

# UNITED STATES GOLF ASSOCIATION GREEN SECTION WESTERN OFFICE



P.O. Box 567

Garden Grove, California

Phone KEllogg 2-2935

WM. H. BENGLEYFIELD  
Western Director

## • Western Turfletter •

Vol. 9 - No. 1

January - February

\*\*\*\*\*

\* B E T T E R T U R F ---- M O R E E N J O Y A B L E G O L F \*

\* If you are a new Green Chairman or if your club is not a USGA Green \*  
\* Section subscriber, perhaps you're wondering "What we're all about." The \*  
\* following 'thumbnail sketch' may provide some of the answers. \*

\* The Green Section is dedicated solely to the interest of helping mem- \*  
\* ber clubs efficiently produce the best in golfing turf. Last year, 117 clubs \*  
\* in 7 Western States subscribed to the Visiting Service. One Club Official \*  
\* has written "The greatest help to an average golf course, such as ours, was \*  
\* instituted by your Golf Association by enlarging your Green Section to in- \*  
\* clude a turf advisory service." \*

\* Each club subscribing to the Green Section Visiting Service receives \*  
\* one scheduled half day visit followed by a written report to the Green Chair- \*  
\* man and Course Superintendent. A second course visit is made at no addi- \*  
\* tional charge upon request. If three or more visits are requested in one \*  
\* year, the club will be billed at the rate of \$50.00 plus expenses. \*

\* Your Green Section Office is a storehouse of a vast fund of knowledge, \*  
\* gathered through years of scientific research and practical experience. It \*  
\* directly supports turf research projects and co-operates with State Universi- \*  
\* ties in developing Turf Conferences, Field Days, etc. It is available for \*  
\* emergency consultation by visits, phone or correspondence and it keeps Super- \*  
\* intendents and Green Chairmen up-to-date with timely turf tips in the Western \*  
\* Turfletter. \*

\* In short, the Green Section's only mission is to serve golf through \*  
\* turf research, interpretation and direct visits to USGA Clubs subscribing to \*  
\* the Visiting Service. In 1960, may we help your club in producing Better \*  
\* Turf for More Enjoyable Golf? \*

\*\*\*\*\*

### D E L E G A T E S - P L E A S E C O M E T O O R D E R

Right now, Poa annua is like a presidential candidate. At this time of the year it seems to be gathering strength and many are tempted to think "it could go all the way." But as a professional turf manager, you know differently. By convention time (July and August) our springtime candidate Poa "has had it." If we're smart, we want to get off this bandwagon - for it is bound to run out of gas every tough summer.

One of the best turfgrass articles published in 1959 was by Dr. Marvin Ferguson, USGA National Research Co-ordinator on Poa annua control." The article appears in the September 1959 issue of the USGA Journal and Turf Management and should be on your MUST list for winter reading. Why? Because Dr. Ferguson reports "It appears that we have the means for effective, if not complete, Poa annua control!"

#### Characteristics of Poa annua:

Although Poa annua may be shallow rooted, it can produce such an abundance of roots that they may almost completely occupy the surface 2-inches of soil. Certainly this grass is not drouth resistant and it is susceptible to many diseases. "With all its inherent weaknesses, one wonders how Poa annua manages to continue as a serious pest. One answer is its prolific reseeding habit. Another is that conditions are provided which meet the requirements of the grass."

"Poa annua is far superior to bentgrass in its ability to extract moisture and nutrients from the shallow region of the soil." Compaction also seems to favor Poa annua by holding more moisture at or near the surface. This in turn, limits the movement of oxygen deeper into the soil where bentgrass roots are more prevalent. Thatch and turf diseases also tip the scale in favor of Poa annua.

