

## APPENDIX 3 Habitat Types & Groups

### Habitat Types within Fire Groups Common to West Central Montana

(excerpt from Fisher and Bradley, 1987, *Fire Ecology of Western Montana Forest Habitat Types*)

#### Fire Group 4: Warm, dry Douglas-fir habitat types include:

- Pseudotsuga menziesii/Agropyron spicatum* h.t. (PSME/AGSP; Douglas-fir/bluebunch wheatgrass)
- Pseudotsuga menziesii/Festuca scabrella* h.t. (PSME/FESC; Douglas-fir/rough fescue)
- Pseudotsuga menziesii/Physocarpus malvaceus* h.t.-*Calamagrostis rubescens* phase  
(PSME/PHMA-CARU; Douglas-fir/mountain ninebark-pinegrass phase)
- Pseudotsuga menziesii/Symphoricarpos albus* h.t.-*Agropyron spicatum* phase (PSME/SYAL-AGSP; Douglas-fir/common snowberry-bluebunch wheatgrass phase)
- Pseudotsuga menziesii/Calamagrostis rubescens* h.t.-*Agropyron spicatum* phase  
(PSME/CARU-AGSP; Douglas-fir/pinegrass-bluebunch wheatgrass phase)
- Pseudotsuga menziesii/Calamagrostis rubescens* h.t.-*Pinus ponderosa* phase (PSME/CARU-PIPO; Douglas-fir/pinegrass-ponderosa pine phase)
- Pseudotsuga menziesii/Spiraea betulifolia* h.t. (PSME/SPBE; Douglas-fir/white spirea)

#### Fire Group 5: Cool, dry Douglas-fir habitat types:

- Pseudotsuga menziesii/Calamagrostis rubescens* h.t.-*Agropyron spicatum* phase  
(PSME/CARU-AGSP; Douglas-fir/pinegrass-bluebunch wheatgrass phase)
- Pseudotsuga menziesii/Festuca idahoensis* h.t. (PSME/FEID; Douglas-fir/Idaho fescue)
- Pseudotsuga menziesii/Carex geyeri* h.t. (PSME/CAGE; Douglas-fir/elk sedge)

#### Fire Group 6: Moist Douglas-fir habitat types:

- Pseudotsuga menziesii/Physocarpus malvaceus* h.t.-*Physocarpus malvaceus* phase  
(PSME/PHMA-PHMA; Douglas-fir/mountain ninebark-mountain ninebark phase)
- Pseudotsuga menziesii/Vaccinium globulare* h.t.-*Vaccinium globulare* phase (PSME/VAGL-VAGL; Douglas-fir/blue huckleberry-blue huckleberry phase)
- Pseudotsuga menziesii/Vaccinium globulare* h.t.-*Arctostaphylos uva-ursi* phase  
(PSME/VAGL-ARUV; Douglas-fir/blue huckleberry-kinnikinnick phase)
- Pseudotsuga menziesii/Vaccinium globulare* h.t.-*Xerophyllum tenax* phase (PSME/VAGL-XETE; Douglas-fir/blue huckleberry-beargrass phase)
- Pseudotsuga menziesii/Linnaea borealis* h.t.-*Syphoricarpos albus* phase (PSME/LIBO-SYAL; Douglas-fir/twinflower-common snowberry phase)
- Pseudotsuga menziesii/Linnaea borealis* h.t.-*Calamagrostis rubescens* phase (PSME/LIBO-CARU; Douglas-fir/twinflower-pinegrass phase)
- Pseudotsuga menziesii/Linnaea borealis* h.t.-*Vaccinium globulare* phase (PSME/LIBO-VAGL; Douglas-fir/twinflower-blue huckleberry phase)
- Pseudotsuga menziesii/Syphoricarpos albus* h.t.-*Calamagrostis rubescens* phase  
(PSME/SYAL-CARU; Douglas-fir/common snowberry-pinegrass phase)
- Pseudotsuga menziesii/Syphoricarpos albus* h.t.-*Syphoricarpos albus* phase  
(PSME/SYAL-SYAL; Douglas-fir/common snowberry-common snowberry phase)

*Pseudotsuga menziesii/Calamagrostis rubescens* h.t.-*Arctostaphylos uva-ursi* phase (PSME/CARU-ARUV; Douglas-fir/pinegrass-kinnikinnick phase)

*Pseudotsuga menziesii/Calamagrostis rubescens* h.t.-*Calamagrostis rubescens* phase (PSME/CARU-CARU; Douglas-fir/pinegrass-pinegrass phase)

*Pseudotsuga menziesii/Vaccinium caespitosum* h.t. (PSME/VACA; Douglas-fir/dwarf huckleberry)

