

BETTER LAWN -- HARVESTS

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NEW OFFICERS ELECTED

Election of Institute officers for the 1968-69 fiscal year witnessed a passing of the gavel from the Mid-west to Oregon. The slate of new officers elected at the Salem, Oregon annual meeting are all Oregonians, -- Mr. James Carnes of W. R. Grace and Company, president; Mr. James Jenks of Jenks-White and Company, vice president; and Mr. Howard Mader, chairman of the Highland Bentgrass Commission, secretary-treasurer. Mr. Carnes had been vice president during the previous fiscal year. Retiring officers Edward Mangelsdorf, immediate past president, and Roy Edwards, Jr., secretary-treasurer for many years, remain as board members.

Other board members re-elected or newly elected include, in addition to those named above: Homer Case, Oregon Fine Fescue Commission, eastern Oregon; Amos Funrue, Oregon Fine Fescue Commission, western Oregon; Arden Jacklin, Merion Bluegrass Association, Washington; Paul Jensen, Penncross Bentgrass Association, Willamette Valley; Willard McLagan, Pacific Northwest Bluegrass Association, western Oregon; Gordon Newton, Northrup-King and Company, Minneapolis; and Col. Edward Spears, Woodford Spears and Company, Kentucky.

INSTITUTE ANNUAL MEETING HELD IN SALEM, OREGON

For the first time in its twelve year history the Better Lawn and Turf Institute held its annual meeting away from Kansas City, Missouri. To satisfy by-law requirements, the meeting was "convened" in Kansas City by the executive committee during May, recessed and reconvened at Salem, Oregon, June 17, this action ratified by the full board. The two day meeting in Oregon was one of the most informative and exciting ever held by the Institute. Monday, June 17 was concerned with business matters, informational presentations, and excellent talks at both a luncheon and an evening banquet. Tuesday, June 18 was devoted to a tour of the seed producing areas, with visits to important farms, cleaning plants and research centers.

The board was greeted on Monday morning at the opening of its deliberations, by Governor Thomas McCall of Oregon, who spoke briefly of Oregon's interest in things agricultural, and the state's efforts to maintain an uncontaminated outdoors. Jay Glatt continued the cordiality, with a welcome from the secretary of agriculture and his personal encouragement of the Institute.

Deliberations during the day centered chiefly upon matters of policy and support. Mr. Mangelsdorf expressed his satisfaction with performance of the Institute through the year, and various trustees offered their views, comments and compliments. Mr. Mangelsdorf indicated that he would not be available for re-election (see item on election of officers).

Institute director, Dr. Robert Schery, was called upon for his review of activities for the year. His report is given in full as a subsequent item. Several exhibits were displayed to the board, and circulated among an "audience" of interested growers who this year attended the open board meeting. Predictions were of continuing ample seed production, all areas considered.

A conducted tour of the seed producing areas was undertaken in chartered bus (supplemented with private automobiles) on the second day of the meeting. The fine producing farms of Bill Rose, Lud Hagen, Bill Tucker, Don Jaquet and Eddie King were visited during the morning, with county agents Hollis Ottaway and Clive Cook being tour guides. In the afternoon there were stops at the Hyslop experiment station (with informative discussions from the Crop Science staff), and stops at the producing fields of the Smith Brothers and John Miller in Linn county under direction of Oscar Mikesell, county agent of Linn county. An excellent luncheon was served at the King Brothers cleaning plant, and an evening barbecue at the Bowers Fertilizer plant of the W. R. Grace and Company. The Institute is especially indebted to the Oregon Highland Bentgrass Commission, the Oregon Fine Fescue Commission, the Pacific Northwest Bluegrass Association, the several county agents, and the tour committee that included Bob Humphreys, Bill Rose and Gordon White, for making this an outstanding day.

STORY IN HORTICULTURE MAGAZINE

"Summer Care of Lawns", done for Horticulture magazine by Dr. Schery, with by-line for the Lawn Institute, appeared in the July issue. It is always a privilege to have a presentation in Horticulture, official publication of the Massachusetts Horticultural Society, and perhaps the most authoritative of the popular gardening magazines. The story is being reprinted for circulation to members. It opens extolling fine turfgrasses, viz. "For Kentucky bluegrass and the fine fescues, backbones of the lawn from the border states northward, summer is the doldrum season. Highland bentgrass becomes ---".

SALES STAFF BRIEFED

Dr. Schery devoted the full day, June 24, to a "workshop" on lawns for benefit of the staff of the lawn products division of the Borden Chemical Company. Borden is a helpful supporter of the Institute, and a user of the Lawn Institute Seal of Approval. This is the first year that Borden has adopted a seed line, and it is of a special interest to sales personnel to learn more about turfgrasses, quality factors of lawn seed, and proper maintenance for achieving best results with the fine-textured lawn seed varieties.

STORY REPRINTED

"Turfgrass -- America's 'Growingest' Crop", appearing in a recent issue of Better Crops With Plant Food, was reprinted for general distribution through the Institute. Reprints have been circulated to all members. The story opens with a resume of the rise and importance of the lawnseed industry, depicts zones where northern and southern grasses are appropriate, and lists the various species by variety for those zones. It is anticipated that there will be continuing and steady demand for this informational item, easily handed out and used as a stuffer.

DR. SCHERY'S REPORT TO THE LAWN INSTITUTE ANNUAL MEETING, 1967-68

I could very nearly present to you today the same report given in Kansas City, May 23, 1967, except that the squeeze on expenditures has continued causing some additional retrenchment, especially in the use of outside services. In particular we have had to abandon use of the clipping service this spring, thus omitting a direct comparison with other years of acceptance of the spring press kit; and we have had to undertake production of the press kit itself in Marysville, with some slight consolidation of the mailing.

On the other hand, I think that the influence of your Institute in its intended purpose of encouraging use of and mention about quality turfgrasses continues unabated. In terms of public acceptance the monies that are spent constitute rare bargain as public relations activities go. Those of you who have taken time to peruse Harveys, our quarterly newsletter, have noted 97 pages of details representing widespread contacts and coverage during this last fiscal year. There is no way of putting a dollar value on influence, but I think that our presence has been felt in many direct as well as subtle ways, and that our "image" is a credit to the lawnseed industry and a force for increasing its respect. Many organizations with multiple staff members, and budgets of hundreds of thousands of dollars, do not achieve the "reach" that does your Institute. In a letter to a member I commented that the Pennsylvania Turfgrass Association alone provides the agronomy department at the University of Pennsylvania with about five times the Institute's entire budget solely as supplementary support for research activity already tax-supported.

In keeping with past policy the Institute during the year engaged in two main activities, -- the preparation of stories for the technical and popular press, and the issuance of seasonal press kits for editors and newspapers. Both continue quite successfully.

Stories or articles for which the Institute was responsible are listed in Table I, totaling over 45 items. There is considerable diversity in length, type of magazine, and audience, -- but not in the thrust (which always mentions quality turfgrasses by name, and recommends their use in lawns). For those new on the board I should say a word about the objectives of this approach.

Of course we are first of all reaching the reading audience of the particular publication, at no cost to the Institute either for type setting, mailing, or other forms of contact. I believe that if the office were maintained for this activity alone, the present budget would be well spent.

However, there are concomitant advantages, too. In effect, the various publications subsidize the Institute's program by paying the major cost of printing, - type setting. Once published, almost all stories can be inexpensively reprinted through offset or similar photocopying means, and issued to members and a host of contacts for further "spreading of the good word". Approximately 23,000 reprints were procured during the year for economical secondary dissemination, such as through members, as envelope stuffers, for inclusion in press kits, for handouts at conventions and speaking engagements, by sales forces of interested firms, for give-away by columnists, and other similar purposes. Were we to compose and have all of this lineage printed ourselves, without the editorial help of the magazines, our budget would be depleted in a relatively short while.

And there are more subtle implications. The printed word has much greater authority used editorially (such as in these stories) than if appearing as advertising. In effect the magazine puts its stamp of approval upon the information.

