S32 E87

One x One Degree

Climate Change Atlas Tree Species

Current and Potential Future Habitat, Capability, and Migration

USDA Forest Service Northern Research Station Landscape Change Research Group Iverson, Peters, Prasad, Matthews

sq. km sq. mi **FIA Plots** Area of Region 10,421 4,023.6 344

Species Information

The columns below provide breif 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					Potenti	al Change	in Habitat Suitability	Capability	to Cope o	r Persist	Migratio	n Poten	tial
Ash	2			Model			Scenario	Scenario		Scenario	Scenario		SHIFT	SHIFT
Hickory	6	Abundar	nce	Reliability	Adaptability		RCP45	RCP85		RCP45	RCP85		RCP45	RCP85
Maple	4	Abundant 3	High	16	25	Increase	34	38	Very Good	16	17	Likely	0	0
Oak	19	Common 28	Medium	35	55	No Change	14	13	Good	16	19	Infill	13	12
Pine	6	Rare 44	Low	36	9	Decrease	25	22	Fair	12	12	Migrate	3	5
Other	38	Absent 13	FIA	2		New	9	10	Poor	14	11		16	17
	75	88		89	89	Unknown	7	6	Very Poor	14	13			
							89	89	FIA Only	2	2			
									Unknown	5	4			
Potentia	al Chang	ges in Climate Variab	les							79	78			
Temperatu	re (°E)				Precinitation									

Temperatu	ıre (°F)				
	Scenario	2009	2039	2069	2099
Annual	CCSM45	63.9	65.6	67.6	67.7
Average	CCSM85	63.9	65.9	68.4	71.0
	GFDL45	63.9	66.6	68.4	69.2
	GFDL85	63.9	66.4	69.5	72.9
	HAD45	63.9	66.2	69.0	70.4
	HAD85	63.9	66.4	70.5	74.4
Growing	CCSM45	77.2	78.8	80.5	81.0
Season	CCSM85	77.2	78.9	81.6	84.8
May—Sep	GFDL45	77.2	80.0	81.8	83.3
, ,	GFDL85	77.2	79.7	83.1	87.1
	HAD45	77.2	80.5	83.0	84.5
	HAD85	77.2	80.5	86.4	89.8
Coldest	CCSM45	43.8	46.1	46.9	46.7
Month	CCSM85	43.8	46.2	47.5	48.6
Average	GFDL45	43.8	47.5	47.7	47.8
	GFDL85	43.8	45.7	46.9	47.2
	HAD45	43.8	43.8	45.5	46.2
	HAD85	43.8	45.1	46.3	48.0
Warmest	CCSM45	81.3	82.9	83.7	83.8
Month	CCSM85	81.3	82.9	84.3	86.2
Average	GFDL45	81.3	84.2	84.8	85.7
2	GFDL85	81.3	83.6	85.1	87.3
	HAD45	81.3	85.6	87.4	87.9
	HAD85	81.3	85.9	89.7	91.0

Precipitati	on (in)				
	Scenario	2009	2039	2069	2099
Annual	CCSM45	53.7	55.2	60.6	59.0
Total	CCSM85	53.7	56.7	58.4	64.5
	GFDL45	53.7	60.3	64.1	65.5
	GFDL85	53.7	59.9	62.5	63.7
	HAD45	53.7	52.2	58.0	58.3 🛶 🔶
	HAD85	53.7	56.7	51.7	54.7
Growing	CCSM45	20.8	21.5	23.3	22.7 ++++
Season	CCSM85	20.8	20.4	21.3	23.2 ++++
May—Sep	GFDL45	20.8	25.4	27.5	26.8
	GFDL85	20.8	26.1	28.2	29.0 + + + + + +
	HAD45	20.8	19.9	22.0	20.8 🔶 🔶
	HAD85	20.8	22.1	16.9	17.9 🔶 🛶

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.

Cite as: Iverson, L.R.; Prasad, A.M.; Peters, M.P.; Matthews, S.N. 2019. Facilitating Adaptive Forest Management under Climate Change: A Spatially Specific Synthesis of 125 Species for Habitat Changes and Assisted Migration over the Eastern United States. Forests. 10(11): 989. https://doi.org/10.3390/f10110989.



