Control That Really Works!

Now you can cut the cost of spray drift losses and keep herbicide sprays out of non-target areas. NALCO-TROL added to a herbicide spray solution lets you put a full dose on the precise area needing it, where it will do the most good—not on surrounding areas. Helps you do a better job of spraying.

NALCO-TROL helps you spray more days of the year; whether used with ground or aerial equipment, NALCO-TROL allows the applicator a greater variety of conditions under which he can spray.

NALCO-TROL mixes readily with all water-based, wettable powder and emulsifiable herbicides. So don’t let your sprays get carried away. Whenever you spray... whatever you spray... let NALCO-TROL help you do a better job!

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time that he has spent on each item. He should go down the log and ask himself "What would have happened if I had not done this?" If the answer is "Nothing," he should never do it again since it is a time waster. It always helps to have a list each day of things that have to be done in the order of their priority. It is surprising how much more can be accomplished with a little planning.

Friendly Supervision is another thing. It means little to men. They prefer it but do not demand it. Women on the other hand insist on it. They remember friendly supervision a long time and speak frequently about it, and they become highly dissatisfied if they are handled crudely or rudely.

Company Policy is an item that is seldom understood and where attitudes get deeply involved. People do not remember it or speak too often about it when it is good, but they sure remember and talk when it is not to their liking. Company policy is that indefinable area of sagacity in the conduct of company affairs that undoubtedly affects the formulation of attitudes.

Attitudes are positions we assume for a purpose. They are frequently pre-conceived viewpoints. They often evolve from past experiences, or hearsay. They are a readiness to react to a particular person or situation in an impulsive manner. They can range in intensity from a mild viewpoint to a deep conviction to a prejudice. They insulate a person from others' viewpoints because they cannot accept the other person's facts or even hear what they are saying.

When we are dealing with mild viewpoints we can use facts but deep convictions and prejudices are emotional and facts do not stand a chance. People can interpret a certain act or situation as favorable in the case of one person and unfavorably in the case of another. Attitudes that are deep convictions or prejudices can be changed in a person only by some other person for whom they have a great deal of respect. If the person for whom they have the respect states his position, the other will weigh his comments often deciding that if this person holds such a viewpoint, then he, himself, must be wrong, and decide to accept his points as valid. A great deal of thought should be put into formulation of company policies and how they will be accepted by the personnel.

In this respect it is highly important that management be respected by the rank and file by doing everything else as near right as possible so that cooperative attitudes will be formulated and compatible opinions be crystallized.

Possible Growth is often an essential ingredient in successful management. Many people as they come to work for an organization have the hopes of improving their personal worth and status and want the opportunity to grow and help the company grow. This can be a driving force which can be in their minds at all times and something they talk about very often. If the opportunity is not present they generally leave the organization rather than fight it.

It is not always bad when people leave an organization. People who are not getting what they want from a work environment and are dissatisfied will often leave to try and find work that will "turn them on" so to speak. It is the people who become dissatisfied and "turned off" but will not leave, because of family or community ties or because they do not want to give up their vested perquisites or are afraid to look for another job, that develop incompatible attitudes that cause them to produce poorly and generally cause trouble.

Peer Relationships is something that bothers men less than women, particularly in the hourly pay brackets. Men would rather not have some one person getting treated better than they, but it's no big deal one way or the other.

In the case of women, however, — watch it. It means a great deal to them. (continued on page 46)
We’re more than middle-of-the-road.

The best automatic sprinkler systems... for the least problems.

Whether you’re irrigating a median strip or a National Park, TORO can meet your specifications. And then some.

OUT OF SIGHT, OUT OF MIND  TORO heads pop up higher than most . . . then pop down below ground surface to prevent vandalism and accidental damage. Nozzles are mounted on a stainless steel spring so there’s never a hang-up.

NO WASTE, NO WORRY  Our Stream Rotor head’s low precipitation rate stops run-off, even on steep road banks. But that solves just one of your problems. TORO offers 586 different head variations to handle the others. Right now, we’re developing a 12” pop-up to rise above high ground cover problems.

