Research Newsflash

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Smoke plumes are a common sight above Idaho grass seed fields each August.

Appeals Court Orders End to Idaho Field Burning

Every summer, Idaho grass seed farmers set their fields ablaze, sending plumes of thick smoke into the skies. And the state of Idaho — a pro-agriculture state — has long defended the controversial practice. Field burning destroys pests and pathogens and forces the grass plant to regrow from crowns and rhizomes. Without burning, a seed production field would revert into a non-yielding pasture the following year.

Field burning is actually illegal under federal law and has been since 1993, according to a new ruling by a federal appeals court, in a surprise victory for clean-air advocates.

"This decision shows that the handwriting is on the wall for field burning in Idaho," said David Baron, a Washington, D.C., attorney with Earthjustice, which represented Safe Air For Everyone (SAFE) and the American Lung Association of Idaho in the case against the U.S. Environmental Protection Agency. The story was covered in the January 31st Spokane, WA, Spokesman-Review newspaper.

A unanimous three-judge panel of the 9th Circuit U.S. Court of Appeals ruled in the environmental groups' favor and ordered the EPA to reconsider SAFE's challenge to a 2005 EPA decision approving field-burning in the state.

The justices ruled that Idaho's state plan – which has "the force and effect of federal law" – clearly "did not permit field burning" all those years.

"We're obviously disappointed in the decision, and we'll be reviewing it to determine what our course of action is," said Toni Hardesty, director of Idaho's Department of Environmental Quality.

The State of Washington phased out grass field burning several years ago because of concerns about its health effects. "It's a practice that *continued page 2*

Q&A Questions from the Field

Doug Brede, Ph.D.

Q: In your Establishment and Management Guide for T-1 Creeping Bentgrass, there is a phrase about a wake-up shot of fertilizer in the spring. Please let me know how much actual N-P-K you recommend for the first spring application, and is it the same quantity for L-93 and Penncross?

A: For the first application, I generally recommend ammonium sulfate (21-0-0) applied at 0.5 lb. N per 1000 ft^2 (2.5 g N/m^2) as soon as you start to notice plant growth (trees, bulbs) in the spring. Some folks use as high as 1 lb. N (5 g) in this application but I'd suggest trying the lower rate first. Ammonium sulfate dissociates into plant-available nitrogen at a lower temperature than any other fertilizer. Thus, it can get into the plant when other fertilizer prills just sit there. Also, there is a sprayable form of ammonium sulfate that works even faster. The same recommendation applies to L-93. Penncross is a bit harder *continued page 2*

Superintendents prefer Kentucky Bluegrass

According to Iowa State University extension specialist, Dave Minner, golf course superintendents in the Midwest region are very interested in improving their fairway conditions by converting to the new generation of close-mow Kentucky bluegrass varieties.

Jeff Wendel, CGCS, Executive Director of the Iowa Turfgrass Institute, surveyed 223 Class A and SM members of Iowa GCSA. Eighty-eight percent of the golf course superintendents responding indicated that they would consider fairway renovation if there were an effective means of controlling annual bluegrass during the establishment and grow-in phase; 70% favored close-mow Kentucky bluegrass, 10% creeping bentgrass, 4% no change, and 1% perennial ryegrass.

Jacklin Seed was the first to introduce close-mow (1/2" cut) bluegrasses and today leads the market.

Burn ban, continued

health and environmental officials are increasingly recognizing as just not one that's acceptable from a public health standpoint," Baron said.

Even Oregon is considering snuffing out the last remaining exceptions to their state-wide burning ban. While most Oregon burning is illegal, some burning is tolerated: Fine fescue fields and ryegrass straw piles. Fine fescue is unresponsive to burn alternatives such as crew-cutting and was exempted from the ban. However, these remaining loopholes will likely change.

Glenn Jacklin, seed production manager for Jacklin Seed, sees clouds on the horizon for area grass seed farmers. "We will be active on this issue for Idaho growers and our production base in Idaho, because we would like to keep the tool [of field burning]."

