



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
chestnut oak	Quercus prinus	NDH	High	86.6	1201.8	13.9	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	1
red maple	Acer rubrum	WDH	High	91.8	843.4	9.2	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	2
yellow-poplar	Liriodendron tulipifera	WDH	High	90.7	806.0	8.9	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	3
Virginia pine	Pinus virginiana	NDH	High	85.6	750.7	8.8	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	4
sourwood	Oxydendrum arboreum	NDL	High	92.8	677.1	7.3	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	5
white oak	Quercus alba	WDH	Medium	87.6	653.7	7.5	Sm. inc.	No change	High	Abundant	Very Good	Very Good			1	6
eastern white pine	Pinus strobus	WDH	High	63.9	571.4	8.9	No change	No change	Low	Abundant	Fair	Fair			0	7
scarlet oak	Quercus coccinea	WDL	Medium	85.6	551.1	6.4	Sm. dec.	Sm. dec.	Medium	Abundant	Fair	Fair			0	8
loblolly pine	Pinus taeda	WDH	High	44.3	486.0	11.0	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	9
shortleaf pine	Pinus echinata	WDH	High	79.4	356.0	4.5	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	10
pignut hickory	Carya glabra	WDL	Medium	83.5	283.9	3.4	No change	Sm. dec.	Medium	Common	Fair	Poor			1	11
sweetgum	Liquidambar styraciflua	WDH	High	43.3	272.5	6.3	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1	12
blackgum	Nyssa sylvatica	WDL	Medium	92.8	268.1	2.9	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1	13
black oak	Quercus velutina	WDH	High	82.5	236.8	2.9	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	14
southern red oak	Quercus falcata	WDL	Medium	68	224.9	3.3	Sm. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	15
northern red oak	Quercus rubra	WDL	Medium	66	195.3	3.0	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	16
mockernut hickory	Carya alba	WDL	Medium	68	153.9	2.3	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	17
eastern hemlock	Tsuga canadensis	NSH	High	45.4	147.4	3.3	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair	Infill +	Infill +	1	18
flowering dogwood	Cornus florida	WDL	Medium	81.4	141.8	1.7	No change	No change	Medium	Common	Fair	Fair			1	19
post oak	Quercus stellata	WDH	High	44.3	97.3	2.2	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	20
black cherry	Prunus serotina	WDL	Medium	51.5	89.8	1.7	Lg. inc.	Lg. inc.	Low	Common	Good	Good			1	21
sweet birch	Betula lenta	NDH	High	43.3	82.1	1.9	No change	No change	Low	Common	Poor	Poor			0	22
black locust	Robinia pseudoacacia	NDH	Low	41.2	66.1	1.6	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	23
boxelder	Acer negundo	WSH	Low	5.2	60.3	11.7	Lg. dec.	Sm. dec.	High	Common	Fair	Fair		Infill +	1	24
pitch pine	Pinus rigida	NSH	High	18.6	56.3	3.0	Sm. inc.	Sm. inc.	Medium	Common	Good	Good	Infill ++	Infill ++	1	25
water oak	Quercus nigra	WDH	High	11.3	48.1	4.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	26
green ash	Fraxinus pennsylvanica	WSH	Low	24.7	47.9	1.9	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good			1	27
sycamore	Platanus occidentalis	NSL	Low	8.2	43.4	5.3	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	28
eastern redcedar	Juniperus virginiana	WDH	Medium	12.4	38.4	3.1	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	29
black walnut	Juglans nigra	WDH	Low	6.2	38.3	6.2	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	30
sassafras	Sassafras albidum	WSL	Low	37.1	34.5	0.9	No change	Lg. inc.	Medium	Rare	Poor	Good			1	31
American beech	Fagus grandifolia	WDH	High	27.8	31.9	1.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	32
hackberry	Celtis occidentalis	WDH	Medium	4.1	29.7	7.2	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor		Infill +	2	33
American basswood	Tilia americana	WSL	Medium	12.4	22.7	1.8	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	34
winged elm	Ulmus alata	WDL	Medium	8.2	21.9	2.7	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	1	35
American holly	Ilex opaca	NSL	Medium	30.9	19.9	0.6	No change	Lg. inc.	Medium	Rare	Poor	Good			1	36
common persimmon	Diospyros virginiana	NSL	Low	20.6	19.5	0.9	Lg. inc.	Lg. inc.	High	Rare	Good	Good			1	37
serviceberry	Amelanchier spp.	NSL	Low	28.9	18.5	0.6	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	38
mountain or Fraser magnolia	Magnolia fraseri	NSL	Low	18.6	16.0	0.9	No change	No change	Low	Rare	Very Poor	Very Poor			0	39
blackjack oak	Quercus marilandica	NSL	Medium	13.4	14.9	1.1	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	40
white ash	Fraxinus americana	WDL	Medium	15.5	14.2	0.9	Sm. dec.	Lg. inc.	Low	Rare	Very Poor	Fair		Infill +	1	41
florida maple	Acer barbatum	NSL	Low	10.3	13.5	1.3	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	1	42
eastern redbud	Cercis canadensis	NSL	Low	10.3	10.0	1.0	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	43
paulownia	Paulownia tomentosa	NSL	FIA	3.1	8.9	2.9	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	44
cucumbertree	Magnolia acuminata	NSL	Low	9.3	8.3	0.9	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	45
shagbark hickory	Carya ovata	WSL	Medium	4.1	7.9	1.9	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	46
