BETTER LAWN Harvests

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AUTUMN PRESS KIT TALLY

As this report is prepared, a trickle of Press clippings for the autumn season can still be expected. We are pleased to report, however, that for the 4 weeks of September our clipping service this autumn caught over 600 clippings, each of which mentions in headline or text standard Institute catch-phrases, - Kentucky bluegrass, fine fescue or Highland bentgrass. In most instances there is helpful discussion, with naming of varieties, such as Park and Merion Kentucky bluegrass, Chewings, Illahee, Pennlawn and Rainier fine fescues.

PRESS PICK-UP TREND

We note in the autumn press clippings received from throughout the country, that the trend continues towards personalized and localized reference to lawns and lawn seed. Thus more and more state extension services are offering releases to newspapers within the state, usually crediting the observations to the local county agent. As a result it is becoming ever harder to determine just where the Lawn Institute Press Kits leave off, and local authoritives begin. As often as not the subject coverage is almost identical to that in our kit. There may be occasional references to the locality, a few words changed here and there, but it very much seems as though a lot of the lineage under local by-line can be traced back to Lawn Institute releases.

As a result, we see somewhat less by-line credit given the Lawn Institute, although again, as in previous seasons, we are very much indebted to Earl Aronson (and his AP syndicated "Newsfeature"), for direct mention of the Lawn Institute. Another friend of the Institute, George Abraham, New York, has utilized "answers" prepared by Dr. Schery at the Institute offices in his syndicated column (placed widely in New York state newspapers). He also draws upon our press materials for informational fill-outs in his "Green Thumb" column, and offers our reprints.

TREMENDOUS MISSOURI COVERAGE

Dr. Schery reported to the annual meeting this year how slack had been the Missouri pickup of press materials, to judge by clippings during the last fiscal year. This autumn a resurgence of Missouri coverage was noted, with many small and medium size towns utilizing an Extension press release out of the University of Missouri. No other state exhibited such widespread and intensive coverage.

It is gratifying that Institute viewpoints are well exposed, possibly as a result of repeated Institute participation in the Missouri Turfgrass Conference and books and releases sent to Columbia. Sample quotes: "Common Kentucky bluegrass is the

most widely used and generally best adapted grass for Missouri lawns. -- good color, medium textured, excellent sod-forming characteristics -- holds up well -- creeping red fescue, a fine-textured, wiry grass, is especially recommended for shaded locations. It survives under minimum fertility and is quite tolerant of dry conditions. Several improved varieties are available. These include Pennlawn, Illahee, Rainier -- and Chewings -- the tall fescues such as Kentucky 31 and Alta should not be confused with creeping red fescue -- Highland and Astoria are more erect non-creeping bentgrass varieties you may sometimes see --"

PRESS KIT COVERAGE

This autumn 27 different states were represented in press clippings derived from the autumn kit (only those mentioning the Lawn Institute or quoting directly). Most voluminously represented (13 newspapers) was New York. Next came New Jersey, Michigan, Wisconsin, Ohio, Pennsylvania, Nebraska, Connecticut, North Carolina, Indiana, Massachusetts and Missouri in that order. Even though the service was not asked to check "winterseeding" stories in the South, we note that Georgia, California, Florida, New Mexico and Texas all had some coverage. Geographically the pick-up ranged widely, with at least one clipping from each of the four corners (Maine, Florida, California, Washington). As in the past, main usage is in the populated market areas of the Northeast, from the Great Lakes region into New England.

ROADSIDE SEEDING INSPECTED

Earlier Harvests have mentioned the "all fine-textured" seeding of about a half mile of median on Route 23 in Ohio, arranged by the Institute last autumn. Loy Stevely is the State Highway Department district supervisor in charge, and the seeding was made under his supervision on the newly constructed divided 23, between County Road 55 and 56 in Wyandotte County.

With the usual delays such a project generally experiences, the seeding was not made until late in the autumn of 1965, and had not yet sprouted when inspected in early October. The seeding mixture used was 57% Kentucky bluegrass, 29% fine fescue and 14% Highland bentgrass, and all equipment used to complete the seeding was thoroughly washed out beforehand to prevent contamination from the seeding mixture used on the peripheral berms (which contained tall fescue). Thus in this stretch of highway we have an all fine-textured median, of no little extent, to be compared with the peripheral berms running along the outer side of the highway seeded according to Ohio specifications (a tall fescue-Kentucky bluegrass-redtop combination).

At the beginning of July the fine-textured seeding was generally well established, with fine fescue the predominating grass. Bluegrass was thriving best on pockets of better fertility, and Highland bentgrass was as yet of minor importance. Drought had continued through late spring, unfortunately, and most of the stand was off-color or decidedly brown. Some grain resulting from the straw mulch was still evident, but would soon disappear contributing to the attractiveness. All in all, an adequate stand of fine-textured grass was established in spite of adverse weather conditions and the late planting.

We look forward to future comparisons, contrasting the fine-textured median with the peripheral berms that contain coarse-kind grasses. Even the first summer

there were practical advantages favoring the median. It had needed but a single mowing before the 4th of July, whereas the berms had had to be mowed two or three times.

"BEST LAWN IN DENVER" CONTEST

During September, Dr. Schery had opportunity to visit turfgrass research installations and review lawn matters with various experts in Colorado. Observations on activities at experimental locations are reviewed elsewhere. But one of the most effective promotional activity is the annual selection of the "Best Lawn In Denver", sponsored by the Denver Post, and engineered by Denver County Agent Herb Gundell.

This September Mr. Gundell kindly scheduled final judging for a day in which Dr. Schery could participate. The field had been narrowed down to 8 lawns that had earlier won in their particular sections. The panel of judges visited each of these (involving nearly 100 miles of travel through Denver), and rated the lawn independently on a series of characteristics each having point scores.

Judges, in addition to Mr. Gundell and Dr. Schery, included the Area Extension Horticulturist, the State Extension Horticulturist and the Director of Parks. There was very close agreement in the ratings (although each judge scored independently and without consultation), with first and second place very close. The value of this contest is not in just selecting a winner, but in focusing attention on good lawns and quality lawn products throughout the growing season. There is probably not another metropolitan area in the country with a higher percentage of good lawns, and as much pride in their maintenance. The Post contest undoubtedly has been helpful in stimulating this attitude. The final awards are given at a sponsored dinner, attended by finalists, judges and other dignitaries. Naturally, the Denver Post provides full publicity on all of these activities. This constitutes first rate "advertising" of quality lawns.

WORD GETS AROUND

The following "inquiry" was received from the Metropolitan Water Board, Syracuse, New York:

"We are completing a 30-MG earthen embankment reservoir --- we have been advised that the Institute would recommend a fine fescue grass for the embankments to eliminate or reduce the mowing problems. Is our information correct? If so, we will appreciate any information you can give us as to blends -- we will appreciate any help --"

Of course recommendations for an all-fine-textured blend of seed with planting instructions was sent immediately.

REPRINTS TO CANADA

It was a pleasure to send several hundred additional copies of the reprint "Fall Offers Ideal Growing Conditions For New Lawns", from Lawn/Garden/Outdoor Living Magazine, for distribution in Canada by Hogg & Lytle. Such help from members greatly aids our "information push" north of the border.

OUTSIDE SUPPORT

We are delighted that the Smith-Douglass fertilizer offices in Columbus, Ohio, made good use in distributing the recent reprints, "Steps To Assure A Good Lawn" and "Starting A New Lawn", of which several hundred copies were furnished late in August.

SEED QUALITY REPRINT USED

We were pleased that Seed Technology made good use of a supply of "Lawn Seed and Lawn Weeds", in a national mailing to customers during September.

ECOLOGICAL REPORTS

Reports delivered by the "pure" scientists often allow extrapolation for such applied arts as lawn tending. Here are a few gleanings from the Ecological Society program at the University of Maryland, August 14-19.

A study of weedy species (that included many lawn weeds) in Washington, showed that there was a nearly standard number of seeds produced in a given area, no matter the frequency of the weeds. When the weeds were thick and crowded, seed yields may be so low as 200 per plant, but the same plants growing without competition would yield 100 times as many seeds. The author concluded such plasticity is characteristic of weeds, and accounts for their ability to spread rapidly once a toehold is gained.

New Jersey and the Pennsylvania researchers checked out the performance of annual weeds (including lawn weeds such as foxtail), over a period of years. They noted that in the first year these weeds tended to be tall and lush, but the second year were relatively small and squat. Foxtail, for example, provided soil residues that inhibited its growth the second year. Foxtail was inhibited by foxtail, but not by other weeds such as bindweed.

The research investigated whether such annual weeds as foxtail interferred with the establishment of perennial plants. These annual weeds did prevent as full colonization and development of the perennials as they did of themselves. Even after death the annual plants had some retarding influence upon development of the perennials.

The implication is that in seeding a lawn to perennial grasses, the annual weeds had best be thoroughly cleaned up first for most efficient performance of the grasses.

SOUTHERN WINTERSEEDING MAILING COMPLETED

By the beginning of September an informational mailing on winterseeding was in the hands of nearly 500 southern newspapers and editors, sent from the Marysville office. In addition to a covering note, there were three full-page stories ("It's Wintergrass Seeding Time", "New Winterseeding Ideas For The Lawn", and "Wintergrasses That Go Farther"), as well as four shorter items ("Hardy Wintergrasses", "New Golf Green Wintergrass", "Golf Turf For The Suburbs", and "Mow Short Before

Winterseeding"). Lending authority to the stories were two reprints, including the Southern Turfgrass Newsletter which contained winterseeding stories by Dr. Schery and southern researchers, and the recent "Invest Now In Your Lawns" from Resort Management Magazine.

