



President's Message **MY HERO**

Everyone should have a hero. I have one and I am proud to admit it. Age shouldn't be a factor — one is never too old to have a hero. There are so many exemplary and outstanding people in our society that finding one to suit your interest, regardless of your age, is really very easy. For as long as I can remember, I've had a hero. They have changed over the years, but for the last ten or so years the same man has been the focus of my hero worshipping.

My first recollections of heroes go back to the late 1950's when the Milwaukee Braves were the terror of baseball. So many of the Braves' players were heroes — Aaron, Mathews, Crandall, Spahn, Burdette and Burton. But my favorite player was Joe Adcock. My dad knew him personally. Joe's wife was from Mineral Point and Joe was occasionally in that area on his off days, looking for horses to buy for his Louisiana ranch. The fact that I could get so close to him, through my father, made him an easy choice as a hero. He was a big man and a good hitter — I can vividly remember the day he hit four home runs in one game! Joe was a better hero than any of the other Braves and even better than Mickey Mantle as far as I was concerned.

Things started to change in 1959 and 1960. Vince Lombardi moved to Green Bay and started to coach the Packers. At a time when I was playing football in high school and when the Packers were winning lots of football games, baseball and Joe Adcock faded. The Packers had a lot of great players worthy of a heroship — Hornung, Taylor, McGee, Kramer, Gregg, Thurston, Nitscke and Starr. Poor Joe didn't have a chance! Suddenly, I couldn't get enough news

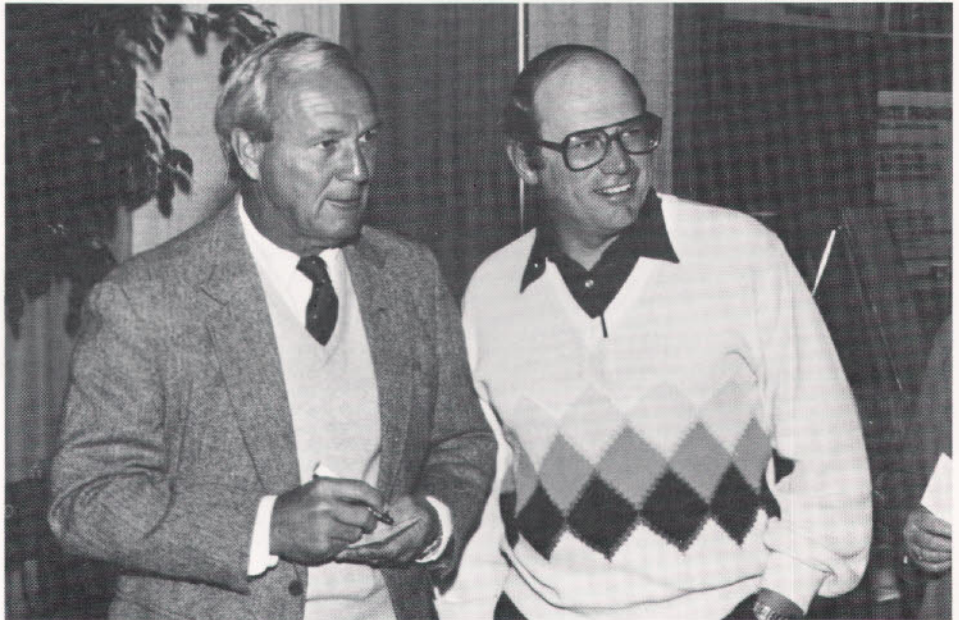
about Bart Starr. Bright, aggressive and cool under pressure describe him best. He was a great player and he had a great name. For years he filled the role of hero for me. He did the same for thousands of kids across the country.

I never felt limited to just one hero. Often, several people captured my attention for extended periods. What young American in the early 60's couldn't feel a certain amount of awe over President Kennedy? He was our youngest president and a war hero. He was courageous in his decisions and his actions. He was a particularly special person to me because, during the primary campaign against Hubert Humphrey in 1959, he was in my hometown of Fennimore to campaign and I was able to get his autograph. That impressed me then, as an eighth grader, and every once in awhile to this day I look at that autograph and feel a certain inspiration. It is one of my prized possessions. John Kennedy was everyone's hero, I think, not just mine.

golfers, for obvious reasons. Managing a golf course tends to narrow and focus one's interest in games, and golf caught my attention more and more, in terms of those playing it. An interest in a game begets an interest in the players and, showily and subtly, there was a gathering of my intrigue in one and only one player — Arnold Palmer. My admiration and respect for him have grown by leaps and bounds since then and he has been the perfect hero for me. I suspect he always will be.

Although he had passed his zenith when I started to take an interest in him, that didn't seem to matter. There are so many appealing things about him that I really didn't, and still don't, care about how many championships he's winning.

Undoubtedly, for myself or for any other Golf Course Superintendent, the greatest trait Palmer has is his love for golf courses. He once wrote, "A golf course is an intoxicating place," music to the ears of a man (me) who will spend many of the working years of his life on a golf course. He grew up on



Monroe Miller and Arnold Palmer discussing — what else? — golf courses.

