

	sq. km	sq. mi	FIA Plots
Area of Region	9,800.0	3,783.8	354

**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	
		Abundant	Common	High	Low	Scenario	Scenario	Scenario	Scenario	SHIFT	SHIFT
				Reliability	Adaptability	RCP45	RCP85	RCP45	RCP85	RCP45	RCP85
Ash	4										
Hickory	6										
Maple	3	3		14	23	Increase	33	35	Very Good	16	16
Oak	18	22		35	52	No Change	14	13	Good	14	15
Pine	5	49		34	11	Decrease	23	22	Fair	7	10
Other	38	13		4		New	9	8	Poor	16	13
	<b>74</b>	<b>87</b>		<b>87</b>	<b>86</b>	Unknown	8	9	Very Poor	12	14
							<b>87</b>	<b>87</b>	FIA Only	4	4
									Unknown	4	5
										<b>17</b>	<b>20</b>
										<b>73</b>	<b>77</b>

**Potential Changes in Climate Variables**

**Temperature (°F)**

Scenario	2009	2039	2069	2099	
Annual	65.7	67.4	69.2	69.4	
Average	65.7	67.7	70.1	72.5	
GFDL45	65.7	68.6	69.8	70.9	
GFDL85	65.7	68.3	71.2	74.5	
HAD45	65.7	68.1	71.0	72.0	
HAD85	65.7	68.4	72.3	76.0	
Growing Season	78.8	80.3	81.7	82.1	
May—Sep	78.8	81.9	85.0	89.1	
	78.8	81.8	84.5	85.0	
	78.8	82.1	87.1	90.2	
Coldest Month	46.2	48.7	49.6	49.7	
Average	46.2	49.7	49.8	49.7	
GFDL45	46.2	47.2	48.2	48.8	
GFDL85	46.2	47.1	48.8	49.6	
HAD45	46.2	48.4	49.9	51.7	
HAD85	46.2	48.4	49.9	51.7	
Warmest Month	83.0	84.2	84.7	84.8	
Average	83.0	84.5	85.3	86.9	
GFDL45	83.0	87.0	86.7	88.4	
GFDL85	83.0	86.5	87.9	90.6	
HAD45	83.0	86.7	88.1	88.0	
HAD85	83.0	87.2	90.0	90.9	

**Precipitation (in)**

Scenario	2009	2039	2069	2099	
Annual	57.7	59.0	65.7	63.4	
Total	57.7	60.2	64.5	66.0	
GFDL45	57.7	62.0	71.9	64.0	
GFDL85	57.7	61.5	64.0	65.1	
HAD45	57.7	56.5	56.8	61.1	
HAD85	57.7	59.5	52.3	56.3	
Growing Season	21.4	21.6	23.2	22.2	
May—Sep	21.4	24.2	30.4	25.1	
	21.4	24.7	26.8	27.8	
	21.4	20.6	20.6	20.8	
	21.4	20.6	16.6	17.2	

