

## What's the Long Range Outlook???

Omni Weather  
Consulting Meteorologists

This is one of the many questions that meteorologists are asked daily. Unfortunately, the weather products used in forecasting the weather have not improved much since the '40s for long term predictions. Most of the emphasis on technological improvements have had to do with satellite imagery and radar which are really only beneficial for a number of hours. Therefore, long term forecasts are in reality nothing more than guesses. A classroom of children have an equal chance of being right in forecasting 1-3 months in advance as does the National Weather Service or a private weather service which claims it specializes in long term forecasting. Meteorologists are able to make fairly accurate 5-7 day forecasts.

The latest rage by the National Weather Service in their long term outlooks is using the term 'equal chances' for having above or below temperatures and rainfall. Now having seen their work, we must ask ourselves — how in the world do they come up with such an astute prediction? Below is a description of the National Weather Service's secret formula as taken from the 'Climate Analysis Center Vo. 40, Number 14'. The predictions in each outlook are formed by a combination of empirical methods.

For the monthly outlooks, these methods included:

1. Extrapolation of the movement and changes of anomalies or abnormal features appearing on the sequence of recent monthly average charts of the northern hemisphere circulation at 700 mb, 10,000 feet.
2. Statistical estimation of month to month persistence of the circulation to be expected at each point at each time of year.
3. Physical reasoning about the likelihood of instability and changes in the major wave trains in the hemispheric circulation.
4. Examination of the current 5-day dynamical predictions of the hemispheric circulation for immediate signs of these or other changes.
5. Testing of the coherence and plausibility of the various projected circulation anomalies by the use of spatial teleconnection statistics.
6. Subjective reconciling of conflicts in the projections.
7. Inferences as to what temperature and precipitation patterns should follow from the circulation projections, using statistical specification equations, conditional probabilities keyed to predicted anomaly centers, and past cases similar to the predicted circulation.

The seasonal forecast procedures omit spatial extrapolation of the anomalies, instability reasoning, and the use of five day dynamical prediction. They add:

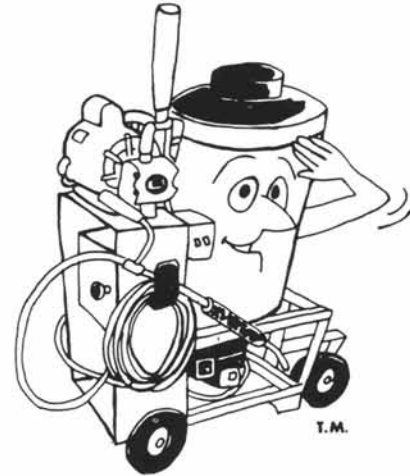
1. Statistical estimates of the persistence of 700 mb anomalies at various lags beyond a month — one, two, three, four, and eight seasons.
2. Statistical contingency estimates of U.S. state-averaged temperatures from temperatures one or two seasons earlier.
3. Statistical estimates of the consequences of anomalous North Pacific and equatorial Pacific sea surface temperatures, when these appear to be significant.

Among the methods not used for either monthly or seasonal prediction are supposed periodicities or cycles of weather and supposed connections to solar system configurations.

After doing all of these steps, one would think that the result would be rather conclusive one way or another. Statistics have proven that only 40% of the time do temperatures and rainfall fall in the normal range. Therefore, one has in reality a 50% opportunity of being correct by choosing above or below normal conditions for a month or season.



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## Midwest Breezes



### Upcoming Events — Mark Your Calendar

**March 2 - 3** — Midwest Regional Turf Conference at Purdue

**March 3 - 5** — Landscape Exposition, O'Hare Exposition

**March 12** — Christensen Power Equip. "Open House"

**March 16** — MAGCS meeting at Nordic Hills C.C.

**March 31** — CDGA Green Seminar at Butterfield C.C.

**April 9** — USGA Regional Meeting at Westmore C.C. in Milwaukee

**April 23** — MAGCS meeting at Inverness C.C.

**May 18** — Joint Association meeting at Pontiac Elks C.C.

**June** —

**July** — MAGCS meeting at Edgebrook G.C., Sandwich, IL

**August** — MAGCS meeting at Turnberry C.C.

**September** —

**October** — MAGCS meeting at Woodstock C.C.

**November** — Annual Meeting

**December 8-10** — NCTE at Pheasant Run

## Midwest Breezes

Congratulations to Len Berg and his voting delegates Al Fierst and Bruce Williams on a great campaign to get Len elected to the GCSAA Board of Directors. Unfortunately the cards were not in Len's favor this year as his excellent qualifications and best interest for GCSAA were overshadowed by the issue of geographic representation on the board. This issue seems somewhat benign as the most important issue is whether the people elected serve the best interests of GCSAA. Only the future has that answer. Len Berg will continue his interest in GCSAA by representing the MAGCS on the GCSAA Education Committee this coming year. Thanks to Len for bringing the issues on the minds of MAGCS members to the forefront on a national scale. We look for Len to continue his activities with GCSAA and run again for Director of GCSAA.