TABLE I

"Have a Lawn You Can Plan On"; American Home
 "Seed and Feed to Hex the Weed"; American Rose Annual
 "Turfgrass, the Nation's 'Growingest' Crop"; Better Crops with Plant Food
 "Fertilizer Has Many Uses", "How to Start a New Lawn in the Spring"; Better Turf
 and Garden
 "Turf Preparation for Summer Heat", "Summer Solitude for Your Turf"; Building
 Maintenance
 "Give Lawns Fall Care", "Is Your Lawn Maintenance Up-to-date"; Buildings
 "Seeded Fairways", "Bluegrass", "Shade Trees"; The Bull Sheet
 "The Spring Lawn Program", "Lest Hunger Haunt Your Lawn"; Fertilizer Solutions.
 "What Happens to the Best Bluegrass Lawns", "Lawnsman's Choice", "In Step With the
 Season"; Floral Magazine
 "In Praise of Unpampered Turf", "A Stellar New Bluegrass"; Flower and Garden
 "Answer to Home Garden Questions on Early Spring Lawn Care", Flower Growers
 "Select Seed Wisely", Golf Superintendent
 "Summer Care of Lawns", "Label's the Clue to Lawnseed Quality", Horticulture
 "The Seedy Side", "Sponsored by Seed", Lawn Equipment Journal
 "Quackgrass Can be Controlled" Lawn, Garden and Outdoor Living.
 "Lawns Fight Pollution"; Mass. Turf & Lawn Grass Council Bulletin
 "Lawn Time", "Quick Lawn Renovation", National Farm and Home.
 "Revitalizing Bluegrass Lawns"; Parker
 "Low But Not Lightweight", "Tools of the Turf Trade", "Essentials for Lawn Care";
 Resort Management Magazine
 "Lawns Thrive in Autumn", "Turfgrass Breeding Comes of Age"; Seed Trade News
 "Lawn Fescues Check Weeds", "The Virtues of Bentgrass", "Bluegrass Stands Guard",
 "Red Fescue True Blue", "All-American Lawns", "Chemical Lawn Edging", "Thatch
 Removal", "Fine Fescue as Roadside Grass", "Bluegrass in the Yard by the Yard",
 "Fescues for Woodlands", "Stop Crabgrass"; Seed World.
 "Cue for Bluegrass Sales"; Turf and Garden Topics
 "Weed Turf With Fertilizer"; Weeds, Trees and Turf

While not everyone agrees with what an author says, at least suspicion of bias is not so great as would be the case with paid advertising. Thus editorial space is the finest kind of "advertising" the industry could possibly procure. Moreover, having this volume of coverage in many respected outlets, parties ignorant of the Lawn Institute itself feel "there must be something to it". Reprinted stories back up our releases in the press kit, improving credibility there. And many a correspondent considers more carefully suggestions given in a letter if these are supported by a printed summation under the signature of an authority who has contributed to books and magazines. One can't exactly put a finger on what creates a good impression, but I feel that the Institute's "image" is one of its more important assets.

Perhaps I should mention that we are noting some change in the magazine publishing field, which may limit the traditional approach in the years ahead. The number of publications in the gardening field seems to be narrowing, and some are being diverted from gardening alone in the direction of related interests. As businessmen you are aware that there is considerable merging and consolidation of the major publishing houses; and that some famous empires such as Curtis Publishing Corporation (American Home, Saturday Evening Post, Ladies Home Journal, etc.) are on shaky ground. Others have de-emphasized gardening. "Popular Gardening and Living Outdoors"

(Holt, Rinehart, and Winston, Division of CBS), for example, is now a folio-sized quarterly with only "Outdoor Living" readily visible in the title. We have had occasional stories in both of these publications, but future opportunities appear doubtful here and in other areas of retrenchment. There is a trend towards greater use of color, elaborate art work and other expensive accouterments. A number of editors seem to be taking a harder stance about devoting expensive space to stories about matters so routine as lawn keeping.

In previous annual reports acceptance of our press kits was reckoned as column inches of clippings verified by the Luce Clipping Service. Through the years we have witnessed a gratifying increase from only a few hundred column-inches of space a decade ago, to many thousands in recent years. Of course were this space engaged at newspaper advertising rates, the billings would quickly end Institute solvency. And the same advantage exists for editorial over advertising space in newspapers as was cited for magazines. I am satisfied that the press kits of the last fiscal year were well received, although direct comparisons with other years is possible only for autumn; this spring, for financial reasons, we abandoned the clipping service.

In keeping with rising costs everywhere, both the monthly retainer and the unit clipping charge were again raised in 1968, and the service insisted upon a 3 months minimum contract (which would have resulted in voluminous clippings the cost of which would exceed press kit production). In great measure because of the Institute's own example issuance of lawn releases has become very popular, especially by extension services of state universities (in several cases our materials are used or adapted). Thus there is a great increase in such key words as "Kentucky bluegrass", "Oregon fine fescue", and "Highland bentgrass", with no good way for a clipping service reader to distinguish which occasions are of interest to us and which might be skipped for economy. Syndicated columns such as that of Earl Aronson, built entirely of Institute releases and crediting the Lawn Institute, appear in hundreds of papers in almost all states; each time such a column appears and is spotted by a reader there is a 20 cent charge (and additionally the monthly retainer of \$40). As desirable as the clipping service is, obviously it is not for a penurious budget.

Because a number of kit recipients send in tear sheets, we are pretty sure that the spring kit received equally as much or more acceptance as did that for last year (9,233 column inches in 1966-67). We did retain the service for one month last autumn, and 4,000 column inches directly attributable to the Institute were tallied there. This was about 800 column inches in excess of the previous year, but of course autumn volume nowhere approaches that of spring when gardening interest heightens and clippings are received over a longer span. I feel fairly certain that were we to have retained the service, and use the same key words as in the past, upwards of 10,000 column inches would have been tallied. Examples of some of the unsolicited usages that have been mailed into the Institute are given on Table 2.

The Lawn Institute is indebted to a number of nationally syndicated columnists, who not only utilized Institute materials but consult with and credit the Institute publicly. You have seen reference in Harvests to such names as Aronson, Abraham, Gray, Harrison, and so on. Mrs. Floyd Sapp, Cedar Rapids Gazette; Irma Bartell, The Cleveland Plain Dealer; Herbert Campbell, The Harrisburg Evening News; Ellis Rawnsley, The Cincinnati Enquirer; Margaret Crooks, Station WJLK; Fred Dale, The Toronto Star Limited; Alice Dustan Kollar, The Newark Sunday Star-Ledger; Virgil Baker, the St. Louis Post Dispatch; Irwin Jones, Columbus Dispatch, etc., have all

Grasses Render Services Far Beyond Covering Lawn

By ROBERT W. SCHERY
Director, Lawn Institute

You'll get little argument that there is any carpeting so attractive as Kentucky bluegrass or bentgrass around home. But did you ever to consider all the other uses of fine lawngrasses besides looking beautiful

side the window are constantly replenishing the oxygen supply.

LAWNS ARE biologically active.

The Cedar Rapids Gazette: Sun., Apr. 14, 1968

Lawn Mowing By Chemicals Questionable

Dr. Robert W. Schery
Director, Lawn Institute

Yards that don't look shaggy weeks, golf fairways that clipping only once in highway berms left undisturbed. Such has been the dream of choice of Kentucky fescue

known. Probably most used is maleic hydrazide, sometimes sprayed along highways, and to keep seedheads from forming on bahia lawns in the South.

Other chemicals such as phosphon, CCC, etc., have proved able to stall grass growth. The spray is absorbed, affecting growth of the whole plant; it does not simply "liquify" the foliage it hits. These treatments work experimentally. Why not this panacea for lessening home mowing?

The reasons are several. First, chemical sprayings are not inexpensive. They must be precisely done with first rate equipment. This usually calls for stand out, as scorched spots, with treated grass as a taller

Columbus Dispatch
SUN., MAY 12, 1968
GARDENS

Research confirms that the effectiveness of many herbicides is improved if accompanied by fertilizer. This emergence crabgrass preventers used on bluegrass lawns. Tests show them to be more effective combined with nutrients.

Spring Is Perfect Time To Start Seeding Lawns

The urge to get into action outdoors is never stronger in a garden after a dreary winter indoors. Since the lawn involves much care, we might as well face reality and begin on our lawn calendar with March, when interest starts.

EDING. Seed as early as possible in spring when the soil is cold, and the weather is overcast, germination will begin in the seed and it will root more quickly when warm weather does arrive. Under ideal conditions such as the low 60 degrees, Kentucky bluegrass can sprout in as little as four days; fine fescues in perhaps three.

It would take another week before you could see appreciable growth from the first leaf popping out of the coleoptile. With an actual lawn the "man in a hurry" is very much at the mercy of the weather, and prevailing conditions far overshadow variations in seedling differences.

