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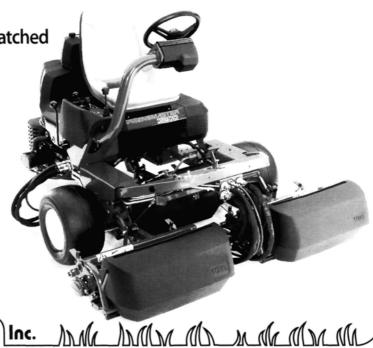
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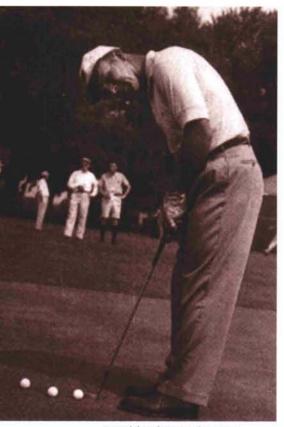


75TH ANNIVERSARY RETROSPECTIVE

Dave Braasch Hughes Creek G.C.

Milestones and Mayhem

Editor's Note: One article couldn't possibly do justice to 75 years of history. So, in honor of the Midwest's 75th anniversary, On Course presents a special decade-by-decade retrospective. This installment features the tumultuous 1960s. Coming in September: the '70s.



Arnold Palmer, who won the Masters in 1960, was one of the decade's top Tour players.

How to Make the 1960s: A Recipe

Follow this recipe closely, because the end result will blow your mind . . . or fry it.

- Take a dab of Jack, Arnie and Gary.
- Mix groovily with 18 Majors between them.
- Refrigerate for 17 minutes, five seconds (or the duration of Iron Butterfly's "In-a-Godda-Da-Vidda").
- Then, in a southern bowl, add some Dr. MLK and a splash of Malcolm X to the chilled mix.
- Though the old recipe called for segregation, we now find that to mix the Honkies with the Negroes, sitting overnight, is best.

While a wall is being built in Germany, serve with a few assassinations and some attempted space flights for good measure. Voila! You've got yourself a great dish!

Next step is to find some pot-smoking, peace-making, tie-dyewearing, NAM-ditching freaks who sit around in a purple haze all day to eat it all up when the munchies hit.

Now let's take a look at the big picture, the whole table, if you will; the feast above needs a larger context.

Milestones and Mayhem

During the '60s, the American people feasted on love and hate, peace and violence, accomplishment and disappointment. Sometimes the feeling was delicious; at others, stomach-turning. Consider this smorgasbord:

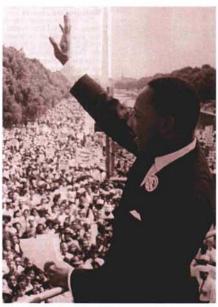
The first-ever televised presidential debate took place between

Nixon and Kennedy, unfortunately not to Dick's advantage. The Berlin Wall went up to prevent free movement between East and West Germany. Russia stored missiles in Cuba, and the United States government demanded that they be removed due to their proximity (within striking distance) to U.S. cities; the Cuban Missile Crisis resulted in the U.S. banning all trade with Cuba. The U.S. put its first man in space: Alan B. Shepard, Jr. made a suborbital flight in the Mercury capsule.

African-Americans began a series of sit-in demonstrations to desegregate lunch counters and similar facilities in the South. These led to some success, as James Meridith became the first black to attend the University of Mississippi. Despite desperate attempts, however, African-Americans still could not vote because of trumped-up literacy tests hindering their constitutional rights. A light at the end of the tunnel was Dr. Martin Luther King, an Alabama preacher who delivered the now famous "I have a dream" speech in Washington, D.C. with more than 200,000 in attendance.

On March 8, 1965, the first U.S. troops arrived in South Vietnam. The war progressed, leading to violent clashes on the home front, most notably ones between the anti-war protestors and the Chicago Police during the Democratic Convention in 1968 and later, a march on the Pentagon. A raid on a black speakeasy sparked the worst race riot of the decade. Forty-two perished and over 300 were injured in the nine days of fires and looting that followed.

Other notable events included the first-ever heart transplant by South African doctor Christiaan Barnard, the creation of the Peace Corps and introduction of "the Pill." Theodore



King to 200,000: "I have a dream."

Maiman invented the laser. Telstar I was the first worldwide communications link, enabling instant global news reporting. And then, of course, debatably the greatest event of the 1960s: "The Eagle has landed." Neil Armstrong and crew were the first humans to land on the moon on July 20, 1969.

