

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	56	1497.3	20.1	Lg. dec.	Lg. dec.	High	Abundant	Good	Good			1	1
green ash	Fraxinus pennsylvanica	WSH	Low	61.6	1387.7	19.9	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	2
boxelder	Acer negundo	WSH	Low	19.3	598.7	31.5	Lg. dec.	Lg. dec.	High	Abundant	Good	Good			1	3
American elm	Ulmus americana	WDH	Medium	56.8	550.3	6.7	No change	Sm. inc.	Medium	Abundant	Good	Very Good			1	4
quaking aspen	Populus tremuloides	WDH	High	24.1	548.5	9.6	Lg. dec.	Lg. dec.	Medium	Abundant	Fair	Fair			0	5
black oak	Quercus velutina	WDH	High	5.9	321.3	26.9	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	6
black ash	Fraxinus nigra	WSH	Medium	9.6	221.3	23.3	Very Lg. dec.	Very Lg. dec.	Low	Common	Lost	Lost			0	7
paper birch	Betula papyrifera	WDH	High	13.3	173.5	4.6	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	8
black cherry	Prunus serotina	WDL	Medium	33.2	146.1	2.9	Lg. inc.	Sm. inc.	Low	Common	Good	Fair			1	9
northern pin oak	Quercus ellipsoidalalis	NSH	Medium	4.8	146.0	30.7	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +		1	10
Scots pine	Pinus sylvestris	NSH	FIA	18.2	145.6	11.5	Unknown	Unknown	NA	Common	NNIS	NNIS			0	11
sugar maple	Acer saccharum	WDH	High	19.2	127.1	4.2	Lg. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	12
bur oak	Quercus macrocarpa	NDH	Medium	18.7	120.6	6.1	No change	Sm. dec.	High	Common	Good	Fair	Infill ++	Infill +	1	13
American basswood	Tilia americana	WSL	Medium	15.5	94.9	4.3	Sm. inc.	No change	Medium	Common	Good	Fair			1	14
eastern cottonwood	Populus deltoides	NSH	Low	22.1	94.6	2.5	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	15
northern white-cedar	Thuja occidentalis	WSH	High	4.2	93.2	17.1	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	16
northern red oak	Quercus rubra	WDH	Medium	23.3	73.3	2.0	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	17
yellow birch	Betula alleghaniensis	NDL	High	4.2	70.9	13.0	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	18
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	4.8	65.6	13.8	Lg. dec.	Lg. dec.	High	Common	Fair	Fair			1	19
white ash	Fraxinus americana	WDL	Medium	12.5	63.1	2.0	Lg. inc.	Lg. inc.	Low	Common	Good	Good			1	20
bitternut hickory	Carya cordiformis	WSL	Low	4.2	59.0	10.8	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	2	21
shagbark hickory	Carya ovata	WSL	Medium	6.9	51.5	5.2	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	22
sassafras	Sassafras albidum	WSL	Low	4.1	50.4	9.0	No change	No change	Medium	Common	Fair	Fair	Infill +		1	23
white oak	Quercus alba	WDH	Medium	6.2	48.5	2.8	Sm. inc.	No change	High	Rare	Good	Fair	Infill ++	Infill +	2	24
silver maple	Acer saccharinum	NSH	Low	13.3	43.1	2.9	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	25
Siberian elm	Ulmus pumila	NDH	FIA	4.8	42.3	8.9	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	26
eastern white pine	Pinus strobus	WDH	High	2.1	30.0	2.8	Sm. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			2	27
American beech	Fagus grandifolia	WDH	High	6.4	25.3	1.8	No change	No change	Medium	Rare	Poor	Poor	Infill +		2	28
swamp white oak	Quercus bicolor	NSL	Low	13.5	24.6	0.9	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	29
white mulberry	Morus alba	NSL	FIA	4.8	16.3	3.4	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	30
tamarack (native)	Larix laricina	NSH	High	4.2	14.3	2.6	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	31
blackgum	Nyssa sylvatica	WDL	Medium	15.2	13.7	0.7	Sm. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	32
American hornbeam; musclev	Carpinus caroliniana	WSL	Low	8.5	9.6	0.9	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	33
bigtooth aspen	Populus grandidentata	NSL	Medium	8.6	9.3	3.5	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	34
black maple	Acer nigrum	NSH	Low	4.2	6.2	1.1	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	35
flowering dogwood	Cornus florida	WDL	Medium	4.8	5.6	1.2	Sm. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	36
black locust	Robinia pseudoacacia	NDH	Low	4.8	4.1	0.9	No change	Lg. inc.	Medium	Rare	Poor	Good	Infill +	Infill ++	2	37
Norway maple	Acer platanoides	NSL	FIA	4.3	3.4	0.6	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	38
serviceberry	Amelanchier spp.	NSL	Low	4.8	2.5	0.5	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	39
eastern redcedar	Juniperus virginiana	WDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	40
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	41
pawpaw	Asimina triloba	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	42
pignut hickory	Carya glabra	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	43
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	44
mockernut hickory	Carya alba	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	45
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	46
hackberry	Celtis occidentalis	WDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	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	<i>Cercis canadensis</i>	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	48
honeylocust	<i>Gleditsia triacanthos</i>	NSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	49
black walnut	<i>Juglans nigra</i>	WDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	50
sweetgum	<i>Liquidambar styraciflua</i>	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	51
yellow-poplar	<i>Liriodendron tulipifera</i>	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	52
Osage-orange	<i>Maclura pomifera</i>	NDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	53
cucumbertree	<i>Magnolia acuminata</i>	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	54
sycamore	<i>Platanus occidentalis</i>	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	55
pin cherry	<i>Prunus pensylvanica</i>	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	56
blackjack oak	<i>Quercus marilandica</i>	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	57
pin oak	<i>Quercus palustris</i>	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	58
post oak	<i>Quercus stellata</i>	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	59
live oak	<i>Quercus virginiana</i>	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	60
black willow	<i>Salix nigra</i>	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Likely +	Likely +	3	61
American mountain-ash	<i>Sorbus americana</i>	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	62
winged elm	<i>Ulmus alata</i>	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	63
slippery elm	<i>Ulmus rubra</i>	WSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate +	3	64