BETTER LAWN Harvests

PUBLISHED PERIODICALLY BY THE NEWS BUREAU OF
BETTER LAWN & TURF INSTITUTE—

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SUITE 818 - 1016 BALTIMORE BUILDING
KANSAS CITY 5, MISSOURI

Volume 10, No. 3 October, 1963

EXECUTIVE COMMITTEE MEETS

President Mangelsdorf called a meeting of the Lawn Institute Executive Committee in St. Louis, September 16. Several pivotal policy matters were discussed. Of prime importance was the decision to encourage additional bluegrass production to be represented in the Lawn Institute.

It was decided that the "Seal of Approval" would be continued at the same royalty basis, but that specific efforts to publicize this and allow its usage in certain newer "firing line" operations would be encouraged. Newspaper mats for spring usage are contemplated, and partial reimbursement offered for use of them in keeping with the royalties received from individual firms.

Promotional plans, related to budget actualities, were reviewed. The Executive Committee felt that Institute members might be of real help in getting the Lawn Institute educational efforts across if they would suggest the Institute for programs, conferences, or writings in influential publications.

DR. SCHERY SPEAKS TO GIRD CONFERENCE

Elsewhere in this issue the charter GIRD Conference is summarized. Dr. Schery, in presentations concerning lawns, made these points among others: "The lawn is certainly not to be ignored by the progressive gardening retailer. In fact, almost more than any other garden feature, the lawn is entree to personalized customer relationships, and thence to sale of many lawn-related products (such as outdoor furniture, playground equipment, barbecue accoutrement, etc.) in addition to familiar lawn mowers and maintenance products. - - It affords first-rate opportunity to the alert retailer willing to develop his own knowledge, become truly a counselor on a sound gardening program (in this increasingly complex field, the average customer cannot be expected to keep abreast of technology).

As lawn tending becomes more sophisticated, new problems arise, and many new techniques follow to facilitate their handling. For example, Dr. Schery pointed out the fertilization and pampering of today's lawns lead to 'thatching.' This simply is a result of so much luxuriant growth that decay of the old vegetation cannot keep up with production. Consequently, a brand new need arises, for de-thatching machines (a recent item in equipment) and sweepers to keep the turf tiptop.

- - It is no longer enough to simply 'peddle goods' over the store counter. The best merchandisers will themselves be, or have at their disposal, technically trained counselors on gardening matters, who can give the customer advice in both

breadth and depth. - - Such personalized service is equally as important as product, points out Dr. Schery, for differing customers, living under differing conditions, require differing gardening programs. The retailer who can be truly helpful in counseling how to have a satisfying lawn and garden, for a particular customer's desires and needs, will certainly build loyalty - -."

WOOSTER, OHIO EXPERIMENT STATION VISITED

Dr. Schery reports a pleasant visit with Dr. R. R. Davis, August 22, checking the changing results at the Ohio Experiment Station. It was here that volunteer bentgrass received so much initial publicity as being the "worst weed" of lawns. We are particularly interested in encouraging studies on Highland bentgrass, which is not so aggressive as volunteer bent. Lawn Institute grounds test plots continue to show for the second year, even dispersal and lack of colony formation with Highland, planted alone or in mixture.

Dr. Davis is well impressed with Paraquat as general grass killer for "quick knockdown" prior to autumn seeding. Where Knotweed and clover are present, additional treatment is necessary with something such as Silvex or Banvel. Davis finds that there is practically no residual in the soil with Paraquat, used at 1 lb. per acre rates.

Davis is impressed with Banvel (Velsicol) at 1 lb. per acre, which knocks out many of the weeds difficult to control with 2,4-D and Silvex. He has had good results in controlling sheep sorrel among others. Tordon (Dow) has given excellent vegetation kill approaching soil sterilization, at no more than 2 ounces per acre.

One very interesting development is that the Merion bluegrass looks excellent on the fertilizer trial plots where chlorinated hydrocarbon insecticides were applied years ago, but is practically gone where they were not applied. No direct reason for this has been uncovered, nor any differential in insect frequency.

On the older plots comparing bluegrass varieties and sources, differences between the cultivars are not great. Quite striking, however, is the weediness where mowing is at 3/4 inch, compared to infrequency of weeds at 2 inches. Penn State K-5 (47) was the most weed resistant at the low level of cut. Merion has been very badly invaded by bentgrass. Altra C-1 has not performed well, and is especially poor at the low cut.

The fertilizer trials continue to show 3 lbs. or less nitrogen per year, from whatever source, adequate for fine fescues. Merion bluegrass, on the other hand, needs at least 5 lbs. nitrogen.

The old mixture and grass type plots are soon to be abandoned. Fine fescues and Kentucky bluegrass in them tend to survive at the 2 inch cut, but at lower mowing heights almost everything has turned either to crabgrass or bentgrass.

The Lawn and Ornamentals Days for 1963, are scheduled September 17-18. Visitors will see considerable experimentation this year with "quick knockdown" means of planting lawns without soil cultivation. This is a follow-up on the 1962 trials, with a wide variety of chemicals.

CHARTER GIRD CONFERENCE INSTRUCTIVE

The first formal meeting of the GIRD organization was held at Pennsylvania State University, August 18-21. Dr. Schery had been assigned presentations relating to lawns.

A small GIRD staff, under the leadership of Murray Franklin, functions something in the fashion of a trade association for independent garden center businesses, which are "affiliates" of GIRD. A corps of prominent garden center owners and operators was present for the charter conference, screened for prominence and financial responsibility in their respective trade areas. Businesses represented were chiefly from the eastern half of the United States, but embraced both northern and southern outlets (from Florida to New England).

After an informal reception, the opening supper gathering heard short talks by the Pennsylvania Secretary of Agriculture, the Dean of the School of Agriculture, and then the kick-off outline for sessions of the following days by Mr. Franklin. From this opening session on Sunday, until close Wednesday afternoon, attendees found themselves with a continuing series of presentations, planned dinners, and formal "buzz sessions" that absorbed both day and evening hours. The pattern in general was to provide sound, unbaised information by speakers, to be followed by group discussion. Attendees being principally owners and policy-makers, most sessions were slanted to broad questions of trend, policy, and business organization.

One general conslusion, what with discount selling now a reality that must be lived with (although it may be moving into a more troubled era), is the need to offer merchandising skills of a type not possible for the discounters. Chiefly this involves trained, skilled help which is of real service to the customer. It is hoped a "professional" stature will be gained by the conscientious garden center, against which price-selling will be of no more consequence than would be paying for dental, legal or similar professional service. A number of newer merchandising techniques were suggested, mulled over. Supplier groups seem willing to back efforts at improved merchandising by an elite, respected group such as GIRD represents.

Charles Walter, of Freystadt Associates, New York, reviewed "Advertising And Sales" as part of his "Promotion Clinic." Suggestions were advanced for better newspaper ad conposition, use of radio saturation, etc. The general feeling was that a public, wealthy enough to buy, was at hand, but was not technically competent to know what it needed and wanted.

Nathan Baily, Dean of the School of Business Administration, American University, dwelled upon "Are You A Professional Business Man?". This interesting presentation reviewed step-by-step the organizational needs of a successful business (especially with reference to changing conditions or aging of the business.)

Final presentation on Monday included specifics on products, profits, and techniques, by Francis Baldwin, Merchandise Manager of Stebbins-Anderson Co. Mr. Baldwin also acted as moderator for the evening "buzz session", in which the participants broke up into small groups to analyze specific situations and problems that they themselves suggested.

Tuesday morning was devoted to lawns and a lawn sales program, with Dr. Schery as the speaker. Excerpts summarizing this presentation are given elsewhere in this issue.

In the afternoon Robert DeLay, President of the Direct Mail Advertising Association, discussed the pertinency of direct mail to the garden center operations. William Mee, President of the Point of Purchase Institute, followed with "Effective Merchandising - The Best Way To Plus Profits." Here again the theme prevailed that potential customers have a hard time finding out information for which they are hungry; they only have to be properly approached, to become purchasers. Therefore the industry has quite an educational job to do, building service that will build sales.

The evening banquet heard Clifton James, Dean of the School of Business, Industry and Management, University of Baltimore. Dean James reviewed the cycle of requirements in capital, outlook, and organizational effort, from the inception of a business until its maturity. He was quite optimistic about the long-range business probabilities in the American economy.

The final sessions on Wednesday were in the hands of the GIRD staff. In addition to providing specific items of help, there was give-and-take discussion in an attempt to clearly define affiliates' wishes, needs and attitudes. It was apparent from the audience reaction that attendees felt the sessions worth-while; there was even pressure to step up conferences to a semi-annual rather than annual basis. This was a "work," not a "pleasure," conference so that the enthisiasm shown must reflect real stimulation from new ideas and mutual discussions.

4TH ANNUAL MISSOURI LAWN & TURFGRASS CONFERENCE

The 4th Annual Lawn & Turfgrass Conference was held at the University of Missouri, September 18-19. The Lawn Institute was prominent in the program, Dr. Schery speaking upon "Quality Cultivars," "Why Thatch," and "Winterseeding."

Stan Frederiksen of Mallinkrodt reviewed turf disease identification, followed by Robert Miller of DuPont on "What's New In Turfgrass Disease Control?". It is evident that turfgrass diseases are very complex and identification confusing. Mr. Miller believed that the only effective use of fungicides is for prevention; none are on the market that will "cure" already damaged grass. He pointed out that the thirams are better preventives if the disease is not yet been around, but that the mercuries are better "sterilants" of organisms already present. It was conceded that there are no fungicides that control all diseases, but that the best approach might still be broad spectrum usage.

It was reported that a top nematologist, though finding nematodes everywhere, indicated that there is still no evidence of direct nematode damage to turf.

Dr. Pinnell of the university spoke on "Developing New Turfgrass Varieties." He was followed by Dr. Brown, also of the university, who reported on some success in controlling Dutch elm disease with systemics.

"The Sod Webworm Problem" was explored by George Thomas, of the university. Tests at the university indicate that sod webworm has indeed built up resistance to chlordane, where chlordane has been used for previous control.

Fertilization of turfgrasses was reviewed by Miller, Ellis Graham of the university and others. It was evident that lesser quantities of nitrogen are called for in Missouri (where the hot summer weather can cause trouble) than in some areas where grass can be more intensively managed. On the other hand, a high phosphorus content in the soil is requisite. Dr. Graham pointed out that an unidentified chemical in clippings and other green vegetation leaches into the soil and causes release of phosphorus fixed on the clay, an argument for letting clippings lie.

Other subjects covered include "Controlling Aquatic Vegetation," "Landscaping The Clubhouse," and "What's New In Weed Control" (with inspection of the various tests undertaken at the university by Dr. Hemphill). The evening banquet featured Earl Page, of St. Louis, who spoke on "Impressions Of Turf In Europe."

The final day was divided into two phases, relating to "Fairway Problems" and to "Lawns, Parks, Institutional Grounds, Athletic Fields, etc." Both groups enjoyed panel discussions on specific problems, including many of the speakers and visitors.

There seems to be continuing enthusiasm for turfgrass investigations and information in Missouri, a notably difficult state neither completely northern nor southern in climate.

LAWN INSTITUTE PRESENTATIONS AT MISSOURI CONFERENCE

To avoid the expense of duplication, of items that might be of limited interest, the Lawn Institute is not sending around to members copies of Dr. Schery's presentations to the Missouri Turfgrass Conference on: "Winterseeding," "Thatch," and "Quality Cultivars." However, resumes as prepared for inclusion in the Proceedings of the Conference, are given here, in case members would like to quote from them or recopy for use in the promotional efforts of individual firms. So please "help yourself" to any of the following comments which might further usage of quality turfgrasses.

WINTERSEEDING

Dr. Robert W. Schery, Director
The Lawn Institute

The panel following on "fairway problems," will doubtless have more to say on winterseeding. The Milwaukee Sewerage Commission has encouraged widespread research in the South, this year cooperatively with the Lawn Institute. Mr. Wilson's presentation to the Florida Turfgrass Conference was very well received.

The reprint from Seedsmen's Digest pretty well covers my general impressions about Southern winterseeding. In addition, published but only now being reprinted,

is an article I would be glad to send upon request, from Weeds and Turf Pest Control. "Business Opportunities In Turf Reseeding" discusses among other things chemical knockdown of old turf and de-thatching prior to interseeding with quality grasses such as Kentucky bluegrass, fine fescues and Highland bentgrass.

In just a few words the southern situation is this. Ryegrass, the traditional winter cover in the South, especially along the tourist routes, is falling into disfavor, for a number of reasons. The last two winters were severe enough deep into Dixie to cause winterkill. Mixtures of quality northern grasses have held up much better. And, strange as it may seem, Kentucky bluegrasses and fine fescues (as well as bentgrasses, expected to do so) have maintained a wonderful putting surface when mowed less than a quarter inch. Slides of some test areas will be shown shortly.

The biggest problem in the South with these quality species is not performance, but getting them started as easily as the large-seeded ryegrass. We are especially encouraged that the fine fescues (such as Chewings, Illahee, Pennlawn, Rainier) can do the job, bolstered later by the slower maturing species. Growth retardants are being investigated for possibly inducing early dormancy in bermuda, the usual southern golf green grass into which winterseeding is made. If a good technique can be developed, there seems general agreement that a mixture of good northern grasses can substitute for ryegrass in large measure, with the advantage of being less of a problem during spring transition back to the bermuda.

As indicated, the same northern grasses used here in Missouri are used for winterseeding in the South, and additionally Poa trivialis. Charlie Wilson looks a little more favorably upon Poa trivialis than do I at this moment, because of its spreading vigor and its yellow-green color (which masks Poa annua in the southern golf greens). Poa trivialis has many commendable features, but unfortunately imported seed often brings with it rosette weeds that are as hard to control in the golf green as is the Poa annua being masked. I would hope eventually for a domestic Poa trivialis industry in Oregon that might produce high quality seed as clean as Blue Tag Highland bentgrass, for example, now comes.

Also, as I am sure Mr. Wilson intends to bring out in the next panel discussion, annual bolster seeding is not a matter only for the South. Through this very section of middle Missouri, neither completely "southern" nor "northern," there is often difficulty keeping even the hardy (U-3) bermuda through winters such as last. On the other hand, even with crabgrass control, bluegrasses-fine fescues-Highland bentgrass have their problems in summer as a fairway turf. We want to look rather closely this winter into techniques for bolstering fairways of this region with quality wintergrasses. Perhaps they can even be held through summer, along with the bermuda now so wisely used on Kansas City and Saint Louis fairways. As relatively small a cost as seed is in the overall maintenance budget, an annual autumn bolstering for better cover during the cooler months should not be prohibitive.