Emphasis in all of the stories was the use of fine-textured northern species for winterseeding of dormant Bermuda, not only for professionally maintained turfs such as on the golf course (where the practice is already well accepted), but also for industrial grounds and dwellings. Sample statements: "In professional circles new interest centers on the so-called fine-textured grasses for winterseeding. These are the fine or lawn fescues, the Kentucky bluegrasses and seeded bentgrasses such as Highland. Familiar varieties of fine fescue are Chewings, Illahee and Pennlawn; there are many choices of Kentucky bluegrass, almost any of which perform well in winter. Park is noted for rapid sprouting." And, "Lawns look dingy in a hurry once winter arrives. But southern lawns can be kept sparkling green if planted to hardy grasses such as the fine fescues, bluegrasses and bentgrasses. All three are reliably winter-hardy, don't discolor even in freezing weather." Or, "The usual ryegrass sown for winter lawns is inexpensive by the pound - but you get relatively few seeds in that measure. By contrast, there are over 2 million seeds of Kentucky bluegrass in a pound, nearly 10 times as much as ryegrass. You'll probably include an inexpensive bentgrass such as Highland in a fine-textured winterseeding mixture, too, with over 7 million seeds to the pound. Don't leave out the fine fescues - varieties like Chewings, Illahee, Pennlawn --"

ACRONOMY PAPERS OF INTEREST

Several papers presented at the agronomy meetings in other than the turfgrass section have tangential interest. Resumes, as condensed from Agronomy Abstracts, may be of interest:

A Cytogeographical study of the Genus Cynodon was completed by Oklahoma Researchers. Fourteen entities of specific or varietal status are defined, many containing both diploid and tetraploid forms (C. X magennisii is a triploid).

VPI Researchers reported on "Photosynthesis and Morphological Characteristics of Alfalfa as Affected by Potassium Nutrition". Net photosynthesis (correlated with yield) rose as did potassium content up to about 2.5%. The same principle - that adequate K is needed for efficient performance - no doubt applies to grass.

Other VPI workers reported on "Accumulation of Ketone Bodies by Cool Season Grasses Under Low Carbohydrate Stress". In attempting to explain the detrimental effect of high nitrogen fertilization on grasses, it is concluded "that cool season grasses placed under conditions of high respiration, low organic reserve, and high nitrogen nutrition may accumulate ketone bodies in a manner similar to animals."

Of related interest is Nebraska work on "Persistance of Phytotoxicity in Decomposing Residues of Wheat, Oats, Corn and Sorghum". Residues of all these crops contain soluble materials toxic to the growth of wheat seedlings. Contributes to the continuing evidence of "antibiotic" materials in all plant residues.

Iowa State Research on "Effects of Light, Temperature and Moisture on Nitrate Accumulation in Smooth Bromegrass", indicates that light intensity, temperature and soil moisture are related to nitrate accumulation.

Still other VPI research related to "Grass Seedlings Response to Moisture and Soil Surface Temperature Stresses as Affected by Wood Cellulose Mulch". Tall fescue growth is enhanced by mulch when moisture levels are low, but depressed at high moisture levels. High mulched surface temperatures caused girdling of seedlings of ryegrass.

North Carolina Research dealt with "Canopy Drips; A Source of Mobile Soil Organic Matter From Mobilization of Iron and Aluminum". Materials leached from the leaves of oaks and pines releasing iron and aluminum from the soil. So, possibly, might a leachate from grass leaves?

California Research on "Some Affects of Iron Chelates on Uptake and Translocation of Some Radioactive Isotopes From Soil", showed involved interrelationships between iron and zinc in chelate form. Sometimes absence of iron increased zinc levels.

LETTER OF APPRECIATION

Floyd Bowers, of Rockford, Illinois, writes as follows (abridged):
"The leaflets, pamphlets and your book, -- contained a wealth of information, and I'm sure I am richer in knowledge because of them. --- In fact, with the information gained last year, I was able to follow a program which awarded me Lawn of the Month -- by the Rockford Men's Garden Club. And I'm sure I owe it to the literature from the Lawn Institute."

REPRINTS FOR THE SHORT COURSE

We are pleased that the Ohio Department of Highways is again utilizing Lawn Institute reprints to be given registrants for the XXV Short Course on Roadside Development, sponsored jointly by the Department of Highways and Ohio State University. Approximately 500 copies were furnished to Mr. Garmhausen, Chief Landscape Architect, of:

1. Steps To Assure A Good Lawn
2. Buying Seed For The Roadside
3. Quality Bentgrass Proves Compatible With Bluegrass in 4-Year Turf Tests

COOPERATION IN LOUISVILLE

After receiving the Autumn Press Kit, Ed Hadley, of the Louisville Courier-Journal and Times, requested some Lawn Institute photographs to back up press kit information. Seven such photos appeared in the Sunday, August 20th issue of the Courier-Journal, along with the feature "Fall's For Making A Lawn".

The tear sheet Hadley kindly sent shows the combining of several stories from the Kit, to compile this feature. Specific credit is given the Lawn Institute. Except for an occasional reference to Kentucky and Indiana, the text is unchanged from the release material. Sample: "The kind of grass you sow - whether bluegrass, the fine fescues or the bentgrasses - will determine the future of your lawn." Bolster

seeding, fertilizing, weed control, seedbed preparation, mulching and "chemical edging" are all discussed.

10TH TURF ANNUAL APPEARS

The 1966 "Turf Annual" published by Park Maintenance appeared in mid-July. The Forward this year was written by Dr. James Beard, Michigan State University, one of the Institute advisors. The Lawn Institute is listed as one of two contributing sources of information for Ohio.

As in the past, so much condensation is necessary in reporting turfgrass research for the year, that many conclusions are out of context and therefore possibly with inaccurate implications. For example, Lawn Institute information on winterseeding southern golf greens is grouped under "Mixtures and Other Grasses," and the following quotation is given without specifying that southern wintergrass greens are being discussed: "In praising the fine-textured trend in mixing grasses for overseeding, Schery - O. reports that in golf course research over the past several winters these blends have proved themselves. Comments Schery, 'They contrast with the lower grouping of coarse kinds, among which annual ryegrass falls. Utilizing these elegant favorites in place of ryegrass has many attractions for the golf green. - -'"

The Annual opens with some discussion of health consequences of pesticides. Then turf diseases are reviewed, with the naming of various fungicides and their effectiveness as determined in cited research.

Fertilizers are covered next, and of possible interest to Institute members is this comment, attributed to Juska and Hanson of Beltsville: "The researchers concluded that the nitrogen requirement of common Kentucky bluegrass, for the maintenance of reasonable density, can be met with a single application of nitrogen. The amount of nitrogen will vary with the environmental conditions but in all probability should not exceed 2 lbs. per M - -."

Under "Grasses" Michigan State is reported high on Holfior, and various other tests are cited. The Lawn Institute is quoted for its Highland bentgrass observations, viz. "Four year tests by Schery - O. indicate that there seems to be unjustified alarm about quality bentgrass in fine turf mixtures. - - His tests in 'bluegrass country' indicate that in four years Highland bentgrass invaded adjacent bluegrass very little - - the lack of 'pestiferousness' was apparent even when Highland was mixed with its companion fine turfgrasses such as Kentucky bluegrasses and Oregon fine fescues."

As to Kentucky bluegrass, testing in Milwaukee is reported as: "For the second straight year, the outstanding plot in the research carried on at Milwaukee's Boerner Botanical Garden - - is the 8-year old one with a blend of equal parts of Merion, Delta, Park and common Kentucky bluegrasses." In Michigan, "Park, Delta, Prato and Penn State's K-547 are still showing good establishment vigor - - although Prato has slipped compared to previous years - -. In Michigan, bluegrass variety evaluations show Park, Newport, common and Delta as top ranking through two growing seasons - -."

How the fine fescues ended up under a "zoysia" heading is hard to explain, but this epitomization is there: "Of the commercially available red fescues, common

Chewings continues to rank on top after two growing seasons at Michigan State. Pennlawn and Illahee rank next highest in turf quality. Highlight, an experimental red fescue from the Netherlands, ranked in turf quality and density when irrigated but deteriorated severely when not irrigated. Pennlawn and common Chewings ranked best in winter survival while Olds, Rainier and common Creeping were severely injured. Perennial ryegrass was 93% winterkilled - -."

Sections on "Insects And Pests," "Irrigation," and "Management" terminate the Annual. It is mentioned that in Iowa, "Astoria bent was injured more by lack of water than was Highland." The Lawn Institute was quoted under mowing, to the extent that, " - - a Kentucky bluegrass-fine fescue lawn can be mowed low in late winter or early spring - -." "Weeds" are given a fairly elaborate discussion with a MCPP and Dicamba combination receiving good notices. Nothing strikingly new was reported for crabgrass control, but several pre-emergence crabgrass preventers were reported useful in helping control Poa annua. Deal, of Maryland, is reported as saying, "Poa annua is fast-becoming one of the most serious weed problems, partly because of foreign seed which sometimes shows a count of 30,000 Poa annua seeds per pound in samples checked at the Maryland seed testing laboratory."

HORTICULTURE STORY APPEARS

Horticulture Magazine, in its September issue, carried the Institute's story "Lawns", which the magazine called a "handbook" of turf species. An insert box listed species according to whether they were Northern or Southern, and according to texture. The text discussed briefly each of the major types. Reprints were circulated to the membership in early October.

DEERE COMPANY FURNISHES MOWER

The Lawn Institute is much gratified that the John Deere Tractor Company has left a garden tractor with rotary mower attachment at the Institute, for summer use in grounds maintenance. This tractor supplements nicely the hand mowers furnished by Toro, and is particularly useful for larger swards and in-about trees. Initial trials show the tractor performing admirably; especially useful is a hand lever which permits acceleration or deceleration up to 100% while the mower speed remains constant. Thus it is possible to move more slowly over tall or tough grass, or around obstacles, without sacrificing cutting effectiveness of the mower.

All in all, this seems an excellently engineered tractor, well suited for sizable lawns. It is designed to accommodate other attachments, too, such as tiller, snow blower, etc. We are very grateful to the John Deere people for this display of confidence and interest in the Institute.

