Those superintendents attending the Golf Course Superintendents Assn. of America International Turfgrass Conference and Show in Anaheim, Calif., will have an unprecedented opportunity to see innovations in virtually every facet of materials and equipment for turfgrass maintenance. Some of the changes have been dictated by OSHA regulations; others will reflect the influence of the ecological and the environmental movement. Economy of manpower and energy will loom big in machinery operations. Efficiency in the use of higher-cost seeds, fertilizers and chemicals will be evident in the new designs of spreaders, sprayers and seedbed preparation tools.

This preview of the attractions at the show admittedly must be incomplete, but it may be considered a general guide. Casual, haphazard wandering is not the way to glean the most out of the splendid and costly showings of merchandise. A cursory glance at a display while walking past a booth is no way to learn about the manufacturer’s efforts to help the superintendent do a better job. Stop and ask the attendant about his equipment. The exhibitors have spent large sums of money to acquaint you with the very latest—make them feel that their efforts have been justified.

Prominent among the displays will be those of the large equipment manufacturers. Each one will welcome your attention, so that you can evaluate the new designs and concepts. Here are some to look for. Improved transportation for men and machines. Gasoline-powered three- and four-wheel “speedsters” are designed to get your crew to the far corners of the course quickly and cheaply. Manpower is too expensive to waste on walking. Safety in machine design is something to ask about. Are gears, chains and sprockets protected to the extent that OSHA standards are met? Are noise levels low enough? Is the exhaust channeled away from the operator? Recycling will play a big part in future golf operations. Grass clippings and tree trimmings will be blended in compost piles to be reduced to humus and returned to the ecosystem. Look for the silent chipper, which reduces noise pollution and can chew tree limbs, old lumber and asphalt blocks into chips for composting. For the economy-minded, there is a three-point hitch chipper that uses tractor power and is portable.

A “Soil Laundry” sounds like a far-fetched idea, but ask about it. Large-scale soil cultivation began about 1947. Since then, we’ve fussied with the debris that comes to the surface. Now, we can expect to see a machine that picks up the soil cores, pulverizes them, returns the soil as topdressing and collects the thatch and other debris for removal to the compost pile. The soil will be in better condition to receive lime, fertilizer and water.

The machine that is able to introduce new, improved turfgrass seeds into established turf without interrupting play and with a high degree of success, is one everyone, who doesn’t own one, should see. With grass seed doubling and tripling in price, the emphasis will be on “how little can I use and still get results.” The word is efficiency. Fertilizers need to be used efficiently, too. We might be looking for a machine that will place fertilizer in the root zone under the surface, where erosion cannot move it to the nearest stream. Deep soil cultivation is the best approach to date. Regulations in Government have encouraged fertilizer manufacturers to ship their products abroad where manufacturers get $30 to $40 more a ton. Hopefully, this will end when controls end, but be prepared to increase the fertilizer item in your budget.

Phosphates are difficult to come by, which may not be too serious in the turfgrass market because of excessive uses of phosphorus. Talk to the fertilizer people and get their view on the current situation. Ask also about the availability of white powdered, soluble sulfate of potash that is sprayable without clogging nozzles. Rock-and gravel-polluted granular potash simply is not acceptable in this day and age when the word is quality. Nitrogen will be discussed at many displays. It is essential to the production of good turf. When a mixed product is sold, ask for a complete breakdown of ingredients. Irrigation equipment now is so sophisticated that it can be baffling to the untrained operator. In some cases, the safety element, such as lightning arrestors, has been neglected. A single bolt can knock out an entire system. Another thing

continued
to discuss with irrigation personnel is how the system will work with sewage effluent water. Also ask about how you can reduce water and still maintain good turf. This is a good question for the grass seed people, too.

Lime has been cast in the roles of hero and villain at various times in our relatively short turfgrass history. In this day, we need to know more about the earth’s own chemical resources to protect our turf. We avoid spoiling our environment with an overkill of powerful chemicals.

Grasses for turf are being developed and released at an astonishing rate. Merion, the first of the improved bluegrasses (1950) now is being challenged by cultivars from Alaska, Sweden, Penn State, N.J., Washington, Indiana and elsewhere. Penncross, the first improved seeded creeping bentgrass, developed at Penn State, now is being challenged by others that claim superiority. New red fescues claim better performance than Pennlawn, another Penn State release. Can the superintendent accept the advertising claims for each grass and be sure that, when it’s planted on his course, it will outperform all others? Of course not, because we have not used our current arsenal effectively as yet. The variability of results might be traced to variations in other factors, which are operating in force. We’ve learned that timely applications of lime have an effect on the incidence of some turfgrass diseases. We know that lime cannot be considered as a fungicide, but it acts like one sometimes. Also, we might see granulated, dust-free lime on display. It will cost more than regular Aglime, but it might be worth it. It won’t hurt to ask.

Chemicals designed to reduce the growth rate of turfgrasses will be a fit subject for discussion. Let’s not forget our “foes”—Poa annua, nut grass, goosegrass and other hard-to-kills. Keep in mind the high cost of synthesizing a new chemical, formulating it, testing it, and finally, getting an approved label for it. Solid-state ignition seems to be on the current state of affairs and could mean improved efficiency and less downtime. Ask your favorite manufacturer what it means to him and what it could mean to you. As I understand it, solid state means an end to breaker points, distributor heads, condensers and associated parts.

Conversion and maneuverability are features to look for and ask about.

Now, more than ever, each superintendent is faced with the necessity of making adjustments in values. Every new device is going to cost more money. How it will work on your course with your budget must be your primary consideration.

See you at the show.

by Fred V. Grau

---

**PRODUCT GUIDE**

**GOLF CARS AND EQUIPMENT** 59
**IRRIGATION EQUIPMENT** 59
**MAINTENANCE EQUIPMENT** 60
**MAINTENANCE VEHICLES** 61
**MOWERS** 62
**TURF PRODUCTS** 63
**ACCESSORIES** 82
**MISCELLANEOUS** 82
**OTHER EXHIBITORS** 82