

Turfgrass Matters

Mid-Atlantic Association of Golf Course Superintendents

From the President...

It's April already, and the season is well underway for all of us.

Many thanks to all of the staff at Leisure World for helping me host the March meeting. We started off on a good note with an attendance of 99 for our first meeting of the year. I hope we can keep getting a crowd like that at all of our meetings this year.

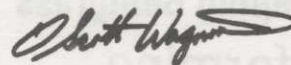
Many things have happened since my last message. I would like to take this opportunity to welcome Chris Ayers to the Board of Directors. Chris has taken on the task of Director of Communications, and I'm sure he will do a tremendous job in that position. Also, congratulations are in order for George Renault who was elected for another term on the Board of Directors of the G.C.S.A.A.

Everyone by now should have received their 1995 dues statements. Please take the time to fill out the member information sheet, as this will be very helpful for

us to update and make sure that we have the correct information in our new computer system. Also, please be sure and check the address where you want your Association mail to go. With the correct address, and knowing where you want to receive your mail, all of our correspondence should be made in a timely fashion. (That should part is my job.)

Our April meeting will be hosted by Falls Road Golf Course. The host superintendents being Nick Vance and Jeff Wahl. Golf will be at Falls Road, with the dinner and meeting to be held at the Marriott Suites.

I hope spring is going well for everyone, can't be as bad as last year's, and I will see you at our April meeting.



Notes....

It was a pleasure to meet many of you at the March meeting at Leisure World. For the first meeting of the year, having 100 or so attendees was impressive.

Things seem to be rolling along smoothly now that the database has been converted to a new format ... correctly. Unfortunately, simple things don't always happen as planned!

You should have your dues notice by now. Please take the time and read the membership data information. Correct any outdated information. We are doing the best we can in keeping things correct. We need your input to do so.

An associations two most important assets are its members and its membership information. To keep in touch with you, the member, we need to have accurate information.

Use the member data sheet. Mark it up, make changes, highlight incorrect information. If we don't understand your notes, we'll call you. If you don't take the time to make the corrections, we don't know that information is not correct.

Along those lines, the U S Postal Service made a change on March 1, 1995 in delivery procedures. Many of you using PO boxes and Rural Route numbers are having mail returned to sender. As we get this mail returned we are calling you for the new correct address.



IN THIS ISSUE

From the President.....	1
Notes.....	1
A Bad Hair Day	2
Education Notes	3
April Speaker	3
Golf Information	3
MAAGCS GOLF NOTES	3
Bats on the Golf Course	4
Water Quality Monitoring	5
Meeting Site's for 1995	7
New Members	8
Meeting Information	8

Your Shop's on Fire or My Definition of a Bad Hair Day

By Bill Neus

July 13, 1994 began with a phone call from the vice president of our company at 3:55 a.m. Now, several things were immediately apparent to me; he's not calling at this hour to say good morning, tell me what a great job I'm doing, or give me a raise. In not so many words, he told me that this morning I will be afforded a life experience that would allow me to meet new and interesting people, consume my every waking minute, challenge my skills, and test my sanity. Or, as he so bluntly put it, "You better get to work. Your shop's on fire."

As I was doing 80 mph down the beltway a State Policeman pulls up along side and screams at me through his bull horn to slow down, but he doesn't pull me over. Can't you hear that conversation, "honest officer, I really am going to a fire."

About one mile away from Hobbit's Glen, I could see flames over the trees against the dark sky. A million things race through my mind and then true panic sets in, the media is going to be there and I haven't even washed my hair yet.