WHY THATCH

Dr. Robert W. Schery, Director
The Lawn Institute

Thatch is a relatively new, - or at least newly recognized, - problem in lawns. It is becoming more serious because demands for quality turf are becoming greater. This is the result both of new cultivars, - dense-growing varieties such as Merion, compared to easy-to-keep natural Kentucky bluegrass; and because the high standards of modern lawnkeeping call for generous fertilization and other cares.

The leaflet distributed courtesy of Parker Sweeper discusses thatch a bit more thoroughly than time permits here. It notes that thatch is "an agglomeration of organic debris which settles just atop the soils in lawns, but has not yet decomposed to become one with the soil. Its bottom is constantly decaying, while the top receives additions from growing grass. Like the compost pile, its thickness depends upon how quickly old remains decay, and how ample are new accumulations." The lawnsman may even help increase thatch by disturbing the natural balance of decay micro-organisms, such as could be the case when fungicides are used in disease prevention.

All familiar plants grow new leaves, shed old. The lowermost leaves of your Kentucky bluegrass and fine fescue plants turn yellow, look "diseased," just as soon as 3-6 new leaves have been produced above them. Nature is readying the lowermost leaves for the "compost pile." If these leaves accumulate in very dense quantities, as is the case with thick-growing grasses, or those grasses which trail along the ground (and thus insulate the old leaves from moist soil), thatch is very likely to develop. Stoloniferous bentgrasses, zoysias and bermudas are more likely to develop thatch than are rhizoming grasses such as Kentucky bluegrass and the fine fescues. Tight-growing cultivars such as the creeping bentgrasses and Merion bluegrass, are more apt to thatch than looser or more erect-growing types such as Highland bent or natural Kentucky bluegrass (including its similar cultivars such as Park or Arboretum). The former also demand heavy fertility, a thatch builder.

The problems thatch may bring include simple mechanical smothering, the shedding of water (so that it runs off the thatch rather than sinking into the soil), the harboring of disease spores (and perhaps holding humidity that encourages disease), the interference with fertilizer and other applications (which may perform irregularly because thatch prevents uniform access to the soil). There may even be intermidiate products of decomposition that have a biological influence.

With excellent power de-thatchers available, this problem is not apt to get out of hand. Never too much a problem on average Kentucky bluegrass-fine fescue lawns, or even Highland bentgrass, thatch can be controlled with machines such as are pictured, even on denser turfs. De-thatching prior to bolster seeding in autumn or early spring seems a useful practice on any lawn.

QUALITY CULTIVARS

Dr. Robert W. Schery, Director
The Lawn Institute

The previous presentation will have discussed methods for developing turfgrass cultivars ("horticultural varieties"). Discussion here will be confined mostly to performance, though genetic background and performance are of course inseparable. First, what generalizations are possible?

What Constitutes Quality In A Turfgrass? - Unlike measuring crop yield, quality in a turfgrass is a summation of factors that create a favorable impression on a user or viewer. It is thus subjective. It will vary from season to season, as well as with the viewer. Permanency, economy, recuperativeness and similar characteristics must be considered part of quality.

The Lawn Institute distilled down to three, characteristics required for qualification for its Seal of Approval. A lawngrass had to be reasonable narrow-leafed ("fine-textured" in the new labeling requirements), giving in mass a "velvety" appearance. Secondly, the grass had to be perennial for the climate where used. And thirdly, it should be able to spread, extend itself to some degree by rhizomes or stolons.

Also important but very much subject to local vagaries are such characteristics as color (much influenced by soil and fertilization), disease resistance (at the whim of weather and kind of care), adaptablility to mowing (depends upon height of cut, kind of mower, etc.), and so on. With lawn conditions so variable even locally, and demands inconstant, these finer points of quality are will-of-the-wisp, sometimes important, sometimes not.

The Environment, Including Care, Overshadows Subtleties. - In view of the foregoing, how you handle your lawn assumes as much or greater importance than the exact compostion of the seed mixture you sow - presuming, of course, you stick with the basic quality features and don't plant "weeds" (haygrasses such as tall fescue, timothy, orchardgrass, etc.). Even the most heralded cultivar can be a failure if improperly tended, while the "common" or natural types may be exquisite if given just the right attention. In fact some of the old-time cultivars have quite an advantage, expecially for large areas receiving minimum maintenance: they are widely adaptable, need little pampering, and their requirements are pretty well known. It takes a decade or more for a new cultivar to become widely tried, its needs reasonably well known, and for potential afflictions to build up to epidemic proportions.

What For Missouri? - North of the Missouri River the state is "bluegrass country," long a seat of bluegrass seed harvest. Fine fescues help, for dry shade and poor soils expecially, and as substitute for nursegrass. Quality seed mixtures generally run about 75% Kentucky bluegrass cultivars and 25% fine fescues for open areas, with higher percantages of fine fescues for shade. For an especially fine-textured "show" turf, Highland bentgrass can be considered, a cultivar from an ecological situation in Oregon nearer Missouri conditions than is the case with creeping bentgrasses.

These same grasses serve south of the Missouri River, too, especially on good prairie or river bottom soils towards the southwest corner of the state. In the boot heel, and along the Arkansas border southern grasses such as bermuda (using winter-hardy cultivars such as U-3) and zoysia (Meyers) may be used. But on the whole Missouri is "northern" in its turfgrass usage, even though these grasses must then be handled a little more cautiously than would be the case from Iowa northward (especially in reduced nitrogen fertility in hot weather, and higher mowing).

Reprints are available from the Lawn Institute (Route 4, Marysville, Ohio) discussing Kentucky bluegrass cultivars, the fine fescues (Chewings, Illahee, Pennlawn, Rainier, etc.) and the lawn-type Highland bentgrass.* Their especial qualities can only be hinted at here.

Among the bluegrasses, Arboretum was selected as a population from a Missouri hillside near Grays Summit, where natural selection should have given it a gene assortment well adapted to Missouri summers and minimum care. Genetically, Park, derived by interplanting twelve selections made by the University of Minnesota, should be very similar. Merion, an outstanding variety farther north, has not done too well towards southern limits of the bluegrass belt, possibly because it is a heavy feeder (and high nitrogen combines poorly with hot summers).

For average usage seedsmen have long suggested mixtures or blends. It certainly seems logical to increase the genetic pool by including several cultivars, even of the same species, as well as different species adapted to similar care. The compatibleness of bluegrasses and fine fescues has already been mentioned, but even among the bluegrasses it might be useful to combine varieties such as Park, Arboretum, Delta, Newport or Merion with natural bluegrass. Perhaps two or more fine fescue cultivars, such as Chewings and Pennlawn, would increase the physiological range, even though fine fescue varieties are quite similar in appearance. Blends of quality cultivars should broaden the adaptability of the seed mixture.

* "Kentucky Bluegrass - Who's Who," from Horticulture; "The Curious Case of Highland Bentgrass," Journal of The New York Botanical Garden; "Fescues Aren't Fussy."

DR. SCHERY SPEAKS TO KANSAS CITY GARDEN CENTER ASSOCIATION

Upon invitation of Dr. John Baumgardt, Director of The Garden Center of Kansas City, Loose Park, Dr. Schery presented a program on "Your Year-around Lawn Program" Wednesday evening, September 4, to The Garden Center Association members.

The presentation reviewed the lawn possibilities in a marginal climate such as that of Kansas City, concluding that all things considered Kentucky bluegrass, bolstered by fine fescues and where appropriate Highland bentgrass, offered the most useful possibilities. It was stressed that this far south in the "bluegrass belt" high mowing, light feeding in summer, and some attention to weed control were needed. Park bluegrass was discussed to illustrate a synthetic variety.

It appears that nimblewill is becoming an increasingly important problem in the Kansas City area, considering the number of specimens that were brought in by members of the audience. It also appears that there is a trend to greater usage of seeding rather than sodding (high quality sod seems difficult to obtain).

WINTERSEEDING DEVELOPMENTAL PROGRAM CONTINUES

We are very pleased with the enthusiasm and fine success enjoyed this autumn in development of the idea of winterseeding in the South with quality turfgrasses. Not only have the Lawn Institute's own trials with a "Lawn Institute mix" (a mixture of fine fescues, Kentucky bluegrass and Highland bentgrass) been enthusiastically received, but we have been fortunate that the Milwaukee Sewerage Commission is also distributing "the Lawn Institute mix" to numerous golf courses in the South as an item of its test seed mixtures. Fairway seeding trials in the transition belt are also being undertaken. The Lawn Institute has donated seed for this investigation.

The Lawn Institute mix is approximately 4 parts fine fescue (two varieties, Chewings and Pennlawn), 2 parts Kentucky bluegrass (natural Kentucky bluegrass of South Dakota origin, and Park), and 1 part pure Blue Tag Highland bentgrass. These figures are on a weight basis; on a seed count basis each type of grass is more nearly equally represented, although the bentgrass predominates slightly.

Main interest this year centers on means for getting quality grasses started quickly and fully, so that they might better compete with ryegrass in these respects. We realize that once established they do make top-grade, beautiful cover. In order to concentrate upon these techniques, the mixture was offered this year rather than individual grasses. Most experts, including Charlie Wilson of the Milwaukee Sewerage Commission, feel that a mixture has advantages for winterseeding, especially on the southern golf greens. Dr. Schery checked into the planting of these grasses in a trip through the South in early October, at the same time making several presentations on winterseeding at a series of meetings. Mr. Wilson's presentation on winterseeding at the Florida Turfgrass Conference was very well received.

Cooperators in the wintergrass testing program for 1963-64 include the University of Arizona, International Minerals & Chemical Corporation in Florida, University of Tennessee, The Everglades (Florida) Experiment Station, University of Florida, the Georgia Coastal Plain Experiment Station (Tifton), Mississippi State University, Texas A & M, Sea Island Company, the University of California, Los Angeles, and the Green Tree Nursery, Pine Bluff, Arkansas. Golf courses cooperating through the Milwaukee Sewerage Commission include: Athens, Georgia; Boca Raton, Florida; Charlotte, North Carolina; Houston, Texas; Memphis, Tennessee; Mobile, Alabama; Sarasota, Florda, and several colleges. Transition belt fairway testing is being carried on at two golf courses in the Philadelphia area, two in the Kansas City area, and five in the St. Louis area.

DR. STITT DISCUSSES BANVEL

In mid-August, Dr. Loyd Stitt, with Velsicol Corporation, dropped by the Lawn Institute offices to review some of the trial work there, with materials furnished by Velsicol. Dr. Stitt says that Institute observations are typical,

with excellent general weed control from Banvel-D, including some weed types not easily handled by the 2,4-D group (viz. knotweed). Remarkably light rates of active ingredient are effective, with recommendations calling for as little as ½ lb. per acre (up to 2 lbs. per acre for "toughies" such as Canada thistle).

Strangely, plantains, so easily controlled with 2,4-D, are not well controlled with Banvel. While we have had no indications of toxicity to woody plants through residues in the soil, this is still something to be cautious about, according to Stitt. The material should not be used directly over the root system of shrubs and trees, or at heavy rates where even limited portions of the root system extend, until further tests clarify just how toxic the chemical really is. Early research, with a slightly different form of the basic chemical, indicated chance of hazard even a year or two after original application.

Banvel-D seems to offer an alternative to use of 2,4-D compounds and Silvex, for general broadleaf weed control in turf. Hazards from volatilization (vaporization) seem far less than with Silvex or many formulations of 2,4-D. But of course the possible toxicity to woody plants through the soil would impose a serious limitation, and until more information is available concerning this, the product should be used only in open turf areas away from trees and shrubs.

GARDENING BOOK PUBLISHED

"The Householder's Guide To Outdoor Beauty," authored by Dr. Schery, has just made its appearance in a 50¢ soft-back edition, published by Posket Books, New York. Sample copies were mailed by the Lawn Institute to its members. If any members are interested in quantity purchase, either for resale or free distribution, the publisher has offered discount from list ranging from 20% to 45% depending upon quantity.

The book contains 25 chapters and forward, embracing 337 pages. Each chapter is preceded by a summary of its contents, so that the book may serve as a quick guide, in which the general gist can be obtained without extensive reading. Then those parts of particular interest can be reviewed in greater detail. In this way it is hoped the book might serve as a handy reference to sales persons and gardening counselors, as well as to the new homeowner and casual reader of paperbacks.

While the book is not technically so complete as "The Lawn Book", lawn making and lawn care are thoroughly covered by special emphasis in 16 of the 25 chapters. Because the lawn is so important to outdoor beauty, its tie-in to the early chapters on landscaping is natural. The later chapters on ground covers, edging plants, hedges, shrubs, annuals, perennials, roses and trees all have pertinency. The book contains over 300 drawings, by Edward Brundage, courtesy of the Asgrow Seed Company.

RECOMMENDATION BY WALL STREET JOURNAL

The Lawn Institute is flattered to note that the Wall Street Journal recommended consultation with the Lawn Institute to the Long Island Arts Center, about a special problem relating to maintaining turf on the concert grounds. Tents are placed over the turf for fairly prolonged intervals.

INSTITUTE PHOTO IN NEW YORK PAPER

The garden section of the New York World Telegram & Sun, for Friday, June 21, featured a lawn photograph requested by Barbara Black. The caption read: "This Better Lawn and Turf Institute photo proves that even fairly new home-owners can have a smooth, trim, attractive lawn."

FINE "FIELD DAY" BY MEMBER FIRM

Northrup-King & Company entertained garden writers and related interests to a splendid field day inspecting garden plantings at the research farms. Lawn plots were perhaps incidental to the more colorful annuals on display. Visitors were well impressed not only with the extensive horticultural displays, but with the fine Northrup-King hospitality.

USDA RECOGNIZES POA ANNUA AS A WEED

The June 21 ASTA Bulletin notes that effective July 1, 1963, an amended regulation to the Federal Seed Act recognizes annual bluegrass as a weed seed instead of a crop seed when it occurs in a lot of seed offered for importation. It is said that the amendments were made to agree with various state rulings.

