

# TURF COMMS



V. 3, I. 6

JUNE 28, '87

**PURPOSE:** To pass on what we learn willingly and happily to others in the profession so as to improve turf conditions around the country.

HAVE YOU -

FILLED OUT AN I-9 FORM FOR ALL YOUR EMPLOYEES?

As of June 1, you are suppose to fill one out for every employee hired after November 6, 1986. If you need forms call the Immigration and Naturalization Service (INS) office nearest you or the nearest Regional Government Printing Office. You'll need to send a check or money order along they are charging \$13 a 100. They should have been mailed to you. But, according to a newspaper article of 6/23 they or information about I-9s has not been received by most small companies. For more information on employer responsibilities, call toll-free: 1 (800) 777-7700.

In Texas it is rumored that construction companies will be the first to be checked to see if they are hiring illegals. Golf courses and landscape maintenance companies can expect to be a close second.

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Wichita, KS Turfgrass Field Day 6/11/87 NOTES

POA ANNUA control - Sequential sprays of growth regulators appear to work. Chevorn's new material ?"Peanut"? is better than Embark.

A combination of ACCLAIM and PENDAMETHALIN gives damage to Midiron bermudagrass. Acclaim appears to be save on Meyer Zoysia. (cont. pg. 6)

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**TURFCOMMS is published at unpredictable intervals by the editor and publisher:**

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HAVE YOU -

FILLED OUT AN I-9 FORM FOR ALL YOUR EMPLOYEES?

## EMPLOYMENT ELIGIBILITY VERIFICATION (Form I-9)

### 1 EMPLOYEE INFORMATION AND VERIFICATION: (To be completed and signed by employee.)

Name: (Print or Type) Last	First	Middle	Birth Name
Address: Street Name and Number	City	State	ZIP Code
Date of Birth (Month Day Year)	Social Security Number		

I attest, under penalty of perjury, that I am (check a box):

- ☐ 1. A citizen or national of the United States.
- ☐ 2. An alien lawfully admitted for permanent residence (Alien Number A \_\_\_\_\_).
- ☐ 3. An alien authorized by the Immigration and Naturalization Service to work in the United States (Alien Number A \_\_\_\_\_, or Admission Number \_\_\_\_\_, expiration of employment authorization, if any \_\_\_\_\_).

I attest, under penalty of perjury, the documents that I have presented as evidence of identity and employment eligibility are genuine and relate to me. I am aware that federal law provides for imprisonment and/or fine for any false statements or use of false documents in connection with this certificate.

Signature	Date (Month Day Year)
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PREPARED BY CERTIFICATION (To be completed if prepared by person other than the employee) I attest, under penalty of perjury, that the above was prepared by me at the request of the named individual and is based on all information of which I have any knowledge.

Signature	Name (Print or Type)		
Address (Street Name and Number)	City	State	Zip Code

### 2 EMPLOYER REVIEW AND VERIFICATION: (To be completed and signed by employer.)

Instructions:

Examine one document from List A and check the appropriate box. OR examine one document from List B and one from List C and check the appropriate boxes. Provide the **Document Identification Number** and **Expiration Date** for the document checked.

List A Documents that Establish Identity and Employment Eligibility	List B Documents that Establish Identity	and	List C Documents that Establish Employment Eligibility
<input type="checkbox"/> 1. United States Passport	<input type="checkbox"/> 1. A State-issued driver's license or a State-issued I.D. card with a photograph, or information, including name, sex, date of birth, height, weight, and color of eyes. (Specify State) _____		<input type="checkbox"/> 1. Original Social Security Number Card (other than a card stating it is not valid for employment)
<input type="checkbox"/> 2. Certificate of United States Citizenship	<input type="checkbox"/> 2. U.S. Military Card		<input type="checkbox"/> 2. A birth certificate issued by State, county, or municipal authority bearing a seal or other certification
<input type="checkbox"/> 3. Certificate of Naturalization	<input type="checkbox"/> 3. Other (Specify document and issuing authority) _____		<input type="checkbox"/> 3. Unexpired INS Employment Authorization Specify form # _____
<input type="checkbox"/> 4. Unexpired foreign passport with attached Employment Authorization			
<input type="checkbox"/> 5. Alien Registration Card with photograph			
<b>Document Identification</b> # _____	<b>Document Identification</b> # _____		<b>Document Identification</b> # _____
<b>Expiration Date (if any)</b> _____	<b>Expiration Date (if any)</b> _____		<b>Expiration Date (if any)</b> _____

**CERTIFICATION:** I attest, under penalty of perjury, that I have examined the documents presented by the above individual, that they appear to be genuine and to relate to the individual named, and that the individual, to the best of my knowledge, is eligible to work in the United States.

