



## RECORD'S RECORD

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"Should regular greens be played during the winter month?" This question was asked frequently during the past season by Greens Chairmen and club officials.

There are two critical times when injury may be severe. Early or late in the season when the grass has been growing and frost occurs, foot traffic on frosted greens will cause serious footprinting. Ice crystals within the grass blades are distorted and rupture living cells, causing death. Later in the day when the ice crystals have thawed the same amount of traffic will do limited damage. Syringing greens in early morning before traffic is allowed on the course will help solve the problem; water melts the ice crystals.

The most serious damage occurs after the soil has been frozen and the upper portion of the green has begun to thaw; the surface layer of the soil is overly wet and slippery. Foot traffic at this time will cause severe compaction, tearing of the roots at the point where they penetrate the still frozen area. The surface of the green will be susceptible to serious footprinting which in turn will affect the quality of the putting green surface throughout the following season.

It has been demonstrated in test plots that trampling on melted snow, with subsequent freezing will result in total turf destruction. This is a strong argument against using slopes on the golf course for sledding, skiing, and the use of snow mobiles.

When the soil is partially thawed injury is serious and long lasting. This condition is always associated with beautiful late winter and early spring days when the air is warm and the soil is cold. It is very difficult to convince golfers they should not play.

Dr. Fred Grau, prominent turf authority, proposes that this sign be displayed at the golf club. "In the

interest of all the members, and in an attempt to preserve the high quality of our greens, the course is closed to play until conditions warrant resumption of traffic."

"Every effort is made to keep the course continuously playable, but when Nature fails to cooperate and brings frost or floods we have no choice but to limit play. The understanding and consideration of the members are greatly appreciated."

Speaking from an agronomic point of view, we would say without reservation that it is best to keep winter play off regular greens and to use temporary greens.

## How's Your Chemical I.Q.?

Buying chemicals? If so, you're exposing yourself to a whole new world of words. Terminology used to identify and describe chemicals or to give instructions in their use are, of necessity, technical and complicated.

Recent surveys made in Texas, Colorado, and elsewhere found that users of ag chemicals too often use them without completely understanding label terms or instructions. As one physician said, "It's one thing to 'read' a label, but something else to 'understand' it. Reading the label is 'important', understanding it is 'essential.'"

We've compiled a list of chemical words (and their definitions) that have been found to be most often unknown or misunderstood by farmers and chemical dealers. Take a good look at this list — you are apt to find them on the label of the next pesticide you buy!

**ACTIVE INGREDIENT** — the killing agent, toxic chemical within the mixture.

**ACTUAL DOSAGE** — the amount of pure toxicant used per unit area, volume or individual. Extension recommendations are given on basis of actual active material.

**AGITATE** — to keep a pesticide mixed up. To keep it from separating or settling in the spray tank.

**ANTIDOTE** — an immediate first aid treatment or remedy to offset effects of a chemical or other poison.

**BASAL APPLICATION** — application of a chemical pesticide in a band at the base of a plant.

**BROADLEAVED PLANTS** — plants or weeds with wide, flat leaves having net veins. Not grasses or conifers.

**CALIBRATE** — to check, measure. Determining how much pesticide is actually being applied by each nozzle, or opening of an applicator.

**CARRIER** — inert material in which the pesticide chemicals are mixed.

**COMPATIBLE** — Chemicals that can be mixed together and still maintain a satisfactory physical state without decreasing their effectiveness.

**DILUTENT** — any material used to dilute a pesticide to desired concentration.

**DIRECTED APPLICATION** — placing of a pesticide on a limited area such as a row, bed, base of plant, or animal.

**DOSAGE** — the amount of pesticide to be applied per given area.

**FINAL TREATMENT** — last pesticide treatment before harvesting a crop.

**FOLIAR SPRAY** — pesticide applied to leaves, needles, and blades of plants.

**FORMULATION** — the form in which the pesticide is offered for sale.

**ILLEGALE RESIDUE** — chemical residue that is in excess of a pre-established government-enforced safe level.

**INCOMPATIBLE** — not capable of being mixed or used together.

**INERT INGREDIENT** — inactive ingredients — any material in a pesticide mixture that wouldn't prevent damage from or destroy pests if used alone.

**LARVA** — the worm-like or grub-like immature or growing stage of an insect.

**LAYBY APPLICATION** — chemical application put on at time plant or crop is cultivated for the last time.

**LOW VOLATILE** — a liquid or solid that does not evaporate quickly.

**MISCIBLE** — able to be mixed.

**NON-PERSISTENT** — only lasts for a few weeks or less.

**NON-VOLATILE** — a pesticide that does not evaporate.

**ORIFICE** — the opening or hole in a nozzle through which liquid is forced and broken up into drops.

**PHYTOTOXIC** — injurious or poisonous to plant.

**PRECIPITATE** — to settle out. A solid substance that forms in a liquid and settles to the bottom of container.

**RESIDUE** — actual amount of a chemical present after application.

**RESISTANT SPECIES** — pests that survive relatively high rates of a chemical.

**SELECTIVITY** — ability of a chemical to kill some pests but not affect others.

**SOIL STERILANTS** — a chemical that will destroy all plants in the treated area for long periods of time.

**SPLIT APPLICATION** — putting on part of a pesticide at one time and the rest on at a later date.

**SPOT TREATMENT** — the placing of a pesticide chemical only on the parts of an area or plant.

**SURFACTANT** — a chemical or agent used in a pesticide formulation to make mixing easier and help the material spread, and completely wet surface.

**SUSCEPTIBLE SPECIES** — animal or plant that can be injured or killed by specific amount of given chemical.

**TOLERANCE** — the amount of chemical considered safe on any food to be eaten. Can mean ability of a plant or animal to survive treatment.

**TOXICITY** — the degree to which a substance is injurious or poisonous to a plant or animal.



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