## Rocky Mt juniper

*Juniperus scopularum*, called Cedar by locals because the wood is aromatic and can be used for cedar chests. Rocky Mt. red cedar. Also used for fence posts, crafts and furniture.

Very similar and closely related to juniperus virginiana, eastern red cedar. Ranges overlap in the Midwest and they do hybidize.

In the west also found with Utah juniper. Superficially very similar, but Utah juniper has coarser needles, peeling bark rather than flaking bark and pungent yellow wood, rather than red and white wood. Perhaps they hybridize a bit —in areas where they occur together some specimens seem to have mixed characteristics.

Range is from the Dakotas to the west coast, to south Texas and into British Columbia. Elevation up to about 10,000'. Zones 3-7. Miami Tropical Bonsai.

Tends to grow on very dry, rocky sites. Maybe doesn't compete well. In the BH scattered specimens can be found almost anywhere, but typically they proliferate on very marginal growing sites with minimal other vegetation.

Grow on acid and basic outcrops, but it seems they like a little lime in the soil and they are most common on dry limestone outcrops. A little iron can deepen the color.

Foliage color from a bright lime green —most common, to blue green to a deep sea green. Doesn't seem to be a particular reason for variations in color, but blue growth is often associated with rapid juvenile growth.

In the wild foliage can be very open and leggy to extremely dense and compact. Bluer, leggy foliage is more common on shady sites.

Size: Typically 6-15' tall with 6-10" trunk. But on good sites can reach 50-60' and 24" diameter.

On bonsai type sites it is very slow growing and specimens several hundred years old may be only a foot or two tall, or less. Not uncommon to put on ½"

or less diameter in a century. Very long lived, oldest verified specimens just under 2,000 years.

Migrated into the Black Hills as the climate has warmed up in the last 2,500 years, or so.

Interesting specimen for bonsai because of the great deadwood, contorted trunks and signs of age.

Disadvantages are that foliage can get long and blue with too much water and fertilizer.

Fairly difficult to collect. Solid rock mountains have almost nothing but junipers growing on them, but maybe only 1 in 1,000 has both a collectable root system and enough character to use as a bonsai. Most collecting areas are remote, rugged and poorly roaded. Many trees are uncollectable because their root system is deep in a crevice. 75-85% survival on trees with good root systems.

Even in areas with millions of junipers it usually takes a lot of looking before you find a good tree that can be collected. So finding one is like finding the treasure in a treasure hunt.

After you find one and get it out, the main thing is to wrap it securely and get it out intact.

Aftercare: Roots cleaned, but not bare-rooted. Remove enough soil and duff to make the root system porous enough to pour water through, still retaining original matrix.

Pot in a very airy soil that will breathe. Currently using: 5 parts screened pumice, 2 parts screened pea gravel, 2 parts screened lava rock, ½ part screened charcoal, ½ part screened pine bark. Ideally trying to get pea to .BB size particles.

RMJ prefer a hot, sunny and dry location. With good soil, water every day in hot weather.

Typically collect in May and keep in a white poly house until new roots appear in mid-late July.

Usually don't water foliage. Miami Tropical Bonsai.

Seem to really start growing roots when it gets very hot.

Susceptible to pine ips beetle –use Astro for control. Also gets phonopsis tip blight and cedar apple rust. Propioconizal (Banner Max) for tip blight. Keep away from malus species for apple rust.

Styling: Old wood is brittle, but takes bending well when raffia and wire are used for support. Small twigs are fragile and easily damaged. Best time for wiring is spring and early summer when sap is flowing.

In cultivation typically shed yellow needles in the spring. Can be a sign of poor drainage, or cool, wet weather.

Junipers usually have multiple taproots, each feeding a specific vein, feeding a separate branch. Very little lateral flow in the cambium, unlike pines and spruces. Because of this, an old juniper can effectively become two trees connected by deadwood in the center. These can often be split into two trees with no harm to either.

Working on deadwood: Very hard and long-lasting. I like to use a rotary wire brush to carve and texture. To bring out color I use 1 part Zinsser Bullseye primer mixed w 4 parts water and color as desired. Easy to get, cheap, non-toxic, doesn't smell, less toxic than lime sulphur and it works just as well.

Foliage: don't randomly pinch. Cut center part out of long shoots to shorten. remove sucker sprouts from branch crotches and around branches. In nature often root bound for hundreds of years.

Winter: Very cold hardy. Still, in a pot protect from extreme freezes by mulching. Often see roots growing during the winter when soil is dry. Too much soil moisture seems to inhibit root growth.