There was a period of time, from the late 60's until the early 70's, that I didn't think much about heroes. I was either in the Army in Vietnam, starting a family, finishing school at the UW or getting my professional feet wet. There didn't seem to be much time for it. I lost track of Joe Adcock's career, John Kennedy was gone and Bart Starr retired as a player. But by 1973 I was paying more attention to

a golf course and lived in a house near the 3rd hole at Latrobe Country Club in Pennsylvania. Arnold's dad, Deacon, was the "Greenkeeper" at Latrobe when Arnie was born in 1929, and soon after that he became the golf pro as well, a "temporary" economy move by the club during the depression years. Deke Palmer not only gave golf lessons, he mowed fairways too. As a youngster, Arnold worked in

the golf shop and on the golf course. This had to influence the affection for golf courses he carries today. I think it is this connection Palmer has with my profession that makes him so special to me. Unlike so many other golf professionals who conjure up hatred for the golf course in order that they may "beat" it, Palmer has never lost his deep affection for them. He has put his knowledge of the game together with his love for golf courses and designed some of the world's greatest layouts. It was also great to learn, in 1983 from Arnold himself, that his father was a long time member of the GCSAA. One of Arnold's brothers, Jerry, is a Golf Course Superintendent at Latrobe Country Club. And Arnie didn't hurt us when he did the series of ads for Pennzoil using the Toro tractor on the golf course.

The GCSAA has done many many great things over the dozen or so years that I have been a member, but none of those comes even close to the stroke of genius they showed when they selected Arnold Palmer as the first recipient of the OLD TOM MORRIS AWARD. He was the perfect choice, the same one I would have made. And when Bob Hope received the 1984 award in Las Vegas, Palmer was there to observe the proceedings. What a guy! It is a wonderful feeling to know that he has respect for us and our profession.

Not only has he been kind to our profession, he has been great for

the game of golf and has probably done more for it than any other man. He is able not only to capture great respect for his game abilities, but also for his warmth, honesty and kindness. I think no one in golf ever has or ever will match this man for his charisma, his personality or his verve. His playing style is courageous and he approaches tough spots with bravado. He probably is the most determinedly aggressive player the game has known and he has an absolutely transparent desire to win. But he is also the ultimate sportsman — not a cryer or a complainer. This past summer he missed qualifying for what would have been his 32nd consecutive U.S. Open. The USGA has a requirement that he qualify, even though he is a past winner. Did he object? Nope. His only comment was, "I missed. I had every opportunity to make it. I feel that if you can't play, you shouldn't play." A great man with a great attitude.

Reporters like him — he always gives them the time they need and will talk with them, good round or bad, win or lose. And the reason "Arnie's Army" became such a big thing on the Pro Tour was that this man always has (and still does, as I can personally attest) signed autographs during a round of golf, almost no matter what.

The image of Arnie on the golf course is legend too. The sight of him tugging at his glove, hitching his trousers up, flicking his

cigarette into the rough, walking up to the ball and hitting it quickly and powerfully has thrilled millions of people, none more than me. And I always appreciated the way he tastefully dressed, avoiding the "distracting" clothes some golf pros like to wear. He always exudes class.

I am fairly serious in my hero worshipping. I have seen Arnold play golf three times. And believe me, there is nothing like standing so close to him that you can actually hear him ask his caddie for a club, to be so close that you are sprinkled by bits of sod after he has drilled a shot with his patented controlled lunge. I never had the chance, nor does anyone ever get the opportunity, to stand behind the umpire when Joe Adcock hit a home run! I have gotten Arnie's autograph on five different occasions, once even asking him to sign a can of Pennzoil for me, which he happily did. I collect books by him and about him. Several pictures of the man hang in my office. And next year, during our annual trip out East, Cheryl and I plan on making a side trip to Latrobe, his hometown in Pennsylvania, and visit the golf course where this marvelous man started his unparalleled career in golf.

He is a great man — greater than great and bigger than life. If you are looking for a hero, you'll never do any better than bestowing that honor on Arnold Palmer.

Monroe S. Miller
President

An Editorial

LOOKING BACK — WHAT VALUE IS HERITAGE?

We've all experienced the great anticipation that fills everyone at a family reunion when three or four, and sometimes even five generations congregate for a really good time. When the picnic and games are over and when the youngest of the kids have quieted down, the parents and grandparents and great-grandparents gather together visit and reminisce. Usually the sad times and dark moments are set aside and all conversations are happy and joyful. Family ties

are renewed. This is a part of "our past" that we cherish, a segment of "our heritage" that we treasure.

There are other times when our past conjures up other pleasant memories which are enjoyable and even soothing, too. In our more thoughtful moments we review our errors and recognize that mistakes are also important in shaping us. This is all part of our past, and things learned over generations have been as important in molding us as is the present.

