

RESEARCH

A healthy lawn works like a sponge

The thicker the lawn, the more water it absorbs, according to research done by Penn State University turfgrass professor Thomas L. Watschke, Ph.D.

This absorption ability helps chemicals do their job, Watschke says.

"High quality turfgrass sites significantly reduce the total runoff," Watschke says. After more than a year's testing, sodded plots had 15 times less runoff than seeded ones. "This indicates that the surface soil structural effects (on seeded surfaces)

do not correct themselves quickly," Watschke notes.

The 1,300-square-foot plots were so sponge-like that even under three-inch-per-hour simulated rainfall, not more than a half-gallon a minute came off the plots.

Watschke added that thatch or a large-pored layer of decaying grass on top of the soil provided a buffer to the "infiltration rate characteristics of the underlying soil," helping to reduce runoff.

LAWN CARE

Is chemical lawn care a risk to pets?

It's not uncommon to hear of bird kills from the misapplication of pesticides. But such negligence can also kill larger animals such as dogs and cats.

Dennis Blodgett, D.V.M., Ph.D., of Virginia Tech, says it's rare, but possible to kill animals with lawn chemicals. "In reality, if you dilute and apply chemicals correctly, you won't cause a problem," Blodgett says. "Walking through a yard, the animal won't pick up much because of the footpads."

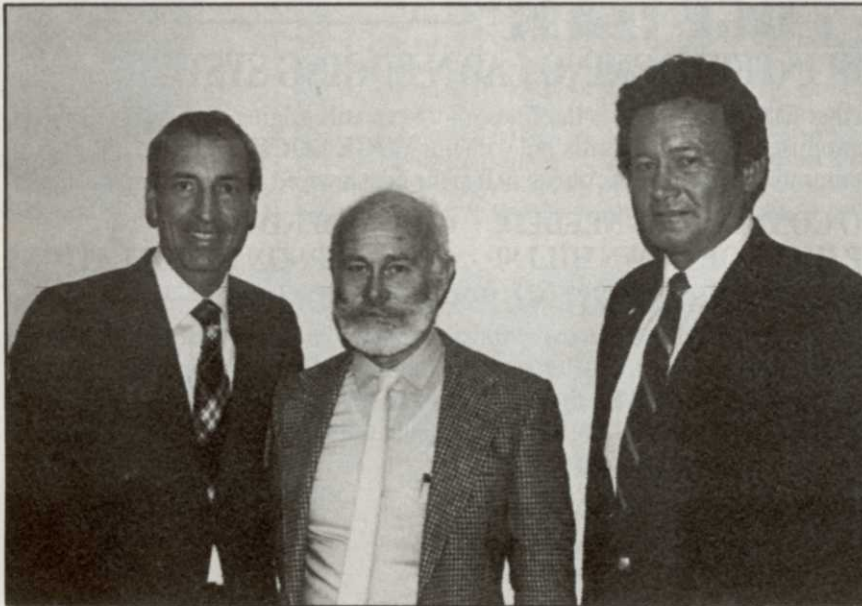
Birds are more frequently poisoned because they mistake chemical granules for seeds, Blodgett says. Eating a grub killed by an insecticide

won't cause a problem.

Dogs and cats are hurt by chemicals when the true cholinesterase enzyme in the nervous tissue is deactivated. The enzyme, which is also found in humans, acts on insecticides in the body and the activity drops off. Organophosphates and carbamates can inhibit cholinesterase in the nervous systems.

Cholinesterase will regenerate in the body, but when regeneration is slower than exposure, the animal is in trouble.

Owners often expose their animals
continued on page 8



New Musser directors

New directors of the Musser International Turfgrass Foundation, gathered at the GCSAA show in Phoenix earlier this year, are shown above. Left to right, they are Mike Bavier, CGCS, Illinois; Peter McMaugh, Australian turfgrass specialist; and Tom Burrows, CGCS, Florida.

1-2-3

The first time pesticide users actually come in contact with pesticides is at mixing. Therefore, caution must be exercised right at the outset to ensure caution against possible accident situations.

Four steps to mixing safety are pointed out by Bert L. Bohmont of Colorado State University in his book "The New Pesticide User's Guide." They are:

1. Always read the label and be careful to properly dilute the pesticide. Make sure you're working with the proper equipment, that you're wearing protective clothing, and that first aid equipment is available.

2. When handling hazardous pesticides, never work alone.

3. Be sure to mix chemicals in an outdoor or well-ventilated location. Do not position your body over the seal or the pouring spout. Never tear open bags; under certain conditions, dusts and powders can billow up in large concentrations.

4. All quantities of the active ingredient should be measured accurately. Measuring containers and weighing scales should be kept where mixing is done. Measuring containers should be thoroughly washed and rinsed after each use.

"The New Pesticide User's Guide" is available through Reston Publishing, 11480 Sunset Hills Rd., Reston, VA, 22090.

"1-2-3" is a monthly department devoted to handling pesticides "by the numbers."