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Common Name	Scientific Name	Range	MD	%Coll	ElAcum	FIAiv ChngCl45	ChngCl9E	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO N
	Pinus taeda	WDH	High	87.4	4368.5	, ,	ChngCl85	Medium		Good	Good	3011143	3011103	1 1
loblolly pine	Liquidambar styraciflua	WDH	High	87.4	4308.5		No change No change	Medium		Good	Good			1 1
sweetgum water oak	Quercus nigra	WDH	High	80.4	657.6	5.7 Lg. inc.	Lg. inc.	Medium		Very Good	Very Good			1 2
eastern redcedar	Juniperus virginiana	WDH	Medium	50.2	478.5	7.5 Sm. dec.	No change		Common	Poor	Fair			1 4
sugarberry	Celtis laevigata	NDH	Medium	40	359.9	6.9 Sm. inc.	Sm. inc.	Medium		Good	Good			1 5
green ash	Fraxinus pennsylvanica	WSH	Low	40	319.1	4.8 No change	Sm. inc.	Medium	Common	Fair	Good			1 6
red maple	Acer rubrum	WDH	High	63.3	258.0	2.8 Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good			1 7
yellow-poplar	Liriodendron tulipifera	WDH	High	50.5	238.0	3.1 Lg. dec.	Lg. dec.	High	Common	Fair	Fair			1 8
longleaf pine	Pinus palustris	NSH	Medium	13.2	241.0	-	Lg. uec. Lg. inc.	Medium		Very Good	Very Good	Infill ++	Infill ++	1 9
shortleaf pine	Pinus echinata	WDH	High	41.7	210.1	3.0 Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1 10
southern red oak	Quercus falcata	WDL	Medium	51.7	188.0	2.5 Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good			1 10
mockernut hickory	Carya alba	WDL	Medium	41.9	165.5	3.0 Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good Very Good			1 11
white oak	Quercus alba	WDL	Medium	41.9	158.0	2.5 Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good Very Good			1 12
winged elm	Ulmus alata	WDL	Medium	54.3	138.0	2.1 Lg. inc.	Lg. inc.	Medium		Very Good	Very Good Very Good			1 13
blackgum	Nyssa sylvatica	WDL	Medium	50.2	146.8	1.8 Lg. inc.	Lg. inc.	High	Common	Very Good	Very Good Very Good			1 14
willow oak	Quercus phellos	NSL	Low	31.8	134.9	3.3 Lg. inc.	-	Medium		Very Good	Very Good			1 15
cherrybark oak; swamp re	· ·	NSL	Medium	38.4	134.9	2.4 Sm. inc.	Lg. inc. Lg. inc.	Medium		Good	Very Good			1 10
American hornbeam; mus		WSL	Low	38.5	130.3	2.4 Sin. inc.	Lg. inc.	Medium		Very Good	Very Good			1 17
Osage-orange	Maclura pomifera	NDH	Medium	9.5	117.1	10.7 No change	No change	High	Common	Good	Good			1 18
laurel oak	Quercus laurifolia	NDH	Medium	28.5	108.0	2.7 Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good			1 10
pignut hickory	Carya glabra	WDL	Medium	32.9	96.4	1.9 Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor			0 21
boxelder	Acer negundo	WSH	Low	13.1	93.8	6.2 Lg. dec.	Lg. dec.	High	Common	Fair	Fair			1 22
post oak	Quercus stellata	WDH	High	31.1	85.7	2.5 Lg. inc.	Lg. uec. Lg. inc.	High	Common	Very Good	Very Good			1 22
