

| | | | |
|----------------|---------|---------|-----------|
| | sq. km | sq. mi | FIA Plots |
| Area of Region | 8,325.1 | 3,214.3 | 168 |

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 | Reliability | Adaptability | Scenario | Scenario | Scenario | Scenario | SHIFT | SHIFT |
| | | | | High | Medium | RCP45 | RCP85 | RCP45 | RCP85 | RCP45 | RCP85 |
| Ash | 4 | | | 7 | 8 | Increase | 12 | 13 | Very Good | 4 | 5 |
| Hickory | 2 | | | 29 | 32 | No Change | 11 | 8 | Good | 10 | 9 |
| Maple | 1 | Abundant | 4 | 12 | 8 | Decrease | 10 | 12 | Fair | 3 | 4 |
| Oak | 4 | Common | 11 | 2 | | New | 4 | 5 | Poor | 7 | 5 |
| Pine | 5 | Rare | 20 | | | Unknown | 13 | 12 | Very Poor | 6 | 6 |
| Other | 19 | Absent | 12 | | | | | | FIA Only | 2 | 2 |
| | 35 | | 47 | 50 | 48 | | 50 | 50 | Unknown | 11 | 10 |
| | | | | | | | | | | 43 | 41 |

Potential Changes in Climate Variables

Temperature (°F)

| Scenario | 2009 | 2039 | 2069 | 2099 | |
|----------------|------|------|------|------|--|
| Annual | 71.7 | 73.1 | 74.5 | 74.5 | |
| Average | 71.7 | 73.2 | 75.3 | 77.3 | |
| GFDL45 | 71.7 | 74.8 | 75.8 | 76.6 | |
| GFDL85 | 71.7 | 74.0 | 76.8 | 80.1 | |
| HAD45 | 71.7 | 73.2 | 75.2 | 76.3 | |
| HAD85 | 71.7 | 73.7 | 75.9 | 79.2 | |
| Growing Season | 80.2 | 81.3 | 82.4 | 82.6 | |
| May—Sep | 80.2 | 81.3 | 83.5 | 85.7 | |
| GFDL45 | 80.2 | 83.2 | 84.0 | 85.1 | |
| GFDL85 | 80.2 | 82.4 | 85.2 | 88.7 | |
| HAD45 | 80.2 | 82.2 | 83.8 | 84.9 | |
| HAD85 | 80.2 | 82.5 | 85.2 | 88.2 | |
| Coldest Month | 57.9 | 59.9 | 60.8 | 60.5 | |
| Average | 57.9 | 59.2 | 60.1 | 61.5 | |
| GFDL45 | 57.9 | 60.5 | 60.9 | 61.5 | |
| GFDL85 | 57.9 | 60.1 | 61.3 | 62.3 | |
| HAD45 | 57.9 | 57.7 | 58.9 | 59.5 | |
| HAD85 | 57.9 | 58.4 | 59.1 | 60.9 | |
| Warmest Month | 82.3 | 83.4 | 84.2 | 84.1 | |
| Average | 82.3 | 83.5 | 84.8 | 86.1 | |
| GFDL45 | 82.3 | 84.5 | 85.3 | 86.0 | |
| GFDL85 | 82.3 | 84.6 | 86.1 | 87.9 | |
| HAD45 | 82.3 | 84.5 | 85.1 | 85.7 | |
| HAD85 | 82.3 | 84.4 | 86.0 | 87.2 | |

Precipitation (in)

| Scenario | 2009 | 2039 | 2069 | 2099 | |
|----------------|------|------|------|------|--|
| Annual | 51.0 | 54.0 | 54.3 | 56.1 | |
| Total | 51.0 | 53.2 | 53.0 | 52.3 | |
| GFDL45 | 51.0 | 60.2 | 61.1 | 63.2 | |
| GFDL85 | 51.0 | 55.3 | 64.5 | 60.9 | |
| HAD45 | 51.0 | 49.9 | 48.3 | 51.1 | |
| HAD85 | 51.0 | 47.3 | 48.4 | 45.5 | |
| Growing Season | 30.9 | 33.1 | 31.7 | 33.6 | |
| May—Sep | 30.9 | 32.6 | 32.0 | 29.8 | |
| GFDL45 | 30.9 | 36.0 | 36.0 | 36.0 | |
| GFDL85 | 30.9 | 33.7 | 37.9 | 36.1 | |
| HAD45 | 30.9 | 30.4 | 28.7 | 27.7 | |
| HAD85 | 30.9 | 27.8 | 25.5 | 24.0 | |

