Are the seasons getting longer?
Superintendents in the transition zones say 'Yes'

By MARK LESLIE

Playing seasons are getting longer in some areas of the country, causing turfgrass damage of which many superintendents are not even aware.

"Before the snow falls," superintendent Russell Bateman said matter-of-factly of the five Baltimore Municipal Golf Courses.

"On Thanksgiving weekend at the end of November if you have days anywhere near 50 degrees, this place is packed," said Bill Neus, head superintendent of the Mid-Atlantic Association of Golf Course Superintendents. "When I got into this business, after Labor Day play just died. That's not even part of the equation any more.

"Ten years ago we had 40,000 rounds a year. Now we're at 55,000.'

— Bill Neus

Stone gets personal
Honors tests grasses in pursuit of the best

By PETER BLAIS

OOLTWEAH, Tenn. — Under stressful conditions in southeastern Tennessee, many new bentgrass varieties far outperform Penncross, according to a Chattanooga-area superintendent conducting his own scientific field trials.

"You couldn't twist my arm far enough to make me seed a new course with Penncross," said David Stone, head superintendent at The Honors golf course.

Stone's work is based on two years of rigorous testing at his own facility. Stone's studies, in fact, remind United States Golf Association agronomist Pat O'Brien of the days when course managers routinely maintained their own test nurseries. There they grew many vegetatively propagated varieties of bentgrass to determine which performed best in their specific locale.

That practice started to disappear in the late 1950s with the appearance of Penncross, the Green Section's Southeastern Region turf expert said. Released in 1955, Penncross soon became the preferred bentgrass seed for golf course cultivars.

"It's the leading creeping bentgrass in the world today," said Tee-2-Green President Bill Rose, whose company produces Penncross. "In some climates it's still the best."

With the abundance of new bentgrass varieties introduced in

USGA reports on nationwide university research

Turfgrass safer than farmland, research studies confirm

By MARK LESLIE

Major university studies around the country are verifying the belief that turfgrass is a vast improvement to agricultural land in pesticide and fertilizer leaching, and researchers are even comparing differences between grasses in runoff studies.

The U.S. Golf Association Green Section's newly released annual Environmental Research Summary notes these findings along with many others in its review of USGA-funded research projects. The booklet reports results after the second year of the three-year studies.

Objectives of the overall project are to understand the effect of turfgrass pest management and fertilization on water quality and the environment; evaluate valid alternative methods of pest control to be used in integrated turf management systems; and determine

Environmental findings widespread, report says

From staff reports

Ten years and $5 million after it was undertaken, new and better grasses that survive on less water and lower maintenance have been developed through the Turfgrass Research Program initiated in 1982 by the U.S. Golf Association (USGA) Green Section and Golf Course Superintendents Association of America. So the USGA Executive Committee has committed its support for another five years, according to Jim Snow, Green Section national director.

Some 40 research projects improved knowledge about water-use rates of various turfgrasses and how these grasses react to moisture stress; introduced new grasses that use less water and pesticides; and forwarded understanding of maintenance practices.

Snow said: "Through the efforts of the individual turfgrass scientists and their support staff, many significant improvements have been made."

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Advances made in turf grasses

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the human, biological and environmental factors that golf courses influence.

From scrutiny of nitrogen and phosphorus compounds to pesticides, the news was good for the golf industry.

A wide-ranging study at the Michigan State University found "turf systems are much more efficient users of nitrogen compared to agricultural systems."

University of Nebraska and Iowa State University examinations of four pesticides in stands of Kentucky bluegrass showed an "apparent increase in degradation rate for these compounds in the turfgrass system compared to degradation rates for the same compounds in agricultural systems."

University of Florida experiments conducted on chlorpyrifos, isazophos and isophenphos found no compounds in significant amounts within leachate samples. Meanwhile, University of Georgia investigators said their research "suggests that turf systems are much more efficient at reducing soluble pesticide leaching compared to agricultural systems."

"Addition of the peat to sand significantly reduced the amount of nitrogen loss through subsurface leaching compared to sand alone," the report said. Among other findings:

• Researchers are establishing composts that suppress Pythium and Typhula incarnata diseases. "In field studies, some composts are as effective as standard fungicides in suppressing Pythium root rot and Typhula blight on creeping bentgrass putting greens."

More than 100 strains of actinomycetes are being evaluated for disease-suppressive properties

• Runoff of nitrogen on sloped fairway plots occurred more quickly and with greater peak flow from the ryegrass than creeping bentgrass.

• No significant difference was noted for leaching of the soluble and insoluble 2,4-D compounds under either field or greenhouse lysimeters.

• Scientists are isolating "beneficial" microorganisms that are antagonists of disease-causing microorganisms as alternatives to chemicals.

The 23-page summary is available from the USGA Green Section, Golf House, Far Hills, N.J. 07931.

Environmental report aired

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accomplishments were made. Water management, and our knowledge about how much water golf turf species use, have greatly improved. New bentgrasses, Bermudagrasses and buffalograsses already have been released to sod and seed producers and are making their way onto golf courses."

In his summary of the 10-year results, Snow reported:

• Improved greenhouse techniques were developed for making nutritional comparisons among new turfgrasses.

• Clipping removal from creeping bentgrass/poa annua fairways was found to favor bentgrass competitiveness.

• Hollow tine cultivation ranked equal to or higher than solid tine cultivation. Both reduced soil compaction.

• Promising zoysiagrass and bentgrass selections with good salt tolerance were identified, but buffalograss proved very sensitive to salt.

• Tifway Bermudagrass fared better than Meyer zoysiagrass and centipedegrass when compared in both moderate and high water usages and in periods of severe moisture stress.

• Screening techniques were developed for resistance to Pythium root rot, brown spot, summer patch and necrotic ring spot pathogens.

• A monoclonal antibody test was developed for rapidly diagnosing the presence of necrotic ring spot and spring dead spot pathogens in turf.

• Some 30 new fungal endophytes which may impart insect resistance were isolated from turfgrasses.

• Biologically active materials called pheromones were isolated from mole crickets to either attract or repel crickets under golf course conditions.