

FLAMMABLE FABRICS ACT also applies to artificial turf or grass, according to Secretary of Commerce, Maurice Stans. The Federal Trade Commission has ruled that the Standard for the Surface Flammability of Carpets and Rugs means artificial turf, too. But in making the decision the FTC said that if any producer can provide information about a product line to disqualify it from the flammability standards, he can petition for a determination.

MUD RATES FIRST in serious football injuries. Second is artificial turf followed by turfgrass. That's the report the medical committee told the NCAA. Dr. Samuel I. Fuenning, chairman of the committee, said it doesn't make any difference if football games are played on grass or artificial turf - players are still going to get hurt. The committee compiled injuries per game from 40 colleges and universities during the 1970 season. Results were 2.86 injuries per game on synthetic turf and 2.67 on turfgrass. More serious injuries occurred on mud than any other surface.

**PARK & TURF DEGREE** is now offered by the University of Nevada. It is a two year program designed to give the student a broad background in park and turf management. Specific professional courses are offered as well as on-the-job training during the summer after the first year.

"PESTICIDE TECHNOLOGY is complex and requires a multidisciplined scientific, engineering and business effort. It is difficult for people who are directly involved, let alone those on the outside, to comprehend the total picture." A strong and extremely accurate statement by Kenneth L. Schulz, director of the Regulatory Division of Velsicol, in a speech before the American Public Health Association. Schulz also pointed out that the effort to develop biological or non-chemical means of pest control so far has produced little in the way of practical results for commercial use.

## SULFUR (from page 60)

When comparisons of nitrogen carriers were made on fescue, bent, and bluegrass turf at the University of British Columbia (200 lbs. of N per acre or  $4\frac{1}{2}$  lbs. per 1,000 sq. ft.), it was found that the ammonium sulfate increased turf density, created deeper green color, and lengthened the duration of response. The other carriers (no sulfur) were urea and ammonium nitrate. Response to nitrogen was poor.

Beaton has discussed several materials as sulfur carriers but none seem to be as adaptable to turfgrass management as potassium sulfate. The proportions of potassium to sulfur appear to be almost perfectly balanced when considering any level of nitrogen fertilization. True, not every soil under every turfgrass area will be sulfur deficient; but, as the use of nitrogen continues, we can expect to see a response to sulfur sooner or later.

Beaton has drawn on some 50 references for his exhaustive review of the role of sulfur in turfgrass fertilization. It leads this writer to sound the warning to every turfgrass manager. Look for possible need of sulfur on your turfgrass.

## Army Engineers Test Underwater Tree Survival

Army engineers are testing survival of trees which must spend at least a part of the year standing in water.

Native trees, shrubs and grasses have been planted in an area where high and low water levels exist.

Purpose of the trials, by the U.S. Army Corp of Engineers, is to find vegetation which will survive near lake edges and similar areas, and thereby eliminate the bathtub ring effect of flood control lakes during low water periods. The vegetation would also offer more sanctuary for wildlife.

Trees and shrubs were planted in mid-December near Stockton, Calif. More than 1200 one and two year seedlings of eight varieties were used. These were specially located to provide for differences in soil, water depth, exposure, and wind.

Late next spring, the Army group will also broadcast seeds of a greater variety of trees and shrubs as well as selected grasses within the test plots.

## A Case To Ponder

The fabled story about killing the goose that laid the golden egg has applications in today's modern business. It seems that before Champion Forge closed down, the union shop committee insisted that workers could produce no more than four forgings an hour. Management time studies indicated that ten should be made. The union held output to four an hour. A **piecework rate** on four an hour was established. Production then jumped to 16 an hour.

Now, no one has a job there.

"We used to make I-beam truck axles in our Cleveland plant, said Charles H. Smith Jr., Chairman, Sifco Industries Inc. in relating the above story to Walter J. Campbell, editor of INDUSTRY WEEK.

"Recently, we learned our former customer was planning to buy axles in Japan or Spain. We decided we would try to get the business for our plant in Brazil.

"Today, we are making those axles there for delivery to the U.S. We found we could buy the steel in Japan, ship it 12,000 miles to Brazil, unload and haul it 100 miles inland to our plant, produce the axles, pack for export, ship them 6,000 miles to the U.S., pay 10% duty, plus 10% import surcharge since Aug. 15, pay inland freight in the U.S., and deliver them to the customer cheaper than we could make them in Cleveland, 5 miles from our steel source. Actually, we now are using Brazilian steel because the mills there met the Japanese price."

Now there's a merry-go-round case of labor's influence on the market!