SOD AND SOIL. In spring, before there is new grass to damage, it is a bad idea to clip the lawn very close. Sun penetrates to the soil, warming it, and off-color lawn might have a cheery green look a week before the neighbor's.

Removal of accumulated duff (good for the compost pile) is especially helpful to bolster new seed from reaching the root zone. Early spring is a good time to remove old grass (or your own gusto at the end of a rake), because the scars from your effort will not show for long amidst reviving sod.

It's not possible to detail all the steps for planting a lawn. Common sense may be the best guide. The objective is to create a lawn that is healthy and attractive.

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How To Create Magic

ST. LOUIS POST-DISPATCH

SUNDAY, MARCH 24, 1968

Columbus Dispatch
SUN., MAY 12, 1968

The LAWNS Institute permits packagers to utilize its Seal of Approval if the seed blend is at least 75% fine-textured grasses that are perennial and spread well. Most blends containing "co

Lawn Fertilizer Research Shows Significant Progress

By ROBERT W. SCHERY
Director, Lawn Institute

One of the three fundamentals for an acceptable lawn is fertilization (the other two are fine-textured grass and proper mowing). Recent years have seen remarkable progress towards providing especially designed modern fertilizers. They have followed burn if directly applied. They are neither smelly, nor do they distribute unevenly.

Agromony Society center upon potassium. It was shown that sufficient potassium (the exact percentage would vary with soil) increases the hardness of grasses tender to cold. It also helps prevent disease, and makes the leaf less flammable.

WITH RESEARCH of this sort under way, homeowners can anticipate lawn fertilizers that are not only convenient, but essentially perfect. One leading manufacturer even offers a special "Winter Survival" formula.

Spring Is Time To Weed, Feed Lawns

Dr. Robert W. Schery, lawn institute director, says that early in spring, often down to 1/2 inch, is the best time to mow. A sudden want to get close mowing nearly with their better hardiest overseeding with lawn. Especially in cases of old grass, a good time to remove old grass (or your own gusto at the end of a rake), because the scars from your effort will not show for long amidst reviving sod.

Don't Scold Or Fine Fescue

Dr. Robert W. Schery, lawn institute director, says that early in spring, often down to 1/2 inch, is the best time to mow. A sudden want to get close mowing nearly with their better hardiest overseeding with lawn. Especially in cases of old grass, a good time to remove old grass (or your own gusto at the end of a rake), because the scars from your effort will not show for long amidst reviving sod.

been personally in communication with the Institute during the year. George Abraham, answering questions in his "Green Thumb" column, especially strong in New York state, regularly comes to the Institute for the write-up on lawn problems. Earl Aronson, Associated Press, has been in the habit of forming occasional of his syndicated columns entirely from Institute materials.

Last year a good bit of mileage was achieved from supplying two stories and the main photograph for the "Beautify Your Corner of America" supplement, issued under sponsorship of ASTA, the Society of American Florists and various nursery associations. Ketchum, MacLeod and Grove, Inc. of Washington, D.C. handles production and distribution. It is reported that this gardening sheet was utilized in 39 states, and our clipping service verified a number of important usages of the lawn items. This year the Institute was even more favored in the supplement, being invited by Bruce Price of ASTA to prepare an even more elaborate series of stories and photos. Both the ASTA and the Lawn and Turfgrass Division of ASTA contributes to funding "Beautify Your Corner of America", but it is a "free ride" for the Institute. This year we supplied 5 stories entitled "Grass Seed Now Available For All Lawn Conditions", "You Can Grow Grass Under Shade Trees", "Pedigree Bentgrass Good for Moist Soil", "Seed Your Lawn Early", and "Kentucky Bluegrass Popular for Lawns". The latest information from ASTA (April 24) shows the supplement used by 212 newspapers located in 39 states and D.C. with a combined circulation of some 17 million readers.

As noted in my last annual report, we have found enthusiasm from radio and TV outlets for the same stories sent to the newspapers; all that we change is the covering letter. There is no way to check usages, but letters of appreciation indicate enthusiastic reception.

In an allied vein, there has been during the year occasional opportunity for personal interview with newspaper men. There come to mind particularly visits with Frank Good of the Wichita Eagle, and with Dave Sadler of the Omaha World Herald. There was also an interview for the news bureau of the University of Nebraska, to be sent all newspapers of Nebraska.

The Institute office continues to respond to telephone inquiry and correspondence. Coverage ranges from homeowner request for information to market discussions with major corporations. These contacts provide entree for Institute literature, and give us chance to emphasize quality turfgrass seed. Reprints are routinely used as stuffers in envelopes answering inquiry. Dr. Schery also serves as the lawn problem "answer man" for Better Turf and Garden magazine. This sponsored publication is dedicated to greater use of quality lawn products. As in the past press kits were supplied the State Extension Directors in Massachusetts, Iowa, and Colorado for distribution to urban county agents in the respective states. Reprints have been supplied the universities of Vermont, Maryland and Rhode Island, and the branch of Cornell University, Long Island.

Contact is maintained with the Institute's board of advisors, chiefly research personnel at experiment stations in all sections of the country. Several new advisors accepted Institute invitation this year, Dr. J. D. Butler, University of Illinois; Roy Dickens, Alabama Polytechnic Institute; Curtis Overdahl, University of Minnesota; Dr. Coleman Ward, Mississippi State College; Dr. Fred B. Ledebaer, University of Rhode Island; Dr. George McBee, Texas A & M; Harry Graves, North Dakota Agriculture College; Dr. Edward Andrews, University of Wyoming, and Mr. Dale Herman, South Dakota State University. There is not a great deal of special communication with the advisors, except when specific questions arise (such as assessment of dicamba for weed control), but all advisors are routinely mailed reprints and resumes of Institute activity.

Trade and technical meetings afford another opportunity for keeping in touch with national authorities. During the year your director appeared on programs at the University of Nebraska, Kansas State University, the University of Illinois, the American Horticultural Congress in Cleveland; sponsored evening meetings at Grand Rapids, Norfolk, and Omaha; with visits and personal conferences at the University of Maryland, Texas A & M University, Beltsville (National Turf Field Day), North Carolina State University, Rutgers University, Chicago Cemetery Officials, American Society of Agronomy in Washington, D.C. and American Seed Trade Association in New York.

Complimentary seed was provided this year in special polyethylene packets with explanatory card to all tour attendees of the Ohio State University-Ohio State Highway Dept. Short Course on Roadside Development. Also seed was arranged for Dr. Madison at the University of California, and for Dr. Evert Burt at the University of Florida, Ft. Lauderdale for winterseeding studies. Winterseeding programs were initiated with Joe Williamson, Sunset magazine, and through Paul Rowell at the College of the Desert, Indio, California. Funds were not available for a separate mailing on winterseeding to southern newspapers, but mention was made in several stories done for magazines and in regular press mailings. Recommendations on seed purchase were provided the Miami Conservancy District and the Ohio Department of Highways.

We have continued to maintain and make such additions as were possible to the photographic files. Most photos are snapped on the Marysville grounds, Kodachromes for speaking engagements by Dr. Schery, and staged photos by a professional photographer for use in stories done for magazines. Photos have been loaned for a cover picture on Seed World, in Lawn Garden and Outdoor Living, for the Ohio State University Industrial Arts curriculum brochure, the ASTA Supplement, and for special gardening inserts (in such newspapers as the Cincinnati Enquirer, St. Louis Post Dispatch, Louisville Courier, Cleveland Plain Dealer, Denver Post).

The Institute helps maintain its reputation as an authoritative source of information by distribution of and by referral to its own books, -- The Lawn Book, and the Householder's Guide to Outdoor Beauty. The former is being used in college level classroom work at least in Massachusetts, Indiana and Illinois; the latter is now out of print, but a supply of several hundred copies was secured as a reserve in a below-cost clearance by the publisher. Such copies make inexpensive give-aways for conferences. Several libraries request Institute reprints. Institute information is also regularly supplied Parks Maintenance magazine for inclusion in its summer "Turf Annual".