yellow buckeye	Aesculus flava	NSL	Low	8.2	6.9	0.8	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			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
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	10.3	6.5	0.6	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	48
Table Mountain pine	Pinus pungens	NSL	Low	3.1	6.1	2.0	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	49
sand hickory	Carya pallida	NSL	FIA	3.1	5.4	1.8	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	50
sugarberry	Celtis laevigata	NDH	Medium	4.1	5.1	1.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	51
bitternut hickory	Carya cordiformis	WSL	Low	4.1	4.9	1.2	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor		Infill +	2	52
red mulberry	Morus rubra	NSL	Low	6.2	3.0	0.5	No change	Sm. inc.	Medium	Rare	Poor	Fair		Infill +	1	53
silverbell	Halesia spp.	NSL	Low	2.1	2.8	1.4	No change	No change	Medium	Rare	Poor	Poor			0	54
slippery elm	Ulmus rubra	WSL	Low	2.1	2.8	1.4	Sm. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	2	55
black willow	Salix nigra	NSH	Low	3.1	2.6	0.8	Lg. dec.	Sm. inc.	Low	Rare	Very Poor	Poor		Infill +	2	56
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	2.1	2.5	1.2	No change	Lg. inc.	Medium	Rare	Poor	Good	Infill +		2	57
American elm	Ulmus americana	WDH	Medium	3.1	2.4	0.8	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	58
striped maple	Acer pensylvanicum	NSL	Medium	3.1	1.9	0.6	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	59
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	3.1	1.3	0.4	Lg. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	60
silver maple	Acer saccharinum	NSH	Low	1	1.3	1.3	Lg. dec.	Very Lg. dec.	High	Rare	Poor	Lost			0	61
American chestnut	Castanea dentata	NSLX	FIA	5.2	1.1	0.2	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	62
sugar maple	Acer saccharum	WDH	High	2.1	1.0	0.5	No change	Very Lg. dec.	High	Rare	Fair	Lost			0	63
honeylocust	Gleditsia triacanthos	NSH	Low	1	0.9	0.8	Sm. inc.	Lg. inc.	High	Rare	Good	Good			2	64
longleaf pine	Pinus palustris	NSH	Medium	1	0.7	0.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	65
black maple	Acer nigrum	NSH	Low	1	0.5	0.5	No change	No change	High	Rare	Fair	Fair			0	66
white mulberry	Morus alba	NSL	FIA	1	0.5	0.5	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	67
butternut	Juglans cinerea	NSLX	FIA	1	0.4	0.4	Unknown	Unknown	Low	Rare	FIA Only	FIA Only			0	68
shellbark hickory	Carya laciniosa	NSL	Low	1	0.4	0.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	69
Shumard oak	Quercus shumardii	NSL	Low	1	0.3	0.3	No change	No change	High	Rare	Fair	Fair		Infill +	2	70
yellow birch	Betula alleghaniensis	NDL	High	1	0.2	0.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			0	71
bigleaf magnolia	Magnolia macrophylla	NSL	Low	1	0.2	0.2	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	72
ashe juniper	Juniperus ashei	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	73
slash pine	Pinus elliottii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	74
spruce pine	Pinus glabra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	75
pond cypress	Taxodium ascendens	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	76
northern white-cedar	Thuja occidentalis	WSH	High	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	77
mountain maple	Acer spicatum	NSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	78
Ohio buckeye	Aesculus glabra	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	79
pawpaw	Asimina triloba	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	80
river birch	Betula nigra	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	81
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate ++	3	82
pecan	Carya illinoensis	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate +	3	83
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	84
black ash	Fraxinus nigra	WSH	Medium	0	0	0	Unknown	New Habitat	Low	Absent	Unknown	New Habitat			3	85
southern magnolia	Magnolia grandiflora	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	86
sweetbay	Magnolia virginiana	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	87
swamp tupelo	Nyssa biflora	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate +	3	88
bigtooth aspen	Populus grandidentata	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	89
laurel oak	Quercus laurifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	90
overcup oak	Quercus lyrata	NSL	Medium	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	91
swamp chestnut oak	Quercus michauxii	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	92
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	93
pin oak	Quercus palustris	NSH	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	94

# Chattahoochee

## National Forests and Grasslands 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
willow oak	Quercus phellos	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	95
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	96
bluejack oak	Quercus incana	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	97
American mountain-ash	Sorbus americana	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	98
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			3	99