

Climate Change Atlas Tree Species  
Current and Potential Future Habitat, Capability, and Migration

	sq. km	sq. mi	FIA Plots
Area of Region	25,566	9,871.1	436

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	25	28	Increase	22	25	Very Good	6	6	Likely	2	2
Ash	3			Medium	41	63	No Change	26	24	Good	15	21	Infill	27	27
Hickory	5			Low	41	18	Decrease	24	23	Fair	20	15	Migrate	10	13
Maple	5	Abundant	5	FIA	11		New	26	28	Poor	15	12			
Oak	17	Common	21				Unknown	20	18	Very Poor	15	16			
Pine	8	Rare	57							FIA Only	5	5			
Other	45	Absent	35							Unknown	9	7			
	<b>83</b>		<b>118</b>		<b>118</b>	<b>109</b>		<b>118</b>	<b>118</b>		<b>85</b>	<b>82</b>		<b>39</b>	<b>42</b>

Potential Changes in Climate Variables

Temperature (°F)

	Scenario	2009	2039	2069	2099	
Annual Average	CCSM45	55.0	56.7	58.8	59.1	
	CCSM85	55.0	57.1	59.5	62.4	
	GFDL45	55.0	58.8	60.4	61.6	
	GFDL85	55.0	58.2	61.6	65.6	
	HAD45	55.0	57.5	60.7	62.1	
HAD85	55.0	57.7	61.5	65.9		
Growing Season (May—Sep)	CCSM45	70.7	72.3	74.1	74.5	
	CCSM85	70.7	72.6	75.1	78.6	
	GFDL45	70.7	74.9	76.9	78.5	
	GFDL85	70.7	74.6	78.4	82.8	
	HAD45	70.7	73.4	76.4	78.1	
HAD85	70.7	73.2	77.8	82.5		
Coldest Month (Average)	CCSM45	31.6	33.6	35.0	35.5	
	CCSM85	31.6	34.1	35.3	36.9	
	GFDL45	31.6	34.7	35.3	36.0	
	GFDL85	31.6	34.3	35.5	36.9	
	HAD45	31.6	33.1	35.2	35.4	
HAD85	31.6	33.6	35.3	37.3		
Warmest Month (Average)	CCSM45	76.4	78.4	79.3	79.5	
	CCSM85	76.4	78.5	80.3	81.8	
	GFDL45	76.4	79.4	81.1	82.4	
	GFDL85	76.4	80.8	82.9	85.6	
	HAD45	76.4	79.6	81.4	82.3	
HAD85	76.4	79.8	82.5	85.6		

Precipitation (in)

	Scenario	2009	2039	2069	2099	
Annual Total	CCSM45	43.9	47.4	49.4	50.6	
	CCSM85	43.9	48.2	49.3	55.5	
	GFDL45	43.9	49.1	52.4	53.0	
	GFDL85	43.9	46.0	52.4	53.6	
	HAD45	43.9	46.7	47.8	46.7	
HAD85	43.9	50.5	45.6	48.7		
Growing Season (May—Sep)	CCSM45	19.7	23.2	24.2	24.9	
	CCSM85	19.7	23.1	23.3	26.2	
	GFDL45	19.7	21.1	22.9	23.4	
	GFDL85	19.7	19.7	22.5	22.9	
	HAD45	19.7	21.5	20.1	18.8	
HAD85	19.7	22.1	18.7	19.2		