And so it is, I feel, with our corporate past and with our professional past. Our corporate past, as a community or a state or a nation or an association, is celebrated on patriotic holidays and special observations. We make note of the birthdays of

tant and inspiring documents and books of years gone by. And, we keep in our minds those undying concepts that make this country great. We must recall these things so that they won't ever be lost. Our professional heritage is important to us for these same reasons.

We need to look at our predecessors and learn of the problems they struggled with. We need to study the solutions they derived for such problems. It is interesting to read that some of the same chaotic situations that existed on golf courses 50 years ago are still with us, and it is equally interesting to find how our professional forebearers dealt with those situations in their time. These presences of our past are practical and pragmatic.

I feel that once in awhile we need to look to our past for some inspiration. In my own case, I have become fascinated with my predecessor of years ago — John S. Bone. John was a prolific writer, offering intelligent thoughts on problems of the times that were published in local and national journals. He was an organizer and founder of the Wisconsin Golf Course Superintendents Association and served four terms as president. This proves, in my mind, that the presence and an awareness of the past can be an inspiration and a challenge, too.

Perhaps the grand prize won from history is perspective — that high point or crest in time from which we can look back to measure our progress and look forward with optimism. Without perspective, it seems to me that our past becomes a broken record of steps forward and back, forward and back, endlessly repeating the same mistakes and telling the same tale time and time again.

And I feel there is nothing wrong in confessing that, for me at least, “looking back” has opened the pages to a fascinating story, one not known to me previously and one that has been enjoyable to read. It has almost been a fun experience.

My sincere hope is that others in the WGCSA have some interest in “from whence we came.” It was my belief in this thought that worked as a catalyst for me in putting together some heritage material for the GRASSROOTS, and **not** my own selfish interest as editor.

It is only natural that I would end up attempting this; it is consistent with my personality. I have, for as long as I can remember, had an interest in the past. I like old things. I enjoy historical novels and biographies. I love to visit historical sites and museums. I like old pickup trucks and old tractors and old radios more than new ones. I've enjoyed playing a part in my Club's activities in reestablishing the local Indian heritage of our

property through the “Historic Places” program of the National Park Service. First time visitors to my office are somewhat intrigued by the many framed old golf course pictures that cover the walls, by the old golf clubs on display and by the old tools that were found in golf course maintenance shops 75 years ago. My library includes several priceless (to me, at least) books on golf course management published in the early 1900's. I am completely devoted to the Golf Foundation of Wisconsin, for a lot of good reasons but especially because we need a home for a library and museum as a place to preserve our golf heritage in Wisconsin.

This trip back in time consumed a goodly portion of whatever spare hours I've had in the past few months. But it was a fruitful trip and worth every minute spent and every effort expended. I have a new sense of the men who preceded me in this profession and I have acquired a heightened respect for them and how they confronted and dealt with the problems and issues of their day. I feel more strongly than ever that we are involved in a very noble endeavor and are to be envied for the good we do on this earth and in this society. My affection for the WGCSA is deeper than before and my dedication is much greater now that I recognize the examples set by its founders.

It was not a lonely trip, either. I had a lot of help. Credit and thanks are extended to Dr. Jim Love for the use of his archives and other resources. Emily Wixson, a researcher at the Steenbock Library on the UW—Madison campus, was so gracious and helpful that I'm still humbled by her interest in this project. Janet Seagel, Librarian and Museum Curator for the USGA in Far Hills, New Jersey, took time from her busy schedule to trace back any number of pages and to send them to me — materials that were not part of the University's collection. And the interest and contributions of Bill Sell, Charlie Shiley and Walt Stepanik were invaluable. Without these people, this attempt would have

ended in futility.

Please do not expect this brief history to be all inclusive. It is only a thumbnail sketch of the early formative years of our Association, coupled with bits and pieces of our more recent past. It frustrates me that it is incomplete, but at least it is a start. I know it contains omissions and I fear the errors that there might be. They are innocent mistakes, however; and, if they are noticed, they need to be corrected and included in the written record.

My hope is that you will at least find it enjoyable reading. Anything beyond that is all “profit.” Maybe we'll gain more access, for example, to old records, minutes and publications from the WGCSA. I firmly believe that you will experience a real pride in the men that preceded us in this organization and in this profession.

Read on.

Monroe S. Miller, Editor
THE GRASSROOTS

In Memoriam — Harry H. Hanson

Harry H. Hanson, a charter member of the Wisconsin Golf Course Superintendents Association and the Golf Course Superintendents Association of America, passed away on September 20, 1984 in a Madison hospital after a long illness. He was 87 years old.

Harry spent all of his working years on Wisconsin and Illinois golf courses. He started in our profession working for his father, who was the Greenkeeper at La Crosse Country Club. Among the golf courses managed by Harry are Maple Bluff Country Club, Sun Prairie Country Club and Blackhawk Country Club. He also built golf courses in Illinois and in Chilton, Wisconsin.

He was a AA member of the WGCSA and a AA member of the GCSAA. He held a 50 year pin from the GCSAA and traveled to the Sylvania Country Club in Toledo, Ohio to participate in the GCSAA 50th Anniversary celebration.

Our deepest sympathies to Harry's family.



