

States  
Climate Change Atlas Tree Species  
Current and Potential Future Habitat, Capability, and Migration

Area of Region    sq. km    sq. mi    FIA Plots  
126,050    48,668    3,216

Species Information

The columns below provide brief summaries of the species associated with the region and described in the table on the next pages. Definitions are provided in the Excel file for this region.

Genus	Species	Abundance		Model		Potential Change in Habitat Suitability		Capability to Cope or Persist		Migration Potential					
				Reliability	Adaptability	Scenario RCP45	Scenario RCP85	Scenario RCP45	Scenario RCP85	SHIFT RCP45	SHIFT RCP85				
Ash	3			High	28	30	Increase	26	31	Very Good	4	6	Likely	0	0
Hickory	5			Medium	42	69	No Change	18	15	Good	21	24	Infill	26	26
Maple	7	Abundant	4	Low	45	23	Decrease	25	23	Fair	14	10	Migrate	14	19
Oak	12	Common	26	FIA	13		New	40	44	Poor	14	15			
Pine	7	Rare	52				Unknown	19	15	Very Poor	16	14			
Other	48	Absent	46							FIA Only	8	8			
										Unknown	6	2			
	<b>82</b>		<b>128</b>		<b>128</b>	<b>122</b>		<b>128</b>	<b>128</b>		<b>83</b>	<b>79</b>		<b>40</b>	<b>45</b>

Potential Changes in Climate Variables

Temperature (°F)

Scenario	2009	2039	2069	2099		
Annual	CCSM45	45.6	47.5	50.0	50.1	
Average	CCSM85	45.6	48.0	50.7	53.9	
	GFDL45	45.6	49.0	52.0	53.3	
	GFDL85	45.6	49.2	53.3	58.0	
	HAD45	45.6	48.7	52.1	53.8	
	HAD85	45.6	48.8	53.0	58.6	
Growing Season	CCSM45	62.8	64.9	66.9	67.3	
	CCSM85	62.8	65.1	67.7	71.6	
May—Sep	GFDL45	62.8	66.6	70.1	71.7	
	GFDL85	62.8	67.1	71.6	76.7	
	HAD45	62.8	66.1	68.9	71.3	
	HAD85	62.8	65.7	70.4	76.4	
Coldest Month	CCSM45	18.7	20.6	22.9	23.0	
	CCSM85	18.7	21.7	23.0	25.3	
Average	GFDL45	18.7	21.9	23.8	24.7	
	GFDL85	18.7	22.6	24.5	27.1	
	HAD45	18.7	20.9	24.1	24.3	
	HAD85	18.7	22.2	24.7	28.2	
Warmest Month	CCSM45	68.8	71.2	72.4	72.6	
	CCSM85	68.8	71.6	73.3	75.4	
Average	GFDL45	68.8	71.8	74.1	75.3	
	GFDL85	68.8	73.1	75.8	78.7	
	HAD45	68.8	72.4	73.9	75.6	
	HAD85	68.8	72.3	75.2	79.6	

Precipitation (in)

Scenario	2009	2039	2069	2099		
Annual	CCSM45	43.1	43.0	42.0	45.7	
Total	CCSM85	43.1	44.1	44.8	45.9	
	GFDL45	43.1	47.4	49.2	48.2	
	GFDL85	43.1	45.1	48.2	50.1	
	HAD45	43.1	44.8	46.3	45.9	
	HAD85	43.1	46.1	45.1	48.7	
Growing Season	CCSM45	19.9	20.2	19.0	20.7	
	CCSM85	19.9	20.0	20.3	19.3	
May—Sep	GFDL45	19.9	20.8	20.1	20.1	
	GFDL85	19.9	19.9	19.9	19.3	
	HAD45	19.9	20.5	19.2	19.9	
	HAD85	19.9	20.1	18.7	19.8	

**NOTE:** For the six climate variables, four 30-year periods are used to indicate six potential future trajectories. The period ending in 2009 is based on modeled observations from the PRISM Climate Group and the three future periods were obtained from the NASA NEX-DCP30 dataset. Future climate projections from three models under two emission scenarios show estimates of each climate variable within the region. The three models are CCSM4, GFDL CM3, and HadGEM2-ES and the emission scenarios are the 4.5 and 8.5 RCP. The average value for the region is reported, even though locations within the region may vary substantially based on latitude, elevation, land-use, or other factors.