The Seal of Approval for lawnseed mixtures continues to be offered, as a service to members. Royalty collections are made twice annually, with the monies (less a small overhead) returnable for local advertising. One additional subscriber, the Borden Chemical Company, adopted the Seal of Approval this year. Although the amount of royalty remitted by individual subscribers is privileged information not revealed even to the secretary-treasurer, it can be stated publicly that there have been rather few claims against accumulated royalties within the last 12 months; escrow credits are generally rather small (at least in terms of the cost of modern advertising). Seven firms are currently using the Seal of Approval.

Maintenance of an experimental demonstration grounds is increasingly vital to the functioning of the Institute. This is especially needed because of the rash of new releases with which we must have at least some familiarity in order to speak authoritatively. Making plantings and using products on the grounds is the only means for becoming really acquainted with new items and procedures of current interest.

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We are grateful to the Highland Bentgrass Commission for capitalizing certain plantings some years ago, and to the Borden Chemical Company for financial support in maintaining the grounds (plus a monthly donation for office overhead). We are also very grateful to outside corporations which think highly enough of the Institute to want their equipment "in action" at the Institute. Hand mowers and an automatic irrigation system are donated by Toro; an up-to-date small tractor with mower by John Deere; dethatching and sweeping machines by Parker Sweeper; spreaders and sprayers from several sources; and various gifts of fertilizers, pesticides and other products. I emphasize once again that the Lawn Institute pays no rental or lease monies for these grounds, nor does it even underwrite shelter and storage space. Yet outdoor operations are the heart of Institute expertise, providing the distinctiveness and entree that public relations alone could not.

At the beginning of this report I mentioned the quarterly newsletter, *Harvests*. Reporting via *Harvests* continues to be one of our routine informational services to members. Not only are activities recited, but within the limits of time and space literature and new developments are reviewed as they are noted. The Institute maintains a library of small proportions, and receives most of the pertinent technical and gardening periodicals. We also try to maintain a smattering of recent books relating to lawns and allied matters. During the last 12 months it was pleasant to note publication of the McCall's Encyclopedia of Gardening, for which the Institute contributed the chapters on Lawns and on Soils. Thus we add another authoritative portion to the growing list of references that will influence gardeners for years to come. Previously we have contributed lawn summaries to Don Wyman for the Prentice-Hall Encyclopedia, the Reader's Digest Complete Book of the Garden, George Abraham's "The Green Thumb Gardening Handbook", Ralph Bailey's Gardening Encyclopedia, and various reading rack booklets on lawns; critical reviews for *Sunset* magazine of its Lawn and Groundcover Book, and for the Agronomy Society of its "Advances in Agronomy" treatment of turfgrass. We have either prepared or been instrumental in publication of informational booklets on lawns by the Missouri Botanical Garden, the Brooklyn Botanical Garden, the American Potash Institute, and others.

Our lawn zone map was redesigned during the year, and has appeared in various forms in magazines such as *American Home*, *Better Turf and Garden* (color), and *Fertilizer Solutions*; scheduled for release shortly is an up-dating of the map and lawngrass discussions done for *Better Crops with Plant Food* some years ago, and which received so much attention as a feature of their handbook on lawns ("You Can Grow a Good Lawn"). Progress was made during the year, also, on the Plant Science text which Dr. Schery is co-authoring with colleagues from Purdue University, the University of Minnesota, and Duke University, which will include sections on ornamentals and lawnseed production (Freeman Division of Crowell-Collier). During the year additional good use was made of the *Better Homes and Gardens* story of April, 1967, "How to Buy Lawnseed", with widespread distribution of this influential item in mailings and in the press kit. Dr. Schery also continues as consultant with major encyclopedias, including *Britannica*, *Americana* and *World Book*.

There are other minor activities part of the working day at the Marysville office. We cooperate with a number of commercial firms, offering opinion on products or equipment furnished for test. For example, I am grateful to the Jacklin Seed Company for seed of the promising new Fylking, and support for getting it established and photographed. Velsicol Chemical Company, Boise Cascade Building Products, Chevron Chemical, and Ezy-Do sprinkler are typical of corporations whose representatives have visited with us relative to new ideas and new products. All of these contacts are invaluable in keeping us up-to-date on trends. On other occasions we have been in a position to serve as an intermediate in arranging

sponsored research at the university level, or in directing educational sessions at sales conferences. At the University of Illinois I was fortunate to be invited to present a "Bluegrass Seminar" to the combined staff of several departments.

Especially I want to thank the officers and board of trustees for their confidence displayed through another fiscal year. Although funding may be lean, cooperation by the officers and tolerance of any mistakes we may make are not. I am especially indebted to President Mangelsdorf, and secretary-treasurer, Roy Edwards, Jr., for the time spent on routine matters and correspondence which are certainly a burden added to their busy activities. We appreciate very much, also, the cooperation extended during the year by the Oregon commissions and bluegrass associations, and the helpfulness of their agents such as Wally Hunter and Dick Kuehner. It has been a privilege to serve another year as Director of your Institute.

WITH INSTITUTE PICTURE

Appearing with the story "Put Strength in Roadside Turf" in the summer issue of Better Crops with Plant Food was a Lawn Institute picture taken of highway 25 in Ohio. We were pleased to see mention of Kentucky bluegrass for roadside seeding, viz, "The overseeding used was Kentucky bluegrass variety Park at 30 lbs. per acre."

SULPHUR INSTITUTE BULLETIN

Samuel Tisdale, vice president for the Sulphur Institute, has written Dr. Schery asking Institute cooperation in revision of their Technical Bulletin No. 12 (having to do with fertilizer consumption). The Sulphur Institute now wants to include data on fine turf acreage. It is hoped that mention of fine turf species will prove possible in this popular bulletin, with some indication of their fertilizer needs.

AUTUMN PRESS KIT SCHEDULED

The familiar autumn press kit is planned for mailing to a select list of editors and writers in mid July. As with the spring kit, production will be undertaken in Marysville as an economy measure. The stories will be reproduced in Columbus by an economical photocopying method, and additional temporary help engaged to aid with addressing, stuffing, etc. This is especially a burden on staff this year because of the annual meeting being a month later, delaying the necessary budget approval. Members are asked to be patient with delays in the mailing of items such as Harvests, press kits, reprints, and royalty statements, all of which have "bunched up" at the end of the fiscal year because of the late annual meeting and change of officers.

PHOTOS TAKEN

This spring has been a good one for lawn photographing on the Institute grounds, with ample rain May and June. At the time a photographer was engaged for taking the transparencies shown at the annual meeting the file of outdoor lawn scenes for magazine usage was also enlarged with several views of equipment in operation.

NEW JERSEY TURF RESEARCH

One of the best turfgrass research centers in one of the nation's most populated gardening areas is at Rutgers University, New Jersey. It is always good to have the annual report on Rutgers turfgrass research, such as that in Bulletin 818 for 1967.

Dr. Funk and Mr. Han open with a review of Kentucky bluegrass breeding. The authors expect greatest progress to be made from intraspecific hybridization, from elite clones already selected or on the market (Rutgers selections; Merion, Fylking, Anheuser, etc.). Techniques are discussed whereby crosses can be made that still yield a high level of apomixis. For the full cycle of making selections, proving out the crosses, and establishing seed sources, as much as 22 years might be required even on a speeded-up program that involves use of a greenhouse. The authors feel that outcome from such a time-consuming (and therefore expensive) procedure would almost surely be new bluegrass varieties superior to anything available at present, benefiting from heterosis the same as the more familiar "hybrid" crops such as corn.

Halisky and Peterson report on fairy rings in lawns, with no new recommendations. Funk, Han and Siebels continue looking closely at Kentucky bluegrass breeding methods, in "Effect of Pollen Parent on Progeny Performance and Expression of Apomixis in Kentucky Bluegrass". Some of the elite clones used in the breeding program are discussed and compared. Promising hybrids have been obtained in which the apomixis of the mother plant is largely retained regardless of the pollen source; Anheuser is especially liked as a pollen parent.

Engel and Alderfer discuss various management techniques on thatch development, over a 10 year test period with bentgrass. No method or combination was completely effective in controlling thatch, but topdressing and scarification were the best deterrents. Engel also reported a study in which high nitrogen fertilization favored puffiness in bentgrass.

Halisky, Funk and Engel report observations on "Effect of Granular Pesticides on Summer Survival of Pennlawn Red Fescue". Two phosphatic compounds (Diazinon and Zytron) were very beneficial to recovery and persistence of the fescue, although these and other compounds often caused a greater or lesser degree of discoloration of the grass.