A Player's Perspective

OBSERVATIONS ON GOLF COURSE REMODELING



By Dr. David U. Cookson

Every green superintendent is called upon to consider or implement some type of course remodeling or renovation at intervals, be it as simple as refurbishing or replacing a bunker, or as extensive as a major rebuilding project involving greens and fairways. My observations have suggested to me that a few basic principles should be considered no matter the size or complexity of the job, since ignoring them through either neglect or being unaware of these premises too often leads to a highly unsatisfactory outcome.

First, one must have a definite plan — a simple starting point to be sure, but often not followed. I have seen bunkers and even greens remodeled with no prior insight into the final appearance, nor thought to all the steps necessary to carry out the task, with the subsequent result frequently needing to be redone. If the proposed project is a major one, and involves a significant redesign of the original architectural conception, outside advice should be obtained, and preferably from a knowledgeable golf course architect. If funds are not available for this (which is short sighted, since money can usually actually be saved here by a proper plan ahead of time), somebody, or a group in the club, who has an interest and

appreciation of course design with some knowledge of conditions and problems solved in other places, should be involved in the planning. It is imperative that the superintendent not only have some other input into the design of the remodeling, but also that the total responsibility for the final success or failure of the project be removed from the superintendent. A costly renovation that does not turn out well, and was not initially planned with the aid of a professional architect or a respected group of club members, is too much of a burden for a green superintendent to be able to bear.

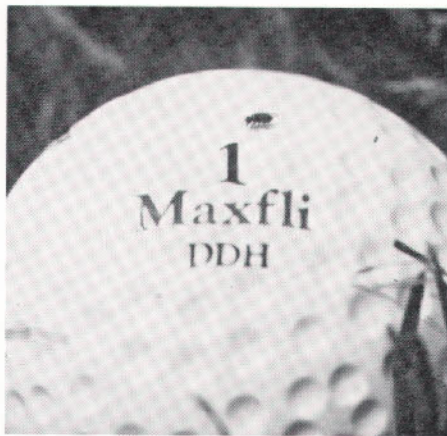
The renovation or remodeling must be completed quickly and precisely. Far too often the superintendent tries to sandwich his renovation project in with other routine maintenance tasks, greatly to the detriment of the project both in the quality of workmanship and length of time needed to finish it. His full attention must be paid to the job until it is done, to make sure that the plan is carried out properly, and to ensure that the job is done completely without corners being cut. If it is done correctly it will not have to be repeated; and it will certainly be done correctly only if the superintendent is closely supervising the work. This is a simple truism I know; but I have seen many botched remodeling projects that were botched and needed to be repeated for just the reasons stated above. Again, nothing raises a membership's ire more readily than watching a renovation project, which should have been completed in a few days, take several weeks to finish. It just is not necessary.

Finally, time the project so that there is the least interruption possible of member play. This may also seem too obvious to repeat here, but I wouldn't say it if I had not seen several flagrant examples of violating this suggestion. Particularly if greens are involved, do the job quickly, at a time when the least number of players will be affected, then get the green in play and the members back on it as soon as possible. Your members will applaud you for your efficiency if you do this; and grumble incessantly if these considerations are not thoroughly thought through and implemented.

To many, the thoughts I have outlined here are basic and too self evident to write an essay about. I have been privileged to play at a golf course where projects have usually gone smoothly with proper application to the principles I have mentioned, but I also have noted too many times at other clubs projects being repeated over and over by not applying these principles first. We can all agree that if a job is to be done it should be done correctly, and I submit that paying attention to these basics of course renovation will make this happen.

Midwest Entomology Report

INSECT PEST OF GOLF GREENS TO BE STUDIED IN OHIO



Frit Fly Adult on Golf Ball.

The frit fly, *Oscinella frit* (L.), is a small black fly often present in large numbers on golf courses and seen by golfers when it lands on white clothing or golf balls. Recognized as a nuisance to golfers, the frit fly larvae can and do cause damage to turfgrass, especially greens, collars, and aprons. Adults lay eggs that hatch into small maggots which tunnel into grass stems to feed on growing tissues. Little is known about the insect; in fact, it has never been studied on turfgrasses in the U.S. Research is currently underway to study the biology, seasonal life history and distribution of this pest on golf course turf. The work is being conducted by Mike Tolley, Ohio State



Frit Fly Damage to Apron of Green.

University Ph.D. graduate student, under the guidance of Dr. Harry D. Niemczyk, Professor of Turfgrass Entomology at OSU's Ohio Agricultural Research and Development Center, Wooster. The project is being supported, in part, by the Ohio Turfgrass Foundation.

