

## FOREST TYPE: SPRUCE-FIR (HIGH ELEVATION)

### SPECIES LIST

Asterisk denotes Species of Greatest Conservation Need. Hyperlinks take you to recommendations specific to the species.

#### *Reptiles and Amphibians*

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None listed

#### *Birds*

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##### [Spruce grouse\\*](#)

Black-backed woodpecker

Gray jay

Boreal chickadee

Red-breasted nuthatch

Golden-crowned kinglet

Ruby-crowned kinglet

##### [Bicknell's thrush\\*](#)

Dark-eyed junco

Pine grosbeak

Red crossbill

White-winged crossbill

Pine siskin

#### *Mammals*

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##### [Rock vole\\*](#)

Southern red-backed vole

##### [Northern bog lemming\\*](#)

##### [Long-tailed shrew\\*](#)

##### [Eastern small-footed bat\\*](#)

Snowshoe hare

Red squirrel

##### [American marten\\*](#)

##### [Canada lynx\\*](#)

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### RECOMMENDATIONS

These recommendations are designed to optimize wildlife habitat conditions within this forest type. Other silvicultural options may apply, but they won't necessarily optimize potential habitat conditions for the full range of wildlife species that can occupy this type. High-elevation (generally above 2,500 feet) forest types are normally situated on soils that are shallow to bedrock or poor in quality. The soil conditions, coupled with climate conditions at high elevations, result in slow vegetative reproduction and growth. Since the habitat provided by this type at these elevations contains a large proportion of SGCN species, special care must be taken when management takes place at high elevations in this type.

The management preference for optimal habitat is no management at all—allow natural processes to take place. If harvesting in this type at high elevation, contact your state wildlife agency before proceeding.

#### Composition and Structure Goals

- Within the managed area at least 60 percent should remain in stands with an average DBH of 4 inches or greater and a stocking of at least 90 square feet of basal area per acre.
- Leave 10 percent of the area unharvested. The remaining 30 percent of the area can be less than 4 inches in DBH and less than 90 square feet of basal area.
- Distribute these cut areas across the managed area rather than concentrating them.

- Direct management toward maintaining or increasing softwood types at high elevations.

#### Harvesting Provisions

- Use group selection with small groups— $\frac{1}{4}$  to  $\frac{1}{2}$  acre is preferred.
- Install larger groups (up to 3 acres) or small clearcuts (3 to 5 acres) only where adequate regeneration is in place.
- Minimize residual stand damage.
- Minimize soil compaction.
- Winter harvest is preferred.
- Avoid whole-tree harvest. Use a cut-to-length harvest method, leaving tops and limbs in place.
- Retain three to five large live cull or cavity trees per acre.