GERMAN SEED RULES INFLUENCED

Just received from Germany are copies of No. 1, Vol. 2 of Mitteilungen - Gesellschaft für Rasenforschung. Beginning on page 5 is "Rasensaatgut und Rasenunkraut," by Dr. Schery, of the Lawn Institute. This was a translation of materials having been developed in this country, especially as having appeared in Seed World. Translation was effected by Professor Stählin of the University of Giessen and by Chris Eisele, with Professor Stählin adapting the tables to middle European conditions.

We are informed that new rules for testing of lawn seeds now being drawn up by the "Gesellschaft" will be based upon these statements. It is nice to feel that the Institute influence is so far reaching.

VISIT BY DR. WATSON

On a visit to Ohio this summer, Dr. Jim Watson, Toro, visited with Dr. Schery, discussing matters of mutual interest. A turfgrass booklet to be distributed by Toro is a good possibility, something in which the Institute might participate. Toro has been most helpful in loaning irrigation and mowing equipment to the Institute for use on the demonstration grounds.

NOTED ON THE TEST GROUNDS

Hot humid weather in mid-summer is rather rough on Highland bentgrass. At that season it thins and develops an undertone of brown. It was noted this year that where Kentucky bluegrass had been included with the Highland bentgrass three years ago at planting time, that the appearance was appreciably improved. Mowed and managed as bentgrass, one wouldn't know any Kentucky bluegrass was around - most of the time. But it is apparent in mid-summer, that even mowed only ½ inch, fertilized and watered generously, that a residuum of Kentucky bluegrass definitely makes a contribution to the quality of Highland bent. We are inclined to believe that in the planting of Highland bent in the eastern states, a small percentage of Kentucky bluegrass and fine fescue can advantageously be included (although the turf should be managed as a bentgrass planting).

It is noticed in the 1960 "Turf Annual" of Park Maintenance Magazine, that the pendulum seems swinging back a bit towards bentgrass in mixture. Rhode Island is quoted as being very pleased, all factors considered, with a mixture that includes 40% Chewings fescue, 20% Kentucky bluegrass, 20% Italian ryegrass, 10% Merion Kentucky bluegrass, 5% Exeter colonial bentgrass and 5% redtop. It is called the "Rhode Island Fairway Mix."

LAWN EDGING PHOTOS STAGED

Cooperating with Ansul Chemical Company, a number of photographs were taken on the Lawn Institute grounds, where Phytar has been used for edging and trimming the turf. Ansul, a former member of the Institute, has kindly furnished cacodylic acid through the years. "Chemical edging" would seem an interest-catching hook on which to hand mention of quality turfgrasses and their use in lawns.

USEFULNESS OF PHOSPHOROUS

Because it nullifies influence of certain arsenical herbicides in the soil, and because current especial interest centers on potassium, phosphorous seems relatively neglected as a component of turf fertilizers. Thus, research done by Dr. J. F. Power, North Dakota, as reported by Larry Chambers in the July-August Fertilizer Solutions Magazine, is timely. Barley was the chief grass tested by Dr. Power, but his conclusions extend to other species as well: " - - - can protect his crop against adverse soil temperatures to some extent by maintaining a high level of phosphorous in his soil."

The research indicated that when growing conditions were near optimum, the crop got along reasonably well even though phosphorous levels might be low. The advantage of phosphorous really stood out when growing conditions became marginal - in this case at temperatures either higher or lower than normally satisfactory. Then the presence of ample phosphorous made all the difference, in enabling the crop to withstand the adversity.

With evidence such as this, and the known value of phosphorous for helping grasses start well and mature a good root system, one wonders whether the tendency to minimize phosphorous in certain lawn fertilizers has not reached the limit of practicality?

MRS. PAYNE "RETIRES"

Mrs. Mona Payne, for the last five years efficient office manager and secretary to the Marysville office, resigned in July. The reason: - one Brian Dean Payne, newly arrived. Brian was received for adoption when only eight days old, and part of the requirement for adoption is that the family not have a working mother.

We wish Mrs. Payne much happiness in her new role as full-time home administrator, and know from the conscientiousness she had displayed during her interval of employment with the Lawn Institute that Brian will have the best possible loving care. We are grateful to Mrs. Payne for her years of diligent service, and extend every best wish to her for her "retirement years" away from office work.

GOOD QUESTION AND ANSWER

Appearing in several newspapers in the New York City Metropolitan area was this posed question-with-answer. Q. "I understand that red fescue and Kentucky bluegrass are the recommended lawngrasses for this area -- I came across a grass called Kentucky 31 Tall Fescue --?" A. "No. Kentucky 31 Tall Fescue is a coarse grass -- primarily it is a pasture grass and not satisfactory in mixtures for fine turf areas". Sounds as though it may have been picked up from the Press Kit.

PRESS HEADLINES

Headlines such as these examples taken from the Autumn Press Clippings perhaps convey the idea more than lengthy text discussions (which are often read only by those interested). Most readers glance at all headlines. These are from newspapers big and small, including Baltimore, Detroit, Indianapolis, Milwaukee, Washington, D. C., Wichita and Wilmington.

"Fertilizing in Fall Benefits Bluegrass", "Grass Planting Time Is at Hand", "Bluegrass in Deep Soil Survives Dry Weather", "Seed Grass Now", "It's Time to Lawn-ch Grass-growing Plans", "Bluegrass Seeds 2,177,250 to Pound", "Experts Keep Trying for Better Bluegrass".

"Read Label When Buying Lawn Seed", "Early September Best Time to Plant Bluegrass Lawn", "Which Lawn Seed is the Best Mixture?", "September is Time to Plant Grasses", "Tailor Grass Seed to Site and Needs", "Get Seed in Now for Spring Lawn".

"Always Read Label When Buying Mixture for Lawn", "Right Seed Can Make That Lawn", "Use Quality Seed This Fall for Good Lawns in Spring", "Important to Select Right Kind of Lawn Seed", "Read Label When Buying Lawn Seed", "Now Best Time to Start New Lawn", "Grass Seed Should Be Sown Now", "Beautiful Lawns Depend on Right Seed Mixtures".

"Select the Right Home Lawn Seed", "Selecting Lawn Seed? Fall is Best Time", "Fall Seeding or Re-seeding of Lawns Best", "Fall Best Time to Build Lawn", "Autumn is Best Time for Renovating Lawn", "Late Summer and Fall Best Time to Seed New Lawns", "Fall Revives Growth of Bluegrass", "Bluegrass Needs Soil Test".

"Read Seed Label", "Fall Ideal Time for Fertilizing Bluegrass Lawns", "Lawns Start Best During Fall Season", "It's Time to Sow Grass", "Fall's the Recommended Time in Establishing a Lawn", "Here's How to Get Lawn Ready to Plant Bluegrass", "Early September Is the Best Time to Plant Bluegrass Lawn", and "Correct Lawn Seed Very Important".

TEST WINTERSEED IS SENT

Upon request from Dr. Victor Youngner, Lawn Institute Advisor for Southern California, supplies of Kentucky bluegrass, fine fescues and Highland bentgrass were arranged for or sent, for testing as "wintergrass" during the winter of 1966-67.

REPRINTS TO THE WEST AND EAST

Upon request of the Oregon Fine Fescue Commission, 50 additional reprints of "Good Seed Makes Good Sod" were sent to Oregon. The same reprint seemed appreciated on the Atlantic Coast, with a request for additional copies from the Lee Patten Seed Company.

THE "BUSINESS PRESS"

The Luce Clipping Service brings to our attention how voluminous and changing is the publishing of trade magazines, often termed "trade press" or "business press". Here is the capsule summary: "Their average circulation is not large: about 21,000. Overall circulation has been estimated at about 57 million. The American Business Press reports there were only 10 in 1850, 800 by 1900, 772 in 1950, and about 2,600 in 1965 - almost no change from the year before. But then we see what the figures don't show: Standard Rate and Data Service for Business publications added an average of 12 new listings each month while at the same time 7 others were being removed." Many business press publications use Institute releases.

USDA TO CORRECT POOR EXAMPLE

We challenged the wisdom of Agricultural Marketing using a poor seed mixture as an example in a "Consumer Quiz" story. James Horton, Editor, writes: "Thank you for your letter and your interest. --- As you recognize, the seed mixture in question was given as an example only. ---

However, we regretfully realize, in retrospect, that a different mixture would have been a better 'theoretical example'.

We hope to publish in an early issue, an article that we hope will help to correct any false impressions that readers may have gained. ---"

James A. Horton, Editor
Agricultural Marketing

We look forward to future publicity about good seed blends.

MRS. NEASON JOINS MARYSVILLE STAFF

Nancy Neason (Mrs. James Neason) has accepted employment at the Lawn Institute Marysville office, as office manager and secretary to Dr. Schery, replacing Mrs. Mona Payne who resigned in July to devote herself to her newly enlarged family. Mrs. Neason is a graduate of Marysville High School, and had previous experience in secretarial work with the First National Bank of Marysville. Mrs. Neason has two children, Jeff and Chris, 6 and 4 years of age. We are happy to welcome Mrs. Neason to the Lawn Institute staff.

"GREEN THUMB" COLUMN ASKS FOR STORY

A familiar inquiry that George Abraham, syndicated columnist of the "Green Thumb" receives, is whether to let lawngrass go to seed in the lawn or not. George asks that the Institute set his readers correct through his column. We pointed out that not only is professionally harvested, clean seed of proven germination readily available in any garden store far more economically than a homeowner might "produce" it himself, but that also in stopping mowing (to let the lawngrass throw seed) the growth and energy of rhizomes and tillers is sacrificed, and the lawn let grow tall cannot suddenly be clipped short once again without drastic consequences. Thus the homeowner risks far more in trying to let his lawn bolster seed itself, than in going down to the seed store for a few pounds of a quality blend that he knows is good.

