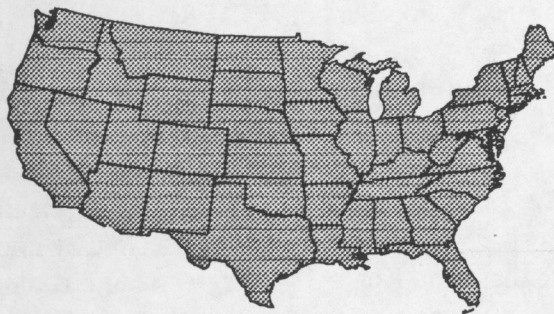


TurfComms



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

GOPHER CONTROL: I heard of two new approaches to gopher control I thought worth repeating seeing at this time of year many superintendents are desperate for new ideas on this subject. One was Juicy Fruit gum and the other was barn owl birdhouses (see below - BIRDS). The Juicy Fruit gum suggestion was passed on to me by one of my students who said her father had good luck with it. All he did was drop a half a stick of Juicy Fruit in each hole. The gophers apparently chewed on it and then couldn't get it out of their digestive system and died.

BIRDS: Three suggestions on birds; first, the RMGSA's The Reporter, May, '95 noted a new material to keep geese, swans and gulls away. "Marvin S. Preiser of Middletown New York has come up with a product called "Rejex-it". It contains a chemical called methyl anthranilate which is the same chemical found in grape flavoring." It supposedly will not hurt the birds or environment. It appears to not yet have full labeling so stay tuned.

In the Summer 1995 issue of Common Sense Pest Control is a seven page article based on a presentation and handbook on problem urban geese by Dave W. Smith of Environment Canada. In the article **Rejexit** is mentioned as registered in all states except California and NY. The article "Managing Urban Canada Geese or The Geese That Wouldn't Leave" does a good job of covering their life cycle, problems associated with the geese and numerous suggestions for control. For a copy of the article drop me a line or phone call. For a copy of the handbook: *A Handbook for the Control of Problem Canada Geese* by Dave W. Smith. Send a check or money order for \$5 made out to "The Receiver General for Canada", Environment Canada, Canadian Wildlife Service, Pacific Wildlife Research Center, RR #1, 5421 Robertson Road, Delta, British Columbia, Canada V4K 3N2.

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The third suggestion is **Barn Owl Nesting Boxes for rodent control**. "A barn owl's diet consists mainly of rodents, such as gophers, ground squirrels and meadow mice." I'm not sure where I saw the original comment on the availability of the one page leaflet entitled SCS Job Sheet CA-501, "Barn Owl Nest Box Plans and Instructions", but I sent for it and agree that it has good information. My bird book implies that the barn owl is native to all of the U.S. The leaflet is available through the Soil Conservation Service, 2121 Second Street, Davis, CA 95616 or you can give me a call and I'll photocopy my copy (put it under ANIMAL REPELLENTS). It is a little late to put the boxes up this year but, you can put them on your list of things to build during the winter months. The leaflet is very clear on how to build and where to put the box for nesting success.

NUTSEDGE CONTROL: Manage™ Monsanto's new turf herbicide, a.i. halosulfuronmethyl, is reported in HortScience, April '95 to be quite safe and effective by university researchers in Kansas and Maryland. Safe that is on Kentucky bluegrass and creeping bentgrass, and effective on yellow nutsedge. There was damage to perennial ryegrass but generally less than that caused by bentazon (Basagran). The bentgrass was mowed at 1/2 inch. Yellow nutsedge was not eliminated by one application on Manage™ there was only temporary top kill. Repeated applications will be necessary. Manage™ appears to be less damaging than Basagran but slower to provide top kill of nutsedge.

WATER USE BY TREES: As you are perhaps aware articles of this nature get my attention. A recent issue of the J. Amer. Soc. Hort. Sci. had one titled "Water Use of Two Landscape Tree Species in Tucson, Arizona". The two trees they took extensive data on were Live oak and Mesquite. Their conclusion: "These coefficients indicate that mesquites (normally considered xeric trees) use more water than oaks (normally considered mesic trees) under nonlimiting conditions."

Another clipping on salt cedars, Tamarix spp., tells why New Mexico researchers want to get rid of it. Its a 'water hog'. They claim one large salt cedar uses about the same amount of water as a two-person household, or twice as much as native vegetation. Salt cedars are European or African depending upon species present. There are four or more species found in the U. S. all have been introduced.

This article was written by Marilyn Hadrill of Las Cruces, N.M. It quotes Mr. Duncan, the brush and weed control specialist for N.M. State Univ., reporting the restoration of water to a dried up spring-fed lake by killing off the salt cedars. Actually all he has been able to do so far is get the water table to rise back to the soil surface but he figures at the rate it is rising the lake will be full in a few years.

I too love trees as I've said many times but out in the West they are a definite luxury in many cases. I know Eastern superintendents have trouble getting rid of trees; they should experience how hard it is to get rid of trees out in West Texas, Kansas and north to the Dakotas. I'm tired of all those tree lovers urging people to plant trees. If you want something to plant try native grasses and then leave it unmowed and unirrigated.