It's easier for me to laugh about it now, but that day and for many months after, was a nightmare that wouldn't end. Insurance investigators swoop down, looking to hang somebody and treat you like a criminal. Insurance adjusters challenge every nut and bolt in your inventory assuming that, surely, you don't keep any parts in your parts room. So, what did I learn? That's easy, don't have a fire! But if you do, here are some things that might help you through. Borrow a camcorder and videotape everything in your shop with narration. Most of us have equip-

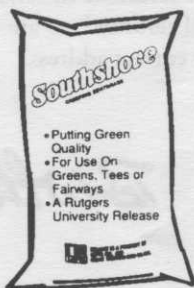
ment inventories, but good luck trying to figure out all the other stuff after the fact. The dollar figure of supplies and shop equipment is astronomical. The first two questions you'll hear when you arrive at the site will be, "where are the chemicals stored and we want your MSDS sheets now!" You better have them ready and they better be updated. Don't give away your master copy. Have someone make 10 full set copies of just your active inventory MSDS first. I had to give away 7 sets in three hours. Every official wants them and nobody shares. Keep a complete second set of critical records off site. God help you, if your only set of records go up in smoke. If you store pesticides in the shop, just wave good-bye, because they will let it burn. The reason is toxic smoke and runoff. Do yourself a favor and get a separate storage building.

In a disaster like this, we tend to focus on the material things. Don't forget the needs of your staff. They want to know if they still have a job, where to go, what to do. Get them together very quickly for reassurance and let them know your plan of attack. Be honest, tell them that you don't have all the answers and you'll need their help in finding solutions. Delegate as much as you can to as many staff members as possible. They truly want to help and will rise to the occasion.

Finally there's you. The next 6 to 8 months will be a study in frustration, red tape, endless paperwork, and many visits from your three new friends, Bud, Jack and Johnny. Don't despair, this too will come to an end. Along the way, there will be some bright spots, the most gratifying of which is the overwhelming support from the distributors and superintendents. Over time, the bad memories will fade, but all of those wonderful people who offered their help will stay with me forever.

Southshore Creeping Bentgrass

It's outperforming
some well-known
competition with its
dense, upright growth
and attractive color!



To learn more contact:



Lofts Seed Inc.
Bound Brook, NJ

(301) 595-1970
(800) 472-7701

Education Notes April 1995

April Speaker

We are fortunate to have Mr. John Bergquist from the Maryland Department of Agriculture, Pesticide Regulation Section, as our speaker. Mr. Bergquist is the Special Programs coordinator for the M.D.A. and will discuss two of his programs with our group. These programs are the Unusable Pesticide Disposal and Pesticide Container Recycling programs. Those who attended Wednesday of "Turfgrass 95" may recall the mention of these programs by Mary Ellen Sefting.

My hope is that by learning more specifics the Membership will benefit from these programs that are available to it. In addition our Members may be able to assist the Department of Agriculture with the continued success of these worthwhile activities. Please come prepared with questions and ideas so that we all may find a way to improve our operations.

Golf Information April 1995

Points Tournament

April's meeting will be at Falls Road Golf Course with Nick Vance as our host. The tournament for the day will be our points tournament. Tee times are available from 11:00 am to 1:00 PM. Cost will be \$10 for the tournament and \$10 for golf carts. You MUST call the Pro shop to reserve a tee time at 301-299-5156.

PRIME SOURCE INC. Pond Maintenance Specialists Environmentally Safe

- We offer cost effective, long term, biological control of Filamentous Algae and Macroalgae, and other pond weed problems, through the use of Israeli Carp and Triploid Grass Carp.
- We also offer a full line of surface and subsurface aeration, as well as decorative fountains.
- 100% effective Muskrat control devices, manufactured by us, and safe for use around golf courses.
- Full line of pond test equipment
- Mechanical cleaning of ponds is available
- Comprehensive pond analysis by our staff, also available.

Contact: Dick Ashley
Phone: (803) 285-7597

30 years experience working with Southeastern Golf Courses

MAAGCS GOLF NOTES

Many thanks to Scott Wagner and the entire staff at Leisure World for the fine day at our March meeting. The golf course was in great condition, the weather was perfect, and the dinner was excellent. Thanks Scott for a job well done!

Only 15 players braved the 70 degree weather to play that day. Winners for the day were; Scott Wagner 1st gross (66), Jim McHenry 2nd gross (73), Paul Brandon 1st net (63), and Walter Montross 2nd net (64). NOTE: Scott even beat his Pro, Luther Showaker that day by one shot.

April's meeting will be at Falls Road Golf Course with Nick Vance as our host. The tournament for the day will be our points tournament. Tee times are available from 11:00 am to 1:00 PM. Cost will be \$10 for the tournament and \$10 for golf carts. You MUST call the Pro shop to reserve a tee time at 301-299-5156.