THE STRONG, SILENT TYPE  TORO heads are made of tough, indestructible Marbon CYCOLAC.® Self-contained gear assemblies of DuPont DELRIN are sealed in oil for less wear and tear and the nozzle is protected by a basket filter. TORO heads operate silently. So with one setting on a central controller dial, you can program a TORO system to go on automatically long after your maintenance crew’s gone home.

AT YOUR SERVICE  TORO’s nationwide network of distributors and contractor/installers is available whenever, wherever you need them . . . with no two or three week delays. And they’re backed by 50 years’ experience in the turf care business. So next time you’re looking for the most system for your money, be specific. Specify TORO. For details, write TORO Irrigation Division, Dept. W-574, P.O. Box 489, Riverside, CA 92502.
Green Industry

Newsmakers

Diamond Shamrock finally found an outlet for all that hot air. The *Artful Dodger*, named for Charles Dickens' infamous bamboozler, is a 75,000 cu. ft. four passenger balloon. It is used for promotional and charity activities and to give company guests a unique experience. The balloon is based at the company's Nopco Chemical Division plant in Morristown, N.J.

Treeeeees! said the newly elected New York State Arborists officers when they lined up to have this beauty snapped. The association voted for officers at their annual meeting in January. Pictured from left to right: D. W. Cadwallader, Ms. Margaret Herbst, James W. Taylor Jr., Jacob Bruinooget, Sam Blakley, newly elected president Carl Lundborg, out-going president Jack Schultz, George Callaway, Richard Wickey and Leo Cook. Not pictured are Philip J. Brogan, David E. Williams, David K. Kress and Edward Johnson.

F. Manley Corp., Ontario, Canada, has been named distributor for the Bolens line of lawn and garden equipment by the Outdoor Power Equipment Div. of FMC Corp. Manley, a long established distributor of lawn and garden products, recreational vehicles and industrial equipment, has been serving dealers throughout eastern Canada since 1945.


"At first look 20,000 seems a mere handful," said Bombardier president Laurent Beaudoin. "But considering these industrial vehicles are unique, custom-built units ranging in price from $7,000 to $55,000, engineered for difficult off-road tasks, 20,000 becomes significant." Canadian manufacturer, Bombardier Limited, lined up an assortment of their logging vehicles, snowplows, materials and personnel carriers to celebrate this significant milestone.

Emerald Bentgrass

F. Manley Corp.
It's a fact. Agrico Country Club Fertilizer for tees and greens provides more efficient feeding. It gets down to the grass roots quicker, and gives you more feeding power for your money. We'll prove it to you on your own course, free of charge.

While other fertilizers are still at the surface level—where they can be mowed away by greens mowers—Agrico's 18-4-10 formula is already rapidly penetrating to the root zone. The key to its rapid penetration is Agrico's scientifically sized, extremely dense particles. These tiny, non-burning granules are quickly dissolved and absorbed to provide instant, longer lasting feeding power. With far less pick-up by mowers.

Proven on leading golf courses, Agrico's 18-4-10 contains the balanced nutrient formula necessary for controlled sustenance of high-quality turf. Ten units of water insoluble nitrogen provide the balanced ratio necessary for continued, long-term feeding. Quickly available sources of nitrogen cause immediate green-up.

Sulphate of potash increases summer durability and winter hardness, while reducing disease incidence. And Agrico's low phosphorus content avoids excessive build-up while promoting vigorous, deep root formation.

"We'll Go To Any Links"

To prove that Agrico works more efficiently, we'll go to any links. Complete the coupon below, and we'll come to you with a free product demonstration. We'll prove beyond a doubt the effectiveness of Agrico's 18-4-10 formula for tees and greens. And we'll fill you in on Agrico's full line of dependable course-care products.

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Offer good only in Agrico trade areas.
Job Performance
(from page 42)

If one woman is being treated better than the rest, there is going to be a great deal of dissatisfaction resulting in problems and reduced productivity.

Achievement or rather the measure of achievement is one of the prime motivating forces that can be used with people. Everyone likes to accomplish something and they like to know how much they have accomplished. It is something they do not remember for ever but while they do remember it, they talk a great deal about it. Records are to be broken and people are competitive and a measure of achievement causes them to want to come back to work tomorrow and see how much better they can do.

