

THRU THE GREEN

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OUR OBJECTIVE: The collection, preservation, and dissemination of scientific and practical knowledge and to promote the efficient and economical maintenance of golf courses.

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PRESIDENT'S CORNER

Again, we had an excellent turnout at DeLaveaga Golf Course and again as in the past, our host superintendent, **Campbell Turner**, was the perfect host. The course, even with the construction of a new pond liner going on was enjoyed by all and the buffet was excellent. Many thanks to Campbell and the staff at DeLaveaga for making us feel welcome.

It takes a major effort by the Superintendent and a lot of cooperation from their respective clubs to host one of our meetings. These meetings just do not happen by themselves. It is also a major task to run Program Chair (**Rod Kilcoyne**) to coordinate and schedule them. Each month it involves mailing out cards for registration, arranging for speakers, checking out the facilities, handling numerous phone calls, planning for golf, registering and a lot of details that have to be taken care of. Some of this is accomplished by the Association Secretary, but much of it is done by our members.

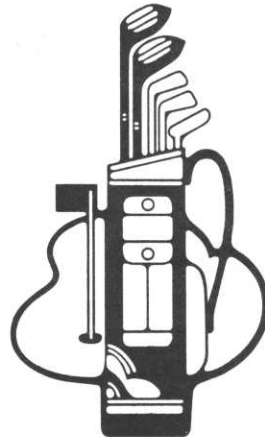
I am not trying to discourage anyone from hosting a meeting, but I am saying that the effort is greatly appreciated. Sometimes a Superintendent can't participate on a committee or volunteer their time, but can host a meeting. This is a great way to show support for our Association. I very specifically said our Association, because that's what it is.

I would like to take a moment to remind everyone what the monthly meeting reservation policy is. The reservation card you receive in the mail each month for a meeting serves many purposes. The first being to get a count on the number of people who will be attending the meeting. This helps the host superintendent and staff arrange to have enough food and chairs. Can you imagine the disappointment to have 120 people show up for a meeting and only enough chairs or food for 80?! The second reason for the card is to plan the pairing and format for golf. Any member has the right to cancel 48 hours if they cannot make the meeting. A member who signs up to come to a meeting and does not show up or cancel is subject to a billing of \$5.00 to defray Association's costs.

The program and education committees are welcome to suggestions for monthly meeting topics and meeting sites. So if I didn't take you out of it, please contact our Association office (408-865-0360) or Program Chair Rod Kilcoyne, for a spot on our schedule. At the present time we are booked through December 1990.

See you at the Superintendent/Pro Tournament on July 16 at Palo Alto Hills Country Club.

Joe Rodriguez, President



CONTINUING EDUCATION HOURS

WHAT YOU MUST DO TO COMPLY

Mac Takeda, Program specialist, Pesticide Enforcement Branch, CDFA, has just announced that the regulation requiring continuing education hours for pesticide applicators will become effective July 4, 1990. Mac has indicated that accreditation of continuing education hours will be retroactive to January 1, 1990. An informational letter from CDFA will be mailed soon to all license/certificate holders.

Changes in the requirements and monitoring of mandated Continuing Education hours have created several areas of confusion. The Applicator's News interviewed Robert Kennedy, Hartnell College Pest management Computer, to get some answers to the most frequently asked questions.

Q. What are the most important things applicators should understand about the new mandated continuing education (CE) program?

A. (1) Sign in with your correct license/certificate number. When you are audited by the California Department of Food and Agriculture (CDFA) and your name and license are not on the meeting sponsors sign-in sheet- then you weren't there! You may have forgotten to sign in BUT be forewarned, the requirement of the CE program is that the meeting sponsor must have a sign-in sheet.

(2) Follow the meeting sponsors sign-out procedure, if one exists. Most all day meetings have one. If you sign in and fail to check out (as the meeting sponsor requires) then, generally, you will only get one hour for having checked in.

Q. How will the new mandate for continuing education hours affect the multiple licensee who holds more than one card under CDFA?

A. CDFA has established a ranking of these licenses and the licensee is expected to keep their CE record on the highest ranking number if attending an applicator meeting. For example, a PCA/QAL card holder will sign in with their PCA number even though attending in order to meet the requirements of their applicator card.

The subject requirements between different groups are quite similar, consequently, meeting the requirements of, and keeping your record on your highest sequence card will meet almost all of the lower sequence license/certificates. These hours will also be kept on your highest sequence card.

