Missouri

	sq. km	sq. mi	FIA Plots
Area of Region	8,000.0	3,088.8	34

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		Abundance			Model Reliability	Adaptability		Potential Change in Habitat Suitability				Capability to Cope or Persist			Migration Potential		
										Scenario RCP45	Scenario RCP85			Scenario RCP45	Scenario RCP85		SHIFT RCP45	SHIFT RCP85
Ash	1								Increase	4	4		Very Good	0	0	Likely	4	4
Hickory	1		Abundant	0		High	2	10	No Change	3	2		Good	2	3	Infill	9	7
Maple	1		Common	5		Medium	7	11	Decrease	6	7		Fair	7	5	Migrate	1	0
Oak	1		Rare	9		Low	12	0	New	8	8		Poor	2	3		**14**	**11**
Pine	0		Absent	8		FIA	1		Unknown	1	1		Very Poor	2	2			
Other	10			**22**			**22**	**21**		**22**	**22**		FIA Only	0	0			
	14												Unknown	0	0			
														13	**13**			

Potential Changes in Climate Variables

Temperature (°F)

	Scenario	2009	2039	2069	2099	
Annual	CCSM45	48.7	50.6	53.0	53.7	
Average	CCSM85	48.7	51.2	53.7	57.1	
	GFDL45	48.7	54.6	53.3	54.7	
	GFDL85	48.7	51.5	54.6	59.1	
	HAD45	48.7	51.6	55.3	56.5	
	HAD85	48.7	52.2	57.1	61.2	
Growing	CCSM45	68.4	70.6	73.2	73.8	
Season	CCSM85	68.4	71.3	73.8	78.0	
May—Sep	GFDL45	68.4	76.1	74.3	76.3	
	GFDL85	68.4	71.9	75.6	81.1	
	HAD45	68.4	70.6	73.7	75.0	
	HAD85	68.4	71.4	75.8	79.7	
Coldest	CCSM45	18.3	20.8	22.0	23.0	
Month	CCSM85	18.3	20.5	21.9	24.0	
Average	GFDL45	18.3	21.9	22.6	22.9	
	GFDL85	18.3	21.4	22.9	24.7	
	HAD45	18.3	21.0	24.6	24.2	
	HAD85	18.3	24.0	28.4	30.7	
Warmest	CCSM45	75.2	77.9	79.7	80.5	
Month	CCSM85	75.2	79.3	80.9	83.8	
Average	GFDL45	75.2	78.9	80.3	81.5	
	GFDL85	75.2	79.6	81.1	84.8	
	HAD45	75.2	77.4	79.4	80.1	
	HAD85	75.2	79.0	81.5	84.1	

Precipitation (in)

	Scenario	2009	2039	2069	2099	
Annual	CCSM45	26.4	27.3	26.1	26.3	
Total	CCSM85	26.4	27.0	27.6	27.5	
	GFDL45	26.4	29.7	32.5	31.8	
	GFDL85	26.4	29.8	33.1	32.5	
	HAD45	26.4	30.6	28.8	29.4	
	HAD85	26.4	27.9	28.9	31.5	
Growing	CCSM45	16.4	16.1	14.8	14.9	
Season	CCSM85	16.4	15.4	15.6	14.9	
May—Sep	GFDL45	16.4	18.8	20.3	18.9	
	GFDL85	16.4	19.0	20.1	18.9	
	HAD45	16.4	18.3	16.8	16.9	
	HAD85	16.4	16.4	15.9	15.3	

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.

Missouri

Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
eastern redcedar	Juniperus virginiana	WDH	Medium	62.5	212.2	32.4	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	2	1
bur oak	Quercus macrocarpa	NDH	Medium	41.2	122.3	37.4	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	2	2
hackberry	Celtis occidentalis	WDH	Medium	32.5	115.3	25.2	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	2	3
Siberian elm	Ulmus pumila	NDH	FIA	21.2	73.6	18.8	Unknown	Unknown	NA	Common	NNIS	NNIS			0	4
American elm	Ulmus americana	WDH	Medium	46.2	67.4	21.2	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	2	5
red mulberry	Morus rubra	NSL	Low	20	38.0	30.4	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			2	6
eastern cottonwood	Populus deltoides	NSH	Low	15	37.4	39.9	Sm. inc.	Sm. inc.	Medium	Rare	Fair	Fair	Infill +	Infill +	2	7
green ash	Fraxinus pennsylvanica	WSH	Low	21.3	6.7	3.2	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	2	8
slippery elm	Ulmus rubra	WSL	Low	11.2	4.5	4.2	Lg. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			2	9
boxelder	Acer negundo	WSH	Low	10	3.5	5.6	No change	No change	High	Rare	Fair	Fair	Infill +	Infill +	2	10
bitternut hickory	Carya cordiformis	WSL	Low	5	3.2	10.3	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor			0	11
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	5	2.4	7.5	No change	Sm. dec.	High	Rare	Fair	Poor	Infill +		2	12
black walnut	Juglans nigra	WDH	Low	5	0.9	2.8	Sm. inc.	Lg. inc.	Medium	Rare	Fair	Good	Infill +		2	13
Osage-orange	Maclura pomifera	NDH	Medium	5	0.3	0.9	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	14
ashe juniper	Juniperus ashei	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	15
silver maple	Acer saccharinum	NSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	16
eastern redbud	Cercis canadensis	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +		3	17
honeylocust	Gleditsia triacanthos	NSH	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Likely +	Likely +	3	18
blackjack oak	Quercus marilandica	NSL	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	19
post oak	Quercus stellata	WDH	High	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	20
black locust	Robinia pseudoacacia	NDH	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	21
American basswood	Tilia americana	WSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	22