Signature	Name (Print or Type)	Title
Employer Name	Address	Date



The continuation of CEC as started in TC V3 15

How big is the difference between kaolinite and the most common of the western clays (montmorillonite)? How different is a deck of cards in structure from a 5 story office building with the floors and supporting post poured?

CEC is usually expressed in milliequivalents per 100 grams of soil. What that stands for and why is not important to understanding CEC but an understanding of the relative values is helpful. Kaolinite, the typical East Coast clay has a CEC of 8 milliequivalents/100 grams of soil while montmorillonite has a value of 100. Or put another way 8 percent Montmorillonite clay in a soil gives that soil the same nutrient holding capacity as if it was 100 percent pure kaolinite. Colloidal organic matter is even more potent with a CEC value of 200.

New USGA "soil" mixes and their imitators are usually very low in clay, usually less than 4%, and not very high in colloidal organic matter. Colloidal organic matter will build up as the organic matter in the mix breaks down and when the roots and debris from the first season's growth start to decompose. But, for the first year or so new "soil" mixes don't have much ability to retain nutrients.

**CLAY STRUCTURE:** Clays particles have a platey structure (think of a stack of luncheon plates glued together). Kaolinite particles (K-clay) supposedly look more like a deck of cards, with all the layers lying tightly on top of each other.

Montmorillonite (M-clay) on the other hand is made up of layers very similar to K-clay except that layers are held apart so that it looks more like a new building under construction. Picture a small office building under construction where the new floors are all in place with the supporting building post in between but no walls yet in place.

For K-clay all the exchange sites are on the outside edges of the "deck of cards". While M-clay has exchange sites all over the floors and ceilings of the "new building under construction". Thus nutrients can flow in amongst the "floors" and fill up a M-clay colloid with lots more nutrients than can attach to the outside edges of a K-clay colloid of the same weight.

**CATIONS:** Cations are positively charged ions (atomic or small molecule size particles). The clays and organic matter are negatively charged colloids. These unlike charged particles are attracted to each other and this is how the soil stores nutrients.

Cations commonly found in the soil in alphabetical order are ammonium, calcium, hydrogen, magnesium, potassium, and sodium. All but hydrogen are considered chemical bases. If the cation exchange complex has only bases on it than it is said to be 100%

base saturated.

Ideally for most turf species the cation exchange complex will have a certain range of each of the desirable nutrients, just like a well stocked pantry. Sixty-five to 75% of the "pantry" will be calcium, 15 to 20% magnesium and 3 to 7% potassium are considered ideal ranges. A small amount of ammonium ion is acceptable. We can live with less than 5% of either sodium or hydrogen. We could do quite nicely without either.

In the West sodium percentages higher than 5% spell trouble and such percentages are all too common. In the East hydrogen percentages higher than 5% are cause for concern, but more easy to live with or cure than high sodium.

Pounds/A VS % of CEC: Results of a soil test given in pounds of nutrients per acre is of use only if you can extrapolate the % base saturation with some degree of accuracy knowing the soil texture (sandy loam, loam, silty clay loam, etc.). I prefer soil test results that give me the % saturation for putting greens, but I'm quite happy for other turf areas with the less expensive test that usually do not give the %.

One hundred pounds of potassium per acre in a soil test report for a green can mean one thing if the CEC is 3 and quite another if CEC is 6. A range like that is not going to be expressed in any way by a guess of soil texture done by the feel method. Yet, where there is a new green on a golf course the difference between greens in CEC may very easily be from 3 or less to greater than 12.

Needless to say the CEC situation has been overly simplified in the above material. For instance, as one textbook notes M-clay holds on to calcium much stronger than K-clay. Therefore, calcium may be more available to the plant in a K-clay soil at 60% calcium saturation than in a M-clay soil at 65% calcium saturation. Also, all the soil textbooks will tell you there are at least three main types of clay not just the two extremes pointed out here.