Q. What is the ranking sequence?

- A. (1) Pest Control Advisor (PCA)
 (2) Pest Control Pilot (JP & AP)
 (3) Qualified Applicator Licensee (QAL)
 (4) Qualified Applicator Certificate Holder (QAC)
 (5) Others

NOTE: If you sign in with your QAL card number and you also have a JP, AP or PCA number, the computer will not accept that number and will respond with "This is not your highest sequence of card". so identify your highest card and always use it.

Q. How does this sequence of licenses affect Professional Association membership and the Hartnell Computer?

A. Hartnell College is funded through contract agreements with each of the professional associations for this service. In accordance with these contracts you must belong to the association of your highest ranking license in order to gain access to the meeting sponsor's records held in the computer. Not only in CDFA stressing education with their new mandate, but the professional associations also agree among themselves on the need to encourage

improvement through education in each of these license categories.

Q. Must I be a member of my professional association to get continuing education hours for attending meetings?

A. NO! BUT at the time of an audit the burden of proof of attendance rests entirely on your shoulders to prove you were there. If you or a member of your professional association the record keeping is done for you and provides proof of your attendance.

Q. How does CDFA audit me?

A. When you are chosen for audit, you will receive a letter from CDFA asking for the documentation of your attendance at each of the meetings you cited on your renewal application. NOTE: DO NOT SEND any of this documentation to CDFA with your routine renewal application. You need only send this documentation when requested by CDFA. When requested send it and keep a copy for yourself. CDFA may then compare this with the meeting sponsor's records. P.S. This is one of the major advantages of the printout from the Hartnell computer. When audited CDFA first checks to see if your renewal record was the Hartnell printout. If so, you probably will not receive the audit letter as the Hartnell printout is the accepted compilation of the meeting sponsor's records saying that you were there.

For CAPCA members the laws and regulation instruction hours will in the future be singled out and accredited with a subcode and will require another line on your computer printout. In addition to being part of the 40 hours, a summary listing at the bottom of your printout will show CDFA whether you met the required 4 hours for laws and regulations. **The computer takes care of you.**

article seen in Applicator's News, Volume 5, number 4

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INSIDE THE SPRAYER

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The many components of a modern pesticide sprayer must work together in order to produce the desired result—a biological effect. If even one of the components is damaged or not functioning properly, the sprayer may not be able to correctly deliver material to the target pest. Proper sprayer design, setup, repair, and maintenance is essential for a successful pesticide application.

In this article we will look at the components of a sprayer, describe their function, describe how to tell whether or not they are operating properly, and how to maintain and repair them.

Screens and Filters

Screens and filters are absolutely essential to proper function. Screens and filters should be checked and cleaned at least every time the tank is refilled. If you notice a partially or completely plugged nozzle, loss of pressure, or lack of liquid getting to the pump, even though the tank still has liquid in it, screens and filters should be checked immediately.

When working with sprayers remember to wear appropriate safety clothing. Screens can serve to collect and concentrate the pesticide as they filter the solution. **NEVER** clean a screen or filter by putting it in your mouth and blowing into it. Screens should be cleaned with a soft brush and rinsed with clear water before replacing. You may be able to get a special nozzle and screen cleaning brush from your dealer. If not, use a toothbrush and keep it with your other tools used with pesticides, NOT in your locker.

A sprayer may have four sets of screens or filters. The first is a screen over the tank inlet. This is usually supplied by the manufacturer and is designed to prevent large pieces of

debris from entering the system. The second is often called a suction strainer, because it is located on the suction side of the pump, between the tank and the pump. This screen protects the pump, pump valves, pressure regulator, control valves and nozzles by capturing particles that could damage these components. A filter here is recommended to be a 30 mesh screen size although a larger size such as 16 or 24 mesh may sometimes be use. A 50 mesh screen may be appropriate at application rates of 0.3 gpm per nozzle and smaller.

The in-line strainer comes after the pump and before the pressure relief valve or any other control valves. This is where you want to capture any particles and unsuspended or unmixed product, not at the nozzle strainer. The mesh size used here should be the same size as used in the nozzle stainers.

Screens at the nozzle are essential for proper nozzle flow rate and pattern. They capture any remaining small particles such as rust or unmixed product. Guidelines for the appropriate mesh for in-line and nozzle strainers are given below.