NATURAL INHIBITORS IN GRASS

Research reported in the May-June American Journal of Botany has uncovered a substance in barley (possibly an alkaloid) which is quite inhibitory to chickweed, shepherd's-purse and other plants. The substance is selective, inhibiting certain species severely, others little if at all. Apparently it is an active metabolic product, for it shows greater effectiveness from living roots than dead ones (when an extract is made).

Increasingly, such substances are being found in many grasses and other plant species, useful to the plant in competition for space and nutrients. We have often wondered if other grasses (barley is a grass), and especially fine fescue, may not secrete some such biologically active ingredient that keeps adjacent vegetation pretty well in check?

SOUTHERN WINTERSEEDING MAILINGS COMPLETED

On August 25, 1966, an envelope of winterseeding stories was sent to over 500 southern newspapers and editors, in an effort to keep the "pot a boiling" on the use of fine-textured grasses for winterseeding in the South. The mailing was backed up with reprints from the Southern Turf Newsletter and Resort Management Magazine, to lend "authority". In recent years there has been encouraging increased use of fine fescues particularly, in the winterseeding of elite southern turfs, such as the golf greens. It is hoped that gradually greater usage can be extended to home lawns, industrial grounds and attractive properties catering to winter visitors.

PRESS RELEASE ISSUED

During late July the hot muggy weather over the eastern half of the country triggered some of the worst disease damage to lawns in many years. Bentgrass particularly was damaged, unfortunately our experience on the Institute grounds, too. Because of the intense interest in disease at this season, a press release was drawn up and issued through the good offices of the Borden Company, Norfolk, Virginia.

The Lawn Institute was quoted as saying that disease identification on lawns was still an uncertain science, requiring laboratory testing for accuracy. Then, "usually it is the poorer, volunteer grass that fails. For example, annual bluegrass (Poa annua), - not to be confused with the highly esteemed Kentucky bluegrass - fades very quickly in hot weather if disease is not prevented. You may not have known it was even in your lawn until it begins to die. The same is true of unpedigreed volunteer bentgrass. But new lawns planted with top quality seed generally suffer much less from disease."

Several of the common lawn diseases were then mentioned, along with the suggestion that any one of several broad-spectrum fungicides would help stall the disease until change of weather finished the cycle. Finally, it was suggested that damaged lawns be fertilized and overseeded shortly.

EXTENSION ACKNOWLEDGES PHOTOS

A letter from Stanley Papanos, county agricultural agent, Hartford, Connecticut, commended the Lawn Institute on photos furnished the Extension Service previously, for a leaflet on lawns. Mr. Papanos was anxious to have a list of photos which might be available in the future. One of the appreciated services that the Lawn Institute can lend is to maintain a photograph file, from which loans can be made to such educational outlets as the Extension Service.

PURDUE TURF CONFERENCE 1966

During the quarter, the proceedings for the 1966 Midwest Regional Turf Foundation Conference at Purdue University was issued. Typical of recent years invited speakers from distant areas are represented, this year particularly from the South (Mississippi) and the Pacific Northwest (Washington). Much of the material covered is repetitious of what has been covered other years or elsewhere, and a good bit involves observations by local superintendents rather than scientific research.

A well-developed report by Roy Goss covered many aspects of turfgrass management in general, and disease control in Washington in particular. A few of the comments may be of interest to members:

Urea has allowed more disease than fertilizers derived from other sources of nitrogen. Sulfur materially reduced Fusarium disease, and had a decided greening effect on turf. Although phosphorous had little effect initially, later it reduced disease such as Snowmold as much as 85%. In certain years potassium has added a decided suppressing effect on disease.

Dr. Jackson, of England, currently studying at Rhode Island, contrasted American and English disease conditions. It is apparent from his discussion that turf-growing conditions in England are very much like those in Oregon and Washington west of the Cascades, - which means automatically much unlike the rest of the country.

Various reports were given on the anatomical and chemical qualities of plants, and some of the research in progress at Purdue. A number of papers were presented by representatives of irrigation products. A Purdue Ecomologist presented details on control of sod webworm.

A presentation by R. M. Warren, on behalf of the Sod Growers Association, was a little distasteful, in that not only calling for better recognition of sod growers by an organized group, he listed as one of the aims of such a group to "educate the public on the use of sod as opposed to seed". There is good reason for the sod and seed industries to live in harmony, each having a vested interest in the other; it would be a shame to see the sod industry become belligerent, causing seedsmen to fight back with a public relations program pointing out the disadvantages of sod (and there are a number).

Dr. Ward, of Mississippi, made the point that optimum nitrogen content of bentgrass (as revealed by tissue tests) is 4%; if it arises to 6% this indicates overfeeding, and if it drops to 3% this represents underfeeding. He also pointed out that recent research in North Carolina shows that growth of young plants may be reduced as much as 70% if potash is in short supply, and that this element is much needed for strengthening plant tissues to resist disease and winter damage.

Some of the later presentations wondered so far afield as examining the world food situation, considering soil warming, and comparing the mechanical qualities of pipe. There seemed to be little or nothing new in the realm of herbicides, with the familiar pre-emergence chemicals called for in crabgrass and goosegrass prevention.

INFORMATION KITS

H. Fred Dale, Garden Editor of the Toronto Star Limited, kindly thanked us for press releases when requesting some photographs recently:

"I find your fall kit very useful (as I have done for years) and may I take this opportunity to thank you for sending kits along regularly. I plan to use several articles either by themselves or as a basis for pieces of my own and would appreciate prints of the above-mentioned photographs to accompany some of the stories."

Yours sincerely,

H. Fred Dale, Garden Editor

MORE ON MICROCLIMATE

M. T. Jackson, reporting on spring flower phenology in Volume 47 No. 3 Ecology, gives some definite measurements about the degree to which slopes affect "climate". Lawnsmen are often called upon to discuss and make decisions regarding different land lies in the lawn. It may be useful to be able to quote Jackson's data, that the "climatic difference" between a North facing and a South facing slope (in this case in the woods; Indiana), is equivalent to 110 miles of latitude with standard exposure. Thus a bluegrass lawn planted in St. Louis on a South slope is almost the equivalent of planting bluegrass in Arkansas, compared to one on a North slope (or, vice versa, a North slope one equivalent to planting a lawn in Iowa rather than Missouri). In a marginal climate this degree of difference can have profound effect.

UNDERGROUND LAWN IRRIGATION

The summer issue of the Massachusetts Turf and Lawngrass Council "Turf Bulletin" carried a story on "Sub-irrigation Of Turf", by Steward, Burt, and Smalley. Dr. Burt is Institute Co-operator and Advisor in Florida. The research was done in Florida.

Three different systems of watering grass from below ground were tried; - I. Controlling the water table, II. Distributing water through conventional tile, III. Distributing water through perforated plastic pipes. All of the systems had certain limitations.

When the water table was raised close to surface level (12 inches below surface), apparently there was lack of proper airification in much of the root zone, and the grass did not thrive. With the water table kept 24 inches and 36 inches deep this was not a problem, but neither did capillary moisture carry to the soil surface. Such system would be difficult to control under practical conditions.

Where tile drains were used to disperse water under a mild head of pressure, things went well initially, but soon flow decreased due to various materials accumulating in the tiles (particularly bacterial slimes). Some of the materials could be flushed out or eliminated chemically, but again it was an expensive and technically exacting problem.

When perforated plastic pipe was used (inverted, so that the pores were on the bottom side), clogging did not seem to be of much importance. But in the soils tested there was inadequate lateral dispersal of the water, so that in effect there were "ridges" of damp and dry soil underlying the turf.

It still seems as though there is no practical alternative to above ground sprinkling, where one can see and check what is going on.

AUTUMN REPRINTS POPULAR

We were delighted that both the "keep sheet" from Flower and Garden Magazine, and "Steps To Assure A Good Lawn" from House and Garden, proved popular with members for handing out to their firms. A number of requests came, that resulted in widespread distribution of these reprints.

EFFECTIVENESS OF FERTILIZERS

Dr. Roy L. Goss, Washington, reported to the Purdue Turfgrass Conference on the fate of fertilizers applied to colonial bentgrass over a period of six years. Should results indicate that even under the best of circumstances only 32% of the nitrogen, 30% of the phosphorus and 60% of the potassium applied, was recovered by the growing grass. Presumably in this humid climate there's considerable leaching, but certainly there seems to be some extravagant wastage somewhere? The fertilizer did not remain as a soluble preserve in the soil, since, with the exception of phosphorous, soil analysis indicated less of the nutrients after six years than at the beginning of the experiment.

MARYLAND LAWN BLENDS

Dr. Elwyn Deal, Institute Advisor, University of Maryland, is reported as recommending the following seed mixture as the most widely adapted in Maryland; 40% Kentucky Bluegrass, 20% Merion Kentucky Bluegrass, and 20% Fine Fescue.

TURFGRASS FIELD DAYS, NEW JERSEY

The August issue of Weeds, Trees and Turf gives a lengthy review of the Rutgers University field day, this year concerned with sod as well as turfgrasses in general. The Rutgers experts are reported not happy with present bluegrass ryes. Most of them are too susceptible to leaf spot. Merion, which is not, is becoming increasingly a victim of stripe smut, for which there is no control. Dr. Funk expressed the belief that within ten years considerable progress could be made by crossing rather than merely selecting bluegrass cultivars. The Rutgers researchers are also considering new perennial ryegrasses.

GRASS DEMONSTRATIONS AT DENVER BOTANIC GARDEN

On September 14th turfgrass plantings made at the Denver Botanical Garden, in part from seed furnished by the Lawn Institute, were inspected by Dr. Schery in the company of Drs. Feucht and Hildreth. As is typical with growing lawn grasses in Colorado, all plantings looked attractive compared to typical quality in other parts of the country.

