Good Turf and Chemical Usage Dr. W. H. Daniel, Turf Specialist, Department of Agronomy Purdue University, Lafayette, Indiana

(Presented before the Chicago District Golf Association meeting, April 28, 1972 at River Forest Golf Club).

How pleasant to look over an expanse of turf and say "It is ready for use. Blow the whistle, start the game, step up to the tee, it's your turn. The lawn is perfect — the green puts true — the field has good traction!" Whatever the use, wherever the turf is ready for use is the key to modern Turf Management.

And, it should be that way. We have the best tools, the most chemicals, the most technology, the most varieties, and the bigger budgets to work with. We put together technology, tools, time and tedium towards producing that good turf.

Chemicals

We need to promote growth and protect from damage. There is no glory in having disease riddled turf. There is little merit in having **Poa annua** fail. Crabgrass killed by frost is less than the best. Severe dollarspots on fairways does not improve turf performance.

We are fortunate to have the monoculture of man in cities, in suburbia, as members of a community. We wish these people to be well fed, well entertained, and in a good environment — fine!

We must support them with other strong monocultures — the golf course ready for use, the highway prepared for travel, the orchard with healthy fruit, the fields with ample yields. Now what is the problem? If monoculture must be strong and must have its performance ecology-wise tied to the others, we can only dream of diluting our monoculture of man and with other monocultures less cared for. Therefore, let's plan and wisely use chemicals to produce strong monocultures.

Examples of Wise Usage

Throughout Europe, and until recently in the United States, **Poa annua** was an uncontrolled pest, affecting golf throughout its range of enjoyment. The seedheads, the bumpy green, the drying turf in summer, the smothered turf in winter — Oh! It was perfect at times. Today we have four systems of control the growth restriction route of Po-San; the seedling prevention route of Bandane, Dacthal and Betasan; the selective restricting route of arsenics. These are just tools that help to accomplish a program.

Today we estimate more than 2,000 golf courses (of more than 10,000 in play) are using calcium arsenate for selective **Poa annua** control, and hundreds have entire areas free of **Poa annua**, crabgrass and goosegrass. It is a success story — not easy to achieve, but worth while today. Takes a lot of technology, much tedium, and a strong dose of patience. But, it is quite a challenge to remove one plant, replace it with another; meanwhile permitting normal usage.

In our hew and cry we deplore burning. This has saddled you in the Chicago area with a very heavy burden of disposing of vegetative trash. If we are going to be gungho about growing vegetation we must anticipate vegetation removal. There is room for some wood chipping; there is room for some clipping composting; there is room for some burying, but it takes much knowledge to keep civilization on a firm footing. The cleanliness of our air is a replaceable resource. Those who understand this can contribute much in the future.

Superintendents have long been noted for their pride in their green thumb activities. They do know how to get the most out of grass. Now we have many chemicals to augment this process. Slow release fertilizers are commonplace; selective broadleaf weed control is commonplace; disease control with fungicides is commonplace. Today wisdom is using as little as possible to do the job as well as possible. Therein lies the finesse of the technical man in this technical age.

The Understanding of Green Committees

As technology advances, committees become policy makers; in fact, their challenge is to be well ahead on policy, so he turns to you - those representing clubs - and says - "Is your policy to be free of Poa annua," or "is it to leave the Poa annua?" Then when you establish that policy and back it with budget, the superintendent, having determined budget, needs to carry out your policy; has tedium of two years which you need to understand just enough to share with your fellow members as to principle and goal. As you have more capable superintendents, as they attend special seminars and programs, as they know their technology, this relieves committees of tedium, and places upon the superintendent the responsibility for program accomplishment

So far in turf we have lost the mercuries for fungicides, and one or two insecticides. This has not hurt our turf maintenance much. I believe we are over the hill in unfounded ecological regulation. Now we should be concerned — we should target the least possible usage, be extremely careful not to have the waste leftovers in streams, in sumps; to use our materials uniformly and wisely.

We should be concerned with personal safety, safety with equipment, and normal caution so that the human is protected while the work is being done. It will be a tragedy if we lose many of the products, but it need not occur. We have a voice — let's speak out for the need and the value, and keep our skirts clean in the programs employed.

REGULAR PHONE 312 349-8484 ORDER CONTROL – ILLINOIS 312 349-0808 ORDER CONTROL – INDIANA, MICHIGAN 800-323-7042 for illinois lawn equipment inc.

WOOD SIGNS - SCOREBOARDS - BENCHES

CARVED REDWOOD SIGNS

815 - 338-2955