

C. J. NOER  
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SUMMARY OF PROCEEDINGS  
ANNUAL CONFERENCE OF THE  
MID-ATLANTIC ASSOCIATION OF GOLF COURSE SUPERINTENDENTS

Under the Auspices  
of the  
Extension Service - University of Maryland

Holiday Inn-Downtown  
Howard and Lombard Streets  
Baltimore, Maryland  
January 5 and 6, 1970

ANNUAL CONFERENCE OF THE  
MID-ATLANTIC ASSOCIATION OF GOLF COURSE SUPERINTENDENTS  
HOLIDAY INN-DOWNTOWN, BALTIMORE, MARYLAND  
JANUARY 5 AND 6, 1970

Summary

The Annual Conference of the Mid-Atlantic Association of Golf Course Superintendents was called to order on January 5 by Dr. George S. Langford, State Entomologist, University of Maryland. There were approximately 200 in attendance. Following the call to order, President Robert C. Milligan introduced Dr. Gordon M. Cairns, Dean of Agriculture, University of Maryland, who welcomed the group and briefly reviewed the merits of meetings of this type. He also briefly reviewed work being done in the College of Agriculture at the University to train students for golf course management positions. The opportunities for young people who attend the Institute of Applied Agriculture, which provides a two year study program as well as opportunities afforded by the four year program, were discussed. Following Dean Cairns' welcome, President Bob Milligan gave his Presidential Address. His remarks were most timely and were effectively illustrated with the four hats he must wear as a golf course owner, as a golf course pro, as a golf course superintendent and as a golf course manager. Special events during the Conference included a Sunday evening get-together, a luncheon and a banquet. Dr. Elwyn E. Deal, Assistant Director of Agricultural Programs for the Cooperative Extension Service, was the speaker at the luncheon on Monday. Dr. Deal reviewed in a most interesting way some of the work being done today by the Agricultural Extension Service.

The Toastmaster at the dinner was Angelo Cammarota and the principal speaker was Mr. C. Lyndon Lee, Vice President of Lifetime Sports Foundation. Mr. Lee talked about opportunities in new skills and opportunities for education and enjoyment of life for the young people. He pointed to values that could come to young people from golf. At the Awards Ceremony, Stephen Michael McCoy was presented with a Golf Course Superintendents Association of America Certificate of Scholarship Award. The presentation, a \$300 scholarship, was made by Bob Shields, Superintendent of Woodmont Country Club, Rockville. The winner is a resident of Rockville and has worked at Woodmont Country Club. Presently he is working at the Navy Medical Center Golf Course in Bethesda, Maryland. Newly elected officers were installed at the banquet. Russell Kerns, Superintendent of Woodholme Country Club, Baltimore succeeded outgoing President, Bob Milligan of Gunpowder Country Club, Laurel, Maryland. Bert Yingling, Superintendent of Beaver Creek Country Club, Hagerstown, Maryland was installed as Vice President and Edward Dembnicki of Indian Spring Country Club, Silver Spring, Maryland was continued as Secretary-Treasurer. Directors for 1970 are: Lee Dieter, Washington Golf and Country Club, Arlington, Virginia; J. Paul Barefoot, U.S. Soldiers' Home, Washington, D.C.; George Thompson, Columbia Country Club, Chevy Chase, Maryland; Robert C. Miller, Suburban Club of Baltimore, Pikesville, Maryland; Dennis McCammon, Springfield Golf and Country Club, Springfield, Virginia; David Fairbank, Lakewood Country Club, Rockville, Maryland and Past President, Robert C. Milligan. There were several interesting topics discussed at the Conference for which summaries are not available. These were all provocative and were entitled "Fairway Disease Control" by Jack B. McClenahan, Westwood Country Club, Vienna, Virginia; "Preparing a Budget" by George C. Gumm, Ocean City Golf and Yacht Club, Berlin, Maryland and "The Right Sand for Putting Green Use" by James M. Latham, Jr., Milwaukee Sewerage Commission, Milwaukee, Wisconsin. The Conference closed following a resume of the highlights of the Conference by Lee C. Dieter, Washington Golf and Country Club, Arlington, Virginia.



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THE PRESIDENT'S MESSAGE: "FOUR HATS"

ROBERT C. MILLIGAN  
GUNPOWDER COUNTRY CLUB

The Owner

First and foremost, I am an owner with a profit motive. Without this motive, there is no incentive. As owner I hire and fire all employees such as club house, grounds crew and pool employees. I also hire specialists as needed. Lately I have needed the services of a lawyer in Montgomery County to qualify my club under the state open spaces plan even though I was already qualified in Prince George's County. Most recently I was required to engage the services of a lawyer when the Park and Planning Commission advertised my property for acquisition causing a small exodus of members that believed the club was doomed to become a public accommodation. The result of my lawyer's findings were that the Park Authority needed my listing to mislead the other owners of adjacent land into thinking that this entire block of land was condemned. This is our modern government at work. This is a sample of the problems that a club owner faces.

The Pro

I'll bet Arnold Palmer isn't worried about my professionalism as a competitor. Let's say my bag is merchandising. I have attended the Mid-Atlantic PGA school and found it very helpful. As the Pro at my club for fourteen years I see more erosion from pro line goods to supermarket junk each year. But sales are holding good due to the golfers that play more than 15 rounds per year. In the pro department I equaled 1968 sales which is better than Golfdom's survey showing up to a 20% drop in 1969. Rentals are not as rosy a picture as might appear. I find repairs the best markup in this business. One item that requires the most attention is the "Rules of Golf". There are only 109 pages on which the survival of the game depends. Play the ball as it lies, limit your winter rules to extreme situation, learn to hit all the shots, and to Superintendents I say, "Take pride in posting that SUMMER RULES sign."

The Manager

It seems to me that my primary job as manager is keeping records for 22 Government agencies. Each of these 22 agencies has a financial interest in how my business is doing. Some overlap, like the sales tax and the admissions tax making some items like rentals, taxable at 8 1/2%. Of those 22 agencies only 9 have visited or offered a service since 1951. This should be interesting to you if you ever wondered why you sometimes get a fertilizer or seed bill with no sales tax included. This is later paid as "Use Tax". The seller must decide if you are in agriculture or in business to determine if you are taxed or not. Now I've heard turf specialists call turf management a very high form of agriculture and by this distinction would be tax free. So I wrote to the Comptroller of the Treasury for a more detailed answer. In essence they say that since we do not produce a marketable or consumable crop we are not in agriculture. If the golf business is continually singled out as in the Sales Tax, the Admissions Tax and in Connecticut, an Excise Tax, we will be carrying an unfair load.

In the golf industry, one-fourth of all golf facilities in the Mid-Atlantic Section are owned by a government agency. The fees reflect a very small increase in recent years. A public course in Albany, New York brags that they have not raised their fees since opening in 1931. We can easily see why as many golfers play on this 25% as play on the other 75%. The reason is price. No one seems concerned that 25% of the Golf Industry is government owned and tax free in this competitive business. And we ARE in business - not in agriculture. Taxes are my largest single expense. We must not be concerned when other industries fall to government ownership, because no one is concerned with our position. When the government takes over



the railroads and the chemical business so they can control insecticides, herbicides, etc., we will already have been completely consumed in the name of conservation. How can this affect a superintendent? In the Mid-Atlantic Section there are 32 government clubs and 80 private clubs. 48% of the government clubs have superintendents. 97% of the private clubs have superintendents. Therefore, when the government takes over, half of us will not be needed.

### The Superintendent

By now you all realize I can be only one-fourth the Superintendent you are. There is no way I can divide myself into four sections and do justice to each job. But please take notice of one important fact. It is the GCSAA that offers what I consider the most informative programs in the industry. I feel that without a playable course, my other enterprises will not prosper. A playable course to me means a clean, well-groomed layout; one on which the high handicapper can occasionally score well, but the low handicapper will find it challenging also. So it is this organization to which I have chosen to devote my time and energy in order to learn how to best achieve my personal aims.

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## REVIEW OF THE SEASONAL PROBLEMS

A. J. POWELL

Last year during this conference, you were challenged to grow a better turf with the advances of present and future. The use of synthetics has put pressure on all of us. We cannot sit back and gripe about people using synthetics. We had better say "good luck" and give them our best. That is competition. We can give them a sample of what they are striving for.

I had the privilege of seeing a synthetic field this fall and had not realized just how much like a carpet it is and how much secrecy is involved concerning cost. Although these football fields received a lot of good publicity, such players as the NFL Most Valuable Player, Roman Gabriel, and also Deacon Jones have voiced their displeasure in its effect upon their play.

However, I think the God-given naturalness of turf will always be its greatest selling point. In a story of his life reported in Sports Illustrated, probably the greatest basketball player of all time, Lew Alcindor, referred to the grass or bright green carpet of grass in Central Park. When his family moved to another home, he described the area in terms of how much grass was present, or in his words, "--acres and acres of green". When he visited colleges, he described them somewhat as to how much green was surrounding the area. I do not think Alcindor would have mentioned a synthetic turf; he did not mention anything about the synthetic basketball courts or surfaces he had played on.