People often talk about the increased productivity with incentive pays such as piece work, and give all the credit to the opportunity of increased earning capacity. This is true to a certain extent but also inherent in all incentive pay schemes is a measure of activity. When this measure of activity is introduced into a simple hourly pay program, increased productivity is also experienced.

Recognition is a must in acquiring acceptable job performance. It is not something that people remember a long time but they like it when it is earned and they talk and brag about it to their families and friends. It must, however, be genuine and not presumed to be flat-tery. The persons involved know when they have done a good job — management knows it also. Therefore, it must be given when earned and publicly, if possible. Supervisors should always remember to praise the person and criticize the job. The recipient of a properly given citation for earned recognition is always anxious to return to work and to compete for another such honor.

Advancement is a driving force. The goal of many people is for constant and consistent advancement. This is probably more true of people in the management hierarchy but also of many people who want to advance into management. People who advance as far as possible in one enterprise may leave to join another where higher positions are possible but while with the original organization have produced well and above the expected level just to reach the goal that they have coveted.

Advancement is remembered long and often but it should never be promis-ced where or when the opportunity is not available because this can cause considerable acrimony, dissatisfaction, and problems. Management’s aim in decision-making should be to reduce problems not increase them.

Responsibility when taken in its broadest sense is the epitome of motivation. Responsibility not for other people necessarily but for knowing how and being permitted to do a job well in one’s own manner. People do not mind being told what to do but they want to decide how to do it themselves. They are proud of their skills and want to practice them. When people are given the opportunity of accomplishing a task by their own self-direction and self-control, they are enjoying their maximum motivation.

This is the reason that people generally work harder for themselves off the job than while on the job. People have a great deal of imagination, ingenuity and creativity that they like to use and enjoy the results. Responsibility is something that people remember a long time and talk a great deal about.

An interesting thing about the factors discussed here, all, except pay, are things that can be used on the job; all of them have more influence on productivity than pay; they are all, if not equally important, at least highly important; they complement each other, and none of them costs the company any real outlay of finances. By using these factors with an eye towards reducing or removing employment dissatisfaction, a manager can come closer to obtaining maximum productivity or acceptable job performance.

---

Take the guesswork out of turf insect control

Diagnostic Aid from TUCO

Many turf insect larvae are night feeders, so the first evidence of their activity frequently is damaged turf. Diagnostic Aid, applied to turf as directed, causes insects to emerge to the surface within 10 minutes. They can be identified and counted where or when the opportunity is not available because this can cause considerable acrimony, dissatisfaction, and problems. Management’s aim in decision-making should be to reduce problems not increase them.

Proxol* 80 SP Insecticide from TUCO

Proxol is the one insecticide developed especially for use on fine turf and ornamentals. Sod webworms and cutworms are two major groups of turf insects controlled by Proxol. It is estimated that each sod webworm larva can chew up 20 square inches of turf in its average life span of 20 to 40 days; the cutworm larva can devour up to 36 square inches. With 300 to 500 larvae generated from each adult in a period of 10 to 21 days, it becomes apparent why early detection and control are desirable. Using Diagnostic Aid and Proxol together lets you program insect control.

*Trademark

One bottle of Diagnostic Aid FREE in each case of Proxol 80 SP.
The Sweet Sound of Industry

The sound of industry has been sweet to hear! At least, to the man who owns the business, or maybe the Chamber of Commerce.

But, for a long time the sweet sound has been getting a bit loud. In fact, sometime it's downright noisy. Happily, since the middle of 1971 things are supposed to be getting quieter. Or, haven't you heard (no pun intended)?

July, 1971 is when the Occupational Safety and Health Act became law and, because of it, you may be one of the many people who's supposed to be making the change.

Find out. If you are, and don't, there are severe penalties involved and your operations could ultimately be shut down!

Start by knowing what OSHA has to say on the subject. That's contained in Section 1910.95, which is printed adjacent to this article for your convenience.

First, you need to know something about sound. The experts say that certain sound pressure levels above 90 decibels (dB) may be injurious to the hearing of some people. We aren't all affected alike by these things, so just to play it safe the "threshold" level of 90 dB was agreed upon. Even now, some people think it should be lowered to 85.