GCSAA CONFERENCE SET FOR FEBRUARY 5-13

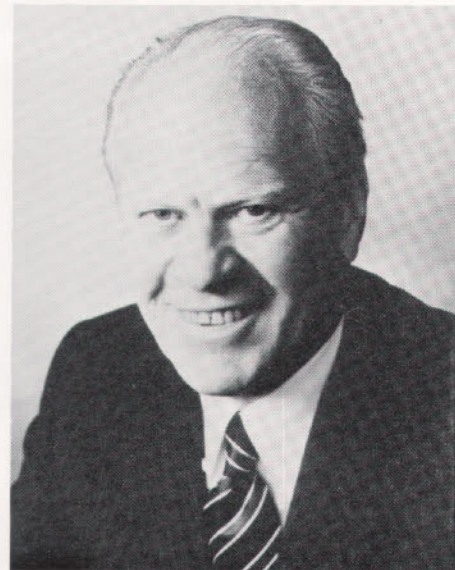
The 56th International Golf Course Conference and Show will include something for everyone through the many educational seminars, awards, spouse programs, golf, tours, election of officers, research, international golf news, golf course design, golf course management, the latest golf equipment and supplies, entertainment and famous sports personalities. This international golfing event is sponsored by the Golf Course Superintendents Association of America (GCSAA) February 5-13, 1985, at the Washington, D.C. Convention Center.

This international conference and show is the largest of its kind in the world, and it truly is an international event. The International Golf Course Management session features Rolf Lowgren, Consultant, Swedish Golf Federation, Stockholm, Sweden; Jimmy Kidd, Gleneagles Hotel and Golf Courses, Perthshire, Scotland; Donald Harradine, President, British Association of Golf Course Architects and President, International Greenkeepers Association; and Stephen Miller, President, Canada Golf Course Superintendents Association, Burlington, Ontario.

The Opening Session of the Conference will feature Jack Whitaker, ABC-TV sports announcer, as well as the presentation of the Distinguished Service Award, the Leo Feser Award and Chapter Newsletter Awards to GCSAA members.

Other special sessions will feature the USGA Green Section program with a special presentation by professional golfer Ben Crenshaw; an architect session bringing attendees the latest word in golf course design; a prayer

breakfast featuring broadcast journalist Cal Thomas; the Association's Annual Meeting with election of 1985 officers; and the annual Banquet and Show featuring country-western singer Tanya Tucker. Also, during the banquet, GCSAA's own Old Tom Morris Award will be presented to Gerald R. Ford, former President of the United States. Arnold Palmer and Bob Hope, previous recipients of the award, are also expected to attend.



Gerald R. Ford

In addition to the special sessions, the conference will bring 336 hours of educational sessions aimed at the most important person in golf course management — the professional golf course superintendent. More than 100 researchers, businessmen, professional superintendents, scientists, and educators will present the latest in turfgrass research and management techniques to the attendees, who are expected to push the 10,000 mark.

The Trade Show, which is undoubtedly the industry's largest under one roof, will feature the latest golf course maintenance equipment and supplies and offers attendees 19 hours of viewing during the three days of the Show.

"Registration is running ahead of last year's record-setting pace for the 1984 Las Vegas Conference. This international conference continues to grow, and we expect the final registration to establish another record for GCSAA," said John M. Schilling, GCSAA's Executive Director.

For registration and further information, call 1-800-GSA-SUPT.



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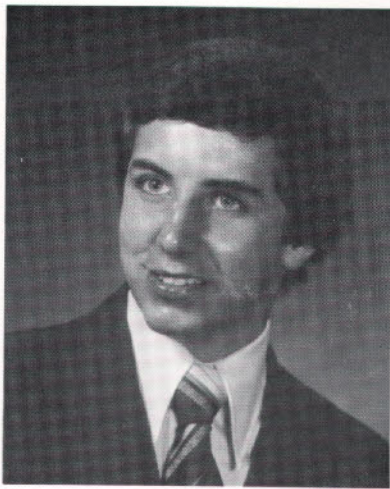
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WGCSA SCHOLARSHIP WINNER ANNOUNCED

Dr. George Sledge, Dean of Instruction of the College of Agricultural and Life Sciences at the University of Wisconsin — Madison, has announced the winner of the Wisconsin Golf Course Superintendents Association Scholarship for the 1984-1985 school year. He is Larry Lennert of Kaukauna. Larry is a senior at the UW—Madison and is finishing the requirements for a double major in the CALS. He is a student in the Department of Horticulture with a specialization in ornamental horticulture and in the Department

of Soil Science with a specialization in turf and grounds management. Larry's activities include membership in Pi Alpha Xi, an honorary horticulture fraternity, and in Delta Theta Sigma, an agricultural and social fraternity. His golf course experience has been at the North Shore Golf Club in Menasha under WGCSA member Roger Bell.

Larry's selection by the College with a recommendation from Dr. Jim Love is applauded by the WGCSA and we can feel confident that this young turfgrass professional will make many worthwhile contributions to our profession in the years to come.

In an open letter to the members of the WGCSA, Larry writes: "I would like to thank all of the members of the Wisconsin Golf Course Superintendents Association for this scholarship. I am very proud to be the recipient of this year's award."

It is a great honor to have been chosen to receive this scholarship and it is one of the high points of my college career. The monetary award will greatly assist me in paying for my final year here at the University of Wisconsin.

I am looking forward to graduating in May and pursuing my interest in golf course management, and would once again like to thank you for helping make this possible."