We are striving to grow more turf. But we are not trying to make it look artificial, but perfectly natural. This is where the superintendent is far ahead because he has been doing this a long time. Even old golf courses spend more money year after year; not just because cost is increasing, but because the golfers are demanding a highly manicured course. We can give that to them.

Today you have greens in a certain condition. Last spring they were in a different condition. There are dozens of ways of getting through the growing season. Every superintendent does things differently. It has been said that every superintendent has the hardest job in the country. There is something peculiar to all courses. Some judgments, some decisions that a superintendent has to make may be wrong, but they are his decisions. There is no one single right way. You will gain experience, learn by doing wrong, hopefully use research results, discuss your problems with fellow superintendents, and attend meetings like this to formulate either on paper or in your mind a program to get your course through the next season. But one very important advantage this year is that you can always look back at last year's program and either ditch it or improve it. Hopefully, you have already done that this year.

In reviewing some of the more serious seasonal problems, Pythium was probably most serious. We were most fortunate this year to have a new fungicide, Koban, which was an effective control. Expense of this material, however, has limited its use to eradication of Pythium instead of the desired preventative control. Occurrence of Pythium was most often associated with some other type of summer injury, such as burning with potassium or nitrogen. Also, N application for turf response during the summer made turf more susceptible to the disease.

Fusarium is on the upswing. Many golf courses, as well as industrial and home lawns, were infected with Fusarium and chemical control with available fungicides is impossible. Frequent irrigation shortly after noon on hot days has given best control. However, this should not be used as a preventative measure since it will result in poor root systems.



Rust and Powdery Mildew were especially severe on Merion Kentucky Bluegrass this past season. Again, this shows the need for mixtures of bluegrasses instead of a pure variety.

Concerning insects, the chinch bug seemed most serious on bentgrass greens during fall. Control with diazinon was fairly effective but the necessity of spraying entire greens, instead of just the infested shoulders was obvious due to the insects ability to move from the sprayed area.

The greenbug aphid occurred as a new insect problem. Although it was not found on golf courses, it appears to be another problem for turf growers. Infecting new fall seedings, it occurred most often on knolls or high spots in sod fields. The aphid seems to do greatest harm to very young seedlings that are probably stunted by lack of moisture. When seedling vigor was good, aphid damage was only slight. This year, at least 200 or 300 acres of newly seeded bluegrass sod fields were severely damaged or destroyed as a direct result of the greenbug. They were identified on at least 5 farms in Queen Anne's County, Prince George's County, Montgomery County and near Culpeper, Virginia. The aphid is very small and hard to identify without careful, close examination. Control was effective with several insecticides when they were applied during first stages of insect damage. During September and October carefully check fall seedings.

A good superintendent (and politician) spends a great deal of time answering members' lawn problems. When considering the homeowners' lack of golf course equipment and lack of experience using chemicals, the proper solution is not always best. When at all possible, recommend cultural methods first. The common usage of pre-emergence crabgrass herbicides has often been unsuccessful due to poor distribution or timing. Slime mold or Powdery Mildew may seem very important to the homeowner but chemical control is seldom necessary. A serious thatch layer is common in older lawns but the homeowner must rent thatching equipment that is inferior to golf course equipment. These examples magnify the homeowners' problems and should be understood by you, a professional consultant.

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## PESTICIDE APPLICATORS LAW

WALLACE T. GARRETT

It is a pleasure to be with you today and have the opportunity to discuss with you matters of mutual concern; namely, Pesticides and Maryland's new Pesticide Applicators Law. First, let me extend to you a belated New Year's wish. I trust each of you have made and are keeping your resolutions.

In 1967 a Commission was appointed to study pesticides and was known as the Governor's Commission to Study Pesticides. Dr. Eugene Cronin, Director of Maryland's Natural Resources Institute, served as chairman. Other members included Dr. George S. Langford and other distinguished persons representing many phases of agriculture, conservation, health and industry. Senate Bill No. 238 was the final result of this study. Bill 238 was signed into law in May 1969 by Governor Mandel and went into effect on July 1, 1969. I was appointed Supervisor of the law in August. This law is being administered by the Maryland State Board of Agriculture through the Office of the State Entomologist.

During the summer, Dr. Wilson Elkins, President of the University of Maryland appointed a Maryland Pesticide Advisory Board. This Advisory Board had been one of the Commission's recommendations, but was not included in the law. The Board is charged with the responsibility of advising the State Board of Agriculture. Members appointed to the Board represent many aspects of agriculture as well as water resources, public health and the pesticide industry. Dr. Eugene Cronin was elected to serve as chairman during the first year.

Since September the Board has been meeting on a regular basis. They have discussed many aspects of the pesticide problem. Experts and highly qualified persons have presented their views. In addition, the Board has given considerable time and attention to the proposed regulations to be adopted under the law. In fact, this group will meet tomorrow to further consider certain sections. It is anticipated that the proposed regulations will be available for distribution in the near future and that the public hearing will be held in February.

Actually, I have gotten ahead of my story. Let me retreat and discuss with you the provisions of the law as enacted. Being a use and application law as opposed to a registration law as was enacted in 1958, this statute requires that all persons who for a fee or for hire, otherwise known as custom applicators or pest control consultants, shall be licensed. Qualifications for licensure and minimum financial responsibility will be set by the Board in the proposed regulations. The basic statute also exempted certain persons or groups from licensure. Included among those exempted were arborists, structural pest control operators, persons applying pesticides to their own or rented properties, persons applying pesticides to the lands of others where the intent is based on the mutual exchange of equipment or labor, and persons applying pesticides on ornamental trees and plants on residential properties of one acre or less. There is also a provision for penalty provided in the basic statute.

You, as golf course superintendents, do not apply pesticides for a fee or to the lands of another, consequently you will not be required to obtain a license. However, anyone who wishes to participate on a voluntary basis may do so.

In addition to providing for licenses and issuing permits to public agencies and bodies politic, the law provides the State Board of Agriculture with the authority to and I quote from the law, "prescribe when necessary the time and conditions under which certain pesticides may be used in different areas of the state, and



provide, if necessary, that extremely hazardous materials shall be applied only under special permission from the Board". Also provided for under the law is, and I again quote, "Define the formulations and establish the conditions and appropriate areas for aircraft application of pesticides". The mechanics of these two provisions as well as several others are subject to public hearing and will be included in the proposed regulations.

With the enactment of the law and an attempt to implement the two above mentioned provisions, Maryland unwittingly involved itself in what has and is, in fact, "the Pesticide Controversy". However, I would prefer at this time to refrain from comment and discussion of this great controversy and say only this. The State Board of Agriculture and the Pesticide Advisory Board have and are continuing to review the facts surrounding pesticides in a calm and reasonable atmosphere. I might add that it is the attitude of both these bodies that because of the need to protect the public health against certain diseases caused by insect vectors such as encephalitis, a "ban" of any one or several of the more popular pesticides is not considered a reasonable course of action. However, the members of the Board are aware that certain pesticides do have characteristics which present concern to humans, or other mammals, or birds, or fish or the general environment which should be given very serious consideration. The attitude that some uses may have to be restricted seems to prevail. Some pesticides may be restricted and used only by permit. No pesticide will be prohibited where a reasonable substitute does not exist, but as such substitutes become available, the use of certain pesticides will diminish.

At this point certain questions must be running through your minds; such questions as how am I affected, what pesticides are involved and how will I secure a permit if I desire to use a restricted pesticide. The Mrak Commission report recommends the phasing out of DDT and other "persistent" pesticides.

Unfortunately, I cannot answer the question of what materials will be restricted. As I indicated, the Pesticide Advisory Board will meet tomorrow to give further consideration to this same question. I can say that certainly the pesticides which have been labelled as persistent will be reviewed. However, persistence in itself is not sufficient reason to take action. Pesticides included in this group would be DDT, chlordane, endrin, heptachlor and dieldrin. Others which may be considered would be the extremely toxic phosphate insecticides such as parathion, methyl parathion and TEPP. Of the herbicides which may be involved would be 2,4D and 2,4,5T. I do not believe that the uses of these materials would be severely restricted except for aerial application and application to areas adjacent to susceptible crops.

Sodium arsenite because of its acute toxicity to birds, wildlife and horses will receive special consideration. It is generally felt that no uses will be prohibited in Maryland where a satisfactory substitute does not exist. As you may know sodium arsenite was the cause of death of a number of show horses several years ago.

To answer the last question as to how you would secure a permit to use a restricted pesticide in your efforts to maintain golf courses, let me say that they may be secured from the Board after a need to apply the pesticide has been established. It is anticipated that this particular section will not go into effect immediately, but at some future date; probably within a year in order that no person, group or business is adversely affected. By that time, I would suspect that the Board will have designated certain persons throughout the state to issue these permits.