"To put it in perspective, right now there are about 35,000 acres of Kentucky bluegrass seed production in Idaho. If burning was banned, the seed industry would lose a big part of that acreage — similar to what happened in Washington State when burning was banned. The growers who were truly grass growers adapted, and the ones who weren't got out," he said.

The majority of Idaho's grass seed acreage is common Kentucky bluegrass. Few improved, proprietary varieties are grown in the state these days. Thus a total ban on Idaho burning in the future would likely impact the discount store boxed seed products and not the elite golf and landscape cultivars.

Q&A, continued

to "wake up" in spring, making this early application less effective.

Q: I'd like to establish a mixture of cool– and warm-season native grasses in a low maintenance area. When is the best time to sow?

A: Planting mixtures of cool– and warm-season grasses always compromises one of the two grasses. Cool-season grasses grow best from an early autumn planting, whereas warm-seasons need early summer establishment in order to grow their underground regenerative parts. If cool– and warm-season grasses are sown together there may be winterkill on the warm seasons or summer damage on the cool seasons, depending upon sowing date. The ideal scenario would be to seed the grasses separately. For example, you could plant the cool-seasons in August or September and then drill-seed the warm seasons over the top of the emerging cool seasons later in the fall -- anytime from November to spring. The warm-season seed will remain dormant and will germinate in the spring. Another option is to seed the warm-seasons in June and overseed the cool-seasons in the fall.

If I were to pick the season to plant these mixtures together it would be as a dormant seeding in the winter.

Q: Some golf courses plant 100% Kentucky bluegrass on their fairways. Other go with a 90% bluegrass — 10% perennial ryegrass mixture. Which is the best?

A: Agronomists love diversity. Standard agronomic practice is "more species are generally better than just one." But here's where I must split from conventional wisdom. Golf superintendents who have planted ryegrass with Kentucky bluegrass on fairways have generally come to regret that decision. Why? Different vertical growth rates. Modern Kentucky bluegrass cultivars grow more slowly (vertically) and need less mowing than perennial ryegrass. In a mix, you've got to mow to keep the tallest mixture component in check — that being the perennial ryegrass. The superintendent at Circling Raven GC in Worley, ID, says he can see ryegrass leaves extending above the bluegrass canopy by late in the afternoon following a morning mow. Another issue: Perennial ryegrass produces seedheads in June that require rotary mowing. Reel mowers push over the seed spikes without cutting them. That's why I recommend straight Kentucky bluegrass for fairways. If you later decide you want perennial ryegrass in the mix, you can always add it. Ryegrass interseeds very easily.

Ryegrass has a much faster vertical growth rate than Kentucky bluegrass.

Q: In your book you recommend that Kentucky bluegrass blend components have similar (1) leaf texture, (2) color, (3) shoot density, (4) growth habit and (5) vertical growth rate. I can find leaf texture and color via NTEP reports. But shoot density is variable depending on the season — spring, summer and fall. So, how do I choose varieties with similar density?

A: At Jacklin Seed I have tried to breed our bluegrasses to all be very compatible in blending. After all, nearly all turfgrasses are sown in some sort of mixture or blend. You can have little fear in constructing blends using Jacklin cultivars. Only a couple watch-outs: Limousine Kentucky bluegrass has a very high density and will dominate varieties with low density. You'll wind up with a monostand of Limousine alone. Second, mixing mid-range varieties with elite varieties will tend to diminish the top quality of the blend if you use more than 10-20% of the mid-range product. Other than that, you really can't go wrong mixing Jacklin bluegrass varieties.

Q: How does creeping red fescue work for fairways?

A: Almost every architect who visits the Royal and Ancient course in Scotland becomes smitten with the seaside links look. Trouble is, the links look has its geographical limitations. The only place it can be reliably grown is in Zone 2 (see Jacklin zone maps). Creeping red fescue requires a mild marine climate to stay attractive and competitive on a golf course fairway.