Sod Winterkill Extensive

Shortage until 1971 seen in Great Lakes region

SOD WILL BE in short supply in the Great Lakes region possibly through the spring of 1971.

Producers have come to this realization as the effects of widespread winterkill in Wisconsin, Illinois and Michigan have become known.

Damage has been greatest on sod that would have been marketed this spring and summer. The shortage is most acute now and will taper off as new grass is planted and becomes available.

Most producers expected a price increase, though predictions varied. A few saw no change; a few saw prices going as high as 75 cents a square yard wholesale to the Chicago market. Yet the consensus came quickly that whatever the price it would not be enough to cover the loss.

A high-low temperature situation the last few days of March brought on the kill.

Cause Explained

Dr. James B. Beard, associate professor of crop science at Michigan State University, explained the effects of Mother Nature's sneak attack:

"The kill occurred in late winter when the turf grass plants' resistance to lower temperature stress was drastically weakened. Temperatures dropped in a short time to near zero in late March. Both crowns and roots of grasses with a high water content were killed by freezing."

In a freeze of this type, the cellular structure is disrupted by ice causing the plant to die.

Wisconsin and Illinois producers suffered the greatest losses.

"If we (speaking of Wisconsin producers generally) can ship 50% of what we marketed last year, we'll be fortunate," reported Richard Horner of Horner Sod Farms at Union Grove, Wis. "And we planted more acreage this year than a year ago."

"Our farm is a good example," he continued. "By May 1, we had shipped only 10% of a year ago. I look for the situation to improve. We'll probably ship more in the fall— we'll have to in order to reach 50%."

Horner reported one experience that supports Andersen's explanation. In the Portage, Wis., area, one farm was completely ice-covered when the warm streak came in March. Apparently the cover kept the ground temperature low enough that the grass retained its winter resistance.

"When the ice cover finally did melt, there was no damage at all," Horner said.

Ben Warren, president of Warren's Turf Nursery in Palos Park, Ill., largest grower in the country, estimated that nearly 80% of his grass plantings were killed. Another Illinois farm, H. E. Sod Nursery, in Tinley Park, reported a similar loss.

Michigan's loss was considerably less, judged to be about 15% statewide after an air-ground inspection. Some individual fields, however, suffered up to 80% damage.

New York and New Jersey area producers apparently were spared. Elwood Tantum, Manager of Princeton Turf Farms, Princeton, N.J., said in early May that "So far, we haven't seen any unusual problems. We have had a cold, wet spring and cuttings are behind normal."

Air Tour in Michigan

As the reports of damage came in from Wisconsin and Illinois, a steering committee for a sod producers' organization in Michigan joined with Michigan State University to sponsor a tour of the state's farms.

WTT's editor accompanied a three-plane, nine-man party that included university turf specialists and sod producers. The group inspected, eith-

Mottled field at left, in Michigan, illustrates two problems: the extent of damage (dark spots are water from recent rain); and the difficulty of harvesting what good sod remains. Above, Dr. James Beard, squatting and gesturing, Michigan State University crop scientist, is explaining to most of the Michigan tour party what has happened. The inspection party included Beard; Axel L. Andersen, professor in MSU's Department of Botany and Plant Pathology; Ralph Hepp and Paul Rieke, MSU agricultural economists; Donald Juchartz, Wayne County extension agent; sod producers Bob Daymon of Gregory, Bob Hozak of Fowlerville, and Ted Bosgraaf of Hudsonville; and WTT's editor.
The men in the left picture were instrumental in arranging the air-ground tour of Michigan sod farms. They make up the steering committee working toward the formation of a state association of growers. Ted Bosgraaf of Hudsonville is comparing the root system of live sod (in his right hand) with that of grass winterkilled. Looking on is Bob Daymon, center, of Gregory, and Bob Hozak of Fowlerville. At right, Donald Juchartz, Wayne County extension agent, examines apparently healthy sod that exhibited no root system. He predicted the grass would die in a few days.

er by air or ground, some 35 to 40 farms or about 50% of the state's total acreage.

Bob Hozak, owner of Tech Center Sod Farms at Fowlerville, summed up the Michigan situation as being the "worst of three out of five bad years," the others being in 1965 and 1968.

"We've seen a little bit of everything — disease, freezing, desiccation," observed Axel L. Andersen, MSU professor in the department of Botany and Plant Pathology. The disease, he said, probably was active last fall and is showing up this spring as the weakened grass was killed by a combination of low temperature and flooding.

One farm showed evidence of Fusarium blight; another fairy ring. A close inspection of one field of apparently healthy turf revealed to Michigan's Wayne County Extension Agent Donald Juchartz that something else must have happened last fall. For some reason, the grass had grown no root system at all. Juchartz predicted that the lush leaf system would soon overtax the roots and that the plant would die.

Evidence on another turf farm supported the theory. Patches of green grass turned brown "almost overnight."

Still other growers were worrying about a more recent problem. A late April two-inch rain inundated sizable portions of farms in the Jackson, Mich., area.