Before I conclude, I might make mention of recent Federal actions taken in regards to DDT. On November 25th the U. S. Department of Agriculture announced the proposed cancellation in thirty days of DDT for use on tobacco, shade trees, around the home and in aquatic situations. It was further announced that all uses of DDT may be cancelled within ninety days or around February 25th except for certain essential uses. It was announced that on or around March 1st, the Department of Agriculture would begin to review the uses of the other persistent pesticides.

#### AGRICULTURAL EXTENSION TODAY

DR. ELWYN E. DEAL

The Maryland Cooperative Extension Service strives to serve as many needs as it can of Maryland's 3 million plus residents with its present staff of approximately 250 people. Extension's major charge is to provide informal educational programs and services in four major program areas -- agriculture, 4-H and Youth, home economics, and community resource development. This is frequently done in close concert with the research, resident teaching and State Board of Agriculture Programs divisions of Agriculture at the University and with other State, Federal, local agencies and private organizations.

Agricultural programs include a host of different subjects ranging from farm business management to apiculture (bees) and animal production to soil testing. Subjects which receive major attention are determined by the needs and wishes of the people of Maryland. Some are in the limelight of public concern today and changed tomorrow, especially in this age of very rapid change. For example, who would have thought just one short year ago that DDT, 2,4,5-T, pollution and sediment control would be receiving as much attention as they are today by the general public and by various governing bodies. Extension is frequently called upon to provide educational programs on such issues on short notice while maintaining its usual ongoing programs.

Extension programs in agriculture are conducted by some 40 county Extension Agents and 60 full and part-time Extension Specialists. Among these are four full-time and two part-time agents along with one full-time and three part-time specialists who devote their extension programs to turf and ornamentals production. Agents and specialists handling these programs provide Extension and agriculture with one of its major connections with the urban and suburban masses of people.

Currently most of Extension's programs for professional turf and ornamental growers are handled by specialists directly from the University. Due to the heavy work load carried by these men, Extension often is not able to provide the programs and services needed so badly by these groups. These specialists are also responsible, in many cases, for research and teaching programs in their respective fields.

Extension specialists' activities include a variety of different techniques to reach the large number of audiences they must serve. Among them are: organizing and presenting programs for conferences, short courses and seminars such as this one; conducting lawn and garden shows; preparing newsletters, bulletins, fact sheets, mimeos and news releases; appearing on radio and television programs; speaking engagements; and answering hundreds of telephone, letter and personal requests. They also attend regular meetings of numerous organizations and groups and visit personally with growers on special problems. There are regular and special reports and programs for his Department, College and the University which must be prepared.



Along with all of these activities he must give high priority to providing training and technical assistance to the County Extension Agents who are on the firing line every day with the general public. And in his spare time he must do enough reading and studying in his own field of specialization to remain the expert and leader that he is expected to be. The remaining three hours per month that he has is spent with his wife and family!

Extension specialists are not alone in this. Agents must share a similar load working with people in their own counties. In most counties agents have to limit themselves to working mostly with homeowners - not necessarily by their own desire to do so, but by the tremendous number of requests for assistance that they receive. As an example, consider working in Prince George's County - one agent with over 600,000 people to serve!

Listed below are the statistics reported by one County Extension Agent in Maryland in 1969.

Television - weekly programs reaching parts of five states and the District of Columbia in addition to the 23 counties of Maryland having an estimated viewing audience of 75,000 per week and a mail response of over 9,000 pieces during 1969

Radio - one five-minute program weekly and five one-minute spots each Monday through Saturday

Monthly newsletter - to 3,000 area residents

Weekly news column - goes to 10 newspapers in surrounding counties

Bulletin rack - in lobby of county office building distributed over 17,000 bulletins in 1969

Soil tests - recommendations on more than 1,800 samples

Tip-a-phone - over 16,000 calls registered

Personal contacts - over 5,000 through telephone, office visits or letter

Lawn class - 500 in attendance

Christmas decorations class - 560 attended

Spring lawn and garden show - 2,000 in attendance

Plant clinics - 600 total attendance at three clinics

Extension agents and specialists have a tremendous responsibility to the people of Maryland, as is evidenced by the above information. A greatly expanded staff would be required to adequately serve the needs and wishes of the people of this state, however.

In summary, we very much appreciate the fine cooperation and support that you, the Mid-Atlantic Association of Golf Course Superintendents, have given Extension and the University in the past, and certainly hope it will continue. You can rest assured that we are interested in doing all we can to provide you with the most accurate and up-to-date information we can to meet your needs. Our doors are always open- we welcome your comments and suggestions.

## A GOLF COURSE ARCHITECT LOOKS AT LONG RANGE PLANNING

EDMUND AULT, ARCHITECT

First, let's consider the significance and reasons for your program committee selecting this subject. I can hardly imagine any superintendent here who doesn't realize the absolute need - - and it is a must - - for competent plans and scheduling for any construction work on the golf course which will interfere with the playability of the course or the operation of the overall club complex.

Let's look at some of the major factors which may necessitate the development and preparation of a long range plan, or plans, for renovation work to any part of the overall club facilities. If at first these factors seem somewhat distant or unrelated to you, the golf course superintendent, let me show you how they could directly or indirectly affect your work.

You know of conditions on your golf course which need rebuilding and correcting, especially where maintenance is involved, far better than any member of your club. In many cases, the superintendent has called these conditions to the attention of his direct chairman and other members of the club. In a majority of cases the superintendent's recommendations to correct such problems have fallen on deaf ears. In many instances situations will arise where the club is required to do extensive work on the clubhouse and other facilities. This is one particular situation that presents a good opportunity to initiate a plan for the golf course also.

Jealousy and competition between chairmen. If the house chairman is successful in getting a budget for new capital, your greens chairman will, or should, also seek an equivalent capital budget for the golf course.

There are other situations where a chairman or club member has convinced the board of directors of the need for additional landscaping, trap renovation, etc. which is just plain window-dressing, and totally ignored previous recommendations by the golf course superintendent for areas that need correcting. Agree in total with these recommendations, but insist strongly that if they are to be done, the golf course architect should be called into the picture to do the proper planning and prepare the proper specifications for this work which is recommended by others.

If a qualified golf course architect is called in, you definitely have a solid ally. His first step should be to meet with you and review the entire golf course hole by hole, tee by tee and green by green. This is your opportunity to point out your maintenance problems. The architect will take into consideration the areas you have outlined. He will definitely consider them in a serious manner before a planned program and schedule is recommended to your club.

I don't believe any architect will let landscaping or window-dressing take precedence over a serious maintenance problem.

### Major Factors Necessitating Planning and Scheduling

- I. Board of Directors or Club Owners
- II. Outside Forces
- III. The Golf Professional
- IV. Committee Chairmen or Individual Club Members
- V. The Golf Course Superintendent



## I. Board of Directors or Club Owners

- A. Remodeling of existing clubhouse
- B. Swimming pool
- C. Tennis courts
- D. Additional parking space
- E. Enlargement and redesign of complete clubhouse grounds
- F. Complete updating and renovation of entire golf course

A major renovation or rebuilding program emanating from these sources in the majority of instances is initiated by a committee chairman calling in a qualified golf course architect and/or a clubhouse architect. This is correct and the number one procedure.

## II. Outside Forces

- A. Encroachment of a highway
- B. Severe storm damage
- C. Fire
- D. Utilities

## III. The Golf Professional

- A. Playability of the course
- B. Speed of play
- C. Height of cut - greens, fairways, roughs

He is certainly in a much more advantageous position to hear comments from the members of conditions on the golf course that in his opinion if modified or revised would make a certain hole more interesting, less difficult for the average club member and speed up play.

## IV. Committee Chairmen or Individual Club Members

- A. Golf course features which affect them personally
- B. Committee chairmen's desire to appease and be recognized

This category is one of our most dangerous. As you well know, individuals will gain sufficient influence and power within a club to bring about modifications and adjustments to the golf course which are suited to their personal degree of skill and ability. Committee chairmen will also promote, or champion, the addition or deletion of features on the golf course so as to leave a mark of their own for their term of office.

## V. The Golf Course Superintendent

- A. Golf course features difficult to maintain
- B. Rebuilding of a green
- C. Irrigation
- D. Landscaping
- E. Traps
- F. Drainage

As mentioned before, the requests from the superintendent for modifications or revisions to the golf course are usually founded on maintenance. Now let's look at an outline which will spell out the correct approach for the preparation of long range planning.

### Approach

This means the proper steps to bring a good plan into being.

1. The golf course architect
2. Meetings and analyses
3. Preliminary plans and specifications
4. Final detailed plans and specifications
5. Detailed cost figures
6. Schedule of work
  - A. Effect on playability
  - B. Relation to time of year
7. Firm bonded construction contract
8. Inspection of and responsibility for completed work
  - A. Golf course superintendent
  - B. Golf course architect
9. Establishment and maintenance until final release of contractor.