It may be of interest that Rainier Fine Fescue was exhibiting moderate chlorosis at the time of visit, the only of the fine fescue varieties to so yellow. However, the plantings are not replicated, and possibly there has been differential fertilizer treatment among the plots? Dr. Hildreth has been impressed by an A-10 strain of bluegrass (which we presume is that offered as sod by Warren's Turfgrass Nursery, Chicago); Hildreth picked this planting up from the Missouri Botanical Garden, where the material had been on test. As grown on the Botanic Garden grounds the planting looked very attractive - fine-textured, dark green, spreading well by rhizomes, drought tolerant.

Among the bentgrasses, Highland was showing to good advantage at time of visit, being somewhat denser and of better color than Astoria, Penncross, and others.

TURFGRASS TOPICS, AGRONOMY MEETINGS

In a separate item there are reviewed the papers presented at the agronomy meeting relating to fertility. It may be of interest to review briefly other papers offered as part of the division C-5, "Turfgrass Management" program.

Discussing "Effect of Wetting Agents on Water Movement in the Soil", John H. Madison, California found that surfactants generally produced no significant difference in water infiltration rates. About the only usefulness ascribed to wetting agents would be to make water-repellant surface materials such as mulch or thatch more receptive to movement of water through that layer.

Texas A & M Researchers reported on "Shade Tolerance Studies on Bermudagrass and Other Turfgrasses". Only one bermudagrass, the so-called "No-Mow", exhibited unusual tolerance to low light intensity. In general, as light intensity decreased, internode lengths increased and stem diameter decreased.

Nebraska work by A. E. Dudeck, Institute Advisor, involved extensive studies on "Protecting Steep Construction Slopes Against Water Erosion --". Elaborate investigations were conducted on usefulness of mulches in establishing seedlings on a 3-1 roadside backslope. Among the best mulches was an excelsior mat, and almost equally good, hay anchored with a paper netting.

New Jersey Researchers reported on establishment of Zoysia with weed control by atrazine and simazine. The herbicides were effective in controlling weeds, and used at reasonable rates did not deter the Zoysia. Simazine was less injurious than atrazine. About one and one-quarter pound of herbicide per acre is adequate.

Gaskin, Scott's, reported that PCNB (Terraclor) seems to have some systemic affect in preventing stripe smut on Kentucky bluegrass. Oklahoma State Researchers reported that bensulide (Betesan) toxicity to crabgrass was influenced by soil fertility; P reduced effectiveness, and NP and S in combination almost nullified the effects. Morgan, California controlled a dallisgrass selectively with DSMA or MSMH, with even high rates not bothering bluegrass, bermuda or dichondra.

California studies on management of bentgrass indicated that insecticides tended to increase soil density and resulted in poor drought resistance; aerification holes provided havens for insects; fungicide preventive treatment showed some advantage initially but this was not long lasting, and increased thatch; clipping yields were stimulated by the use of herbicide. About the only secondary management practice that seemed to have consistent benefits was topdressing. The tests were given on Penncross bent.

AN APPRECIATION OF PRESS KITS

It is always gratifying to receive letters such as the following (excerpted), expressing appreciation of a major institute activity. We thought members would like to hear a few of Mrs. Sapp's thoughts:

"Your fall press releases were given to me because I write the garden feature articles for this paper. - - - -

Anyhow, somehow we've managed to lose the one of Dr. Schery's that told about the chemical used for edging lawns. - - - - -

Will you tell us, please, what that chemical was, or send us another copy of that particular write-up? And thanks so much for your trouble. Sorry to have bothered you.

We do appreciate getting these releases and use some of them just as they're written. The information in others is incorporated in longer articles. Thanks for those, too."

Mrs. Dorothy Sapp
Cedar Rapids Gazette

SOD WARMING AT AIR FORCE ACADEMY

The Colorado Springs Air Force Academy has had 16½ miles of heating cable installed to keep the grass growing growing on the football field at least until the end of the season. There seems to be a national trend towards this sort of thing, in places where cost is a minor consideration.

NEW PEST HANDBOOK

Mallinckrodt Chemical Works, St. Louis, issued this summer one of the handiest compilations on diseases attacking turfgrass available anywhere. Forty-two pages long, it discusses and pictures several prominent weeds as well as the major diseases. Each disease is headed with a colored picture of afflicted turf, and a drawing to the left showing the fungus as it would look microscopically. The text describes symptoms, grasses attacked, environment and control. Seventeen diseases are fully covered (some including multiple causes), and a key to their identification is provided at the beginning of the manual.

Stan Frederiksen and Bill Small are to be congratulated upon assembling so attractive and useful a "Turf Pest Managment Handbook".

LAWN DISEASE REPORT

Houston Couch sent a recent reprint on "Fusarium Blight of Turfgrasses", from the July, Phytopathology. He and his colleague are convinced that the disease often identified as "Fusarium roseum", is one of the more widespread and serious inflictions of turfgrass. The studies indicate that Highland Bentgrass is more susceptible than various Kentucky Bluegrasses, and these than the Creeping Red Fescues. High nitrogen levels particularly encourage the disease, and so do low calcium levels. Colored photos of the disease show it to resemble very much some of the damage experienced on the Lawn Institute grounds this year, to Highland Bentgrass generously fertilized during hotter weather.

REPRINTS OFFERED

George Abraham, syndicated "Green Thumb" columnist, and garden editor for the Buffalo Courier Express and other papers, has again honored the Lawn Institute by offering copies of our reprints to his readers. Mrs. Neason sent several thousand copies of our autumn stories for distribution by Mr. Abraham in early September.

TURF FERTILIZATION INTENSIVELY COVERED

This year, more than usual, turfgrass fertilization was generously covered in papers presented at the Agronomy Meetings, Stillwater, including an afternoon symposium on nitrogen. Many of the papers will no doubt appear eventually in the technical journals, but members may like to have a resume here. Unfortunately, so complicated is the relationship between fertility nutrients and the soil, and so poorly understood the microbiological processes continuously going on, that some of the research conclusions seem fragmentary, or even contradictory (varying with the test conditions).

Work reported out of Michigan State University, principally by Dr. Beard, Institute Advisor, included growth-chamber work involving free amino acid content in various grasses, and relating this to growing conditions. There were no practical conclusions yet to report, and all one can say is that high temperature damage seemingly is associated with higher soluble nitrogen content in the grass tissue. Having more practical implications was a study on winter hardiness related to fertility and management practices. When nitrogen was utilized at rates above 4 pounds /M annually hardiness of the grass was reduced somewhat (although hardly enough to be of concern under the usual winter conditions in Michigan), and the disadvantage was reduced somewhat if the potassium level was brought up to about half that of the nitrogen. Balance in fertilizer was stressed, with a recommendation that the N-to-K ratio be approximately 3-1 or 2-1.

Massachusetts' work showed it possible to properly fertilize fly-ash deposits, so as to maintain turfgrass. Greenhouse work indicated that bentgrasses were better able to derive potassium from fixed soil minerals than bluegrass. In the plant population sequence timothy gives way to bluegrass and then bluegrass to bentgrass, as potassium is depleted. It was felt that 4% or more potassium in a tissue test was too much, and caused clover to invade and overrun the grass.

Beltsville work dealt with the nutritional requirements of Poa annua. This would be of concern to golf course superintendents, whose bentgrass greens are badly infested with Poa annua. Under some soil conditions at least, Poa annua rooted much better under neutral rather than acid conditions. Nitrogen was most important, phosphorous next and potassium last, in contributing to both top and root yield.

In Mississippi State research, potassium had little influence on carbohydrate content of the grass, although carbohydrate content varied widely with the season. Winterkill of Tifgreen Bermuda in spring seems a natural outgrowth of lowered carbohydrate content then, as the result of revival of growth, and can be little controlled by fertilizer management.

California research indicated soils to vary greatly in ability to supply potassium from breakdown of minerals, whether or not showing abundance by soil test. Minnesota work showed the expected advantages to generous rates and repeated

applications of fertilizer, in establishing turf and preventing erosion on poor roadside soils. Mississippi work on roadside turf establishment indicated that soluble nitrogen was much preferable to ureaform in establishing bermudagrass the first season, though ureaform contributed something to density the second year; ammonium nitrate was suggested as the most practical nitrogen source.

Other California work, by Madison, Davis, was not directed particularly to fertilization, but did examine various management practices on bentgrass that are commonly practiced and generally thought essential. None of these showed more than momentary advantages compared to the checks, leading to the conclusion that many turfgrass managers have been oversold on the necessity of particular practices (such as thinning, aerification, use of wetting agents, etc.).

Both interesting and frustrating (because no general conclusions result) was the symposium on nitrogen nutrition. Ward, Mississippi, reviewed the theoretical physiology of nitrogen uptake, stating that nitrogen is preferentially absorbed as the nitrate ion, but is also used in the ammonium form or directly as urea and even amino acids. He indicated that at about 10 pounds /M of nitrogen is removed annually in clippings. Nitrate is mainly found in stems, not roots and leaves. Young grass plants utilize ammonium nitrogen more, old plants nitrate. Potassium sulfate seems to interfere less with nitrogen uptake than does potassium chloride.

Roberts, Iowa State, reviewed his extensive experience in growing turfgrasses in nutrient culture. He emphasized that nitrogen is the main nutrient controlling turfgrass performance. But just what its effects will depend greatly on other management practices, that includes other nutrients, temperature, age of turf, mowing height, and so on. He feels that nitrogen at levels up to about 4% as measured in the tissue improve turf quality, above that reduce quality (though this varies with the season). The usual turf fertilizers high in nitrogen but relatively low in P and K perform well late in the season, but just the reverse in hot summer weather. In hot weather difficulties caused by N can be mediated by higher P and possibly K. In general there was increased disease with high N. Absorption of nutrients through the leaves could not substitute for root absorption; when terminated, the grass was conditioned to not absorb nutrients adequately through the roots. As would be expected, abundant nitrogen reduced rooting, but abundant P and K encouraged it. There were a lot of confusing results, viz.: clipping increased the nitrogen content under low fertility but decreased it under abundant fertility; clipping increased the P in both leaf and root, but it decreased the K (provided nitrogen was abundant); under drought stress, either too much or too little nitrogen gave disadvantages; under low nitrogen more roots were produced under drought stress, but this didn't happen when moisture was adequate; when bluegrass was nutritionally disturbed, it often showed P deficiency symptoms even though containing abundant P. "Normal" nutrient content would be almost 100ppm. for N, 25ppm. for P, and 60ppm. for K. In an outdoor test, adequate N was needed to restrain weeds, more effective than herbicides in stopping the dandelions and crabgrass. But fertilization permitted bluegrass to gain the upper hand over fescue.