**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.

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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
red maple	Acer rubrum	WDH	High	74.9	1101.7	12.6	Sm. dec.	Sm. dec.	High	Abundant	Good	Good			1	1
loblolly pine	Pinus taeda	WDH	High	27.5	765.6	25.6	Lg. inc.	Lg. inc.	Medium	Abundant	Very Good	Very Good	Infill ++	Infill ++	1	2
yellow-poplar	Liriodendron tulipifera	WDH	High	49.4	690.9	13.2	Sm. dec.	Lg. dec.	High	Abundant	Good	Good			1	3
sweetgum	Liquidambar styraciflua	WDH	High	42.1	575.0	12.5	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good			1	4
white oak	Quercus alba	WDH	Medium	51.1	505.4	8.2	No change	No change	High	Abundant	Very Good	Very Good			1	5
black cherry	Prunus serotina	WDL	Medium	45.4	423.6	8.0	Sm. dec.	Sm. dec.	Low	Common	Poor	Poor			0	6
chestnut oak	Quercus prinus	NDH	High	27.5	298.5	10.1	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	7
blackgum	Nyssa sylvatica	WDL	Medium	56.7	294.7	5.0	No change	No change	High	Common	Good	Good			1	8
American beech	Fagus grandifolia	WDH	High	35.7	230.9	6.5	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	9
black locust	Robinia pseudoacacia	NDH	Low	26	214.9	6.8	Lg. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	10
northern red oak	Quercus rubra	WDH	Medium	34.2	205.8	5.2	No change	No change	High	Common	Good	Good			1	11
Virginia pine	Pinus virginiana	NDH	High	20.1	200.3	7.2	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0	12
black oak	Quercus velutina	WDH	High	28.8	183.0	4.9	Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1	13
sugar maple	Acer saccharum	WDH	High	10.4	158.1	8.1	Sm. inc.	No change	High	Common	Very Good	Good	Infill ++	Infill ++	2	14
American holly	Ilex opaca	NSL	Medium	27.5	155.8	4.9	No change	No change	Medium	Common	Fair	Fair			1	15
scarlet oak	Quercus coccinea	WDL	Medium	27.1	141.6	4.2	No change	Sm. dec.	Medium	Common	Fair	Poor			1	16
pignut hickory	Carya glabra	WDL	Medium	27.3	125.8	3.9	No change	No change	Medium	Common	Fair	Fair			1	17
mockernut hickory	Carya alba	WDL	Medium	18.1	111.1	5.1	Sm. inc.	Lg. inc.	High	Common	Very Good	Very Good			1	18
white ash	Fraxinus americana	WDL	Medium	22.1	101.8	4.1	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair			1	19
sweet birch	Betula lenta	NDH	High	10.8	92.4	5.3	Sm. dec.	Lg. dec.	Low	Common	Poor	Very Poor	Infill +		0	20
sassafras	Sassafras albidum	WSL	Low	29.1	87.6	2.7	No change	No change	Medium	Common	Fair	Fair			1	21
southern red oak	Quercus falcata	WDL	Medium	19.8	87.2	4.1	Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	22
eastern redcedar	Juniperus virginiana	WDH	Medium	7.8	79.4	6.4	No change	Sm. inc.	Medium	Common	Fair	Good	Infill +	Infill ++	1	23
black walnut	Juglans nigra	WDH	Low	13.5	78.4	5.5	No change	No change	Medium	Common	Fair	Fair			1	24
boxelder	Acer negundo	WSH	Low	10.7	73.4	5.0	Sm. dec.	No change	High	Common	Fair	Good	Infill +	Infill ++	1	25
sycamore	Platanus occidentalis	NSL	Low	10.6	65.9	6.2	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good	Infill ++	Infill ++	1	26
willow oak	Quercus phellos	NSL	Low	11.7	49.0	3.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	27
eastern white pine	Pinus strobus	WDH	High	2.4	44.7	7.2	No change	No change	Low	Rare	Very Poor	Very Poor			2	28
bitternut hickory	Carya cordiformis	WSL	Low	6.9	42.4	6.5	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	1	29
Norway spruce	Picea abies	NSH	FIA	2.1	40.4	14.9	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	30
slippery elm	Ulmus rubra	WSL	Low	6.2	37.7	5.0	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	31
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	6	35.5	5.6	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	32
American hornbeam; musclev	Carpinus caroliniana	WSL	Low	14	34.5	2.3	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	33
ailanthus	Ailanthus altissima	NSL	FIA	10.1	32.9	3.0	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	34
eastern hemlock	Tsuga canadensis	NSH	High	3.1	30.9	3.9	No change	No change	Low	Rare	Very Poor	Very Poor			2	35
swamp chestnut oak	Quercus michauxii	NSL	Low	8.6	30.7	3.5	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	36
pin oak	Quercus palustris	NSH	Low	4.8	30.0	4.7	Sm. dec.	No change	Low	Rare	Very Poor	Very Poor			2	37
shagbark hickory	Carya ovata	WSL	Medium	7.4	29.5	2.7	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	38
silver maple	Acer saccharinum	NSH	Low	2.4	28.1	8.2	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	39
green ash	Fraxinus pennsylvanica	WSH	Low	5.8	25.9	3.7	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair	Infill +	Infill +	1	40
American basswood	Tilia americana	WSL	Medium	3.2	24.6	4.0	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	41
eastern cottonwood	Populus deltoides	NSH	Low	1	21.9	28.0	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	42
hackberry	Celtis occidentalis	WDH	Medium	5.8	20.3	3.8	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	43
sweetbay	Magnolia virginiana	NSL	Medium	6.3	17.2	2.6	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair	Infill +	Infill +	2	44
yellow birch	Betula alleghaniensis	NDL	High	1.3	15.9	3.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	45
American elm	Ulmus americana	WDH	Medium	9.5	15.4	2.7	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +	Infill ++	2	46
flowering dogwood	Cornus florida	WDL	Medium	12	14.9	1.1	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1	47