Nozzle strainers can be either screens or slotted strainers. Some may also incorporate a check valve to stop the nozzle from dripping after the boom or nozzle is turned off. These also need to be checked for proper operation and freedom from corrosion or clogging.

Every sprayer should have, at a minimum, a suction strainer and screens at every nozzle. The inlet or tank screen and in-line filter may or may not be present, depending on the manufacturer of your equipment and the design of your particular sprayer. If your sprayer is missing either of these two screens, or it's been more than a day since they've been checked, add them or clean them before using the sprayer. Their presence and proper function will help you succeed.

GOLF COURSE SUPERINTENDENTS INSTITUTE

Please join Golf Course Superintendents Association of Northern California (GCSANC) and the University of California Cooperative Extension (UCCE) at Mountain Springs Golf Course in Sonora on October 10, 11, 12 for the next Golf Course Superintendents Institute.

The theme will be "Environmental Issues Challenging Today's Superintendent". Dr. Martin Petrovic and Dr. William Steinke are some of the noted speakers.

In response to the membership, a special half-day seminar on budget preparation will be held on Wednesday October 10. This will be a hands-on course on budget preparation. Class size is limited to 20 people.

On October 11, we will have a full day seminar on environmental issues facing superintendents today. This seminar is limited to 120 people. In the evening spouses, guests and children are invited to attend a BBQ at the Mountain Springs Clubhouse.

On Friday, October 12, 7:30 am golf will be a shotgun start. Presentation of golf prizes and lunch will conclude the day.

Hotel reservations will be made directly to the Hotel's we have reserved.

A spouse program will be provided. Children and spouses are encouraged to attend.

Watch your mailbox for a registration form in August.

We hope to see you there.

A LOOK AHEAD

| | |
|--------------------|---|
| 16 | Supt./Pro Tournament Palo Alto Hills CC |
| July 19 | Turf and Landscape Field Day at Santa Clara Field Station |
| August 6 | Meadow Club |
| August 16 | Northgate CC-Reno Celebration of Sierra Nevada 15th Anniversary |
| September 7 | Mira Vista CC |
| September 20, 21 | GCSAA Sierra Nevada Seminar |
| October 10, 11, 12 | Supt. Institute-Mountain Springs Sonora |
| November 9 | Claremont |
| December 29-30 | GCSAA - GCSA NC Seminar Pleasanton |
| December 7 | Larry Lloyd Memorial Tournament |

WORKING OVERTIME ON MORALE

BY ELIMINATING "DEMOTIVATORS", YOU CAN IMPROVE EMPLOYEE MORALE AND PRODUCTION DURING THE LONG WEEKS OF SPRING AND SUMMER

The long, busy hours of spring are bound to put additional pressure on your employees. For them to remain motivated and maintain high morale, management needs to introduce incentives so their employees can work hard yet feel good about themselves and their work.

Management tends to overlook the need to introduce motivational incentives for employees, even though they're a simple, effective way to improve morale among workers who are working long hours under

high pressure conditions.

An easy, effective first step is to allow employees to think for themselves. Let them make the field decisions that you usually made in the past.

While you're at it, get rid of the rules or management techniques that act as constraints to innovative or creative thinking by your employees. Employees are not robots, so don't treat them as if their sole purpose is to produce. Let them think while they work on a customer's property.

Many "demotivators" exist in green industry companies. Finding and getting rid of them will help improve employee morale this spring.

Exactly what are these "demotivators"?

Decisions that are singularly beneficial. Avoid making decisions that are for the benefit of only one employee or appear to benefit the owner of the company. For example, pressure to increase spring production may result in employees' only concern being to get the job done quickly—often with little regard to the quality of work.

Stressing individual effort. Ours is a team business. Failure to promote team thinking generally results in your employees approaching their work with a one-on-one attitude. You lose the feeling that you're part of the company.

A lack of team attitude develops if and when you make decisions that seem inconsistent with the facts or previous decisions. Another sign is a sloppy, unkempt office area. This careless attitude about the appearance of the work area often carries over into the employees' attitude about customer service.

Spring is the time to change this approach to your work force. Bring them together and reestablish the team concept. Have a pizza party or similar social event and let your employees know that you want them to work together as a team. Remind them that the uniform they wear is of your company and, as such, they are looked at by the community as a team.

