

sq. km sq. mi FIA Plots
Area of Region 31,155 12,029 435

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	Scenario	Scenario	Scenario	SHIFT	SHIFT	
				High	Medium	Low	FIA	RCP45	RCP85	RCP45	RCP85	
Ash	3			24	27	Increase		25	34	Very Good	7	13
Hickory	4			39	66	No Change		22	13	Good	21	20
Maple	6	Abundant	2	43	20	Decrease		24	24	Fair	11	9
Oak	15	Common	30	13		New		25	27	Poor	13	11
Pine	7	Rare	52			Unknown		23	21	Very Poor	18	17
Other	49	Absent	35							FIA Only	7	7
	84		119		119			119	119	Unknown	10	8
											87	85

Potential Changes in Climate Variables

Temperature (°F)

	Scenario	2009	2039	2069	2099
Annual Average	CCSM45	53.7	55.5	57.6	57.9
	CCSM85	53.7	55.8	58.4	61.4
	GFDL45	53.7	58.1	59.3	60.4
	GFDL85	53.7	57.0	60.5	64.5
	HAD45	53.7	56.3	59.6	61.1
	HAD85	53.7	56.4	60.5	65.1
Growing Season May—Sep	CCSM45	69.7	71.5	73.3	73.8
	CCSM85	69.7	71.7	74.3	78.1
	GFDL45	69.7	74.7	76.1	77.6
	GFDL85	69.7	73.6	77.6	82.0
	HAD45	69.7	72.6	75.7	77.6
	HAD85	69.7	72.3	77.1	82.2
Coldest Month Average	CCSM45	29.8	31.7	33.2	33.7
	CCSM85	29.8	32.2	33.5	35.1
	GFDL45	29.8	33.0	33.8	34.4
	GFDL85	29.8	32.8	34.0	35.6
	HAD45	29.8	31.4	33.7	33.9
	HAD85	29.8	32.0	33.8	35.9
Warmest Month Average	CCSM45	75.5	77.7	78.7	78.9
	CCSM85	75.5	77.9	79.7	81.4
	GFDL45	75.5	78.6	80.4	81.7
	GFDL85	75.5	79.9	82.2	84.9
	HAD45	75.5	78.9	80.7	81.9
	HAD85	75.5	79.0	81.9	85.3

Precipitation (in)

	Scenario	2009	2039	2069	2099
Annual Total	CCSM45	44.8	47.9	49.9	52.2
	CCSM85	44.8	48.5	50.5	55.8
	GFDL45	44.8	50.1	53.5	53.5
	GFDL85	44.8	47.0	53.2	54.9
	HAD45	44.8	47.5	48.7	48.1
	HAD85	44.8	50.7	47.1	50.4
Growing Season May—Sep	CCSM45	20.4	23.8	24.7	25.8
	CCSM85	20.4	23.3	24.2	26.4
	GFDL45	20.4	21.7	23.0	23.7
	GFDL85	20.4	20.3	22.7	23.3
	HAD45	20.4	22.0	20.6	19.7
	HAD85	20.4	22.3	19.6	20.2

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-DGP30 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.

Cite as: Iverson, L.R.; Prasad, A.M.; Peters, M.P.; Matthews, S.N. 2019. Facilitating Adaptive Forest Management under Climate Change: A Spatially Specific Synthesis of 125 Species for Habitat Changes and Assisted Migration over the Eastern United States. *Forests*. 10(11): 989. <https://doi.org/10.3390/f10110989>.