flowering dogwood	Cornus florida	WDL	Medium	37.6	83.7	1.1 Sm. inc.	Sm. inc.	Medium	Common	Good	Good			1 23
sourwood	Oxydendrum arboreum	NDL	High	24.4	68.3	1.6 Lg. dec.	Lg. dec.	High	Common	Fair	Fair			1 24
water tupelo	Nyssa aquatica	NSH	Medium	7.6	68.2	6.1 No change	No change	Low	Common	Poor	Poor	Infill +	Infill +	0 26
sweetbay	Magnolia virginiana	NSL	Medium	17.6	62.9	2.5 Lg. inc.	Lg. inc.	Medium		Very Good	Very Good			1 27
American elm	Ulmus americana	WDH	Medium	23.7	62.3	1.6 Lg. inc.	Lg. inc.	Medium		Very Good	Very Good			1 28
black cherry	Prunus serotina	WDL	Medium	30.8	59.1	1.4 Lg. inc.	Lg. inc.	Low	Common	Good	Good			1 28
American beech	Fagus grandifolia	WDL	High	24	55.9	1.6 Lg. inc.	Lg. inc.	Medium		Very Good	Very Good	Infill ++	Infill ++	1 30
common persimmon	Diospyros virginiana	NSL	Low	30.4	55.9	1.1 No change	•	High	Common	Good	Good	1111111 ++	111111 ++	1 30
swamp chestnut oak	Quercus michauxii	NSL	Low	17.8	48.7	1.5 Sm. inc.	No change Sm. inc.	Medium		Fair	Fair			1 31
eastern hophornbeam; irc		WSL	Low	26.3	48.7	1.1 Lg. inc.	Lg. inc.	High	Rare	Good	Good			1 32
river birch	Betula nigra	NSL	Low	8.9	47.2	3.8 No change	No change	Medium	Rare	Poor	Poor			1 33
shagbark hickory	¥	WSL	Medium	18.7	47.1	1.9 Lg. dec.		Medium	Rare	Very Poor	Very Poor			0 35
slippery elm	Carya ovata Ulmus rubra	WSL	Low	15.5	45.0 41.7	2.2 Sm. dec.	Lg. dec. Sm. inc.	Medium	Rare	Very Poor	Fair			1 36
swamp tupelo	Nyssa biflora	NDH	Medium	5.7	38.8	6.7 No change	No change	Low	Rare	Very Poor	Very Poor			0 37
pecan	Carya illinoinensis	NSH	Low	11	34.8	2.6 Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	1 38
sycamore	Platanus occidentalis	NSL	Low	14.8	34.8	1.3 No change	Sm. inc.	Medium		Poor	Fair	Infill +	Infill +	1 39
overcup oak	Quercus lyrata	NSL	Medium	9	32.0	2.1 Sm. inc.	Sm. inc.	Low	Rare	Poor	Poor	Infill +	Infill +	1 40
red mulberry	Morus rubra	NSL	Low	17	30.9	1.3 Lg. dec.	Sm. dec.	Medium		Very Poor	Very Poor			0 41
durand oak	Quercus sinuata var. sinuata		FIA	9.1	29.5	2.1 Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0 41
honeylocust	Gleditsia triacanthos	NSH	Low	7.6	29.5	3.8 No change	No change	High	Rare	Fia Only Fair	Fair	Infill +	Infill +	1 43
black willow	Salix nigra	NSH	Low	11.2	29.0	1.8 Lg. inc.		Low	Rare	Fair	Fair	111111 +	111111 +	1 43
chestnut oak	Quercus prinus	NDH		5.5	27.5	1.8 Lg. mc. 1.4 Sm. dec.	Lg. inc.				Poor			0 45
	Taxodium distichum		High Medium	5.5 6.5	27.0		Sm. dec.	High Medium	Rare Rare	Poor	Good	Infill +	Infill ++	
bald cypress		NSH				2.1 Sm. inc.	Lg. inc.			Fair		101101 +	(1)))) ++	1 46
American holly	llex opaca	NSL	Medium	11	23.0	0.9 Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			1 47