For those of you who missed the GCSAA Golf Tournament in Tucson, it was another successful event. The weather was perfect, the courses were magnificent and everyone had a great time. The MAGCS was well represented by the team of John Stephenson, Mike Bavier, Paul Voykin and Bill Kraft who took second place overall in the Net Division. John Stephenson also took third place net score in the Senior II Division (age 57 & up) and Bill Kraft also took second place gross score in the Senior II Division. Bob Kronn and his partner won the Best Ball Event held on Saturday before the tournament. Bruce Williams took third place net score in the Blue Division. Congratulations to all these guys who prove that you don't have to be a "Sunbelt Superintendent" to know how to play the game!

The GCSAA Conference and Show in Phoenix was once again a great success. GCSAA staff, Conference and Show Committee, and the Education Committee are to be congratulated on another job well done. There were several MAGCS members who participated and spoke at the conference on a variety of topics. Bruce Williams taught the seminar "The Assistant Superintendent: Functions and Responsibilities", Len Berg chaired the session on "Golf Course Construction Techniques and Renovation", Roger Stewart spoke on "Fairway Renovation — Chicago Style", Pete Leuzinger spoke on "Me and My Assistant", and Al Frantik who took the opportunity to represent MAGCS and give a little something back to their profession.

Good Luck to the new GCSAA Board of Directors in 1987! They are as follows:

President..... Don Hearn  
Vice President..... John Segui  
Directors..... Dennis Lyons, Gerry Faubel, Bill Roberts,  
..... Ken Sakai, Randy Nichols.

**PLEASE MAKE SURE YOU TAKE NOTE THAT THE MARCH 16 MAGCS MEETING IS AT NORDIC HILLS C.C. AND NOT AT INDIAN LAKES AS WAS STATED IN THE FEBRUARY ISSUE OF THE BULL SHEET!**

Assistant Superintendent position open at Shamrock Golf Club in St. Anne, IL. Contact Larry Horrell, Golf Course Superintendent, at 815-937-9355. Looking for someone with a minimum of two years working experience on a golf course. College background accepted but not mandatory. Competitive salary.

Assistant Superintendent position open at Mount Prospect Park District Golf Club. Contact Fred Behnke, Golf Course Superintendent, at 312-259-7218. Full-time, year-round position offering excellent salary and benefits.

### FOR SALE

1979 3 wheel Cushman Turf Truckster. Includes P.T.O., hydraulics, Smithco 120 gallon spray rig with boom, utility box, and Greensaver Aerator. Complete package in good condition. Contact Pete at 312-460-7781.

Position open for Assistant Superintendent — Park Hills Golf Course, Freeport, IL. Send resumes to: Dave Fischer, Golf Course Superintendent, Park Hills Golf Course, 2892 W. Stephenson, Freeport, IL 61032. Phone 815-232-5090.

The deepest sympathy of the members of the Midwest Association of Golf Course Superintendents is extended to the Pat E. Klein family on the death of Pat on Friday, February 20, 1987. Unfortunately Pat was taken in the prime of his life and leaves his wife Pat, children and friends with a tremendous loss.

## From "Down Under" to "Up and Over"

**Fred Opperman, CGCS, Editor**

This message to report on the travels of your wandering Editor is first being written at 37,000 feet over the South Pacific just north of the island of Fiji. I have just finished visiting three different countries: New Zealand (both north & south islands), Australia, and Fiji.

I find the numbers of this trip kind of mind boggling, like: 37 days away from your family, 24,562 air miles which included 32 landings and take-offs on both private and commercial aircraft. The aircraft ranged from a tiny L4 World War II spotter plane (the only such plane in the southern hemisphere), a Cessna 180, up thru the 747B. A total of over 66 hours in the air. Bus trips totaling about 780 miles, and car/camper van of over 2,656 miles.

I was able to visit golf courses in all of the countries and the range of maintenance went from oiled greens in the desert of central Australia at Coober Pedy to the high budget of the Royal Sydney Golf Club where they employ both a greenkeeper who takes care of the 4 bowling greens (Pennecross) and 13 grass tennis courts, flowers and shrubs around the clubhouse; plus a Golf Course Superintendent who maintains the 27 holes of golf with a crew of 15. In between these two extremes you have courses in New Zealand where in the summer they fence off the greens and turn the sheep loose to maintain the grass and keep it "cut" and fertilized. It seems the "Kiwi's" are too busy in the summer with their sailing, swimming, trekking, and camping to play much golf. Their golf season is during the winter months of June, July, and August.