Sincerely,
Larry Lennert

WGCSA OFFICERS AND DIRECTORS FOR 1984 — 1985 ELECTED

New officers and directors of the Wisconsin Golf Course Superintendents Association for 1984 — 1985 were elected at the Association's November 5th meeting at Tumblebrook Country Club in Pewaukee. Those elected are:

President

Monroe S. Miller
Blackhawk Country Club

Vice-President

William R. Roberts
SENTRYWORLD

Secretary

Rodney W. Johnson
Pine Hills Country Club

Treasurer

Roger C. Bell
North Shore Golf Club

Directors

Danny H. Quast
Milwaukee Country Club
Dale E. Marach
Clintonville Riverside Country Club

Special thanks were extended to Don Ferger of the Country Club of Beloit for the outstanding job he did during his terms as treasurer of the WGCSA.

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Short Course for Greenkeepers

University of Wisconsin devotes five days to interesting study of problems of course maintenance and turf.

BY H. HANKINSON

THE first greenkeepers' course ever held by a state university in the Midwest was conducted by the College of Agriculture at the University of Wisconsin, Madison, from February 10th to 14th inclusive. Fifty-nine greenkeepers from Illinois, Minnesota and Wisconsin were enrolled in the course.

Faculty members for this course included the best that could be secured in the various fields. Specialists were selected not only from the College of Agriculture, but also from other places, so that expert instruction in all phases of golf grounds management could be given. The subjects covered a wide range of interests from maintenance problems, golf grounds equipment and land drainage, to discussions regarding care of turf and plantings and the preservation of natural beauty on golf courses.

The best kinds of grasses for golf courses and greens and the care of turf were presented in detail in several lectures by John Monteith, grass specialist in the Greens section of the United States Golf association. The soil as a basis for plant growth and the use of fertilizers were handled in a practical way by O. J. Noer, soils and fertilizer specialist, and by C. J. Chapman and E. J. Graul, professors of soils in the College of Agriculture.

Among other worthwhile things in his talks, Mr. Noer stressed the importance of the physical characteristics of soils and showed that many disappointments in the matter of turf were the result of neglect to get good physical structure at the start.

Seed Expert Gives Advice

IN lectures and seed demonstrations, A. L. Stone of the Wisconsin agronomy department informed the greenkeepers of the impurities to be found in cheap mixtures of grass seeds and warned against purchasing seeds from companies not known to be reliable. In his laboratory section, students of the course were shown how to detect certain weed seeds, chaff, and other matter detrimental to good stands of grass.

Diseases of grass and other pests of

golf courses, such as animals and insects, were discussed in an enlightening manner by A. S. Dahl, disease specialist of the United States Golf association and by H. F. Wilson of the Wisconsin economic entomology department.

Drainage problems were handled by E. R. Jones and F. W. Duffee, College of Agriculture engineering department, and home-made devices and commercial equipment for golf courses were taken up by C. A. Tregillus, manager of the A. D. Lasker estate at Lake Forest, Illinois.

Franz A. Aust, associate professor of landscape design, gave suggestions and advice in the care of trees. He also pointed out that responsibilities rested with greenkeepers everywhere in the matter of helping to preserve natural outdoor beauty. The golf course, he said, should be maintained as a portion of America's beautiful countryside and seldom landscaped to resemble a city estate.

Laboratory Work Interesting

FOUR laboratory sections during the course gave all students opportunity to



GREENKEEPERS ATTENDING THE UNIVERSITY OF WISCONSIN'S SHORT COURSE

BOTTOM ROW, left to right—H. W. Schmitz, Sparta, Wis.; F. J. Ranney, West Salem, Wis.; John Bauer, Prairie View, Ill.; Adam Fleek, Brodhead, Wis.; C. R. Brinkley, Freeport, Ill.; R. Kurtz, Milwaukee, Wis.; V. Miller, Milwaukee, Wis.; W. Merrifield, Delafield, Wis. SECOND ROW—E. A. Leitzinger, Cambridge, Wis.; F. Boeye, Northbrook, Ill.; F. J. Dinnelli, Northmoor, Ill.; H. Neipert, Jefferson, Wis.; P. F. Sieber, LaCrosse, Wis.; D. Gates, Williams Bay, Wis.; Fred Peters, Waukesha, Wis.; E. A. Fox, Racine, Wis.; C. B. McCann, Eau Claire, Wis. THIRD ROW—Harry Stewart, Cambridge, Wis.; C. L. Kalitoski, Westfield, Wis.; H. J. Wittenberg, LaCrosse, Wis.; Will Bryant, Brown Deer, Wis.; H. Bergan, Winthrop Harbor, Ill.; P. Brockhausen, Wauwatosa, Wis.; Don R. Boyd, Northbrook, Ill. FOURTH ROW—P. G. Wagner, West Bend, Wis.; P. W. Sommers, Elkhorn, Wis.; Otto Schael, Wausau, Wis. FIFTH ROW—R. E. Farmer, Milwaukee, Wis.; V. S. Bietz, Beloit, Wis.; F. B. Reinhart, Beloit, Wis.; Dick Ryerson, Milwaukee, Wis. SIXTH ROW—J. Glaster, Delavan, Wis.; M. P. Christensen, Racine, Wis.; H. W. Kubiak, LaCrosse, Wis.; F. L. Johns, Platteville, Wis.; E. J. Simons, Rockford, Ill.; A. R. Ludwigsen, Hartland, Wis.; E. Foster, South Milwaukee, Wis.; E. J. Levenhagen, Milwaukee, Wis. SEVENTH ROW—B. M. Donovan, Bloomington, Ill.; R. E. Meyers, Baraboo, Wis.; E. M. Iverson, Williams Bay, Wis.; J. N. Monical, Maywood, Ill.; R. R. Springer, Rockford, Ill. EIGHTH ROW—A. J. Gillett, Rockford, Ill.; F. J. Hartwell, Hinsdale, Ill.; J. S. Bone, Madison, Wis.; Mavor Boyd, Hillside, Ill.; J. B. Boyd, Northbrook, Ill.; L. W. Quigley, Wauwatosa, Wis. LAST ROW—L. R. Bloomquist, Minneapolis, Minn.; R. Zwerg, Madison, Wis.; R. B. Michael, Oconomowoc, Wis.

