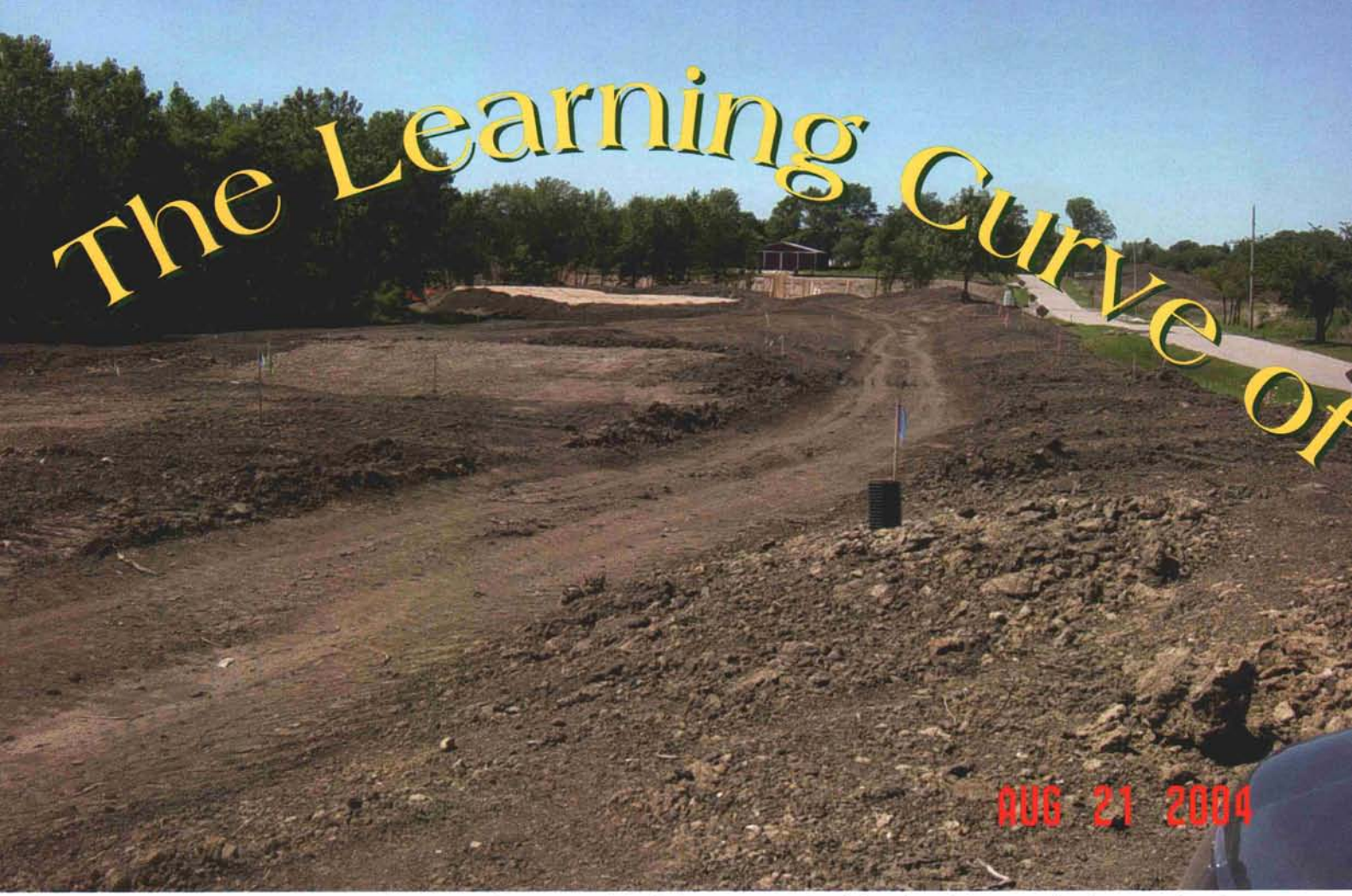
The Learning Curve of



Hole no. 9 at the new Hawthorn Woods Country Club, during construction (above) and four weeks after germination.