SOIL and WATER SCIENCE: Key to Understanding Our Global Environment: This is the title of the Soil Sci. Society of Am. Spec. Pub. # 41. It is the Proceedings of a symposium sponsored to honor Dr. Daniel Hillel author of *Out of the Earth: Civilization and the Life of the Soil*, published in 1991. The goal appears to have been to make others aware that "Soil and water

are precious and fragile resources that are vulnerable to mismanagement, and shortsighted policies" that will have disastrous consequences on the world's environment and the living condition of all humans. This 103 pg. publication is not one I strongly suggest you read. I did come away with a strong desire to read Hillel's book.

It doesn't take much of a soils and crops background to realize the importance of soil to feeding the human population. If also one has kept up even somewhat with the deteriorating world soil condition then you should be aware that this as much as anything may bring a disastrous end to population growth in much of the Third World. Loss of top soil even in the U.S. is way above replacement levels. It is easy to forecast the day when golf courses will be again turned into Victory Gardens.

WATER: If you would like a report on the availability of water around the world read the May/June issue of World-Watch. The war of the future is to be over water not land or food. This is not pleasant reading for a depressed soul.

NEMATODES: Dr. Janell S. Johnk, Extension Pathologist, gave the talk to the May meeting of the No. TX G.C.S.A. She spent most of her time talking about nematodes. This is a subject I have found very frustrating over my many years in turf. Counts do not usually agree with the level of damage seen. Of course part of that is caused by the fact that when the root system completely dies the nematodes move to "greener" pastures. Apparently another factor is the sensitivity of nematodes to heat and drying which means that all nematodes sent to the testing laboratories do not make it there alive. But even Dr. Johnk taking her own samples in a green known to have high nematode populations found 500% variation in nematode counts between plots in this green before putting on any treatments.

She suggested that when sampling for nematodes you only go as deep as the roots go and throw the top 1/2 to 1 inch away. Sample those areas weak but certainly not the worse condition areas in the turf. Nematodes do not like the high temperature fluctuations found in the surface. Secondly, take 10 to 20 samples with a one inch soil sampling probe. Put sample plugs into a small plastic bucket, then **immediately** remove the top 1/2 to 1 inch and place the remaining sample into a plastic bag, seal and put into a refrigerated cooler. Ship via one day delivery service and keep them cool.

Dr. Johnk also reported on a blind study done last spring because of reports that the Texas Plant Disease Diagnostic Laboratory was not doing a good job. Four golf courses sent two thoroughly mixed samples to four different state laboratories by dividing the large sample into 4 subsamples. After the results were sent back to the golf courses the golf course superintendents sent it back to her.

There was too much variation between laboratories for me to swallow. This further emphasizes to me the futility of testing for nematodes. I like the way one superintendent told me he tested. Every so often during the summer months he puts out a small test plot with Nemacur on one of his weakest looking greens. If he gets a dramatic response he treats. After carefully looking over her data I would agree that the Texas PDD Laboratory appears to be doing as good a job as Florida's but that is not an endorsement for either. Dr. Johnk corrected the data for the different volumes of soil used by each lab. As an example of the data generated let's look at the analysis by four labs. of a sample from **green number 2 of course B.**

Root-knot Nematodes

Lab. 1 - - - 186

Lab. 2 - - - 60

Lab. 3 - - - zero

Lab. 4 - - - 10

Ring Nematodes

496

70

155

818

Stubby Nematodes

434

zero

zero

114

I can assure you sample results were similar for the five other greens tested from three golf courses. Now do you understand why I like the above superintendent's method of sampling to see if his greens have economically important levels of nematodes?

For control she noted that Triumph and NemaCur kill and stop the growth of the nematodes but, eventually they do come back. She is currently running some test with Orthene. It apparently has some ability to kill or stop the activity of nematodes.

BENTGRASS CULTIVARS: Just received from Dr. Beard a Research Progress Report titled Bentgrass (*Agrostis* spp.) Cultivar Characterizations for 1993 in Torino, Italy. Torino (Turin) is in Northeast Italy in the Po River Valley. I would assume the climate is somewhat similar to Salem, Oregon.

The cultivars were planted in May of 1992 on a high-sand root mixture. The rankings based upon 1993 data only are Southshore, Penneagle, Putter, Providence, and Pennlinks superior to Cobra and Penncross with SR 1020 and National a distant third of the commercially available cultivars. Several experimental Pennsylvania State Univ. selections looked even better than the Southshore. Even though dollar spot did develop beyond minimal levels "no fungicide applications were made during the 1993 growing season." This may explain why SR 1020 did so poorly.

DISEASE COURSE ON TAPE: I have available 5 of a 7 VCR tape (14 hour) disease course put out over satellite by TX A & M. This course is aimed at beginning level practitioners, and a general horticulture audience. After completion one will have a fair ability to distinguish in the field the differences between diseases caused by bacteria, vs. those caused by fungi, viruses, nematodes or physiological causes. If you would like to borrow these to educate yourself or crew give me a call. I also have notes I typed up that go along with the tapes as I used them for a plant pest control class I was teaching at the local community college. Give me a call if you would like to see these. The tapes are also available from TX A&M for \$29.00 each I believe.

ST. AUGUSTINE: If you find yourself giving advice to homeowners on preemerges to use in this grass a recent research article out of Florida implies that Gallery and Ronstar are very safe in this grass. If on the other hand you or your client wishes to get rid of it without using MSMA then you might try Dimension or Pendimethalin as these two reduce rooting very dramatically. Or use a high rate of Surflan in the Fall as I did in 1993.

END

DOUG

