

Black Hills Spruce

By: Pam Bergstrom, Lower Elkhorn Natural Resources District Forester

I just love the Black Hills of South Dakota! (It may have to do with the fact my mother is originally from Rapid City and I have family and friends who live out there!) They are so majestic and have so much history to share with the rest of the world. If I could, I would go out there every weekend. However, that is costly and since no one has come up with a money tree I will just go out when time and money allow. Well, why not bring the Black Hills to northeast Nebraska?! And just how do I plan on doing that? How about planting a Black Hills Spruce!

Black Hills Spruce is a variety of White Spruce that is found only in the Black Hills and because of this is the state tree of South Dakota. This spruce is becoming popular for windbreaks, backyards, and various urban plantings. Why is it becoming so popular? Well, let me tell you about some of its fascinating traits and characteristics.

Growing to a mature height of over 40 feet and having a crown spread of 20 feet, the dense and compact Black Hills Spruce is sturdy and can handle drought conditions and will tolerate moist soils more so than other evergreens. Even though it is drought tolerant – to a point – as a young seedling or sapling you may need to water it every week or every other week depending on how dry the soil is, the type of soil, and how timely the rains are. This spruce will require full sun, but can handle some shade and with dense foliage makes a great windbreak tree. In fact, some landowners are switching to Black Hills Spruce in their windbreaks instead of Eastern Red Cedar. Some evergreens won't transplant well, but the Black Hills Spruce will do fine, just as long as you don't transplant it into swampy or poorly drained sites. It can easily survive winters where the thermometer reaches -40F. And lifespan, how about 200 – 300 years!

Nesting and song birds will love it for the cover that is provided during the winter and the seeds that are produced within its cones. Song birds will also utilize it during the spring and summer for an area to nest in. When planted in a windbreak, wildlife will find refuge under the boughs of this spruce when the winds are fierce and the snow is blowing.

This is one of the slowest growing spruces, but that means that it is putting down good roots. In regards to disease and pest problems, bag worms and sawflies can be a problem, but if caught early will not cause damage or harm to the tree. This spruce will not do well in areas with heavy urban pollution. Compared to the Colorado Blue Spruce, the Black Hills Spruce doesn't have the disease problems that can restrict or even kill the Colorado Blue Spruce. In fact the needles can give off a blue color tint. To prevent the threat of diseases or insect problems, it is best to plant this spruce on the outside rows of windbreaks so it gets air movement and when planting for ornamental reasons, it is best to fine space in an open area where it will get both air movement and sun.

Like most evergreens, Black Hills Spruce is prone to have multiple leaders or tops on it and this can easily be modified with some corrective pruning by removing the other leader. If there are multiple leaders, the best thing to do is to determine the alpha leader and each year prune out one or two of the other leaders. For the most part, this is the only pruning that is required for most evergreens.

Black Hills Spruce is not usually grown for timber, but American Indians would use the wood for tipi poles and today it is used for pulpwood or making paper. In the past few years, Christmas Tree Farms have been utilizing this spruce for growing Christmas Trees because of its dense growing habit. It should be noted that American Indians also utilized the inner bark and new shoots for food.

Here's a quick fact before I sign off, the Black Hills Spruce almost didn't make it as the state tree for South Dakota. In fact, they wanted the state tree to be the Cottonwood just like Nebraska because the cottonwood can be found all across the state of South Dakota where the Black Hills Spruce is only found in the Black Hills. However, when it was pointed out that when planted in other parts of the state

it will survive, the doubters changed their minds and it officially became the state tree of South Dakota in 1947.