Playing favorites. By singling out one or two individuals who seem to be carrying the company, you're creating a divisive environment. A few of your employees appear to be doing all of the work while other employees appear to be under-producing.

Eliminating these divisive actions will go a long way to improving the team attitude of your employees.

Manager passing of the buck. What happens when a supervisor voices his objections to your instructions in front of employees? Demotivation. Monitor managers to see if this condition exists. If it does, it must be corrected in order to remotivate your employees and rekindle in them a belief in the company.

Lack of employee communication. Spring often means employee turnover, and a lack of training of the new hires frequently exists. Having a workforce that is under-trained and not sure of its job frequently leads to employee frustration.

Meet with your employees during the early summer months and be certain they understand what you expect of them. This will go a long way toward relieving employees anxiety.

Remote management. Another area of frustration and demotivation of employees is when a company is forced to deal with absentee owners. If you own a lawn care company but have not been actively involved with it, take the time to visit the company. Meeting the brains behind the operations will improve their job motivation.

Lack of employee recognition. If you do not have some method of recognizing outstanding employee performance, now is the time to do it. When an employee sees their name on a plaque, receives a day off, or gets a preferred parking place for period of time, they'll strive for a higher level of performance.

Give your employees the opportunity to shine among their peers.

Owners who notice a declining attitude of their employees during the spring need to determine what demotivators exist within their company. With work demands high and the hours long, demotivators are out there lowering employee morale.

By reinforcing the team concept and paying attention to personnel's needs, you can remotivate and encourage your employees, while increasing your company's profitability.

As seen in Landscape Management, June 1990

DELAVEAGA GOLF RESULTS

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The GCSANC Golf committee has worked very hard with the PGA in forming a mutual gift certificate redeemable at a Pro shop of your choice. In the future all golf prizes earned at monthly meetings will be presented in this gift certificate. keep reading "Thru The Green" for details.

If you or someone you know has a golf prize coming and they have not received it, please let Jean LaDuc or Steve Good know.

AUTOMATIC IRRIGATION CONTROLLERS

Control of our irrigation systems would seem to have come full circle. The beginning of "automatic" irrigation started with a night waterman who "manually" placed a sprinkler in a quick coupling valve (QCV). Since the irrigation lines normally had water under pressure to the QVC, the night waterman often ended up as wet as the turf he was watering. The benefit of this type of system was that the night waterman could talk to the superintendent and water only those areas needing water by just using the quick couplers in that area. The disadvantage of this system was that often times every area that was watered received the same amount of water, i.e. all sprinklers would be put in the QCV's for 40 minutes. If the golf course was large and the night waterman had to use 50 sprinklers, the length of each run time depended on how long it took him to get around the course as he was installing the sprinklers.

As demand increased for more control, superintendents requested a system that used pop-up sprinklers that they could group together. This "bank" of sprinklers was opened, then 12 or 14 sprinklers would come on. In this way, a golf course with 1200 sprinklers could be controlled by just 100 valves. Now each valve (hooked up to a

station at the controller) could be adjusted for shorter run times and the valve could be operated by a controller that "told" it when to operate. These first control systems used the same three basic components that we still use:

- *1. a controller (tells the sprinkler when to run and for how long);
- *2. a valve (allows water to get to the sprinkler);
- *3. control lines from the controller to the valve (typically either electric wire or hydraulic tubing).

As the number of sprinklers assigned to each station decreased (for more control) number of controllers on the golf course increased. In an effort to cut down on the time that it took to program an irrigation system, manufacturers designed systems that used a central controller that would send a start signal to groups of satellite controllers. This allowed the superintendent to determine his run times in the field, but set his start times in the office. While this made for easier programming, systems were still watering shaded areas the same as sunny areas and flat terrain the same as sloped areas.

Next month: Completing the circle on control.

DISPOSABLE PROTECTIVE CLOTHING

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Project

Protective clothing is essential to prevent the spray, mist, or dust of pesticides from contacting your skin during an application, and also to protect your body from concentrated pesticides during mixing or handling. Typical protective clothing includes long-sleeved shirts and pants made from a tightly woven cloth fabric (the minimum protection for any type of pesticide handling or application), cloth coveralls, and, for more toxic materials, waterproof rainsuits. The type of protective clothing used depends on the requirements prescribed by the pesticide label and the type of work being performed.

