

Climate Change Atlas Tree Species
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
quaking aspen	Populus tremuloides	WDH	High	91.9	1406.27	15.31	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair				0 1
red maple	Acer rubrum	WDH	High	94.2	915.55	9.72	No change	No change	High	Abundant	Very Good	Very Good				1 2
northern pin oak	Quercus ellipsoidalis	NSH	Medium	57	777.84	13.65	No change	Sm. dec.	High	Abundant	Very Good	Good				1 3
red pine	Pinus resinosa	NSH	Medium	51.2	644.35	12.59	No change	No change	Low	Abundant	Fair	Fair				0 4
sugar maple	Acer saccharum	WDH	High	62.8	591.02	9.41	Sm. dec.	Sm. dec.	High	Abundant	Good	Good				1 5
northern red oak	Quercus rubra	WDH	Medium	75.6	561.63	7.43	No change	No change	High	Abundant	Very Good	Very Good				1 6
bur oak	Quercus macrocarpa	NDH	Medium	61.6	533.84	8.66	No change	No change	High	Abundant	Very Good	Very Good				1 7
jack pine	Pinus banksiana	NSH	Medium	40.7	520.28	12.78	Sm. dec.	Sm. dec.	High	Abundant	Good	Good				1 8
black ash	Fraxinus nigra	WSH	Medium	58.1	505.05	8.69	Sm. dec.	Sm. dec.	Low	Abundant	Fair	Fair				0 9
bigtooth aspen	Populus grandidentata	NSL	Medium	55.8	378.17	6.78	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor				0 10
American basswood	Tilia americana	WSL	Medium	66.3	374.77	5.65	No change	No change	Medium	Common	Fair	Fair				1 11
eastern white pine	Pinus strobus	WDH	High	48.8	327.99	6.72	Sm. inc.	No change	Low	Common	Fair	Poor				1 12
paper birch	Betula papyrifera	WDH	High	82.6	327.73	3.97	Sm. inc.	No change	Medium	Common	Good	Fair				1 13
tamarack (native)	Larix laricina	NSH	High	38.4	297.08	7.74	No change	No change	Low	Common	Poor	Poor				0 14
green ash	Fraxinus pennsylvanica	WSH	Low	55.8	247.78	4.44	Sm. inc.	Sm. inc.	Medium	Common	Good	Good				1 15
balsam fir	Abies balsamea	NDH	High	41.9	227.56	5.44	Sm. dec.	No change	Low	Common	Poor	Poor				0 16
black spruce	Picea mariana	NSH	High	30.2	186.48	6.17	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor				0 17
American elm	Ulmus americana	WDH	Medium	52.3	151.67	2.9	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good				1 18
white oak	Quercus alba	WDH	Medium	30.2	151.4	5.01	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good				1 19
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	67.4	148.07	2.2	No change	Sm. inc.	High	Common	Good	Very Good				1 20
white spruce	Picea glauca	NSL	Medium	27.9	114.92	4.12	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor				0 21
black cherry	Prunus serotina	WDL	Medium	54.7	101.27	1.85	Lg. inc.	Lg. inc.	Low	Common	Good	Good				1 22
yellow birch	Betula alleghaniensis	NDL	High	27.9	67.94	2.43	No change	No change	Medium	Common	Fair	Fair				1 23
northern white-cedar	Thuja occidentalis	WSH	High	14	60.15	4.31	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good	Infill ++	Infill ++		1 24
boxelder	Acer negundo	WSH	Low	8.1	51.24	6.29	No change	No change	High	Common	Good	Good	Infill ++	Infill ++		1 25
silver maple	Acer saccharinum	NSH	Low	5.8	41.59	7.15	Sm. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++		1 26
white ash	Fraxinus americana	WDL	Medium	23.3	38.34	1.65	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair				1 27
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	38.4	37.64	0.98	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0 28
eastern cottonwood	Populus deltoides	NSH	Low	2.3	37.38	16.07	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +		2 29
slippery elm	Ulmus rubra	WSL	Low	5.8	26.92	4.63	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +		1 30
Scotch pine	Pinus sylvestris	NSH	FIA	2.3	24.67	10.61	Unknown	Unknown	NA	Rare	NNIS	NNIS				0 31
eastern hemlock	Tsuga canadensis	NSH	High	8.1	19.5	2.4	No change	No change	Low	Rare	Very Poor	Very Poor				2 32
balsam poplar	Populus balsamifera	NSH	Medium	4.7	18.85	4.05	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0 33
bitternut hickory	Carya cordiformis	WSL	Low	10.5	17.78	1.7	No change	Sm. inc.	High	Rare	Fair	Good	Infill +	Infill ++		2 34
serviceberry	Amelanchier spp.	NSL	Low	18.6	14.64	0.79	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor				0 35
eastern redcedar	Juniperus virginiana	WDH	Medium	1.2	14.01	12.05	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good				2 36
butternut	Juglans cinerea	NSLX	FIA	8.1	13.93	1.71	Unknown	Unknown	Low	Rare	FIA Only	FIA Only				0 37
chokecherry	Prunus virginiana	NSLX	FIA	14	6.81	0.49	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only				0 38
pin cherry	Prunus pensylvanica	NSL	Low	4.7	3.63	0.78	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost				0 39
swamp white oak	Quercus bicolor	NSL	Low	2.3	2.21	0.95	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good				2 40
hackberry	Celtis occidentalis	WDH	Medium	1.2	1.31	1.13	Lg. inc.	Lg. inc.	High	Rare	Good	Good				2 41
black oak	Quercus velutina	WDH	High	1.2	0.93	0.8	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good				2 42
black walnut	Juglans nigra	WDH	Low	1.2	0.26	0.22	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good				2 43
mountain maple	Acer spicatum	NSL	Low	0	0	0	New Habitat	Unknown	High	Absent	New Habitat	Unknown	Likely +			3 44
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	NSL	Low	0	0	0	Unknown	New Habitat	High	Absent	Unknown	New Habitat				0 45
pignut hickory	Carya glabra	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				0 46
shagbark hickory	Carya ovata	WSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +		3 47
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				0 48
mockernut hickory	Carya alba	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				3 49
American beech	Fagus grandifolia	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +		3 50
honeylocust	Gleditsia triacanthos	NSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +		3 51
yellow-poplar	Liriodendron tulipifera	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				3 52
Osage-orange	Maclura pomifera	NDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			Migrate +	3 53

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bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown				0 54
red mulberry	Morus rubra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +		3 55
blackgum	Nyssa sylvatica	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				3 56
sycamore	Platanus occidentalis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				3 57
scarlet oak	Quercus coccinea	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat				0 58
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat				0 59
black locust	Robinia pseudoacacia	NDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate +		3 60
black willow	Salix nigra	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Likely +	Likely +		3 61
sassafras	Sassafras albidum	WSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +		3 62