Timely Tips for December

Climate Information for December in Phoenix, Arizona

Rainfall Average: 1 inch Record: 4.0 inches (1967) Temperature (degrees F) Average High: 66.2 degrees Lowest High: 36 degrees (1898) Record High: 87 degrees (1950)

Average Low: 41.8 degrees Highest Low: 59 degrees (1949) Record Low: 22 degrees (1900, 1911)

Note: Rainfall and temperatures vary widely within the valley depending upon elevation and microclimate.

Problem Solving for Winter Lawns in the Low Desert With Dr. Dave Kopec

SYMPTOMS: Pale green color, very low clipping production

CAUSE: Nitrogen deficiency

MANAGEMENT: In the coldest time of year, nitrate nitrogen is most available to the grass. Use ammonium nitrate, potassium nitrate or calcium nitrate. Apply 1/4 pound per 1,000 square feet as needed to maintain good color (usually once every three weeks).

SYMPTOMS: Straw and/or yellow leaf tips

CAUSE: Frost damage - leaves look like they have "dried up" and may be slightly twisted. Leaf appears yellow at first, leaf tip is straw, and immediately below straw color is a slightly yellow band.

Mowing with dull or improperly adjusted reel mower will cause similar symptoms, but the leaf blade may have several damage streaks across each blade.

MANAGEMENT: Continue standard mowing and watering plan.

SYMPTOMS: Yellow Leaf Tips - Leaves are yellow from the youngest leaf tip downwards. Each succeeding younger leaf becomes deficient so the yellowing occurs from the tip of the leaf down towards the base, then from the next youngest leaf tip to its base, etc. Turf in "wet spots" is usually the most "yellow". CAUSE: Iron deficiency - The iron in the soil is not as available when the soil is cold and wet. MANAGEMENT: Turf can be treated with ferrous sulphate spray, or with chelated forms which are readily available. Ferrous sulphate is less expensive, but does not last as long. Apply as a spray during the midday heat and let dry on the leaf for 12 - 24 hours before irrigating.

SYMPTOMS: Dark green turf, stunted with purple colored leaves. The turf appears dark green, with a discoloration of the lower, older leaves. This dark green color of the lower leaves turns to a dull blue-green, followed by a purple discoloration along the entire edge of the blade. It is usually more purple on the underside. On some turf grasses, the purple coloring will change to dull reddish tints that appear on leaf tips first, and then go down the blade. Dead tissue occurs then on the older leaf tips and progresses towards the base. CAUSE: Phosphorous deficiency. Like iron, phosphorous is less available in cold, wet soil conditions. MANAGEMENT: Apply a high phosphate fertilizer (0-27-0) or (0-45-0) to correct these deficiencies. Apply at a rate of 1.0 - 1.25 lbs. Phosphorous per 1,000 square feet.

SYMPTOMS: Blotchy leaf blades, with intermittent leaf yellowing or whitening, withered leaf tips. Yellowing occurs between the veins, but the mid-vein retains its green color. The leaf blades may feel limp and soft. The tips of the older leaf blades may be yellow- white, and be frayed or cracked. Leaf tips may curl and some green patches will be left on the leaf. The leaf edges will also be scorched, and tear easily. CAUSE: Potassium deficiency

MANAGEMENT: Apply potassium nitrate or potassium sulphate fertilizer at the rate of 1.0 lb per 1,000 square feet.

Highly recommended reading: <u>Frost Protection: Publication AZ1002</u> at <u>http://cals.arizona.edu/pubs/</u> - Courtesy of AZ Cooperative Extension, Maricopa County, The University of Arizona College of Agriculture & Life Sciences & Goodman's Landscape Maintenance, LLC.