Keep your eyes open for your entry form to this years Superintendent/Pro tournament. This years tournament will be held at Suburban Club on May 9th. The field will be limited so get your entry in early.

WINNERS AT NATIONAL TOURNAMENT

Scott Wagner	Flight 1	1st Gross Points
Sean Remington	Flight 2	1st Gross Points
Bill Shirk	Flight 2	6th Net Points
Joe Emanuel	Flight 2	7th Net Points
Mike Evans	Flight 4	3rd Gross Points
George Renault	Flight 4	7th Net Points
Nick Vance & Scott Woodhead	4-Ball	6th Net
Tim Sage	PoppyHills	CTP
Lentz Wheeler	Division	Long Drive

Congratulations to all the winners! See you April 11 at Falls Road.

Jim McHenry
Golf Chairman

Bats on the Golf Course

Kevin Pryskei CGCS Cattail Creek Country club

Before undertaking a program to encourage and increase a bat population on your course, some of the myths surrounding these warmblooded mammals must be dispelled and expressed to the golfing population.

Bats are generally quite harmless to people. They are quite shy and will avoid human contact. They will not become tangled in your hair as seen in many "B" movies. If handled, however, they will bite. Bats are capable of contracting and Carrying the rabies virus, but they are no more susceptible to this disease than a house cat or dog. In fact, they are less apt to contract the virus because they do not interact with other mammals that can transmit the disease. According to the Audubon Society, if a random sample was taken of all bats in a given area, less than 1/2 of one percent would be found to be infected. Dr. Merlin D. Tuttle, author of America's Neighborhood Bats, states that "in more than four decades, public health records indicate that only sixteen people in the United States and Canada have died from bat-borne diseases. Placed on perspective, this means that the odds of anyone dying of a disease transmitted by a bat are less than one in a million. In contrast, in the U.S. alone more than ten people die annually from dog attacks, not to mention dog and cat transmitted diseases."

Bats have body lengths of three to six inches and wingspans varying from eight to sixteen inches. As they fly, they navigate by emitting pulses of sound through the mouth. These are reflected back to their sensitive ears giving the bat the location of an object, as well as its texture and other characteristics. The general thinking that bats are blind is yet another myth. Bats have keen eyesight on which they rely for long-distance orientation. They become active at dusk and can be observed by watching the sky for birdlike figures that flap their wings very quickly yet fly slowly and erratically. They are often found near water features as this habitat provides the insects needed for their food. As a nocturnal animal, the bat eats when the insects are out, in contrast to birds

which feed during the day. Having a population of bats on the golf course should have an immediate appeal to most people because of their enormous capacity for consuming insects especially mosquitoes. A single brown bat, the most widespread species in North America, can eat three to seven thousand mosquitoes each night. Other insects

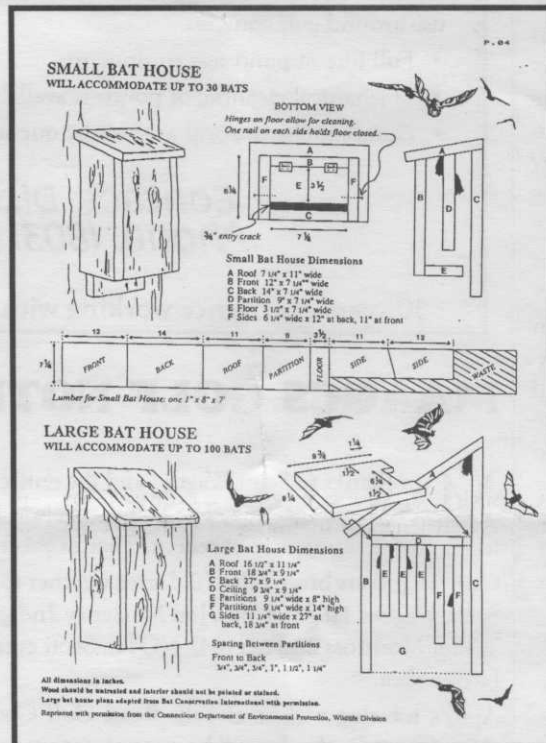
Bat houses have narrow openings at the bottom for bats to enter and rough surfaces for them to hold onto. The box should be fastened to the side of a building or tree and be twelve to fifteen feet above the ground.