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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
red maple	Acer rubrum	WDH	High	79.1	1291.4	15.8	No change	Sm. dec.	High	Abundant	Very Good	Good			1	1
sugar maple	Acer saccharum	WDH	High	71.9	1127.2	15.4	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	2
white ash	Fraxinus americana	WDL	Medium	64.9	638.1	9.8	No change	No change	Low	Abundant	Fair	Fair			0	3
American beech	Fagus grandifolia	WDH	High	55.9	592.8	10.4	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	4
eastern hemlock	Tsuga canadensis	NSH	High	43.3	494.4	10.8	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor			0	5
eastern white pine	Pinus strobus	WDH	High	39	488.0	12.2	No change	Sm. dec.	Low	Common	Poor	Poor			0	6
black cherry	Prunus serotina	WDL	Medium	58.9	424.7	7.3	Sm. inc.	No change	Low	Common	Fair	Poor			1	7
yellow birch	Betula alleghaniensis	NDL	High	41.3	303.7	7.0	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	8
northern red oak	Quercus rubra	WDH	Medium	35.4	292.7	8.0	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	9
quaking aspen	Populus tremuloides	WDH	High	32.4	254.4	8.0	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	10
American elm	Ulmus americana	WDH	Medium	37.8	238.5	6.8	No change	Sm. inc.	Medium	Common	Fair	Good			1	11
red spruce	Picea rubens	NDH	High	20	184.8	9.3	Sm. dec.	Lg. dec.	Low	Common	Poor	Very Poor	Infill +		0	12
balsam fir	Abies balsamea	NDH	High	17.7	173.3	9.9	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	13
green ash	Fraxinus pennsylvanica	WSH	Low	15.1	159.5	14.6	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	14
American basswood	Tilia americana	WSL	Medium	29.4	128.5	4.7	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	15
sweet birch	Betula lenta	NDH	High	20	110.5	4.7	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair	Infill +	Infill +	1	16
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	37.1	108.8	2.9	No change	No change	High	Common	Good	Good			1	17
chestnut oak	Quercus prinus	NDH	High	7.7	84.8	9.5	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	2	18
bitternut hickory	Carya cordiformis	WSL	Low	16.6	80.5	5.8	No change	Sm. inc.	High	Common	Good	Very Good			1	19
paper birch	Betula papyrifera	WDH	High	16.6	78.2	4.3	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	20
red pine	Pinus resinosa	NSH	Medium	7.6	76.3	10.5	Sm. dec.	No change	Low	Common	Poor	Poor	Infill +	Infill +	0	21
white oak	Quercus alba	WDH	Medium	14.6	72.5	5.0	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	22
Norway spruce	Picea abies	NSH	FIA	8.4	71.9	10.2	Unknown	Unknown	NA	Common	NNIS	NNIS			0	23
northern white-cedar	Thuja occidentalis	WSH	High	7.6	68.6	8.9	Sm. dec.	No change	Medium	Common	Poor	Fair	Infill +	Infill +	2	24
shagbark hickory	Carya ovata	WSL	Medium	15.5	63.7	5.0	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good	Infill ++	Infill ++	1	25
Scots pine	Pinus sylvestris	NSH	FIA	6.6	63.0	10.5	Unknown	Unknown	NA	Common	NNIS	NNIS			0	26
silver maple	Acer saccharinum	NSH	Low	5.6	61.8	16.9	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	2	27
bigtooth aspen	Populus grandidentata	NSL	Medium	14.1	56.8	4.0	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	28
black locust	Robinia pseudoacacia	NDH	Low	6.8	54.0	9.1	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	29
eastern cottonwood	Populus deltoides	NSH	Low	4.7	53.7	13.7	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	30
black oak	Quercus velutina	WDH	High	9.2	53.0	6.1	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good	Infill ++	Infill ++	1	31
boxelder	Acer negundo	WSH	Low	5.7	45.8	12.9	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	1	32
pitch pine	Pinus rigida	NSH	High	3.2	44.8	16.7	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	33
black willow	Salix nigra	NSH	Low	5.5	43.3	11.1	Sm. dec.	No change	Low	Rare	Very Poor	Very Poor			0	34
eastern redcedar	Juniperus virginiana	WDH	Medium	4.8	38.6	7.7	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	2	35
serviceberry	Amelanchier spp.	NSL	Low	19.6	36.4	1.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	36
pignut hickory	Carya glabra	WDL	Medium	10.8	35.1	3.9	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	37
black ash	Fraxinus nigra	WSH	Medium	8.9	32.6	4.0	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	38
gray birch	Betula populifolia	NSL	Low	8.4	31.3	3.6	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	39
white spruce	Picea glauca	NSL	Medium	3.1	30.6	11.4	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	40
scarlet oak	Quercus coccinea	WDL	Medium	3.5	29.2	9.0	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair	Infill +	Infill +	2	41
American hornbeam; musclev	Carpinus caroliniana	WSL	Low	17.1	27.4	1.7	Sm. dec.	Sm. inc.	Medium	Rare	Very Poor	Fair			1	42
swamp white oak	Quercus bicolor	NSL	Low	4.4	25.5	9.3	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	43
tamarack (native)	Larix laricina	NSH	High	4.5	25.0	5.9	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			2	44
black walnut	Juglans nigra	WDH	Low	5.7	22.8	6.4	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	45
pin cherry	Prunus pensylvanica	NSL	Low	5.4	15.7	2.5	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	46
bur oak	Quercus macrocarpa	NDH	Medium	2.9	15.1	7.7	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	2	47