Fire Group 7: Cool habitat types usually dominated by lodgepole pine:

*Pseudotsuga menziesii/Vaccinium caespitosum* h.t. (PSME/VACA; Douglas-fir/dwarf huckleberry)

*Picea/Vaccinium caespitosum* h.t. (PICEA/VACA; spruce/dwarf huckleberry)

*Picea/Linnaea borealis* h.t. (PICEA/LIBO; spruce/twinflower)

*Abies lasiocarpa/Vaccinium caespitosum* h.t. (ABLA/VACA; subalpine fir/dwarf huckleberry)

*Abies lasiocarpa/Calamagrostis canadensis* h.t.-*Vaccinium caespitosum* phase (ABLA/CACA-VACA; subalpine fir/bluejoint-dwarf huckleberry phase)

*Abies lasiocarpa/Linnaea borealis* h.t.-*Vaccinium scoparium* phase (ABLA/LIBO-VASC; subalpine fir/twinflower-grouse whortleberry phase)

*Abies lasiocarpa/Xerophyllum tenax* h.t.-*Vaccinium scoparium* phase (ABLA/XETE-VASC; subalpine fir/beargrass-grouse whortleberry phase)

*Abies lasiocarpa/Vaccinium globulare* h.t. (ABLA/VAGL; subalpine fir/blue huckleberry)

*Abies lasiocarpa/Vaccinium scoparium* h.t.-*Calamagrostis rubescens* phase (ABLA/VASC-CARU; subalpine fir/grouse whortleberry-pinegrass phase)

*Abies lasiocarpa/Vaccinium scoparium* h.t.-*Vaccinium scoparium* phase (ABLA/VASC-VASC; subalpine fir/grouse whortleberry-grouse whortleberry phase)

*Pinus contorta/Vaccinium caespitosum* h.t. (PICO/LIBO; lodgepole pine/dwarf huckleberry)

*Pinus contorta/Linnaea borealis* h.t. (PICO/LIBO; lodgepole pine/twinflower)

*Pinus contorta/Vaccinium scoparium* h.t. (PICO/VASC; lodgepole pine/grouse whortleberry)

Fire Group 9: Moist, lower subalpine habitat types:

*Picea/Equisetum arvense* h.t. (PICEA/EQUAR; spruce/field horsetail)

*Picea/Galium triflorum* h.t. (PICEA/GATR; spruce/sweetscented bedstraw)

*Abies lasiocarpa/Clintonia uniflora* h.t.-*Clintonia uniflora* phase (ABLA/CLUN-CLUN; subalpine fir/queencup beadlily-queencup beadlily phase)

*Abies lasiocarpa/Clintonia uniflora* h.t.-*Aralia nudicaulis* phase (ABLA/CLUN-ARNU; subalpine fir/queencup beadlily-wild sarsaparilla phase)

*Abies lasiocarpa/Clintonia uniflora* h.t.-*Vaccinium caespitosum* phase (ABLA/CLUN-VACA; subalpine fir/queencup beadlily-dwarf huckleberry phase)

*Abies lasiocarpa/Clintonia uniflora* h.t.-*Xerophyllum tenax* phase (ABLA/CLUN-XETE; subalpine fir/queencup beadlily-beargrass phase)

*Abies lasiocarpa/Clintonia uniflora* h.t.-*Menziesia ferruginea* phase (ABLA/CLUN-MEFE; subalpine fir/queencup beadlily-menziesia phase)

*Abies lasiocarpa/Galium triflorum* h.t. (ABLA/GATR; subalpine fir/sweetscented bedstraw)

*Abies lasiocarpa/Calamagrostis canadensis* h.t.-*Calamagrostis canadensis* phase (ABLA/CACA-CACA; subalpine fir/bluejoint-bluejoint phase)

*Abies lasiocarpa/Calamagrostis canadensis* h.t.-*Galium triflorum* phase (ABLA/CACA-GATR; subalpine fir/bluejoint-sweetscented bedstraw phase)

*Abies lasiocarpa/Linnaea borealis* h.t.-*Linnaea borealis* phase (ABLA/LIBO-LIBO; subalpine fir/twinflower-twinflower phase)

*Abies lasiocarpa/Linnaea borealis* h.t.-*Xerophyllum tenax* phase (ABLA/LIBO-XETE; subalpine fir/twinflower-beargrass phase)

*Abies lasiocarpa/Menziesia ferruginea* h.t. (ABLA/MEFE; subalpine fir/menziesia)

*Tsuga mertensiana/Menziesia ferruginea* h.t. (TSME/MEFE; mountain hemlock/menziesia)

*Abies lasiocarpa/Alnus sinuata* h.t. (ABLA/ALSI; subalpine fir/sitka alder)