

# BETTER LAWN

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Better Lawn & Turf Institute

## HARVESTS

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### OFFICERS ELECTED AT ANNUAL MEETING

The annual meeting of the Lawn Institute was held at the Kansas City Club, Kansas City, Missouri, on May 23, 1967. Members of the Board of Trustees attending were: James Carnes, Pacific Northwest Bluegrass Association; Roy Edwards, Jr., Grace & Company; Amos Funrue, Fine Fescue Commission; Willard McLagan, Pacific Northwest Bluegrass Association; Howard Mader, Highland Bentgrass Commission; Ed Mangelsdorf, Mangelsdorf Seed Company; Edward Spears, Woodford Spears and Sons; guests included former Institute presidents Carl Farris and Joseph Peppard of St. Joseph and Kansas City, respectively.

President Mangelsdorf thanked all supporters for their interest in the Institute during the fiscal year ending, and pointed out the many successes this support had made possible. The Secretary-Treasurer gave his resume of the financial condition, which will remain precarious until a firmer basis of support can be developed in the producing regions. Director Schery was called upon for his annual summary of Institute activities, which is presented in its entirety on subsequent pages.

Representatives of the various commissions and associations indicated continuing enthusiasm for the Institute; each offered constructive suggestions for the year ahead, and the current situation with his sponsoring organization. Exhibits of Institute activities were provided in conjunction with the Director's report. Crop prospects for the various grasses were discussed. The meeting terminated with election of officers for 1967-68. Mr. Mangelsdorf was re-elected President, and Mr. Edwards Secretary-Treasurer. Mr. Carnes is the new Vice President. Mr. Spears continues as a member of the Executive Committee, and Gordon Newton as Membership Chairman. Trustees representing the various groups and associations remain on the Board until new elections within their respective associations. Officers and trustees as the new fiscal year begins are:

President - Edward Mangelsdorf, St. Louis, Missouri  
Vice President - James Carnes, Halsey, Oregon  
Secretary-Treasurer - Roy Edwards, Jr., Kansas City, Missouri

Amos Funrue - Oregon Fine Fescue Commission, Oregon  
Arden Jacklin - Merion Bluegrass Association, Washington  
Gustav Kveen - Northern Minnesota Bluegrass Growers Association, Minn.  
Howard Mader - Highland Bentgrass Commission, Oregon  
Willard McLagan - Pacific Northwest Bluegrass Association, Oregon  
Gordon Newton - Northrup, King & Company, Minnesota  
Creston Shaw, - Oregon Fine Fescue Commission, Oregon  
Edward Spears - Woodford Spears & Sons, Kentucky  
(Honorary Trustee) Bill Rose - Penncross Bentgrass Association



THE REPORT OF THE DIRECTOR, FISCAL 1966-67, TO THE BOARD OF TRUSTEES, KANSAS CITY, MAY 23.

As trustees are well aware, Institute efforts were handicapped during the year because of budget stringencies and inability to engage much supplementary service. In spite of this the Institute program has had sufficient momentum from previous investment of time and talent, to make its presence felt widely and fully. The four issues of Harvests, a running account of Institute activities through the year, attest to this, totaling 118 pages (134 in 1965-66). Indeed, if each trustee has read Harvests sent him each quarter, he is well aware of details too voluminous for me to summarize today.

I am especially proud of the impact made during the year by stories in select publications. A chronological tally of these is given as Chart #1. There were 28 appearances, and another 8 are in press; counting occasional private reprinting or adaptations from the press kit of which we have no record, we can no doubt lay claim to about forty items published in magazines. It is evident, that were this same space secured for advertising, that a tenfold increase in the Institute budget could not meet the charge. And surely paid advertising is not so seriously regarded as is editorial space, where the prestige of the magazine backs our message, and the magazine itself thinks highly enough of the information to schedule it. I am sure, for example, that a paid advertisement in the April issue of Better Homes and Gardens, costing thousands of dollars, would not influence the magazine's seven million readers to look out for "fine-textured" grasses on the seed label nearly so effectively as did our story.