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black spruce	Picea mariana	NSH	High	1.5	12.5	8.3	Sm. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			2	48
yellow-poplar	Liriodendron tulipifera	WDH	High	3.4	10.3	3.2	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	49
pin oak	Quercus palustris	NSH	Low	1.9	8.9	8.4	No change	Sm. inc.	Low	Rare	Very Poor	Poor		Infill +	2	50
butternut	Juglans cinerea	NSLX	FIA	3.5	8.7	2.6	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	51
Norway maple	Acer platanoides	NSL	FIA	2.1	7.5	5.0	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	52
blackgum	Nyssa sylvatica	WDL	Medium	2.5	7.3	3.6	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	53
slippery elm	Ulmus rubra	WSL	Low	2.4	7.2	2.9	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	54
sassafras	Sassafras albidum	WSL	Low	2.6	5.3	2.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	55
sycamore	Platanus occidentalis	NSL	Low	0.7	5.0	5.5	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	56
chokecherry	Prunus virginiana	NSLX	FIA	4.4	4.9	2.0	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	57
ailanthus	Ailanthus altissima	NSL	FIA	1.5	3.6	4.5	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	58
cucumbertree	Magnolia acuminata	NSL	Low	1.9	3.1	1.3	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	59
balsam poplar	Populus balsamifera	NSH	Medium	0.8	2.4	2.7	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	60
jack pine	Pinus banksiana	NSH	Medium	0.2	2.1	8.6	No change	Sm. dec.	High	Rare	Fair	Poor	Infill +	Infill +	2	61
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	1	1.6	2.3	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	62
mockernut hickory	Carya alba	WDL	Medium	1.2	1.5	1.3	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	63
American mountain-ash	Sorbus americana	NSL	Low	1	1.4	1.5	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	64
flowering dogwood	Cornus florida	WDL	Medium	1.6	1.3	1.0	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good			2	65
mountain maple	Acer spicatum	NSL	Low	1.8	1.3	0.7	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	66
hackberry	Celtis occidentalis	WDH	Medium	0.4	1.3	3.0	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	67
northern pin oak	Quercus ellipsoidalis	NSH	Medium	0.2	1.2	4.8	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	68
river birch	Betula nigra	NSL	Low	0.1	0.9	10.7	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	69
shellbark hickory	Carya laciniosa	NSL	Low	0.1	0.3	1.9	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	70
peachleaf willow	Salix amygdaloides	NSLX	FIA	0.1	0.3	3.8	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	71
American chestnut	Castanea dentata	NSLX	FIA	0.2	0.3	0.4	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	72
white mulberry	Morus alba	NSL	FIA	0.4	0.2	4.2	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	73
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0.2	0.2	1.1	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	74
Virginia pine	Pinus virginiana	NDH	High	0.1	0.2	0.4	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	75
sweetgum	Liquidambar styraciflua	WDH	High	0.2	0.1	3.6	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	76
Table Mountain pine	Pinus pungens	NSL	Low	0.1	0.1	1.0	No change	Lg. inc.	High	Rare	Fair	Good			2	77
post oak	Quercus stellata	WDH	High	0.6	0.1	0.9	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	78
rock elm	Ulmus thomasii	NSLX	FIA	0.1	0.1	0.7	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	79
northern catalpa	Catalpa speciosa	NSHX	FIA	0.1	0.1	0.7	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	80
wild plum	Prunus americana	NSLX	FIA	0.1	0.1	0.7	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	81
striped maple	Acer pensylvanicum	NSL	Medium	2.7	0.0	0.8	Sm. dec.	No change	Medium	Rare	Very Poor	Poor			1	82
Atlantic white-cedar	Chamaecyparis thyoides	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	83
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	84
slash pine	Pinus elliottii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	85
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	86
pond pine	Pinus serotina	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	87
loblolly pine	Pinus taeda	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	88
bald cypress	Taxodium distichum	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	89
florida maple	Acer barbatum	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	90
black maple	Acer nigrum	NSH	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	91
Ohio buckeye	Aesculus glabra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	92
yellow buckeye	Aesculus flava	NSL	Low	0	0	0	Unknown	New Habitat	Low	Absent	Unknown	New Habitat		Migrate +	3	93
pawpaw	Asimina triloba	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	94