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sprace pinePrink glahraNLOw320.73.1a.g.0.MeduNeNeVery PoorVery Poor	Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv Chr	ngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO N
IndicatorAcri bandarmNS.LowISISISS. S. M.C.S. M.C.M.G.No.No.PoorPoorPoorNorNorNorDiad coakQuercus velutionNDHHighI.S.I.S. S. M.C.S. M.C.No.NorNorNor PoorVery PoorVery PoorVery PoorVery PoorVery PoorNor	eastern redbud	Cercis canadensis	NSL	Low	12.9	21.0	1.1 Lg.	dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0 48
VirgingingingPinus virgingingNDHHighZ.4V.8.6O.9.Sin-dec.MediumRareVery PoorVery PoorV	spruce pine	Pinus glabra	NSL	Low	9.2	20.7	1.3 Lg.	dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0 49
back decisQuerca velutionWDIHybMDI <td>florida maple</td> <td>Acer barbatum</td> <td>NSL</td> <td>Low</td> <td>15.6</td> <td>19.7</td> <td>0.8 Sm</td> <td>. dec.</td> <td>Sm. dec.</td> <td>High</td> <td>Rare</td> <td>Poor</td> <td>Poor</td> <td></td> <td></td> <td>1 50</td>	florida maple	Acer barbatum	NSL	Low	15.6	19.7	0.8 Sm	. dec.	Sm. dec.	High	Rare	Poor	Poor			1 50
white sh Frainus americana WDI Medium 9.9 16.6 1.1 Nochange Nork Rere Pare P	Virginia pine	Pinus virginiana	NDH	High	2.4	18.6	0.9 Sm	. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0 51
ShumadakQuercus shumariliNMMorMol <td>black oak</td> <td>Quercus velutina</td> <td>WDH</td> <td>High</td> <td>9.9</td> <td>17.1</td> <td>1.2 Sm</td> <td>. dec.</td> <td>Lg. dec.</td> <td>Medium</td> <td>Rare</td> <td>Very Poor</td> <td>Very Poor</td> <td></td> <td></td> <td>0 52</td>	black oak	Quercus velutina	WDH	High	9.9	17.1	1.2 Sm	. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0 52
norther ned oak Quercus nubra WDH Medum 7.1 1.6 B.g. dec. B.g. dec. High Rare Poor Poor Poor black walnut Jugiann ligra WDH Low 7.3 1.3 1.9 Sinder Kein Medium Rare Good Good Good Good High Rare Very Poor Very	white ash	Fraxinus americana	WDL	Medium	9.9	16.6	1.1 No	change	No change	Low	Rare	Very Poor	Very Poor			0 53
black walnutJugins nigraWDIvar5.81.81.95.9Gr.Gr.MedumRevMerp MorMerp Mor <td>Shumard oak</td> <td>Quercus shumardii</td> <td>NSL</td> <td>Low</td> <td>4.1</td> <td>16.6</td> <td>3.1 Sm</td> <td>. dec.</td> <td>No change</td> <td>High</td> <td>Rare</td> <td>Poor</td> <td>Fair</td> <td>Infill +</td> <td>Infill +</td> <td>2 54</td>	Shumard oak	Quercus shumardii	NSL	Low	4.1	16.6	3.1 Sm	. dec.	No change	High	Rare	Poor	Fair	Infill +	Infill +	2 54
sassafras	northern red oak	Quercus rubra	WDH	Medium	7.1	14.7	1.6 Lg.	dec.	Lg. dec.	High	Rare	Poor	Poor			0 55
scarlet oak Quercus soccinea WDL Medium 61 11.2 1.5 g. dec. Lg. dec. Hedium Rare Good Good Infill ++ Infi	black walnut	Juglans nigra	WDH	Low	5.8	13.8	1.9 Sm	. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0 56
blackjack oak Quercus marilandica NSL Medium 6 11.2 1.3 g, inc. High Rare Good Good Infill ++ Infill ++ 1.7 southern magnolia Magnolia grandifiora NSL Low 6.3 8.7 0.7 Lip.cc. High Rare Good Good Good Infill ++ Infill ++ 1.7 bilgefarmagnolia Magnolia grandifiora NSL Low 6.6 7.8 0.8 Lip.dec. High Rare Poor P	sassafras	Sassafras albidum	WSL	Low	11.8	13.0	0.9 Lg.	inc.	Lg. inc.	Medium	Rare	Good	Good			1 57