All members receive copies of these stories sent as they are reprinted, so should be acquainted with the general run of the material. However, so that you can see what these stories cumulatively amount to, Mrs. McComas has pulled together in one bundle most of the reprints of recent years, for scanning as these are circulated. The top 17 represent this fiscal year. Think what the typesetting alone would cost, were we not to have this "subsidized" for us by the magazines. The Institute could never issue so many of its own bulletins as it is able to reprint economically.

What is not so readily apparent is the widespread secondary usage these reprints receive. They are distributed to key audiences by member firms, by special mailings, as stuffers in envelopes, as a token at my personal appearances, through offerings of columnists such as George Abraham (Green Thumb is his syndicated column), and in other ways. During the year 32,000 reprints, including a number of special runs of from a few hundred to a few thousand copies for which we were reimbursed, were issued. For example, a major fertilizer company has purchased several separate reprints from us for issuance to its salesmen and through its field forces; a public relations firm has purchased some 8 thousand for back-up to mailings; the Ohio highway department distributed several items to its personnel, and to a national audience attending the annual Short Course. In a few instances, we have given permission for private reprinting, which adds a little more to the distribution totals. Chart #2 lists some of the major distributions made of reprints; at no cost to the Institute for the handling, postage, and sometimes the reprint itself.

Even that degree of penetration is not the whole story; there is yet another bonus. Reprints such as these add "authority" to our own press kits, and permission from writers and editors is often sought to quote from the article. The stories likewise serve to impress the experts who write popularly about lawns, and are often found for information passed on in gardening columns or editorial space. The sheer volume of the stories, always repeating the theme of fine-textured grasses and their image of quality, cannot help but have a subconscious influence upon garden writers and even technical specialists. So, in a sense, there is triple duty from each story; first, its authoritative impact on the



CHART #1

Stories Appearing or Prepared for publication during 1966-67 Fiscal Year

- "Good Seed Makes Good Sod" - Massachusetts Turf & Lawn Grass Council Turf Bulletin
- "Lawn Weeds - Don't Let Them Rob You" - Resort Management
- "Steps To Assure A Good Lawn" - House & Garden
- "Improving an Old Lawn" - Flower & Garden
- "Fine Textured Winterseeding" (Second reprinting) - Southern Turf Newsletter
- "Invest Now In Your Lawns" - Resort Management
- "Top Lawn Grasses Need Little Mowing" - Seed World
- "Lawn Story" - Hardware Merchandiser
- "Early Fall is Best Seeding Time For Lawns" - Turf Grass Times
- "Lawns" - Horticulture
- "Remarkable Kentucky Bluegrass" - Weeds, Trees & Turf
- "Bargain Time For Lawns" - Seed World
- "Turfgrass Management in the United States" (editing and proofing) - Advances in Agronomy, Academic Press
- "Rise of Urban Gardening Parallels Farming in Growth of Mechanization" - Home & Garden Supply Merchandiser
- "Seed & Fertilize at the Same Time" - Seed World
- "Where Bargains Are Not Bargains" - Seed World
- "Top Lawn Grasses Need Little Mowing" - Massachusetts Turf Bulletin
- "The Lawn Seed Industry Comes of Age" - Crops & Soils
- "Where You Can't Have a Lawn" - Horticulture
- "Crabgrass Map" - Lawn/Garden/Outdoor Living
- "How to Have a Beautiful Lawn at Your Motel" - Tourist Court Journal
- "Early Spring Lawn Care" - Home Garden
- "Shabby Look of Spring Lawn Can Be Avoided" - Resort Management
- "The Lawnmaker's Year" - Bulletin of N.Y. Horticultural Society
- "Now Lawns" - Floral Magazine
- "Saving on Lawn Maintenance" - American Cemetery
- "How to Buy Lawn Seed" - Better Homes & Gardens
- "Bevy of Mowers Suited for Resort Use" - Resort Management