Be that as it may, whether or not any particular sound level will be injurious to any given person depends on how long he's exposed to it. So, included in the regulations is Table G-16. This gives the time of exposure to various sound levels allowed in one day. For example, by OSHA laws a sound level of 92 dB can be safely tolerated for up to six hours a day, while a sound level of 110 dB is permitted for only 15 minutes.

Your first reaction to this might be, "Well, if I have a problem with a sound level of 110 dB, all I have to do is cut it in half, and wind up with 50 dB. That would put me home free, right?" Wrong! Because decibels don't add and subtract the way other things do. Sound level is measured on a scale based on ratios and logarithms. When you cut a sound pressure level in half it goes down by only six decibels. If you double it, it goes up by only six. (In case you're wondering, when two equal sound sources are put together, the net increase in sound pressure level is only three dB.) Seems very funny. But that's the way it is. Obviously, the problem of controlling sound is somewhat tougher than it first seems to be.

Sound frequency is important too, but all we have to know about it here is how it's taken care of when a sound level is measured. If you're interested, the sound level meter has three scales — A, B and C. Mostly, the difference between them is the way they discriminate against the very low frequencies, with the greatest discrimination being in the "A" scale. For each of these settings the meter can be set on either "slow" or "fast" response.

At fast response the meter needle will try to follow every change in sound level, which would make it hard to read. Set at slow response, there is much less needle movement, making the whole thing easier to read. So, any sound level measurements you use for compliance purposes must be made with a meter set on the "A" scale, slow response.

Note the column heading on the right in Table G-16. It reads, "dBA slow response". That means that the sound levels listed are as measured on the "A" scale of a sound level meter set at slow response.

Are you in compliance? If you don't know, find out. Chain saws, chippers, brush saws and, in fact, most equip-

(continued on page 56)
When The Going Gets Tough—

By JOHN R. HALL
Turf Specialist

In this peculiar time when we find our ability to obtain the material necessary for the production of quality turfgrass hampered by shortages, it becomes increasingly difficult to make management decisions. Today's supply uncertainty looms heavily in the minds of all turfgrass managers. Turfgrass managers are generally paid commensurate with their ability to provide quality turf in spite of Acts of God or man. Therefore, I fear we had best tighten up the reins and get with it.

Current material shortages exist in gasoline, fertilizer, seed, chemicals and machinery. The reasons why these shortages exist are complex and in certain instances unexplainable. The fact remains, however, that if "Push Gets to Shove" the turfgrass industry is going to have a struggle on its hands. All segments of the industry are now feeling the pressure of shortages. The American Sod Producers Association (ASPA), Maryland Turfgrass Association, Maryland Turfgrass Council and Mid Atlantic Association of Golf Course Superintendents are actively defending their interests. Others are involved, too.

Largely through the efforts of an alert American Sod Producers Association the sod producers have been granted the status of "agricultural production" by the Federal Energy Office. This means that if fuel is available sod producers will be allotted 100 percent of current requirements. Fuel availability to sod installers is not as clear.

ASPA legal counsel, William A. Harding, indicates that the Federal Energy Office is considering use of the Standard Industrial Classifications Manual Definitions in future cases. In this manual sod is classified as an agricultural commodity and the installation of sod is classified as an agricultural activity. However, it appears that only sod installers involved in sod production will receive agricultural energy allocations.

Fertilizer will be in short supply in 1974. The reasons for the fertilizer shortage are many: 1) Release of government control on production acreage has increased fertilizer usage, 2) reduced electrical power and natural gas availability has limited production, 3) devaluation of the American dollar has made our fertilizer cheap on the world market thus we are competing with foreign markets, 4) fertilizer production capacity was reduced when older plants not able to meet new pollution and safety standards were shut down in lieu of costly modifications, 5) more urea is being used as a protein feed supplement because of high protein food costs.

Our fertilizer prices are higher due to: 1) increased costs of natural gas, phosphoric acid, sulphuric acid and basic nutrients used in production, 2) increased labor and transportation costs, 3) increased production costs as a result of expensive pollution abatement equipment and 4) increased cost of fertilizer bags.