During the winter months bats migrate south or to nearby caves for a period of hibernation because most species cannot survive freezing temperatures. As they return, they will seek out sites for nesting, so it is important to have the boxes installed by early April. The interior of the box should stay very warm and should be placed where it will receive the maximum amount of sun, especially in the morning. If your location cannot provide enough sunlight to warm the interior to at least eighty degrees you may want to add tar paper or dark colored shingles to the roof. Cooler locations may not be ideal for nursery colonies, but they may attract a colony of bachelors which prefer cooler temperatures. A year to a year and a half is the common waiting period for bats to inhabit a new house. If it is not occupied within two years, change the location of the box. You will know when the house is being utilized by the appearance of guano or bat droppings on the ground below. The house is open at the bottom to eliminate

the need for cleaning and to prevent birds from nesting. If bats live on your course and the house is appropriately located, they will find it.

The following building plans were reprinted from the Audubon cooperative Sanctuary System, Bat Conservation International, and the Connecticut Department of Environmental protection and are typical of most bat house dimensions.

As with all habitat enhancement projects, it is important to educate and explain to golfers the importance of this program. Post information or use your club newsletter to alleviate any apprehension that there may be about bats on the golf course. Most people will welcome a population when they understand the role these animals play in your pest management program.



consumed are cut worm moths, corn borer moths, and potato beetles. That is a pretty effective insecticide that should be an addition to any IPM program.

Unfortunately bats are feeling a housing crunch with their favorite old hollow trees, barns, and old houses disappearing. Nearly 40 percent of America's bats are on the Endangered Species List. Human disturbance will often result in an adult bat abandoning their young. Bats only raise one pup per year so their populations do not increase quickly. Golf courses can play a major role in ensuring the survival and growth of bat species in your area. Bats prefer sites that are within a quarter mile of streams, lakes, or wetlands making golf courses ideal for the installation of bat boxes. This habitat provides the insect population needed for food.

Water Quality Monitoring

By Bill Shirk, CGCS, Queenstown Harbor Golf Links

A brief history of Queenstown Harbor Golf Links starts at its location which is situated on the mouth of the Chester River and Little Queenstown Creek which is located less than a mile from the Chesapeake Bay. Queenstown Harbor Golf Links is located just east of the Chesapeake Bay Bridge. Queenstown Harbor Golf Links was built on 750 acres of farmland, hardwood forest, non-tidal wetlands, and tidal wetlands. The property has been owned and operated as a farm until 1990 by Washington Brick & Terra Cotta Company for 25 years. After 7-1/2 years of permitting process and 43 public hearings, Washington Brick and Terra Cotta finally broke ground on August 1, 1990, on their newest project, a 27 hole upscale public golf course.

During one of the many public hearings, which seemed to be constantly changing as to the law and interpretation of what a wetland was and how it is to be protected and preserved, the Critical Area Commission and Washington Brick and Terra Cotta Company agreed to have 13 ground water monitoring locations on the property and to be tested by an independent lab. This

testing would be done four times per year. A report from each testing would have to be sent to the Critical Area Commission, Queens Anne's County Planning Department, Washington Brick and Terra Cotta Company and to Bill Shirk CGCS, Golf Course Manager. These reports were to be used to help me with our integrated pest management program and to provide information to the Critical Area Commission to help them decide whether golf courses could be located in the critical area zone of the Chesapeake Bay and its tributaries. The critical area zone is the area within 1,000 feet of the Chesapeake Bay and its tributaries.

The water monitoring is done by Apogee Research Inc. from Bethesda, Maryland. Steve Roy is in charge of this project and with whom I work closely to make adjustments to fertilizer programs according to the monitoring results.

The 13 monitoring wells were installed using a drilling rig with hollow stem augers on July 6, 1990. Notice this was done prior to construction in hopes of getting some data prior to golf course usage.

