



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
Osage-orange	Maclura pomifera	NDH	Medium	50	258.8	22.2	No change	No change	High	Common	Good	Good			1	1
honeylocust	Gleditsia triacanthos	NSH	Low	59.5	211.0	18.4	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	2
black walnut	Juglans nigra	WDH	Low	72.6	199.5	12.3	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	3
American elm	Ulmus americana	WDH	Medium	72.6	190.0	12.1	No change	No change	Medium	Common	Fair	Fair			1	4
hackberry	Celtis occidentalis	WDH	Medium	59.5	151.5	10.5	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	5
silver maple	Acer saccharinum	NSH	Low	13.1	148.2	25.2	Lg. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	1	6
shingle oak	Quercus imbricaria	NDH	Medium	41.7	86.7	10.6	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor			0	7
chinkapin oak	Quercus muehlenbergii	NSL	Medium	44	86.4	9.6	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	8
red mulberry	Morus rubra	NSL	Low	63.1	79.8	5.8	No change	Sm. dec.	Medium	Common	Fair	Poor			1	9
pin oak	Quercus palustris	NSH	Low	11.9	63.6	12.7	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	10
black cherry	Prunus serotina	WDL	Medium	38.1	47.2	4.9	Lg. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	11
bitternut hickory	Carya cordiformis	WSL	Low	33.3	45.5	5.8	No change	Sm. inc.	High	Rare	Fair	Good	Infill +	Infill ++	1	12
boxelder	Acer negundo	WSH	Low	38.1	44.6	4.5	No change	Sm. inc.	High	Rare	Fair	Good	Infill +	Infill ++	1	13
northern red oak	Quercus rubra	WDH	Medium	35.7	38.5	8.2	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	1	14
eastern redbud	Cercis canadensis	NSL	Low	57.1	35.6	4.7	Sm. dec.	No change	Medium	Rare	Very Poor	Poor			1	15
green ash	Fraxinus pennsylvanica	WSH	Low	32.1	34.2	6.1	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	16
shagbark hickory	Carya ovata	WSL	Medium	42.9	33.6	3.8	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	17
white oak	Quercus alba	WDH	Medium	10.7	29.0	8.9	Lg. dec.	No change	High	Rare	Poor	Fair	Infill +	Infill +	2	18
bur oak	Quercus macrocarpa	NDH	Medium	21.4	28.0	9.4	Sm. inc.	Sm. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	19
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	25	26.0	5.2	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor		Infill +	1	20
eastern redcedar	Juniperus virginiana	WDH	Medium	27.4	25.5	4.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	21
white ash	Fraxinus americana	WDL	Medium	40.5	23.9	4.8	Sm. inc.	Lg. inc.	Low	Rare	Poor	Fair	Infill +	Infill +	1	22
black locust	Robinia pseudoacacia	NDH	Low	15.5	21.7	10.3	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	23
slippery elm	Ulmus rubra	WSL	Low	41.7	18.2	2.3	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	24
American basswood	Tilia americana	WSL	Medium	11.9	17.4	3.8	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	25
black oak	Quercus velutina	WDH	High	15.5	11.6	3.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	26
sycamore	Platanus occidentalis	NSL	Low	25	9.1	2.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	27
eastern cottonwood	Populus deltoides	NSH	Low	19	8.9	6.7	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	2	28
Kentucky coffeetree	Gymnocladus dioicus	NSLX	FIA	10.7	7.7	2.3	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			2	29
Ohio buckeye	Aesculus glabra	NSL	Low	10.7	4.3	1.5	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	30
post oak	Quercus stellata	WDH	High	9.5	4.0	6.0	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	31
black willow	Salix nigra	NSH	Low	14.3	3.1	3.1	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	32
common persimmon	Diospyros virginiana	NSL	Low	10.7	1.8	0.7	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	33
pawpaw	Asimina triloba	NSL	Low	9.5	1.1	1.7	Very Lg. dec.	Lg. dec.	Medium	Rare	Lost	Very Poor			0	34
Shumard oak	Quercus shumardii	NSL	Low	4.8	1.1	3.2	No change	Lg. inc.	High	Rare	Fair	Good			2	35
flowering dogwood	Cornus florida	WDL	Medium	9.5	0.9	1.3	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	36
sugarberry	Celtis laevigata	NDH	Medium	4.8	0.8	2.4	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	37
mockernut hickory	Carya alba	WDL	Medium	9.5	0.6	0.9	No change	Lg. inc.	High	Rare	Fair	Good			2	38
pecan	Carya illinoensis	NSH	Low	4.8	0.3	0.8	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	39
blackjack oak	Quercus marilandica	NSL	Medium	4.8	0.1	0.4	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	40
sugar maple	Acer saccharum	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	41
serviceberry	Amelanchier spp.	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	42
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	43
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	44
blue ash	Fraxinus quadrangulata	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	45
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	46
pin cherry	Prunus pensylvanica	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	47

U.S. Census Bureau Urban Areas  
Climate Change Atlas Tree Species

USDA Forest Service  
Northern Research Station  
Landscape Change Research Group  
Iverson, Peters, Prasad, Matthews

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
water oak	Quercus nigra	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	48
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	49
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	50
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	51