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 |
|----------------------------|-------------------------|-------|--------|-------|--------|-------|---------------|---------------|--------|----------|-------------|-------------|-----------|-----------|-----|----|
| slash pine | Pinus elliottii | NDH | High | 63.7 | 2026.6 | 38.8 | No change | No change | Medium | Abundant | Good | Good | | | 1 | 1 |
| cabbage palmetto | Sabal palmetto | NDH | Medium | 51.7 | 1050.4 | 26.2 | Sm. inc. | Sm. inc. | Medium | Abundant | Very Good | Very Good | | | 0 | 2 |
| pond cypress | Taxodium ascendens | NSH | Medium | 37.1 | 660.6 | 24.4 | Sm. inc. | Sm. inc. | Medium | Abundant | Very Good | Very Good | | | 1 | 3 |
| longleaf pine | Pinus palustris | NSH | Medium | 21.8 | 585.2 | 30.9 | No change | Sm. dec. | Medium | Abundant | Good | Fair | | | 1 | 4 |
| red maple | Acer rubrum | WDH | High | 41.7 | 391.1 | 14.2 | No change | No change | High | Common | Good | Good | | | 1 | 5 |
| live oak | Quercus virginiana | NDH | High | 44.5 | 280.8 | 11.0 | Lg. inc. | Lg. inc. | Medium | Common | Very Good | Very Good | | | 1 | 6 |
| sand pine | Pinus clausa | NDH | High | 5.8 | 239.8 | 38.8 | No change | No change | Low | Common | Poor | Poor | Infill + | Infill + | 0 | 7 |
| swamp tupelo | Nyssa biflora | NDH | Medium | 38.3 | 231.6 | 7.6 | Sm. inc. | Sm. inc. | Low | Common | Fair | Fair | | | 1 | 8 |
| laurel oak | Quercus laurifolia | NDH | Medium | 37.4 | 217.5 | 8.6 | Sm. inc. | Sm. inc. | Medium | Common | Good | Good | | | 1 | 9 |
| loblolly-bay | Gordonia lasianthus | NSH | Medium | 30 | 216.4 | 8.4 | No change | No change | Medium | Common | Fair | Fair | | | 1 | 10 |
| pond pine | Pinus serotina | NSH | Medium | 13.2 | 127.2 | 13.4 | No change | No change | Low | Common | Poor | Poor | | | 0 | 11 |
| sweetgum | Liquidambar styraciflua | WDH | High | 26.5 | 115.3 | 5.9 | No change | No change | Medium | Common | Fair | Fair | | | 1 | 12 |
| sweetbay | Magnolia virginiana | NSL | Medium | 27.5 | 90.4 | 5.5 | Sm. inc. | Sm. inc. | Medium | Common | Good | Good | | | 1 | 13 |
| American elm | Ulmus americana | WDH | Medium | 30.3 | 57.4 | 3.4 | Sm. inc. | Lg. inc. | Medium | Common | Good | Very Good | | | 1 | 14 |
| redbay | Persea borbonia | NSL | Low | 35.6 | 54.1 | 2.2 | Sm. inc. | Sm. inc. | High | Common | Very Good | Very Good | | | 1 | 15 |
| bald cypress | Taxodium distichum | NSH | Medium | 16.8 | 46.9 | 5.7 | Lg. inc. | Lg. inc. | Medium | Rare | Good | Good | Infill ++ | Infill ++ | 1 | 16 |
| loblolly pine | Pinus taeda | WDH | High | 6 | 39.7 | 6.6 | No change | No change | Medium | Rare | Poor | Poor | Infill + | Infill + | 1 | 17 |
| water oak | Quercus nigra | WDH | High | 15.4 | 24.0 | 1.8 | Lg. inc. | Lg. inc. | Medium | Rare | Good | Good | Infill ++ | Infill ++ | 1 | 18 |
| pignut hickory | Carya glabra | WDL | Medium | 2.3 | 22.3 | 9.2 | Sm. dec. | Sm. dec. | Medium | Rare | Very Poor | Very Poor | | | 2 | 19 |
| green ash | Fraxinus pennsylvanica | WSH | Low | 3.6 | 21.9 | 6.1 | No change | No change | Medium | Rare | Poor | Poor | Infill + | Infill + | 1 | 20 |
| sugarberry | Celtis laevigata | NDH | Medium | 7.8 | 19.5 | 2.9 | No change | Lg. inc. | Medium | Rare | Poor | Good | Infill + | Infill ++ | 2 | 21 |
| Carolina ash | Fraxinus caroliniana | NSL | FIA | 4 | 12.7 | 3.5 | Unknown | Unknown | NA | Rare | FIA Only | FIA Only | | | 0 | 22 |
| pumpkin ash | Fraxinus profunda | NSL | FIA | 2.8 | 12.0 | 5.1 | Unknown | Unknown | NA | Rare | FIA Only | FIA Only | | | 0 | 23 |
| American hornbeam; musclev | Carpinus caroliniana | WSL | Low | 4.7 | 11.2 | 2.3 | Sm. dec. | Sm. dec. | Medium | Rare | Very Poor | Very Poor | | | 0 | 24 |
| blackgum | Nyssa sylvatica | WDL | Medium | 8.4 | 9.2 | 2.6 | Sm. inc. | Sm. inc. | High | Rare | Good | Good | Infill ++ | Infill ++ | 2 | 25 |