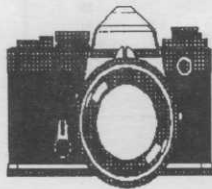
On November 15, 1990, nine wells were tested. Several wells were damaged during construction and three new wells were added in 1994 as part of construction for a new nine, B-14, B-15, and B-16. We now have close to five years of data. I will highlight the first report and the last report and let the charts show the rest.

November 9th Testing Results

The drinking water standard for nitrate-nitrogen is 10 MOIL. Two samples, well B-7 and well B-8 revealed elevated nitrates. Nitrates in well B-7 were 14 MG/L and well B-8 was measured at 19 MG/L. These wells are located at a ground water discharge point to the Chester River and demonstrate significant impacts from the previous agricultural operation. Well B-4 which is located in the practice fairway also showed elevated nitrates at 6.1 MG/L. This area was in agriculture operations.

The average concentration of nitrate-nitrogen for all the wells was 5.34 MG/L. Well B-1 is considered representative of background undisturbed water quality as it moves onto the site.

Continued on page 7



Aerial Photography



Aerial photographs of your golf course--oblique, vertical, and single-hole shots. Find out if your fairways and greens need improvement. Have an aerial view to help in the planning of future landscaping and development.

Makes a great score card cover and photo for the Club House.

Prices start at \$475.00.

E&R Aerial Photography, 9210 Gold Dust Court
Laruel MD 20723 Phone/Fax (301) 369-0550

Water Quality Monitoring Tables

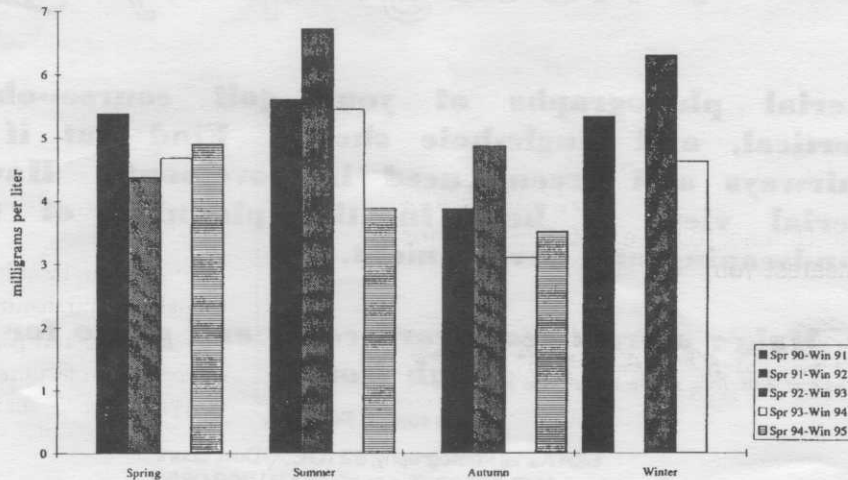
Table 1

WASHINGTON BRICK AND TERRA COTIA												
Queenstown Golf course - Water Quality Laboratory Report												
Sampling date: 11/15/90												
Sample ID	chemical: (mg/l)	Nitrate Nitrogen	Ammonia Nitrogen	Kjeldahl Nitrogen	Phosphorus (total)	Orthophosphate Phosphorus	Carbofuran (ppb)	Carbazyl (ppb)	Flowl (ppb)	Chlorothalonil (ppb)	Iprodione (ppb)	Atrazine (ppb)
B-1		0.02	0.90	9.80	0.88	4.10	< 2.00	< 2.00	< 2.00	< 0.05	< 0.10	< 2.00
B-2		0.13	1.10	12.00	0.05	< 0.01						
B-4		6.10	0.29	18.00	0.24	< 0.01						
B-7		14.00	0.60	0.60	0.52	< 0.01	< 2.00	< 2.00	< 2.00	< 0.05	< 0.10	< 2.00
B-8		0.02	< 0.10	< 0.1	0.20	< 0.01						
B-8		19.00	< 0.10	9.10	0.05	< 0.01						
B-9		2.60	0.10	3.70	0.02	< 0.01						
B-10		0.83	< 0.10	1.80	0.02	< 0.01	< 2.00	< 2.00	< 2.00	< 0.05	< 0.10	< 2.00
LOC-1(Little Queenstown Crk)		0.44										
CR-B-7 (Chester River)		0.39										
Performed by Martel Laboratory Services and Hazelton Wisconsin.												
(ft):	Depth to Bottom	Tape to water	Water level on tape	Depth to water	Top Casing	Water Level						
B-1	17.00	7.00	1.09	5.91	17.28	11.27						
B-2	16.50	11.50	0.98	10.51	21.41	10.90						
B-4	16.00	13.00	0.94	12.06	20.30	8.24						
B-6	14.00	12.20	1.54	10.66	19.90	9.24						
B-7	16.00	9.00	1.38	7.62	8.69	1.07						
B-8	20.00	14.50	0.95	13.55	19.94	6.39						
B-9	20.00	10.50	0.45	10.05	21.53	11.48						
B-10	22.00	16.00	0.96	15.04	24.31	9.27						
B-12	16.50	11.00	0.58	10.42	22.85	12.43						