study more in detail the problems taken up in lecture and discussion periods. These groupings were particularly helpful because actual equipment and materials could be seen and handled. Laboratory subjects consisted of seed studies, soil problems, gas engines, and land drainage. Each group was given instruction in a different subject each day.

An hour or more every day was given over to discussions of the topics taken up in the lecture periods. These round table talks were informal; students were urged to ask questions relating to their own personal problems in golf course management, and answers were given by experts in the particular line of discussion announced and by experts in closely allied fields, one or more of whom were always present. In these round table discussions, students also profited from an exchange of experiences with other students, they said.

At the close of the four and one-half day session, the greenkeepers were agreed that the information and practical studies packed into the course might well have been extended over a period of several weeks.

Following is the formal program of the course, and a list of the students enrolled:

**Short Course in Greenkeeping
University of Wisconsin,
Madison, Wisc.**

STAFF

F. A. Aust. Professor of Landscape Design, University of Wisconsin.

C. J. Chapman. Professor of soils, University of Wisconsin.

A. S. Dahl, Disease Specialist. Green Section, U.S. Golf Ass'n.

F. W. Duffee. Professor of Agricultural Engineering, University of Wisconsin.

E. J. Graul. Professor of Soils, University of Wisconsin.

E. R. Jones, Professor of Agricultural Engineering, University of Wisconsin.

John Monteith. Grass Specialist, Green Section, U.S. Golf Ass'n.

O. J. Noer. Soils and Fertilizer Specialist, formerly Soils Dep't, University of Wisconsin.

A. L. Stone. Professor of Agronomy, University of Wisconsin.

C. A. Tregillus. Manager of A. D. Lasker Estate, Lake Forest, Illinois.

H. H. Wilson. Professor of Economic Entomology, University of Wisconsin.

PROGRAM

General sessions held in Horticultural Building.

Monday, February 10

- 10:00 a.m. Registration
- 1:15 p.m. Announcements
- 1:30 p.m. Grasses for golf course, their adaptation and propagation Mr. Monteith
- 3:00 p.m. Properties of soil and their relation to plant growth Mr. Noer
- 4:00 p.m. Soil acidity, its detection and control Mr. Graul

Tuesday, February 11

- 8:00 a.m. Grass seeds and their impurities Mr. Stone
- 9:00 a.m. Sources of plant nutrients Mr. Chapman
- 10:00 a.m. Grass for greens Mr. Monteith
- 1:30 p.m. Laboratory instruction
 - Section 1—Seed studies Mr. Stone
 - Section 2—Gas engines Mr. Duffee
 - Section 3—Land drainage Mr. Jones
 - Section 4—Soils Mr. Graul
- 3:30 p.m. The use of fertilizers for turf development and maintenance . Mr. Noer

Wednesday, February 12

- 8:00 a.m. Diseases of grass and their control Mr. Dahl
- 9:30 a.m. Animal and insect pests of golf courses Mr. Wilson
- 10:00 a.m. Round table on grass fertilization Mr. Noer
- 1:30 p.m. Laboratory instruction
 - Section 1—Gas engines
 - Section 2—Land drainage
 - Section 3—Soils
 - Section 4—Seed studies
- 3:30 p.m. Tree planting and care Mr. Aust

Thursday, February 13

- 8:00 a.m. Principles of land drainage Mr. Jones
- 9:00 a.m. Care of turf Mr. Monteith
- 10:00 a.m. Round table on grass problems Mr. Monteith
- 1:30 p.m. Laboratory instruction
 - Section 1—Land drainage
 - Section 2—Soils
 - Section 3—Seed studies
 - Section 4—Gas engines
- 3:00 p.m. The labor factor Mr. Tregillus