### Summary

1. Call in the professional

I am referring to the professional whose experience and profession would be applicable to the problem at hand; that is, clubhouse architect, drainage engineer, golf course architect, landscape architect, etc.

2. Budget the work for efficiency in maintenance, transition and establishment

Don't burden or over-extend your staff in maintaining too great a volume of new work in the first phase. In other words, if you are planting an especially large number of trees and shrubs, spread it over several years so that you may get the first group established before attempting the second phase.

3. Complete information to entire membership

This is not a new practice or procedure with the qualified golf course superintendent. However, it is much more important when major construction work is involved in the golf course. Keep the plan exposed to the membership at all times.

4. Do not compromise the plan

As work progresses, hind-sight on the part of many begins to catch up. Don't try to please everyone. Don't piece-meal. Stay on course. A definite goal has been established. If you do have recommendations and suggestions, especially while an adopted plan is in force, refer them back to the committee chairmen.

5. Do not let a change in chairmanship alter the plan

Superintendents at membership-owned clubs know that the chairmen of the various committees change frequently.

It is now that I want to make a very strong point and recommendation to you superintendents. Once a plan and/or budget is established, make sure that the club passes sufficient rules within its regulatory directors so that regardless of the change in chairmanship the program must be followed as originally adopted. In other words, if it is a three year program, don't change horses in the middle of the stream when a new chairman is appointed.



At this point I would like to take the opportunity to show a few slides which may, or may not, be directly related to the current subject. These are observations that are made by the architect when he is called in or has the opportunity to review a golf course. They are related to the mowing lines of greens and fairways and how the tractor operator can change the entire character of a putting green or a beautiful par 4 hole. These mowing outlines, especially on greens, are becoming more noticeable with the use of the TRIPLEX greens mower.

## LONG RANGE PLANNING FOR THE GOLF COURSE

HOLMAN M. GRIFFIN, AGRONOMIST

Planning implies mental formulation of ideas and sometimes graphic representation of these ideas. Planning is an integral part of existence and the person with no plans of any kind would be a rare oddity if not an impossibility. Proper planning often means the difference between success and failure and no project may even be started without some sort of plan.

Accurate anticipation of need is what planning is all about. Attention to detail enhances the value of plans and thorough organization streamlines the operation. There are all kinds of plans used on golf courses and each type has a specific function. First, there is a job plan of very limited scope which deals with a single job. Next, a work plan which covers all the necessary jobs on the golf course. Work plans are timely and may cover from one day to several months in scope. Beyond one year we begin to formulate long range plans which will affect our progress in the years to come.

Long range plans may be formulated for any number of years and when properly made and followed, will insure both stability and progress. Long range plans should definitely be positive in nature and not just a ruse used to avoid getting things done. All too often, I have heard the phrase, "That's in the long range plans", when what is really meant is, "We realize the need and certainly hope the next generation will do something about it".

Essentially, long range plans are concerned with new projects for improvement not covered by the routine budget, improvements which must be done in stages over a period of years and the changes required to maintain the "status quo" of the club. Progress means change, but a good long range plan will lessen the chances of making unwise moves which may not be in the best interest of the club. This sort of planning gives a club both a goal to reach and the direction of progress toward that goal. Without a goal there can be no progress and without direction, progress is always slower with the end result more dubious.

Design changes take place at many clubs every few years and there are some instances of clubs going through many expensive changes only to return to the original design as their final effort. Clubs which do this are very much like the man who resets his watch every time he sees a timepiece which does not agree with his. There has never been an 18 hole course built that would please everybody even though a vast majority of courses are well designed. If plans for a new course are not well received by the majority of the people who pay the bills, then construction should never be started until an acceptable design is found. Once the course is completed it may be improved upon by correction of construction flaws or addition of new features which enhance the value of the property, but basic design changes are seldom advisable unless requested by a majority of the members. In all cases, an architect should be consulted and the changes should be a part of the long range

plan. Major design changes are never urgent and the time between conception and implementation should be at least a year which by definition makes them a part of long range planning.

Long range planning lends continuity to the management program of any course. Green Chairman, Green Committees, Board Members and Superintendents come and go and more often than not, continuity is sadly lacking. The formulation of long range plans does not imply that the first green committee the club has should make a rigid 30 year program and everyone from there on must stick to it. Long range planning must be flexible to meet changing situations but not flexible to the point that a new committee can take over and in one or two years change the course in chameleon fashion. The fact that some of the world's outstanding courses are old courses which have undergone only minor changes during the years, would, in itself, lend credence to the practice of making long range plans.

You may be thinking about now that every course is not a great course and that yours needs some modernization and needs it now. Maybe you are faced with the seeming crisis of a new "super course" in your area competing for members. Long range planning will be even more of an asset to you in these situations. If your basic design is poor to start with, a quick refurbishing can be extremely costly and probably won't help much on the long pull. What the course needs is complete re-design and rebuilding. If the committee in charge of planning your programs has been on the ball, they will have recognized the inherent problems on your course and will have anticipated the possible danger of competition. A long range plan should have been formulated to eliminate any severe consequences to your club.

If your basic design is good, a long range plan will show your membership where you are going and they will appreciate the fact that long range plans will make the changes less of an inconvenience and certainly less costly than a crash program.

Long range planning should take into account that new and better grasses are being developed and that traffic is not only increasing but changing in type. Your long range plans need not specify the type of grass to which you wish to change, but you can be almost certain that from now on there will be an improved turf variety for some area of your course when you are ready. The new variety probably won't be the ultimate, but it should be better than that which you now have. Honestly now, think of all areas of your course - greens, tees, fairways, roughs, clubhouse lawn etc. - and I feel sure you can picture at least one or more of these which could be made more desirable by switching to an improved variety of turf.

Increased traffic of all kinds has influenced golf course design tremendously in the last 10 years. Superintendents find it almost impossible to maintain turf on small, poorly constructed greens with limited cupping space. If this is your problem, you have two alternatives; you can either restrict play or you can build new greens. The second solution seems much more advisable and should be part of your long range planning. You might also get some relief from foot traffic on greens by instituting an educational program which advises the membership of the problem and encourages them to wear golf shoes of the type with the spike shoulder recessed in the shoe sole. This won't lessen the traffic but it may reduce the wear on turf by 50% which in turn makes playing conditions better, gives the golfer a good excuse to buy a new pair of shoes and makes the Golf Professional's cash register ring. This will be a long range plan if you arrange it at all.

Golf carts and service vehicles constitute another type of traffic which is becoming increasingly difficult to deal with. Many clubs realizing the need for cart paths and service roads have begun to install these on a long range basis because of the expense of putting all the necessary roads in at one time. Long range



planning will also allow you to decide better where they are needed, how successful the design will be, what width to make them to best serve your purposes and a number of other things which may be overlooked on a short term installation.

The scope of long range plans should include but not be limited to, land acquisition for additional holes or a new site which would offer the golfers better facilities than they have now; tree planting for replacement of older trees or additional trees, beautification to make the course and grounds more appealing, improved drainage to make the course more playable and easier to maintain, new or additional supplies of irrigation water from wells and/or storage tanks and ponds, and better irrigation systems to improve the turf and save manhours.

The list of ideas for long range plans on the golf course is infinite as is the value of such plans. Generally speaking though, the happiest people are those who make things happen and no one can make things happen without a plan.

#### A GOLF COURSE SUPERINTENDENT'S EXPERIENCE WITH LONG RANGE PLANNING

DAVID S. FAIRBANK

I'm sure my experience as a superintendent in long range planning is going to correspond with almost every superintendent sitting in the audience today. We're the first to admit that we've all got to plan years ahead to shape and develop our golf course both in our heads and on paper. While attending our monthly meetings or traveling to different parts of the country, while on vacations, we see and play many different courses and some seem to be just right. What more can possibly be done to them? They're perfection. We have a few of these courses in our Mid-Atlantic area that I have put in this category. To the superintendents of these clubs, there's probably a list of improvements and correctable faults that are as long as the monthly gripe list from their greens committee. The answer to our advance planning is the theme of this afternoon's session, "A Master Plan for Your Golf Course".

Today, I'm going to cover my experience with the master plan for my golf course which, incidentally, is continually being added to. It is by no means finished and I doubt if it ever will be. We're continually adding on as new ideas are brought up of committee members, prostaff, mine and members in general. If and when I leave my club, I'm sure the new superintendent will have a whole new set of ideas; I'm sure we realize that no two of us are exactly alike in our thinking.

Most of you know the early history of Lakewood Country Club and the hardships for the first four or five years of the development of the course. During those first years there was an absolute minimum amount of money spent. Except for the equipment initially purchased, there were only a few extra pieces bought. When I was hired in May of 1965, there was a tremendous amount of planning that had to be done. It was at that time our master plan began to take shape. An aerial photograph of the club was used to make graphics with two scales; 1" = 100' and 1" = 150'. I prefer the larger scale because of more detail; anything larger, of course, would be better yet. I remember seeing an aerial photo of Woodmont Country Club in Bob Shields' office that looked like 1" = 50' scale. This I consider an ideal size to work with.

