

Forestland Interpretations

Forestland interpretations are important to good management. The management of trees begins with an understanding of the soil where they grow or are to be grown. Some soils are very suitable for growing wood crops; others barely support tree cover. Different tree species may vary in production on the same soil.

Forestland interpretations should be used to assist land users in planning, installing, and maintaining forestland management systems.

Forest Management and Productivity

The Forestland Management and Productivity tables presents information about suitable for producing timber for each soil map unit. Management concerns, which include hazard of erosion, equipment use, seedling mortality, and windthrow hazard, are listed by ratings of SLIGHT, MODERATE, or SEVERE. Information on potential productivity includes plant competition, common trees, site index, productivity class, and trees to plant.

Management Concerns

EROSION HAZARD - the risk of erosion is slight if the expected soil loss is small; moderate if some measures are needed to control erosion during logging; and severe if intensive management or special equipment and methods are needed to prevent excessive loss of soil.

EQUIPMENT LIMITATION - A rating of slight indicates that use of equipment is not limited to a particular kind of equipment or time of year; moderate indicates a short seasonal limitation, or a need for some modification in management of equipment; and severe indicates a seasonal limitation, a need for special equipment or management, or a hazard in the use of equipment.

SEEDLING MORTALITY - The ratings are for seedlings from a good planting stock that are properly planted during a period of sufficient rainfall. A rating of slight indicates that the expected mortality of the planted seedlings is less than 25 percent; moderate - 25 to 50 percent; and severe - more than 50 percent.

WINDTHROW HAZARD - A rating of slight indicates that trees in wooded areas are not expected to be blown down by commonly occurring winds; moderate - that some trees are blown down during periods of excessive soil wetness and strong winds; and severe that many trees are blown down during periods of excessive soil wetness and moderate or strong winds.

PLANT COMPETITION - A rating of slight indicates little or no competition from other plants; moderate indicates that plant competition is expected to hinder the development of the fully stocked stand of desirable trees; and severe means that plant

competition is expected to prevent the establishment of a desirable stand unless the site is intensively prepared, weeded, or otherwise managed for the control of undesirable plants.

POTENTIAL PRODUCTIVITY - This is discussed under the ordination class symbol.

COMMON TREES - Trees that generally occur on the soil are listed regardless of economic importance.

SITE INDEX AND PRODUCTIVITY CLASS - These are discussed under ordination class symbol.

TREES TO PLANT - Trees that are suitable for commercial wood production and that are adapted to the soil.

See the National Forestry Manual, Subpart B for criteria used in rating management concerns.

This subsection includes:

- **(a) Forest Management (one or two tables)**

Audrain County, Missouri: Detailed Soil Map Legend

Forest Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Erosion on roads and trails		Off-road or off-trail erosion		Soil rutting		Log landings		Seedling survival	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
10C2: Armstrong-----	Limited ~slope/erodibility (limited)	0.78	Slightly limited ~slope/erodibility (slightly limited)	0.14	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.20	Moderately limited ~low strength (moderately limited) ~seasonal wetness (slightly limited) ~slope (slightly limited)	0.50 0.20 0.15	Not limited	
10C3: Armstrong-----	Limited ~slope/erodibility (limited)	0.78	Slightly limited ~slope/erodibility (slightly limited)	0.17	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.20	Moderately limited ~low strength (moderately limited) ~stickiness (surface) (moderately limited) ~seasonal wetness (slightly limited)	0.50 0.50 0.20	Not limited	
18F: Goss-----	Very limited ~slope/erodibility (very limited)	1.00	Moderately limited ~slope/erodibility (moderately limited)	0.43	Limited ~low strength (limited)	0.80	Very limited ~slope (very limited) ~low strength (moderately limited)	1.00 0.50	Very limited ~seasonal wetness (very limited) ~droughty (slightly limited)	1.00 0.07
19B: Marion-----	Moderately limited ~slope/erodibility (moderately limited)	0.33	Slightly limited ~slope/erodibility (slightly limited)	0.07	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.29	Moderately limited ~low strength (moderately limited) ~seasonal wetness (slightly limited)	0.50 0.29	Not limited	

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Map symbol and soil name	Erosion on roads and trails		Off-road or off-trail erosion		Soil rutting		Log landings		Seedling survival	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
22C2: Keswick-----	Limited ~slope/erodibility (limited)	0.78	Slightly limited ~slope/erodibility (slightly limited)	0.17	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.20	Moderately limited ~low strength (moderately limited) ~seasonal wetness (slightly limited) ~slope (slightly limited)	0.50 0.20 0.15	Not limited	
22D2: Keswick-----	Very limited ~slope/erodibility (very limited)	1.00	Slightly limited ~slope/erodibility (slightly limited)	0.29	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.20	Limited ~slope (limited) ~low strength (moderately limited) ~seasonal wetness (slightly limited)	0.76 0.50 0.20	Not limited	
23B2: Leonard-----	Moderately limited ~slope/erodibility (moderately limited)	0.33	Slightly limited ~slope/erodibility (slightly limited)	0.07	Limited ~low strength (limited) ~seasonal wetness (moderately limited)	0.80 0.45	Moderately limited ~low strength (moderately limited) ~stickiness (surface) (moderately limited) ~seasonal wetness (moderately limited)	0.50 0.50 0.50 0.45	Moderately limited ~seasonal wetness (moderately limited)	0.30
24F: Winnegan-----	Very limited ~slope/erodibility (very limited)	1.00	Moderately limited ~slope/erodibility (moderately limited)	0.43	Limited ~low strength (limited)	0.80	Very limited ~slope (very limited) ~low strength (moderately limited)	1.00 0.50	Not limited	