A Kaleidoscope of Entertainment and Fashion

The pin-up goddess was Raquel Welch: 37-22-35. Hubba hubba—with measurements like that, you didn't have to be a good

actress. Johnny Carson was at the top of the late-night talk shows. On TV and the silver screen, you found Sesame Street, The Monkees, Easy Rider, Laugh-In and Dr. No—the first of many 007 movies to be released. Fashion statements included beehives, tie-dves, Vidal Sassoon (nice hair) and miniskirts (we love you, Mary Quant). The \$100,000-man was Mantle; and Muhammad Ali reigned as the four-year heavyweight champion. Billie Jean King won Wimbledon (and let's not forget she later became the first female tennis player to beat a man at an official public match). Wilt Chamberlain, between bedhopping, set a season record of 4,029 points (no match to his romantic record). And music? In the opinion of many, this decade produced some of the most notable music this country has ever seen (or heard) to date. This remarkable era delivered music by the Beatles, Jefferson Airplane (way before the Starship), Jimi Hendrix, Janis Joplin, The Doors, the Grateful Dead, Bob Dylan and so many others, many of whom can now be seen on VH1 attached to the phrase, ". . . and then began his/her descent into drugs and alcohol."

(continued on page 24)



The Beatles invaded America in 1964.

Where Have All the Good Guys Gone? A Decade of Assassinations

The 1960s saw at least four noteworthy American assassinations, each with its own consequences.

On November 22, 1963, President John F. Kennedy was assassinated in Dallas, Texas (purportedly?) by Lee Harvey Oswald. Two days later, Oswald was shot point-blank by local nightclub owner Jack Ruby on live TV. It was seen by millions of stunned viewers who were following the assassination aftermath.

In 1965, Malcolm X, one of the earliest pioneers for civil rights, was assassinated.

On April 4, 1968, Dr. Martin Luther King, civil rights activist and recipient of the 1964 Nobel Peace Prize, was assassinated in Memphis by James Earl Ray. Dr. King's death was followed by racial violence in 125 U.S. cities; rioting and destruction continued for seven days. On April 11 of that same year, singer James Brown made a televised plea for a 'night of silence.' His plea was followed by a live concert; one of the songs performed was "Say it Loud; I'm Black and Proud."

Later that year, on June 5, Robert F. Kennedy was—you guessed it—assassinated. Sirhan Sirhan was the guilty hand, this time in Los Angeles. Kennedy had just announced his candidacy for President. He was a strong believer in civil rights and was against the war in Vietnam.

Green Side Up

Politics notwithstanding, the golf world was also coming of age. With superintendents reigning such as Warren Bidwell at Olympia Fields Country Club and



John F. Kennedy, Jr., snapped a salute as his father's casket passed.

Jerry Dearie at Medinah Country Club, it's no wonder that Chicago was the golf mecca of tournaments in the '60s. During that decade, Medinah C.C., Beverly C.C. and Tam O' Shanter hosted four Western Opens among them. Champions like Arnold Palmer and Billy Casper were present for the game-play. Olympia Fields played host to the 1961 PGA Championship, with Jerry Barber as the winner.

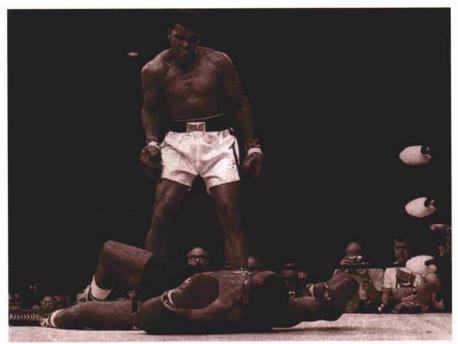
While some of these courses would go on to host tournaments for the next 30 years, some new tracks were nonetheless constructed, further enhancing the local golf scene. Some of the newcomers included Cress Creek C.C., Ravinia Green C.C., Village Links of Glen Ellyn and Pheasant Run Resort. Speaking of Village Links (weren't we?), the helpwanted ad for its superintendent placed in February 1965 required that "all applicants state their age and marital status" on their resumes. Boy, how the times have changed.

Who was pioneering this golf revolution and to what end?

Roy Nelson, CGCS, of Ravisloe C.C., became president of GCSAA in 1963. Too bad it wasn't 1965, when the national moved its headquarters from Florida to Chicago. In that same year, the MAGCS reached 245 members, making it the biggest local superintendents' association in the country. It would have been 246 if a great one, John MacGregor, hadn't already passed away. (John was a Scottish immigrant who provided members of Chicago Golf Club with 30 years



The U.S went on the offensive in Vietnam.