UNIVERSITY OF WISCONSIN WEED WORK

Test plots at the University of Wisconsin were inspected with Drs. Dana and Hasselkus, July 31. Some of the highlights noted were these:

Betasan, a new candidate among crabgrass preventers, seemed to be working well when used as a pre-emergent at 20 lbs. per acre, on a vermiculite carrier. Results from this test were about the equivalent of the most effective products available, Dacthal and Zytron. Dr. Dana preferred Zytron, because he feels it has a slightly longer residual effect than other crabgrass preventers.

Calcium arsenate, at 16 lbs. per M, showed some interesting results. At the time of application in 1961, it gave only modest crabgrass control, and seemed somewhat damaging to the turf. Now two years later, the plots where applied are completely free from crabgrass and stand out.

Dana finds Silvex one of the most useful herbicides, and with repeated usage feels it may even free a bluegrass lawn of bentgrass. Banvel has done as effective a job in general weed control as has Silvex, but there is still uncertainty whether there may be soil toxicity around woody ornamentals. Strangely, Banvel has been relatively ineffective against broadleaf plantains, although handling other troublesome broadleaf weeds (such as mouse-ear chickweed) quite handily.

TURF IRRIGATION MEASUREMENTS

Stan Wilkins, of Albany, California, kindly sent a copy of the July 1963 "California Agriculture", containing an article by Richards and Weeks on "Evapotranspiration for Turf Measured with Automatic Irrigation Equipment."

Automatic control and measuring meters indicated the amount of water utilized to maintain soil moisture at a needed amount. Appropriate calculations gave the approximate amount of moisture "lost" by the turf (evapotranspiration) on a monthly basis. There were less than 7 inches of rainfall at this riverside California location, this confined to winter. Evapotranspiration was nearly 6 inches per month from mid-spring through summer, a pretty good indication of turf moisture requirements during this season. Total evapotranspiration for the year was approximately 47 inches. The results seem to jibe rather closely with the Colorado State tests, indicating that an inch of irrigation per week is necessary to keep turf growing and reasonably attractive in an arid climate.

MULCH EFFECT ON SOIL

Mulches have generally proved beneficial to soils, but it has not always been clear why. Drs. Tukey and Schoff, Purdue, report extensively on this in the 1963 Proceedings of the American Society of Horticultural Science. Such diverse mulches as legume hay, peanut hulls, corncobs, straw, sawdust, foam rubber, glass fiber, gravel and grass sod were examined.

Interestingly, under any mulch both phosphorus and potassium increased. Mulching, of any type, would, as expected, reduce moisture loss (as much as 75%). There was less oxygen and more carbon dioxide, as might also be expected, under the mulches, compared to clean-cultivated soil. Soil temperature was materially affacted. No significant difference was noted in soil porosity, base exchange, pH, and a few other factors.

The studies were made after five years of mulching beginning in 1954.

SUNLIGHT ABSORPTION BY GREEN LEAVES

There have been wide variations in the estimates of the amount of solar energy absorbed by leaves. Since green leaves absorb little energy in the infrared area, and in other wave length categories not in the blue, green or red spectrums, the discrepancies are perhaps accountable by what the author has considered "solar" energy."

A study by Walter Loomis, Iowa State University, reported at the AIBS meetings August 28, indicated that typical leaves absorb 90% of the wave lengths in the blue, 85% in the red, and 70% in the green spectra. Loomis concludes that a typical leaf no thicker than a grass blade will absorb approximately half of the sunlight energy which strikes it. A well fertilized, thick lawn, therefore, could be expected to be making use of half the sunlight it receives.

MICRO-ORGANISMS MAKE NUTRIENTS SOLUBLE

Dr. Vincent Sauchelli, a columnist for Agricultural Chemicals, makes a point in the July issue often overlooked. This is the importance of micro-organisms in the soil, in making "available" supposedly insoluble nutrients. Dr. Sauchelli feels that chemical and physical thinking has too long dominated the concepts in soils, and it's time to think more of how the micro-organisms contribute. He points out specifically research studies that show how certain organic acids

released by micro-organisms make various (supposedly insoluble) compounds available to plants, even vermiculite. He notes that a number of weak acids (acetic, formic, lactic, succinic, aspartic, and glumatic) have some chelating capacity with metallic elements. Studies show that tricalcium phosphate and phosphates of iron and aluminum are made soluble in the presence of such acids.

Many of the seemingly strange responses of new seedings and seedling growth in lawns may relate to the biological complexity of the soil. Recent ecological studies have even shown different rates of leaf decay, and composition of the bacteria which bring about such decay, depending upon soil acidity and such factors as slope and type of tree cover.

The relationship of micro-organism activity to thatch and its control, a topic of high interest in turf research these days, is evident. Fundamental studies will no doubt give insight as to why certain plantings are repressed by others, and by the detritus left from previous "crops".

MORE ABOUT CAPSULED FERTILIZER

The May-June 1963 issue of the Agronomy Journal carried a technical article on "Controlling Release Of Fertilizer Constituents By Means Of Coatings And Capsules." The work was done by a group of Wisconsin researchers, on corn and on bluegrass. With the bluegrass, capsuled fertilizer caused a deficiency initially, but more uniform growth later in the season. Capsuling was effective in controlling rate of release of the fertilizer. But because of the cost of processing it, it seemed unlikely that capsuled fertilizer would have widespread usage, except for special situations (of which lawns would qualify).

LESS NITROGEN IN BLUEGRASS AS POTASSIUM ADDED

In an article entitled "Chemical Composition of Kentucky Bluegrass As A Function Of Applied Nitrogen, Phosphorus And Potassium," Iowa researchers, reporting in the May-June 1963 issue of Agronomy Journal demonstrated interrelationships of the major nutrients. Where no nitrogen was added, nitrogen content of bluegrass forage was greatest when there was little potassium as compared to much potassium. But when 160 lbs. per acre of nitrogen were added, then nitrogen in the forage increased when levels of potassium and phosphorus were high. A good deal more potassium occurred in the forage when nitrogen levels were high.

COMMERCIAL MOTOR FREIGHT SALUTES SEED INDUSTRY

Commercial Comments, in the July 1963 issue, was devoted mostly to the seed industry. Jack Currier, Director of Public Relations for Commercial, had visited the Lawn Institute prior to preparation of this issue, and the Better Lawn & Turf Institute is given credit on the publication. The issue summarizes the sort of information prepared for the Agricultural Yearbook on Seeds, reviewing importance and history of the seed industry, uses of seed, seed production and gathering, and research concerning seed. Three photos were furnished by the Lawn Institute. All members of ASTA received copies of this issue of Commercial Comments.

INSTITUTE LITERATURE ENTHUSIASTICALLY RECEIVED

At the GIRD Conference, representing leading proprietors of garden centers from all over the United States, a full folder of Lawn Institute reprints and booklets was made available. Included were the Quality Turfgrass brochure (printed several years ago), the "Selecting Lawn Grasses" booklet, and numerous two-four page reprints ("Story of Bluegrass", "Gobs Of Good Grass", "Plant For Profit", "Prestige Of Quality Turf", "Lawns, Their Making And Keeping", "Remake Your Lawn In Autumn", "Modern Power Mowers", "Beat The Bugs, Plan For Pleasure", "August Is The Month For Home And Community Lawn Projects", "Sprigs And Plugs", "Autumn Lawn Seed Sales-Yours For The Promoting", "The Beckoning Green", "Your Outdoor Carpet").

Every last bit of literature displayed was picked up by the participants, and numerous requests were made for additional press kits (a couple of copies were passed around for display). A good deal of enthusiasm was also shown for "The Householder's Guide To Outdoor Beauty."

SHORT WINTERSEEDING STORY

The June-July 1963 issue of Crops and Soils, carried the Institute story "Fine Northern Turfs Go South For Winter." Excerpts from this item follow: "A mixture of fine fescues, Kentucky bluegrass and Highland bentgrass can be started successfully in southern turf. At least that's the news reaching the Lawn Institute.

Tests during the past winter indicate that 5 to 10 pounds of quality seed should be sown from September to November, followed by topdressing and watering. These grasses for annual winterseeding are intended as replacements for ryegrass in dormant bermudagrass. Ryegrass is aggressive, yet develops a number of diseases. It often inhibits or retards revival of bermuda during the spring.

- - Interest is high in specialty use of these fine-textured northern species for golf course greens. This is particularly true where seeding costs are secondary to results.

There might be an advantage in mixing northern seeds with ryegrass, or using them alone, for turfs. This should reduce the dependence on a single species, should a serious disease strike one grass. - R. W. Schery, Industrial Agronomist and Director, The Lawn Institute, Marysville, Ohio."

NORTH CAROLINA INCREASES TURF MANAGEMENT WORK

We are pleased to receive from Dr. Elwyn E. Deal, the following note: "I have seen some of your recent literature on lawns and would appreciate receiving copies of your recent publications. I have recently joined Dr. W. B. Gilbert on a post-doctoral appointment in turf management research at North Carolina State in Raleigh. If possible, I would also like to have my name put on your mailing list to receive any future publications."

FLOWER AND GARDEN FEATURES LAWN ARTICLE

"A Lawn From Scratch", by Charles M. Drage of Colorado State University, Institute advisor, led off the August issue of Flower and Garden. The Lawn Institute was credited with an illustration, while Drage adopted many ideas and even wordings

from Institute release materials. Drage advises: "The basic northern grasses are Kentucky bluegrass, creeping fine-leaf fescues, and Highland-type bentgrasses." It is pointed out that "Kentucky bluegrass is really a mixture of many varieties," and that "Park has good seedling vigor and is preferred - - because it greens up fast - - Arboretum seems to have some advantage in the southern limits of the bluegrass zone - - leads me to wonder if maybe common Kentucky isn't pretty good after all, because it includes many varieties, some of which must be well adapted to your site."

Drage adds: "You can't go wrong if you plant bluegrass. The 2½ million seeds per pound make bluegrass most economical - - mixtures frequently contain coarse broadleafed, clump, pasture-type grasses as well as a high percent of annual rye. Even price-wise, they are no bargain because they may have less than 3,000,000 seeds per pound." The article includes conventional instructions for starting a new lawn.

POWERAMA AT MEN'S GARDEN CLUB MEETING

The 1963 Powerama was held in conjunction with the Men's Garden Club meeting at Rockford, Illinois, August 1. Several major equipment firms had extensive displays of equipment (ranging from tractors down to trimmers, with all the attachments), on display, and in action.

It was difficult to note differences in performance between the many types of mowers, soil cultivators, and so on, as they were demonstrated before the sizeable gathering. Operators were conversant with the capabilities of their machines and the heralded features. One of the most effective presentations was by Parker Sweeper, in which the new Thatch-o-Matic "de-thatcher" made a clearly visible cleaning out of the thatch in the old turf with ease, unhesitatingly. Then the Parker sweeper followed, collecting the immense pile of duff with aplomb.

SEEDSMEN'S DIGEST REPORTING

"I was personally very pleased that you handled the subject as you did. By including other grasses, I know the interest and usefulness of the article was broadened. Thanks again for your excellent cooperation." - Ken Skarien, Seedsmen's Digest.

HORTICULTURAL NEWSLETTER PLUMPS FOR QUALITY GRASSES

As the Horticultural Newsletter starts its second decade, we are gratified to note acceptance of Kentucky bluegrass and fine fescues as synonymous for quality turf. In an item devoted to crabgrass control, the newsletter states: "It is always sensible to consider why you have crabgrass. Perhaps some of the conditions are not satisfactory for good growth of bluegrass or fescues. If such is found, correction may simplify crabgrass control."

BLUEGRASS FAIRWAYS

We are pleased to see that Dr. William Daniels, of Purdue, speaking at the Central Plains Turfgrass Conference at Kansas State University, spoke highly of bluegrass for fairway usage. Bill emphasized bluegrass' usefulness, drought tolerance, easy establishment, ability to stand fairly close mowing, excellent recovery, disease resistance and playing quality, vigor and density. Daniels stressed need for crabgrass control, in addition to the usual considerate mowing and fertilization.

USEFUL TURFGRASS DISEASE BOOKLET

Herbert Cole and Houston Couch, of Pennsylvania State University, are responsible for Circular 510 "Control Turfgrass Diseases," a most attractive 32-page booklet with colored illustrations on both covers.

In many respects, the simplified approach makes this booklet more useful in a practical way, and for the homeowner, than does Dr. Couch's more elaborate book "Diseases of Turfgrasses."

Discussions are grouped by disease, and secondarily (where disease is extensive, such as Helminthosporium) by grass attacked. Treatment seems sound and fair, without crusading for a particular method of control, type of product or strain of grass.

WORD FROM HOLLAND

Dr. Maarten J. Zijp writes that he has been appointed "Director of Research, Messrs. Zwaan & de Wiljes Ltd., at Scheemda, Netherlands. Dr. Zijp was formerly head of the plant breeding station at Vlijmen, Netherlands. He asks "Please send literature on turf you may have prepared recently - - information on cultivar testing." Dr. Zijp adds: "I will be very glad to maintain the same pleasant contacts as we had in the past and exchange publications, seed samples, trials results - - and so on."

GOLFDOM MENTION

The May 1963 issue of Golfdom carried a review of the University of Maine First Turf Management Course, including photograph of Schery, Wiley, Skogley and Record, speakers at the Maine meeting.

CORNELI DISCONTINUES LAWN SEED BUSINESS

C. Robert Pommer, Vice-President of Keystone Seeds, long member of the Lawn Institute, makes it official: "We have discontinued the lawn grass and lawn supply business as of June 1 this year and, therefore, would appreciate your accepting our resignation - - I appreciate the great effort you have made in past years in the interest of better lawn care and just want to tell you that both Earl Page and myself have considered it a pleasure working with you."

Bob Pommer is to be sincerely thanked for his fine efforts in behalf of the Lawn Institute through the years, and his assumption of membership chairman 1960-61. Corneli's participation in the Lawn Institute will be missed.

LAWN INSTITUTE PHOTO IS COVER PICTURE

Flower & Garden Merchandiser, for April 1963, chose one of the Lawn Institute photographs (furnished for previous articles) as its cover. Mrs. John Paddack, of Ft. Lauderdale, Florida, brought this to our attention.

WORD FROM MERRY ENGLAND

Francis J. Bellingham, of Kentish Landscapes Limited, with the impressive address of Dillywood Lane, Higham, Rochester, Kent (England), recently inquired of the Lawn Institute, after having read a presentation by Director Schery given at the 17th Short Course on Roadside Development at Ohio State University. Mr. Bellingham had been in Ohio investigating machinery for facilitating roadside seeding, hoping to adopt procedures similar to those used in the United States, in England. We were happy to provide Mr. Bellingham with references and literature concerning his interest in seeding English roadsides with better quality grass seed.