What I propose to do is give you a rundown on the kind of things that are incorporated on the master plan and elaborate a little on each point so you can get an idea of how we've progressed over the past five years. Keep in mind that capital income has not been up to expectations but we're hopeful that the future will yield more progress.

Our plan shows greens, tees, and traps which periodically are problem areas that we plan to rebuild or renovate. We have constructed four new greens, eleven tees, which includes a few ladies' tees, and three new fairways. This was a major project that largely took place in 1968. You might recall my account of this in the Newsletter of December, 1968. As for trap work, we have rebuilt a total of six, excluding the ones on the new holes. These were either too large or too flat, so that it was virtually impossible to keep sand in them after an open winter. The traps on the new holes were all constructed with plastic lining to prevent the percolation of soil from the bottom marring the whiteness of the sand and also to prevent grass and weed growth. After one year of use, I can say the work was well worth it in the trap weeding alone. Eleven new traps were lined in this manner. Because our fairways and tees are 60-70% Poa Annua, a renovation program is in future plans when money is available. Just this past fall, we seeded a nursery to an improved variety of bluegrass with the hopes of sodding new grasses to the aprons and approaches of the greens because of the high incidence of Poa. I have another area of one and a half acres that is irrigated that I plan to put to sod nursery use next fall. Between the two sites I feel I can replace the aprons and approaches every four to five years as the Poa Annua encroaches.

Lakewood Country Club is a nurseryman's dream because ten years ago it was all farmland, with very few acceptable trees on it. While planning our varieties, we take into consideration the trees most adapted to the area; the location in relation to exposure, sun and wind and the type of tree; deciduous or evergreen and the soil conditions where the tree is to be placed. In the past five years we have planted close to 800 trees; these being six to eight feet at the time of purchase. I feel the members don't want to wait ten years to see a sprig grow into a tree. There are plans in the future to start a tree nursery but for now we're footing the bill for the larger trees.

With the increased use of golf carts, we've all come to the realization that paths are definitely needed in areas of concentrated traffic. Some courses are even going to the extent of providing paths from tee to green over the entire course and prohibiting cart traffic from leaving them during adverse weather conditions. Lee Dieter at Washington Golf and Country Club is an innovator of this in the Washington area. He admits that it's hard to enforce the rule about the carts sticking to the paths. We installed approximately one mile of paths in the past five years and hope in the near future to finish paving them. We excavated to a depth of four inches using a scarifier and York rake, and compacted two inches of crushed stone in the six foot wide channel. I feel that freezing and thawing conditions which we experience in our area justifies the base of crushed stone. We have some paths that were installed without base that we've had to tear up and repave due to breaking up. Our plans show another one half mile of paths yet to be installed in crucial areas.

One of the largest and most costly projects to be completed on our course is our ditch renovation. We have worked with the Montgomery County Soil Conservation District regarding renovation of our ditches and the tilling of wet areas on the course. So far, we've only reached the planning stages because of the cost of the project but hopefully, in the near future, money will become available to at least start the work. I stated earlier that we had done a major project in 1968 of rebuilding a couple of complete holes. We also installed a complete irrigation system at the same time. Unfortunately, due to the cost of the entire project, automation was only supplied to the tees and greens. The fairway watering was left to the services of a night waterman using manual plug-in sprinklers. Our plans include automating the fairways as well as installing underground sprinkling systems in the clubhouse lawns and pool areas. We are in the process of constructing six new Har Tru tennis courts that are to be ready for play by the 1970 tennis season. The



irrigation of these courts is being tied into our new system also. These future connections were all planned for when the irrigation system was designed. This is one area where many mistakes are made. Too many clubs don't provide for these future additions to the club facilities and when they try to tie into an irrigation system, they overtax it. We did run into one problem this past season with our new system. We ran out of water! We have a one and one half acre lake from which we draw water. This in turn is supplied by springs, runoff and a two inch city water outlet. When you're pumping 1000 gallons per minute and replenishing with only 150 gallons per minute, a breaking point is sooner or later going to be reached. Because of the high population of Poa Annua in our fairways, we were watering quite often and during July, the breaking point was reached. When the water was down to eighteen inches off the suction line, we made the decision to stop watering fairways and save what was left for the greens and tees. You can imagine what happened to the fairways. In a matter of three days, they were gone! The membership had been forewarned of what to expect but it didn't really sink in until that third day when large areas started leaving the scene. This year I had a good excuse for losing the fairways. What about next year and next? We hope to provide a larger city water outlet this year but as I see it right now, the situation might well be repeated.

Included in our long range planning but not shown on the master plan is the relationship with the key employees on the greens crew. When I came into the picture none were making over \$1.90 per hour, including the foreman and now the average is \$2.80. Their benefits have also risen so that they are covered by hospitalization, vacation and sick pay and are given a Christmas bonus before the holidays usually amounting to a week's pay. I have discussed with the greens committee the possibility of awarding my key employees contracts which they and I feel would give them a greater feeling of security. In it would be their obligation to the superintendent and the compensation in return. What harm can it do? It can only further strengthen my relationship with my employees.

I've tried to draw you a picture of our master plan with ideas of my own plus those of the various members of the greens committee and pro staff. I believe in open communication between members of the various committees and club members in general. How do we know how these people think unless we listen to their suggestions and complaints? Sure we've got continual grippers. Who doesn't? These people aren't the majority. It's the others I'm listening to because their ideas are very often sound and helpful to my operation. It's only by working with these people that we can put our master planning on the golf course and not leave it stranded on paper.

#### FROM MINIMUM TO MAXIMUM BUDGET

DON S. MARSHALL

This talk has already cost me money and I would fully expect that my good friends in the Mid-Atlantic Association will completely restore the \$20,000 the President of my Club cut from our 1970 budget when he got hold of the program for this fine meeting and found that I would be discussing "Maximum Budgets". After a good deal of talking, I got back \$10,000 of the cut with the remainder promised only if I submit a full transcript of the talk. It is true that the semantics of the title are probably rather bad. No one in his right mind would approach his Board of Directors with the proposal that next year he must have a maximum budget to work with, rather than the trash they've been throwing him in the past. Perhaps a better reference point would be "from minimum to reasonable budget", and it is the achievement of this point that I would prefer to think that I have been asked to expand.

I would guess that the reason for this request is the fact that I work with a rather conservative club that was threatening suicide by economic strangulation throughout the late forties and all of the fifties; and was seemingly damn proud of it! Then in the late fifties they discovered that suicide was not exactly the thing that attracts new members, and there was a vast re-awakening with the establishment of the concept that just because a golf course was the belle of the 20's didn't mean that you could even play a decent member-guest on it in the 60's.

So they changed their entire level of operation particularly in regard to the golf course. I would like to state most strongly at this point that I was not hired for ability to perform this task - and in fact, it was probably because at the time I was a malleable kid, who would do just about what they wanted. It was only a coincidence that I was able to relieve one of the most economically efficient super-intendents on record in the person of Carl Treat, for a more than well-earned, but all too short retirement of four years. The change-over was already well underway upon my arrival, and any reference to I and we in the following fifteen or so minutes refers to the entire team that did the job; particularly the golf course crew, and two Green Chairmen named Bernard Deehan and Shaw Cole. The whole program was a challenge; one heck of a lot of work; and yet, much fun and very satisfying. In some small ways I am almost sorry we were seemingly so successful, because while we may never make it to the top of the mountain, it's in sight, and a lot of the challenge is out of the game.

It is of course, very difficult to talk of budgets. After all, the statement made by more than one exasperated Green Chairman that many Golf Course Managers could spend the National Debt if they had it available, probably contains much truth. Then again, there are many in the field who are content to operate at levels that the majority of us would consider sub-par, if not minimum - and yet, they are perfectly happy. Without any great amount of semantics, let us accept the fact that even the maximum budget must be founded on logic and reason; and that any budget is a minimum budget if it does not at least provide the necessary funds for you as a golf course manager to operate within the full scope of your training and abilities. There are two aspects of this situation that have bearing on the theme of long range planning.

First would be how you might achieve an increased budget in order to upgrade the quality of your operation. And second, once you have achieved this desirable state, how you can most reasonably establish plans that will bring about the desired improvement in the operation over a reasonable period without the necessity of Brinks' trucks arriving daily with new funds for the jerk superintendent who attempts to condense a five or seven year program into a single growing season.

Of course, of the two aspects, the first is infinitely more difficult than the second. There are probably more golf course managers who have withered in frustration and eventually left the business due to low funding, including their own salaries than for any other reason. The first person who must be convinced that a more adequate budget structure is necessary is not your President or your Chairman, but yourself. Sure everyone can use more money for any operation. But the point is, you have to reach the turning point where you don't just think it would be a nice thing to have, but is absolutely essential to the operation of the golf course and your personal success. You'll never sell anyone else on the idea of increases unless you have reached that difficult point where you can honestly state that if at least a start is not made soon on your very reasonable proposals, you will assume your talents are not needed and you will look elsewhere for employment.



