

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
balsam fir	Abies balsamea	NDH	High	89.7	1872.49	16.2	Sm. dec.	Sm. dec.	Low	Abundant	Fair	Fair			0	1
red maple	Acer rubrum	WDH	High	93.8	1580.97	13.59	Sm. inc.	No change	High	Abundant	Very Good	Very Good			1	2
red spruce	Picea rubens	NDH	High	85.5	1295.29	10.96	Lg. dec.	Lg. dec.	Low	Abundant	Poor	Poor			0	3
eastern white pine	Pinus strobus	WDH	High	85.6	890.15	9.42	Sm. inc.	No change	Low	Abundant	Good	Fair			1	4
paper birch	Betula papyrifera	WDH	High	83.9	601.75	5.26	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	5
eastern hemlock	Tsuga canadensis	NSH	High	46.3	473.8	9.61	Sm. inc.	No change	Low	Common	Fair	Poor			1	6
northern red oak	Quercus rubra	WDH	Medium	47	467.82	9.26	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	7
northern white-cedar	Thuja occidentalis	WSH	High	57	463.09	6.28	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	8
white spruce	Picea glauca	NSL	Medium	55.6	401.83	4.54	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	9
black spruce	Picea mariana	NSH	High	27.9	369.58	10.79	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	10
American beech	Fagus grandifolia	WDH	High	39.1	314.55	7.99	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	11
gray birch	Betula populifolia	NSL	Low	52.6	252.12	3.87	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	12
quaking aspen	Populus tremuloides	WDH	High	49.9	235.74	4.34	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	13
tamarack (native)	Larix laricina	NSH	High	34	217.86	4.95	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	14
yellow birch	Betula alleghaniensis	NDL	High	54.8	206.26	3	Sm. inc.	No change	Medium	Common	Good	Fair			1	15
white ash	Fraxinus americana	WDL	Medium	40.4	166.9	3.22	Sm. inc.	Lg. inc.	Low	Common	Fair	Good			1	16
sugar maple	Acer saccharum	WDH	High	26.2	151.6	5.67	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	17
bigtooth aspen	Populus grandidentata	NSL	Medium	41.6	150.39	3.03	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	18
black cherry	Prunus serotina	WDL	Medium	20.3	110.1	4.6	Lg. inc.	Lg. inc.	Low	Common	Good	Good			1	19
red pine	Pinus resinosa	NSH	Medium	12.2	69.52	5.43	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor	Infill +	Infill +	0	20
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	13.8	61.64	4.44	Sm. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	21
striped maple	Acer pensylvanicum	NSL	Medium	34.3	51.34	1.36	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	22
chokecherry	Prunus virginiana	NSLX	FIA	5	41.84	5.76	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	23
pin cherry	Prunus pensylvanica	NSL	Low	13.6	25.85	1.55	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	24
black ash	Fraxinus nigra	WSH	Medium	8.9	18.13	1.94	Sm. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	25
Scotch pine	Pinus sylvestris	NSH	FIA	1.2	16.97	14.67	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	26
serviceberry	Amelanchier spp.	NSL	Low	10.6	12.81	0.74	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	27
mountain maple	Acer spicatum	NSL	Low	5.3	12.57	2.02	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			1	28
American elm	Ulmus americana	WDH	Medium	6.9	12.37	1.75	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	29
Norway spruce	Picea abies	NSH	FIA	1.8	10.64	3.91	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	30
balsam poplar	Populus balsamifera	NSH	Medium	1.2	3.85	3.33	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	31
green ash	Fraxinus pennsylvanica	WSH	Low	0.4	3.7	1.02	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	32
American mountain-ash	Sorbus americana	NSL	Low	1.1	3.55	0.45	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	33
Norway maple	Acer platanoides	NSL	FIA	1.1	1.85	1.5	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	34
swamp white oak	Quercus bicolor	NSL	Low	1.2	1.3	1.12	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	35
American basswood	Tilia americana	WSL	Medium	1.2	0.54	0.47	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	36
eastern redcedar	Juniperus virginiana	WDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	37
pitch pine	Pinus rigida	NSH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	38
Virginia pine	Pinus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	39
boxelder	Acer negundo	WSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	40
sweet birch	Betula lenta	NDH	High	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	41
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	NSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	42
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	43
pignut hickory	Carya glabra	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	44
shagbark hickory	Carya ovata	WSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	45
mockernut hickory	Carya alba	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	46
flowering dogwood	Cornus florida	WDL	Medium	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			0	47
American holly	Ilex opaca	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	48
black walnut	Juglans nigra	WDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	49
yellow-poplar	Liriodendron tulipifera	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	50
cucumbertree	Magnolia acuminata	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			0	51
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	0	0	0	Unknown	Unknown	NA	Absent	Unknown	Unknown			0	52
blackgum	Nyssa sylvatica	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	53

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
sycamore	Platanus occidentalis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	54
white oak	Quercus alba	WDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	55
scarlet oak	Quercus coccinea	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	56
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	57
pin oak	Quercus palustris	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	58
chestnut oak	Quercus prinus	NDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	59
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	60
black oak	Quercus velutina	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	61
black locust	Robinia pseudoacacia	NDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	62
sassafras	Sassafras albidum	WSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	63