COMPLIMENTS FROM THE NEW YORK TIMES

Joan Faust, Garden Editor for the New York Times, recently wrote: "I do enjoy reading all the press materials that the Lawn Institute sends out, and I am glad to see that we are on your mailing list. Keep up the good work - - with all good wishes."

SOUTHERN EXPERT ADVOCATES MIXTURES

Charles Hudson, well-known garden authority in Atlanta, mentions seed mixtures in addition to conventional ryegrass, in his Popular Gardening column "Gardening in the South": viz., "Planting lawns to ryegrass, fescues and grass seed mixtures has also been an early fall necessity as tests have proved that early September plantings in the middle and upper South produce better winter lawns - - ."

LAWN ADVICE FOR MIDWEST

Perhaps Ben Vance, in his column "Gardening in the Midwest," has been reading Institute press materials sent Popular Gardening. He writes: "Grass seed mixtures should contain at least 75% permanent grasses. Don't waste time and money on cheap lawn mixtures. Remember the cost of the seed is only a small fraction of the cost of establishing a lawn, so it pays to buy the best."

INQUIRY FROM ABROAD

The Lawn Institute's reputation has reached to Switzerland. The following was received from Donald Harradine, golf course architect in Caslano, Ticino: "I would be pleased to receive your occasional publications dealing with turf - - please send and bill to the above address."

THANKS FROM AMERICAN ROSE SOCIETY

"I wish to thank you for your assistance during the American Rose Society Convention - -. Your program - - was a very good one, and fully up to your usual high quality. - - The program committee appreciates very much your contribution to the success of the convention." - Irwin Jones, Chairman, Program Committee

NAMES WINTERGRASSES

R. D. Wescott in his column "Gardening in the Southwest" advises: "Cut bermuda close, then overseed with annual rye, fescue, or Highland bent. Apply top-dressing to cover seed."

NOER ON WINTERSEEDING

O. J. Noer, well known in golf circles for his years with Milwaukee Sewerage Commission, reports in the July Golfdom that maleic hydrazide has shown some success in controlling Poa annua, when used in conjunction with winterseeding in the South. Success has not been equal everywhere, however. Noer also puts in a plug for Poa trivialis, because its yellowish-green color helps mask the Poa annua where this cannot be controlled.

Perhaps the cooperative work with the Milwaukee Sewerage Commission, for which the Lawn Institute is furnishing seed this winter, will help establish best grass combinations and techniques for winterseeding golf greens in the South.

SUB-IRRIGATING LAWNS

A decade ago, when Dr. Schery was consultant for the newly purchased Busch Stadium in St. Louis, there was interest in an experimental try at irrigating baseball turf through underground watering by a gridiron of pipes. Robert Atkinson, of Los Angeles, reports this has now been done at the Los Angeles baseball field (Chavez Ravine). The advantages to an athletic playing surface are obvious, but it remains to be seen whether the irrigation pipes can continue to supply moisture uniformly enough to grass roots at 30 inch spacing, or whether some spots will become overly wet while others are not damp enough (as soils settle, compact, or there is localized clogging in the beds of pea gravel surrounding the pipes).

IOWA MENTIONS ZYTRON FOR NIMBLEWILL CONTROL

Institute advisors Eliot Roberts and A. E. Cott recently published the suggestion of liquid Zytron for controlling nimblewill. This jibes with early findings at

the Lawn Institute, in which it was shown that two sprayings with liquid Zytron in late spring or summer, at the rates of 1 pint per M, were quite effective in eliminating or reducing nimblewill.

"GOBS OF GOOD GRASS" BRINGS INQUIRY

"I've got Gobs of Good Grass in front and back yards - - but I've also got several clumps of that tall, clumpy fescue as pictured in your recent article.

How, in a few simple words (or dashes of chemical), can one get rid of it shy of getting out the old trusty spade?

Thanks, and enjoyed your report." - Lee C. Bright, Sports Dept., Dayton, Ohio NEWS

TORONTO STAR WEEKLY APPRECIATES PRESS KIT

"Thank you for the kit on lawns. This has been turned over to our Garden Editor, Fred Dale, and I am sure he will be pleased to receive it." - E. Cuthbert, Star Weekly

PURDUE 1963 TURFGRASS PROCEEDINGS RELEASED

The Purdue Turfgrass Conference, one of the most heavily attended in the country, has issued its customary Proceedings. In it are noted plans for release of "Evansville" creeping bentgrass, and "Midwest" zoysia. A plea is made for new, improved varieties of grass, and Purdue research comparing clones of bluegrass is reported upon.

Several papers relate to fertilizer, with Nelson pointing out that potassium proportions in fertilizer should probably be higher than have been customary. Interest continues to center on turfgrass diseases, with the newly important "spring deadspot" of bermudagrass showing some promise of control with a chemical to be made available in the autumn of 1963.

A specialty phase of weed control received main attention this year, with rather thorough-going discussion of aquatic weed control.

GRASSES CONTROL CRABGRASS

Lawn/Garden/Outdoor Living, August issue, contained an interesting resume of work done at the West Virginia Experiment Station on resistance of lawngrasses to crabgrass invasion.

Bentgrasses had the best record for keeping crabgrass out over a period of years, and a combination of natural Kentucky bluegrass with Merion bluegrass was very nearly as effective. Strangely, the combination did better than either Merion or natural Kentucky by itself.

All grasses were mowed at a series of cutting heights, ranging from ½ inch to 2 inches. As was to be expected, there was increasingly greater crabgrass incidence as the mowing height became lower.

ADDITIONAL WORD ON WINTERSEEDING

Dr. Joseph Folkner, of the University of Arizona, has kindly followed up early reports on last winter's winterseeding at the university, with a summary of the findings at spring transition. As of late July they were still taking ratings on revival of the bermuda, under the differing treatments and seedings practiced last winter.

Folkner was very pleased with eventual fine fescue response: "After you saw the plots, with more fertilization and more watering, all of the fescues made very dense turfs."

Folkner notes that where the chemical inhibitors had been applied, they did have some effect on spring transition. Spring application of Paraquat and MH-30, presumably to help clean out the wintergrass, had some "rather startling effects, of doubtful value."

Ryegrass continued to perform badly, "going out all at once", but the fine fescues and Kentucky bluegrass performed much more satisfactorily, giving gradual transition: "Kentucky bluegrass still holding about 50% bluegrass and 50% bermuda, - it is more heat tolerant than the others."

Dr. Folkner is interested in continuing the winterseeding work at the university, and the Lawn Institute will donate a seed mixture composed of fine fescues, Kentucky bluegrasses, and Highland bentgrass, for this winter's testing.

SILVERTOP OF BLUEGRASS STUDY REPORTED

The Ohio Journal of Science, July 1963, carried a report by Schurr and Dean on a study of silvertop in northern Minnesota bluegrass fields. Evidentally a number of vectors can transmit the trouble, resulting from destruction of the vascular system in the lower part of the seed stalk. In Park variety there seems to be a Fusarium fungus associated with the trouble, but this was not the case with Newport. Thrips, mites, and possibly unspecified arthropods are suspect of introducing Silvertop, which was not noted to develop in cages sprayed with a potent insecticide.

USDA NATIONAL AGRICULTURAL LIBRARY REQUESTS LITERATURE

The USDA National Agricultural Library recently requested a copy of "all available issues to date and future issues as published." An autumn press kit was sent to the Library, and their name added to the Institute's mailing list.

KOZELKA COURTESY

It was a pleasure to have been seated with Mr. & Mrs. Art Kozelka, garden columnist for the Chicago Tribune, at a recent field day. With personal contact established, Mr. Kozelka has been most kind in utilizing Lawn Institute press kit materials in the Tribune. As he notes, in sending in clippings, the August 14 Tribune dug deeply into release materials.

One section ("Choice of Seed Vital") should be of especial interest to members, viz.: "Dr. Robert W. Schery, Director of the Lawn Institute, suggests that soil be left in a somewhat roughened state, with crumbs up to marble size, after this final cultivation. This will permit seeds to settle into the crevices and become planted without raking or rolling.

The kind of seed one selects, along with soil preparation, is a vital factor in achieving a fine lawn. Kentucky bluegrasses, combined with good fescues, are the mainstay for northern mixtures, Schery said, with such varieties as Park, Merion, Arboretum, Newport, and Delta, often being included in quality mixtures.

Park is a vigorous, quick sprouting grass which includes a dozen specially selected strains of natural bluegrass discovered by the University of Minnesota."

The column finishes out with additional paragraphs credited to the Institute, describing lawngrasses and seed mixtures.

GOOD PUBLICITY IN MISSOURI'S "DISPATCH" NEWSPAPERS

Lester Satterlee, garden editor for the six Dispatch papers in northwestern Missouri, makes excellent use of press kit materials. In early June he sent to the Kansas City office 15 clippings of items taken from the press kit, all of them mentioning Institute grasses or the Lawn Institute.

We were pleased to see the Seal of Approval featured, under the heading "Lawn Institute Approval Seal On Better Seed Mixtures." The article recited the qualifications for the seal, and admonished "Seed packages displaying the Lawn Institute seal can be purchased with confidence that the seed is of appropriate grasses for a permanent lawn in the locality."

Column inches in just this set of clippings totaled 33. Some of the headlines and mentions read: "BEST FESCUE SEED. Best fescue seed comes from Oregon. The fine fescues, such as Chewings, Illahoe and Pennlawn, are grown as a crop in Oregon. They are carefully cleaned and marketed according to high standard of certification."

"SAVE ON MAINTENANCE. - - for - - distant views fine fescues and Kentucky bluegrass can be left unmowed until mid-summer, - -."; and "Kentucky bluegrass-fine fescue mixtures, or straight Highland bentgrass, reach so far that just a few pounds of seed are sufficient to bolster a whole lawn."; and "Natural Kentucky bluegrass, and varieties such as Park and Arboretum, are able to get along with only moderate fertilization."

"STAND SHADE BETTER. - fine fescues and Kentucky bluegrass stand shade better than does crabgrass points out the Lawn Institute. A bluegrass-fescue turf survives under trees if reasonable tended, but crabgrass will not grow there."; "CHOOSE HIGH QUALITY. Quality seed mixtures - - include only grasses that are fine-textured, such as Kentucky bluegrass, the fine fescues or bentgrass." "Kentucky bluegrass and fine fescues benefit from higher mowing, Highland bent from lower mowing about 1 inch tall." "Kentucky bluegrass and fine fescues, of old world origin, are preferred because they remain green during the colder months." "Kentucky bluegrass is a remarkably rugged grass and will not be injured by proper rates of crabgrass preventer. Lawn fescues are tolerant of preventive chemical treatments, too."

"DURABLE PLANTINGS. Kentucky bluegrass is one of man's more durable plantings, notes the Lawn Institute. In Kentucky and the Midwest sods of Kentucky bluegrass as old as the memory of white man are still producing commercial seed for modern lawns."

1963 TURF ANNUAL

Park Maintenance magazine, in its July 1963 issue, published the 7th Turf Annual and Turfgrass Review. Dr. W. H. Daniel, Institute advisor, was editor-author of the year's compilation. The Lawn Institute was listed among references and authorities. The turfgrass field has become so large and complicated, that any review such as this can only touch upon activities going on, with scant explanation or advisories.

PESTICIDE RESIDUE ANALYZER

With all the flurry of excitement over "Silent Spring," it may be of interest to members that Crops and Soils reports a new gas chromatograph said to permit analysis of pesticides below one ppm. The device is made by Wilkins Instrument & Research.

UNSATURATED USE OF GARDEN PRODUCTS

A study of Ortho (Standard Oil of California) indicates that only one-third of the people use garden products, and of this one-third only 50% use enough. This would seem to represent a large reservoir of untapped purchasing potential for garden supplies.

QUALITY TURFGRASS BROCHURE

There are still supplies in Kansas City of the rather luxurious "Quality Turfgrass" brochure, not dated. We suggest that firms which could make good use of this brochure for mailings, or dealer handouts request a supply, furnished to members without cost except mailing charges.

If you don't remember what "Quality Turfgrass" is like, ask for a sample copy.

APPRECIATION FROM ENGLAND

"Thank you very much indeed for your recent letter. I am grateful to you for the information - and look forward with very much pleasure to the receipt of the pamphlets and literature." - Francis Bellingham, Kentish Landscapes Ltd., Kent (England).

POPULAR GARDENING FINDS PRESS KITS HELPFUL

"Thank you so much for sending us the Lawn Institute kit with the many stories and shorts on lawns. I think this is a wonderful way of presenting material. We especially like the one about the bluegrass mixup, since it clarifies this question which so many new homeowners ask. The varied lengths of the articles are helpful too - - they'll be easy to drop in as fillers whenever we have space.

- - Will look forward to receiving additional information from you in the future and thank you for all your help." - Ruth Marie Peters, Popular Gardening & Living Outdoors

INSTITUTE ARTICLE SYNDICATED IN MISSOURI

At the request of Les Satterlee, Dr. Schery prepared the article "Look To Your Lawn Future" expressly aimed for the western Missouri climate. This item was printed, with complete by-line credit, in at least the following newspapers: the News-Dispatch, North Kansas City, Missouri; the Gladstone Dispatch, Gladstone, Missouri; the Platte Co. Dispatch, Parkville, Missouri.

The article ran several columns, but perhaps excerpts taken from it will be of interest:

"It just isn't easy to have a perennially good lawn in Kansas City, compared with more northerly locations. And southern grasses, such as U-3 bermuda, are not reliably hardy in winter, nor do they have a sufficiently long growing season this far north. Usually, in this area, we take our summer lumps with the recognized turfgrasses of quality, blends primarily of Kentucky bluegrasses with fine fescues.

Both Kentucky bluegrass and the fine or red fescues are remarkably hardy grasses. When well established the crowns survive even though all leafage browns to a crisp, in hot, dry weather. Often you feel that your bluegrass lawn is "done for," only to have a considerable show of fresh green shoots come rains and cool weather of September. - - In this area it is probably wise to expect that the lawn will need fortifying each autumn. Good seed is economical, goes far, and annual overseeding is a small price to pay for the beauty of a good bluegrass-fescue lawn through autumn, winter, spring and much of summer. Many sections of the country, Los Angeles for example, take for granted that annual reseeding will be needed. An autumn refurbishing is looked upon as a regular seasonal chore, the same as raking leaves.