Funk, Engel and Halisky further delve into Kentucky bluegrass breeding procedures, in their discussion of clonal evaluation of selections. To be worth considering a clone certainly must be resistant to both leafspot and stripe smut. The item is especially of interest in that promising strains are compared for quality ratings in tables I and II (of commercial varieties Anheuser was first in one test and third in another, Fylking second and fourth, Pennstar third and fourth, Merion eighth and eleventh; all other leading clones were coded selections not yet released).

Funk and Engel compared the performance of Kentucky bluegrass, perennial ryegrass and tall fescue varieties. In the table on bluegrasses, with 10 the highest possible score, Fylking rated well ahead with an average of 8.1, followed by Merion with 7.2, Campus with 6.1 and Windsor with 5.4 (and others thereafter closely bunched). Norlea rated best of the perennial ryegrasses tested, Kenwell best among the tall fescues (although Kentucky 31 was not far behind).

Funk, Engel and Halisky reviewed summer survival of turfgrass species, and determined that high fertility contributed to poor summer survival of fine fescue

and Kentucky bluegrass, especially fine fescue. There is considerable difference comparing one variety with another, so that a well organized breeding program should create selections better suited to summer survival than most currently available.

Streu and Vasvary reviewed the effect of certain insecticides on nematodes in turfgrass. Various chemicals reduced or altered various nematode populations, but results were not always consistent nor clearcut. Engel and Dunn reported on "Pre-emergence Herbicides for Control of Goosegrass in Cool-season Turfgrasses", for a series of tests over seven seasons. The authors conclude that there is no presently available herbicide that is highly consistent in the control of goosegrass, and many of them cause greater or lesser injury to the turfgrass. Generally most useful, all things considered, were Bandane, Dacthal and Zytron.

The final presentation by Engel, Dunn and Ilnicki, compared crabgrass herbicides. Dacthal and Zytron gave the best and most consistent control; dry applications were generally more effective than liquid. The authors stress the need for relating type of herbicide to germination date.

YOUNGNER ON BLUEGRASS

The presentation of Vic Youngner, Institute advisor in California, to the Golf Course Superintendents Association in San Francisco, is reviewed as a special report in the April Western Landscaping News. Members may be interested in some of the statements concerning the affects of temperature and light on vegetative growth, as it relates to bluegrass.

Dr. Youngner points out that both photosynthesis and respiration enhance as temperature rises to about room temperature level, after which photosynthesis tails off while respiration continues advancing, resulting in a food deficit detrimental to grass. Both southern and northern grasses store food best under reasonably cool temperatures. Thus young Kentucky bluegrass planted in warm seasons may be "unable to accumulate any reserve carbohydrates and even lose the little which may have been stored --".

Youngner reports that his studies have shown Merion Kentucky bluegrass to have far superior ability to accumulate food reserves than Newport. Thus Merion should be better adapted to warmer weather.

Tillering and rhizome development are related to temperature and light intensity. Youngner finds that both Merion and Fylking Kentucky bluegrasses tiller better at higher temperatures than Newport, and thus would probably be better varieties for areas where spring and summer temperatures are high.

Length of day influences rhizome and stolon growth, generally favored by long days. Either very high or very low temperatures restrict root growth, as does low light intensity. Both Kentucky bluegrass and Highland bentgrass grown at room temperature (for the air), best develop roots when the soil temperature was about the same; raising it to 80° seriously restricted root growth.

MORE ON PHYTOTOXICITY

Water extract from several plants, including crabgrass, proved inhibitory to crown vetch, in an Alabama study by Bieber and Hoveland, reported in the April, 1968 Agronomy Journal. Substances toxic to seed germination occurred in all parts of the growing plants.

ABOUT SEEDING AND SODDING

We all realize that the service business of transforming good lawnseed into sod, to provide the consumer with "instant turf", is important, growing, and here to stay. But just as responsible seedsmen have had to fight constantly for quality blends, so does the sod industry have problems that may be even greater. Inquiries to the Marysville office remind one of this, a typical example of which was an exchange of correspondence with a Cleveland homeowner in early May.

This gentleman, after much expense and effort during 2 years, refers to his results as "a discouraging experience". He purchased Merion sod, which survived reasonably well the first year given as it was watering and fertilization. However, it never rooted well, and patches could be lifted; it died this winter from desiccation. He writes, "your letter has opened my eyes to the things that the landscapers should tell the homeowner when he puts the sod down, but for some reason they don't."

In this instance there was a minimum of sodbed preparation, and the man was told "the sod would root itself into the ground". Later, reporting he was able to lift the sod from the soil, he was told that it didn't matter so long as he watered the sod. At best this is shabby public relations.

A subsequent problem was appearance of "wild" grasses in the sod. The "explanation given, namely that these had blown in from someone's yard (even though there was no foreign grass in the vicinity and the neighborhood was of well-kept, sodded lawns). The man writes, understandably, "how can the homeowner be protected against this kind of business. -- we aren't experts --".

When a homeowner seeds his own lawn, at least he is dealing with known problems, and not importing others. It is usually conceded that though the sodded lawn is quicker, the seeded one will likely be better rooted and more durable if adequately cared for through the seedling stages.

ALABAMA REPORT

The Proceedings of the 8th Annual Turfgrass Short Course, Auburn, Alabama, was received this spring. Turfgrass fertilization was rather thoroughly covered, with additional papers on building a golf course, the new Tifdwarf bermudagrass, and nematodes.

Sturkie and Rouse present considerable data on P and K fertilization of zoysia and bermuda. In general the first lb./M annually was sufficient to provide for grass growth, although a bit more (K especially), might be needed to maintain soil levels. A 4-1-2 ratio seems appropriate, used to apply 8 lbs. N/M annually where the clippings are removed.

Tifdwarf bermuda seems to be gaining great favor, even for fairways and lawns as well as the golf green. One disadvantage is that it is very susceptible to webworms. Of interest to members will be the comments on winter overseeding of Tifdwarf. Opinion seems to vary from "no trouble at all" to "some very real problems". Fine-textured grasses as well as ryegrass are being used. Some reports indicate that overseeding on Tifdwarf did not thin out as fast in spring as the same seeding did on Tifgreen (the parent variety). On fairways and lawns, mowing Tifdwarf at $\frac{1}{2}$ inch, it is speculated that mowing might be only once monthly.

PURDUE TURF CONFERENCE

The Proceedings of the 1968 Turf Conference at Purdue University were issued in early June. As in the past the program was a voluminous one (83 pages in the Proceedings). With this volume of coverage it is difficult to get a program consistently dealing with fundamental topics. Many presentations are turning towards matters of human interest, or to the gadgetry that comes with mechanization. A lot of discussion takes place these days on artificial root media for golf greens.

Some of the more incisive papers were presented by members of organizations sponsoring the Institute. Arden Jacklin spoke about "New Grasses for New Areas", providing the audience with a number of points worth thinking about. Howard Kaerwer, Northrup-King, spoke on newer grasses and the possibility of developing strains or combinations to fit situations heretofore difficult. Incidentally, Dr. Daniel announced progress on the Sodco bluegrass, a multiline selection; foundation seed for growers will be harvested from breeders plantings in 1968, and there should be some certified seed for harvest in 1969. Daniels emphasizes resistance to stripe smut; slow, low growth; and less thatch, for this variety.

Jim Latham of the Milwaukee Sewerage Commission spoke both on "Bacteria and Organic Additions", and "What is Turf Renovation". The former was one of the more completely developed subjects on the program, and the latter salutary in pointing up some of the foibles the turfgrass industry engages in as it whips up enthusiasm for all sorts of "programs".

While there is not a great deal of permanent reference value in the 1968 Proceedings, followers of the Midwest Regional Turf Foundation activities through the years will find it interesting and appropriate to this section of the country. Because of the length we cannot review the more than 50 presentations here. One, only distantly related to turf management, was "The Chemical Control of Some Aquatic Plants" by Robert Hiltibrand of the Illinois Natural History Survey, which cites specific chemical control for specific water weeds. For those concerned with this problem it is good to have such a condensation in one place for possible reference.

THE ROLE OF POTASSIUM

Members are probably aware of the current stress on potassium in lawn fertilizers, interest stimulated in part by an active campaign by the Potash Institute, (with whom the Institute cooperates). There have been a number of national symposiums on the usefulness of potassium, including an afternoon of discussion at the last Agronomy Meeting, and a recent issue of Better Crops With Plant Food devoted to the subject (for which Dr. Schery reviewed turfgrass). Even with all of this attention, the fundamental role of potassium remains obscure.

