TURF

Watson recommends drought measures

With or without drought conditions, there never will be enough water anywhere in the world to allow continuing excessive waste to be tolerated, according to Dr. James R. Watson, agronomist and vice president of The Toro Company, in his keynote address at the Texas Turfgrass Conference in December.

Drought not only means a lack of rainfall, he said, but a shortage of water. In addition to lack or rainfall, water shortages exist because of an increasing demand and excessive,

growing waste.

Two kinds of strategy are needed to combat drought, he emphasized: one for personal and business use of water; and another to apply on a much broader scale — the "green industry".

Dr. Watson offered several suggestions for using less water to maintain large turf areas.

Highest watering priority should go to the most intensively managed area. The greens on a golf course are an example. They are generally the most valuable part of the course and an area where play is most critical.

Should irrigation practices should be followed. The best combination of little wind, low temperature and high humidity is the best time to irrigate. That time occurs most often just before dawn. When watering trees and shrubs, use probes so the water will penetrate deeply, he suggests.

Reduce other causes of stress, being especially alert to salt build-

up.

Make sure fertilization programs are adequate, especially phosphorus to encourage root growth. Maintain a constant and uniform supply of nitrogen at a low to medium level to avoid unnecessary leaf growth. Slow release materials should be considered. If soluble sources are used, apply the materials frequently at low rates rather than vice versa. Infrequent high rates encourage excessive leaf growth.

Raising mowing height, even as little as 1/32 of an inch on a green, can have a significant effect on the ability of the turf to tolerate moisture stress. Mow less frequently.

Wind barriers can help, especially where there are large ex-

panses of open spaces.

Aggressively seek additional sources of water. Among the possibilities is treated sewage effluent. There are about 75 golf courses, known to Dr. Watson, in the U.S. that are using treated wastewater for irrigation. There are more than 30 in California, at least six in both Arizona and Colorado, and one or more in Texas, Florida, Idaho, Illinois, Missouri, New Mexico, Nevada, New Jersey and probably several other states.

There are approximately 2,000 facilities in the U.S. today that provide land disposal of wastewater in volumes ranging from a few thousand to several million gallons per day. The amount of waste water available for irrigation is going to expand dramatically, Dr. Watson predicts, mainly as a result of EPA action.

