

**WAC 222-16-085 Northern spotted owl habitats.** (1) **Suitable spotted owl habitat** means forest stands which meet the description of old forest habitat, sub-mature habitat or young forest marginal habitat found in (a) and (b) of this subsection. Old forest habitat is the highest quality, followed in descending order by sub-mature habitat and young forest marginal habitat.

(a) **Old forest habitat** means habitat that provides for all the characteristics needed by northern spotted owls for nesting, roosting, foraging, and dispersal, described as stands with:

(i) A canopy closure of 60% or more and a layered, multispecies canopy where 50% or more of the canopy closure is provided by large overstory trees (typically, there should be at least 75 trees greater than 20 inches dbh per acre, or at least 35 trees 30 inches dbh or larger per acre); and

(ii) Three or more snags or trees 20 inches dbh or larger and 16 feet or more in height per acre with various deformities such as large cavities, broken tops, dwarf mistletoe infections, and other indications of decadence; and

(iii) More than two fallen trees 20 inches dbh or greater per acre and other woody debris on the ground.

(b) **Sub-mature habitat and young forest marginal habitat.** Sub-mature habitat provides all of the characteristics needed by northern spotted owls for roosting, foraging, and dispersal. Young forest marginal habitat provides some of the characteristics needed by northern spotted owls for roosting, foraging, and dispersal. Sub-mature habitat and young forest marginal habitat stands can be characterized based on the forest community, canopy closure, tree density and height, vertical diversity, snags and cavity trees, dead and down wood, and shrubs or mistletoe infection. They are described in the following tables:

(i) Western Washington spotted owl sub-mature and young forest marginal habitat characteristics.

Characteristic	Habitat Type	
	Sub-Mature	Young Forest Marginal
Forest Community	conifer-dominated <i>or</i> conifer-hardwood (greater than or equal to 30% conifer)	conifer-dominated <i>or</i> conifer-hardwood (greater than or equal to 30% conifer)
Canopy Closure	greater than or equal to 70% canopy closure	greater than or equal to 70% canopy closure
Tree Density and Height	115-280 trees/acre (greater than or equal to 4 inches dbh) with dominants/codominants greater than or equal to 85 feet high OR	115-280 trees/acre (greater than or equal to 4 inches dbh) with dominants/codominants greater than or equal to 85 feet high OR
Vertical Diversity	dominants/codominants greater than or equal to 85 feet high with 2 or more layers and 25 - 50% intermediate trees	dominants/codominants greater than or equal to 85 feet high with 2 or more layers and 25 - 50% intermediate trees
Snags/Cavity Trees	greater than or equal to 3/acre (greater than or equal to 20 inches dbh and 16 feet in height)	greater than or equal to 2/acre (greater than or equal to 20 inches dbh and 16 feet in height) OR greater than or equal to 10% of the ground covered with 4 inch diameter or larger wood, with 25-60% shrub cover
Dead, Down Wood	N/A	
Shrubs	N/A	

The values indicated for canopy closure and tree density may be replaced with a quadratic mean diameter of greater than 13 inches and a basal area of greater than 100.

(ii) Eastern Washington spotted owl sub-mature and young forest marginal habitat characteristics.

Characteristic	Habitat Type		
	Sub-Mature	Young Forest Marginal (closed canopy)	Young Forest Marginal (open canopy)
Forest Community	greater than or equal to 40% fir	greater than or equal to 40% fir	greater than or equal to 40% fir
Tree Density and Height	110-260 trees/acre (greater than or equal to 4 inches dbh) with dominants/codominants greater than or equal to 90 feet high OR	100 - 300 trees/acre (greater than or equal to 4 inches dbh) dominants/codominants equal to or greater than 70 feet high	100 - 300 trees/acre (greater than or equal to 4 inches dbh) dominants/codominants equal to or greater than 70 feet high
	Vertical Diversity	dominants/codominants greater than or equal to 90 feet high with 2 or more layers and 25 - 50% intermediate trees	2 or more layers 25 - 50% intermediate trees
Canopy Closure		greater than or equal to 70% canopy closure	greater than or equal to 70% canopy closure
Snags/Cavity Trees	greater than or equal to 3/acre (greater than or equal to 20 inches dbh 16 feet in height) OR	N/A	2/acre or more (greater than or equal to 20 inches dbh 16 feet in height)
Mistletoe	high or moderate infection	N/A	high or moderate infection
Dead, Down Wood	greater than or equal to 5% of the ground covered with 4 inch diameter or larger wood	N/A	N/A

The values indicated for canopy closure and tree density may be replaced with the following:

(A) For sub-mature a quadratic mean diameter of greater than 13 inches and a relative density of greater than 44;

(B) For young forest marginal a quadratic mean diameter of greater than 13 inches and a relative density of greater than 28.

(2) **Spotted owl dispersal habitat** means habitat stands that provide the characteristics needed by northern spotted owls for dispersal. Such habitat provides protection from the weather and predation, roosting opportunities, and clear space below the forest canopy for flying. Timber stands that provide for spotted owl dispersal have the following characteristics:

(a) **For western Washington**, timber stands 5 acres in size or larger with:

(i) 70% or more canopy cover; and

(ii) 70% or more of the stand in conifer species greater than 6 inches dbh; and

(iii) A minimum of 130 trees per acre with a dbh of at least 10 inches or a basal area of 100 square feet of 10 inch dbh or larger trees; and

(iv) A total tree density of 300 trees per acre or less; and

(v) A minimum of 20 feet between the top of the understory vegetation and the bottom of the live canopy, with the lower boles relatively clear of dead limbs.

(b) **For eastern Washington**, timber stands 5 acres in size or larger with:

(i) 50% or more canopy closure; and

(ii) A minimum of 50 conifer trees per acre, with a dbh of 6 inches or more in even-aged stands or 4 inches or more in uneven-aged stands, and an average tree height of 65 feet or more; and

(iii) Total tree density of 200 trees per acre or less; and

(iv) A minimum of 20 feet between the top of the understory vegetation and the bottom of the live canopy, with the lower boles relatively clear of dead limbs; or

(v) Conifer stands with a quadratic mean diameter of 9 inches or more and a relative density of 33 or more or a canopy closure of 55% or more.

(c) Suitable spotted owl habitat provides all of the required characteristics needed by spotted owls for dispersal.

(d) Landowners may submit information to support an alternate definition of dispersal habitat for review and approval by the department in consultation with the department of fish and wildlife.

[Statutory Authority: Chapters 76.09 and 34.05 RCW. WSR 96-12-038, § 222-16-085, filed 5/31/96, effective 7/1/96.]