Agnes will long be remembered by all East Coast Superintendents; probably more so than hurricane Hazel in 1955.
Agnes was unique in that all damage resulted from flooding and raging currents of water. Relatively little wind destruction was noted in the Mid-Atlantic area.

The Mid-Atlantic States were not familiar with handling such a crisis and consequently were unprepared for Agnes. Most courses suffered much loss of trap sand, washed out pump houses, bridges, and maintenance shops.

Hardest hit in our area was Mike McKenzie at Goose Creek C.C. in Leesburg, Virginia. Some of you Washingtonians might have noticed Mike was pictured on the front page of the Washington Star paddling across his course in a canoe.

Four holes at Goose Creek - tee to green - were completely covered with at least one foot of silt, debris mixed with oil, grease and gas, and many dead uprooted trees. Mike's shop, located near the turbulent Goose Creek, was severely flooded. All his maintenance equipment suffered from silt and oil deposits, including his car which has since been junked. "I was standing in ankle deep water in my shop, and 40 minutes later I was swimming," Mike said.

Mike's first major effort of clean up was to remove the silt off his greens and salvage his power equipment from the mud covered shop. For three days, he and his men worked on uncovering the greens on the back nine and two greens on the front: some of which were hard to locate because familiar landmarks were washed down the river and land contours changed.

How does one go about removing slick silt, mixed with grease and oil, from the surface of greens? Mike found an answer. He bought out all the laundry soap from the area stores and powdered his greens with soap. A four inch water hose was then used to flush the surface clean. Mike shoveled much of the debris off before soaping his greens. Some greens were pure white in color after cleaning, which was attributed to lack of sunlight and oxygen. As of this date, the soaped greens are recovering well with 75 to 80% salvaged.

Mike's primary objective now is to keep the front nine open for play and concentrate on clean up on the back nine to prepare for fall seeding of tees, fairways and lost greens. Hopefully the full 18 will be open by next spring.

VIRGINIA GETS 3rd GENERATION "SUPERINTENDENT"

Michael Paul McKenzie, born June 1, 1972, provided the McKenzie's with a healthy 7 lb. boy. His father, Mike, is superintendent at Goose Creek Golf Course in Leesburg, Virginia. Mike's father, Paul, is superintendent at Chartwell Golf and Country Club in Arnold, Maryland.

JOB REQUEST

Douglas Eugene Dailey received a B.S. in agronomy in June, 1972 from V.P.I. He is interested in golf course work in the Washington area. He is 22 years old, single, and his military status is 4F. For further information contact him directly. His address is Route 5 Box 451, Winchester, Virginia.

HOPE YOU'RE FEELING BETTER

Jim Reid, retired superintendent of Suburban Club of Baltimore (1951 - 1967) recently became ill and is now in the Chapel Hill Convalescent Home. Jim would appreciate a card or note from his Mid-Atlantic friends.

His address is: Chapel Hill Convalescent Home Liberty and Robossom Road Randallstown, Maryland 21133

RAINY DAY JOBS

This topic has plagued all of us this year in the Mid-Atlantic States, more so than normal. Rainy day jobs become scarce when we live through a constant monsoon season.

Early in the morning the skies darken, rain begins to fall, and the crew comes in quickly. The repair of equipment was completed during the last weeks rain, new tee markers and benches were made, some painting was done, and the whole shop was cleaned out twice. You don't want to send the men home - good men should be guaranteed a 40 hour work week. Unfortunately rainy days are hereto stay and constructive work must be found for all employees.

The old motto "Don't put off until tomorrow what you can do today" does not apply if you can hold a given inside project for a time when rain delays outside work. Your files should contain a folder on suitable jobs for bad weather days. This will help you prepare ahead by having on hand materials needed for any given project - 4x4's for tee markers, cement and redwood for benches, etc.

Following are a few guidelines to insure all employees a productive rainy day's work:

Equipment Familiarization

Teach the proper technique of sharpening a reel, bedknife, or chainsaw to all who operate this equipment. Have...
each man practice on an old reel or bedknife.

**Shop Improvements**

A rainy day is an ideal time to build that new work-bench, add a new electrical circuit, or put up shelves. This kind of work is often impossible to get done during the winter months when the shop is full of equipment.

**Small Construction Jobs**

Tee markers can be made out of 4x4's. Cut long 4x4 lengths into 4 inch squares and put a 30 penny nail in one flattened corner. Saw off the head of the nail and paint the block of wood.