- - Now is the time to get busy. Purchase only the best seed, high in Kentucky bluegrass or its varieties. I would avoid a single prima donna variety, but choose instead a blend of regular old-time Kentucky bluegrass, to which

special varieties such as Park and Arboretum may be added. The fine fescue component may bear such names as Chewings, Illahee and Pennlawn; but avoid untidy tall fescues, often listed as Kentucky-31 or Alta."

SEED SOWING ADVICE IN HORTICULTURE

Horticulture Magazine for Soptmeber carried a lead article, "Sow Grass Seed Now." A number of statements support the cause of quality lawn seed, viz: "Buy the best. Read the label on the seed mixture - -."

Two hypothetical mixtures are contrasted, one basically Kentucky bluegrass and fine fescue, the other a conglomeration with much ryegrass. The text reads: "Notice the total number of seeds per pound. In contrast - - a popular priced mixture. You have to use at least twice as much of it per thousand square feet to give a green cover - - even that will not become a fine lawn - -."

ADVERTISING INTENSITY

It is said that each individual receives 1700 sales messages per day, and that by 1970 this advertising barrage will have reached 3000 per day.

Obviously, to be remembered, a sales message must be very interesting or very good.

One might suppose that this constant harangue would build resentment. However, studies indicate that people are not antagonistic to the advertising, - merely indifferent. Psychologically they "close their ears and eyes," and this psychological shutting out of the din will probably increase as the barrage intensifies!

INSTITUTE MEMBER DISTRIBUTES MATERIALS AT CONVENTION

At a convention in early September, the Kiburz Seed Company, Afton, Iowa distributed sample packets of Kentucky bluegrass seed and copies of the Institute reprint, "Lawns, Their Making and Keeping."

APPRECIATION FROM WESTERN LANDSCAPING NEWS

"Thank you again for your cooperation on this matter, and I shall look forward to receiving your releases as they are issued." - Robert Arnell, Editor & Publisher

WORD FROM ONTARIO

"We look forward to and learn much from your periodic bulletins on turf instruction." - C. Jenks, Aqua Mulch Seeding Co. Ltd., Thorold, Ontario

COMMENTS FROM THE SOUTHWEST

Institute friend, Joe M. Clark of the Santa Fe "The New Mexican" send his column of Sunday, September 15. He is generous in his comment concerning "The Householder's Guide To Outdoor Beauty." We are pleased to hear that: "Yet almost anyone can become something of a turfgrass expert rather easily now. This, through the recently published (Householder's Guide) -- Schery obviously considers the lawn as a heart of any home landscape, - - he writes so that any of us can understand the vital information he imparts."

SOUTHERN REACTION

Many southern newspapers have simply printed the stories on winterseeding, sent out by the Lawn Institute this autumn. It is interesting that the Associate Editor of the Chattanooga, Tennessee NEWS-FREE PRESS offers the following comment in the gardening column:

"From a recent communication from Dr. Robert W. Schery, Director of the Lawn Institute at Route 4, Marysville, Ohio, we note he suggests a mixture of bluegrass, fescue and bentgrass. Try a mixture of Kentucky bluegrass, red fescue and Highland bentgrass. Write him at the given address for additional details.

Do not write me; I am still cutting this year's weeds, and have not the remotest thought about winter, other than I will welcome fall."

CONNECTICUT UTILIZES INSTITUTE MATERIALS

The University of Connecticut issues a very attractive seasonal booklet entitled "Milestones." The autumn 1963 issue carried items on fall garden care, and lawn chores. The Lawn Institute was delighted to help Messrs. Favretti and Papanos with Lawn Institute materials, including two photographs for which credit is given in the issue. We agree with the advice: "For seed use a mixture of bluegrass and fescue at the rate of 3 to 4 lbs. - -."

SOD WEBWORM CONTINUES DEPREDATIONS IN MISSOURI-KANSAS

For the second year in a row, sod webworm has been a serious pest in and around Kansas City. Irregular patches of dead, bleached lawn, that might be "summer scald" prove to be cut-off "straw" from webworm depredations near the grass crowns.

The Kansas City Garden Center feels that part of the reason for this webworm population explosion, is the recent tendency to encourage lawns to lush growth through heavy fertilization.

In this midwestern climate it is thought about three generations of webworms are possible through the growing season, at roughly 46 day cycles. However, what with some lawn moths breeding early in sunny locations, others belatedly

in shady or north-sloping lawns, cycles overlap and there may be almost continuous invasion as lawn moth populations build up through the summer. Extensive damage comes late in summer.

Occasionally insecticide treatments seem ineffective, but most experts believe this is due to inadequate application. The insecticide must be worked down into the crowns of the grass where the webworms are actually feeding.

BLUEGRASS SEED GERMINATION IN DARK

Not long ago an article appeared in a national gardening magazine, in which the author mentioned the need of light for good germination of Kentucky bluegrass. We questioned this, since earlier testing at the Lawn Institute had shown satisfactory germination in the dark. But to be certain, Seed Technology agreed to test a bluegrass seed kept completely dark, compared to conventional procedures in clear plastic containers.

The tests substantiated earlier findings; bluegrass seed did germinate in the dark, as well as the light. However, there was some indirect advantage from the light, that resulted in better "countable stands" after ten days. More mold occurred in the dark container, and seemed to interfere with proper development of some young seedlings. Also, the young seedlings, blanched for lack of light, had an "unhealthy" appearance.

After ten days in complete darkness there were about 50% "normal" seedlings, compared to about 75% in light. But it is evident that light is not necessary to stimulate the actual germination process.

HIGHLAND BENT IS TEST GRASS FOR DISEASE STUDY

A group of Pennsylvania State University experts published in Phytopathology, a study on "Influence Of Environment On Diseases Of Turfgrasses," in which Highland bentgrass was the species investigated.

In brief the results showed that relatively low fertility and pH resulted in less Pythium disease than did other combinations, that higher temperatures encouraged the disease, the calcium deficiency caused a proneness to the disease in Highland bent, and that disease increased at either abundant soil moisture or permanent wilting point moisture levels.

The latter is interesting in that it shows an influence of environmental factors on the host, that in turn influences disease. The authors point out that the same relationship has held with dollar spot on Kentucky bluegrass, the disease increasing as soil moisture stress increased.

THE LATEST WORD ON WINTERSEEDING

September brings this word from Charles Wilson, Milwaukee Sewerage Commission, after his presentation at the Florida Turfgrass Conference on "The Latest Look At Overseeding." - - "The paper was quite popular. This would indicate

that more and more courses are interested in the results of our earlier tests and are getting back into overseeding greens again. Incidentally, ryegrass is in disrepute in the South."

WOOD PRODUCTS AS SOIL AMENDMENTS

Beltsville researchers tested 28 woods and barks, for the effect on legumes, when mixed into the soil. Most exhibited no toxicity, but four were slightly toxic, and two very injurious (incense cedar wood, white pine bark).

INFLUENCE OF NITROGEN SOURCE ON FERTILITY

A study at the University of Georgia, reported in the July-August Agronomy Journal, found nitrate nitrogen more satisfactory than ammonium nitrogen under certain schemes of fumigation and kind of crop. General conclusion, however, was "under normal conditions when the soil is adequately limed and not fumigated either source of N appears to be equally effective for crop growth."

A BLUEGRASS CAUTION

The following appeared in the "Cooperative Farmer" of Richmond, Virginia. "But imported (bluegrass) normally carried a high percantage of Poa annua - annual bluegrass. Poa annua is considered a weed in this area."

LABELING RULES

Because of interest to turfgrass seedsmen, your attention is called to discussion of the Pennsylvania Seed Act as reported by the American Seed Trade Association, September 11. Particularly designation of kind or variety must be confined to the recognized names; examples include: Merion Kentucky Bluegrass not Merion Bluegrass; Kentucky 31 Tall Fescue not Ky 31 Fescue; Annual or Italian Ryegrass not Common Ryegrass; Pennlawn Red Fescue not Pennlawn Fescue.

NEW YORK HERALD TRIBUNE FEATURES INSTITUTE ARTICLE

We are delighted that the New York HERALD TRIBUNE gave by-line credit to Dr. Schery and the Lawn Institute, in printing "Fine Fescues A Feature Of Choice Mixtures." This item appeared in the Sunday, September 8, issue, with a circulation of nearly a half-million. You may remember that the article opens: "'Fine fescue' is becoming as well known in good lawn circles as is its peer and companion, Kentucky bluegrass. When you notice such varietal names on a seed package as Chewings, Illahee and Pennlawn, there are within improved varieties of red or fine fescue, probably grown in Oregon." The article continues, extolling the virtues of fine fescues.

HELP FROM THE SYNDICATES

Allen Swenson, a syndicated writer who receives Institute press materials, had this to say in August and September columns: "There is a tremendous difference in lawn seed. Two boxes of seed may weigh the same and seem alike, but there may be ten times the amount of seed in one package than another. Bluegrass seed adds to about 2 million seeds to a pound. A more temporary grass comes to only 250,000 seeds to a pound.

It takes just as much effort to plant inferior quality seed as to put in a permanent lawn using seed of high purity and germination."

CONTINUING HELP FROM GRAND RAPIDS

The Grand Rapids PRESS has been one of the most faithful users of Institute materials. The PRESS garden editor, Charles Johnson, gives Institute grasses quite a boost, viz." "There are several reasons why Kentucky bluegrasses, fine fescues and Highland bentgrass really zoom to the front these days." The item continues with the reasons advanced for autumn seeding, etc.

GARDEN CENTER BULLETIN ON LAWNS

Dr. Baumgardt, Director of The Garden Center, Loose Park, Kansas City, devoted the September issue of the "Garden Center Bulletin" to lawns. This tied-in very nicely with Dr. Schery's presentation at The Garden Center in early September. Much of the material utilized in the issue was from Lawn Institute releases, credit being given, viz.: "The information has been accumulated during years of observation and trial and error. Much of it has come from The Lawn Institute."

The opening article proclaims bluegrass: "Walk around people's yards; what is the predominate grass? Bluegrass is the thing ninety-nine times out of one hundred."

Dr. Baumgardt concludes that minimum care, in the sense of restrained fertilization, watering and such like, is the key to keeping bluegrass in the Kansas City area. He feels that people, rather than climate, are the chief cause of failure.

Subsequent articles call for high mowing, autumn feeding (mentioning the advantages of organic fertilizers), the advantages of autumn for building or refurbishing lawns, chemical control of weeds, insects and disease. There is an item on soil improvement, and an interesting story on "Which Grass Seed Should I Buy?". The latter states: " - - your seed mixture ought to contain not less than 60% - - Kentucky bluegrass - - and the rest ought to be a true lawngrass such as - - Chewings red fescue." It adds: "There is absolutely no excuse for sowing ryegrass, timothy, or tall fescue on a lawn. These things are haygrasses and ought to be reserved for the pasture." The story points out the higher seed count, too, in a quality lawn seed mixture compared to bargain-basement offerings.

INSTITUTE ADVISORS QUOTED

The Institute advisors seem to make good use of the releases mailed them, to judge by advice such as this from Dr. Harold E. Mosher, University of Massachusetts. In the Wakefield, Massachusetts ITEM appeared: "Grass seed is generally sold in mixtures of selected grass species. These grasses are compatible and augment each other in a lawn. Each grass species has certain growth characterestics: e.g. Kentucky bluegrass grows upright in full sun and red fescue is a low-growing - -. These two species are often used together to give a compact, complete turf carpet."

Institute advisor, Winston A. Way, University of Vermont, is quoted in the Enosburg Falls, Vermont STANDARD and LEADER, and in the Boston, Massachusetts MORNING GLOBE, viz.: "You see, only these two kinds (Kentucky bluegrass and fine fescues) can be used to make a good lawn in this area. Bluegrass is best adapted to medium and heavy soils (loams to clays) which usually have good moisture and hold fertility.

- - Fine (red) fescue and its varieties, - - perform well when seeded. They are able to tolerate sandy soils, dry sites, and areas of partial shade - -. Pennlawn and Illahee are two of the better varieties to choose."

NEWS FROM ALASKA

In the Anchorage, Alaska NEWS and the Fairbanks NEWS MINER this advice: "Common Kentucky bluegrass seed makes a good lawn in Alaska. - - Creeping red fescue has been successfully used in several locations and seems to be gaining in popularity."

BLUEGRASS A FAVORITE

Howard Taylor's column in the Bristol, Virginia TENNESSEAN reported upon the field day activities at the University of Tennessee Experiment Station. About 20 plots on the station lawn had been seeded with different types of lawngrasses, alone and in mixture. Mr. Taylor concluded: "While practically all the persons present - - looked over each of the small plots, noting different textures and colors of the grasses, it was evident that the most popular plot of the day was the one covered with 100 percent Kentucky bluegrass. This was surely our favorite."

MOWING RECOMMENDATIONS

Throughout the summer and early autumn instructions on proper mowing height et al, appeared in numerous newspapers, especially in Illinois and New Jersey. Examples: "During the spring when the Kentucky bluegrass-red fescue lawn grows rapidly, you may have to mow every three days. During the summer when grass growth slows down, you can too." "Mowing the Kentucky bluegrass-red fescue type lawn closer than one and one-half inches gradually weakens - - the grass. For the Kentucky bluegrass-red fescue lawn, the mower should be set to cut - - at a height of one and one-half to two and one-half inches. The (higher cut) is especially desirable during the summer."

ILLINOIS LAWN ADVISORY

We were pleased to see Illinois newspaper plugging for better quality lawn seed, viz.: "Do not buy the cheapest seed unless you want a temporary lawn. The old axiom 'you get what you pay for,' is not necessarily true. In the case of cheap lawn seed, you often get less for your money than if you buy high quality seed.

Use grass varieties that are best adapted to this area, or to the use to which you will put them. Kentucky bluegrass, fine-leaved fescues, and bents are suited to northern Illinois."

LAWN STUDY COMPLETED AT COLORADO

George A. Beach, horticulturist with the Colorado State University Agricultural Experiment Station at Fort Collins, has completed a three year study of bluegrass lawn management. The management systems involved cutting heights, clipping removal and fertilization.

