

UNITED STATES GOLF ASSOCIATION
GREEN SECTION

Southwestern Office

Texas A & M College

COLLEGE STATION, TEXAS



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Southwestern Turfletter



No. 1

February - 1957

NOTICE

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* This is the last issue of the Southwestern Turf- *
* letter that you will receive. Because of a slight *
* change in the organization of the Green Section, it *
* is planned to publish turfletters from four regions *
* of the United States. These regions conform gener- *
* ally to the major divisions of turfgrass adaptation. *
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* Subscribers in the Southwestern Region who have golf *
* courses with Bermudagrass greens will receive the *
* Southern Turfletter. Those who grow bentgrass greens *
* will receive the Mid-Continent Turfletter. A part of *
* the material for each of these turfletters will con- *
* tinue to be prepared at College Station, Texas. *
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THE MID-CONTINENT REGION

In 1957, the Regional Turf Service will be available to USGA member clubs in every part of the United States. In relation to this expansion, a new region has been established which will include the Southwestern Region and a part of the Midwest where the service has not been offered previously. Two offices will serve the region. One will be at College Station, Texas, and one at Chicago, Illinois. Three agronomists will serve the region. They are J. B. Moncrief, James L. Holmes, and Marvin H. Ferguson, Regional Director. It is believed that this new arrangement will make possible better service to old subscribers as well as the ones to whom the service is newly available.

OKLAHOMA AWARDS

The Oklahoma Turfgrass Association presented awards for outstanding service to two of its members during the Turfgrass Conference last December. Inscriptions on the awards read as follows:

To
BOB DUNNING
For

outstanding service in the field of
turf management and perpetuation
of interest and desire in turf improvement in the
State of Oklahoma
1956

Oklahoma
Turfgrass Association
Award of Merit

To
JOHN PRICE
For

His Efforts to Advance
Turf Improvement
in Oklahoma
1956

Our congratulations to Bob Dunning and John Price! The Oklahoma Turfgrass Association is fortunate to have members like Bob and John and it is to be commended for this expression of appreciation for their service.

LONGEVITY OF SEEDS

Very often one encounters a person who has undertaken the establishment or re-establishment of turf on an area and who finds that he has produced a crop of weeds rather than a stand of the grass which was sown. If the weed which appeared was not common in the area before the renovation was undertaken, the person is quite likely to believe that the seed he bought was full of weed seeds. Seed laws require that lots of seed be accurately labeled with respect to germination, purity, and weed seed content. It is extremely unlikely that one would ever bring about a weed infestation in this way so long as he bought properly labeled seed.

The weeds that appear following renovation are most likely those which have been lying dormant in the soil. How long does a seed live in the soil? F. H. Montgomery of the Ontario Agricultural College provided some answers in a paper presented to the Sports Turfgrass Conference at Guelph in 1955. The following extracted paragraphs are quoted from Montgomery's paper:

"Periodically we read about successful germination tests being made on seeds that have been discovered in Egyptian tombs or in the caves of pre-historic man. Such claims must be treated with the greatest of skepticism. Experimental work has shown that seeds do die after a period of time."

"The number of seeds present in the soil is enormous. At the Rothamsted Experimental Station in England, a survey was made to determine the number of seeds present in fields that had been under cultivation for almost a century. It was estimated that approximately 158 million seeds were present on every acre. Many of these would not germinate under normal agricultural conditions at any one time, but when brought under proper conditions for germination they did germinate. How long some of these seeds had been in the soil is not known."

"Few long range experiments have been conducted to test the longevity of seeds buried in the soil, but two may be mentioned here.

"Duval of the U. S. Dept. of Agriculture in 1902 started a test on 107 species of wild and cultivated seeds in soil longevity. Germination tests were made at intervals of 1, 3, 6, 10, 16 and 20 years. Most seeds of cultivated plants died after one year. Timothy, Kentucky bluegrass, beet, Bush clover (*Lespedeza*), 3 species of clover, tobacco, celery and black locust were still viable after the 20 year period. Seeds of wild plants were found to be especially viable after 20 years in the soil.

"In 1879, Beal of the Michigan Agricultural College began an experiment to study the viability of a number of seeds, mostly weed seeds. He used 20 species. These seeds were mixed with sand and placed in pint bottles. 1000 seeds were placed in each bottle, and the bottles were buried 18 inches in the earth. It was planned to test these at intervals of 5 years. In 1920 it was decided to make the interval 10 year periods. The 1950 results, or the 70th year of the experiment, showed that the seeds of evening primrose, curled lock, moth mullein were still viable. These, however, are not all that may still be viable, for as I mentioned before, dormancy is an unpredictable state and other seeds may still be viable or break their dormancy and appear in another test. Other long lived seeds of this experiment have been Redroot pigweed, 40 years; Black mustard, 50 years; field peppergrass, 40 years; dog fennel or stinking mayweed, 50 years; common chickweed, 30 years, and common mullein, 35 years."

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USGA GREEN SECTION

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