Section 221D

EcoMap 2007
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
yellow-poplar	Liriodendron tulipifera	WDH	High	62.2	829.7	12.9	Lg. dec.	Lg. dec.	High	Abundant	Good	Good			1	1
red maple	Acer rubrum	WDH	High	69.6	708.3	9.8	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	2
chestnut oak	Quercus prinus	NDH	High	38.5	447.5	10.4	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	3
white oak	Quercus alba	WDH	Medium	45.8	381.9	7.2	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	4
black cherry	Prunus serotina	WDL	Medium	61.1	294.6	7.0	No change	No change	Low	Common	Poor	Poor			0	5
white ash	Fraxinus americana	WDL	Medium	47.2	273.7	7.1	No change	No change	Low	Common	Poor	Poor			0	6
northern red oak	Quercus rubra	WDH	Medium	46.8	250.4	5.0	No change	No change	High	Common	Good	Good			1	7
Virginia pine	Pinus virginiana	NDH	High	17.7	246.0	8.2	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	8
black oak	Quercus velutina	WDH	High	43.4	239.6	6.0	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	9
eastern redcedar	Juniperus virginiana	WDH	Medium	29.4	237.9	8.1	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			1	10
mockernut hickory	Carya alba	WDL	Medium	35.2	184.0	5.1	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	11
pignut hickory	Carya glabra	WDL	Medium	43.9	174.7	4.0	No change	No change	Medium	Common	Fair	Fair			1	12
blackgum	Nyssa sylvatica	WDL	Medium	47.1	173.5	3.4	No change	Sm. inc.	High	Common	Good	Very Good			1	13
black locust	Robinia pseudoacacia	NDH	Low	24.7	173.3	6.8	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	14
black walnut	Juglans nigra	WDH	Low	33.7	152.0	6.3	No change	Sm. dec.	Medium	Common	Fair	Poor			1	15
loblolly pine	Pinus taeda	WDH	High	3.1	119.7	14.2	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good	Infill ++	Infill ++	2	16
eastern white pine	Pinus strobus	WDH	High	11.6	113.6	10.8	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	17
American beech	Fagus grandifolia	WDH	High	29.1	112.0	3.9	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	18
scarlet oak	Quercus coccinea	WDL	Medium	20.7	98.3	3.5	No change	No change	Medium	Common	Fair	Fair			1	19
sweet birch	Betula lenta	NDH	High	22.6	90.8	3.6	Lg. dec.	Lg. dec.	Low	Common	Very Poor	Very Poor			0	20
sassafras	Sassafras albidum	WSL	Low	37.4	86.7	3.0	No change	No change	Medium	Common	Fair	Fair			1	21
pin oak	Quercus palustris	NSH	Low	14.9	84.4	7.2	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor	Infill +	Infill +	0	22
green ash	Fraxinus pennsylvanica	WSH	Low	10.7	83.5	9.7	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good	Infill ++	Infill ++	1	23
boxelder	Acer negundo	WSH	Low	23.2	79.8	5.9	No change	Sm. inc.	High	Common	Good	Very Good			1	24
ailanthus	Ailanthus altissima	NSL	FIA	20.6	72.5	3.3	Unknown	Unknown	NA	Common	NNIS	NNIS			0	25
southern red oak	Quercus falcata	WDL	Medium	7	71.7	5.8	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	2	26
sweetgum	Liquidambar styraciflua	WDH	High	3.3	69.4	11.7	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good	Infill ++	Infill ++	2	27
American elm	Ulmus americana	WDH	Medium	26.9	64.9	3.8	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			1	28
flowering dogwood	Cornus florida	WDL	Medium	24.9	55.3	2.0	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	29
sugar maple	Acer saccharum	WDH	High	14	54.2	5.1	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	2	30
sycamore	Platanus occidentalis	NSL	Low	11.6	53.5	4.3	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good	Infill ++	Infill ++	1	31
bitternut hickory	Carya cordiformis	WSL	Low	17.3	51.8	5.9	Sm. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	32
shagbark hickory	Carya ovata	WSL	Medium	14.1	40.2	4.2	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair	Infill +	Infill +	1	33
Norway maple	Acer platanoides	NSL	FIA	11.7	37.3	7.6	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	34
silver maple	Acer saccharinum	NSH	Low	8.1	34.4	10.9	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	1	35
hackberry	Celtis occidentalis	WDH	Medium	12.2	28.5	3.0	No change	Sm. inc.	High	Rare	Fair	Good	Infill +	Infill ++	1	36
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	12.8	27.1	2.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	37
slippery elm	Ulmus rubra	WSL	Low	6.8	26.5	4.2	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	38
eastern redbud	Cercis canadensis	NSL	Low	8.1	23.7	2.2	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	39
post oak	Quercus stellata	WDH	High	3.5	21.2	2.7	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	40
Norway spruce	Picea abies	NSH	FIA	3.5	20.3	11.1	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	41
common persimmon	Diospyros virginiana	NSL	Low	4.5	19.5	2.9	No change	Sm. inc.	High	Rare	Fair	Good	Infill +	Infill ++	1	42
eastern cottonwood	Populus deltoides	NSH	Low	1.1	19.0	32.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	43
paulownia	Paulownia tomentosa	NSL	FIA	3.7	17.9	4.6	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	44
swamp white oak	Quercus bicolor	NSL	Low	2.6	17.7	11.0	Sm. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			2	45
American basswood	Tilia americana	WSL	Medium	5.9	15.6	2.1	No change	Sm. dec.	Medium	Rare	Poor	Very Poor	Infill +		1	46
black willow	Salix nigra	NSH	Low	2.4	15.0	5.6	No change	Sm. inc.	Low	Rare	Very Poor	Poor		Infill +	2	47