#### Ferguson's "Twelve Point Program":

Once we know and understand the growth habits of Poa annua, we are in a good position to do something to control its advances in our greens. The Green Section believes that the management program must be set up to "give the edge to bentgrass" on the greens. With good management over several years, we believe the Poa annua population can be greatly reduced. Marvin Ferguson lists a twelve point program worthy of your consideration:

1. Provide good drainage. This means good surface drainage as well as good internal drainage. Whether you are in 'rain country' or not, tile lines in greens are important.
2. Relieve surface compaction through an active program of cultivation (aeration) and top-dressing. Most superintendents agree that aeration, or oxygen diffusion, is extremely important to the health and vigor of bentgrass roots. Top-dressing is again returning to favor and practiced to some extent on most golf courses.
3. Move the flag stick frequently. Recent research work indicates that heavy traffic on greens not only causes turf wear but can also affect soil structure. This is especially true around the flag stick.
4. Follow an irrigation program which favors bent and not Poa annua. The more deeply rooted bentgrass will survive on rather infrequent irrigations although some mid-day wilting may occasionally require syringing. ----- Frequently, golfer complaints result from surface hardness. If it were possible for the Superintendent to irrigate in such a way that the 1 or 2-inches of soil nearest the surface would remain relatively dry while the remainder of the root zone was relatively moist, a long step toward Poa annua control would be taken. The highly permeable sandy soils lend themselves to this practice."

Ferguson's "Twelve Point Program" (continued):

5. Keep thatch in greens to a minimum. Rooting depth becomes limited when excessive thatch develops. Under conditions of limited rooting depth, Poa annua will have the upper hand over bentgrass.
6. Control disease and insects. Any process that causes a severe thinning out of bent turf invites Poa annua invasion.
7. Establish a good fertilization program for every month of the growing season. Light but frequent feedings during the summer months will keep the bent growing when Poa annua is at a disadvantage. "The use of fertilizer in the summer must be tempered with caution but judicious fertilization at this time seems to be beneficial." During the cooler months, keep the bent growing and help it resist Poa annua invasion. Good bent greens are never produced on a starvation diet.
8. Use such materials as lead arsenate to discourage Poa annua. This must be a continuing program over the years. Reports indicate that calcium arsenate also shows selectivity in Poa annua control. However, its behavior is sometimes erratic and turf loss may result. Its use on greens is not recommended at this time.
9. Keep phosphorous levels down. Purdue University research shows that high phosphorous levels in soils counteracts to some extent the control effectiveness of lead arsenate on Poa annua. Besides bentgrass requirements for phosphorous are relatively low.
10. Consider the use of wetting agents as a factor in overcoming the accumulation of water in thatch. By lowering surface tension of water, greater penetration into the soil and through thatch may be accomplished.
11. The judicious use of herbicides appears to have a place in Poa annua control. For example, crabgrass should be controlled so that open or bare areas will not occur in the fall for Poa annua invasion.
12. Use a bentgrass that grows vigorously and resists disease. Many strains of excellent bentgrasses are now available and will greatly contribute to winning the battle against Poa annua. On older greens, consider overseeding with Penncross or Seaside each spring or fall in order to maintain bentgrass populations.

Al Radko, Eastern Green Section Director says that "the past 30 years may well be classified as the 'Poa annua period,' and during the past 10 years Poa annua has invaded greens in an alarming proportion."

The Twelve Point Program outlined above is more than just a Poa annua control program ---- it is a complete management program. And this is the purpose of Marvin Ferguson's article and the justification of the statement that "it appears we have the means for effective, if not complete, Poa annua control."

So Delegates, Please Come to Order. Poa annua will not live up to our Platform (or on our greens) this summer. Now is the time to plan for its control - and remember; by perseverance the snail reached the Ark.

May the Bent Grass win!

\* \* \* \* \*

"A politician thinks of the next election; a statesman, of the next generation."

James Freeman Clarke

**U. S. GOLF ASSOCIATION GREEN SECTION  
WESTERN OFFICE**

P.O. Box 567 Garden Grove, California

**BULK RATE  
U.S. POSTAGE  
PAID  
Garden Grove, Calif.  
Permit No. 83**

**Dr. J. R. Watson, Jr.  
Chief Agronomist  
Toro Manufacturing Corp.  
Minneapolis 6, Minn.**