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cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	Unknown	New Habitat	High	Absent	Unknown	New Habitat			0	95
water hickory	Carya aquatica	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	96
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	97
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	98
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			2	99
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	100
common persimmon	Diospyros virginiana	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	101
honeylocust	Gleditsia triacanthos	NSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	102
silverbell	Halesia spp.	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	103
American holly	Ilex opaca	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	104
Osage-orange	Maclura pomifera	NDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	105
southern magnolia	Magnolia grandiflora	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			0	106
sweetbay	Magnolia virginiana	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	107
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	108
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	0	0	0	New Habitat	New Habitat	NA	Absent	New Habitat	New Habitat			0	109
red mulberry	Morus rubra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	110
water tupelo	Nyssa aquatica	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	111
swamp tupelo	Nyssa biflora	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	112
sourwood	Oxydendrum arboreum	NDL	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	113
redbay	Persea borbonia	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	114
southern red oak	Quercus falcata	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	115
cherrybark oak; swamp red o.	Quercus pagoda	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	116
shingle oak	Quercus imbricaria	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	117
laurel oak	Quercus laurifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	118
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	119
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	120
swamp chestnut oak	Quercus michauxii	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	121
water oak	Quercus nigra	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	122
willow oak	Quercus phellos	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	123
Shumard oak	Quercus shumardii	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	124
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	125
bluejack oak	Quercus incana	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			0	126
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	127
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	128