Rocky Mountain Juniper
Rocky Mountain Juniper (*Juniperus scopulorum*)

**General Description**
A small to medium tree, typically with a dense pyramidal crown. Native to western North Dakota. Seedling plantings may exhibit a wide variety of forms. Many denser growing cultivars are used as ornamentals. The largest tree in North Dakota has a trunk circumference of 7½ feet.

**Leaves and Buds**
- **Bud Arrangement**: Continuous.
- **Bud Color**: Same as leaves, hard to distinguish from leaves.
- **Bud Size**: 1/8 inch.
- **Leaf Type and Shape**: Simple scale and awl-like leaves.
- **Leaf Margins**: Entire.
- **Leaf Surface**: Prickly.
- **Leaf Length**: Variable lengths, indeterminate growth, the current year's foliage is awl-shaped or scalelike, 1/4 to 1/3 inch.
- **Leaf Width**: Variable 1/16 inch.
- **Leaf Color**: Dark or light bluish-green, glaucous or light green, variable. Little fall or winter color change.

**Flowers and Fruits**
- **Flower Type**: Unisexual, usually dioecious.
- **Flower Color**: Female, red to green; male, yellow.
- **Fruit Type**: Cones (typical juniper “berry”), ovoid, and deeply pitted, mature second year; 1 to 3 seeds.
- **Fruit Color**: Shiny brown seeds in dark blue berry-like glaucous cones.

**Form**
- **Growth Habit**: Variable pyramidal to narrow crowns, normally with numerous long, upward-reaching branches.
- **Texture**: Fine, summer and winter.
- **Crown Height**: 20 to 40 feet.
- **Crown Width**: 12 to 20 feet.
- **Bark Color**: Reddish-brown coloration to the underbark, shredding bark. Older bark has shallow fissures in a network of flat ridges.
- **Root System**: Variable, shallow in moist areas, deep in dry soils.

**Environmental Requirements**

**Soils**
- **Soil Texture**: Prefers deep moist well-drained loam, but will tolerate sandy soils.
- **Soil pH**: 6.0 to 8.0. Tolerates salts and high pH.
- **Windbreak Suitability Group**: 1, 1K, 3, 4, 4C, 5, 6, 6D, 6G, 7, 8, 9C, 9L.

**Cold Hardiness**
- **USDA Zone**: 3.

**Water**
- **Extremely drought tolerant once established, but likes moist soils.**

**Light**
- **Full sun.**

**Uses**

**Conservation/Windbreaks**
Small to medium evergreen for farmstead and field windbreaks. Most stress tolerant species available for conservation use.

**Wildlife**
Excellent for cover, nesting, and food.

**Agroforestry Products**
- **Wood**: Used for fence posts, cedar chests, pencils, and medicines. Heartwood is decay resistant.
- **Medicare**: Used in alcohol products.
- **Medicine**: Used for cancer treatment, and colds, coughs, sore throats, diarrhea, bleeding, fevers, pneumonia, stomach aches, and topical pain reliever for arthritis. Source of pinene, a terpenoid volatile oil and source of podophyllotoxin, an antibiotic.

**Urban/Recreational**
Good for ornamental landscaping. Does not turn brown in winter like Eastern Red-cedar.

**Cultivated Varieties**
Only a selected group of cultivars are listed. There are many broad-spreading cultivars of lesser landscape value.
- **Blue Creeper™ Juniper (*Juniperus scopulorum* ‘Monam’) - A patented atypical Rocky Mountain Juniper with a low 1 to 2 feet spreading growth habit. Undoubtedly a hybrid. Excellent bluish color year round.
- **Cologreen Juniper (*J. scopulorum* ‘Cologreen’): Semi-compact, bright green upright form.
- **Welch Juniper (*J. scopulorum* ‘Welchii’): An older, somewhat compact cultivar with upright growth, silvery to bluish-green in color.
- **Winter Blue Juniper (*J. scopulorum* ‘Winter Blue’): Another atypical Rocky Mountain Juniper which grows as a spreader with bluish color. Undoubtedly a hybrid.

**Related Species**
- **Eastern Red-cedar (*Juniperus virginiana*)

**Pests**
Common diseases include cedar-apple rust (*Gymnosporangium*) and Kabatina tip blight. Common insect pests include spider mites. Junipers should not be planted near apples, crabapples, juneberries, or hawthorns due to increased risk of damage by Gymnosporangium rusts. Extracts of *Juniperus* species are toxic to certain insect pests.