One of the best ways to assist yourself in this decision is to meet with your neighboring course managers and sit down and go over everyone's budgets point by point. There are five large courses of comparable maintenance levels within a 10 mile radius of Montclair Golf Club where I am located. Last February, by mutual consent, the course managers of all these clubs spent an entire evening in one of our homes going over each and every item on all our respective budgets with all questions answered. Needless to say we started with the destruction of the biggest area of pure rumor and stated our salaries including all benefits obvious or hidden. From the information made available on this one point alone, two of our group were able to reasonably request and receive, sizeable increases amounting to \$3,000 in one instance and \$2,500 in the other.

A private meeting of this sort is also the time and place to eliminate the confusing chaff from the budgets that are often shown by Green Chairmen and unfortunately sometimes even by club house managers. In order to speak intelligently you have to make the figures comparable and often times when you finally do get them on a comparable basis, you will find that your situation is not nearly what you had thought it was. I would strongly urge everyone, whether in need of increased funding or not, to take part in confidential, private discussions of this type. Your budget may be adequate this year or even next, but it doesn't take long for the situation to do a complete turnabout.

Of course, the best time to state and apply for your budget requirements is the day you apply for the job, if such a situation arises. There has been many a young, eager, potential superintendent who has placed himself behind the eight-ball in his desire to please his interviewers and be hired, by either dodging the issue of course maintenance requirements or indicating he can provide miracles in the way of vast improvements without extra funds. I can vividly remember one winter when I was being considered as the next superintendent being called by the difficult treasurer of the club with the blunt question, "Marshall, what do you intend to do about cutting down the exhorbitant expenses we have in the Green Section in the winter?" Fortunately, that day my mind was in gear and I just had an inkling that this was a test. So I told the truth as politely, yet as firmly as I dared; that in actual fact I considered the operation to be at a starvation level on a year around basis and almost below welfare subsistence in the winter, especially. In answer to his question, I would have to say that winter expenses would have to increase greatly and went on to tell him why. Although as superintendent, I later saw this same man run other members of the staff up one side and down the other on budget situations, he never bothered me again!

The tone for your desired type of operation should be set in your original interview and maintained throughout your tenure. It is also common knowledge that for some reason the early period on a job seems to be the best time for upgrading the equipment inventory. The psychology of the situation is difficult to understand, but how many times have you seen an established golf course manager literally plead for new equipment only to finally give up in despair and move on and then find that the man who took his job got everything he had wanted and more, within the first six months!

Probably one of the greatest confusions in comparing budgets and attempting to show that your operation is not at the level it should be, is caused by trash items that have somehow accumulated in the Green Section budget over a period of years. The heading at the top of the page still reads "Golf Course Maintenance Expense", but somehow the club grounds, part of the pool and tennis labor and possibly the driving range and paddle tennis, have taken a firm hold on a few lines that in total amount to a considerable item. In our case we picked up an instant paper budget increase of about \$10,000 per year by starting to charge the other departments of the club for work we performed for them such as grounds maintenance

and snow removal. In the latter case we found that we were losing on the trucks and plows so now we charge by the hour for use of the vehicles and the "Grounds Dept." owns the plows. Our operating budget is now strictly for the golf course and although we are perfectly willing to do other work, it must quite rightfully be separately funded. Many clubs have gone along for years believing that the total figure at the bottom of the green section statement represents an entirely adequate sum for proper course maintenance when compared with widely published accounting firm reports. In actual fact the amount spent on the course is often about 25 percent less than the total shown.

Assuming you have not only decided that the working capital just isn't there, but have also proved it by further study and investigation, doesn't mean that there are people who will even agree to listen to your case within your own club. Probably the greatest void in this business today is the lack of communication between all parties involved in regard to what the course manager thinks he should be doing, or can be doing with the monies available and what the contributors of those funds actually want. Probably the most unhappy group around today is the "supers" who are very much frustrated in their attempt to turn Dairy Farm County Club into the golfing scenario of the east on a budget that the farmers of Dairy Farm have decided will support the low level of maintenance they will be satisfied with. It is actually true that in some instances the greenskeeper is literally working night and day in an attempt to provide course conditions that the membership doesn't even expect or much less desire. Of course, the opposite is also true in the situation where the course manager has set up an intelligent program based on the funds available, only to be constantly berated by members who think their dues should be doing far more. The basic concept here is that unfortunately very often no one really sits down and discusses this general and most fundamental of operational foundations -- what do the owners desire and what can they afford as a golf course.

So often changes are made to the golf course in many minor ways without consideration of what a myriad of small changes could or will, do to the general maintenance level of the course. I know of a course that fenced in the entire property to prevent vandalism with great success until someone wondered why the grass along the fence couldn't be cut. There were no men or machines with which to do it. Building a fence had nothing to do with turf, or so they thought.

Your first question and working premise in every instance of short or long range planning should be "You tell me what you want in full, and I'll tell you what it will cost in full". Personally, I make it a point every year to outline in writing our maintenance program for the coming season, especially in areas where it most affects the golfers. This is the program that can be carried out within the budget. If they want something added that's been done at some other club, we'll be more than happy to include it, but it will cost this many dollars more.

Once you have proven to the authorities that an upgrading of the maintenance level of the course is a must, obviously the next step is to convince the rest of the membership that you have just cause and that they have reason to expect success. How do you go about it?

I don't suppose there is any set pattern, but there are a few things we found useful in our gradual climb from \$83,000 in 1961 to \$208,000 for 36 holes in 1970. Probably the most useful is the sudden proto-type development. We wanted fairway watering, so we took the worst July-August fairway on the course and patched in a water system. Granted neither the system nor the results were what we wanted, but the fairway was green when it had never been before. Pictures before and after provided additional emphasis. If you want to switch to a more expensive trap sand, buy some and put it in a couple of prominent traps. We did it this past year and even sold a reluctant Green Chairman on the idea because the members wanted it.



Many times demonstrations of equipment are very helpful. A switch from pull gang type fairway mowers to the pusher type for the weekend of the member-guest might just start the ball rolling. Most dealers are more than willing to cooperate, but if not, borrow the thing you need or even rent it.

In the early stages of up-grading we were always more than willing to compromise in order to obtain equipment that would enable us to improve the end product which in turn would allow us to justifiably request still more money. A prime example was the purchase of transportation vehicles. The Board had allotted us \$1,500 for the purchase of one new Cushman type vehicle which we needed desperately. It so happened that the World's Fair had just closed and had Cushman's coming out of its ears, howbeit, with a few assorted dents. For the \$1,500 we were able to purchase four of the vehicles we wanted at auction. Although some people scoffed at the idea of buying used equipment, they are all still running today.

It may take a couple of years but if you've got your facts straight and down cold, you should be able to win general acceptance of your increased program. As your initial changes begin to take shape in the form of an improved golf course and improved player conditions, the going gets easier and in fact, may even begin to snowball faster than you might like. We had one man who became so impressed with the gradual changes that money seemed to be making to the course that he donated \$1,500 for brick drinking fountains. They were beautiful works of art and nearly vandal-proof, too, but we didn't bother to tell him that the only problem was they would have to sit there for almost a year without water until we could get pipes laid to them.

There are a few things that we found after trial and error are better starting points for a higher grade program than others. Probably the most basic point has been in the formulation of a respect between the Board of Trustees and The Green Section. It has been our successful policy not to inflate proposed budgets on the theory that they will undoubtedly be slashed to somewhere near the figure we really wanted. It seems best to set up programs that stand a reasonable chance for completion during the coming year and then work out the cost to the closest figure our information allows us to come up with. As a result, just about the only time our proposed budgets have been cut has been the result of an across the board percentage cut within the entire club operation. This year, for instance, all proposed expenses were reduced by three percent to match expected income.

We have also become very proud of the fact that we have never gone over budget in the last ten years. There have been some very close calls, but it is not hard to limit various aspects of the operation as early as August in order to meet the total allotted fund figure. Both of the above situations seem to have created a very open-minded condition on the part of the Board because they are fairly confident that the monies requested are constructively needed and not just a pie in the sky dream request; and they also know they can plan on this specific expense and will not be hit later for more as a result of poor planning.

Once the budget is approved, however, it becomes almost sacred as the exclusive property and responsibility of the Course Manager and Chairman. Considerable savings have resulted because, as we all know, the best laid plans in this business are all too often just well laid pieces of paper after the weather gets done with its planning. Rather than having to obtain new approval for changes within the program, we have been able to make immediate adjustment with resulting savings in labor use and even occasionally in the unexpected purchase of a quantity of a needed material at a bargain price. There have been several occasions when a wet year or early closing has permitted the diversion of sizeable funds to the purchase of new equipment and in this area we always keep a list of our anticipated

needs, at least two years in the future, so that any sudden purchase becomes merely the advancement of a well-structured program rather than a panic buy without anyone's knowledge or approval. Of course, some of the items are listed in very general terms such as better mowing equipment, to allow for new developments that may arrive on the market.