Turfgrass managers with properly timed cool-season grass fertilization programs should miss the real fertilization crunch that will arise when corn and soybean fertilizer meets peak. No sod producer in Maryland should have applied spring nitrogen fertilizer to cool season grasses after March 31. The longer after this date one waits to apply his nitrogen fertilizer the more shoot growth the more root growth he is going to produce. More shoot growth simply means more mowing and further aggravation of your gasoline shortage problem.

Seed prices are up and availability of certain bluegrass varieties is mixed. The current seed shortage arises as a result of several factors: 1) competition with wheat land is severe and certainly of a good price for wheat is better than for grass seed, 2) open burning of seed fields has been prohibited reducing seed yields and increasing disease and insect problems, 3) drought in the 1972-73 production year was the worst in 50 years and crippled seed production and 4) overseas markets are booming with European and Japanese countries now becoming turfgrass conscious. The current seed-pricing situation has brought the common Kentucky bluegrass almost into the same cost bracket as the superior varieties. With the cost differential diminishing between superior bluegrass and common bluegrass this should be the year to strengthen the blends with real performers such as Merion, Penn-star, Fylking and Adelphi.

Chemical availability also appears to be mixed with most of the standard broadleaf weed control materials such as 2,4-D, Silvex, Dicamba and MCPP in short supply. Prices are up somewhat due to the fact that most of our pesticide chemicals are petroleum-based and oil is deficient and expensive.

From a management standpoint, the use of surfactants should allow more efficient use of herbicide materials and help reduce rates of use. Consider use of synergistic mixes of demethylamine salts, 2,4-D, MCPP and Dicamba. Total herbicide usage can be considerably reduced with the synergistic mixtures.

Keen diagnostic techniques are essential in this time of shortages. Preventive spray programs will become harder and harder to justify as the season progresses. Blanket applications of insecticides and fungicides without positive diagnosis is a luxury few of us will be able to afford. Consider use of pyrethrins for diagnosis of sod webworm problems in 1974. This insecticide-irritant will bring thatch-borne webworms to the surface of the turf simplifying diagnosis.

Machinery and parts availability is poor for most of the turf industry. Stocking of parts that annually break down might be wise. There may be considerable delay for some replacement parts. In view of this situation proper machinery maintenance is more essential than ever before. All the turfgrass management expertise in the world is of no avail if equipment is not running.

Admittedly the picture is bleak but we in the turf industry know as well as anyone that when the Going Gets Tough — The Tough Get Going.
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O.J. Noer Grant-In Aid Presented to MSU

Frank I. Shuman (on left) presents a continuing O. J. Noer Research Foundation, Inc., $4,000.00 grant-in-aid check to Dr. James B. Beard at the Michigan State Turfgrass Conference, East Lansing, Michigan, in mid-January.

Beard heads the turf research work at Michigan State University. Shuman is Secretary-Treasurer for the O. J. Noer Foundation and a Philadelphia area Toro distributor.

In addition to the research at Michigan State, The Noer Foundation supports work in progress at the University of Florida, Pennsylvania State University and Texas A & M University.

Grass Seed Production Continues In Oregon

The rumor is out that Oregon will move out of grass seed production unless a workable field burner is found immediately.

A publicity release from the Oregon Seed Council claimed that such prognostics were simply rumors. The release also suggested that it is extremely remote that the legislature will enforce the January 1975 deadline to halt open field burning.

In Oregon's Willamette River Valley, an area about 3,000 square miles, some 270,000 acres of grass seed is grown each year. Ryegrass, fine fescues, bentgrass and bluegrass plus a considerable acreage of orchardgrass and tall fescues push this cropping practice to an excess of $60 million annually.

The perennial grass crops are kept in stands for about five years and growers of varietal strains must keep fields clean through rouging out foreign plants and by the use of chemical sprays. The chief source of field sanitation has been burning the straw on the fields, following harvest each year. The heat from the burning straw has proven to be an excellent way to kill seed left in the field following harvest, controlling insects and shocking the plant into greater production. This cultural practice has been...