For those of us who love the unique beauty that a golf course holds and appreciate the wonderful memories that this stage can create, the opportunity to grow in a golf course and play a small part in its refinement and, in turn, the game of golf is a special opportunity both in the feelings and challenges involved.

These first two pictures are of Hawthorn Woods Country Club's ninth hole during construction and four weeks after germination. For me, it was important to appreciate these moments of satisfaction and envision that first golfer on the tee. The satisfaction helped me to face the many frustrations and accept the many daily challenges as opportunities to devise solutions and, in the end, make it a more enjoyable golf course to play.

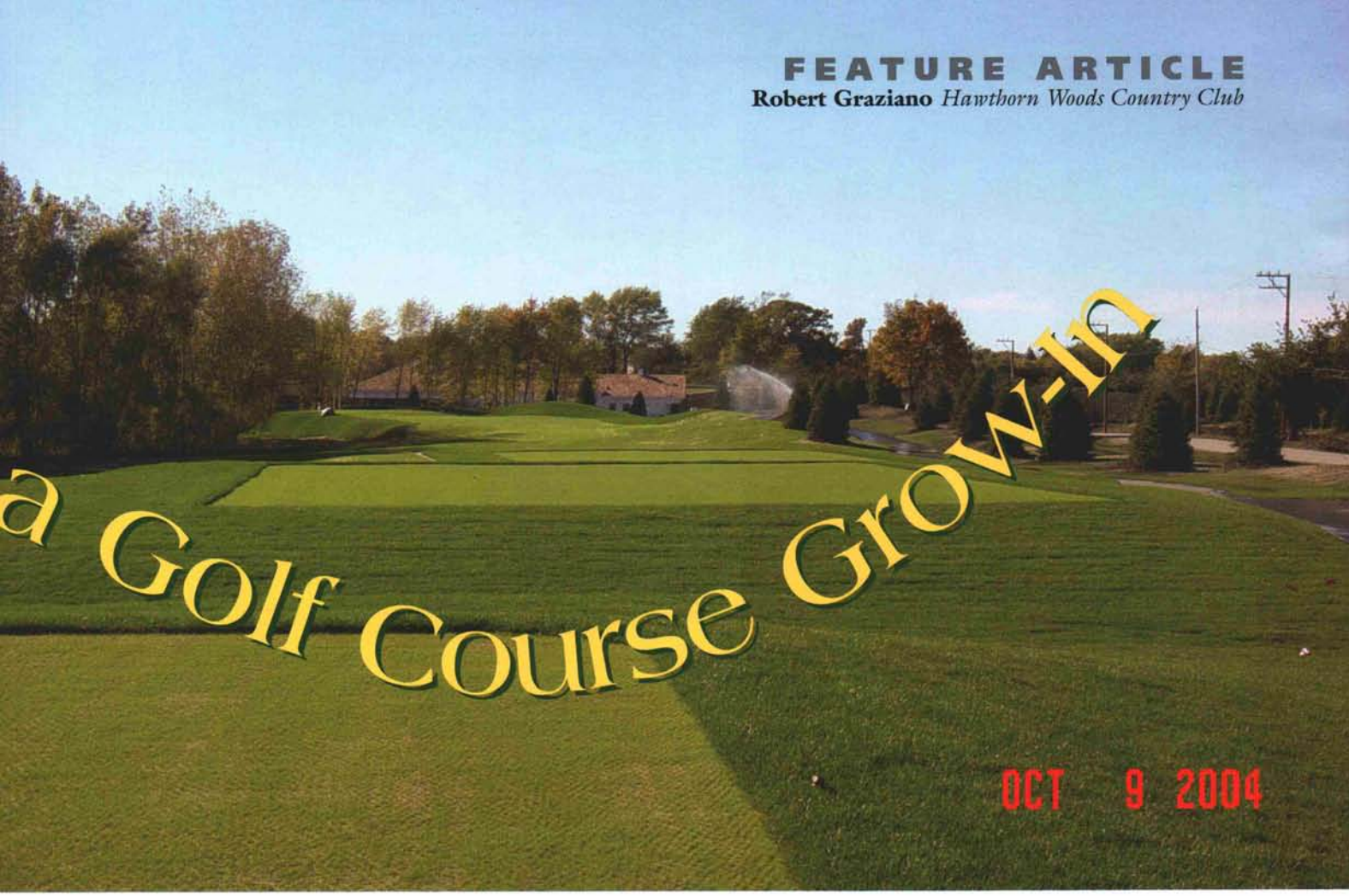
Many of us have had the opportunity to experience renovations on an existing golf course...