It is thus of interest to note a research report in the May 17 Science, by Fischer, University of California, on "Stomatal Opening; Role of Potassium Uptake by Guard Cells". Fischer found that the opening of the stomata ("breathing pores") in a leaf definitely relates to potassium in solution, preferably as the chloride rather than the sulphate. Absence of potassium, or its replacement with an element such as calcium, inhibited stomatal opening entirely. With ample potassium, given light and air relatively free of carbon dioxide, stomata opened widely. The classical belief that high sugar content developed in light stimulates turgor of guard cells and stomatal opening seems challenged; instead it may be the uptake of potassium under such stimuli that is the primary cause of stomatal opening.

MORE ABOUT WINTERSEEDINGS

Interest continues to run high in Tifdwarf bermudagrass for golf greens in the south. In his Southern Turf Newsletter mailed in May, Ray Jensen, of the Southern Turf Nurseries, concludes that "Tifton dwarf bermuda ranks highest for golf greens among turfgrasses of the south". New greens being planted use Tifdwarf 4 to 1 over other bermuda varieties. Thus it would seem very much as if Tifdwarf will be the base grass of the future into which northern grasses are winterseeded on golf greens. It would be advantageous for the seed industry to learn about response of Tifdwarf golf greens winterseeded with fine textured combinations of Kentucky bluegrass, fine fescue, Highland bentgrass and other kinds.

So far reports on response of winterseeded Tifdwarf are rather fragmentary. Some claim it is more difficult to winterseed, and damaged by vigorous seedbed preparation (such as vertical mowing) prior to overseeding. Jensen, however, does not feel that there are any special problems more serious with Tifdwarf than with the long-used Tifgreen. He notes, "The dense dwarf bermuda sods are sometimes difficult to overseed. However, for the past 2 winters we have had excellent results on the 19 Tifton dwarf greens at Tifton. At present it appears that recovery from winter overseeding is about the same for both grasses." This is encouraging.

MICHIGAN TURFGRASS CONFERENCE

Discussions at the Michigan Turfgrass Conference in March are reviewed in the May Weeds, Trees and Turf. So far as lawn seed is concerned, Dr. Beard is reported feeling that mixtures of several varieties are preferable to a single variety alone. Thus the lawnsman hedges his bets against different modes of care, different diseases, and different environmental conditions.

Other reports indicate organic sod to root better than that grown on mineral soil, and to dry out less rapidly. As has been known for sometime, thin sod (3/4 inch) roots better after grass planting than thick sod (2 inches). Sod produced under high levels of nitrogen fertilizer heat more in transporting, but this is not a critical factor.

Research on pesticides confirmed what had been found at Rutgers, that the organic phosphates stimulate grass growth, presumably by making nitrogen more readily available through microfloral activity. Discussions on weed control, soil mixtures, and plant diseases were along familiar lines. Dr. Britton, guest speaker from the University of Illinois, pointed out that there has been very little success in finding control for the major turfgrass diseases.

WEED COMPETITION

Interesting studies by Palmblad, Utah, are reported in Vol. 49 No. 1, of Ecology. Various species of brome grass, plantains, composites and shepherd's purse, many of them familiar lawn weeds, were planted at different densities, under varying conditions of soil, fertilization, moisture and type of habitat. In keeping with weeds generally, all adapted well to prevailing conditions. One interesting point was that the greater the density, the less the seed germination and the less productive were individual plants in forming new seeds. Higher density also caused greater mortality within the population. The study indicates that most of the familiar weeds have inherent population regulating mechanisms.

POTASSIUM FOR DISEASE CONTROL

Enthusiasm for adequate levels of potassium in fertilizer continues to receive encouragement in the literature. Goss and Gould, Washington, reporting in the USGA Green Section Record, review the situation for turfgrass under the title "Turfgrass Diseases; The Relationship of Potassium". While the authors hesitate to pick an exact figure in which potassium levels are adequate, they do cite a number of diseases which are less severe when potassium content is adequate. Mentioned are a leafspot disease on coastal bermudagrass, dollarspot, brownpatch, redthread, Fusarium patch, and Ophiobolus. The role that potassium plays in the plant is also summarized. On the soil where tests have been observed (Puyallup, Washington) potassium loss is great under high nitrogen levels; the authors recommend a 3-1-2 ratio, with about 12 lbs. of nitrogen/M annually for putting greens.

LATEX PROTECTANT FOR WINTER

The Wilt-pruf Company furnished a trial sample of their latex anti-dessicant last autumn, for testing as a winter protectant to new grass seedlings and other ornamentals. Readings this spring made on the Lawn Institute grounds show no advantage to new seedlings or established grass, where the foliage or seedbed was sprayed last September 16 or October 15. Neither did there seem to be winter protection for most ornamentals (such as boxwood, mahonia, ivy, Evonymus, yews, etc.), although transplanted white pines appeared to have somewhat less winter leaf scorch where sprayed with Wilt-pruf. It would seem that there is not sufficient advantage in spraying new lawn seedlings or young seedlings with a latex mulch, for winter protection, to justify the cost and trouble of treatment.

SALT TOLERANCE

Dr. Eliot Roberts' "Salt Tolerances of Grasses and Accumulation in Soils", presented in the 26th Short Course on Roadside Development in Ohio last year, has now appeared in the Proceedings of that conference. Of 17 grasses tested, Kentucky 31 tall fescue appeared to be best adapted where roadsides are contaminated with salt. Salt contamination has been a serious problem because of its use in de-icing roads in winter.

NIGHT TEMPERATURE IMPORTANT

A study by Baker and Jung reported in the April Agronomy Journal pointed up the importance of night temperatures for Kentucky bluegrass (and three other species). In general the food reserves decreased as night temperatures increased from about 35° F to 65° F.

HERBICIDE INJURY TO BENTGRASS

A study by Rutgers researchers reported in the April issue of Weed Science indicates the influence of silvex on Colonial bentgrass under various environmental conditions. The detailed studies pretty well confirm what is known from field experience. There is less injury when temperature is cool than when hot; and to a lesser extent when the day is long and the pH low.

IN SUNDAY SUPPLEMENT

Since the Institute did not engage its clipping service for the spring, we have depended upon chance pickup of items to judge how widely the spring press kit has been utilized. It is encouraging to note use of the stories in newspapers coming to our attention. Typical is the Columbus Dispatch of Sunday, May 12, which utilized 5 different Institute items scattered over several pages of the gardening section.

Two of the stories carried by-line and Institute credit. Three others were simply taken from the kit without authorship being stated. In "Grasses Render Services Far Beyond Covering Lawn" with a by-line, readers learned, "You'll get little argument that there is any carpeting so attractive as Kentucky bluegrass or bentgrass around the home -- it is comforting to know that those bluegrasses and fescues outside the window are constantly replenishing the oxygen supply." The by-lined item on lawn fertilization begins, "One of the three fundamentals for an acceptable lawn is fertilization (the other two are fine-textured grass and proper mowing)". Under a headline "Spring is Time to Weed, Feed Home Lawns", one reads, "However, proven lawngrasses, such as Kentucky bluegrass, Oregon fine fescue and Highland bentgrass are not bothered by herbicides that neatly take broadleaf lawn weeds -- out of the grass." Another item states, "The Lawn Institute permits packagers to utilize its Seal of Approval if ---; --- mixtures containing 'coarse-kind' haygrasses are not of sufficient quality to merit the Seal." The final item refers to using crabgrass preventers on a bluegrass turf.

MAGNETISM AND SEED GERMINATION

U. J. Pittman, Agronomist with the Canada Department of Agriculture, reports in an article on "Magnetism and Plant Growth" in the June Crops and Soils. Certain plants (especially wheat) sprout better under magnetic influence, and out-yield other plantings of the same seed when the seed is oriented in a north-south direction at planting time.

IN LAWN EQUIPMENT JOURNAL

A short, light story done for the Lawn Equipment Journal appeared in April, reprinted as "The 'Seedy Side'". It provided a handy circular printed front-back, headed by a photograph showing seeding with a Cyclone seeder mounted on a garden tractor. Copies of this reprint were offered members, and have been used as a stuffer in mailings.