Champ Cassius Clay tells a floored Sonny Liston: "I told you I had a surprise."

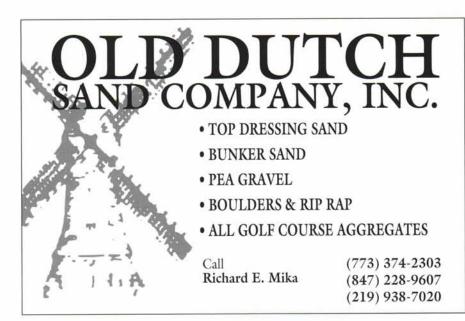
of excellence and served as president of the MAGCS from 1926-1928.)

"What now?" wonders the MAGCS. How do we improve ourselves and the people who teach us?

Five men established the Illinois Turfgrass Association; they were R. Milton Carleton, Bertram H. Rost, George Vaughan, Dr. Ralph F. Voight and Ben O. Warren. Their purpose was to create a fund to be used in support of turfgrass research and development at the University of Illinois. On July 27, 1960, U of I held its first Turf Field Day to show how funds from the ITF would be beneficial, and how ITF had contributed thus far.

Certification from GCSAA is born.

This program was built to recognize those persons who are truly (continued on page 26)











Nixon eked out a victory in 1968.

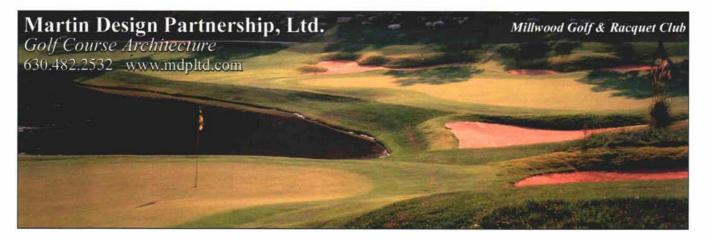
professional golf course superintendents. Such a person must have the specialized knowledge, the competence to practice and the attitude of a professional. Stan Metsker of Boulder C.C. and Ken Voorhies of Columbine C.C. were the first to become certified in 1968.

The '60s was an era we will never recapture, but those years clearly laid the groundwork for the present, be that good or bad. The steamy stew of politics, entertainment and sport are forever changed by occurrences commensurate with "White Rabbit," like it or not. Changes are still on the horizon, even regarding the fate of our precious greens and those of us who care for them, play on them and endlessly talk about them.





In July 1969, Neil Armstrong took "one small step for man, one giant leap for mankind."



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FEATURE ARTICLE

Dr. John Stier Department of Horticulture, University of Wisconsin-Madison

The Push for Effluent Irrigation

Editor's Note: This article—part one of a three-part series—originally appeared in the July/August issue of *The Grass Roots*, the official publication of the Wisconsin GCSA. Our thanks to the WGCSA for permission to reprint this discussion of a very timely topic.

Fights and arguments over water rights and water quality are as ancient as civilization. In Wisconsin we think of water quality and quantity issues as being remote: confined to the Middle East, or perhaps in our own Western states. In reality the truth is much closer to home. In today's newspaper two articles were devoted to the need to preserve water quantity and quality right here in Wisconsin. Over 70% of Wisconsin's citizens depend on groundwater for drinking, bathing, washing and other uses (Seely, 2001). Yet private wells are going dry, and aquifers beneath municipalities are being drawn down at an alarming rate. Part of the trouble is we are using water faster than the aquifers can be replenished. The other aspect is that of contamination: as water quantities diminish, pollution rates increase. Pollutants can come from natural causes like arsenic from the soil or from human by-products such as agrichemicals. While research has yet to document golf courses as being genuine polluters of water supplies, the public generally does not know of the results or does not believe the data.

