THINK LIKE AN ELK!

Recommendations for land managers to improve elk summer forage in the forests of northern Idaho

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Cool Forest

Englemann spruce and subalpine fir; sparse understory, rocky/dry soils

Forage Capacity: Low

Stand Goals: Post-wildfire treatments to remove travel barriers

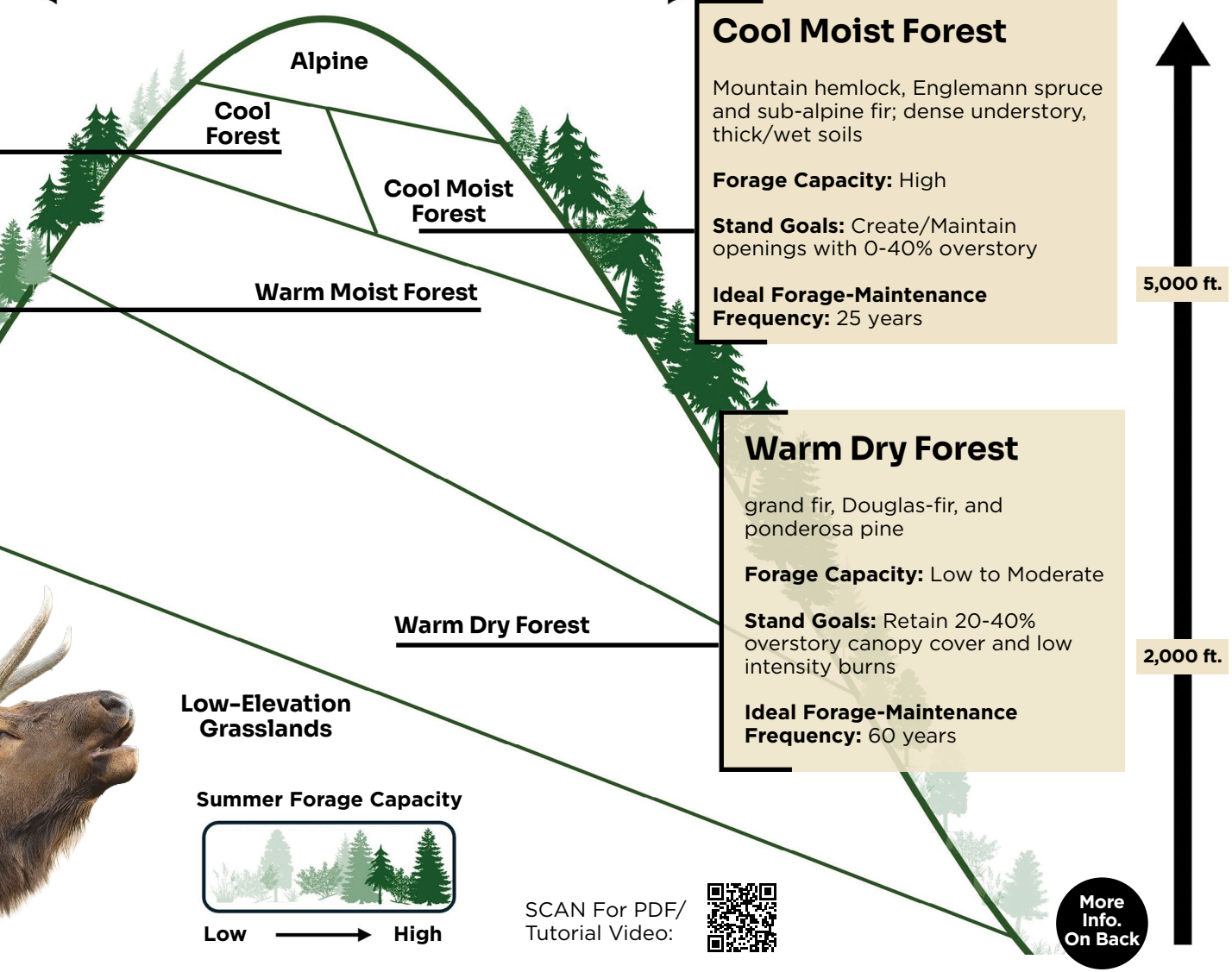
Warm Moist Forest

western hemlock, western redcedar and grand fir

Forage Capacity: Moderate-high to High

Stand Goals: Create/Maintain openings with 0-40% overstory

Ideal Forage-Maintenance Frequency: 20-45 years



Cool Moist Forest

Mountain hemlock, Englemann spruce and sub-alpine fir; dense understory, thick/wet soils