Schmidt, Virginia, tried to relate environmental conditions to nitrogen uptake. Low pH or low soil temperature slows the conversion of ammonium to nitrate. But in an adequately limed soil either source of nitrogen seems equally useful. Under good growing conditions nitrate uptake seems favored. But if ammonia is abundant (or P and Mg excessive) nitrate absorption is depressed. High nitrogen results in low carbohydrate content, and produces few roots in summer, although just the

opposite may be the case in winter. In mixed fertilizer the ammonium component is preferentially absorbed over the nitrate (although this varies with season and even quantity of light).

Goetze, Oregon, stressed that greater attention need be given the stubble that remains rather than the clippings that are removed. He felt the fertilizers high in K may cause a secondary effect of chlorine damage. There are reports of more disease where urea is the source of nitrogen, than where ammonium of nitrate is the source. He wondered why not greater use of potassium nitrate. He was favorably impressed with oxamide as a newer source of nitrogen, being particularly impressed that the rate of release relates to particle size (there was disagreement from the audience on these points).

TURFGRASSES AT COLORADO EXPERIMENT STATION

On September 15th, Dr. Schery had opportunity to visit the Colorado Experiment Station, at Fort Collins, and inspect turfgrass research now underway under the guidance of Dr. Jesse Fults, assisted by Jack Day. Most of the management studies formerly guided by Dr. Beach (now retired), have been abandoned.

Fult's chief concern has been making fairly extensive plantings, to assure knowing the qualities of varieties as the basis for further testing of herbicides and basic management. Scotts has donated seed and sod in considerable quantity, and Northup, King seed of Prato.

Under soil conditions prevailing at Fort Collins, there was a tendency for turfgrasses to become chlorotic. Here, as in Denver, Rainier, among the fine fescue varieties, seems most susceptible. Several bluegrasses showed a tendency towards chlorosis, especially when maintained at high fertility levels. Delta was especially chlorotic, and Newport fairly so. Most other varieties were on the brink.

As in the plantings that were made at Grand Junction (reported on elsewhere in this issue), clumps of tall fescue seemed to be showing up in stands established from seed. This suggests that some tall fescue crop is being carried in the fine fescue, although there would certainly be opportunity for off-types to be introduced from nearby research plantings, too.

So far the research has chiefly involved establishment of and familiarization with a number of standard varieties of bluegrass, fescue and bent. It is planned that various herbicide and management studies will be superimposed upon these as their behavior becomes known to yield information about differential response to management.

At the moment chief attention is being devoted to selection of chemicals that can help eliminate one variety or species from populations of another. In efforts to remove bentgrass from bluegrass, paraquat, potassium cyanate and ammonium solutions have all been reasonably successful. Used at proper rates they are very detrimental to the bentgrass without serious injury to the bluegrass.

As a sideline in the weed control work Fults is growing extensive stands of crabgrass, barnyard grass, and other weeds, to develop pedigreed strains of known germination characteristics. For example, crabgrass is notoriously erratic in

breaking dormancy, and sizeable percentages will not sprout the first year after harvest; Fults has now developed a strain that germinates 90% any month of the year the seed is planted.

TEST SEEDING GRAND JUNCTION, COLORADO

Two years ago the Lawn Institute furnished several lots of lawn seed to the Colorado Experiment Station, for a trial planting to the southern part of the state. The Extension Department was unable to arrange satisfactory controls at the intended location in Pueblo, and instead this year sent the seed to Dr. Ure, for planting at the sub-station at Grand Junction, Colorado. Dr. Schery visited with Dr. Ure there on August 30-31, inspecting the plantings which were made in front of the administration building.

As is the case generally in Colorado, turfgrasses grow excellently in the high altitude and bright climate if only irrigation is available. The Grand Junction plantings were no exception, and any of the plantings would do credit to an Eastern lawn. Dr. Ure reports that Park Kentucky Bluegrass was quickest to establish among the bluegrasses, and Rainier was slightly quicker among the fine fescues. Where the Lawn Institute mix (containing 2 bluegrasses, 2 fine fescues and Highland Bentgrass) was utilized, there was no evidence yet of the bentgrass having become established, although the blend looked excellent at the time of the visit.

Among the bluegrasses "Newport" was the darkest green (and therefore slightly preferred); Dr. Schery was led to wonder, however, whether there may not have been a mislabeling after planting, between Newport and Merion, since appearance was typical of Merion and not Newport. Prato Bluegrass was looking well, but was reported the slowest of all varieties to establish.

In the full Colorado sun the fine fescues do not perform quite so well as do the Kentucky bluegrasses, and would be best used in mixture with bluegrass. There is the occasional irregularity survival noted in the East, especially under conditions of high fertility. At the time of visit, Rainier was the best appearing variety, Chewings next best, Illahee and Pennlawn following. It was noted that in all cases where fescue was planted (either alone or mixed with bluegrass) that there was occasional clumps of tall fescue and orchard grass, suggesting possible contamination from crop.

The 10 bluegrasses under observation are: Arboretum, Delta, Kentucky Bluegrass (South Dakota origin), Merion, Newport, Park, Prato, Windsor, Kentucky Bluegrass (Kentucky origin), and mixes (including the Lawn Institute mix). All were performing excellently, and it would be difficult to say which was superior. Under the prevailing conditions there seemed no particular advantage to premium varieties, other than the somewhat darker color of (Merion-Newport).

PRESS KIT AT WORK

We appreciate very much Alice Dustan, writing for the Newark, New Jersey Star-Ledger, sending a tear sheet of the Sunday, August 21st issue. In it she had combined several stories from the Lawn Institute Autumn Press Kit, into an attractive resume about lawn tending in this populated part of the nation. Excerpts from her featured story include:

"From the Lawn Institute -- here are some valuable points on lawn renovation -- It is the season when prime turfgrasses such as the Kentucky bluegrasses, fine fescues and Highland bentgrass grow their best -- (fertilization and weed control are discussed) -- Choose the best quality seed you can possibly buy - which will be entirely the "fine-textured" varieties -- use compatible species that grow alike and look alike, such as one or more Kentucky bluegrass varieties in combination with a fine fescue or two. -- Studies -- have shown the fine fescues -- to be among the most adaptable species. Especially in the shade and on dry sites having low fertility, they hold their own against all competition. Illahee, Pennlawn and Chewings are popular varieties. Bentgrasses, the most luxurious lawngrasses commonly grown do best where the climate is seasonably misty. Highland Bentgrass is the most important seeded type. Where Highland seed is grown in Oregon the summers are relatively bright and dry, -- the fine turfgrass most used for sod is Kentucky bluegrass, in its many varieties such as Merion and Park. --"

RECOMMENDED SOIL FUMIGANT

Dow Chemical Company reports in its "Down To Earth" Autumn issue, that Trizone soil fumigant on the average out performed other soil fumigants including various Dowfume methyl bromide formulations. Trizone is a combination of three fumigants, each chosen for a particularly useful attribute. It contains 61% methyl bromide, 30% chloropicrin, and 9% propargyl bromide.

HIGHWAY SEED MIXTURE SPECIFICATION

Word has been received from Steve Wolfe, Division Landscape Architect, Ohio Department of Highways, that the 1967 Specifications Book is now being written. He suggests making our recommendations known. The nearest thing to a "fine-textured" mixture presently specified is 35% Kentucky Bluegrass, 55% Creeping Red Fescue, 5% Red Top and 5% White Dutch Clover. This should be acceptable for the highway, but it is hoped we might suggest additional choices and greater flexibility.

WINTERSEEDING IN ARIZONA

While at the agronomy meetings, Dr. Schery had luncheon with Dr. W. R. Kneebone, now engaged with turfgrass research at the University of Arizona, Tucson. Kneebone reported that general experience with the all fine-textured blend sent by the Institute for winterseeding experimentation, was that it was too slow to establish compared to ryegrass. We have known that in the bright, dry desert climate of Arizona, ryegrass does not suffer from the diseases and afflictions common with it in the Southeast. But Kneebone is interested in pursuing investigations further, since at least components of the "Lawn Institute mix" are persisting, where the ryegrass is not. In some instances this may prove a useful attribute.

ROADSIDE DEVELOPMENT SHORT COURSE

The first week of October brings the XXV Roadside Development Short Course, sponsored by the Ohio Department of Highways and Ohio State University. The Institute has long been a supporter and a participant in this national gathering of roadside landscaping authoritives. The American Seed Trade Association sponsors a luncheon

for the tour which follows the formal presentation. Speaking on roadside seeding this year was Dr. William Daniel, Purdue, Institute Advisor for Indiana. Institute reprints have been supplied for handouts.

COLUMN INCHES OF AUTUMN PRESS COVERAGE

Column inches of lawn publicity (in newspapers whose clippings were "caught" by our service during September 1966) were almost 7000 inches. This compares with little more than half as much in 1965.

PRESS KIT APPRECIATED

It is always gratifying when a well-known garden columnist is appreciative of the Institute informational efforts. The following letter was received from Mrs. Venus Barnett, Kingsport, Tennessee, after receipt of a press kit which she requested.

"The fine materials you have sent me on lawns have surely been a big help to me in writing of my columns on lawns. Thank you so much for all of them, and any that you might send me in the future. I am interested in any information regarding lawns.

In the letter enclosed with the folder it stated you would also send a custom story, on request. I would certainly appreciate one of these. Something on 'general lawn care', that could be used any time during the growing season, would be fine.

