



CYCLONE POWER SEEDERS

CYCLONE MODEL S-3 POWER SEEDER (left, above). Does a fast, accurate job, whether used for seeding or applying fertilizers. Spreads up to a 30-foot swath, depending on material being spread. Operates from heavy duty, flexible drive shaft which fits tractor PTO. Double agitator, easy setting rate gauge, and positive shut-off. 1, 2½, 3 and 5 bushel sizes.

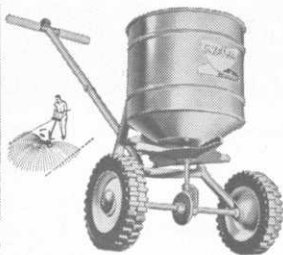
CYCLONE ELECTRIC MODEL M-1 (shown on garden tractor at right, above). Mounts on garden tractor or front or rear of large tractor, truck or jeep. Powered by a self-contained electric motor which operates from the electric system of the vehicle upon which it is mounted. Does a fast, accurate job of seeding or applying nitrogen and other pelleted and granular fertilizers. Resistor available for control of spread width. 1, 2½, 3 and 5 bushel sizes.



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EVERY SPREADING AND SEEDING JOB
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CYCLONE HAND SEED SOWER. Accurately and quickly distributes grass seed . . . also pelleted fertilizer. Exclusive double-oscillating feed. Instant shut-off. 7- to 28-foot spread.



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THE CYCLONE SEEDER CO., INC.
URBANA 60, INDIANA

Grau's Answer to Turf Questions

By **FRED V. GRAU**
Does It Wear Out

Q. Does grass ever have to be replaced? Does it get old like people? (Illinois)

A. Turfgrasses that are constantly closely mowed renew themselves. Yes, older blades do die and are added to the residue in and on the soil, but fresh new shoots continually replace the old ones. In effect, this maintains *young* turf. About 85 per cent of the root systems of grass are completely renewed each year.

The residue that accumulates as a result of dead and dying plant parts sometimes is called "thatch" or "mat." Accumulation is lessened when conditions favor active microbiological decomposition (proper pH range, adequate nitrogen and balanced mineral nutrition).

It is well known that fresh young growth is infinitely more disease resistant than older growth. Removal of old growth by "thatching" (mechanical means) permits improved development of disease resistant young growth.

Apron Problems

Q. Why is it so difficult to maintain good aprons in front of the greens? (Illinois)

A. One of the reasons is that this area becomes more compacted than any other because of the concentration of traffic while the green was being built and since it has been in play. Such traffic creates compaction conditions under which few grasses can thrive.

Another reason is that many greens are built so that all of the drainage water comes off the greens directly on to the approach. This creates a condition under which it is almost impossible to grow anything but poa annua and knotweed. On some courses, the problem has been solved by more frequent aerating and by re-designing the green to take the drainage water off in other directions so that only a minimum comes off on the apron. Planting a type of grass that is suited to the condition also is helpful.

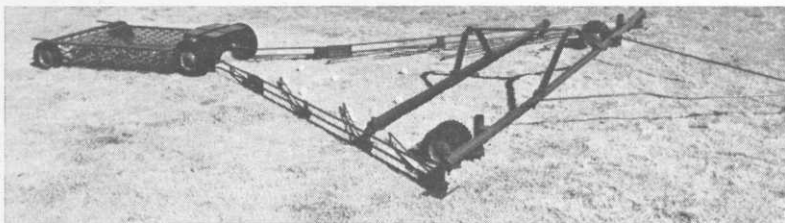
Hard Way Scarifying

Q. One of our members suggested, at a monthly round table discussion, that it might be a good idea in the fall to cut all the sod on the tees with a power sod cutter, but not remove the sod. Would this tend to make better turf on the tees because of the scarifying of the earth underneath? (Minnesota)

A. In my estimation, this would be a very foolish procedure. First, in cutting the sod, all of the

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4120 East Grant Road, Tucson, Arizona
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deep roots would be severed and the sod would be dependent upon the more shallow roots until roots began to form below the cut. If dry weather intervened, it would be possible to lose a great deal of the sod. This might be particularly harmful if there was a cold, dry spring with high winds causing a great deal of desiccation. Without deep roots, much sod could be lost.

Wants to Kill It

Q. I am sending a sample of grass that we'd like to get rid of. Would you please tell me what type it is and what is the best way to kill it (Arkansas)

A. the grass which you sent is Eleusine indica, better known as goosegrass, crowfoot or silver crab.

The best way to kill it is to grow dense, solid turf so that it can't get started. Chemicals are only partially successful and they may damage the turfgrasses more than the weed. Successive light applications of DSMA can be very helpful along with an adapted grass and a sound feeding program. Goosegrass on the greens frequently is brought in with unclean topdressing. Soil sterilization will help here. Soil compaction may be partially responsible.

This weed ceases to be problem when Bermuda and zoysia turf can be grown and where these grasses are adequately fertilized. A good sharp knife is still a good tool to remove goosegrass. Vertical mowers can be very useful in

removing seedheads of goosegrass without seriously disturbing the turfgrasses.

How About Japonica?

Q. What is your opinion of Zoysia, japonica, Japanese lawngrass, for course roughs? (Va.)

A. Within its range of adaptation, Japanese lawngrass (common zoysia) makes very nearly the "ideal" rough. It can be established from seed which is available on the market. It has low fertility requirements, is remarkably drought tolerant, and effectively chokes nearly all weeds without the need for chemicals. Height of cut can be varied without injury to the grass to meet requirements of championship play or to suit the weekend player. It can be established as part of the seed mixture during construction or it can be introduced later by appropriate means.

Merion Is Main Grass

Q. Under what conditions would you specify Merion bluegrass as the principal grass for lawns or fairways? (Illinois)

A. Within its range of adaptation, Merion bluegrass should be specified as the main grass for lawns and fairways only if it is the intention to fertilize and manage for Merion. This includes optimum nitrogen fertilization (6 to 8 pounds N per 1,000 sq. ft.) with balanced minerals, minimum irrigation, realistic height and frequency of cut and removal of clippings. Merion has been disappointing when management has failed to meet its requirements.