Pitch of "The 'Seedy Side'" is indicated by the opening sentences: "Why lawn equipment? The excuse really is a tiny seed!" The story continues with facts about lawnseed, including "but for the homeowner and commercial property sixty million or so pounds of Kentucky bluegrass, Oregon fine fescue, Highland bentgrass and a few other sorts sponsor sales of four million mowers annually, innumerable sprayers, spreaders, --" A subheading reads "Good Seed is a Bargain", and goes on to cite the number of seeds in a pound of Chewings, Illahee, Pennlawn fescues, and Highland and Penncross bentgrass. A subsequent heading reads, "Modern Seed is Marked by Quality", in which bluegrass varieties are named with their outstanding attributes. Reference is also made to the care undertaken in growing the lawnseed crop, as is so characteristic of the industry in Oregon.

UPDATED TURFGRASS REFERENCE

We were pleased to have had appear in the second 1968 issue of Better Crops with Plant Food, an updating of the popular resume done some years ago on turfgrass zones and varieties. A simplified map was redesigned for the story. It shows northern and southern zones, and within each of these the area where irrigation is necessary. The story is entitled "Turfgrass -- America's 'Growingest' Crop", with Lawn Institute byline.

The story emphasizes maturation of the lawnseed industry and its importance; "Imagine how many Kentucky bluegrass plants are being carefully nurtured on the most expensive 'cropland' in the nation in the suburban yard". The story points out that for perhaps 90% of the population the lawn is the "crop" closest to their lives. There are today a host of fine-textured grasses to suit almost any taste and condition. So voluminous are these that the listings of the older issue were changed to tabular form to accommodate all the new varieties. These are spelled out respectively for the northern and southern zones, according to species and variety, with occasional comments about adaptation and care.

The story fits nicely a 4-page format that will be very useful through the years in answering general inquiries about lawn grasses. The item was reprinted and distributed to members in late June.

IN AMERICAN HOME

"Have a Lawn You Can Play On", was the title of a story done by Dr. Schery for the April issue of the widely circulated American Home Magazine. This was a difficult story to reprint for distribution, since it was continued on several pages of the magazine, and embraced many different column widths. Also, the color photo that headed the story had to be abandoned in favor of a more economical black-white substitute in reprinting.

The story begins with some cited examples of the fine-textured grasses serving admirably for "rough usage". "Stadium after stadium seeds or sods Merion Kentucky bluegrass, for years the cream of lawngrasses. -- Home, putting and bowling greens can use the same Pennncross and Highland bentgrasses that a golf course would." And, again, "Even where budgets are minimal, as for park and community athletic fields, experts recommend attractive grasses such as the fine fescues rather than rough ones."

The more important Kentucky bluegrass varieties are listed and characterized and the same for fine fescues, (organized on the front page in reprinting). On the back page southern grasses are discussed, and use of various grasses according to climatic zone. For the Humid Northeast and Pacific Northwest, for example, "Bluegrass does so well here as an active play lawn, that there's little point in settling for less.", "The fine fescues look very much alike and are usually used as a companion grass with Kentucky blue" -- " -- for moderately short fairway turf, you may have occasion to use bentgrass. Colonial bents such as Highland are fine for the latter. Use creeping bents such as Pennncross for the former." And for the arid Southwest, "Newport bluegrass does well in California, as does Highland bentgrass and Fylking bluegrass for fairway turf."

WEEDS, TREES AND TURF STORY

The Institute story on "Mechanical Renovation -- One Method for Upgrading Turf", appeared in the April issue of Weeds, Trees and Turf. Since photographs accompanying the story did not depict institutional lawns, the story was published as text only. This made a convenient one-page reprint, which has been offered to members.

The item first described mechanical treatment of sod with powered equipment, as a simpler alternative to cultivating a seedbed. "Some reports suggest that coarse bunchgrasses such as tall fescue may be repressed while rhizoming grasses such as Kentucky bluegrass and the fine-leaf fescues gain ground, following severe mechanical attrition of a mixed sod." The combination of mechanical renovation and crabgrass control is mentioned, viz. "--products containing siduron can be used at the same time Kentucky bluegrass, fine fescue and Highland bentgrasses are seeded, --".

The final section of the story deals with "Tailored Grasses". Named in this section are some of the outstanding varieties both of Kentucky bluegrass and fine fescue. Also, "seeded bentgrasses are rather few, with Penncross the favorite creeping type, and Highland the most used of the colonials (Astoria and Exeter are other recognized names). Kingstown is a velvet bent --". Finally, "These are but a few of the specially bred fine turf possibilities your seedsman might recommend --".

FINE-TEXTURED TURFGRASS STRESSED

Incidental to other correspondence we receive from Cornell University, a tear sheet was included from a bulletin which effectively utilized the Lawn Institute photograph that contrasts Kentucky bluegrass and Oregon lawn fescue with "hay fescues and ryegrass." Insets show comparative seed size. We were pleased to see the following caption used with the photo: "Quality grass results only from proper seed. The fine lawngrasses, Kentucky bluegrass and red fescues, contrast with the coarse tall fescues and rye grass. Seeds pictured are proportional to their frequency per pound; bluegrass-lawn fescue blends afford many more seeds than do cheap hay grass mixtures."

ITEM USED

The April 26 issue of Seed World drew again upon Institute releases, printing as its "Bulletin Board Suggestion", the story Lawn Thatch. Members may remember such typical reference to quality grasses as, "-- excellent for combing the thatch out of an erect lawn grass such as Kentucky bluegrass and fine fescue, while slicing devices -- do a better job on -- Highland bentgrass. All of these fine turf species are stimulated by spring weather, and quickly heal over scars--".

STORIES READ

Even though we had no press clippings check on the stories issued this year, the press kit must be getting read. We can only believe so when we receive letters such as the one from Mr. Charles Stanz of Buffalo, New York, which begins "I read your article in our newspaper and would like to know if you have any articles or bulletins --".

BLUEGRASS STORY FEATURED

We have word from Barbara Lawton, editor of the Bulletin of the Missouri Botanical Garden, that a story based upon "Migration of a Plant", originally done for Natural History magazine, will appear in the September-October issue of the new Bulletin of the Missouri Botanical Garden, St. Louis. Dr. Schery has checked adaptation, and supplied supplementary photographs for this issue. The MBG Bulletin is being changed to a bimonthly with a new format that will contain regular features and longer special features such as this on Kentucky bluegrass. Stories in authoritative magazines such as this should reach an elite gardening audience, and be a continuing source of reference.

EXTENSION WANTS PHOTOS

The cooperative extension service for New York state requested in mid-May multiple copies of the photograph contrasting Kentucky bluegrass and fine fescues with "coarse-kind" grasses. Twenty copies of the photograph were provided for release with a news story. Naturally we were very pleased to have use of the photos for so prestigious a purpose, and also to supply another photograph for an announcement of a "Homeowners Turf Maintenance Workshop" planned for later in the spring. It is always pleasant to have Institute objectives furthered by activities of the extension services.

AUTUMN RELEASE PREPARED

A special story was prepared for late summer release through the facilities of the Borden Chemical Company, entitled "Whip the Lawn Weeds". Mention of autumn seeding and quality turfgrasses was built into the theme about using weed-and-feed products in autumn. We tend to think of using the excellent fertilizer-herbicide combinations in spring only, but experience on the Lawn Institute grounds show that even better control of spring dandelions is had from autumn application.

Typical items of advice in the story are, "Favorite lawn species such as Kentucky bluegrass and Oregon fine fescue grow especially low and dense -- prevents revival of weeds -- if the lawn is thin, overseed with a fine-textured seed blend, for autumn is the best time of year to start new grass." and, "Bluegrasses, fescues and bentgrasses thrive on extra fertilizer during cool weather, -- will not burn then --".

LAWN LEAFLET READIED

"Prosperous Lawns" issued by the Ezy-Do sprinkler company of Tulsa, was completed in April. The leaflet contains general information supplied through Dr. Schery at the Lawn Institute, and a very attractive colored map of grass zones. Accompanying the map are listings of adapted species and varieties for the respective zones.

Elsewhere in the folder are statements such as these: "The most attractive northern lawngrasses are the fine-textured ones, grouped under this heading on the seed box label. Principally these are Kentucky bluegrasses, fine fescues and bentgrasses". Appropriate fertilization, mowing and so on is recommended according to variety, with important varieties mentioned by name throughout the leaflet.

