



## Natural Biosolids

Top Cut<sup>®</sup> is an organic, nutrient-rich, nitrogen fertilizer source produced from biosolids. The addition of Top Cut to Prevail fertilizers replenishes the organic matter and also improves soil structure by increasing the soil's ability to absorb and store moisture. Combining Top Cut with other fertilizer components complements the agronomic benefits of natural fertilizers with the quick response and economy of traditional fertilizers.

### Organic Nitrogen

- Enriches the soil with organic matter to improve overall soil health

### Slow Release

- Nutrients are available to the turf over a period of time, feeding the soil continuously

### Nutrient Rich

- Includes nitrogen, phosphorus, iron, calcium and additional micro-nutrients necessary for turf growth

### Renewable Resource

- Recycles byproducts that conserve landfill space and reduces disposal costs

### Reduces Soil Erosion

- Assists with binding soil particles – improving water-holding capacity that enhances root development

## Nutrient Rich

Top Cut is rich in nitrogen and phosphorus, two primary nutrients essential for turf growth, and also contains micronutrients such as calcium, sulfur, iron and humic acid. Because the nutrients are released as the plant needs it, they are less likely to leach into waterways, which is better for the environment. The slow release feeding also provides more uniform growth, a more established root system and thicker, healthier turf.



### Benefits of Humic Acid

- Optimizes soil structure to increase soil fertility
- Neutralizes acidic and alkaline soil to release beneficial metal ions and promote nutrient absorption
- Stimulates root growth to improve nutrient uptake
- Increases turf's ability to withstand stress

### Benefits of Calcium

- Helps maintain a chemical balance in the soil, reduces salt content, and improves water penetration
- Stimulates the roots to encourage the uptake of nutrients
- Increases cell wall strength and thickness

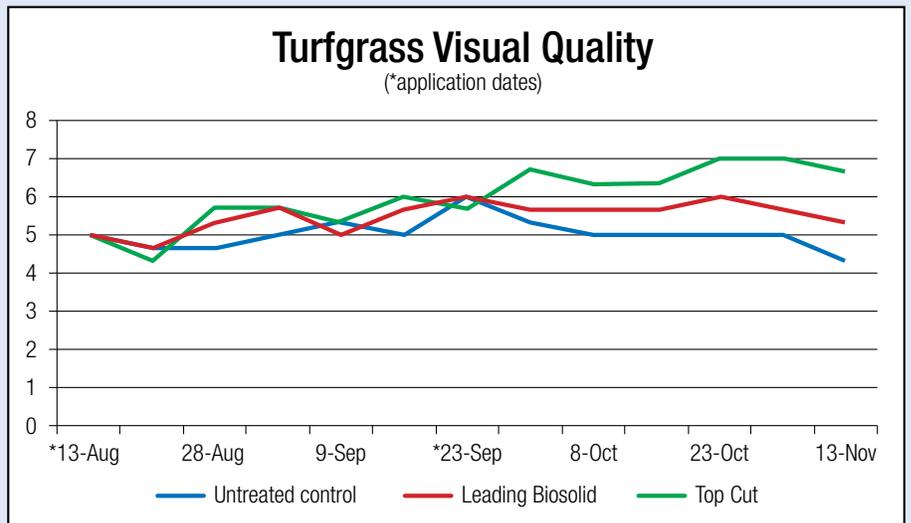
## Organic Byproducts

Biosolids are an organic byproduct of purification systems that treat domestic wastewater. Biosolids are created after wastewater processing leaves residuals, or solids, from communities' municipal and private wastewater treatment plants. These residuals are processed multiple times through clarifiers and digesters in which the anaerobic microbes break down the organic matter – in essence, the bacteria utilizes these solids as their food source and converts them into usable and stable organic compounds. The final result of the process is a biosolid, rich in nutrients that plants need to grow and thrive. By recycling these byproducts they remain out of our landfills and provide a beneficial resource to turf managers, farmers and growers.

## Quality and Safety

The EPA has certified Top Cut as a "Class A" biosolid with "exceptional quality." "Class A" biosolids are pathogen-free and can be applied without any restrictions. The long-term practice of recycling biosolids has been subjected to more than 90 years of intensive research, providing worry-free application with predictable results.

Top Cut also has the highest standards in granulation sizing and uniformity index, with minimal odor and dust. The easy handling formulation is also safer for the environment, people and pets.



#### N Applied per application:

- Top Cut: .4 lb nitrogen/1000 sf
- Leading Biosolid: .5 lb nitrogen/1000 sf

*Turfgrass visual quality is rated on a scale from 1 to 9 with 9 as the best. A rating of 6 is generally considered acceptable.*