

## MAJOR DECISIONS IN TURF MANAGEMENT

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Sometimes a decision is made which dictates going in one direction and greatly affects other things. These I call major decisions. Twelve are discussed briefly below as examples of this. Readers may have others to suggest.

1. **WEED CONTROL WITH 2,4-D** — An obvious choice, now standard procedure, but the earlier decisions, about 1950, to use 2,4-D meant that now turf could be promoted and weeds repeatedly removed. This is an old decision.

2. **REMOVAL OF CLOVER** — with Silvex 2,4,5-TP, MCP, or Dicamba. The absence of clover means a closer cut means more fertilizer, particularly more nitrogen, and it meant more attention to turfgrasses about 1954.

3. **VERTICAL GROOVING AND OVERSEEDING.** The newer machines permit the use of light rates of the newer varieties of grasses. The 10 lb. seed per acre bluegrass price is not critical. Performance produced in subsequent years is the key; thus this has released the experimenter and the seed grower from the burden of tonnage to the challenge of performance.

Equally important has been the well established procedure of vertical tillage with tines, spoons which reduce compaction, punch holes through the thatch and provide certain topdressing benefits.

4. **PRE-EMERGENT TOXICITY** — With arsenic usage, no added phosphorus, slow build-up of arsenic, and the losing of the benefits of earthworms are all important to the performance of arsenic toxicity. Plan on a 5-10 year program; stay with the program.

Now with Balan, Betasan, Dacthal or Tupersan, each have their time of year, their period of toxicity, their disipation — each should be used to get a specific response. Overseeding presents special problems with some materials. These chemicals can protect existing turf.

5. **AUTOMATIC IRRIGATION.** The supervisor tends to operate the system. There are design limits. It can be used for air-conditioning. There is a possibility of obsolescence. Nevertheless, automatic irrigation can serve well and is another major decision fast becoming standard procedure.

6. **WARM SEASON GRASSES IN FAIRWAYS.** In the Midwest the proper management for establishment and long term maintenance is to avoid fall fertilization on Zoysia or Bermuda at the very time when bluegrass needs pushing; thus it is not surprising that some have killed Zoysia and Bermuda as they "fertilize bluegrass."

7. **MOWING WITH HYDRAULIC POWERED EQUIPMENT.** Formerly a fairway situation now also being used on greens, there is the problem of higher inventory, fewer workers, equipment reserves — it is more adaptable. This alone, if nothing else, makes hydraulic mowing equipment a major decision for it affects so many other.

8. **INCREASING GOLF CART USAGE.** There is no turning back. Water will increase, damage will be more obvious — flags, signs, paths, barriers, curbs will all be inadequate in certain places.

9. **COARSE GRANULAR FERTILIZERS** to slow down and regulate release the IBDU (Isobutylidene diurea) offers particular promise. We are using particles 3/8 to 1/2" in diameter under sod and in new seed plantings, etc.

10. **SYSTEMIC FUNGICIDES** offer completely new concepts. With Benlate it is root absorbed so weather is not as critical — leaf coverage is less critical. There will be other systemics also.

11. **DWARFING OF GRASSES.** Already accomplished in the Bermudas it offers much promise for other species, less competition, less frequency of mowing, more attention to manicuring — why not?

12. **PURR-WICK SYSTEM OF ROOTZONES** — new, different, most promising. It does conserve moisture and nutrients. It does permit the manager maximum control of both wetting and drying circles.

13. **MOBILITY OF WHEELS UNDER WORKERS.** Readers may think of other Major Decisions, which ONCE MADE require additional technology, performance and management conditions. The above twelve illustrate the ongoing character of Turfgrass Improvement.

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