This article is not intended to discuss the many technical aspects of golf course construction and grow-in. Through experience, research and recommendations, we can all choose from the many grasses, their cultivars and their seeding rates for greens, tees, fairways, rough and natural areas. Also, a variety of styles and methods exist to fertilize and protect new turf from disease. And there are a variety of methods and styles to accent a golf course with annuals and perennials, flowers and shrubs. But this article hopes to identify some of the other, different challenges I faced during the construction and the grow-in process of Hawthorn Woods Country Club. I hope that you gain some sense of the enjoyments, the frustrations and the challenges and will have an opportunity to apply some of my experience to assist in your own renovation or grow-in project.

Many of us have had the opportunity to experience renovations on an existing golf course. Whether or not the course involved holds a PGA Tour event or is a public or private golf course, a successful renovation requires the ability to coordinate, to organize and to follow through on many diverse

Robert Graziano *Hawthorn Woods Country Club*

a Golf Course Grow-In



aspects. However, a grow-in requires all of the above on a much larger scale and at a much greater speed. In going from pre-fertilization to seeding and to irrigation, hole by hole, the speed and complexity of each day increases. One key is to go slower and to continue to do one thing at a time as you multitask each day. If you believe that you can make a smooth transition from renovation to new golf course grow-in, BE CAREFUL: they are not the same animal even if they appear to be. In a normal scenario, we come to an established golf course with a trained crew, proper equipment, a central location to work from, an established routine and a working irrigation system in place with an established turf. And still, the numerous issues of refining the system already in place and improving the existing standards through agronomic practices and renovation are a full-time challenge. Imagine starting from scratch . . .

At Hawthorn Woods Country Club, an Arnold Palmer-designed championship golf course of more than 7,000 yards from the championship tees featuring an effluent water system, is located in a gated community being built by Toll Brothers Inc. in Hawthorn Woods, Illinois. From day one, HWCC has faced numerous challenges that every new golf course in today's world will have to successfully overcome by designing environmentally sensitive solutions to reach its completion goals.

Some of the many problems HWCC had to overcome are listed below.

- Environmentally sensitive areas.
- Permitting issues.
- Drainage and tiling in accordance with the environmental demands.
- Water issues and standards surrounding the use of an effluent irrigation system.
- Bringing an irrigation system online.
- Power issues.
- Coordination of the different onsite contractors.

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- Solving construction issues.
- Hiring a maintenance crew.
- Training a maintenance crew.
- Acquiring the proper equipment in a fiscally responsible way.
- Maintaining without damaging, young and very sensitive turf.
- Working successfully without a central facility.
- Due diligence in decision-making and record-keeping.
- And last but not least, a requirement for unlimited patience!

The above challenge list just begins to describe the demands faced by the turfgrass professionals responsible for the grow-in of a new golf course.

The first action item I recommend is to read all of the different agreements of the many contractors involved. You must have a thorough understanding of the stated specifications and the fiscal responsibilities for each part of the construction and grow-in process. It will go a long way as daily workloads and responsibilities increase and the speed of construction and seeding program gains momentum. Once you have an understanding of the different contractors' responsibilities, the ensuing, sometimes daily, but always weekly, meetings will go more smoothly. This understanding will insure better communication and cooperation between the interested parties. The work performed will be more efficient and successful. Keep detailed daily logs. It does not happen as often as it should, but if you have the opportunity to be involved in the negotiation of the contracts and the planning and the design of the golf course and maintenance facility, DO IT! Your responsibility as manager of the grow-in staff will be judged on the opening condition and daily and yearly maintenance of the course and its facility, not on the construction process or its problems. Your input will go a long way in insuring a golf course that can be maintained effectively and successfully. Get and give as much input as you can.

