

Good irrigation grows turf that will withstand scrutiny by a television camera.

Baltusrol and world sees sixth U.S. Open in fine shape

Television coverage of a U.S. Open Championship couldn't have been better than at Baltusrol Golf Club last year. All 18 holes were fully televised for fans around the nation to enjoy every exciting moment of play at the memorable old club located in Springfield, New Jersey.

With several million television viewers and as many as 25,000 exuberant fans trodding through the final days of the week-long tournament, it was certainly no wonder that Superintendent Joe Flaherty was especially concerned that all ran smoothly on the grounds of this most prestigious golf club.

This 1980 tournament marked the sixth time U.S. Open competition was conducted at Baltusrol and the second time Flaherty was on hand to supervise overall grounds maintenance. In 1967, Flaherty served as the assistant grounds superintendent — very helpful experience he brought to bear for the 1980 tournament.

"The United States Golf Association sends representatives of the Green Section to courses scheduled for tournament play approximately two years before the actual week of the event," said Flaherty. "We meet to devise a program for ensuring that the course will be in top condition. Prior to tournament time we're asked to follow very specific instructions for the maintenance of putting greens, tees, fairways and roughs."

The USGA committee is very specific in its requirements for Baltusrol. Greens must be carefully trained to accept a true cut of 5/32 of an inch during the week of the championship. And all greens must be uniformly fast — standing up to the careful scrutiny of the USGA's stimpmeter, a device that measures the "roll" of the lush greens.

Collar areas around the greens must be mowed to precise height as are the tees and fairways. A careful spraying program is adopted early on to ensure the grounds will not suffer from disease or insects.

"We have two courses here at Baltusrol," said Flaherty. "This time the lower course hosted the tournament play. But both courses are carefully maintained — whether there's a championship tournament in town or not."

Flaherty credits his hard-working maintenance crew, ranging from 18 to 21 men, the reliability of his equipment, and his automatic irrigation system, for the model appearance of his Club.

Baltusrol Golf Club President R.J. Boutillier has said that the primary objective of this Club for the past 95 years is the cultivation and advancement of the royal and ancient game of golf. Proper irrigation goes a long way toward achieving that singular goal.

Flaherty, who doesn't mince his words, calls his irrigation system a "real workhorse". Presently 125 acres of the Club are under automatic irrigation. Installation of the system was done in 1969 without any disruption of play.

To achieve that end, piping for the system was plowed into position — polyethylene pipe laid in narrow slits at the rate of one fairway per day green to tee. Rather than positioning the pipe through the center of each fairway, pipe runs alongside of fairways with sprinklers installed in triangular formations to give better water coverage in the roughs and less saturation in the fairways.

The water mains total 90,000 ft., and are constructed of asbestos cement ranging from four to eight inches in diameter to deliver a total

annual water requirement of more than 17 million gallons. Water for both courses is pumped from four deep wells on the Club property with the balance provided by the Commonwealth Water Co., Short Hills, New Jersey.

Four Worthington pumps are utilized to bring water from these wells. Included are one 300-GPM (gallons per minute) pump with a 50-hp motor, one 200-GPM pump with a 40-hp motor, one 120-GPM pump driven by a 30-hp motor and one 90-GPM pump with a 30-hp motor. The total 710 GPM provided by these pumps is augmented by city water to maintain the desired 1200 GPM needed to keep the grounds in the best condition possible.

The backbone of the irrigation system is represented by the more than 1100 sprinklers (Rain Bird Model 41), chosen for their unique water conservation features. Because of the triangular positioning of these sprinklers, approximately two to two and one-half more units are used than in a center row installation.

From an aesthetics point of view, better water coverage means healthier, more attractive grass. But from a golfer's standpoint, particularly the pros, Baltusrol adds up to faster greens and tougher roughs — the way the game was meant to be played.

Flaherty agrees. "We know full well that more than 150 tough competitors will be vying for total prize money of approximately \$365,000 — a tough-minded bunch culled down from an initial entry list of almost 5,000. You can bet they've come to play."

But maintaining a highly competitive, attractive course doesn't have to be expensive. In fact, it can



be phenomenally inexpensive. "I bet I've spent no more than \$200 per year in maintenance costs to keep the sprinklers in top working condition," says Flaherty.

Total cost of the system was approximately \$300,000 in 1969, including installation by Wilpat Associates, Inc. of Springfield. Initial design work for the project, which took six months to complete was provided by Richard J. Jeske, Inc., a consulting engineering and design firm.

Prior to the automatic system, Flaherty relied on a traveling watering system. "My master satellite controllers provide much better accuracy than I got from the system," he explains. "And I've got a much better handle on the amount of water and money I spend to water the property."

Flaherty's very accurate records show that he spent \$12,400 in 1979 for electrical power and water from the city. Fewer crewmen are needed to operate the automatic irrigation system than to drag around the old system, too.

Why automatic irrigation for this part of the nation where average rainfall can top 44 inches in a single year? Though the average rainfall is high, it tends to come during a relatively short period of time. Then, it's more rain than the grass can use. A few dry weeks and the grass will brown out.

Flaherty indicated that his watering cycle runs from approximately the third week in June until mid-September, depending upon natural rainfall. Though no week's schedule is the same as the previous week's, each of the 600 stations on his irrigation system receives one-half hour of watering per day during the irrigation season.

During tournament week, however, depending upon weather conditions, Flaherty will refrain from irrigating the greens. Should the weather be particularly dry, he may hand water carefully at rates which are sufficient to keep the grass alive. Normally, Flaherty waters all greens for approximately 10 minutes each morning following cutting.

Baltusrol's famous hillsides call for separate watering treatment. Sprinklers topside are allowed to run longer than those at the bottom in order to compensate for run-off.

During the winter months, the irrigation system lies dormant, the pipes cleared of water by compressed air. The official golf season runs from mid-April through mid-October, though Flaherty points out that some of the Club's 500 golf members will play anytime when snow isn't on the ground.

This Irishman is rightly proud of his golf courses. He was prepared for the onslaught of visitors the U.S. Open always brings but was just as glad to see them go and operations around Baltusrol return to normal. Like Baltusrol Golf Club, Flaherty is a traditionalist dedicated to keeping the grounds in tip-top condition so that the grand old game of golf can be played here the way it has for nearly 100 years — "the way it's meant to be played".