Friday, February 14

- 8:00 a.m. Drainage problems Mr. Jones
- 9:00 a.m. Golf course equipment Mr. Tregillus
- 10:30 a.m. Landscape problems Mr. Aust
- 1:30 p.m. Laboratory instructions
 - Section 1—Soils
 - Section 2—Seed studies
 - Section 3—Gas engines
 - Section 4—Land drainage
- 3:30 p.m. Final conference

Student Enrollment

SECTION I

- E. A. Lietzinger, Cambridge, Wis., Lake Ripley
- Harry Stewart, Fort Atkinson, Wis., Lake Ripley
- Roy Meyer, Baraboo, Wis., Baraboo
- J. E. Snobble, Evanston, Ill.
- A. J. Gillett, Rockford, Ill., Harlem Hills
- B. M. Donovan, R. 3, Bloomington, Ill., Highland Park
- Frank J. Dinelli, Ravinia, Ill., Northmoor C. C.
- Claire Binkley, Freeport, Ill., Freeport C. C.
- R. Burns Michael, Oconomowoc, Wis., Oconomowoc C. C.
- F. L. Johns, Platteville, Wis., Platteville C. C.
- Fred Boeye, Northbrook, Ill., Middlebrook C. C.
- E. J. Simon, R. 5, Rockford, Ill., Sandy Hollow C. C.

J. B. Boyd, Northbrook, Ill., Sunset Ridge C. C.
Paul Brockhausen, Wauwatosa, Wis., Blue Mounds C. C.

L. W. Quigley, Wauwatosa, Wis., Jacobsen Mfg. Co.

SECTION II

- C. B. McCann, Eau Claire, Wis., Hillcrest Golf C.
- F. J. Hartwell, Hinsdale, Ill., Ruth Lake C. C.
- Harry A. Neipert, R. 1, Jefferson, Wis., Meadow Spgs. G. C.
- Don R. Boyd, Northbrook, Ill., Techny Fields
- F. J. Ranney, West Salem, Wis., Maple Grove C. C.
- Fritz Reinhart, Beloit, Wis., Morse Hills G. C.
- James Gloster, Delavan, Wis., Lake Lawn G. C.
- Peter Sieber, R. 3, La Crosse, Wis., Winneshiek G. & C. C.
- H. J. Wittenberg, La Crosse, Wis., Winneshiek G. & C. C.
- L. R. Bloomquist, R. 2, Minneapolis, Minn., Country Club
- J. H. Bauer, Prairie View, Ill., Kildeer C. C.
- E. M. Iverson, Williams Bay, Wis., Kishwaukee C. C.
- Donald Gates, Williams Bay, Wis., Kishwaukee C. C.
- Roy R. Springer, R. 3, Rockford, Ill., Mauh Mah Tee See G. C.
- Fred Peter, Waukesha, Wis., Spring City

SECTION III

- Mavor Boyd, Hillside, Ill., Maywood G. C.
- Otto Schael, Wausau, Wis., Wausau C. C.
- Harold Bergan, Winthrop Harbor, Ill., Oakshore G. C.
- Robert E. Farmer, North Milwaukee, Wis., Brynwood C. C.
- Evald Fischer, South Milwaukee, Wis., Grant Park G. C.
- E. J. Levenhagen, West Allis, Wis., Greenfield Park G. C.
- Russell Kurtz, Wauwatosa, Wis., Currie Park G. C.
- A. W. Wilbrandt, N. Milwaukee, Wis., Brown Deer Pk. G. C.
- Phillip Wagner, R. 4, West Bend, Wis., West Bend C. C.
- Paul W. Sommer, R. 1, Elkhorn, Wis., Lauderdale C. C.
- M. P. Christensen, Racine, Wis., Jacobsen Mfg. Co.
- Eugene A. Fox, Racine, Wis., Racine C. C.
- Adam Fleek, Broadhead, Wis., Decatur Lake C. C.
- Dick Ryerson, Milwaukee, Wis., Equipment Dealer

SECTION IV

- J. N. Monical, Maywood, Ill., Maywood G. C.
- Alfred Ludwigson, Hartland, Wis., Cheniqua C. C.
- Verland Miller, S. D. R. 2, Milwaukee, Wis., Tuckaway C. C.
- Albert Nettum, Stoughton, Wis., Stoughton C. C.
- Wesley Merrifield, Delafield, Wis., St. John's G. C.
- Clement Kalitowski, Winona, Minn., Westfield G. C.
- Harry Kubiak, La Crosse, Wis., La Crosse C. C.
- Henry White, Lake Geneva, Wis., Hillmoor G. C.
- John S. Bone, Madison, Wis., Black Hawk C. C.
- H. W. Schmitz, Sparta, Wis., Sparta C. C.
- R. F. Zerg, Madison, Wis., Municipal
- V. S. Dietz, Beloit, Wis., Beloit C. C.
- Owen Baker, Beloit, Wis., Superintendent of Parks
- Ross Yost, Beloit, Wis., Municipal
- C. L. Bingham, Beloit, Wis., Municipal