust	Gleditsia triacanthos	NSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	62
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	63
Osage-orange	Maclura pomifera	NDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	64
cucumbertree	Magnolia acuminata	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	65
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	66
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	67
red mulberry	Morus rubra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	68
blackgum	Nyssa sylvatica	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	69
sycamore	Platanus occidentalis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	70
scarlet oak	Quercus coccinea	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	71
northern pin oak	Quercus ellipsoidalis	NSH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +		3	72
shingle oak	Quercus imbricaria	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	73
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	74
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	75
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	76
American mountain-ash	Sorbus americana	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	77
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	78
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	79