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Map symbol and soil name	Erosion on roads and trails		Off-road or off-trail erosion		Soil rutting		Log landings		Seedling survival	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
27B: Mexico-----	Slightly limited ~slope/erodibility (slightly limited)	0.22	Slightly limited ~slope/erodibility (slightly limited)	0.05	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.25	Moderately limited ~low strength (moderately limited) ~seasonal wetness (slightly limited)	0.50 0.25	Not limited	
27B2: Mexico-----	Slightly limited ~slope/erodibility (slightly limited)	0.22	Slightly limited ~slope/erodibility (slightly limited)	0.05	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.25	Moderately limited ~low strength (moderately limited) ~stickiness (surface) (moderately limited) ~seasonal wetness (slightly limited)	0.50 0.50 0.25	Not limited	
28: Twomile-----	Slightly limited ~slope/erodibility (slightly limited)	0.22	Slightly limited ~slope/erodibility (slightly limited)	0.05	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.29	Moderately limited ~flooding (moderately limited) ~low strength (moderately limited) ~seasonal wetness (slightly limited)	0.60 0.50 0.29	Moderately limited ~flooding (moderately limited)	0.60
33: Belknap-----	Slightly limited ~slope/erodibility (slightly limited)	0.11	Slightly limited ~slope/erodibility (slightly limited)	0.02	Limited ~low strength (limited) ~seasonal wetness (slightly limited)	0.80 0.20	Very limited ~flooding (very limited) ~low strength (moderately limited) ~seasonal wetness (slightly limited)	1.00 0.50 0.20	Limited ~flooding (limited)	0.90

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Map symbol and soil name	Erosion on roads and trails		Off-road or off-trail erosion		Soil rutting		Log landings		Seedling survival	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
34: Putnam-----	Slightly limited ~slope/erodibility (slightly limited)	0.11	Slightly limited ~slope/erodibility (slightly limited)	0.02	Limited ~low strength (limited) ~seasonal wetness (moderately limited)	0.80 0.60	Moderately limited ~seasonal wetness (moderately limited) ~low strength (moderately limited)	0.60 0.50	Moderately limited ~seasonal wetness (moderately limited)	0.60
45B: Gifford-----	Moderately limited ~slope/erodibility (moderately limited)	0.33	Slightly limited ~slope/erodibility (slightly limited)	0.07	Limited ~low strength (limited) ~seasonal wetness (moderately limited)	0.80 0.45	Moderately limited ~low strength (moderately limited) ~seasonal wetness (moderately limited)	0.50 0.45	Moderately limited ~seasonal wetness (moderately limited)	0.30
47: Chariton-----	Slightly limited ~slope/erodibility (slightly limited)	0.11	Slightly limited ~slope/erodibility (slightly limited)	0.02	Limited ~low strength (limited) ~seasonal wetness (limited)	0.80 0.76	Limited ~seasonal wetness (limited) ~low strength (moderately limited)	0.76 0.50	Limited ~seasonal wetness (limited)	0.76
56B: Jemerson-----	Slightly limited ~slope/erodibility (slightly limited)	0.22	Slightly limited ~slope/erodibility (slightly limited)	0.05	Limited ~low strength (limited)	0.80	Moderately limited ~low strength (moderately limited)	0.50	Not limited	
74C2: Winnegan-----	Limited ~slope/erodibility (limited)	0.78	Slightly limited ~slope/erodibility (slightly limited)	0.14	Limited ~low strength (limited)	0.80	Moderately limited ~low strength (moderately limited) ~slope (slightly limited)	0.50 0.15	Not limited	
74D2: Winnegan-----	Very limited ~slope/erodibility (very limited)	1.00	Slightly limited ~slope/erodibility (slightly limited)	0.24	Limited ~low strength (limited)	0.80	Limited ~slope (limited) ~low strength (moderately limited)	0.76 0.50	Not limited	

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Map symbol and soil name	Erosion on roads and trails		Off-road or off-trail erosion		Soil rutting		Log landings		Seedling survival	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
90B: Lenzburg-----	Moderately limited ~slope/erodibility (moderately limited)	0.33	Slightly limited ~slope/erodibility (slightly limited)	0.07	Limited ~low strength (limited)	0.80	Moderately limited ~low strength (moderately limited) ~stickiness (surface) (moderately limited)	0.50 0.50	Very limited ~seasonal wetness (very limited)	1.00
90F: Lenzburg-----	Very limited ~slope/erodibility (very limited)	1.00	Limited ~slope/erodibility (limited)	0.68	Limited ~low strength (limited)	0.80	Very limited ~slope (very limited) ~low strength (moderately limited) ~stickiness (surface) (moderately limited)	1.00 0.50 0.50	Very limited ~seasonal wetness (very limited)	1.00
100: Udorthents----	Limited ~slope/erodibility (limited) ~slope/erodibility (moderately limited)	0.89 0.50	Slightly limited ~slope/erodibility (slightly limited) ~slope/erodibility (slightly limited)	0.20 0.16	Not limited		Moderately limited ~slope (moderately limited)	0.30	Not Rated Not Rated ~seasonal wetness (very limited)	1.00
M-W: Water-----	Not rated		Not rated		Not rated		Not rated		Not rated	
W: Water-----	Not rated		Not rated		Not rated		Not rated		Not rated	