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Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
serviceberry	Amelanchier spp.	NSL	Low	5.2	14.7	0.9	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	48
pawpaw	Asimina triloba	NSL	Low	5.4	14.4	2.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	49
water oak	Quercus nigra	WDH	High	7.5	14.2	2.0	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	50
common persimmon	Diospyros virginiana	NSL	Low	7.7	13.1	1.9	No change	Sm. inc.	High	Rare	Fair	Good	Infill +	Infill ++	1	51
red pine	Pinus resinosa	NSH	Medium	1.2	12.6	10.7	Very Lg. dec.	Very Lg. dec.	Low	Rare	Lost	Lost			0	52
Osage-orange	Maclura pomifera	NDH	Medium	1.3	11.5	6.6	Sm. dec.	No change	High	Rare	Poor	Fair		Infill +	2	53
white mulberry	Morus alba	NSL	FIA	5.1	10.0	4.7	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	54
cucumbertree	Magnolia acuminata	NSL	Low	2.9	8.1	1.1	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	55
red mulberry	Morus rubra	NSL	Low	0.8	6.9	4.3	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	56
eastern redbud	Cercis canadensis	NSL	Low	2	6.5	1.8	No change	No change	Medium	Rare	Poor	Poor			0	57
pitch pine	Pinus rigida	NSH	High	1.8	6.4	1.9	No change	Sm. dec.	Medium	Rare	Poor	Very Poor	Infill +		2	58
river birch	Betula nigra	NSL	Low	1.7	6.2	3.0	No change	Lg. inc.	Medium	Rare	Poor	Good	Infill +	Infill ++	2	59
post oak	Quercus stellata	WDH	High	0.5	6.1	5.1	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	60
Norway maple	Acer platanoides	NSL	FIA	2.5	5.6	3.0	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	61
bigtooth aspen	Populus grandidentata	NSL	Medium	1.5	5.4	1.2	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	62
pin cherry	Prunus pensylvanica	NSL	Low	0.7	5.4	1.2	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	63
black willow	Salix nigra	NSH	Low	1.2	4.8	2.6	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	64
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	3.2	4.8	0.9	Sm. inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2	65
bald cypress	Taxodium distichum	NSH	Medium	0.8	4.6	5.8	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	66
shortleaf pine	Pinus echinata	WDH	High	1.2	4.2	3.6	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	67
shingle oak	Quercus imbricaria	NDH	Medium	0.8	4.1	5.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	68
wild plum	Prunus americana	NSLX	FIA	0.8	4.0	5.1	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	69
Scots pine	Pinus sylvestris	NSH	FIA	0.7	3.0	0.9	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	70
paulownia	Paulownia tomentosa	NSL	FIA	1.2	2.7	2.3	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	71
honeylocust	Gleditsia triacanthos	NSH	Low	0.8	2.6	3.3	No change	Sm. inc.	High	Rare	Fair	Good			2	72
Atlantic white-cedar	Chamaecyparis thyoides	NSH	Low	0.5	2.6	1.6	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	73
black ash	Fraxinus nigra	WSH	Medium	2.2	2.4	2.4	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	74
Table Mountain pine	Pinus pungens	NSL	Low	0.7	2.0	1.0	No change	No change	High	Rare	Fair	Fair		Infill +	2	75
American chestnut	Castanea dentata	NSLX	FIA	1	1.2	0.8	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	76
quaking aspen	Populus tremuloides	WDH	High	0.8	1.1	1.4	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	77
chinkapin oak	Quercus muehlenbergii	NSL	Medium	0.4	1.1	2.7	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	78
chokecherry	Prunus virginiana	NSLX	FIA	0.6	0.8	0.9	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	79
swamp white oak	Quercus bicolor	NSL	Low	1.5	0.8	2.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	80
sand hickory	Carya pallida	NSL	FIA	0.4	0.6	1.5	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	81
overcup oak	Quercus lyrata	NSL	Medium	0.4	0.6	1.4	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	82
bear oak; scrub oak	Quercus ilicifolia	NSLX	FIA	0.7	0.1	0.3	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	83
ashe juniper	Juniperus ashei	NDH	High	0	0	0	New Habitat	New Habitat	NA	Absent	New Habitat	New Habitat			0	84
red spruce	Picea rubens	NDH	High	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	85
slash pine	Pinus elliottii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	86
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate ++	Migrate ++	3	87
pond pine	Pinus serotina	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate ++	Migrate +	3	88
pond cypress	Taxodium ascendens	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	89
northern white-cedar	Thuja occidentalis	WSH	High	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	90
florida maple	Acer barbatum	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	91
striped maple	Acer pensylvanicum	NSL	Medium	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			2	92
mountain maple	Acer spicatum	NSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	93
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	94

