



One x One Degree  
Climate Change Atlas Tree Species

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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
American elm	Ulmus americana	WDH	Medium	36.8	87.4	12.4	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	2	1
eastern redcedar	Juniperus virginiana	WDH	Medium	26	74.2	16.8	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	2	2
honeylocust	Gleditsia triacanthos	NSH	Low	22.4	62.8	30.3	Lg. dec.	Lg. dec.	High	Common	Fair	Fair	Infill +	Infill +	2	3
hackberry	Celtis occidentalis	WDH	Medium	31.3	41.4	11.0	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	2	4
red mulberry	Morus rubra	NSL	Low	20.1	31.5	16.9	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	5
Osage-orange	Maclura pomifera	NDH	Medium	8.6	30.0	10.1	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	6
post oak	Quercus stellata	WDH	High	6.1	25.6	17.8	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	7
black willow	Salix nigra	NSH	Low	11.2	22.5	20.5	No change	No change	Low	Rare	Very Poor	Very Poor			2	8
pecan	Carya illinoensis	NSH	Low	11.4	20.6	7.9	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	9
blackjack oak	Quercus marilandica	NSL	Medium	9.6	16.0	7.3	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	10
white mulberry	Morus alba	NSL	FIA	3.2	12.6	39.4	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	11
eastern cottonwood	Populus deltoides	NSH	Low	3.9	11.7	15.6	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	12
sugarberry	Celtis laevigata	NDH	Medium	13.8	10.4	6.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	13
black walnut	Juglans nigra	WDH	Low	9.7	10.2	6.8	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	14
Siberian elm	Ulmus pumila	NDH	FIA	5.2	10.2	20.0	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	15
bur oak	Quercus macrocarpa	NDH	Medium	9.5	10.1	7.6	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	16
green ash	Fraxinus pennsylvanica	WSH	Low	13.4	8.6	4.5	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	2	17
black hickory	Carya texana	NDL	High	6	5.0	7.4	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	18
slippery elm	Ulmus rubra	WSL	Low	4.1	4.4	2.7	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	19
boxelder	Acer negundo	WSH	Low	11.8	4.2	3.0	No change	Sm. inc.	High	Rare	Fair	Good			2	20
northern catalpa	Catalpa speciosa	NSHX	FIA	2.5	2.9	7.1	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	21
Kentucky coffeetree	Gymnocladus dioicus	NSLX	FIA	5.9	2.0	3.0	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	22
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	4.8	1.8	1.5	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	23
wild plum	Prunus americana	NSLX	FIA	4.8	1.7	0.7	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	24
chinkapin oak	Quercus muehlenbergii	NSL	Medium	4.9	1.6	0.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	25
black oak	Quercus velutina	WDH	High	3.4	0.6	1.9	No change	No change	Medium	Rare	Poor	Poor			0	26
silver maple	Acer saccharinum	NSH	Low	3.3	0.5	1.6	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	27
eastern redbud	Cercis canadensis	NSL	Low	1.2	0.4	0.5	No change	No change	Medium	Rare	Poor	Poor			0	28
northern red oak	Quercus rubra	WDH	Medium	0.2	0.3	0.1	No change	No change	High	Rare	Fair	Fair			0	29
ashe juniper	Juniperus ashei	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	30
Ohio buckeye	Aesculus glabra	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	31
serviceberry	Amelanchier spp.	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	32
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	33
white ash	Fraxinus americana	WDL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate ++	3	34
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	0	0	0	Unknown	Unknown	High	Modeled	Unknown	Unknown			0	35
pin cherry	Prunus pensylvanica	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	36
Shumard oak	Quercus shumardii	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	37
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	38
black locust	Robinia pseudoacacia	NDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	39
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	40
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	41