Section 221D

EcoMap 2007
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
bigtooth aspen	Populus grandidentata	NSL	Medium	3.5	12.2	2.2	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			2	48
willow oak	Quercus phellos	NSL	Low	2.1	9.7	1.7	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +		2	49
red mulberry	Morus rubra	NSL	Low	4.6	9.3	6.0	Sm. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	1	50
pawpaw	Asimina triloba	NSL	Low	4.2	8.5	2.4	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	51
eastern hemlock	Tsuga canadensis	NSH	High	3.7	8.5	3.3	No change	No change	Low	Rare	Very Poor	Very Poor			2	52
Scots pine	Pinus sylvestris	NSH	FIA	0.3	8.4	25.6	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	53
shortleaf pine	Pinus echinata	WDH	High	2.5	8.0	1.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	54
river birch	Betula nigra	NSL	Low	2.9	7.5	1.3	No change	Lg. inc.	Medium	Rare	Poor	Good	Infill +	Infill ++	2	55
sourwood	Oxydendrum arboreum	NDL	High	0.9	5.9	1.6	Sm. inc.	Sm. inc.	High	Rare	Good	Good			2	56
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	8.3	5.7	1.2	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	57
white mulberry	Morus alba	NSL	FIA	3.6	4.9	3.7	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	58
pitch pine	Pinus rigida	NSH	High	0.8	4.9	0.4	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	59
yellow birch	Betula alleghaniensis	NDL	High	2.6	4.4	0.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	60
swamp chestnut oak	Quercus michauxii	NSL	Low	2.4	4.0	2.5	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	61
Osage-orange	Maclura pomifera	NDH	Medium	4.4	3.9	7.5	Sm. dec.	No change	High	Rare	Poor	Fair	Infill +	Infill +	2	62
shingle oak	Quercus imbricaria	NDH	Medium	1	3.6	3.7	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	63
serviceberry	Amelanchier spp.	NSL	Low	6.3	3.4	0.5	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	64
American holly	Ilex opaca	NSL	Medium	1.5	3.3	1.2	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	2	65
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	0	2.3	0.6	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	66
striped maple	Acer pensylvanicum	NSL	Medium	0.7	2.0	0.5	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	67
cherrybark oak; swamp red o.	Quercus pagoda	NSL	Medium	0.3	1.8	5.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	68
red pine	Pinus resinosa	NSH	Medium	0.3	1.4	4.3	Very Lg. dec.	Very Lg. dec.	Low	Rare	Lost	Lost			0	69
American chestnut	Castanea dentata	NSLX	FIA	1.8	1.1	0.4	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	70
quaking aspen	Populus tremuloides	WDH	High	3.7	0.9	1.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	71
cucumbertree	Magnolia acuminata	NSL	Low	0.1	0.7	0.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	72
blackjack oak	Quercus marilandica	NSL	Medium	0.4	0.7	1.0	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	73
Kentucky coffeetree	Gymnocladus dioicus	NSLX	FIA	0.3	0.7	2.1	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	74
pin cherry	Prunus pensylvanica	NSL	Low	1.2	0.6	1.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	75
black ash	Fraxinus nigra	WSH	Medium	0.3	0.6	1.7	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	76
chokecherry	Prunus virginiana	NSLX	FIA	0.2	0.5	1.1	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	77
northern catalpa	Catalpa speciosa	NSHX	FIA	1.3	0.5	5.9	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	78
honeylocust	Gleditsia triacanthos	NSH	Low	0.3	0.3	1.1	No change	Lg. inc.	High	Rare	Fair	Good			2	79
rock elm	Ulmus thomasii	NSLX	FIA	1.3	0.3	4.0	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	80
butternut	Juglans cinerea	NSLX	FIA	0.5	0.2	0.9	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	81
white spruce	Picea glauca	NSL	Medium	1.3	0.1	1.5	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	82
winged elm	Ulmus alata	WDL	Medium	0.1	0.1	0.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	83
sweetbay	Magnolia virginiana	NSL	Medium	0.9	0.0	0.4	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	84
ashe juniper	Juniperus ashei	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	85
red spruce	Picea rubens	NDH	High	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	86
slash pine	Pinus elliottii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	87
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	88
pond pine	Pinus serotina	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	89
bald cypress	Taxodium distichum	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	90
florida maple	Acer barbatum	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	91
black maple	Acer nigrum	NSH	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	92
mountain maple	Acer spicatum	NSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	93
Ohio buckeye	Aesculus glabra	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	94



Section 221D

EcoMap 2007

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
yellow buckeye	Aesculus flava	NSL	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +		3	95
gray birch	Betula populifolia	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	96
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	97
water hickory	Carya aquatica	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	98
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +		3	99
shellbark hickory	Carya laciniosa	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	100
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	101
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	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
southern magnolia	Magnolia grandiflora	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			3	104
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	105
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	106
water tupelo	Nyssa aquatica	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	107
swamp tupelo	Nyssa biflora	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	108
redbay	Persea borbonia	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +		3	109
water elm	Planera aquatica	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	110
turkey oak	Quercus laevis	NSH	Medium	0	0	0	Unknown	New Habitat	High	Absent	Unknown	New Habitat			3	111
laurel oak	Quercus laurifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	112
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	113
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	114
water oak	Quercus nigra	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	115
Shumard oak	Quercus shumardii	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	116
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	117
bluejack oak	Quercus incana	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	118
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	119