The first golf course I visited in New Zealand I was behind a tanker truck going up the driveway to the clubhouse. But this tank truck was different from any I had ever seen before — it was a tanker full of beer. This beer tank truck was making a delivery at the clubhouse. I had heard that "down under" the people could drink beer; but a tank truck!

The Superintendents in New Zealand and Australia have the same problems we have in the north but they have one very serious problem we think we have, but really don't, when compared with their problem. Their serious problems is the availability of parts and equipment. Most of their turf equipment comes from the states and it is slow and hard to get anything and very expensive. We complain if we don't get it in a couple of days, they are happy if they get it in 2-3 weeks.

Overall my trip was a success and I had a great time and met a lot of wonderful people.

## "Wild March Hare"

That Wild March Hare is again on the run,  
Playing in the open, soaking up Sun.  
Scampering about, leaping for fare,  
Spurred on by Spring's smell in the Air.  
Just like that Hare, we're rearing to go,  
Soon as We're through with Ice and Snow.  
It's hard to hang in there, not jump the gun,  
Once You taste Spring's warming Sun.

**Kenneth R. Zanzig**

### FOR SALE

Toro Super Pro, excellent condition. Reels all sharpened and ready to go. \$750.00 (negotiable). Contact: Roger Stewart, CGCS, Riverside Golf Club, 312-447-1049.

### FOR SALE

1979 Toro Pro 84 — 7 blade reels, external oil filter & cooler, Roto Mist converted to trailer type leaf blower - directional, 4 cylinder engine, 2 sets spring comb kits for Toro series IV PGM, 2 sets caster wheel pull frames for Toro PGM III, ¾" irrigation keys & quick couplers, 1½" irrigation keys and quick couplers. Best Offer — Kishwaukee C.C. — Dan Murray, (815) 758-5273.

### FOR SALE

1982 7 gang Jac F-10 Diesel, asking \$16,500, only 3 seasons of use. Call Bob Winter at Oak Brook Maintenance, (312) 759-0820.

Pete Mirkes wishes to thank the members for remembering him while in the hospital and reports everything came out fine (what does that mean?) and is feeling great. (That's good to hear, Pete!)

Move aside Donny Osmond, here comes The Big Al and Marie Show! That's right, for all you folks who missed the GCSAA Banquet and Show, Big Al made his stage debut with Marie Osmond. Seems Big Al got so excited on stage that when he got back to his seat there were sequins imbedded in his coat and tie! If you are interested, Big Al will have an autograph session at the next MAGCS meeting. Unfortunately, he only has pictures of himself for autographing. Contract negotiations for the remake of "A Star is Born" are reportedly moving at a slow pace! (Big Al alias Al Fierst)

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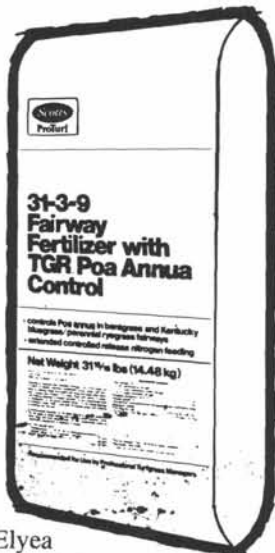
This editor would like to thank Roger Stewart for the great job he did in pasting up the February issue of **The Bull Sheet** and the gathering and writing of materials for the March issue. I think we might have found a replacement for me when I step aside some day. Thanks, Roger, for a good job while I was off down under playing in the sun.

**Fred Opperman, Editor**

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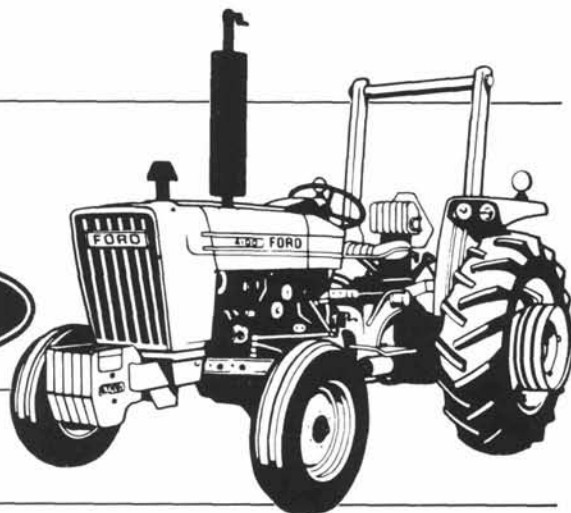
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## Irrigation System Modernization Poplar Creek Country Club

David Blomquist, Asst. Supt.  
Poplar Creek Country Club

In January 1984, James Young Construction Company purchased Moon Lake Golf Club, changing the name to Poplar Creek Country Club. The new owners brought in a new superintendent, and visions of transforming Poplar Creek into a top public facility. Fortunately, they are aware that it is a time consuming and costly venture. However, it did not take us long to realize the irrigation system would not be adequate to accomplish what is expected from it.

