

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
red maple	Acer rubrum	WDH	High	82.4	2260.79	29.91	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	1
eastern white pine	Pinus strobus	WDH	High	70.9	1546.46	22.67	Lg. dec.	Lg. dec.	Low	Abundant	Poor	Poor			0	2
pitch pine	Pinus rigida	NSH	High	34	547.15	14.75	Sm. dec.	Lg. dec.	Medium	Abundant	Fair	Fair			0	3
scarlet oak	Quercus coccinea	WDL	Medium	57.6	449.12	8.36	No change	Sm. dec.	Medium	Common	Fair	Poor			1	4
black oak	Quercus velutina	WDH	High	61.1	404.31	7.18	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	5
white oak	Quercus alba	WDH	Medium	61.8	354.37	5.83	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	6
northern red oak	Quercus rubra	WDH	Medium	43.2	305.5	7.82	No change	No change	High	Common	Good	Good			1	7
blackgum	Nyssa sylvatica	WDL	Medium	32.3	142.85	4.06	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	8
black cherry	Prunus serotina	WDL	Medium	33.9	127.91	5.45	Lg. inc.	Lg. inc.	Low	Common	Good	Good			1	9
American elm	Ulmus americana	WDH	Medium	19.8	103.02	5.61	Lg. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	10
white ash	Fraxinus americana	WDL	Medium	25.2	96.54	4.97	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair			1	11
eastern hemlock	Tsuga canadensis	NSH	High	23	92.74	5.86	No change	Sm. dec.	Low	Common	Poor	Poor			0	12
pignut hickory	Carya glabra	WDL	Medium	12.2	92.66	7.56	Sm. dec.	No change	Medium	Common	Poor	Fair	Infill +	Infill +	1	13
yellow birch	Betula alleghaniensis	NDL	High	20.8	52.81	3.54	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	14
Norway maple	Acer platanoides	NSL	FIA	9.1	47.16	8.54	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	15
gray birch	Betula populifolia	NSL	Low	14	46.99	3.02	No change	Sm. inc.	Medium	Rare	Poor	Fair			1	16
sweet birch	Betula lenta	NDH	High	15.7	43.43	3.19	Sm. inc.	No change	Low	Rare	Poor	Very Poor			1	17
American beech	Fagus grandifolia	WDH	High	17.8	40.38	2.95	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	18
eastern redcedar	Juniperus virginiana	WDH	Medium	19.7	39.32	1.98	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	19
bigtooth aspen	Populus grandidentata	NSL	Medium	7.6	34.51	5.93	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	20
sugar maple	Acer saccharum	WDH	High	8.8	29.5	4.09	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	21
Atlantic white-cedar	Chamaecyparis thyoides	NSH	Low	8.3	27.11	3.12	No change	No change	Low	Rare	Very Poor	Very Poor			0	22
green ash	Fraxinus pennsylvanica	WSH	Low	8.9	25.56	4.76	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	1	23
black willow	Salix nigra	NSH	Low	5.4	24.18	8.2	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			2	24
shagbark hickory	Carya ovata	WSL	Medium	12.5	20.17	2.28	Sm. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	1	25
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	6.7	19.79	2.67	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	26
sassafras	Sassafras albidum	WSL	Low	13.8	18.56	1.4	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	27
paper birch	Betula papyrifera	WDH	High	7.6	16.03	2.93	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	28
black locust	Robinia pseudoacacia	NDH	Low	6.6	12.91	2.32	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	29
honeylocust	Gleditsia triacanthos	NSH	Low	0.5	10.82	3.5	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	30
post oak	Quercus stellata	WDH	High	3	9.77	4.75	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	31
silver maple	Acer saccharinum	NSH	Low	1.2	9.05	7.4	Sm. dec.	Sm. inc.	High	Rare	Poor	Good			2	32
black walnut	Juglans nigra	WDH	Low	1.2	8.32	6.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	33
quaking aspen	Populus tremuloides	WDH	High	2.4	7.01	2.86	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	34
swamp white oak	Quercus bicolor	NSL	Low	7.8	6.82	2.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	35
red pine	Pinus resinosa	NSH	Medium	2.9	6.78	2.92	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	36
mockernut hickory	Carya alba	WDL	Medium	1.2	4.89	3.9	Sm. inc.	Lg. inc.	High	Rare	Good	Good			2	37
tamarack (native)	Larix laricina	NSH	High	1.8	4.77	1.25	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	38
American holly	Ilex opaca	NSL	Medium	3.6	3.99	1.07	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	39
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	5.6	3.45	0.78	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	40
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	1.2	3.42	2.8	No change	Sm. inc.	High	Rare	Fair	Good	Infill +		2	41
Norway spruce	Picea abies	NSH	FIA	1.8	2.86	0.73	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	42
pin cherry	Prunus pensylvanica	NSL	Low	1.9	2.02	0.67	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	43
pin oak	Quercus palustris	NSH	Low	1.2	1.75	1.43	Very Lg. dec.	No change	Low	Rare	Lost	Very Poor			0	44
chokecherry	Prunus virginiana	NSLX	FIA	0.5	1.71	0.62	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	45
American basswood	Tilia americana	WSL	Medium	5.3	1.65	0.96	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	46
northern catalpa	Catalpa speciosa	NSHX	FIA	1.2	0.73	0.6	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	47
butternut	Juglans cinerea	NSLX	FIA	4.2	0.73	2.04	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	48
serviceberry	Amelanchier spp.	NSL	Low	2.7	0.16	0.29	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	49
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	50
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	51
loblolly pine	Pinus taeda	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	52
Virginia pine	Pinus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	53

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	54
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	55
black hickory	Carya texana	NDL	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
flowering dogwood	Cornus florida	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	58
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	59
black ash	Fraxinus nigra	WSH	Medium	0	0	0	Unknown	Unknown	Low	Modeled	Unknown	Unknown			0	60
sweetgum	Liquidambar styraciflua	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	61
yellow-poplar	Liriodendron tulipifera	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	62
Osage-orange	Maclura pomifera	NDH	Medium	0	0	0	Unknown	Unknown	High	Modeled	Unknown	Unknown			0	63
red mulberry	Morus rubra	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	64
redbay	Persea borbonia	NSL	Low	0	0	0	Unknown	Unknown	High	Modeled	Unknown	Unknown			0	65
sycamore	Platanus occidentalis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	66
southern red oak	Quercus falcata	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	67
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	68
swamp chestnut oak	Quercus michauxii	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat		Migrate +	3	69
water oak	Quercus nigra	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	70
willow oak	Quercus phellos	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	71
chestnut oak	Quercus prinus	NDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	72
bluejack oak	Quercus incana	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			0	73
American mountain-ash	Sorbus americana	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	74
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	75