Table 3: Nitrate-Nitrogen Sampling Results

Queenstown Harbor Golf Links														
DATE	B-1	B-2	B-4	B-6	B-7	B-8	B-9	B-10	B-12	B-13	B-14	B-15	B-16	All Wells Average
11/15/90	0.02	0.13	6.10	0.02	14.00	19.00	2.60	0.83	no samp.	no samp.				5.34
03/20/91	0.03	1.60	8.51	0.04	8.18	17.40	4.36	8.24	no samp.	0.05				5.38
06/20/91	0.03	2.90	7.90	0.04	7.50	15.00	6.50	8.90	6.80	0.52				5.61
09/30/91	0.02	0.02	no samp.	0.05	8.62	19.00	4.81	1.83	0.41	0.08				3.87
04/06/92	0.33	1.80	7.60	0.05	4.20	10.00	8.30	11.00	0.40	0.05				4.37
06/23/92	0.23	2.90	8.10	0.03	8.40	23.00	8.30	16.00	0.15	0.06				6.72
10/05/92	0.35	1.70	7.70	0.01	7.70	21.00	7.10	3.00	0.10	0.03				4.87
01/12/93	0.03	1.40	11.00	0.13	9.60	21.00	10.20	9.20	0.51	0.02				6.31
03/31/93	0.15	2.10	1.90	0.09	5.30	18.30	6.30	12.10	0.20	0.30				4.67
06/23/93	0.08	2.00	3.40	0.05	7.90	12.70	3.50	23.00	0.05	1.80				5.45
10/06/93	0.07	1.70	5.00	0.86	7.30	8.30	2.40	4.00	0.05	1.30				3.10
01/17/94	0.05	1.40	4.30	0.05	3.30	16.40	1.90	12.50	0.19	2.10	6.50	10.00	1.50	4.63
04/05/94	0.10	1.60	3.50	0.10	1.90	12.50	1.30	5.20	no samp.	0.80	18.30	9.50	4.00	4.90
06/20/94	0.30	2.10	4.50	0.40	2.90	11.20	1.20	5.40	0.40	0.80	10.70	7.20	3.20	3.87
10/06/94	0.40	1.40	4.90	0.20	2.00	14.50	0.70	6.10	0.30	1.30	6.60	4.40	2.40	3.51
Average	0.15	1.65	6.03	0.14	6.59	15.98	4.63	8.49	0.80	0.66	10.53	7.78	2.78	4.84

Figure 4: Queenstown Harbor Golf Links - Seasonal Comparison for All Wells Average



Meeting Site's for 1995

April - Fall Road Golf Course, Potomac, MD
May - Superintendent/PRO Tournament, Surburban Club, Baltimore, MD
June - Forest Park Golf Course, Baltimore, MD
July - Springfield Country Club, Springfield, VA
August - Bretton Woods Golf Club, Potomac, MD
September - Cripple Creek Country Club, Bethany Beach, DE
October - Rolling Road Country Club, Baltimore, MD.
November - Chevy Chase Club, Chevy Chase, MD
December - Turf Valley Hotel & Country Club, Ellicott City, MD

**The Mower
You Need.
At the Price
You Want.**

Now you can buy a full-featured EagleStar® 36-inch walk-behind commercial mower for as little as \$1,999.*



Our mid-sized mowers feature:

- 5 speeds plus reverse
- Kawasaki engines
- New deep V drive belt design

*for 36-in. cutting deck
48-in. models also available.