Again, I thank you for all the wonderful materials you have sent me in the past."

INSTITUTE WORDS IN PRINT

Members may be interested in a few examples of how Lawn Institute Press Kit materials are made use of.

Outstanding coverage is given by Earl Aronson, in his AP Newsfeature syndicated column, "The Weeders Guide". This appears widely all over the country. This August and September Earl devised two entire columns from the Press Kit, mentioning the Institute directly. Sample excerpts from one: "With no fertilization and only occasional mowing, the fine fescues have dominated the planting, the Institute reported. -- The Institute recommends a blend of fine-textured species as very appropriate for highways --"; "If your Kentucky bluegrass is troubled with Canada Thistle, control it with --"; "Fine-textured grasses make excellent permanent lawns -- and are useful for winter-seeding dormant bermuda grass in border states in the South --"; "One advantage of Kentucky bluegrass is the manner in which this fine lawn cover spreads --"; "The luxurious bentgrasses grow best where the climate is seasonally misty. Highland bentgrass, the Lawn Institute reports is the most important seed type. Where Highland seed is grown in Oregon, the summers are relatively bright and dry"; " -- most of this country's fine fescue is produced in Oregon."

From the other: "Many experts consider autumn the best time for seeding cool season lawns with Kentucky bluegrass, fine fescue and Highland bentgrass. -- Dr. Robert W. Schery, Director of the Lawn Institute, says turfgrasses need moisture (watering and mulching are explained) -- The better the grass seed you use -- the better your lawn will be --".

The Chicago Tribune and nearby Indiana newspapers utilized information prepared especially for Art Kozelka. Indiana and Kentucky papers used several "shorts", revealing (in the Rockport, Indiana Democrat) "A blend of Kentucky bluegrass varieties, or bluegrass mixed with fine fescues works out well over most of the country", and (in the Paducah, Kentucky Sun-Democrat) "Slicing or cutting machines are suggested for lawn bentgrasses such as Highland".

The Quincy, Illinois Herald-Whig, gives Dr. Schery and the Lawn Institute a by-line, in advocating autumn lawn work. Fine-textured lawngrasses are named, in the story beginning "In Bluegrass country, small favors bestowed in autumn bring great rewards --" The Rockford, Illinois Star gives similar direct credit in the story built about chemical edging.

In New London, Connecticut, newspapers adopted Abraham's column without by-line, but reveal the Institute's answer to a question about lawn failure, "My guess is that your seeding mixture contained annual ryegrass, which took over initially and died. I suggest an immediate autumn seeding with an all-perennial blend, mostly fine fescues (Chewings, Illahee, Pennlawn) with some bluegrass for insurance." This for a shaded, sandy location. Other Connecticut papers state, "A mixture containing Kentucky bluegrass and creeping or Chewings fescue should be used for the average lawn."

Nebraska read an adapted Institute story in the Omaha Sun and satellite papers, viz. "Kentucky bluegrass is generally not as expensive as some of the large seeded grasses when you compare the number of seeds contained in one pound --" Also used is the "Northwest Passage" short, viz. "Kentucky bluegrass gained a toehold in Kentucky in early colonial times. Since then it has moved westward and today most of the Kentucky bluegrass seed used in lawns comes from the Pacific Northwest, says the Lawn Institute."

Up in Maine, a lead story indicates "It's a waste of time to plant cheap lawn seed, cautions Dr. Robert W. Schery, Director of the Lawn Institute -- (choose) species such as Kentucky bluegrass - Fine Fescues, or Bentgrass. A little South, in Elkton, Md., the Democrat adds "-- in buying seed mixtures don't confuse -- the fine fescues in varieties such as Chewings, Illahee and Pennlawn."

Springfield, Missouri, in the News, headlines "Bentgrasses like misty climates best". The story goes on to say "The Luxurious bentgrasses grow best where the climate is seasonally misty. Highland bentgrass, the Lawn Institute reports, is the most important seed type --" In Moberly, Missouri, the headline reads "Bluegrass and Red Fescue among best lawngrasses". Michigan papers picked up the certification story, mentioning "Pennlawn is one of the certified fine fescues grown in Oregon -- building up new certifiable stock of such old favorites as Chewings. Oregon also certifies Highland bentgrass grass seed -- Park and Merion are typical bluegrasses commonly certified. Park originated in Minnesota, a combination of numerous vigorous selections." The Flint, Michigan Journal quotes Dr. Schery as saying, "Adequate feeding in autumn accomplishes more for top lawn species such as Kentucky bluegrass, fine fescue and bentgrass --." The Pontiac,

Michigan Press picks up the historical narrative, "Bluegrasses Native to Europe". The Lansing, Michigan State Journal picks the happy headline, "Fescues rated better nursegrass than rye", in reporting on Institute findings. The Ann Arbor, Michigan News cites, the "fine-textured grasses are the quality species, notes the Lawn Institute." And Garden City, Michigan hears that "Lawn seed is usually free of crabgrass, -- a dense Kentucky bluegrass-fine fescue lawn mowed tall, or a thick sward of Highland bent, resists invasion by weeds."

The Boston Morning Globe and the Boston Herald tell of fescues, "Tall Fescue Tale" ("don't mistake it in seed mixtures for the topflight finer red fescues, including Chewings"), and "Fine Fescues" ("fine fescues and tall fescues are two different breeds of cat, notes the Lawn Institute. Fine fescues in a number of glamorous varieties such as Chewings, Illahee, Pennlawn and Rainier are prime companions for Kentucky bluegrass --"). The Boston Traveler continues with "Best Looking Lawns Planted", giving the Institute a by-line; "Among the bluegrasses, varieties such as Merion and Park are well recognized, while Chewings, Illahee and Pennlawn are familiar creeping red fescue names. Highland is the most used bentgrass."

The Cincinnati Inquirer tells over 200,000 readers "There's not a better time to fertilize your lawn than right now -- is the advice of Dr. Robert W. Schery, Director of the Lawn Institute. Adequate feeding in autumn accomplishes more with top lawn species such as Kentucky bluegrass, fine fescue and bentgrass, than does equivalent care at any other time of the year. -- Kentucky bluegrass and prime lawn fescues such as Chewings and Pennlawn --" The Columbus, Ohio Dispatch, now going to nearly 1/3 million readers, picks up the same theme in "Fall Feeding for Lawns Advised by Expert", utilizing the same story. The Canton, Ohio Repository, begins its pickup, "For Kentucky bluegrass, fine fescue and Highland bentgrass lawns, autumn is generally considered the best time of the year for seeding." In the Mansfield, Ohio News-Journal, an Institute photograph pictures a Kentucky bluegrass bag.

Mention has already been made of the widespread use of both Abraham and Aronson columns in New York, especially bedroom communities for New York City. Abraham offers Institute reprints, "My guide was written by a turf specialist and it should help you have a better lawn." The Port Chester, New York Item quotes from the kit directly, viz. "One advantage of Kentucky bluegrass is the manner in which this fine lawn covers -- Highland bentgrass, the Lawn Institute reports, is the most important seed type -- most of this country's fine fescue is produced in Oregon." In Mount Kisco, the Patent Trader, advised "But most homeowners prefer the more luxurious limousine equivalent and will be happy with nothing less than the turf of the Kentucky bluegrasses, fine fescues or Highland bentgrass." The Albany Times-Union uses some of the shorts, and includes statements such as, "The widely used Kentucky bluegrasses and fine fescues need less water --" and "Kentucky bluegrasses and fine fescues are not injured, but susceptible weeds wither away."

Newark, New Jersey, learns from its News, to "-- bolster seed. -- A light seeding in autumn should have merit, says the Lawn Institute. Put good seed in the lawn as insurance against thin or bare spots which might develop. If Bluegrass and fine fescue seeds aren't at hand, surely there will be weeds instead." Another time, "Bluegrass, fine fescue and bentgrass run little chance of burning when fertilized in the cooler weather of autumn and early winter." Other papers were concerned about the water shortage, and used a kit item which reads, in part, "You will find among the fine fescues such varieties as Chewings, Illahee, Pennlawn,

Rainier and Creeping Red. Nor are the Kentucky bluegrasses slouches when it comes to sitting out drought. Kentucky bluegrass is at its best in fertile, well-drained ground rather than water-logged soil. -- Park and Merion are varieties of Kentucky bluegrass." Another headline reads "Fine Fescue Berms", yet another "Highland Blue" ("the bluish-green color of Highland bentgrass is more like Kentucky bluegrass and fine fescue than like the usual run of bentgrasses. Were it a bluegrass a fitting name might be Highland Blue, reminiscent of the misty Oregon highlands where Highland bentgrass is grown.") The Asbury Park, New Jersey Press utilized the lawn edging story with a Marysville dateline. It also introduced a short, "Lawns Improve Soil. -- Kentucky bluegrass and other fine turfgrasses grow many rootlets --"

The Hanover, Pennsylvania Sun compiled a 7-column story from a number of sources. It concludes, after comparing fescues, that "The tall fescues are tough and hardy. Indeed that is their trouble. Once used in the lawn they are hard to get rid of -- So, in buying seed mixtures, don't confuse them with the fine fescues, in varieties such as Chewings, Illahee and Pennlawn." The Levittown, Pennsylvania Times headlines its story "Soil is Right for Kentucky Bluegrass", then quotes the Lawn Institute as saying "Many experts consider autumn the best time for seeding cool season lawns with Kentucky bluegrass, fine fescue and Highland bentgrass". The Bristol Courier picks up the same story. The Pittsburgh Press uses the fertilizer short, "With autumn well suited to fertilizing Kentucky bluegrass, fine fescue and bentgrass turf, --." Among the more southerly states, the Greenville, South Carolina News informs its readers, "Inquiry to the Lawn Institute about the kind of epidemic of lawn disease brought this answer from Dr. Robert Schery, Director -- Annual bluegrass, not to be confused with the highly esteemed Kentucky bluegrass, fades very quickly -- but new lawns planted with top quality seed generally suffer much less from disease." Kingsport, Tennessee newspapers cited the Institute, "A great deal depends upon individual preference. The appearance and easy care of a bluegrass-fescue lawn is popular. Some of the best lawngrasses for most of the country are: fine-leafed Kentucky bluegrasses, fine fescues and bentgrasses -- Merion Kentucky Bluegrass requires more fertilizer -- Kentucky bluegrass and fine fescues require little mowing --."