Cement benches with redwood slats are easily constructed when cement forms set up in the summer rather than in winter.

Other small construction jobs could include making a few purple martin bird houses, or possibly a new tennis tournament chair.

**Education Sessions**

Have a blackboard permanently mounted in your shop. If only a short rain is anticipated, a constructive educational discussion should take place. List all jobs routinely done by your crew on the board and question everybody why and how each job is done. Encourage suggestions on ways of improving any particular job. As all the men learn the purpose of their work, they will become more valuable and versatile.

The possibilities of subjects for discussion are unlimited. If the rain continues you can discuss your irrigation system. Explain how the entire system functions, from the pump house to the jammed pop-up or bad selonoid.

Identification of turf diseases should be pointed out to all employees and what you do to control them. This is especially important to the man who changes cups.

Have your mechanic lead a discussion on what everybody can do to keep equipment running smoothly. You and your mechanic should discuss each piece of equipment with the whole crew available to ask questions. Show the men what the machine will do, necessary adjustments, daily maintenance, and where the machine should be stored.

**Show Slides**

You probably accumulate 35mm slides of your golf course. Keep a projector on hand and run through the slides for your men. They will enjoy seeing the growth of the course and themselves at work: also “a picture is worth a thousand words” when instructing your crew to improve their work. With this in mind be sure to photograph your men during all of the jobs performed on the course. Most of us don’t take enough pictures and what we do take is normally a before and after shot of some construction or renovation project.

**Visit Another Course**

Most of us find it difficult to travel around our area and visit our neighboring superintendents. A rainy day is a perfect time. Take your assistant, mechanic or top men and go see someone else’s operation. You probably will learn something from a tour of another golf course or shop. Your top men rarely, if ever, see another shop or meet other men in their field of work. Be sure they get this opportunity on at least one rainy day.

If anyone has some unique ideas or jobs reserved for rainy days, please jot them down and send them in to the newsletter mailbag. We all will benefit.

Craig Spottswood

**THE IMPORTANCE OF WATER MANAGEMENT**

**PART II – Fred V. Grau**

Fertility levels greatly affect water requirements. Hungry turf needs five times as much water to produce a pound of dry matter as well-fed turf. There are records that show Marion bluegrass going 40 days between irrigation periods. I’ve seen bermuda grass turf (well fed) still green after 90 days without water.

We are recognizing the growing need for potash in turfgrass maintenance. The need is greater on irrigated turf because water washes the potash out of the plant. Studies in Michigan showed that 71% of the potash in grass plants is lost after 4 hours of irrigation. Many of us have come to believe that, on irrigated turf, we need to balance potash with nitrogen, about a 1:1 basis. After studying many soil test reports, I have formulated a fertilizer mixture that could be useful in many situations where potash has become critical. It is, simply, a mixture of ureaform (38-0-0) and granular sulfate of potash of equal particle size (0-0-50) in proportions of 1,200 pounds to 800 pounds respectively. This yields a material of approximately a 23-0-20. Phosphorus, where and when needed, can easily and inexpensively supplied in several ways.

We are in the International Hydrological Decade, 1965 – 1975, during which time the water resources of the world will be studied and mapped in infinite detail. Also, during this time, we will be re-doubling our efforts, to conserve the water we have and to learn how to get along with less water. We do not have any new sources of water - we must “make do” with what we have.

I’d like to share with you an experience I had in Texas while I was Director of the Green Section. The complaint was that, no matter how much water they put on the Seaside greens they would not hold a shot. At that time I was playing good golf so I went out 80 yards in the fairway and hit 8 iron shots. It didn’t take long to realize that, with bermuda fairways cut at 1½ inches, every shot was a “floater” that would not hold no matter how soft the green. The obvious answer was to mow the fairways down to ½ inch so that the golfer could play a controlled shot by placing the ball between the club face and the turf. The greens were allowed to dry and, with less water, they held the shot better (and the grass recovered).

In another case, during a tournament, a putting green was wilting and it needed water very badly, the chairman instructed the superintendent NOT to put water on the green while the sun was shining because “it would burn the grass”. The result was that the grass died because it did not get the water when it was needed!

No matter who you are or where you are you (and I) are committed to the concept of “Efficient Water Management”. I recall vividly hitting golf shots with Horton Smith and Al Watrous in Detroit many years ago. After