In conclusion Beach notes: "Two and a quarter inches appears to be the best cutting height for Kentucky bluegrass, while Merion can be cut a little shorter. - - during the three years of test, no detrimental effect has been noted on plots where clippings were not removed. The only effect has been occasional lowering of the appearance score by the presence of dried clippings. - - Two lbs. of actual nitrogen per 1000 square feet of lawn, applied in two feedings - - one pound in the spring and one pound in the fall - appears to be a moderate application for common Kentucky bluegrass. This would be below the minimum requirement for good growth of Merion - -."

INSTITUTE RELEASES INSPIRE GARDEN WRITERS

Mailings to editors and garden writers may have been responsible for many lawn articles of early autumn. Nevah Simmons, garden writer for the Peoria, Illinois EVENING JOURNAL STAR, writes: "If the bluegrass situation seems a little mixed up these days, it is because seedsmen are trying to incorporate a blend of varieties that will meet various needs. They are all inimitable Kentucky bluegrass - - some of the varieties used in quality mixtures being Park, Merion, Arboretum, Newport, Delta and Windsor.

Park actually is a combination of a dozen carefully selected strains of natural bluegrass which are quick to sprout and vigorous in growth - -."

In the Muncie, Indiana STAR, C. G. Milne notes: "Good Ingredients Are Necessary To Making Million-Dollar Lawn." "Fall is the best time to sow grass seed. - - nursegrasses - - are not needed as they will die with the first severe frost.

- - Kentucky bluegrass - This type is by far the best all-around grass seed to use under a wide set of conditions. - - It can be mixed satisfactorily with one of the fescue type (tall fescue excluded) at the rate of - - 70% Kentucky and 30% creeping fescue for normal areas or a reverse ratio for overly sunny, dry or heavily trafficked areas.

There's - - interest in the improved strains of red - - fescue and the better one are Pennlawn - -."

Virgil A. Stanfield, in the Mansfield, Ohio NEWS-JOURNAL, headlines "Kentucky Bluegrass Comes From Oregon." "It doesn't sound right, but - - Kentucky bluegrass seed comes from Oregon. - - Oregon's climate is ideal for growing bluegrass, even though the fields might need some irrigating in certain seasons. Several varieties of bluegrass are often included in lawn mixtures in order to meet changing growing conditions."

EXTENSION AGENT SUPPORTS INSTITUTE POSITION

Thanks to Robert C. Ruizzo, Assistant Camden County Agricultural Agent, New Jersey, this adaptation from Institute releases appeared in the Camden COURIER-POST: "A good lawn mixture consists of Kentucky bluegrass and red fescue. Nursegrasses, such as ryegrass, compete with the finer grasses - - Take no chances - use a pure mixture.

- - Some of the finer-textured grasses are: Kentucky bluegrass, Oregon red fescues (Chewings, Illahee, Pennlawn, Rainier).

- - With the average bluegrass-fine fescue lawn the Lawn Institute feels that clippings will settle into the upright grass, eventually decompose and contribute to fertility. - -

There is no more rewarding time to start a bluegrass-fescue or Highland bent lawn than in autumn."

- - Tests at the Lawn Institute show that fertilizer applied to frozen ground even in midwinter has just about as much beneficial influence as if delayed until April - -."

SEPTEMBER BEST FOR SEEDING LAWNS

Numerous newspapers throughout Kentucky such as the Georgetown TIMES, Paintsville HERALD, Princeton TIMES and Walton ADVERTISER, support autumn seeding: "In Kentucky 90% of the lawngrass seed is sold in the spring but the first half of September is a much better time for sowing. Bluegrass is a cool weather crop. If sown in September it will grow during much of the fall and early winter."

INSTITUTE PHOTOS APPEAR

C. Reed Funk writing for the New York TIMES used two Institute photos with credit (one showing a fescue plant, the other a bluegrass plant) in his column entitled "Top-Quality Turf - Bluegrass and Red Fescue Mixtures Are Best For Lawns In Northeast." The article reviewed the various bluegrass and fine fescue varieties.

The August 18 issue of the Muncie, Indiana STAR gave this caption to an Institute photo: "Give Turf A Boost - Autumn's cool weather presents an ideal time to give your lawn a 'shot in the arm,' says the Lawn Institute, with fertilizer and seed. Thicken thin turf with a quality seed mixture containing Kentucky bluegrass and the fine fescues. Autumn bolstering pays off in a better lawn next year as well as this."

Bea Jones, garden editor for the Garden City, New York NEWSDAY credited the Lawn Institute for the photo in her column "The Time Has Come To Start Fall Lawn Project." Photo caption read: "It takes a combination of good seed and good seedbed to produce a stand of hardy turf. Good seed is wasted unless soil is properly prepared."

"THE LAWN BOOK" RECOMMENDED

" - - anyone interested in the various aspects of turf construction and maintenance will find 'The Lawn Book' by R. W. Schery, published by Macmillan, a rich source of information - -." - G. H. Hamilton, Niagara Falls, New York GAZETTE

CHOICE OF SEED IMPORTANT

The Ann Arbor, Michigan NEWS gave by-line credit to the Lawn Institute in an item entitled "Choice Of Seed For Home Lawn Said Important." The article read in part: "A lawn is neither a hayfield nor crop land. Coarse grasses are not wanted. What is needed is permanent perennial carpet, fine-textured and sod-forming - -. The lawn should be seeded the right way, at the proper time, above all, with the right grass. - - Most 'cheap seed' is in reality expensive. - - there are over 2 million bluegrass seeds to the pound, but only 250,000 ryegrass. - - For most northern states (mixtures include) high proportions of Kentucky bluegrass and red fescue, with bentgrass - -."

CUT GRASS HIGH

"In one university test, weeds were reduced from 108 to only 5 in a 10-square foot area by mowing Kentucky bluegrass 2 inches high instead of 3/4-inch. Research has also shown that mowing often - so that only a third of the grass is clipped off - results in stronger roots and thicker grass. Result: less need to weed and water." - Lansing, Michigan STATE JOURNAL

CHOOSE PROPER GRASS

"'Lawn Failures Begin With Wrong Grass Selection.' Purchasing inexpensive seed is expensive. Read the label before you buy any seed. - - The contents by types of permanent grass must be shown.

What should you look for in building a beautiful and permanent lawn? The first requirement is fine, permanent species of grass such as a generous quantity of:

1. fine red fescues
2. Kentucky bluegrass
3. excellent bentgrass

These are tried and true lawngrasses. Without a high percentage of them in any seed mixture you plant, you are likely to get too much annual grass." - New Haven, Connecticut REGISTER

ABOUT THATCH

Charles J. Hudson, Jr. in the Atlanta JOURNAL adapted the thatch pamphlet done by Dr. Schery for the Parker Sweeper Company. Mr. Hudson refers to the Institute, viz.: "Dr. R. W. Schery, director of the Lawn Institute, says that in a very broad sense almost all vegetation develops thatch. Green leaves serve their life span, then wither and are shed. - -"

Two other newspapers, the Youngstown, Ohio VINDICATOR and the Urbana, Ohio CITIZEN also carried items on thatch. "Kentucky bluegrass and the fine fescues tend to thatch least. These species are erect-growing, spreading by underground stems.

Park, though noted as a vigorous sprouter, does not produce extra leafage. Park, Arboretum and other varieties similar to natural Kentucky bluegrass seldom have thatch problems. The same is true of such fine fescues as Chewings, Illahee and Pennlawn.

Bentgrasses are turfgrass delights when cared for. But the creeping sorts are great thatchers - - The more erect varieties, such as Colonial and Highland, thatch less --."

LABOR AND GRASS

The "labor-saving equipment" article was used by the Ann Arbor, Michigan NEWS, Champaign-Urbana, Illinois COURIER and the Asbury Park, New Jersey PRESS. "Labor-saving equipment for the lawn is getting better and more diversified. For a number of years excellent spreaders have been available, to distribute good lawn seed uniformly, even at light rates. Kentucky bluegrass-fine fescue mixtures are normally planted three to five pounds per thousand square feet, or overseeded at half this rate. Highland bentgrass is generally sown 2 lbs. or less, though it takes a really good spreader to distribute at the lighter rates."

FRILLS & FADS

"Lawn Frills and Fads" appeared in the Springfield, Missouri LEADER & PRESS, September 1 with by-line credit in an article entitled "Cheap Seed No Bargain." Excerpts: "In cooler climates, a good bluegrass-fine fescue lawn, or perhaps one of Highland bentgrass, is the goal of most homeowners. - - Bargain seed mixtures are a frill no one can afford. The quick-sprout, quick-die-out hay-grasses are no bargain at any price. - - Avoid seed mixtures seeming to sell at unrealistic discount; good bluegrass-fine fescue blends are economical enough.

- - A frill that has good chance of sticking with sophisticated turfs such as Highland bentgrass is sweeping the clippings. - -"

A MILLION REASONS

"A Million Reasons For A Good Lawn Mixture" appeared in the Richmond, California INDEPENDENT, Augusta, Maine KENNEBEC JOURNAL, the Easton Express, Pennsylvania. "Kentucky bluegrass contains over 2 million seeds to the pound, fine fescues (such as Chewings, Illahee and Pennlawn) a half million or more. Highland bentgrass is something of a champion with seven million seeds. - - A cheap haygrass mixture would not only have inferior grasses, but less than a tenth as much seed in each pound purchased."

LAWN ARTICLE IMMORTALITY

Last year Earl Aronson corresponded with Dr. Schery, later syndicating an article that brought many inquiries. This same item was still being picked up, as in the Hartford, Connecticut COURANT. "We asked Dr. Robert W. Schery, director of the Lawn Institute at Marysville, Ohio, to sum up the features - -."

The Hagerstown, Maryland MAIL carried "It's 'Repair That Patch' Time For Summer's Burned Out Lawns." A Lawn Institute photo with credit is utilized with this caption "New lawn seeding and autumn seem to go together like ham and eggs."

"Insects - Enemy No. 1" reappeared in the "Green Thumb Corner" of the Springfield, Missouri LEADER & PRESS, the Wausau, Wisconsin RECORD-HERALD, and the Champaign, Illinois NEWS-GAZETTE. " - - according to Dr. Robert W. Schery, Lawn Institute director, elite lawngrasses will prosper when the bug population is reduced."

The earlier "research" story appeared in: Traverse City, Michigan RECORD-EAGLE, Springfield, Missouri LEADER & PRESS, Albany, New York TIMES-UNION, Janesville, Wisconsin GAZETTE. Excerpts: "Research is the day's watchword. What has lawn research developed to make bluegrass better, fescue finer, and bentgrass brighter?

Lawn bentgrasses, like Highland, need more nitrogen than bluegrass and fescue.

The most attractive lawns are those seeded with 'fine-textured' grasses. Among the fine-textured varieties are Kentucky bluegrass (including varieties like Park, Merion and Arboretum), fine fescues (Chewings, Illahee and Pennlawn) and the bentgrasses (both creeping and lawn varieties, such as Highland). - -"

The Janesville, Wisconsin GAZETTE utilized an older story "Fall Is Always A Good Time For Seeding Lawns." Excerpts: "Best chance for establishing a good bluegrass-red fescue lawn is from autumn seeding. This is the contention of the Lawn Institute, and the finding of most experiment stations in the northern two-thirds of the nation. - - There are many advantages to autumn seeding, but paramount is the fact that Kentucky bluegrass, fine fescues and Highland bentgrass perform best during the cooler weather of autumn - -."

Also, with Institute credit: "Good Progress Reported In Fight On Lawn Pests." "Fortunately Kentucky bluegrass, lawn fescues, even Highland bentgrass are pretty stalwart citizens. Chemical applications which do away with the weeds are at most only a temporary discomfort to them."

NEW JERSEY COVERAGE

New Jersey residents, the leading garden supply purchasers on a per capita basis, receive a continuing fire of sound lawn advisories. The Extension Service out of Rutgers does a top job, with releases very similar to those of the Lawn Institute. This autumn the usual good coverage was obtained. For example, the Asbury Park, New Jersey PRESS picked up the Insitutue press story verbatim: "Kentucky bluegrass-fine fescue mixtures are normally planted 3 to 4 lbs. per thousand feet, overseeded at half this rate. Highland bentgrass is generally sown 2 lbs. or less, though it takes a really good spreader to distribute at the lighter rates."

WINTERGRASS STORIES

Among pickups from the southern mailing - Greenville, South Carolina NEWS; Laurel, Mississippi LEADER-CALL (two stories); Marietta, Georgia JOURNAL (four stories); Fayetteville, North Carolina OBSERVER; Saint Augustine, Florida RECORD; Atlanta, Georgia WORLD; Hammond, Louisiana DAILY STAR; Wauchula, Florida HERALD-ADVOCATE (two stories). By-line credit was usually given.

Sample headlines: "Golf Greens Forerunner Of Lovelier Dixie Lawns?", "Future Of Southern Turf May Lie In Lawn Species," "Seed Lawns With Northern Grass," "South Has New Look In Lawns," "New Look In Southern Lawns," "Two Tough Winters Change Ideas About Seeding Lawns," "South's Green Lawns Charm Winter Guests," "Seed Fine Winter Turf In The Fall," "Winter Lawns For Southern Charm," "Touch Up Turf During Autumn," "Even South Uses Makeup," "Winter Lawns And Southern Charm," "Golf Courses Leading Way For Lawns."

Excerpts: "It is only natural that taste in its wintergrass improves, as the South progresses. All over the nation modern homeowners want the feel of quality outdoors the same as indoors, a tangible acknowledgement of America's improving standards. Why not, then for the South in winter, the best that northern lawns sport in summer? This is not far-fetched, for a good blend of Kentucky bluegrass-fine fescue-Highland bentgrass is very economical per plant; there are ten times as many seeds in each pound as with old-fashioned wintergrass. - - Best seeding times usually range from early until late October, the earlier dates suggested for the upper South, the later for the deep South. - - If days are warm, and the new planting is kept moist, fine fescue (the first of these elite grasses to sprout) should be visible within two weeks, the Kentucky bluegrass and Highland bentgrass not long after."

"Two really tough winters in a row have changed a lot of thinking about wintergrass seeding in the South. Old-time ryegrass was especially hard hit almost to the Gulf Coast - -. Highly successful in test plantings in all southern states have been mixtures of top quality northern grasses, of course used as winter annuals here. When ryegrass was sadly decimated or completely knocked

out at such test locations as Texas A & M or Mississippi State University bluegrass-fine fescue-Highland bentgrass combinations stood up well.