In Las Cruces, New Mexico, the Sun-News says, "The Better Lawn and Turf Institute advises that in many parts of the South -- golf courses are using what are called fine-textured grasses, such as bluegrass, fescue or bent." In Winston-Salem, North Carolina, "The Lawn Institute says that there are nearly 10 times as much seed in a pound of Kentucky bluegrass as there is in a pound of ryegrass. Fine fescue -- about two-thirds million -- a mixture of these fine-textured grasses are economical because of the great number of seeds to the pound. The bentgrass suggested is Highland, and fine fescue includes Chewings, Illahee and Pennlawn." In Lakeland, Florida, Ledger readers learn, "In professional circles new interest centers on the so-called fine-textured grasses for winterseeding. These are the fine or lawn fescues, the Kentucky bluegrasses and seeded bentgrasses such as Highland. Familiar varieties of fine fescue are Chewings, Illahee and Pennlawn; there are many choices of Kentucky bluegrass -- Park is noted for rapid sprouting." The same story is used in the Atlanta, Georgia World.

Wisconsin papers seem mostly concerned with feeding-seeding. The Wausau Record-Herald pieced a story from the kit shorts, beginning with, "It's the season when prime turfgrasses such as the Kentucky bluegrasses, fine fescues and Highland bentgrass grow their glamorous best --." The Wisconsin Rapids Tribune stated "It's the time of year when new seedings, bolstering of thin turfs, and the feeding of

those grasses which thrive in cooler climate (bentgrasses, fine fescues, Kentucky bluegrass) accomplish much, at little expense."

The Bluefield, W. Va. Telegraph uses the "Bluegrass Sexy?" item, quoting the Lawn Institute; and the Thermopolis, Wyoming Independent-Record offers such advice as, "Select your grass seeds carefully, avoiding bargains which more often than not contain more weed seeds than you'd like. A lawn is usually the most permanent part of your landscape, and good grass seed will repay you with a large expanse of velvety green. Kentucky bluegrass is probably the best for your purpose. It is an aristocratic, but hardy, undemanding grass. The fine fescues which tolerate shade and dry places will broaden the adaptability of bluegrass mixtures --"

QUOTABLE QUOTES

Here are some of the statements being made in papers around the country, often inspired by the Institute's Press Kit. To save space we won't cite name of paper and location, but all clippings are on file at the Institute office.

"If you plan to seed fescue or bluegrass, get your seed planted in September", "Probably most important of all is to use a good grass seed", "Before grass seed is purchased be sure to read the fine print on the label. Kentucky 31 is not a bluegrass", "Kentucky bluegrass -- is by far the best all around grass seed --", "Permanent type grasses such as Kentucky bluegrass and red fescue", "Before sodding or seeding -- it is well to remember the quality of seed in the lawn is vital to its appearance", "Properly aided, bluegrass can stifle wild grasses", "Planting Kentucky bluegrass? Here's best time to grow it", "Use a good quality grass seed. Be sure the mixture has a high percentage of perennial grasses such as Kentucky bluegrass and red fescue", "Selected varieties of Kentucky bluegrass such as Newport, Park and Windsor make up the backbone of our cool season lawns".

"Most of us know the difference between fine texture and coarse texture -- the fine textured grasses are -- Highland bentgrass; Kentucky bluegrass; Merion Kentucky Bluegrass; Poa trivialis; red fescues such as Chewings, Illahee and Pennlawn;", "In many areas use bluegrass. The higher the percentage the better -- in shady areas, you should use seed mixtures containing some red fescues.", "Avoid coarse-leaved grasses such as ryegrass, -- Kentucky bluegrass is the basic grass -- while the fine-leafed fescues are the secondary ones", "In most parts of Kentucky, common Kentucky bluegrass is the best lawngrass. Creeping red fescue is often added for shady and dry locations -- ryegrass competes too much with other grasses --", "Kentucky bluegrass is the best grass for good soils. Creeping red fescue is often added for shady and dry locations.", "Common Kentucky bluegrass is the best lawngrass to use, except for the extreme southern part of Missouri", "The quantity of Kentucky bluegrass or red fescue desired in a mixture depends upon the shade conditions", "Bluegrass seed is the best adapted seed for the Midwest", "The answer is simple, for cool-season grasses such as bluegrass and fescue --", "One of the most highly advertised lawngrasses, Windsor Kentucky Bluegrass, has failed a 4-year test", "By good grass seed I mean about 50 to 70% of Merion and Kentucky Blue, and the balance in fescues."

"-- an all purpose 50-50 mixture of Kentucky bluegrass and red fescue such as Pennlawn, Illahee or creeping red fescue. Avoid using coarse temporary grasses such as timothy, Italian ryegrass, meadow fescue or Kentucky 31 tall fescue.", "Use a good quality grass seed. Be sure the mixture has a high percentage of perennial grasses

such as Kentucky bluegrass and a creeping red fescue.", "This should consist mostly of Kentucky bluegrass for a sunny lawn, and may include one of the fine-leafed fescues such as Chewings --", "Experts are agreed that the best lawn seed mixture for this area always contains predominantly permanent or perennial grasses: Kentucky blue (Merion), the fine fescues --", "If you plan to do some seeding this fall, make sure you look at the label before you leap. Bargain buys may not be the bargain that the price tag indicates", "When you buy seed, check the label carefully. Look for a fine-textured grass," "Perennial lawns for that new home? Seed lots are labeled as fine-textured grasses or coarse kinds. Fine-textured grasses such as Kentucky bluegrass and creeping red fescue are best--", "For shady or sandy soils use a combination of fescue and bluegrass", "You'll prevent weed problems in your lawn by being careful about the kind of seed you plant", "Bluegrass and creeping red (fine-bladed) fescue are the predominant lawngrasses in most lawns -- bentgrass can also be a desirable lawngrass --", "-- maintenance should be rather easy with either a bluegrass or fescue lawn or one made up with both of these grasses --".

"WHAT THEY ARE SAYING" ABOUT THE LAWN INSTITUTE

I wish also to extend a most hearty hand of gratitude to whoever so graciously rounded up the pictures for me.

Ed Hadley
Courier Journal and Louisville Times

"I am most appreciative of your enclosed material regarding steps to assure a good lawn. This is the best piece of information I have seen regarding lawn care."

Senator Ross H. Rasmussen, Nebraska

"Dear Bob: Thanks for the manuscript which arrived this morning. It is full of valuable information -- Thanks for your promptness and careful working of the manuscript. It was a pleasure to read it."

"Would you drop us a line to suggest what would suit you to write about next? ---" I am keen to have the readers (and the new editor, whoever he will be) have the advantage of another of your authoritative and down-to-earth articles, already "in the works."

Henry Mitchell
Resort Management Magazine

Dear Dr. Schery:

Would you be so kind as to recommend a grass seed admixture suitable for public school playgrounds and athletic fields in the central Ohio area, particularly around the metropolitan area of Columbus?

George B. Tobey, Jr.
Landscape Architect

You recently sent a folder on lawn information - - - - As an instructor of turf management courses in the Institute of Applied Agriculture, which is part of the University of Maryland, I would appreciate it if you would put me on your mailing list.

Douglas T. Hawes
Instructor

Is there any way I can get some glossy prints or mats of the illustrations in your Autumn 1966 Lawn Institute release?

I think I could make good use of some of this material. Thanks for any help you can give me. Even a few of the photos would be helpful.

Virgil A. Stanfield
The News Journal, Mansfield, Ohio

We'll be grateful for any comments or constructive suggestions you feel will help us serve the turf industry more adequately.

S. A. Frederiksen
Mallinckrodt Chemical Works

I just now have got around to looking at the photographs that you have taken, and, Bob, they are really outstanding.

Thanks again for the wonderful pictures.

Robert E. Lucas
The Ansul Company

Dear Mrs. Neason:

I was pleased to receive Dr. Schery's letter accepting my invitation to attend the Short Course Banquet on Tuesday evening, October 4.

I would like to have 150 copies of each of the following:

1. Steps To Assure A Good Lawn

2. Buying Seed For The Roadside

3. Quality Bentgrass Proves Compatible With Bluegrass in 4-Year Turf Tests

Thank you very much for taking this trouble.

Wilbur J. Garmhausen
Ohio Department of Highways

Dear Bob:

Thanks for your nice letter. Could I get 1,000 copies of "Steps To Assure A Good Lawn" reprint. That is a dandy and I want to offer it. Also "Starting A New Lawn" and "Improving An Old Lawn".

Appreciate all your nice help....and letters.

George Abraham
Naples, New York

Thank you very much for your letter of August 2 and the information contained in it, as well as the attached reprints of articles you have had in "Weeds, Trees & Turf".

Arthur W. Holweg
Supervisor of Game Mgt.

This is to let you know that we have received the material we requested. We look forward to receiving the Autumn Press Kit. We are particularly interested in fall and spring lawn care.

Arthur Carol
Carol Printing Corporation

I have just read through the reprint entitled "Good Seed Makes Good Sod" and want to compliment you on it. I think it is one of the most concise and comprehehsive articles I have read on sod production.

W. R. Somers

In the name of the "Gesellschaft für Rasenforschung" I want to thank you once more for giving us the permission to translate and print this very valuable text.

Chris Eisele
HESA Hessische Saaten GmbH Darmstadt

Just a note, Dr. Schery,

to thank you for your reply to our inquiry about the control of ground pearl. I much appreciate your taking time - - - -

Joseph R. Corner,
Weeds, Trees & Turf