TURFCOMMS

V. 3, I. 3 FEB. 21, '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.

THE WORLD FOOD AND POPULATION PROBLEM

IS YOUR PROBLEM !!! OUR PROBLEM?

WORLDWATCH PAPER 74* - A recent editorial encouraged me to further discuss this (to me at least) distressing paper. The editorial in the Dallas Morning News was labeled "The Threat of Deforestation" and was by Guy R. Lanza a professor of Environmental Sciences at the University of Texas at Dallas. It started on the note that tropical ecosystems are being deforested at the rate of 100,000 square kilometers/yr.

The tropical forest are the site of the greatest biodiversity in the world. This rapidly disappearing diversity of small plants and animals is something that might be able to improve the standard of living of all in the long range future if preserved. Removing the forest does little even toward improving the short term food needs of the world.

The editorial makes it clear there are two reasons for concern. The loss of plant and animal species represent lost potential sources of new drugs and food crops. Secondly, as the forest is removed severe soil erosion begins and the long range goal of increased food production goes down the proverbial tube with the soil(my choice of words not his). Most tropical forest soils are very thin and very unproductive except for tree production and the forementioned small plants and animals which live in the tropical forest environment.

* See the last page of the last issue for details on where to purchase this paper.

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

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Returning to the Worldwatch Paper, it has a similar theme only it looks at the world wide human population in regards to the "life-support systems" (soil, forests, aquifers etc.). This paper explains how population grows as nations go from premodern societies to modern. In the third and last stage improved economic and social gains act to reduce births and thus solve the population growth problem.

However, the second stage is one of improved living conditions as a results of public health measures that lower infant mortality rates and death rates thus triggering a population boom. "Once incomes begin to rise and birth rates begin to decline, the process feeds on itself and countries can quickly move to the equilibrium of the demographic transition's third stage.

Unfortunately, these self-reinforcing trends also hold for the forces that lead to ecological deterioration and economic decline: Once populations expand to the point where their demands exceed the sustainable yield of local forests, grasslands, croplands, or aquifers, they begin directly or indirectly to consume the resource base itself. Forests and grasslands disappear, soils erode, land productivity declines, and water tables fall. This in turn reduces per capita food production and incomes, triggering a decline in living standards." pg. 6.

The world you and I know has successfully reached the third stage. The other half of the world includes Southeast Asia, Latin America, Indian subcontinent, Middle East and Africa. In these the carrying capacity of the life support system is close to its limits, yet the population is expanding at a very rapid rate. Malthusian predictions for this half of the world are made in Worldwatch Paper 74.

The Paper shows how supplying food and medical supplies worsens the problem. Be prepared to read about famine for the rest of your lifetime. You are all going to declare me a pessimist, but in reality I'm a realist. Yes, these countries can save themselves. China appears to have done so. But, how many nation leaders are willing to shove down the throats of their people a policy of one child per family and make it stick???

Yes, we can solve energy problems and food problems. But, "then what?"

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BERMUDAGRASS CONTROL IS NOT IMPOSSIBLE

JUST DIFFICULT - The following is in response to a question asked about how to selectively control bermudagrass in perennial ryegrass approaches. There is of course as you are well aware no easy "magic bullet" to accomplish this. The suggestions below should be helpful.

It should be noted that perennial ryegrass at that height of cut in your transition zone area does not have the tolerance to abuse that it might in more northern areas. However, bermudagrass in the transition zone is particularly susceptible reduction from dense vigorous overseedings of perennial ryegrass. On shaded tees under such conditions bermudagrass is often lost to perennial ryegrass competition even as far south as Houston, Texas.

Therefore, the following is suggested for areas where control of bermudagrass in perennial ryegrass is desired. Maintain a high nitrogen level from late fall to early spring, at least 4 lb./1000 should be applied, more if clippings are being removed. Use none or very little nitrogen between the first of May and the end of September.

This spring (late Feb. early March) give serious consideration to a Prograss application for Poa annua control. (For more on PROGRASS see below. You will not get good Poa control by such a late application but some damage to the bermudagrass is to be expected. Also, when greenup of bermudagrass is observed in other areas apply at least the recommended rate of Tupersan (siduron). This rate can be used even in conjunction with the spring touch up seeding of ryegrass you were planning. If you desire to apply double or triple rates you should avoid these rates where reseeding. In those areas reapply Tupersan a week or more after ryegrass germination. As you are aware common types of bermudagrass are not as susceptible to damage from Tupersan as the Tif-cultivars are.

Aerification should be done before and Tupersan applications should be done after the above seeding. As you should aerify only to encourage the ryegrass, spring or very early summer would be the best time for this operation. If this is the only time you are going to aerify do a good job of it. Defined as - lots of large deep holes and rework the soil back in.

Next fall in preparation for reseeding vertical mow deeply and in several directions. In addition to helping to prepare a seedbed this will discourage the bermudagrass. A Prograss application made before dormancy of the bermudagrass will do much to weaken it.

To boil this all down, manage to favor the perennial ryegrass

while taking advantage of those things that are most likely to damage the undesirable bermudagrass.

PROGRASS is not a bermudagrass controlling herbicide. It is quite damaging under certain circumstances. It is doing a very effective and safe job of controlling Poa annua in pure plantings of perennial ryegrass when label directions are followed closely.

ROUNDUP use is a more drastic approach worth considering. A Fall application at five to six quarts of formulation per acre at least 3 weeks before the first frost should result in 99% control. Allow the turf to go unmowed two days before spraying and wait 7 days after to reseed. Use a preemerge in the spring to stop reinfection from bermuda seed remaining in the soil.

WHAT DO YOU DO

WHEN THE SPEAKER YOU ARE LISTENING TO CALLS TURF

GREEN PAVEMENT???

Was listening to a talk entitled "Natural Landscaping: Community Ecology in Landscape Design" when the speaker in response to an audience question admitted there was a place for turf. He said, "When you need "green pavement" turf is the only choice." I asked him how he could call something as soft as turf "green pavement"? He said, "It is all relative, but that turf has an infiltration rate of about 1/2 that of the native tall grass prairie." Figured there probably was an element of truth to it. But, was not sure how many homeowners want a fire hazard like a native tall grass prairie for their front lawn.

You might wonder why I was at a symposium on native landscapes and natural landscaping. Well I've felt for some time that some of this approach is good on the golf course. It provides an interesting and pleasant contrast to the manicured turf.

As you might have guessed that speaker wasn't exactly friendly toward the lawn care industry. He was quite correct in calling a lawn "a perpetually unbalanced ecosystem" though. However, a lawn really doesn't need many pesticides if carefully managed and if a lush carpet-like quality is not desired.

But, urban lawns are getting a load of pesticides from the lawn care industry. Those pesticides all too readily wash off down the street and all too rapidly end up in the local reservoir for you or the people down stream to drink. The fact that this is true is going to make it more difficult in the future for you to apply pesticides to your golf course.

END