Kentucky bluegrass is especially hardy - - continues growing right through winter, at least on the milder days. It has no peer for beautiful texture.

The fine or red fescues, are hardy, too - - are featured in winterseeding blends chiefly because they are quick to sprout, 'show green' in a hurry. Varieties such as Chewings, Illahee and Pennlawn are frequently selected, and have excellent dark green color.

Highland bentgrass backs up the other stalwarts with a tight low growth characteristic of bentgrasses, the gems of northern putting greens. Highland bent is a little slower to make an appearance, but exhibits excellent late winter growth.

A good winterseeding blend may include other grasses, too, but none will prove hardier than the three stalwarts mentioned. Look for their names in the component listing required for seed mixtures."

And "It is encouraging that recent investigations show seeding mixtures of such highly thought-of grasses as Kentucky bluegrass, fine fescues and Highland bentgrass, to make excellent winter cover in the South. These are fine-bladed grasses, during winter the equal in texture of our best southern summer grasses. Your local garden supply store should have top-quality winterseeding blends, and offer advice for starting them easily. The millions of seeds to each pound make such blends go farther."

ABOUT HIGHLAND BENT

"Highland Bentgrass To The Fore" was headlined in the Willoughby, Ohio NEWS HERALD, "Highland Bentgrass Is Good Lawn Bet" and in the Ann Arbor, Michigan NEWS "Bentgrass Can Be Used For Home Grounds, Too."

The Muncie, Indiana STAR says: "'Fore' smacks of golf course pleasures, habitat familiar to Highland bentgrass. Highland is respected as a fairway grass on watered northern courses. - - Nor is Highland unknown on the putting green, at least in such favorable bentgrass environments as the Pacific-Northwest."

Highland bentgrass is also moving to the fore for lawns. There are several reasons why the luxurious feel of Highland bentgrass can be had on home and commercial lawns. One is the grass is versatile. Another, its special production area in Oregon, and the attention given it there, which should equip it for eastern conditions. Finally, lawn products and consumer demands have reached a degree of sophistication such that even bentgrasses may be handled easily and economically by just average folks.

Highland bent fills a need where lawnkeepers insist upon closer mowing than is desirable for Kentucky bluegrass-fine fescue lawns, mainstay turf in the northern two-thirds of the country. It lives easily at cutting heights between $\frac{1}{2}$ and 1 inch.

- - Almost all the world's production of Highland bentgrass seed comes from a few square miles in the hills southeast of Salem, Oregon - -."

SEED COST

"Lawn Seed Cost Is Minor" appeared in the Richmond, California INDEPENDENT, Easton, Pennsylvania EXPRESS, Champaigne-Urbana, Illinois COURIER and the Willoughby, Ohio NEWS HERALD. Excerpts: "Unless a seed mixture is chosen wisely, to contain top-flight ingredients such as Kentucky bluegrass and fine fescues only, the lawn is not likely to be a permanent success. - - A Kentucky bluegrass-fine fescue blend can be neatly spread at rates as light as 3 lbs. per thousand feet with today's spreaders. - - The abundant seeds of Highland bent are adequate at 2 lbs. per thousand square feet."

REPRINT PICKUP

The Muscatine, Iowa JOURNAL adapted "Remake Your Lawn In Autumn." Credit was given the Lawn Institute. Excerpts: "Lawn making may not be foremost on the homeowner's mind as the gardening season draws near its close. Yet September seeding has many advantages in 'bluegrass country', where Kentucky bluegrass with its fine fescue allies makes the best all-around turf. Elegant Highland bentgrass, too, when planted in autumn, gets the jump on spring weeds."

MORE ABOUT FINE FESCUES

"Featuring Fine Fescues" and "Fescues Aren't Fussy" were used by these among other papers" "Ann Arbor, Michigan NEWS, New York HERALD-TRIBUNE, New York, Springfield, Missouri LEADER & PRESS, Richmond, California INDEPENDENT, Willoughby, Ohio NEWS HERALD. Titles included "Fine Fescue Grass Produces Good Lawn," "Don't Ignore Lawn Fescues," "Fine Fescue A Feature Of Choice Mixtures," "Oregon Fescue Is Fine Lawn Helper," "Bluegrass Gets A Lift From Fescue." Excerpts: "Need an all-around helper for your bluegrass lawn? It's Oregon fine fescue. Good lawn seed mixtures almost invariably contain some fescue. Yet, compared to Kentucky bluegrass, fescue is not a familiar household word. Complicating the situation is the fact that there are fine-leafed red fescue varieties, excellent for lawns; and coarse tall fescues, such as 'Kentucky-31' or 'Alta,' best fit for roadsides or other rough areas. - - The desirable red fescues come in a number of varieties, such as Creeping red, Chewings, Illahee, Pennlawn and Rainier. All make excellent turf, and are first-rate companions for Kentucky bluegrass in seed mixtures."

""Fine fescue' is becoming as well known in good lawn circles as is its peer and companion, Kentucky bluegrass.

When you notice such varietal names on the seed package as Chewings, Illahee and Pennlawn, there are within improved varieties of red or fine fescue, probably grown in Oregon. Fine fescue is the component of a quality lawn seed blend that gives it such wide adaptability, usefulness in the shade and on poor, dry soils - -."

IN THE WEST

The Walla Walla, Washington EVENING AND MORNING UNION-BULLETIN used Lawn Institute stories 11 times. Excerpts: "At summer's end many homeowners assume that bolstering tired turfs might just as well wait for spring. Such is not the case, says Dr. Robert W. Schery, director of the Lawn Institute, at least in bluegrass-fine fescue climates." "The fine or red fescues are grown widely in Oregon and almost all improved varieties, such as Chewings, Illahee, Pennlawn, Rainier, originate in that state, says the Lawn Institute. Highland bentgrass is produced almost exclusively in a few counties near Salem. Whether seed is from Oregon or bluegrass from Kentucky and the Midwest, modern day standards for lawn seed assure the purchaser of a quality mixture of seed essentially weed-free and high in germination." "'Fine fescue' is becoming as well known in good lawn circles as is its peer and companion, Kentucky bluegrass. - - If you are planning to seed your lawn, take pains that only fine fescues are featured in the lawn seed mixtures you buy. Fortunately, it's the only fescue good mixtures contain." "Autumn is the beginning of the growth cycle for the best lawngrasses such as Kentucky bluegrass and the fine fescues. - -"

LAWN ESTABLISHMENT

"Steps For Starting A Lawn" was picked up by the Pittsburgh, Pennsylvania PRESS, retitled "Starting A New Lawn Calls For Best Seed; Bluegrasses, Fescues Tops,". The Ann Arbor, Michigan NEWS advises "Use Good Seed To Start Lawn." The accompanying photo showed a fine fescue and Kentucky bluegrass plant with this caption "Fine Lawn Pair - The royal family of grasses for district lawns is made up of fine fescue and Kentucky bluegrass strains. The fine fescue on left is basically similar to the bluegrass. Stringy sideshoots on the bluegrass are rhizomes, underground stems that spread and knit the best sod." Excerpts: "Starting a new lawn is not complicated. Good seed, powered cultivators such as rotary tillers, and ready products make it easy. - - Sow only a high quality seed mixture - coarse or impermanent grasses are not a bargain at any price. Kentucky bluegrass and fine fescues are mainstay for northern mixtures. - - (bluegrass) varieties may be mixed with natural Kentucky bluegrass and improved fine fescues such as Chewings, Illahee and Pennlawn."

ABOUT BLUEGRASS

"Bluegrass Mix-up" was utilized by the Willoughby, Ohio NEWS HERALD, Ann Arbor, Michigan NEWS, Muncie, Indiana STAR, Chicago, Illinois SUN TIMES, Battle Creek, Michigan ENQUIRER-NEWS, Springfield, Missouri LEADER & PRESS and the Newark, New Jersey NEWS. Excerpts: "If you are mixed up about bluegrass, it may be because seedsmen these days mix up bluegrasses. They're all inimitable Kentucky bluegrass, however; just different varieties blended together, to share the outstanding attributes of each. - - Among the bluegrass varieties often included in quality seed mixtures are Park, Merion, Arboretum, Newport, Delta, and Windsor. Park reflects nature, too, in that it is a combination of a dozen especially selected strains of natural bluegrass discovered by the University of Minnesota. These interplanted in the production fields. The gathered seed is carefully cleaned to high standards, and is outstanding for quickness to sprout and the vigor of its seedlings."

RE NEWS COLUMN FORMAT

The Springfield, Missouri LEADER & PRESS, August 11, carried all six of the Lawn Institute press kit short stories preprinted in newspaper column width. Excerpts: "Knowledgeable gardeners start or refurbish lawns in autumn. Autumn is the beginning of the growth cycle for the best lawngrasses, such as Kentucky bluegrass and the fine fescues, and holds more promise than any other season." And "Kentucky bluegrass, premier lawngrass, became named for Kentucky in the early 1800's. - - Selections from this widely-spread bluegrass account for well-known modern varieties, such as Arboretum, Park and Merion." "Good lawn seed mixtures consist almost entirely of permanent perennial grasses. - - A bluegrass-fine fescue-bentgrass combination might be interseeded into dormant bermuda, - -." "Experts advise seeding bluegrass lawns in autumn. - - Kentucky bluegrass, fine fescues or Highland bentgrass gain an advantage over weeds from autumn planting - -." "Kentucky bluegrass and fine fescues together account for most of the quality lawn seed planted in America. Both have one outstanding trait, particularly noticeable in bluegrass - the ability to spread by underground stems termed rhizomes." The Muscatine, Iowa JOURNAL and the Quakertown, Pennsylvania FREE PRESS also utilized several of these shorts.

EVEN IN CAROLINA

The Greensboro, North Carolina RECORD, August 9, carried an Institute story with by-line credit, "Experts Advise That Bluegrass Be Seeded Now." " - - A good seed mixture can be planted in spring, too, but autumn has advantage enough to make it generally first choice. - - Lawngrass must fight for space and sustenance. Kentucky bluegrass, fine fescues or Highland bentgrass gain an advantage over weeds from autumn planting - -."

KANSAS CITY COVERAGE

Mary Hobbs, Garden Editor for the Kansas City, Missouri STAR adaptod part of her column ("This Is Lawn Work Time") from Institute releases. Concerning fertilization at time of seeding she has this to say: "Several lawn experts of the area and the Lawn Institute have become convinced that application at the same time is practical because rains and watering will wash the fertilizer into the soil ready for the roots to be nurtured when the grass does germinate."

She then continues: "Kentucky bluegrass, or combined with the fine fescues such as Chewings, Illahee, Pennlawn, Rainier and Creeping Red, provides excellent turf if kept moist through the germination period. - -"

She also used a Lawn Institute photo (showing fescue plant and Kentucky bluegrass plant) with this caption: "BEST FOR AREA LAWNS is Kentucky bluegrass, with fine fescue as a combination planting. The basic similarity in the fine fescue (left) and the Kentucky bluegrass is noted here. Stringy side shoots on the bluegrass are rhizomes, underground stems that spread and knit a sod second to none, the Lawn Institute comments."

PRESS KIT FILLERS SUCCESSFUL

Wide use has been made of the short statements in the press kits concerning the Lawn Institute, and the grasses it represents. A number of the fillers which have received heavy usage are:

"PARK BLUEGRASS. Park Kentucky bluegrass is a 'synthetic variety', says the Lawn Institute. Park, noted for its seedling vigor, is derived by planting together a dozen Kentucky bluegrass strains selected by the University of Minnesota."

"Crabgrass needs hot weather, points out the Lawn Institute. If Kentucky bluegrass and fine fescues are urged to thick, full growth in the cool of early spring (when these good grasses flourish), through fertilization and high mowing, crabgrass won't stand much chance."

"MILLIONS PER POUND. There are about 7 million seeds to the pound of Highland bentgrass, the most among good lawngrasses. Kentucky bluegrass has over 2 million seeds to the pound."

"A lawn is a blessing not a burden, points out the Lawn Institute. The lawn adds value, points up landscaping, keep grime from the door, affords play space and summer 'air conditioning.' A few pounds of a bluegrass seed blend and occasional mowing is small price to pay for all this."

"There is a trend to labeling lawn seed 'fine-textured' or 'coarse king,' notes the Lawn Institute. Many states are starting to require this labeling. The fine-textured, quality grasses include the bluegrasses, fine fescues, bentgrasses and a few specialty species."

"A lawn seed is one of the world's biggest bargains, notes the Lawn Institute. A Kentucky bluegrass seed costs only a few one-hundred-thousandths of a cent; yet it has the potential to cover a sizable portion of lawn with one of the most attractive ground covers known."

"A quality seed mixture based upon Kentucky bluegrass and the Oregon fine fescues needs no help from nursegrasses in autumn, the Lawn Institute points out."

"Kentucky bluegrass is one of man's more durable plantings, notes the Lawn Institute. In Kentucky and the Midwest sods of Kentucky bluegrass as old as the memory of white man are still producing commercial seed for modern lawns."

"Lawngrass is the biggest 'agricultural' enterprise in several states, says the Lawn Institute. Under heavy urbanization the value of the lawngrass comes to exceed that of the leading agricultural crops."

"Fine fescue is good for shade, notes the Lawn Institute. Fine fescues make excellent companions for Kentucky bluegrass in lawn seed mixtures, because they are able to survive well on dry soils in the shade."

"Highland bentgrass, with 7 million seeds to the pound, can best be sown with a well-engineered lawn spreader, notes the Lawn Institute."

"Are you buying trouble in a pretty box, queries the Lawn Institute? When buying lawn seed look for the required content listing on the label. For northern climates lawn seed mixtures should have mostly Kentucky bluegrass, and such fine fescue varieties as come from Oregon."

"Kentucky bluegrass, and its fine fescue companions of better lawn mixtures, may stay green until after Christmas. The severity of winter is determining, but in mild winters of latitudes approximating Saint Louis, bluegrass lawns may retain a touch of green all through the colder months."

"Autumn proves an excellent time to reduce Highland bentgrass cutting slightly, says the Lawn Institute. In autumn the Highland revives quick to a thick, rejuvenated turf."

"Bluegrass, fine fescues and bentgrasses benefit most from autumn feeding, according to the Lawn Institute. These elite lawngrasses grow best when the weather is cool."

"The Lawn Institute notes that 'energy' available to lawngrass seedlings comes initially from the seed. This is one reason why fine fescues make an excellent 'starter' in quality seed mixtures."