In accordance with the above, make sure that your daily record-keeping is extensive and precise. Your logs and your record-keeping will be invaluable in improving your own systems. As well, you can identify construction problems and prevent their repetition. As future punch lists come into play, you will be able to sort out the varied fiscal responsibilities of each.

The second action item I recommend is to have a thorough understanding of your irrigation system and the programming of the central computer prior to seeding. I cannot overestimate the importance for proper coverage of the seeded and germinating areas. Also, the better your understanding of the system, its programming and its hydraulics, the better able you will be to prevent contamination or erosion by managing the amount and frequency of your watering programs and better insure proper head-to-head coverage. Computer-driven irrigation systems are becoming more and more sophisticated. Your ability to refine your irrigation system will be invaluable in a successful grow-in. Central control and communication to the controllers in a residential development under construction requires regular testing of home base-to-controller communi-

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cation. As homes are being built, the ability to communicate to individual controllers from home base will change. Sometimes, controller booster antennas will be necessary. Invest in a few extra and have them on hand. I guarantee you will find a use for them and minimize your frustration. Also, if you think you need six hoses, get ten. Hand-watering, especially on tees and greens, is key to consistent and complete germination and the rooting of newly sodded areas. No matter how meticulous the design of the system, wind and the inevitable irrigation problems that arise will require the precision of hand-watering. Extra-quick couplers and aqua-quicks are also important. In line with this theme, take extra time in training your syringing crew in proper technique of hand-watering: not only seeded areas, but sodded areas as well. Proper installation and removal of couplers and their reinstallation must be emphasized.

In new construction, power issues oftentimes require the use of portable generators to power up pumps and controllers. Even though it might or might not be your responsibility to fuel and maintain these generators, check fuel levels and be involved in coordinating their proper maintenance to insure it does not happen during a period that is 90° with the wind blowing at 20 mph. These steps insure that a pump or series of controllers do not lose power, disrupting your watering plans.

Regarding training: in a new restaurant, it is not unusual for newly hired staff to be trained and tested for weeks prior to opening day. In new golf course construction, oftentimes you will not have that luxury. If you have a sister course or have the opportunity to leverage a friendly relationship with a neighboring course to train your staff in watering, edging, sod installation, mowing, and the proper and safe way to operate golf course equipment, I recommend you do it! It will be a great investment of your labor dollar paying huge dividends through the grow-in process. Your sister course or your neighbor can benefit from these free labor dollars. As the construction speeds ahead and more young turf requires more and more of your attention, and as the varied fiscal responsibilities increase hole by hole, your ability to devote time to PROPER training will continued to be tested. We all know the most difficult part of our jobs is human resources. Do not depend on hiring an experienced, capable, golf course maintenance crew; you will probably have to create one!

The author's friend JJ, an expert in goose control.

One recommendation I know to be worthy of repetition is take advantage of today's technology. I for one know that there is a lot more my computer can do to make my life less cumbersome. I know my computerized irrigation system has many more aspects of refinement I still need to internalize in my programming skills. I ask for and receive invaluable technical support from our vendors. Also, I utilize the many specialty software systems available for record-keeping. These resources will pay for themselves in the extra time you are able to be on the golf course and not in the office.

I have been fortunate to have as my supervisor an experienced, capable, accomplished and often very patient grow-in superintendent to guide me through the bumps and sometimes bruises of my learning curve in golf course grow-ins. A great deal of work and planning was done this past winter. However, as the spring came and the first nine holes of tees, fairways, greens, rough and natural areas came out of dormancy, I cannot put into words the sense of satisfaction as all the hard work and sacrifice of last year produced what has started to really look like a golf course. I look forward to finishing the process and setting up this golf course for play. If the opportunity knocks for you to do a grow-in, DO IT! The experience is terrific and with the daily challenges, I guarantee that boredom will not be an issue.

Ending on a lighter note, I hope you're lucky enough to have a friend like JJ to chase those geese for you from day one of the fall season to prevent nesting and damage.