

	sq. km	sq. mi	FIA Plots
Area of Region	18,002	6,950.5	246

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		
		High	Common	Reliability	Adaptability	Scenario RCP45	Scenario RCP85	Scenario RCP45	Scenario RCP85	SHIFT RCP45	SHIFT RCP85	
Ash	3											
Hickory	1											
Maple	2	Abundant	4	High	10	13	Increase	12	15	Very Good	4	4
Oak	8	Common	12	Medium	29	44	No Change	14	13	Good	6	9
Pine	5	Rare	28	Low	25	8	Decrease	15	13	Fair	10	8
Other	25	Absent	19	FIA	3		New	6	8	Poor	12	12
	44		63		67	65	Unknown	20	18	Very Poor	9	8
								67	67	FIA Only	3	3
										Unknown	17	15
											61	59

Potential Changes in Climate Variables

Temperature (°F)

Scenario	2009	2039	2069	2099		
Annual	CCSM45	61.5	62.6	63.7	63.6	
Average	CCSM85	61.5	62.6	64.2	65.8	
	GFDL45	61.5	63.5	64.6	65.2	
	GFDL85	61.5	63.2	65.3	67.8	
	HAD45	61.5	62.7	64.4	65.3	
	HAD85	61.5	63.2	65.0	67.7	
Growing Season	CCSM45	67.9	68.8	69.7	69.8	
	CCSM85	67.9	68.8	70.4	72.1	
May—Sep	GFDL45	67.9	69.8	70.9	71.7	
	GFDL85	67.9	69.7	71.7	74.4	
	HAD45	67.9	69.7	71.0	71.9	
	HAD85	67.9	69.9	72.3	74.7	
Coldest Month	CCSM45	51.0	52.6	53.3	53.1	
Average	CCSM85	51.0	52.3	53.0	54.0	
	GFDL45	51.0	53.0	53.3	53.7	
	GFDL85	51.0	52.7	53.6	54.4	
	HAD45	51.0	50.9	51.8	52.2	
	HAD85	51.0	51.5	52.0	53.4	
Warmest Month	CCSM45	69.4	70.3	70.8	70.9	
Average	CCSM85	69.4	70.4	71.3	72.3	
	GFDL45	69.4	71.0	71.7	72.2	
	GFDL85	69.4	71.1	72.3	73.7	
	HAD45	69.4	71.2	71.8	72.2	
	HAD85	69.4	71.2	72.5	73.6	

Precipitation (in)

Scenario	2009	2039	2069	2099		
Annual	CCSM45	38.2	40.9	42.1	43.1	
Total	CCSM85	38.2	40.2	41.3	40.4	
	GFDL45	38.2	44.2	45.6	47.1	
	GFDL85	38.2	41.5	47.9	44.7	
	HAD45	38.2	38.8	39.4	41.0	
	HAD85	38.2	37.2	37.8	37.3	
Growing Season	CCSM45	24.0	26.0	25.9	26.6	
	CCSM85	24.0	25.1	26.2	24.6	
May—Sep	GFDL45	24.0	27.7	28.1	28.4	
	GFDL85	24.0	26.7	29.8	27.6	
	HAD45	24.0	24.4	25.0	23.5	
	HAD85	24.0	22.8	21.1	20.6	