In so far as priorities are concerned during the upgrading period, we found in our case that wages came first, followed very closely by immediate improvements to the golf course and then improvement of the equipment and maintenance structures. In the early stages we postponed any project that would not produce a sudden visible change for the better. We spent two years building new traps and tees before we even attempted to go for the water system and drainage. By that time at least the membership knew we were trying and had produced constructive results. Even though we needed a new maintenance building right from the start, we are just now getting around to a position where we will be starting construction this spring with the full support of the membership. Curiously, at the same membership meeting where this new expensive building was passed unanimously, improvements to the clubhouse, which would have given far more obvious enjoyment, were voted down.

To briefly conclude, there seem to be only a few basic concepts to follow in the quest for more adequate operating systems of which two are primary. A complete review is required, not only of yourself and the way in which you view your job, but also of the total operation and the way the owners see it. And after the fundamental guidelines are established by mutual agreement of all parties concerned, it calls for the well programmed production of a gradually improved product.

The man in charge of a golf course must be made a part of the total management picture and not merely recognized as supervisory in nature and technique. The standard presently accepted name for our role in this business belies the fact that budget preparation, control and future planning are definitely a function of management. I strongly hope that someday soon we will stop bickering over just how "professional or non-professional" we are or are not, and get on to the realization that we are a very select and important part of the growing industry of recreational management. In this short presentation, I have often referred to the job as being that of golf course manager because in my humble opinion this nomenclature at least provides some equalization between those that practice the age-old art of inn-keeping with a title, and the practitioners of the science of agronomy as related to recreation. At the very least you are managers, and it may well be that the title of such is not nearly enough to portray your full talents, but it's certainly far better than the bib-overalls image that superintendent creates almost universally. A budget, large or small, is a guideline for a planned management operation. You don't supervise it; you manage it, and as in all business, good management is rewarded in many ways!

Gentlemen, it's been an honor and a pleasure. Thank you very much.

#### ARE YOU AN EFFECTIVE SUPERVISOR?

J. PAUL BAREFOOT

The job of supervision is the one which we all have in common and, of course, is the basis for our being in the jobs we now hold. Even though technical knowledge is important in our work, it is virtually impossible to accomplish our goals without supervising others. In the time we have today I would like to discuss the following areas:



1. The supervisor in a new job
2. The major areas of responsibility of a supervisor
3. How not to be an effective supervisor

When taking a new job, whether you have previously been a supervisor or not, you will be judged by your superiors and subordinates largely on your initial impression. Unknowingly you may have taken over a group of resentful employees along with the many other problems in operating a golf course or park. Whether you are successful in overcoming personnel problems can largely depend upon your attitude in the first few weeks of your employment. When entering a new job your attitude toward people is all important. It may be wise to recall the story of the new boss who called all his subordinates together the first day and said, "You guys just keep this in mind -- I'm the boss and you are nothing." A voice in the back immediately replied, "Then it looks like you are boss over nothing."

When selecting some of your subordinates to train for sub-supervisory or leader positions it is well to keep in mind the fact that just because a man is a good technician, machine operator or laborer does not necessarily mean that he will be a good supervisor. Oftentimes, a relatively lazy man may make a good supervisor because he has the knack of getting work out of others. Remember - you are responsible for getting work out of others.

Listed below are some points to observe when starting off on a new supervisory job:

1. Listen and look.

Maintain a calm friendly attitude. Keep your ears open and your mouth shut. Trust the judgement of your assistant or senior employee. Go out of your way to be courteous to those who may resent your promotion.

2. Use the "old broom" as long as you can.

Hold off on radical changes. Show respect for predecessors. Keep in mind that people resent and fear change.

3. Wait before making promises.

Check into all the facts. Don't promise something you can't fulfill. Even a hint of pay raise, better conditions or the like can be construed by subordinates to be promises. You are not politicians.

4. Concentrate on clarifying mutual goals.

Go over job descriptions with employees. Make sure you agree on his job.

5. Make assignments on ability to get results.

Don't play favorites or ignore those who may be backward. Don't consistently assign the good jobs to your personal friends. On the other hand, don't slight your friends and former co-workers for fear of having it look like you are favoring them. Stand by your convictions.

6. Think before you speak.

You represent management. According to your subordinates, your words are the words of the bosses. Employees may pick up a careless remark and translate it to suit themselves. Praise in public - reorient in private. Don't criticize the actions of one employee to another employee; do it to his face.

7. Ask "Who can do this for me?"

Some of the common failings of many supervisors are; trying to do all the work themselves; failing to delegate work of a routine nature; and fearing

to trust subordinates. The boss who has failed in these areas can be recognized by an excessive pile-up of work. With proper training employees can do the job just as well as the boss. Give a man credit for what he can do or knows. If you insist on the subordinates waiting for your personal attention before doing a job, you will invariably have paid employees losing and wasting time waiting for you.

8. Accept the responsibility when something goes wrong.

A real leader will not be afraid to admit his mistakes or judgement errors.

9. DO NOT LOSE YOUR TEMPER!

Avoid questioning the decision of your superior in the hearing of your employees. You must have control over yourself before you can control others.

10. Ease into taking any special privileges due you as a supervisor. Do not abuse these privileges.

#### Typical Duties and Responsibilities of Supervisors:

1. Getting the right man on the job at the correct time
2. Economical use and placement of materials
3. Attendance control
4. Accident prevention and control of hazards
5. Keeping the men satisfied and happy on the job
6. Adjusting grievances
7. Maintaining discipline
8. Keeping records and making reports
9. Maintaining quality and quantity of production
10. Planning and scheduling work
11. Training workers
12. Requisitioning tools, equipment and materials
13. Inspection, care and preservation of tools and equipment
14. Giving orders and directions
15. Developing and maintaining cooperation with other units
16. Checking and inspecting raw materials
17. Settling differences among employees
18. Promoting teamwork
19. Preparing and disseminating rules and regulations, organizational channels, operating procedures and any other information pertinent to employees
20. Maintaining good housekeeping on the job

By analyzing this list of typical duties and responsibilities of a supervisor, it is possible to arrive at six major duties common to all supervisory jobs.

The first of these, the primary responsibility of every supervisor, is PRODUCTION. No matter where the job, we are paid to produce something; be it materials, crops or beauty. In order to obtain production we must organize our work to get maximum production with a minimum of effort. We must also learn to delegate our responsibilities as far as possible. Even though a supervisor is responsible for the final results, he must delegate his authority so his work is not spread too thin. A word of caution, however; one must be careful not to sacrifice quality for quantity in way of production.

A second major responsibility of a supervisor is the SAFETY, HEALTH AND PHYSICAL WELFARE OF EMPLOYEES. When a man is absent as a result of an injury he is a non-producer. Teaching safety is an important part of our job as well as setting



good examples of safety. Do not overlook the situation if you see an employee committing an unsafe act. Immediately call it to his attention.

**DEVELOPMENT OF COOPERATION.** This is not limited to cooperation within your own group, but involves cooperation with fellow supervisors as well as cooperation with management. In the long run, it is the whole organization that counts, so it is wise not to isolate your own little group from the whole organization.

A fourth major responsibility, **DEVELOPMENT OF MORALE**, could be tied in with the cooperation development. One point to remember is, a producing group will be found to be a group with high morale.

**TRAINING AND DEVELOPMENT OF SUBORDINATES.** All of us here fully realize the value of this training. We ourselves are exposed to learning at our monthly meetings and conferences and we must be willing and able to pass on information to our men. The greatest contribution a supervisor can make is the development of his subordinates. An effective supervisor should arrange to have at least one man trained and able to take his place. This is done most efficiently by delegating your responsibility when possible.

A final major responsibility, **RECORDS AND REPORTS**, needs no emphasis to this group. We base our budgets and evaluation of our progress on these. It is wise to know the reason and understand the effect of any reports that we make.

It is up to each individual superintendent to analyze these six major responsibilities and learn to place the proper emphasis on each. It is best not to neglect our least liked area of supervision in favor of an area more to our liking.

While preparing this paper, I discovered a list of ten points on how not to be an effective supervisor. Perhaps one or more of these will "hit home" and our efforts will not have been in vain.

How Not to be a Good Supervisor:

1. Never give your operators clear instructions ahead of time. Let them proceed on their own. Then, when they make mistakes, criticize them severely for any errors or omissions they may have made. Thus, you will be able to foster initiative and confidence.
2. Never commend a subordinate for a job well done for this might spoil him. Kind words are not appropriate in a factory or office.
3. When criticism, corrections or reprimands are necessary, never administer them in private. Be sure that someone else is listening. It is better to have a large crowd so as to enhance your prestige.
4. Arrange to be busy with your own part of the work so that you cannot take time to help your operators on the job. You can best do this by not delegating work to those who are capable of doing it. This will force you to do most of the work yourself and will keep others from seeming to be as important as you are.
5. Never speak kindly to operators or subordinates or they will think that you are soft or that you are a "good fellow". An honest-to-goodness supervisor should resemble Ivan the Terrible in dealing with his own force.
6. Avoid going over your mail for several days or even just let it stand unattended if you do look it over. This can conveniently be made to stretch

out over weeks and more. The longer you take to approve a request or to respond to a communication from a subordinate, the more he will come to appreciate your importance.