FIGURE 1. WATER USE IN THE U.S. (Ratcliff, 1999)	
Industry power.	8.5%
Domestic	4.3%
Livestock	3.2%
Landscape	2.9%
Golf	1.5%

Nearly 80% of water use in our country goes towards irrigation (Figure 1: Ratcliff, 1999). In 1995, 134,000 million gallons of water were used daily for irrigation. Fifty million acres of agriculture land and over 20 million acres of residential ad commercial landscapes were irrigated. On a hot summer day, an 18-hole golf course may use up to 300,000 gallons of water. Golf course irrigation, though, accounts for less than 2% of water use in the U.S. One of the advantages of golf courses being run by increasingly educated and professional superintendents is the intelligent water use practices that have been developed and that are increasingly refined. Indeed, golf course irrigation is typically highly efficient. Nighttime or early morning irrigation results in minimal evaporative losses. Irrigation is monitored to avoid runoff. Since golf courses are nearly 100% pervious surface, the water that is not used by plants for growth will eventually percolate back to an aquifer, cleansed and filtered by the foliage and root systems of the turf and other plants. In addition, many golf courses have their own water supplies (e.g., ponds). Yet golf courses are highly visible to the public and are constantly under scrutiny. The homeowner who has had his water turned off by the city due to a

drought, or the environmentalist who questions the very right of a golf course to exist, view golf course irrigation as an obscene waste of a valuable resource.

Theoretically our water can come from four sources: precipitation, surface water, ground water and effluent water. For nearly 20 years golf courses in the western U.S. have increasingly turned to effluent water as a way to skirt the rapidly shrinking availability of fresh water. The economics can be favorable as well: effluent water costs can be 80% or less of potable water costs (Huck et al., 2000). Potable water is, of course, fresh, i.e., drinking water. Effluent water has been through at least one cycle of domestic use (McCarty, 2001). It is sometimes referred to as gray, reclaimed, recycled or even wastewater. According to the National Golf Foundation, 13% of U.S. golf courses used effluent water for irrigation in 1999 (NGF, 1999). The

majority of these golf courses were located in the Southwest, but an increasing number of golf courses in the Southeast are turning to effluent water. Lately, a sprinkling of golf courses along the East Coast have begun using effluent water. Mounting public pressure has forced the use of effluent water in some locations. For example, California passed legislation in 1992 requiring effluent water to be used, where available, for irrigation.

Effluent water is usually subjected to three levels of treatment before being discharged for reuse: primary, secondary and tertiary (McCarty, 2001). In primary treatment, screening and sedimentation are used to remove organic and inorganic solid materials. This includes sand, stones and other material which may be washed and placed in a landfill. Approximately 60-70% of suspended solids and 25-40% of biological oxygen demand (BOD)

are removed by the primary treatment. (BOD is biodegradable organic material such as proteins, carbohydrates and fats. Untreated, their decomposition uses oxygen dissolved in water, which is necessary for most aquatic life and creates septic conditions.) Primary effluent may be chlorinated to kill bacteria and decrease odor problems. It is NOT intended for irrigation as it can contain harmful human pathogens and other undesirable compounds.

Secondary treatment consists of trickling primary effluent water through vats of bacteria designed to remove up to 90% of the organic matter. Afterwards, the water is chlorinated to kill pathogens. The primary pathogen that engineers are concerned with is coliform bacteria. After treatment, secondary effluent water must have less than 23 coliform bacteria per 100 ml water. Secondary effluent water is a

(continued on page 39)

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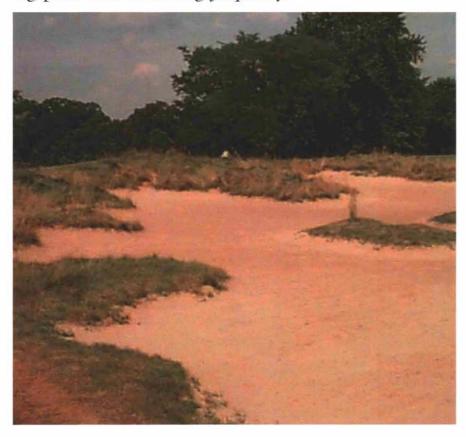
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Many Chicago-area courses date back to the early days of the 20th century. It's hardly surprising, then, that restorations and renovations of these classic, older courses are taking place with increasing frequency.



The Glen View Club in Golf, IL, is among the recently remodeled. Prior to the club's renovation, officials there determined that they wanted to change the look of the grass around their bunkers. They wanted to achieve an increasingly popular, wispy, links-inspired look. They felt that this would make for a natural, aesthetically pleasing transition from the bunker area to the fairways and greens. To achieve this look would require a special blend of fescue and bluegrass. Glen View Club's superintendent, Leuzinger, settled on this particular blend because it would be thinner than bluegrass and more drought-tolerant.

In 1998, Leuzinger asked a number of sod growers if they would consider growing a blend of grass that contained 60% fescue and 40% bluegrass. H&E Sod