We are extremely lucky to have an owner who is committed to upgrading the operation. Very little persuasion was necessary in convincing them about our needs: with bentgrass fairways in the near future, we knew we would need a state-of-the-art system.

It was not financially feasible to replace everything. This was a major problem, because the entire system was a total loss. It was different than the usual hydraulic designs in that it was normally closed. Acuator valves, located at each head, were controlled by pressure in the 1/8" control lines. The controllers were useless and the pipes leaked everywhere. The heads were allowing water to pass through them, but the nozzles were not the same on any two heads, and most of the bodies were cracked.

We had to evaluate how much money was available and what those funds could purchase. The big question was — would a partial renovation work? (It should be noted that in the winter of 1985, we had our three pumps rebuilt, and our pneumatic control panel updated. We have budgeted for a new electronic panel for the winter of 1986). With this in mind we concentrated on modernizing the most important components: heads, swing joints, and controllers. Later three isolation valves were added to the contract, and it was decided to keep Toro Model 690 heads on the fairways, and 650's on the greens. We had 630's on the tees, but they were changed over to 650's also.

We reviewed several makes of field clocks and decided on the brand new Toro VT-4's. For a central controller, we also went with their latest model, implementing an IBM personal computer.

### THE CONTRACTOR MAKES THE DIFFERENCE

Following the decision concerning what to purchase, our next step was who would install it. The most important factor in installing a new system is the selection of the right contractor. An incompetent installation can defeat the advantages of even the best hardware. After careful consideration, we chose Midwest Irrigation, out of Dubuque, Iowa.

Soon after January 1, 1986, the contract was signed and work was scheduled to begin in the spring. It was April 30 when they were finally underway. The first priority was to put in two of three isolation valves. These 6 inch valves are situated so in the event of a leak, we can isolate all but one fairway from the pumphouse — naturally we have had several leaks there.

Replacing the swing joints was found to be quite a task. Most connections and service tees in the fairways were on the verge of failure, and the pipes under the greens and tees were in such bad shape, Midwest decided to pull new two inch pipe. (They felt they could better guarantee their work, as well as save labor hours). We calculated a price that both parties thought was fair.

There were several other problems that slowed progress.

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(Irrigation System cont'd.)

Aside from parts availability, weather and mechanical breakdown, we observed many PVC swing joint leaks. Midwest replaced up to fifteen defective nipples.

On May 21, we had one section of greens and tees complete. (The fairways would come later). On June 2, we watered several zones with the central computer for the first time; and by the last week of June, we were totally automated. Midwest returned several weeks later to replace 240 feet of a six inch main that was giving us problems. Their service representative makes regular return trips to repair minor leaks or deal with any other problems which arise.

### NEWEST CONTROLLERS AVAILABLE

Although the system was bid to include new VT-4 controllers, they were not ready at the time of installation. VT-3's were put in the field until July 9, when the VT-4's were finally ready.

We are, obviously, very happy with our new system. The most valuable item is the computer, as we can run our regular watering cycle; and at the same time, computer labor statistics or fertilizer applications. We have drastically cut down on run times, while watering much more efficiently. We do have some kinks inherent with any new system:

—Chronic swing joint leaks — (It might be advisable to use galvanized swing joints in fairways, or incorporate block valves to eliminate constant swing joint pressure).

—Dirty valves — occasionally causing heads to stick on.

Except for inferior pipe, we now employ the most efficient up-to-date irrigation system available. The difference is night and day. We can now focus our energies toward capital improvements instead of wasting valuable hours keeping up with a dilapidated system!

### PROJECT SUMMARY

**TOTAL COST — \$163,000**

—\$158,000 bid & \$5,000 for 2" pipe on greens and tees.

—\$38,500 for controllers — \$1,100 per clock, 35 clocks

—\$5,100 for computer

—\$118,800 for swing joints, heads, wire, etc.

**START DATE — April 30, 1986**

**COMPLETION DATE — July 2, 1986**

**VT-4 Clocks installed — July 9, 1986**

**The following are pictures from the GCSAA  
Convention held in Phoenix.**



*Owen C. Carr, speaker at the Prayer Breakfast along with John Ebel, the moderator.*



*Arnie Bodhaine, Ed Braunsky Jr., and Alan Frantik*



*Ray Schmitz & wife Jan, with Dick Trevarthan*



*Mrs. Oscar Miles, Linda Biggers and Jan Schmitz*

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