southern magnolia Magnolia grandifiora NSL Low 4.3 10.3 18 Lg, inc. Lg, inc. Medium Rare Good Good Infill ++	scarlet oak	Quercus coccinea	WDL	Medium	4.1	11.3	1.6 Lg.	dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0 58
bitterCarya cordiformisWSLUNS.38.70.7U.U.Non.Poor	blackjack oak	Quercus marilandica	NSL	Medium	6	11.2	1.3 Lg.	inc.	Lg. inc.	High	Rare	Good	Good	Infill ++	Infill ++	2 59
bitterCarya cordiformisWSLUNS.38.70.7U.U.Non.Poor	southern magnolia	Magnolia grandiflora	NSL	Low	4.3	10.3	1.8 Lg.	inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1 60
water hickory Carya aquatica NSL Medium 2.2 6.8 2.1 Sm. inc. Lg. inc. Medium Rare Fair Good Infill + 2 cucumbertree Magnolia acuminata NSL Low 5.8 6.5 0.8 Letter. Lg. dec. High Rare Yenry Poor Yenry Poor <td>bitternut hickory</td> <td></td> <td>WSL</td> <td>Low</td> <td>5.3</td> <td>8.7</td> <td>0.7 Lg.</td> <td>dec.</td> <td>Lg. dec.</td> <td>High</td> <td>Rare</td> <td>Poor</td> <td>Poor</td> <td></td> <td></td> <td>0 61</td>	bitternut hickory		WSL	Low	5.3	8.7	0.7 Lg.	dec.	Lg. dec.	High	Rare	Poor	Poor			0 61
cucumbertree Magnolia acuminata NSL Low 5.8 6.5 0.8 Lg. dec. Medium Rare Very Poor Very Poor <t< td=""><td>bigleaf magnolia</td><td>Magnolia macrophylla</td><td>NSL</td><td>Low</td><td>6.6</td><td>7.8</td><td>0.8 Lg.</td><td>dec.</td><td>Sm. dec.</td><td>Medium</td><td>Rare</td><td>Very Poor</td><td>Very Poor</td><td></td><td></td><td>0 62</td></t<>	bigleaf magnolia	Magnolia macrophylla	NSL	Low	6.6	7.8	0.8 Lg.	dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0 62
turkey oak Quercus laevis NSH Medium 3.8 4.5 1.2 lg.dec. lg.dec. High Rare Poor Parts Poor	water hickory	Carya aquatica	NSL	Medium	2.2	6.8	2.1 Sm	. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +		2 63
slash pinePinus elliottiiNDHHigh1.63.51.7Lg, inc.Lg, inc.MediumRareGoodGoodGoodCC2eastern cottonwoodPopulus deltoidesNSHLow1.22.00.5Sm. dec.Sm. dec.MediumRareVery PoorVery PoorVery PoorVery PoorVery Poor000	cucumbertree	Magnolia acuminata	NSL	Low	5.8	6.5	0.8 Lg.	dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0 64
eastern cottonwoodPopulus deltoidesNSHLow1.22.00.5Sm. dec.MediumRarePareVery PoorVery	turkey oak	Quercus laevis	NSH	Medium	3.8	4.5	1.2 Lg.	dec.	Lg. dec.	High	Rare	Poor	Poor			0 65
redbayPersea borboniaNSLLow1.92.01.1 No changeSm. inc.HighRareFairGoodGoodImage: Construction of the construction	slash pine	Pinus elliottii	NDH	High	1.6	3.5	1.7 Lg.	inc.	Lg. inc.	Medium	Rare	Good	Good			2 66
serviceberryAmelanchier spp.NSLLow1.91.70.9No changeMediumRarePoorPoorPoorPoorOAmerican basswoodTilia americanaWSLMedium1.11.60.4Very Lg. dec.Very Lg. dec.MediumRareLost00hackberryCeltis occidentalisWDHMedium11.31.4No changeNo changeHighRareFairFairInfill +Infill +10.60wild plumPrunus americanaNSLXFIA1.90.70.4UnknownUnknownMediumRareGoodGood0222silver mapleAcer saccharinumNSLFIA1.90.70.4UnknownUnknownMediumRareFoorPoorPoor00222silver mapleAcer saccharinumNSLHigh10.60.6Lg. inc.HginRareFoorPoorPoor0222silver mapleAcer saccharinumNSLLow00New HabitatNew HabitatN	eastern cottonwood	Populus deltoides	NSH	Low	1.2	2.0	0.5 Sm	. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0 67