CALCINED CLAY is one of the above clays baked into small gravel like structures. The value of it in the soil is much like adding porous gravel. In at least the opinion one respected researcher of putting green soil mixes and mine, this material is best used for kitty litter and absorbing oil spills on the shop floor.

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#### REVIEWS OF TWO EDUCATIONAL VCR TAPES:

"CONTROLLING PESTS & DISEASES - TURF EDITION" This is a review of a videotape with that name sold by The Idea Bank. This 60 minute tape is divided into two equal halves. The first 30 minutes is of Dr. Dave Langston discussing the control insects



and related "crawlies". The explanations are fine but the closeups of insects are poor and few. The discussion of sampling methods and that of insecticide application technique are good.

The second 30 minutes is a discussion of turf diseases by Dr. Edward Mulrean. Four diseases receive the majority of time. They are Brown Patch, Melting Out, Pythium, and Fairy Ring. Again the explanations are good, telling the why and how of disease development, but the photos showing the symptoms did not show well on my screen and were too few.

I felt this tape would be of value to your members but not to you. This is not a tape that would be of much use training a new crew member. He does not need to know how to sample or spray for insects. The new crew member could be of use to you though if he could identify insects and diseases. He could be of use if he could spot those off color patches that are often the first clue of insect or disease problems and tell you where they are. It is my feeling that this tape will not be of much help in accomplishing that training.

For the club members on the other hand it does point out the complexity of disease and insect identification and control. Thus you might want to purchase it for the club library but probably not for yours if you are a golf course superintendent.

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THE ART OF LANDSCAPING - Had the good fortune to review a recently released video "The Art of Landscaping" by Howard Garrett a Dallas landscape architect. The first 20 minutes of this 52 minute tape is on design. It is on a level that the average home owner should comprehend and I assume that it is the audience it is aimed at. The remaining 30 minutes cover construction, buying plants, planting trees and shrubs with the emphasis on trees, and finishes with tips on maintenance.

In the design section you can see the site, and watch him work out a design on paper for it. There are some good pointers given on the construction process. He does a good job of showing what plants to avoid when buying. Avoid those with poor, unstable or twisted root systems, those in steel cans because of the safety problem and any with bad form or broken branches. He suggests certain size containers for certain types of plants too. Pruning and lawn care are briefly covered in maintenance.

Only on the inclusion of sand in the soil mix for ornamental beds and some of his thoughts on lawn maintenance did I take mild objection to. I wished the tape had spent more time on design problems and solutions. Some of the ideas he did present were very interesting.

This is a tape well worth including in your club's library or your own if you are doing some landscaping on the side. It would be of use anywhere in the country. This tape is available at

Lambert's Nursery, Dallas for \$29.95.

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KS Field Day NOTES (cont. from pg. 1)

SPRING DEAD SPOT - Iprodione, Banner and Rubigan give some control, none much better than check (control plot) in recent test. Rubigan to have a label for this soon. Need 1 to 2 oz/1000 of Rubigan in fall for SDS control. Benomyl type materials resulted in an increase in SDS in a one year trial.

DIAZINON not controlling MASKED CHAFER under high rainfall, while MOCAP and OFTANOL gave good control. Mocap extremely toxic dermally (LD 50 - 2) whereas LD 50 orally is 60. That makes Mocap the most dangerous material you handle.

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College Station, Texas Turfgrass Field Day 5/13/87 NOTES

DIVANET a new product did a good job on grubs.

Two centipedes (grasses that is) that are winter hardy in Dallas and will tolerate a high soil pH are AC-44 and Centennial.

IMAGE controls purple nutsedge in warm season grasses at 0.5 lb a.i./A. Also will control wild garlic, henbit and mouseear chickweed at rates less than that. Cost \$230/ gallon. One quart/A (3/8 lb. a.i.) controls the above weeds. Might need a second application on purple nutsedge at that rate.

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RULES FOR LAWN CARE CHEMICAL SPRAYING - Rhode Island now has a law on the book similar to that of Massachusetts that prescribes what lawn-care companies must do before and after spraying pesticides on a lawn.

First the company must tell the homeowner what pesticides they may use. What health or safety warnings go with those pesticides. Second a list of pesticides sprayed and a sign posted on the lawn for three days. Neighbors may request 48 hour warning of impending sprays and a written notice immediately after spraying.

The man who has sprayed my house for termites and other unwanted pests told me the other day he plans to get out of the business soon. His insurance costs are driving him out.

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