**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-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
loblolly pine	Pinus taeda	WDH	High	94.9	3979.6	43.8	No change	Sm. dec.	Medium	Abundant	Good	Fair			1	1
sweetgum	Liquidambar styraciflua	WDH	High	94.9	777.4	8.5	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good			1	2
longleaf pine	Pinus palustris	NSH	Medium	41.8	537.7	13.9	Sm. inc.	No change	Medium	Abundant	Very Good	Good			1	3
southern red oak	Quercus falcata	WDL	Medium	75.5	433.5	6.1	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	4
slash pine	Pinus elliottii	NDH	High	21.4	360.2	16.8	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	5
water oak	Quercus nigra	WDH	High	72.4	342.2	5.0	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	6
post oak	Quercus stellata	WDH	High	57.1	213.4	4.0	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	7
white oak	Quercus alba	WDH	Medium	59.2	209.6	3.7	No change	No change	High	Common	Good	Good			1	8
blackgum	Nyssa sylvatica	WDL	Medium	78.6	207.4	2.8	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	9
bald cypress	Taxodium distichum	NSH	Medium	21.4	198.4	9.3	No change	Sm. inc.	Medium	Common	Fair	Good			1	10
red maple	Acer rubrum	WDH	High	82.7	185.5	2.3	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	11
shortleaf pine	Pinus echinata	WDH	High	49	176.8	3.6	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	12
green ash	Fraxinus pennsylvanica	WSH	Low	40.8	128.6	3.4	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good			1	13
American beech	Fagus grandifolia	WDH	High	38.8	126.9	3.6	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	14
American hornbeam; musclev	Carpinus caroliniana	NSL	Low	51	119.1	2.5	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	15
willow oak	Quercus phellos	WSL	Low	25.5	107.0	4.2	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	16
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	34.7	88.1	2.8	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	17
mockernut hickory	Carya alba	WDL	Medium	43.9	85.5	2.1	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	18
flowering dogwood	Cornus florida	WDL	Medium	60.2	84.0	1.5	No change	No change	Medium	Common	Fair	Fair			1	19
winged elm	Ulmus alata	WDL	Medium	43.9	76.1	1.9	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	20
overcup oak	Quercus lyrata	NSL	Medium	15.3	73.7	4.8	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair			1	21
sugarberry	Celtis laevigata	NDH	Medium	13.3	66.9	6.6	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	22
American elm	Ulmus americana	WDH	Medium	25.5	61.2	2.9	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	23
water tupelo	Nyssa aquatica	NSH	Medium	9.2	53.9	5.9	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor	Infill +	Infill +	0	24
water hickory	Carya aquatica	NSL	Medium	9.2	51.4	5.6	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	25
blackjack oak	Quercus marilandica	NSL	Medium	25.5	46.5	1.8	Lg. inc.	Lg. inc.	High	Rare	Good	Good			1	26
pecan	Carya illinoensis	NSH	Low	4.1	42.0	10.3	No change	No change	Low	Rare	Very Poor	Very Poor			0	27
sweetbay	Magnolia virginiana	NSL	Medium	21.4	41.7	2.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	28
American holly	Ilex opaca	NSL	Medium	34.7	37.0	1.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	29
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	30.6	32.7	1.2	Lg. inc.	Lg. inc.	High	Rare	Good	Good			1	30
swamp chestnut oak	Quercus michauxii	NSL	Low	20.4	30.8	1.9	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	31
honeylocust	Gleditsia triacanthos	NSH	Low	13.3	28.7	2.9	Sm. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	32
white ash	Fraxinus americana	WDL	Medium	18.4	26.5	1.5	Sm. inc.	Sm. inc.	Low	Rare	Poor	Poor	Infill +	Infill +	1	33
water elm	Planera aquatica	NSL	Low	4.1	24.1	5.9	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	34
southern magnolia	Magnolia grandiflora	NSL	Low	17.3	23.6	1.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	35
slippery elm	Ulmus rubra	WSL	Low	9.2	23.5	2.6	No change	No change	Medium	Rare	Poor	Poor		Infill +	1	36
pignut hickory	Carya glabra	WDL	Medium	13.3	23.0	1.7	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	37
black cherry	Prunus serotina	WDL	Medium	33.7	20.2	0.7	Sm. inc.	Lg. inc.	Low	Rare	Poor	Fair			1	38
sassafras	Sassafras albidum	WSL	Low	32.7	20.0	0.7	No change	Sm. inc.	Medium	Rare	Poor	Fair			1	39
laurel oak	Quercus laurifolia	NDH	Medium	17.3	15.4	1.1	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	40
common persimmon	Diospyros virginiana	NSL	Low	15.3	14.4	0.9	Sm. dec.	Sm. inc.	High	Rare	Poor	Good			1	41
eastern redcedar	Juniperus virginiana	WDH	Medium	13.3	10.4	0.8	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	42
sourwood	Oxydendrum arboreum	NDL	High	8.2	9.5	1.2	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			1	43
waterlocust	Gleditsia aquatica	NSLX	FIA	3.1	9.2	3.0	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	44
sycamore	Platanus occidentalis	NSL	Low	6.1	8.8	1.4	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	45
swamp tupelo	Nyssa biflora	NDH	Medium	6.1	7.4	1.2	No change	No change	Low	Rare	Very Poor	Very Poor			0	46
Nuttall oak	Quercus texana	NSH	Medium	10.2	6.7	1.1	Sm. inc.	Sm. inc.	High	Rare	Good	Good			0	47