POPULAR REPRINT

As members realize, one of the most effective and economical means for spreading the Institute story on quality grasses, is through the distribution of reprints. We are thus highly pleased that the spring story appearing in the American Rose Annual, "Seed and Feed to Hex the Weed", has been very effective. Within a month after appearance requests had been received for over 3,000 copies of the story, two member firms using it in their own mailings to consumers, and at least one other for passing along to the field force. An amazing "reach" is thus attained, at little or no cost to the Institute.

STORY APPEARS

The July issue of Flower and Garden magazine carried the Institute's story, "In Praise of Unpampered Lawns". While there was some editorial change by the magazine that introduced occasional inaccuracies, the main thrust persists, pointing out there are many possibilities among fine-textured grasses for lawns ranging from the luxury type to those relatively self-reliant. Thus there is no need to turn to "coarse-kind" seedings just because circumstances prevent the "pampering" that some people seem to feel a modern lawn requires. It is good protection of an investment to provide the necessary fertilization and other occasional attentions that keep even an unpampered lawn performing up to expectations.

SEED WORLD COVER

Members may have noticed that a photograph taken on the Lawn Institute grounds was the cover picture for the March 22 issue of Seed World. In the credit given, Seed World recommends "early seeding and fertilizing", and credits the Institute "Courtesy of the Lawn Institute to whom we are indebted for many of the suggestions on lawn care which appear on our retail page."

NEW GARDENING PUBLICATION

A horticultural newsletter issued twice monthly, the Avant Gardener, will be published beginning October of this year. Editors have asked from the Institute whatever information we have in the way of published material. If the new publication develops as planned, this should provide opportunity for getting capsule summaries quickly before serious gardeners, professional nurserymen, landscape architects, greenhouse operators, park and estate superintendents and conservationists. The Institute has already supplied the Avant Gardener with a background file of reprints.

IN SEED TRADE NEWS

April 17 issue of Seed Trade News carried as a boxed insert, "Turfgrass Breeding Comes of Age", crediting Dr. Schery and the Lawn Institute. The story comments especially upon the bluegrass breeding work being done at Rutgers University under the direction of Dr. C. Reed Funk, and attempts to provide perspective on evolutionary development of fine turfgrass varieties. The opening paragraph comments on earlier advances, including the "fine-textured" concept, and remarks: "Kentucky bluegrasses, fine fescues, bentgrasses such as Highland and a few other types could thus be easily recognized as the only fitting species for really attractive lawns."

TURF ANNUAL

Again this spring we have had request from Park Maintenance magazine, which annually in July publishes its "Turf and Irrigation Annual", asking for Institute publications and informational material. We are pleased to send reprints, for the added influence they gain, and look forward to another summary of turf research in Parks Maintenance this summer.

HOMEOWNER'S REQUEST

A request from Milwaukee asks for "news and views" related to home maintenance and home improvement, for publication in the Homeowner's Report. The Institute was delighted to forward selected items for such use, and has offered to prepare custom materials in the future.

SEED WORLD USE

"Chemical Lawn Mowing", with full by-line credit to the Institute, was carried in the April 12 issue of the Seed World. Members may recall that the story emphasises suitable grasses already available, and discounts the practicality of chemical treatments: "In part the dream has been satisfied, through choice of grass. Fine-textured Kentucky bluegrasses and Oregon fescues make unmowed roadsides presentable, provide top lawns when mowed infrequently (but tall). Highland bentgrass is not aggressive either on fairway or luxury lawns. There are even new, low-growing bluegrasses that blend with bentgrass --".

INSTITUTE NAMED

We are pleased that the Lawn Institute is named in a press release to news services from the American Potash Institute. This is derived from a summarization for the story done recently by Dr. Schery for Better Crops With Plant Foods.

IN TURF AND GARDEN TOPICS

"Mechanical renovation certainly affords seed a better chance for gaining a toehold than if simply cast upon untreated turf. And in breaking up whatever thatch there may have been, fertilization is made more efficient. The granules are thus more easily accessible to soil and rootzone." - Dr. Robert W. Schery, The Lawn Institute.

MENTIONED IN GARDEN SUPPLY MERCHANDISER

The April issue of the "Home and Garden Supply Merchandiser" contains a short item quoting the Lawn Institute on lawn fertilization.

INVITATION

Recently the Lawn Institute received a formal invitation: "The Administrator of the Agricultural Research Service and The President of the American Institute of Architects invite you to attend the 1968 B. Y. Morrison Memorial Lecture to be presented by Mrs. Lyndon B. Johnson in the Portland Civic Auditorium, Portland, Oregon Wednesday morning, June twenty-sixth at ten o'clock."

ABOUT MOVIES

More information has come in from Modern about the Skyport Cinemas, which show sponsored films to travelers awaiting planes at major airports. The audience is, indeed, a premium one. Over half of viewers are professional, managerial or sales executives. Median income was nearly \$15,000, 87% above the national average. While the Institute's movie, "Bluegrass Beauty" was still active, the Skyport Cinemas were just starting. But this would seem an excellent means of reaching a worthwhile audience with a topic that should be especially of interest while killing time between planes.

JOHN DEERE COURTESY

We are most pleased to report that again this year the John Deere Tractor Company has lent the Institute one of the latest model garden tractors with mower, for tending the Institute grounds. This year's model 140 is a real "honey". There are the usual safety features, flotation tires and a luxury touch that includes even a cigarette lighter. All of this with no sacrifice in "muscle". There is the usual PTO and hydraulic lift, but the former "variable speed" lever has been redesigned to handle all shifting, -- a real convenience for the user. Push the stick forward, and speed increases accordingly; pull the stick backwards, and the same is true for reverse -- all with the same lever. We are sure that this tractor will do much to excite interest on the grounds, in photographs, and as a "conversation piece" around which quality lawnseed publicity can be woven.

GRASS SEED PRODUCTION

C. L. Canode Pullman, Washington, reports in the May-June Agronomy Journal on "Influence of Row Spacing and Nitrogen Fertilization on Grass Seed Production". Yields of Kentucky bluegrass were improved by comparatively closer rows. Row spacing had little influence upon fine fescue. Kentucky bluegrass yields were improved at relatively high nitrogen fertility rates, but fine fescue did not respond to anything much over 60 lbs./A. However, heavier seed of fine fescue was produced at double this nitrogen rate.

ANOTHER FILM REQUEST

Interest continues in sponsored films relating to turfgrass. The latest request, interestingly, comes from the Associated Landscape Contractors of Oregon, with headquarters in Salem. Mr. Sweet writes, "You were referred to us by the Institute of Maintenance and Research in Salt Lake City --. We are a non-profit organization and would be using the film for training landscape personnel --." A retired copy of "Bluegrass Beauty" was offered Mr. Sweet, if he felt this might still be of some use.

WHAT THEY ARE SAYING:

"The liberal shipments of lawn folders arrived. Many thanks for supplying them. We had a total attendance of 400 at our beautification conference. Another year, we hope to double the number."

Paul F. Frese, Naturalist
Dept. of Parks, Recreation & Conservation
White Plains, New York

"Dear Bob, You certainly came to the rescue with real good glossies for our spring lawn story. Thank you for your prompt help. I'll send along tear-sheets."

Irma Bartell
The Plain Dealer, Cleveland, Ohio

"The enclosures are sent to show you that we do appreciate receiving your 'lawn information'. Thanks much for sending these."

Dorothy Sapp, Garden Writer
The Cedar Rapids Gazette

"Recently I saw copies of several reprints that you made available to workers in the lawn industry. I would appreciate receiving a copy of each of the following, and would also like to be on your mailing list to receive other information that you make available."

Joe L. Newcomer, Extension Agronomist
University of Maryland.

"Thank you for the recent reprints that you and Mrs. Rush mailed to me. I also thank you for placing my name on the 'List of Advisors' to receive additional information that might be forthcoming from your office. I know that this will be helpful to us in our extension program, not only with the commercial people but also with the Homeowners."

Joe L. Newcomer, Extension Agronomist
University of Maryland

"I greatly appreciate your excellent review of one of our recent articles on bluegrass breeding. Publicity such as this is of considerable value in reminding our administrators of the value of our programs."

C. Reed Funk, Assoc. Res. Prof. Turfgrass
Breeding; Rutgers University.

"Bob, Was just looking through the July F & G. You get smarter as you grow older. That story on lawns is the most sensible that I ever read, written by anyone."

George Kelly
Cortez, Colorado