"If the weather were to warm up, there would be more damage," said Beard. University experiments, he added, have shown that grass can be water-covered for two months without ill effects when the temperature is 50 degrees or lower. "But at 80 degrees, grass was killed in 10 days," he said.

"Losing the sod is bad enough," said Bill Johnson, owner and general manager of Halmich Sod Nurseries, "but plowing the dead sod is another thing. You just can't get it all plowed down, and that affects the next crop."

The "hopscotch" harvesting that will be necessary to lift good sod from a field spotted with winterkilled "could double cutting costs," said Horner.

Actual dollar loss on sod alone is difficult to estimate and the loss through related costs — such as fixed overhead, higher production costs, lost wages, etc. — almost impossible.

**Price Increase Expected**

Prices were expected to go up.

"Wholesale prices of 40 cents last year were expected to go up two to five cents anyway," said Warren. "With the shortage, the price could go to 60 cents or even higher. A big determining factor will be the transportation costs of bringing sod from other locations."

Horner felt wholesale prices might peak at 75 cents. "Some buyers may think we're gouging them, but..."
Some evidence of disease was found, such as Fairy Ring above, but most damage was caused by a high temperature period followed by a hard freeze.

there's just no way to cover our costs."

"This kind of a loss," said Warren, "will cause a lot of us to do some thinking and investigating to see if a federal disaster loan of some kind is available and if a type of crop insurance can be obtained for future protection."

With the winterkill so widespread and coming on the heels of a bad year in 1968, Bob Daymon predicted that the Great Lakes region would feel a shortage "until the opening of the spring season in 1971."

"It will take that long for producers to regain the marketable sod acreage lost to winterkill."

Daymon, whose farm is near Gregory, chaired the steering committee of the fledgling Michigan sod producers group. He and the other members, Ted Bosgraaf of Hudsonville and Bob Hozak of Fowlerville, both producers, were instrumental in arranging the plane tour of Michigan farms.

First World-Wide Turf Meet
Set July 14-17 in England

The first international turfgrass research conference is slated for July 14-17 in Harrogate, Yorkshire, England.

According to Organizing Committee Chairman Dr. James B. Beard, the conference's objective is to establish a forum for the exchange of information on turfgrass problems, research methods and results. Some 60 world specialists are expected to attend.

Creation of a permanent organization is also on the agenda. The date and place of the next international conference will be discussed, Dr. Beard added. He is affiliated with Michigan State University's Department of Crop Science.

Conference proceedings to be published will include: turfgrasses and their improvement; soil modification and nutrition; environmental stress; turfgrass pests—weeds, insects and disease—and their control; construction and maintenance systems; and turfgrass terminology and definitions.

U.S. conference publicity director is Dr. James R. Watson, director of agronomy for Toro Manufacturing Corporation, Minneapolis, Minn. The other two organizing committee members are J. R. Escritt, Sports Turf Research Institute director at Bingley, Yorkshire; and Bjarne Langvad, horticulture director for Weibulls, Landskrona, Sweden.

ASPA Sod Field Days
Open at Rutgers, Aug. 4

Two turfgrass research and development sites and a commercial turf farm will be the focal points of the third annual summer conclave sponsored by the American Sod Producers' Association, Aug. 4-6.

Activities will center at Rutgers University's College of Agriculture and Environmental Science in Brunswick, N.J.; Princeton Turf Farms in Cranbury, N.J., and the U.S. Department of Agriculture Research Center in Beltsville, Md.

A turfgrass research plots tour will highlight the Aug. 4 field day at Rutgers. Guests will inspect the internationally famous turfgrass breeding program, then attend a dinner business meeting.

On Aug. 5, the newest sod production equipment and products will be displayed and demonstrated at Princeton Turf Farms.

USDA's field day is Aug. 6 at its Beltsville research center.

Interested exhibitors should contact Dr. Henry W. Indyk, executive secretary, Rutgers' College of Agriculture, New Brunswick, N.J. 08903.

AT LAST A MACHINE TO HARVEST SOD the Growers way!

- WILL ELIMINATE UP TO 10 MEN FROM YOUR LABOR FORCE.
- DEPENDABLY PRODUCES 1500 PLUS YARDS OF NEATLY ROLLED AND PALLETIZED SOD PER HOUR.
- THE "HARVESTURF" NEVER TRAVELS ON THE SOD. ALLOWING HARVESTING UNDER MOST WEATHER CONDITIONS. AND NEVER DAMAGING THE TURF.
- ALL POWER IS FURNISHED BY HYDRAULIC MOTORS WHICH ARE FULLY ADJUSTABLE AT ALL SPEEDS.
- THE "HARVESTURF" IS ABLE TO HARVEST SOD AT WIDTHS UP TO 24 INCHES AND LENGTHS TO 82 INCHES.

BIG 'J' PRODUCTS, INC.
A DIVISION OF
SHAMROCK TURF NURSERIES, INC.

HANNA, INDIANA 46340
PHONE: 219-797-2212

For More Details Circle (114) on Reply Card

WEEDS TREES AND TURF, June, 1969 33