"The Lawn Institute points out that Park bluegrass is marketed only under high standards of purity and germination. The variety, a frequent component of good lawn seed mixtures, is known for its ability to sprout quickly."

"The Lawn Institute notes that even though fertilizer is applied at the same time bluegrass lawns are seeded, no injury will result. The fertilizer is sufficiently dispersed by rains and watering, make the grass seedlings grow more rapidly once seed has sprouted."

"The Lawn Institute points out that Park variety of Kentucky bluegrass, produced in northern Minnesota, works out well for winterseeding in the deep South because it sprouts so quickly."

"While versatile lawn seed mixtures contain fine fescues as well as Kentucky bluegrass, it is the vaunted ability of bluegrass to spread by rhizomes that makes bluegrass seed mixtures especially useful, notes the Lawn Institute."

"Either bluegrass-fine fescue, or Highland bentgrass turf, is good for formal landscaping, if kept neat and trim, believes the Lawn Institute. Hedges, borders and beds should be clipped in precise geometrical pattern."

"The difference between the fine or lawn fescues and the tall or hay-type fescues is critical in lawn making, notes the Lawn Institute. Purchase lawn seed mixtures that contain Oregon fine fescues such as Chewings, Illahee or Pennlawn - not coarse field fescues such as Alta and Kentucky-31."

"The fine fescues in quality lawn seed mixtures are fast sprouting, notes the Lawn Institute, but a mulch and regular watering cause new plantings to sprout more surely."

"The Lawn Institute points out that the deep green color of lawns is enhanced by generous use of lawn fertilizer."

"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."

"The Lawn Institute notes that without a first-class lawn, such as comes from planting good bluegrass seed, that neither foundation planting or rose and shrub beds look their best. To frame next year's ornamental plantings well, start the lawn program now."

"The Lawn Institute suggests that the sprouting of good seed mixtures containing Kentucky bluegrass can often be hastened by covering the new seeding with transparent plastic to prevent drying out."

"The Lawn Institute says that Kentucky bluegrass, famed component with fine fescues in quality lawn seed mixtures, likely reached American shores with the first immigrants."

"New York has declared annual bluegrass a weed. Don't confuse annual bluegrass with famed Kentucky bluegrass, including varieties such as Park, Arboretum and Merion, says the Lawn Institute. Kentucky bluegrass is perennial, persistently attractive, an outstanding lawngrass."

"The Lawn Institute suggests that when scuffs or bare spots need reseeding, see that Kentucky bluegrass-fine fescue mixtures are not encumbered with much annual ryegrass that sprouts quickly but dies quickly too."

"Lawn seed containing fine fescues, such as Chewings, Illahee and Pennlawn varieties, are excellent for dry, shady situations, notes the Lawn Institute."

"Not everyone can remember the names of appropriate varieties in top lawn seed mixtures, notes the Lawn Institute, but it is easy to insist upon the major species they represnet. Kentucky bluegrass is represented by such well-known varieties as Park, Arboretum, and Merion, while the fine or red fescue species includes Chewings, Illahee and Pennlawn varieties. Highland is the bentgrass most used for lawns."

"Highland bentgrass makes superlative lawns in seasonally moist climates such as coastal Oregon-Washington, around the Great Lakes, and in parts of New England, says the Lawn Institute."

"The Lawn Institute points out that with better lawn seed mixtures containing fast-sprouting grasses such as the Oregon fine fescue and Park Kentucky bluegrass, there is little call for interfering 'nursegrass'."

"The proven northern lawngrasses, such as Kentucky bluegrass, fine fescues and Highland bentgrass, all stand up to weed killers well. It's no great trick to take dandelions and chickweed out of such turf, says the Lawn Institute."

"There is a difference between 'grass' seed and 'lawn' seed. Bargain seed is never a bargain if it contains coarse or impermanent grasses, instead of quality seed types such as Kentucky bluegrass and fine fescue."

"Highland or colonial bentgrass is easier to care for than creeping bentgrasses, says the Lawn Institute. The more erect growth of Highland keeps it from building up a thatch so quickly, lessens the need for thinning and special pampering."

"The savor of the barbecue seems greater, notes the Lawn Institute, if the lawn about the patio is first-class. Only seed mixtures containing Kentucky bluegrass and fine fescues - or Highland bentgrass - provide fine-textured turf that thickens and is permanent."

"Bluegrasses, fine fescues and bentgrasses benefit most from autumn feeding. These elite lawngrasses grow best when weather is cool, and make best use of fertilizer from autumn through spring."

Among the newspapers in which these have appeared, in some occasions repeatedly, are: Newark, New Jersey NEWS; Ann Arbor, Michigan NEWS; Midland, Michigan NEWS; Owensboro, Kentucky MESSENGER-INQUIRER; Albany, New York TIMES-UNION; Hartford, Connecticut TIMES; St. Paul, Minnesota PIONEER PRESS; Pittsburgh, Pennsylvania PRESS; Saginaw, Michigan NEWS; Lexington, Kentucky HERALD; North Tonawanda, New York NEWS; Kenmore, New York RECORD-ADVERTISER; Muncie, Indiana STAR; Charleston, Illinois COURIER-NEWS; South Bend, Indiana TRIBUNE; Portland, Maine TELEGRAM; Columbus, Ohio DISPATCH; Kansas City, Missouri STAR; Newark, Ohio ADVOCATE; Lansing, Michigan STATE JOURNAL; Wausau, Wisconsin RECORD-HERALD; Cincinnati, Ohio ENQUIRER; Davenport, Iowa MORNING DEMOCRAT; Fresno, California BEE; New Brunswick, New Jersey HOME NEWS; Sheboygan, Wisconsin PRESS; North Kansas City, Missouri NEWS DISPATCH; Champaigne, Illinois NEWS-GAZETTE; Fargo, North Dakota MORNING FORUM; Leominster, Massachusetts ENTERPRISE; Manitowoc, Wisconsin HERALD TIMES; Augusta, Georgia HERALD; Zanesville, Ohio TIMES RECORD; Lock Haven, Pennsylvania TIMES; Springfield, Missouri LEADER & PRESS.

WHAT THEY ARE SAYING ABOUT THE INSTITUTE AND ITS RELEASES

"Your cooperation and efforts - - on behalf of our readers are appreciated, Bob. Hope to see you soon."

Charles D. Webb, Editor
Weeds and Turf Pest Control Magazine

"I'm confident that the information that you have provided will be of immense assistance to my company in establishing the method of hydraulic seeding in this country."

Francis J. Bellingham
Kentish Landscapes Ltd.
Kent, England

"Dear Bob: If you will read the enclosed clippings from this morning's edition, you will note that I already have dug deep into your fall press kit."

Art Kozelka, Garden Editor
Chicago Tribune

"Enclosed find a copy of your article which you so generously sent us. Thanks a million, it was really good. See where you are on the program at the Garden Center - that's good, too."

Lester E. Satterlee, Garden Editor
Dispatch papers
Kansas City, Missouri

"Thank you for your recent letter and sending me the reprints of your article on "Beat the Bugs." We look forward to receiving other stories that you are writing - -."

Robert E. Lucas
Ansul Chemical Company

"I read all the articles on lawns in three or four garden magazines, and I think yours in the September Flower Grower is best - -."

Fred A. Harms
Detroit, Michigan

"Thank you most sincerely for your information- -had some Italians cut my lawn. They also brought in the weeds - - Meantime thank you again for your kindness."

J. D. A. Morrow
Sewickely, Pennsylvania

"I would appreciate being able to call upon you as a reliable source of information on when and how to - - care for lawns."

Aileen Snoddy
Newspaper Enterprise Association

"I was very impressed with your talk at the GIRD Conference and would appreciate (being) put on your mailing list. I can promise you that your material will reach our garden editor."

C & P Garden Center
Madison, Wisconsin

"I have been reading your popular articles in the rose magazines and other garden periodicals. They are interesting. Thanks for the reprints from time to time. No doubt, through your efforts, the grass seed market will be bigger this year."

Dr. R. W. Prevatt
International Minerals & Chemical Corp.

" - - The reprints sent us recently are most interesting. I am particularly interested in the one from Seedsmen's Digest entitled 'New Look For Winter Turf.' If the South does start using the fine-leaved grasses to a greater degree, it could be good for everyone in the industry. The report was quite encouraging."

G. O. Newton, Vice President
Consumer Products
Northrup-King & Co.

"We certainly are indebted to Bob Schery over the years for representing the ASTA in our relationships with the Ohio Short Course."

William Heckendorn, Executive Secretary
American Seed Trade Association

"I want to compliment you on your book entitled OUTDOOR BEAUTY. You have certainly put a lot of wonderful information in a compact manner; and the book should sell readily to the many interested people in gardening and lawn care."

J. G. Peppard
Peppard Seeds

"I have read with interest your article which appeared in the September issue of Weeds and Turf. - - I would like to get a number of reprints of your article."

Robert E. Lucas
Ansul Chemical Company

PRESS QUOTES

"A seed mixture high in Kentucky bluegrass or of its variants - - is much to be preferred if the soil is moderately fertile and there is not much shade. If the soil is very poor or if shade is a problem, a mixture high in red fescue might do better - -." - Staten Island, New York ADVANCE

"For best results in sunny locations, use Kentucky bluegrass. A mixture of 50 percent Kentucky bluegrass with the balance of fescue is desirable. For shady locations, use 75 percent creeping red fescue and the balance Kentucky bluegrass." - Duluth, Minnesota NEWS - TRIBUNE

"Here in the Midwest bluegrass-fine fescue lawns are able to survive out hot, dry summers with reasonable care. - - Desirable red fescues that are coupled with Kentucky bluegrass seed are varieties such as Creeping red, Chewings, Illahee, Pennlawn and Rainier." - Kansas City, Missouri STAR

"Buy high quality seed, preferably a bluegrass-fescue mixture." - New York, New York TIMES

"- - use only a mixture with not less than 70 percent of the permanent grasses, Kentucky bluegrass, fescues and bents, - . There are many more seeds to the pound of these good grasses than with the coarser-seeded sorts - -." - Ann Arbor, Michigan NEWS

"Before grass seed is purchased be sure to read the fine print on the label. Kentucky bluegrass is one of the best grasses - - in this area - -. Some fescues, such as Pennlawn, Chewings, and Illahee, make excellent lawngrasses. Kentucky-31 is not a bluegrass but a coarse fescue which is not satisfactory." - Martinsburg, West Virginia JOURNAL

"If possible, sow seed to produce the same kind of grass now in the lawn or an all-purpose 50-50 mixture of Kentucky bluegrass and red fescue such as Pennlawn, Illahee - -." - Hackensack, New Jersey RECORD

"It's not too soon to begin thinking about a new fall lawn. Bluegrass does best when the days are warm, the nights cool, the kind of weather we enjoy in September. It's mighty hard to beat a Kentucky bluegrass lawn - -." - Goodland, Kansas NEWS

"There are many Kentucky bluegrass varieties available, and a mixture of some of the better varieties might offer some advantages - -. Fine feacue varieties such as Chewings, Illahee, Pennlawn and Rainier are excellent companions in the mixture as they sprout quickly and thrive in shaded areas." Newark, New Jersey NEWS

"In most parts of Idaho, Kentucky bluegrass is the most dependable turfgrass." Idaho Falls, Idaho EVENING POST REGISTER

"A mixture high in percentages of permanent grasses recommended for New Jersey conditions such as Kentucky bluegrass and - - red fescue and low in - - ryegrasses is one worthy of use on your lawn." - Passaic, New Jersey HERALD-NEWS

"Kentucky bluegrass and fine fescues - - have been long established as the best for northern lawns. Bluegrass contains about 2 million seeds to the pound, and fine fescues, a half million or more." - Muskegon, Michigan CHRONICLE

"- - Kentucky bluegrass still gives the best Nebraska lawns." - Lincoln, Nebraska EVENING JOURNAL

"Buy the best mixture you can afford. Cheap mixtures contain nursegrasses - and these make the place look like an abandoned - - pasture the second year." - Portland, Oregon OREGON JOURNAL

"Even if the lawn is seeded too late for autumn sprouting, seeds will not be harmed lying dormant in the lawn through winter, according to the Lawn Institute." - Salt Lake City, Utah DESERT NEWS

" - - why risk it with anything less than the best seed. A Kentucky bluegrass-fine fescue blend can be neatly spread - - the abundant seeds of Highland bent are adequate at 3 lbs. per M or less." - Willoughby, Ohio NEWS HERALD

"Kentucky bluegrasses and fine fescues were the best grasses." - Mullison, Ann Arbor, Michigan NEWS

"Red fescue should be mixed with Kentucky bluegrass to blend into those worn spots in the landscaping." - Syracuse, New York HERALD AMERICAN

"Other bluegrasses, fescues and similar permanent grasses make excellent combinations." - Swenson, NEA

"Both Kentucky bluegrass, and the fine fescues, prime grasses of quality seed mixtures, grow to some extent right through winter." - Muscatine, Iowa JOURNAL

"(Broadleafed fescues) are coarse, bunchy-type grasses that have no place in the lawn." - Minnesota HORTICULTURIST

"The Lawn Institute points out that Park bluegrass is marketed only under high standards of purity and germination. The variety, a frequent component of good lawn seed mixtures, is known for its ability to sprout quickly." - Ann Arbor, Michigan NEWS

" - - be sure to avoid cheap grass seed mixtures. They contain grasses such as rye, totally unsuited to making a lasting, suitable lawn." - Portland, Oregon JOURNAL

"Natural Kentucky bluegrass makes an excellent base into which Oregon fine fescue and selective bluegrass varieties can be mixed for an all-around quality seed mixture, notes the Lawn Institute." - Lexington, Kentucky HERALD

" - - the height of cut should be determined by the kind of grass in the lawn or the predominating grass in the seed mixture used to make the lawn. Thus Kentucky bluegrasses, except Merion, should be kept $1\frac{1}{2}$ inches long - -. For the fine-leaved fescues like Illahee or Pennlawn, the mower should be set for $1\frac{1}{4}$ inches. Highland bentgrass needs a cutting height of $1\frac{1}{4}$ inches - -." - Appeared in over 70 Illinois newspapers.

"A mixture that will produce an attractive long-lasting lawn contains a high percentage of Kentucky bluegrass - and one of the red fescues. - - The red fescue includes Pennlawn, Illahee, - creeping red or Chewings." - Hackensack, New Jersey RECORD

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