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
laurel oak	Quercus laurifolia	NDH	Medium	71.9	664.4	13.8	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	1
slash pine	Pinus elliottii	NDH	High	48.4	601.0	21.7	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good			1	2
live oak	Quercus virginiana	NDH	High	60.9	544.4	14.7	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good			1	3
longleaf pine	Pinus palustris	NSH	Medium	33.7	510.5	19.0	No change	No change	Medium	Abundant	Good	Good			1	4
pond cypress	Taxodium ascendens	NSH	Medium	26.2	451.3	26.2	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	5
red maple	Acer rubrum	WDH	High	42.1	295.6	9.1	No change	No change	High	Common	Good	Good			1	6
turkey oak	Quercus laevis	NSH	Medium	18.9	224.7	14.8	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	1	7
water oak	Quercus nigra	WDH	High	31	190.7	9.7	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	8
cabbage palmetto	Sabal palmetto	NDH	Medium	31.7	190.3	10.4	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			0	9
sweetgum	Liquidambar styraciflua	WDH	High	28.7	161.0	6.7	No change	No change	Medium	Common	Fair	Fair			1	10
swamp tupelo	Nyssa biflora	NDH	Medium	36.5	140.6	6.3	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair			1	11
sand pine	Pinus clausa	NDH	High	7.2	138.7	20.3	No change	No change	Low	Common	Poor	Poor	Infill +	Infill +	0	12
bald cypress	Taxodium distichum	NSH	Medium	20.7	133.9	11.7	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	13
loblolly pine	Pinus taeda	WDH	High	7.2	114.6	11.5	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	1	14
black cherry	Prunus serotina	WDL	Medium	17.6	63.8	6.0	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair			1	15
sweetbay	Magnolia virginiana	NSL	Medium	22.5	58.7	4.6	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	16
loblolly-bay	Gordonia lasianthus	NSH	Medium	7.2	42.3	7.2	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	17
redbay	Persea borbonia	NSL	Low	26	38.3	2.7	No change	Sm. inc.	High	Rare	Fair	Good			1	18
bluejack oak	Quercus incana	NSL	Low	14.7	38.3	4.3	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	19
American elm	Ulmus americana	WDH	Medium	19.9	30.6	3.1	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good			1	20
pignut hickory	Carya glabra	WDL	Medium	6.7	28.7	4.1	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	21
eastern cottonwood	Populus deltoides	NSH	Low	0.7	27.8	50.0	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	22
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	8.7	25.6	3.3	No change	No change	Medium	Rare	Poor	Poor			1	23
pumpkin ash	Fraxinus profunda	NSH	FIA	10.8	20.4	4.7	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	24
southern magnolia	Magnolia grandiflora	NSL	Low	6.6	15.8	3.6	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	25
sugarberry	Celtis laevigata	NDH	Medium	5.2	14.2	2.6	No change	Sm. inc.	Medium	Rare	Poor	Fair	Infill +	Infill +	1	26
post oak	Quercus stellata	WDH	High	4.2	10.2	3.6	No change	Sm. inc.	High	Rare	Fair	Good	Infill +		2	27
Carolina ash	Fraxinus caroliniana	NSL	FIA	8.6	8.5	1.8	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	28
green ash	Fraxinus pennsylvanica	WSH	Low	3.9	7.9	3.6	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	29
common persimmon	Diospyros virginiana	NSL	Low	5.4	5.1	1.3	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			1	30
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	2.7	4.0	1.8	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor		Infill +	2	31
blackgum	Nyssa sylvatica	WDL	Medium	1.3	2.3	2.1	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	32
hackberry	Celtis occidentalis	WDH	Medium	0.1	2.0	0.4	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	33
florida maple	Acer barbatum	NSL	Low	0.1	1.8	0.4	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	34
eastern redcedar	Juniperus virginiana	WDH	Medium	2.6	1.6	1.3	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	35
pond pine	Pinus serotina	NSH	Medium	0.7	1.3	1.2	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	36
Shumard oak	Quercus shumardii	NSL	Low	0.7	1.2	2.1	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	37
waterlocust	Gleditsia aquatica	NSLX	FIA	3.3	1.2	2.7	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	38
flowering dogwood	Cornus florida	WDL	Medium	1.4	1.0	0.3	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	39
winged elm	Ulmus alata	WDL	Medium	3.2	0.9	0.6	Sm. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	2	40
water tupelo	Nyssa aquatica	NSH	Medium	0.7	0.6	1.1	No change	No change	Low	Rare	Very Poor	Very Poor			0	41
black willow	Salix nigra	NSH	Low	0.1	0.5	0.2	Sm. dec.	No change	Low	Rare	Very Poor	Very Poor			2	42
American basswood	Tilia americana	WSL	Medium	0.7	0.2	0.3	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	43
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	1.9	0.0	0.1	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	44
shortleaf pine	Pinus echinata	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	45
spruce pine	Pinus glabra	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	46
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	47

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
serviceberry	Amelanchier spp.	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			3	48
pawpaw	Asimina triloba	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	49
river birch	Betula nigra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	50
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	Unknown	New Habitat	High	Absent	Unknown	New Habitat			0	51
shagbark hickory	Carya ovata	WSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	52
mockernut hickory	Carya alba	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	53
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	54
American beech	Fagus grandifolia	WDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	55
white ash	Fraxinus americana	WDL	Medium	0	0	0	Unknown	Unknown	Low	Modeled	Unknown	Unknown			0	56
silverbell	Halesia spp.	NSL	Low	0	0	0	New Habitat	Unknown	Medium	Absent	New Habitat	Unknown			0	57
American holly	Ilex opaca	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	58
cucumbertree	Magnolia acuminata	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	59
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	60
pin cherry	Prunus pensylvanica	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	61
scarlet oak	Quercus coccinea	WDL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	62
southern red oak	Quercus falcata	WDL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	63
swamp chestnut oak	Quercus michauxii	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	64
willow oak	Quercus phellos	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	65
black locust	Robinia pseudoacacia	NDH	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	66
American mountain-ash	Sorbus americana	NSL	Low	0	0	0	Unknown	New Habitat	Low	Absent	Unknown	New Habitat			0	67