(Stories prepared, but not yet appearing in magazine)

- "Is Your Lawn Maintenance Up To Date" - Buildings
- "About Quackgrass & Bluegrass" - Lawn/Garden/Outdoor Living
- "Summer Solicitude For Your Turf" - Building Maintenance and Modernization
- "Lawn Time" - National Farm & Home Publications
- "Lest Hunger Haunt Your Lawn" - Fertilizer Solutions
- "Seeded Fairways" - Midwest Assn. of Golf Course Supts.
- "Shade Grasses" - Midwest Assn. of Golf Course Supts.
- "Lawnsman's Choice" - Floral Magazine



CHART #2

Extra requests for reprints, distributed or used by:

George Abraham - several thousand on various occasions  
Central Ohio Rose Society - to members  
Chicago cemetery association - handouts  
Cleveland landscape conference - for handouts  
University of Delaware - for class use  
Everett Seed Company - general request  
Grace & Company - various branches on various occasions  
Hogg & Lytle - an autumn mailing  
Lloyd Mansfield Co. - several thousand, autumn and spring  
Marion Men's Garden Club - handouts  
Maryland Adult Education - class use  
University of Massachusetts - class use  
Michael-Leonard - two titles  
Missouri Lawn Conference - to registrants  
Northrup King - numerous times, various parties  
Ohio Department of Highways - for personnel  
Ohio Short Course - three items to all attendees  
Oregon Fine Fescue Commission - modest extra supply  
Patco - several titles, for instructional meetings  
Purdue University - class use  
Quebec Seed Ltd. - for mailings  
University of Rhode Island - class use  
Seattle Community College - class use  
Seed Technology - a national mailing  
Smith-Douglass - a dozen titles intermittent through year  
South Dakota State University - class and colleagues  
Western Farmers Association - for members

(continued from page 2)

readership of the magazine; second, its back-up influence through direct distribution; and third, its indirect influence upon the minds and outlook of key writers, editors and educators.

Through the fiscal year we have found funds enough to issue both autumn and spring press kits. These have had to lack some of the refinements we would like - photographic offerings, survey cards, printed items on the order of a "clip sheet", for example. But the influence of the kits, now widely recognized in editorial circles, continues unabated. Mailings to only a few hundred addresses resulted in over 1,000 items used (identified by credit or mention, or by direct copying of text), accounting for roughly 9,000 column inches of space in newspapers. This is approximately the same acceptance witnessed last year, our banner year to that time, from a slightly larger mailing (a few less items, a few more column-inches). In addition we have had gratifying response from this same kit by radio-TV, about which more in a moment.

There are on exhibit before you numerous bundles of clippings picked up by Luce Clipping Service, each of which is taken directly from our press kits or cites the Lawn Institute as an authority for the information. The total is, indeed, impressive; it would be even more so were our unproductive lists to even approximate our most voluminous users. Some



newspapers use a dozen or more items from a single kit, filling in different portions of a gardening page, or using them successively for a series of issues. We have had excellent acceptance of this sort with newspapers so important as the Baltimore Sun, Pittsburgh Press, Chicago Tribune and Boston Herald. Remember, that these clippings reflect only those stories that the Luce Press Clipping Service has laid its hands upon. We know that this represents only a portion of the uses, for we ourselves occasionally come upon the stories in cities not reported in by the clipping service.

One of the difficulties, of course, is that our budget stringencies prevent as thorough-going a clipping coverage as the service would prefer. We restrict coverage to two months in spring and one month in autumn, and each season readers have to be "taught" anew what to look for. Moreover, we nag the clipping service so much about economy, and with specific instructions, that I am sure they do not feel the Institute is one of their most rewarding accounts. The cost of the clipping service continues to rise, and there is a question whether in the future we will be able to employ it, even to extent it now is used; we may have to cease general coverage, and restrict ourselves to specific items of clear identification. I hope it will not be necessary to curtail the service greatly, for there are side advantages to subscribing to such a service, not the least of which is a booklet from time to time updating the status of newspapers on a state-by-state basis.