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Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIaiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
water hickory	<i>Carya aquatica</i>	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	95
pecan	<i>Carya illinoensis</i>	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat		Migrate ++	3	96
shellbark hickory	<i>Carya laciniosa</i>	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	97
black hickory	<i>Carya texana</i>	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	98
sugarberry	<i>Celtis laevigata</i>	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	99
loblolly-bay	<i>Gordonia lasianthus</i>	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	100
southern magnolia	<i>Magnolia grandiflora</i>	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			3	101
bigleaf magnolia	<i>Magnolia macrophylla</i>	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	102
mountain or Fraser magnolia	<i>Magnolia fraseri</i>	NSL	Low	0	0	0	New Habitat	New Habitat	NA	Absent	New Habitat	New Habitat			0	103
water tupelo	<i>Nyssa aquatica</i>	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	104
swamp tupelo	<i>Nyssa biflora</i>	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Likely +	Likely +	3	105
sourwood	<i>Oxydendrum arboreum</i>	NDL	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	106
redbay	<i>Persea borbonia</i>	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	107
water elm	<i>Planera aquatica</i>	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	108
turkey oak	<i>Quercus laevis</i>	NSH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	109
laurel oak	<i>Quercus laurifolia</i>	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	110
blackjack oak	<i>Quercus marilandica</i>	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	111
Nuttall oak	<i>Quercus texana</i>	NSH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	112
Shumard oak	<i>Quercus shumardii</i>	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat		Migrate +	3	113
live oak	<i>Quercus virginiana</i>	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	114
bluejack oak	<i>Quercus incana</i>	NSL	Low	0	0	0	Unknown	New Habitat	Medium	Absent	Unknown	New Habitat			3	115
American mountain-ash	<i>Sorbus americana</i>	NSL	Low	0	0	0	Unknown	Unknown	Low	Absent	Unknown	Unknown			0	116
winged elm	<i>Ulmus alata</i>	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	117
cedar elm	<i>Ulmus crassifolia</i>	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	118