American basswoodTilia americanaWSLMedium1.11.60.4 Very Lg. dec.Very Lg. dec.MediumRareLostLostDescriptionhackberryCeltis occidentalisWDHMedium11.31.4 No changeNo changeHighRareFairFairFairInfill +Infill +Infill +12nuttall oakQuercus texanaNSHMedium0.40.80.3 Lg. inc.Lg. inc.HighRareGoodGoodCood0live oakQuercus virginianaNDHHigh10.30.3 Lg. dec.Lg. inc.HediumRareGoodGoodCood2silver mapleAcer saccharinumNSHLow10.30.3 Lg. dec.Lg. dec.HighRarePoorPoorPoor0striped mapleAcer pensylvanicumNSLLow000New HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew Habitat0gawpawAsimia trilobaNSLLow000New HabitatNew Habitat <td< td=""><td>redbay</td><td>Persea borbonia</td><td>NSL</td><td>Low</td><td>1.9</td><td>2.0</td><td>1.1 No</td><td>change</td><td>Sm. inc.</td><td>High</td><td>Rare</td><td>Fair</td><td>Good</td><td></td><td></td><td>0 68</td></td<>	redbay	Persea borbonia	NSL	Low	1.9	2.0	1.1 No	change	Sm. inc.	High	Rare	Fair	Good			0 68
hackberryCeltis occidentalisWDHMedium11.31.4No changeNo changeHighRareFairFairInfill +Infill +Infill +12nuttall oakQuercus texanaNSHMedium0.40.80.3Lg. inc.Lg. inc.HighRareGoodGoodGood0wild plumPrunus americanaNSLFIA1.90.70.4UnknownUnknownMediumRareFIA OnlyFIA OnlyFIA Only0live oakQuercus virginianaNDHHigh1.00.60.6Lg. inc.Lg. inc.MediumRareGoodGoodGood2silver mapleAcer saccharinumNSLHigh00.00.8New HabitatNew Habi	serviceberry	Amelanchier spp.	NSL	Low	1.9	1.7	0.9 No	change	No change	Medium	Rare	Poor	Poor			0 69
nuttall oakQuercus texanaNSHMedium0.40.80.3Lg. inc.Lg. inc.HighRareGoodGoodGoodImage: Coord <t< td=""><td>American basswood</td><td>Tilia americana</td><td>WSL</td><td>Medium</td><td>1.1</td><td>1.6</td><td>0.4 Ver</td><td>ry Lg. dec.</td><td>Very Lg. dec.</td><td>Medium</td><td>Rare</td><td>Lost</td><td>Lost</td><td></td><td></td><td>0 70</td></t<>	American basswood	Tilia americana	WSL	Medium	1.1	1.6	0.4 Ver	ry Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0 70
nuttall oakQuercus texanaNSHMedium0.40.80.3Lg. inc.Lg. inc.HighRareGoodGoodGoodImage: Coord <t< td=""><td>hackberry</td><td>Celtis occidentalis</td><td>WDH</td><td>Medium</td><td>1</td><td>1.3</td><td>1.4 No</td><td>change</td><td>No change</td><td>High</td><td>Rare</td><td>Fair</td><td>Fair</td><td>Infill +</td><td>Infill +</td><td>2 71</td></t<>	hackberry	Celtis occidentalis	WDH	Medium	1	1.3	1.4 No	change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2 71
wild plumPrunus americanaNSLXFIA1.90.70.4UnknownMediumRareFIA OnlyFIA OnlyFIA OnlyComposition	nuttall oak	Quercus texana	NSH	Medium	0.4	0.8	0.3 Lg.	inc.	Lg. inc.	High	Rare	Good	Good			0 72
silver mapleAcer saccharinumNSHLow10.30.3Lg, dec.Lg, dec.HighRarePoorPoorPoorImage to the state t	wild plum	Prunus americana	NSLX	FIA	1.9	0.7	-		-	-	Rare	FIA Only	FIA Only			0 73
ashe juniperJuniperus asheiNDHHigh00New HabitatNew HabitatMediumAbsentNew HabitatNew Habita	live oak	Quercus virginiana	NDH	High	1	0.6	0.6 Lg.	inc.	Lg. inc.	Medium	Rare	Good	Good			2 74
striped mapleAcer pensylvanicumNSLMedium000UnknownNew HabitatMediumAbsentUnknownNew HabitatMedium3pawpawAsimina trilobaNSLLow00UnknownUnknownMediumAbsentUnknownUnknownUnknownMigrate +3cittamwood/gum bumeliaSideroxylon lanuginosum ssp. NSLLow00New HabitatNew HabitatHighAbsentUnknownUnknownUnknownMigrate +Migrate +3shellbark hickoryCarya texanaNDLHigh000New HabitatNew HabitatMediumAbsentUnknownUnknownUnknown00black hickoryCarya texanaNDLHigh000New HabitatNew HabitatNew HabitatNew HabitatNew HabitatMigrate +Migrate +3silverbellHalesia spp.NSLLow00New HabitatNew HabitatNew HabitatNew HabitatNew HabitatMigrate +3water elmPlanera aquaticaNSLLow00New HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatMigrate +3pin cherryPrunus pensylvanicaNSLLow00New HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatMigrate +3<	silver maple	Acer saccharinum	NSH	Low	1	0.3	0.3 Lg.	dec.	Lg. dec.	High	Rare	Poor	Poor			0 75