| southern magnolia | Magnolia grandiflora | NSL | Low | 5.9 | 7.1 | 2.2 | No change | Sm. dec. | Medium | Rare | Poor | Very Poor | Infill + | | 1 | 26 |
| water hickory | Carya aquatica | NSL | Medium | 2.4 | 6.0 | 2.5 | Sm. dec. | Sm. dec. | Medium | Rare | Very Poor | Very Poor | | | 0 | 27 |
| American basswood | Tilia americana | WSL | Medium | 0.9 | 5.9 | 3.6 | Sm. dec. | Sm. dec. | Medium | Rare | Very Poor | Very Poor | | | 0 | 28 |
| eastern redcedar | Juniperus virginiana | WDH | Medium | 7.2 | 5.2 | 1.6 | Sm. dec. | Very Lg. dec. | Medium | Rare | Very Poor | Lost | | | 0 | 29 |
| common persimmon | Diospyros virginiana | NSL | Low | 4.7 | 4.6 | 0.9 | Lg. dec. | Lg. dec. | High | Rare | Poor | Poor | | | 1 | 30 |
| turkey oak | Quercus laevis | NSH | Medium | 4.8 | 2.5 | 8.2 | Lg. inc. | Sm. inc. | High | Rare | Good | Good | Infill ++ | Infill ++ | 2 | 31 |
| red mulberry | Morus rubra | NSL | Low | 1.2 | 1.2 | 1.0 | Very Lg. dec. | Very Lg. dec. | Medium | Rare | Lost | Lost | | | 0 | 32 |
| American holly | Ilex opaca | NSL | Medium | 1.2 | 1.1 | 0.9 | Very Lg. dec. | Very Lg. dec. | Medium | Rare | Lost | Lost | | | 0 | 33 |
| hackberry | Celtis occidentalis | WDH | Medium | 1.1 | 1.0 | 0.8 | Very Lg. dec. | Very Lg. dec. | High | Rare | Lost | Lost | | | 0 | 34 |
| white ash | Fraxinus americana | WDL | Medium | 3.5 | 0.4 | 0.9 | Sm. dec. | Sm. dec. | Low | Rare | Very Poor | Very Poor | | | 0 | 35 |
| striped maple | Acer pensylvanicum | NSL | Medium | 0 | 0 | 0 | Unknown | Unknown | Medium | Absent | Unknown | Unknown | | | 0 | 36 |
| shagbark hickory | Carya ovata | WSL | Medium | 0 | 0 | 0 | Unknown | Unknown | Medium | Absent | Unknown | Unknown | | | 0 | 37 |
| mockernut hickory | Carya alba | WDL | Medium | 0 | 0 | 0 | Unknown | Unknown | High | Modeled | Unknown | Unknown | | | 0 | 38 |
| flowering dogwood | Cornus florida | WDL | Medium | 0 | 0 | 0 | Unknown | Unknown | Medium | Modeled | Unknown | Unknown | | | 0 | 39 |
| black ash | Fraxinus nigra | WSH | Medium | 0 | 0 | 0 | Unknown | Unknown | Low | Absent | Unknown | Unknown | | | 0 | 40 |
| silverbell | Halesia spp. | NSL | Low | 0 | 0 | 0 | Unknown | Unknown | Medium | Absent | Unknown | Unknown | | | 0 | 41 |
| cucumbertree | Magnolia acuminata | NSL | Low | 0 | 0 | 0 | Unknown | Unknown | Medium | Absent | Unknown | Unknown | | | 0 | 42 |
| bigleaf magnolia | Magnolia macrophylla | NSL | Low | 0 | 0 | 0 | Unknown | Unknown | Medium | Absent | Unknown | Unknown | | | 0 | 43 |
| water tupelo | Nyssa aquatica | NSH | Medium | 0 | 0 | 0 | New Habitat | New Habitat | Low | Absent | New Habitat | New Habitat | Likely + | Likely + | 3 | 44 |
| black cherry | Prunus serotina | WDL | Medium | 0 | 0 | 0 | New Habitat | New Habitat | Low | Absent | New Habitat | New Habitat | Likely + | Likely + | 3 | 45 |
| southern red oak | Quercus falcata | WDL | Medium | 0 | 0 | 0 | New Habitat | New Habitat | High | Absent | New Habitat | New Habitat | | Migrate + | 3 | 46 |
| bluejack oak | Quercus incana | NSL | Low | 0 | 0 | 0 | New Habitat | New Habitat | Medium | Absent | New Habitat | New Habitat | Likely + | Likely + | 3 | 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 |
|-----------------------|----------------------|-------|--------|-------|--------|-------|----------|-------------|--------|---------|-----------|-------------|---------|---------|-----|----|
| black locust | Robinia pseudoacacia | NDH | Low | 0 | 0 | 0 | Unknown | Unknown | Medium | Absent | Unknown | Unknown | | | 0 | 48 |
| American mountain-ash | Sorbus americana | NSL | Low | 0 | 0 | 0 | Unknown | New Habitat | Low | Absent | Unknown | New Habitat | | | 0 | 49 |
| winged elm | Ulmus alata | WDL | Medium | 0 | 0 | 0 | Unknown | Unknown | Medium | Modeled | Unknown | Unknown | | | 0 | 50 |