
Tri-Basin NRD
1723 N Burlington Street
Holdrege, NE 68949



Phone: (308) 995-6688
Fax: (308) 995-6992
Email: tribasin@tribasinnr.org

Natural Resources District

NEWS RELEASE

December 1, 2010

For Immediate Release

For more information, contact: Nicole Salisbury, Information & Education Coordinator
Phone 308-995-6688 or email nsalisbury@tribasinnr.org

Pines in Peril

By John Thorburn, Tri-Basin NRD manager

Christmas is coming! For many of us, a live Christmas tree, imparting its fresh pine scent throughout the house, is a traditional part of our celebration of the season. Many even go to the effort of visiting a tree farm and cutting their own Christmas tree.

“Scotch” or Scots Pine is the most widely planted Christmas tree species. They are popular because they don’t lose their needles as easily as spruce or fir trees. They also grow rapidly from seed, reaching marketable height of six to eight feet in about as many years. They tend to grow a straight leader and have a uniform canopy, readily producing the distinctive conical Christmas Tree form.

Scots Pine are also planted as landscape trees as well as in many windbreaks and shelterbelts. They are relatively drought tolerant (which is why they resist losing their needles), and tolerant of a wide range of soils. They also tolerate a wide range of climatic conditions, making them the most wide-ranging pine in the world. Their native range extends from Spain to the Arctic Circle, from Ireland to Siberia. Scots Pine were one of the first European tree species introduced into North America, in the early 1600s. They now reproduce naturally across New England and the Great Lakes and are widespread from coast to coast.

In addition to their use as Christmas trees and in shelterbelts, Scots Pines are important commercial trees. Larger trees are cut for dimensional lumber and smaller trees are ground into pulp. Until recently, as many as 35 million Scots Pines were planted annually in the US for commercial purposes. They were long considered by experts to be the ideal pine tree because of their adaptability and good growth habits.

Even though Scots Pines have been planted in North America for hundreds of years, they aren’t native plants, so they aren’t genetically resistant to many animals, diseases and pests found on this continent. The Scots Pine’s “enemies list” is long, ranging from sawflies to needle cast diseases, pine collar weevils to scleroderris canker. Pine grosbeaks, porcupines, even deer can cause widespread damage in pine plantations.

Most devastating of all threats to Scots Pines however, is Pine Wilt. Pine Wilt is a complicated ailment, caused by nematodes that live parasitically on Pine Sawyer beetles. The beetles inject the nematodes into the circulatory system of pine trees, where they feed and breed. The nematodes block the circulation of water and nutrients, causing trees to die in a matter of weeks or months. There is no effective treatment for infested trees. Once a diseased tree is identified, it needs to be cut down and burned or buried immediately, to limit the spread of the beetles and nematodes.

Pine Wilt is damaging only to introduced pine species. Scots Pine is most susceptible to the nematode, followed by Austrian Pine and Japanese Black Pine. Native pine trees like Ponderosa Pine, White Pine and Jack Pine have genetic resistance to Pine Wilt nematodes.

Pine Wilt is widespread in Missouri, Kansas and eastern Nebraska. It spread into this part of the state just within the past year or so. The malady is so devastating that it is expected to wipe out mature Scots Pines in Nebraska within the next ten years. At Tri-Basin NRD we quit selling Scots Pines a couple years ago, and we offer Austrian Pines only as replacements for existing windbreaks. We encourage landowners to consider native species as alternatives. Ponderosa Pines don't grow as straight or as quickly as Scots Pines, but they are much more likely to survive over the 50 to 100 year lifespan of a windbreak.

The rise and demise of the Scots Pine is a sad chapter in the history of American Forestry. We need to learn from this episode that there are no ideal plant species, all have their strong points and drawbacks. Our forests, parks and landscapes are most durable when they are populated with a wide variety of species, with an emphasis on native species adapted to local conditions.

We should also incorporate native plants into our Christmas traditions. Why not bring home a redcedar tree for Christmas this year? There are many to choose from in pastures across Nebraska, free for the cutting.