pawpawAsimina trilobaNSLLow000UnknownMediumAbsentUnknownUnknownUnknownUnknownMediumAbsentMigrate +Migrate +<	ashe juniper	Juniperus ashei	NDH	High	0	0	0 Nev	w Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0 76
cittamwood/gum bumeliaSideroxylon lanuginosum ssp. NSLLow000New HabitatNew HabitatHighAbsentNew HabitatNew HabitatMigrate +Migrate	striped maple	Acer pensylvanicum	NSL	Medium	0	0	0 Unl	known	New Habitat	Medium	Absent	Unknown	New Habitat			3 77
shellbark hickoryCarya laciniosaNSLLow000UnknownUnknownMediumAbsentUnknownUnknownUnknownMigrate +Migrate +Migrate +Migrate +Migrate +Migrate +Migrate +3black hickoryCarya texanaNDLHigh000New HabitatNew Habitat </td <td>pawpaw</td> <td>Asimina triloba</td> <td>NSL</td> <td>Low</td> <td>0</td> <td>0</td> <td>0 Unl</td> <td>known</td> <td>Unknown</td> <td>Medium</td> <td>Absent</td> <td>Unknown</td> <td>Unknown</td> <td></td> <td></td> <td>0 78</td>	pawpaw	Asimina triloba	NSL	Low	0	0	0 Unl	known	Unknown	Medium	Absent	Unknown	Unknown			0 78
black hickoryCarya texanaNDLHigh000New HabitatNew HabitatMigrate +Migrate +	cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	. NSL	Low	0	0	0 Nev	w Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3 79
black ashFraxinus nigraWSHMedium000New HabitatNew Habitat<	shellbark hickory	Carya laciniosa	NSL	Low	0	0	0 Unl	known	Unknown	Medium	Absent	Unknown	Unknown			0 80
silverbellHalesia spp.NSLLow000New HabitatNew Habitat	black hickory	Carya texana	NDL	High	0	0	0 Nev	w Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3 81
silverbellHalesia spp.NSLLow000New HabitatNew Habitat	black ash	Fraxinus nigra	WSH		0	0	0 Nev	w Habitat	New Habitat	Low	Absent	New Habitat		U	0	3 82
water elmPlanera aquaticaNSLLow00New HabitatNew HabitatMediumAbsentNew HabitatNew HabitatMegrate +3pin cherryPrunus pensylvanicaNSLLow00New HabitatNew HabitatMediumAbsentNew HabitatNew HabitatNew HabitatMediumAbsentNew HabitatNew HabitatMigrate +3chinkapin oakQuercus incanaNSLMedium000UnknownUnknownMediumAbsentUnknownUnknownUnknown0bluejack oakQuercus incanaNSLLow00New HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatNew HabitatMigrate +3	silverbell	, , , , , , , , , , , , , , , , , , ,	NSL	Low	0	0	0 Nev	w Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3 83
pin cherry Prunus pensylvanica NSL Low 0 0 0 New Habitat New Habitat Medium Absent New Habitat New Hab		••			0	0									Migrate +	3 84
chinkapin oak Quercus muehlenbergii NSL <mark>Medium</mark> 0 0 0 Unknown Unknown Medium Absent Unknown Unknown Unknown 0 0 0 Unknown NSL Low 0 0 0 New Habitat N		•	NSL		0	0	0 Nev	w Habitat	New Habitat	Medium					-	3 85
bluejack oak Quercus incana NSL Low 0 0 0 New Habitat New Habitat Medium Absent New Habitat New Habitat Migrate + 3			NSL	Medium	0	0	0 Unl	known	Unknown	Medium		Unknown	Unknown			0 86
	•				0	0									Migrate +	3 87
		•													0	0 88
cedar elm Ulmus crassifolia NDH Medium 0 0 0 New Habitat New Habitat Low Absent New Habitat New Habitat Migrate ++ Migrate ++ 3		•												Migrate ++	Migrate ++	

