

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
sugar maple	Acer saccharum	WDH	High	65.9	1754.4	18.3	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	1
red pine	Pinus resinosa	NSH	Medium	52.2	1268.2	17.6	Sm. dec.	Sm. dec.	Low	Abundant	Fair	Fair			0	2
red maple	Acer rubrum	WDH	High	75.4	1209.5	10.9	No change	No change	High	Abundant	Very Good	Very Good			1	3
quaking aspen	Populus tremuloides	WDH	High	57.4	895.1	10.4	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	4
bigtooth aspen	Populus grandidentata	NSL	Medium	55.4	665.3	8.1	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	5
northern red oak	Quercus rubra	WDH	Medium	47.5	622.9	8.5	No change	No change	High	Abundant	Very Good	Very Good			1	6
eastern white pine	Pinus strobus	WDH	High	55.6	548.7	7.6	No change	Sm. dec.	Low	Abundant	Fair	Fair			0	7
northern white-cedar	Thuja occidentalis	WSH	High	36.4	495.4	10.3	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	8
jack pine	Pinus banksiana	NSH	Medium	30.8	408.6	8.7	No change	No change	High	Common	Good	Good			1	9
Scots pine	Pinus sylvestris	NSH	FIA	13.6	386.6	23.9	Unknown	Unknown	NA	Common	NNIS	NNIS			0	10
black cherry	Prunus serotina	WDL	Medium	58.2	358.2	4.0	Lg. inc.	Sm. inc.	Low	Common	Good	Fair			1	11
American beech	Fagus grandifolia	WDH	High	45.9	311.2	4.8	No change	No change	Medium	Common	Fair	Fair			1	12
white oak	Quercus alba	WDH	Medium	24.9	285.1	9.0	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	13
white ash	Fraxinus americana	WDL	Medium	36.8	268.8	4.4	No change	No change	Low	Common	Poor	Poor			0	14
American basswood	Tilia americana	WSL	Medium	35.2	245.5	4.6	Sm. inc.	No change	Medium	Common	Good	Fair			1	15
eastern hemlock	Tsuga canadensis	NSH	High	24.6	140.9	3.4	Sm. inc.	No change	Low	Common	Fair	Poor			1	16
balsam fir	Abies balsamea	NDH	High	19.8	134.1	3.9	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	17
black ash	Fraxinus nigra	WSH	Medium	26.6	132.1	3.6	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor			0	18
white spruce	Picea glauca	NSL	Medium	5.3	131.0	21.7	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	19
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	40.6	127.2	2.0	Lg. dec.	Lg. dec.	High	Common	Fair	Fair			1	20
black oak	Quercus velutina	WDH	High	15.5	108.2	4.7	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	21
American elm	Ulmus americana	WDH	Medium	28.8	107.9	2.7	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	22
paper birch	Betula papyrifera	WDH	High	35.9	107.4	2.3	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	23
northern pin oak	Quercus ellipsoidalis	NSH	Medium	15.8	99.6	4.3	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	24
green ash	Fraxinus pennsylvanica	WSH	Low	22	94.8	2.5	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	25
silver maple	Acer saccharinum	NSH	Low	5.1	84.3	9.9	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	26
tamarack (native)	Larix laricina	NSH	High	9.5	64.7	5.0	No change	No change	Low	Common	Poor	Poor	Infill +	Infill +	0	27
balsam poplar	Populus balsamifera	NSH	Medium	7.7	39.8	4.1	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	28
yellow birch	Betula alleghaniensis	NDL	High	11.4	26.7	1.4	No change	Sm. inc.	Medium	Rare	Poor	Fair			1	29
black spruce	Picea mariana	NSH	High	9.4	21.3	1.6	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	30
pin cherry	Prunus pensylvanica	NSL	Low	3.6	16.2	4.5	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	31
American hornbeam; musclev	Carpinus caroliniana	WSL	Low	6	9.5	1.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	32
slippery elm	Ulmus rubra	WSL	Low	3.5	5.5	1.5	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	33
chokecherry	Prunus virginiana	NSLX	FIA	3.6	5.3	1.5	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	34
Norway spruce	Picea abies	NSH	FIA	3.6	4.4	1.2	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	35
serviceberry	Amelanchier spp.	NSL	Low	3.8	1.7	0.3	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	36
sassafras	Sassafras albidum	WSL	Low	4.3	1.5	0.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	37
striped maple	Acer pensylvanicum	NSL	Medium	0.9	0.9	0.6	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	38
eastern redcedar	Juniperus virginiana	WDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	39
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	40
Virginia pine	Pinus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	41
mountain maple	Acer spicatum	NSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	42
sweet birch	Betula lenta	NDH	High	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	43
bitternut hickory	Carya cordiformis	WSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	44
pignut hickory	Carya glabra	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	45
shagbark hickory	Carya ovata	WSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	46
mockernut hickory	Carya alba	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	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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flowering dogwood	Cornus florida	WDL	Medium	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat		Migrate +	3	48
black walnut	Juglans nigra	WDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	49
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	50
yellow-poplar	Liriodendron tulipifera	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	51
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	52
blackgum	Nyssa sylvatica	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	53
eastern cottonwood	Populus deltoides	NSH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	54
swamp white oak	Quercus bicolor	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	55
scarlet oak	Quercus coccinea	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	56
pin oak	Quercus palustris	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	57
chestnut oak	Quercus prinus	NDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	58
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	59
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	60
black locust	Robinia pseudoacacia	NDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	61
black willow	Salix nigra	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate +	3	62
American mountain-ash	Sorbus americana	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	63