USGA REGIONAL UPDATE



Alkaligrass - An Option For Salt Affected Soils

By Blake Meentemeyer, agronomist, West Region

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In the West, many golf courses constantly struggle to move salts and sodium away from plant roots due to the lack of measurable rainfall and in some cases inadequate drainage. The further deterioration in recycled water quality in the region only exacerbates the challenge of growing a desirable turf species across an entire golf course site. Proactive soil and/or water amendment programs are often not enough in some situations to change the highly buffered, large volume of clay based soil and water. While sand-capping and regrassing the fairways to facilitate drainage would be the best solution, it is not always economical or sustainable. Luckily, if we pay attention, as many have in the intermountain region, nature tends to show us an alternative.

Nature always seems to find a way to adapt to the environment. On a recent CCS visit in Colorado, alkaligrass, *Puccinellia distans 'Fults'*, was the dominate turfgrass



Figure 1 - Alkaligrass becomes more competitive in poorly drained soils as the level of salt rises; It becomes less competitive in better draining soil as evident in the Poa annua grass lines seen over the top of a sand-channel drainage system in this fairway.

species on several lowlying, poorly drained fairway areas. This grass was simply out-competing the less salt-tolerant fairway turfgrasses such as Kentucky bluegrass and perennial ryegrass. Alkaligrass is tolerant at EC levels greater than 16 mmhos/cm; conversely, Kentucky bluegrass and perennial ryegrass are only tolerant at less than 4 mmhos/cm. While



alkaligrass has a slightly different color and texture, it is an adaptive species that should be considered when trying to promote a healthy mixture of turfgrass in areas where growing anything seems impossible.

More detailed information on alkaligrass is available by reading <u>Two More Unconventional Grass Families to Know and Love.</u>

Factual information on the drought in California – As the drought continues in California and parts of the West, there has been a lot of finger-pointing at golf courses and other industries regarding who is wasting water and how water is actually distributed throughout the state. In such emotionally charged situations, it's always good to be armed with the facts. The Sacramento Bee recently published A Guide to California's Drought and Water Crisis, which provides a good historical perspective on water in California as well as useful links to other factual resources. Additional resources also are available at Golf's Use of Water Resource Center to help golf courses manage through this difficult time while also sharing best management practices to protect water quality. Text goes here

West Region Agronomists:

Patrick J. Gross, regional director - pgross@usga.org

Larry W. Gilhuly, agronomist – lgilhuly@usga.org

Brian S. Whitlark, agronomist – bwhitlark@usga.org

Blake S. Meentemeyer, agronomist – <u>bmeentemeyer@usga.org</u>

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