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Midwest Turfmen Describe 1961-62 Winterkill Damage

Midwest supts. who attended the association's 10th turf clinic at Olympia Fields (Ill.) CC, Nov. 27-28, were particularly interested in the post mortem on 1961-62 winter damage which was prevalent in their part of the country. Mike Britton, U. of Illinois pathologist, discussed the theoretical aspects of winterkill, and Dudley Smith, John Ebel and Ted Woehrle described the damage it did to greens at their courses last year.

Winterkill, said Britton, undoubtedly is a suffocation condition in which oxygen is shut off from the roots of the plant and carbon dioxide accumulates under great pressure, resulting in widespread toxicity. Studies of turf which have been damaged by winterkill, Britton said, show that proteins are precipitated, the plant becomes badly dehydrated, and tissue is killed or severely injured by ice crystals that penetrate plant cells.

Smith, Ebel and Woehrle described the trying days they went through when they discovered that winterkill had knocked out from one-third to two-thirds of the greens at their clubs. When the winter's

ice accumulation finally melted in late March it was found that the turf was either black or a disheartening gray and gave off a sickening odor. All three immediately aerified the putting surfaces extensively and overseeded with Seaside. Later they verticutted and, in one instance, treated with fungicides when it appeared that the turf was starting to revive.

Recovery Slow

Recovery generally was slow and in most cases, temporary greens had to be used well into May. By late June or early July, thanks to heavier than average rainfall throughout the Midwest, the greens returned to normal and by the end of the season were in excellent shape.

All three supts. agreed that C-15 turf held up quite well and Toronto and Penn-cross made creditable showings in face of the winterkill. They also agreed that when ice accumulates on greens for as long as 20 days, damage can be expected. However, Smith, Ebel and Woehrle couldn't offer any ideas for effective removal of heavy ice accumulation and, for that matter, neither could anyone else who attended the clinic.