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Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
pond cypress	Taxodium ascendens	NSH	Medium	1	6.3	6.2	Sm. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	48
black oak	Quercus velutina	WDH	High	11.2	6.0	0.8	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	49
bitternut hickory	Carya cordiformis	WSL	Low	11.2	5.8	0.8	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			1	50
ogeechee tupelo	Nyssa ogeche	NSLX	FIA	4.1	4.7	1.2	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	51
redbay	Persea borbonia	NSL	Low	6.1	3.7	0.6	Sm. dec.	No change	High	Rare	Poor	Fair			1	52
shagbark hickory	Carya ovata	WSL	Medium	3.1	3.3	1.1	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	53
pin cherry	Prunus pensylvanica	NSL	Low	4.1	3.3	0.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	54
black ash	Fraxinus nigra	WSH	Medium	2	3.2	1.6	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	55
red mulberry	Morus rubra	NSL	Low	6.1	3.0	0.5	Very Lg. dec.	Sm. dec.	Medium	Rare	Lost	Very Poor			0	56
boxelder	Acer negundo	WSH	Low	2	2.5	1.2	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	57
Shumard oak	Quercus shumardii	NSL	Low	2	1.8	0.9	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	58
American basswood	Tilia americana	WSL	Medium	2	1.6	0.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	59
eastern redbud	Cercis canadensis	NSL	Low	4.1	1.6	0.4	Very Lg. dec.	Lg. dec.	Medium	Rare	Lost	Very Poor			0	60
florida maple	Acer barbatum	NSL	Low	3.1	1.4	0.5	Very Lg. dec.	Sm. dec.	High	Rare	Lost	Poor		Infill +	2	61
swamp white oak	Quercus bicolor	NSL	Low	2	1.4	0.7	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	62
pond pine	Pinus serotina	NSH	Medium	1	1.4	1.3	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	63
bluejack oak	Quercus incana	NSL	Low	2	1.2	0.6	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	64
eastern cottonwood	Populus deltoides	NSH	Low	1	1.1	1.1	No change	No change	Medium	Rare	Poor	Poor		Infill +	2	65
black willow	Salix nigra	NSH	Low	1	1.1	1.1	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	1	66
cedar elm	Ulmus crassifolia	NDH	Medium	2	1.0	0.5	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	67
scarlet oak	Quercus coccinea	WDL	Medium	1	0.5	0.5	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	68
black walnut	Juglans nigra	WDH	Low	1	0.4	0.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	69
silverbell	Halesia spp.	NSL	Low	1	0.4	0.4	No change	No change	Medium	Rare	Poor	Poor			0	70
wild plum	Prunus americana	NSLX	FIA	1	0.3	0.3	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	71
bur oak	Quercus macrocarpa	NDH	Medium	1	0.3	0.3	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	72
Carolina ash	Fraxinus caroliniana	NSL	FIA	1	0.2	0.2	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	73
chestnut oak	Quercus prinus	NDH	High	1	0.2	0.2	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor			0	74
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	75
silver maple	Acer saccharinum	NSH	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	76
serviceberry	Amelanchier spp.	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	77
river birch	Betula nigra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	78
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	79
shellbark hickory	Carya laciniosa	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	80
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	81
yellow-poplar	Liriodendron tulipifera	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	82
cucumbertree	Magnolia acuminata	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	83
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	84
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	New Habitat	Unknown	Medium	Absent	New Habitat	Unknown			3	85
northern red oak	Quercus rubra	WDH	Medium	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	86
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	87