Disposable protective clothing is a suitable alternative to clothing made from woven fabrics or rubber-coated rain suits. Disposables have many advantages and, in most cases, provide adequate protection while mixing, loading, or applying pesticides. They are available in a coverall style which may include an attached hood. Disposables are generally light weight and loose fitting, making them comfortable to wear and easy to put on or take off. Disposables are worn over conventional work clothing. Disposability eliminates the need for laundering which can be a problem when dealing with pesticide contamination. Disposable protective clothing is less expensive than non-disposable types of protective clothing.

Disposable fabrics, manufactured by several companies, are made from non-woven fibers, giving the fabric great strength and resistant to tearing. Some fabrics are laminated to plastic materials to provide protection against moisture, certain types of these coated fabrics protect against pesticide penetration. Various styles and grades of protective clothing made from non-woven fabrics are available. Quality, cost, and the degree of protection

vary according to the fabric type, style of the garment, and the manner in which seams and closures are sealed. For use with toxic liquids, the garment must have well-sealed seams and an attached hood.

When selecting disposable protective clothing, choose the right fabric type for protection against the pesticide you will be applying. Disposable protective coveralls suitable for pesticide handling and application are available in three types of fabric.

UNCOATED FABRIC

The most common example of an uncoated disposable fabric is Tyvek, manufactured by the DuPont Chemical company. Coveralls made from this fabric are light weight (about 5 ounces) and zip up the front. A pair of coveralls cost between \$4.50 and \$7 depending on whether it has an attached hood. An uncoated Tyvek suit of this type provides approximately the same degree of protection as a pair of coveralls made from tightly woven cotton fabric. This means that it can be used when handling the kinds of pesticides for which cloth coveralls or long-sleeved shirts and pants would provide adequate protection. It protects against most particulate contamination (dusts), but will not prevent skin contact with liquids.

Coveralls made from uncoated Tyvek or similar fabrics should not be used for handling liquid pesticides that are moderately or highly toxic.

POLYETHYLENE LAMINATED FABRICS

Non-woven fabrics coated with polyethylene provide a greater degree of protection against pesticides, since they are waterproof. Examples of this fabric are the DuPont Company's P.E. or Poly laminated Tyvek. This type of fabric is not suitable for extended exposure to liquid organophosphates, however, because solvents in these pesticides damage the polyethylene coating. Examples of organophosphates include parathion, terbufos, diazinon, chlorpyrifos, fonofos, and dimethoate. Polyethylene-coated coveralls range in price from \$8 to \$20 depending on the style and method in which seams are sealed prices may also vary by manufacturer. The polyethylene-coating make the coveralls slightly heavier and stiffer than an uncoated fabric. Also, coveralls made of coated fabric

may be more uncomfortable to wear since the fabric does not breathe (see the daytime and nighttime temperature restrictions below.)

SARAN-COATED FABRICS

Saran is another material used as a moisture barrier for non-woven fabrics from which protective clothing is made.

Saranex is the trademark for DuPont's saran-coated Tyvek, and is an example of this type of fabric. Saran-laminated coveralls provide the best protection against pesticides and they can be used effectively with organophosphate liquids. In most instances, coveralls made of saran-coated fabric proved the same amount of protection as rubber or vinyl-coated waterproof rain suits. These coveralls range in price between \$20 and \$30, depending on the style, type of seam sealing and manufacturer. This coated fabric is equivalent in stiffness and weight to polyethylene-coated fabrics, and may be uncomfortable in hot weather since it does not breathe. For this reason, California law restricts the use of all types of waterproof protective clothing during pesticide application to daytime periods when the air temperature is 80 degrees F or below and to nighttime periods when the air temperature is 85 degrees F or below.

It's very important to note that neither the P.E. or Poly laminated Tyvek or the Saranex coveralls (or coveralls made from similar fabrics) are suitable for use with chlorinated hydrocarbon pesticides such as methoxychlor.

REUSING DISPOSABLE CLOTHING

Coveralls and other garments made from non-woven fabrics can be reuse, however they must be laundered between wearing. Follow the guidelines for laundering other pesticide-contaminated clothing or consult the manufacturer for instructions. This protective clothing should be disposed of if the laminated coating is torn or begins to separate from the fabric or if seams or closures are not properly sealed. Never launder or reuse disposable coveralls or any other type of protective clothing that has been heavily contaminated with an undiluted pesticide. With heavy contamination, it may not be possible to remove all traces of pesticide through any type of laundering.