Call the EagleStar Hotline, toll-free, 800-929-1948 for name of dealer nearest you.

 **EagleStar**
Made in USA

Water Quality Continued from page 5

Nitrate levels at this well were measured at .02 MOIL. Phosphorus levels (.88 MOIL total phosphorus and 4.10 MG/L orthophosphate) were quite high.

Three wells were tested for pesticides B- 1, B-7, and B- 10. All samples provided results at levels below analytical detection levels. The chemicals tested for were Carbofuran, Carbaryl, Pendimethalin, Atrazine, Chlorothalonil, and Iprodione. Please see Table 1 for November 15, 1990, test results.

The results for the last testing to date was October 6, 1994.

After nearly five years of testing nitrate-nitrogen, (NO₃) is the primary constituent of concern at the golf course. All other testing has become analytical undetectable. Ground water samples are analyzed for nitrate-nitrogen primarily because of two reasons: the concerns of nitrogen additions to the Chesapeake Bay and its usefulness as an indicator of ground water quality conditions and movement.

The average nitrate-nitrogen concentration at the site decreased from the previous sampling event. The average concentration from all wells decreased to 3.5 MG/L in October, 1994, from 3.9 MG/L in June, 1994. Only one well, B-8, had nitrate-nitrogen concentrations above the drinking water standard. The other well which had previously been above 10.0 MG/L, B-14, dropped to 6.6 MG/L in this sampling event. B-8 has always been high. Our conclusion is that this well is located next to an active agricultural use, corn, soybean, and wheat production, since testing has started. Also, B-14, B-15, and B-16 are located in the same agricultural use until fall of 1993. This area has now been developed in an additional 9 holes of golf. We believe that test results for these wells will show a decline in the near future.

The results for the October 6, 1994, sampling and each of the past sampling results are on Table 3. Also on Figure 4 is a seasonal comparison for all wells' average.

In conclusion, I would like to point out that even though the nitrate-nitrogen testing has shown valleys and peaks, of which hopefully we can refine our fertilizer applications to level these valleys and peaks, that Queenstown Harbor Golf Links has dropped the nitrate-nitrogen levels from 5.34 MG/L in November, 1990, to October, 1994's, results of 3.51 MG/L.

New Members

Please welcome the following members

Class A

Marcus Holmes - Virginia Oaks Country Club
Byron Lash - Lowes Island Club

Class B

Steven Raabe - Rock Creek Golf Course

Class C

James Rugg, Jr. - Horry - Georgetown Technical College

Class D

Brendan O'Rourke - Bonnie View Country Club

Class F

Charles Bergamo - Pro Lawn Products

Meeting Information

April 11, 1995

The April Meeting will be held at the Marriott Suites on Democracy Boulevard in Bethesda. Cocktails start at 6:00 PM with a cash bar. Dinner is at 7:00 PM. There are no shower facilities at the Golf Course so dinner will be casual. The Dinner/Meeting fee is \$31.00.

Directions to the Marriott Suites:

From the South, take I-95 North to I-495 North to I-270 North. At the first exit on I-270 exit onto Democracy Boulevard east. Travel 4/10 of a mile. The hotel is on the left.

From the East/North, take I-495 South to Exit 36. Exit onto Old Georgetown Road North (to Rockville). Turn left onto Democracy Boulevard. Travel 7/10 of a mile. The hotel will be on the right.

Call or FAX your reservations. The deadline to RSVP is April 7, 1995 at 10:00 am.

Call (800) 725-5822 or (804) 340-5918 to RSVP.

FAX your reservation to (804) 340-8455.



Mid Atlantic Association
of Golf Course Superintendents
P O Box 9528
Virginia Beach, VA 23450-9528



U.S. POSTAGE
0032
H METER 489456

Phone (800) 725-5822
Fax (804) 340-8455
e-mail btharp@infi.net