7. If you don't understand or agree with what someone else is trying to say, don't let him finish his arguments. Interrupt and cut him off at the third word of every sentence. After about the sixth or seventh time of this, he'll quit trying and you will find that you have then won your point; as a supervisor always should.
8. An excellent way to let your subordinate know that you have ideas of your own is to say to him when you are considering a letter or report that he has prepared, "Well, it's not the way I would have written it myself, but I'll sign it anyway". It also demonstrates your generosity and bigness of heart, to say nothing of your broad-minded willingness to overlook his minor faults.
9. Never waste time training subordinates for possible advanced jobs. You won your way to your present supervisory position because you had an unusual combination of talent, concentration and hard work. A helping hand is not appropriate in this world of hard knocks.
10. Always remind your operators that their job is hanging on a thin thread because that will keep them from too much confidence and security. The best way to keep people on their toes is to keep them on their knees.

REF: "Discipline or Disaster: Management's Only Choice" by Paul M. Magoon and John B. Richards.

#### TURF RESEARCH AT UNIVERSITY OF RHODE ISLAND

DR. C. R. SKOGLEY

#### I. GRASSES AND MANAGEMENT - GOLF TURF

##### A. Bentgrasses for putting greens

Numerous selections of grasses and mixtures with a potential for putting green turf are entered in this study. 108, 10 x 10 foot plots were established, between 1963 and 1969, using standard and experimental selections. Most plots were established vegetatively using stolons from an increase nursery. The selections showing the best overall performance at 1/4 inch height during 1969 were A.P.-3 and A.P.-4 (A.P. = Agrostis palustris - R.I. selections), C-48 creeping bent - USDA selection, Kingstown velvet, a mixture of Exeter colonial and Kingstown velvet and R. I. selection A. colonial bent. The velvet bent was more susceptible to snow mold than the others.

In general the velvet bents continued to receive the highest turf score ratings on a seasonal average.

##### B. Plastic screens for winter protection

Plastic screens providing shade densities from 9 to 88%, in colors of white, green and black, were evaluated as turf covers to provide winter protection to putting greens and newly seeded areas. Temperatures in the soil and turf were recorded and quality scores were given regularly. Black screens with shade densities from 50 to 65 appear to be optimum. Some information was



obtained on temperatures under the covers, on fertilizer-cover relationship, and on management following cover removal in the spring.

A study was started in late November 1968 on Penncross creeping bent that included variables of fertilization, fungicide and plastic screen cover. Fertilizer treatments included late November application of Milorganite at 2 and 4 lbs. N, Urea at 1 and 2 and a 75-25 U.F. - Urea mixture at 2 and 4 lbs. N. A liquid and dry inorganic mercury fungicide was used and half of each fertilizer and fungicide treatment was covered with a black polypropylene screen of 55% shade density. Performance data indicated that the best quality turf was obtained with the high rate of Milorganite plus the cover. Snow mold injury ranged to 12% without the fungicides but was very light where either had been applied. Cover had no effect on disease incidence.

#### C. Fertilizer management study on fairway grasses

Eleven grasses or mixtures were established in 1963 and 1964. They are maintained at 3/4 inch and annual fertilizer rates range from 1 to 3 lbs. N/1000. Treatments are arranged to permit a direct comparison of effects between rate and time of application. Quality scores have been taken for 5 seasons and clipping weights were taken during 1967 and 1968.

Kentucky bluegrasses, red fescues and mixtures of these respond well to fall fertilization. They have maintained better color and density during fall and winter and have greened up about 3-4 weeks earlier in the spring than with similar rates applied during spring and summer. Clipping weights have been lower during the spring and grasses have maintained better density during the season. Bentgrasses have responded less favorably to fall fertilization but treatments have not been harmful.

Highest quality ratings of the grasses throughout the study have been obtained from the pure stand of Jamestown red fescue.

## II. GRASSES AND MANAGEMENT - LAWN AND UTILITY TURF

### A. Variety evaluation

1. Regional study - 55 Kentucky bluegrass and 24 red fescue selections, seeded in late summer of 1968 as a portion of NE-57, were evaluated monthly through the season. General performance and disease incidence data were obtained. During the first season a number of grasses were rated considerably better than the best standard varieties now available.

2. Bluegrass varieties - twelve Kentucky bluegrass selections from domestic and European sources, seeded in 1967, were evaluated for turf use under 3/4 inch cutting height and 4 lbs. of N annually. All grasses included, except Park and Cougar, have performed well. These two varieties are highly susceptible to leaf spot. PP-1 and PP-2 (R.I. selections) are best during the spring but lose some quality during the summer. The best grasses to date have been Fylking, Merion and Barenza 64-1.

### B. Electric soil warming

Soil warming with electric cables to supply 10 watts/sq. ft. has been tested for four winters on seven different putting green and lawn grasses. All seven grasses were kept reasonably green on unfrozen soil all winter when

the soil thermostat was at 50°F. The heat was turned off suddenly during cold spells (below 0°F.) on two occasions during the winter of 1967-68 and the soil was permitted to freeze to a depth of 12 inches before again warming the soil. Grasses browned off but recovered 100% when heat was restored.

A larger scale study was installed in December of 1967. This included 3 cable types to supply 5, 10 and 15 watts/sq. ft. and soil thermostat settings were varied from 40° to 60°F. during the winter. Thermocouples were installed to measure temperatures at the cables and at many locations from the base of the grass to depths of several feet. During the winter, information was obtained on the use of various covers over the warmed soil, on seed germination and establishment with and without covers, and on the rooting of sod.

### C. Activated charcoal studies

1. Activated charcoal was successfully used in 1967 to nullify the harmful effects of various herbicide residues in soil during turf establishment (Proc. NEWCC 1968). To determine if the charcoal used in these seedbeds (300 lb./A in the top inch) would influence herbicide effectiveness in the following year, crabgrass seed and bensulide were applied to the area in April 1968. Charcoal did not affect the degree of crabgrass control obtained with bensulide.

2. A test was initiated to determine if charcoal applied to the surface of established turf would affect the degree of crabgrass control obtained from preemergent chemicals. In November of 1967 activated charcoal was applied to plots of lawn-type turf. Five months later, bensulide was applied as the test herbicide. The percent crabgrass control estimates, as shown below, indicate that the effectiveness of bensulide was reduced to varying degrees related to the rate of herbicide and charcoal used.

Bensulide lb./A	Charcoal lb./A					
	0	25	50	100	200	400
10	93	93	71	78	40	31
20	99	98	97	93	80	36
40	100	100	100	99	98	89

3. Laboratory studies showed that different grades of charcoal have varying degrees of effectiveness for nullifying the harmful effects of a herbicide. In turf establishment tests two sources of charcoal, "Aqua Nuchar" and "Darco S-51", appeared equally effective.

4. Charcoal was used in putting green turf, which contained preemergent chemical residues, to determine if it would aid in grass establishment. The area was seeded with velvet bentgrass, with the aid of an aero-blade machine, after the existing vegetation was killed. Poor turf establishment occurred where bandane and DCPA had been used for three prior years.

Good stands were obtained where bensulide, tri-calcium arsenate and siduron has been used. Charcoal at rates up to 300 lbs./A did not nullify the harmful effects of bandane, but it did reduce the harmful effects of DCPA. Seedings made in areas which were treated with these five herbicides several



weeks earlier were not successful. Siduron treated areas had the best turf stands (83%). Use of charcoal in areas treated with bandane, bensulide and siduron resulted in improved turf stands (94-98%). Charcoal use in areas treated with DCPA and tri-calcium arsenate showed only fair stands, 65% and 79%, respectively.

5. A test was initiated to determine if charcoal would alleviate the damage from a brush-killer type herbicide applied to putting green turf. The effect of time of charcoal use after application was also investigated. An ester formulation of 2,4-D + 2,4,5-T was applied to Penncross creeping bentgrass. Within seven days after herbicide use about half of the grass was discolored, and at two months this appeared to be permanent damage (turf score 2.5-3.5). Turf treated with charcoal (200 lbs./A) up to 24 hours after the herbicide was applied had 60% less discoloration and at two months 80% less damage (turf score 6.8-7.8). Charcoal treatments made 4, 8 and 14 days after herbicide use were less effective, but at two months there was 50-70% less damage (turf score 4.3-5.5).

Bensulide lb./A	Charcoal lb./A				
	0	25	50	100	200
10	98	97	97	98	98
20	98	98	97	97	98
40	100	100	100	99	98