Forage Capacity: High

Stand Goals: Create/Maintain openings with 0-40% overstory

Ideal Forage-Maintenance Frequency: 25 years

Warm Dry Forest

grand fir, Douglas-fir, and ponderosa pine

Forage Capacity: Low to Moderate

Stand Goals: Retain 20-40% overstory canopy cover and low intensity burns

Ideal Forage-Maintenance Frequency: 60 years

Summer Forage Capacity

Low → High

SCAN For PDF/ Tutorial Video:

More Info. On Back

Recommendations for land managers to improve elk summer forage in the forests of northern Idaho[1]

Broad Habitat Type[2]	Generalized Seasonal Use[3]	Capacity to Improve Forage Nutrition	Stand Goals for Maximum Forage Growth[4]	Ideal Maintenance Frequency for Maximum Forage Retention
Cool (spruce-fir dry)	Summer or transition range	Low	☐ Complete post-wildfire treatments to remove travel barriers (e.g., standing dead, jack-strawed debris)	Forage-maintenance frequency should mimic natural intervals since forage retention is low Enter earlier if: stands are inaccessible due to travel barriers
Cool Moist (spruce-fir moist)	Summer range	High	☐ Use active management tools to create/maintain a mosaic of openings with 0-40% overstory canopy cover ☐ Complete post-harvest or follow-up treatments to encourage regrowth or maintain forage (e.g., prescribed burn, pile/burn, hand/mechanical thin)	~25 years **Enter earlier if:** canopy closes, shrubs are taller than 10 feet, or undergrowth is thick enough to be a travel barrier
Warm Moist (wet grand fir, western red cedar, western hemlock)	Summer or transition range	Moderate-high to High	☐ Use active management tools to create/maintain a mosaic of openings with 0-40% overstory canopy cover ☐ Complete post-harvest or follow-up treatments to encourage regrowth or maintain forage (e.g., prescribed burn, pile/burn, hand/mechanical thin)	~20-45 years **Enter earlier if:** canopy closes, shrubs are taller than 10 feet, or undergrowth is thick enough to be a travel barrier
Warm Dry (ponderosa pine, Douglas-fir, dry grand fir)	Winter range	Low to Moderate	☐ Retain/Maintain a mosaic of openings with 20-40% overstory canopy cover to provide shade for understory regrowth ☐ When burning focus on a mosaic of low intensity burns that account for wildlife escape routes	~60 years **Enter earlier if:** conifers are encroaching shrub stringers, shrubs are taller than 10 feet, or undergrowth is thick enough to be a travel barrier

[1] Information primarily compiled from Monzingo et al. 2023: https://doi.org/10.2737/PNW-GTR-1016

[2] Vegetation typing between Monzingo et al. 2023 and NPCNF Land Management Plan 2025 have slight variations within Douglas-fir and grand fir habitats that could change classification of the broader habitat types. For stands that could fit within either Warm Moist or Warm Dry consult Monzingo et al. 2023 for more specifics.

[3] Broad Habitat Type is not the only indication of winter range. Other key variables to determine winter range include elevation, evergreen forest composition within 400 m, average maximum snow depth, deciduous shrub within 400 m, slope, terrain position index at 500 m, and aspect (Bergen et al. 2016, IDFG Elk Seasonal Ranges).

[4] Specific treatments were intentionally left out. The objective is to create a mosaic of openings. Land managers have the superior expertise to determine precise prescriptions.