While on this subject, I think you may be interested in a few highlights regarding newspaper employment of kit materials. We are especially gratified when a columnist, such as our friend Earl Aronson of the Associated Press (Albany), gives us full credit and citation in his stories for syndicated release. Luce Clipping Service caught 88 instances representing 23 states. In the same fashion mention of our information, if not our name, in George Abraham's "Green Thumb" column receives wide coverage (going to 102 newspapers). As already mentioned, Abraham offers our reprints from time to time to his readers, at no cost to us other than furnishing the reprints. Influential newspapers carrying Institute comment include in addition to the Baltimore, Boston, Chicago and Pittsburgh papers already mentioned, such large-circulation dailies as Cincinnati Enquirer, Albany Times-Union, Trenton Times, Lansing State Journal, Detroit Times, Dayton News, Youngstown Vindicator, and Buffalo News.

With 3/4 of the spring clipping pick-up schedule completed, we find this year Michigan leading the usage, chiefly because our friend Dr. Carter Harrison at Michigan State University adapted one of our stories and lent his name to it as a Michigan State University release. So far there have been 82 Michigan pick-ups of Institute material noted. Next in order come New York, New Jersey, Ohio, Pennsylvania, Wisconsin, Maryland, California, Illinois and Colorado in that order. Last autumn the verified pickup through the clipping service showed New York most using our material, followed by New Jersey, Michigan, Wisconsin, Ohio, Pennsylvania, Connecticut, North Carolina, Indiana, Massachusetts and Missouri. Obviously, we are hitting the populous market areas well.

Several photographs were taken of assembled clippings from our autumn kit, shown to sponsoring groups at the Oregon Seed League Meeting last December; at least the headlines and names of papers proved readable, showing how often Fine Fescues, Kentucky bluegrasses and Highland bentgrass appeared in headlines around the country. With such clippings before us on the table, I have not scheduled a photographic exhibit this morning; but had you time to read the clippings you would note repeated mentions of the grasses by name. A sampling can later be photocopied and sent to the Oregon Commissions for acquainting their people.



Starting last autumn, following discussion by the Board at the last annual meeting, we have explored the possibility of serving the radio and television fields with informational kits. After a good bit of correspondence, and some long distance telephone calls from radio and TV personalities, it seemed rather evident that no standard means of providing information exists within radio-TV gardening circles. Rather, it appears, that each announcer or "personality" prefers to adapt materials to his own style or format. Thus it is probably an unnecessary extravagance to have informational items such as appear in our press kits for newspapers taped or otherwise recorded for mailing to radio-TV outlets. This spring we tried adapting 160 of our regular newspaper press kits to radio-TV stations, with a separate covering letter and explanation, and with a return card enclosed for checking usefulness. As we reported in the last issue of Harvests the response was gratifying; of the cards returned, the sentiment was nearly unanimous that the kits just as prepared for the newspapers were useful fonts of information for radio-TV, and were appreciated by the respondents. Sample comment includes, "Pleased to have this both professionally and personally" (Des Moines), "I will use quite a bit of the material as spring approaches" (Detroit), and "Terrific for radio use" (Duluth).

We have no check on the actual use over the air, as we have with clippings appearing in newspapers; but on the basis of enthusiasm shown by those taking time to fill out the return cards, it looks as though we have a valuable new communications entreco needing little or no extra expense beyond the usual production charges in issuing the press kit. Here on the table are the responses received from radio and TV stations. You will note that there is often useful additional comments given, varied, but in some cases suggesting that shorter items rather than longer ones are useful for this medium. We can presume that our materials were used by these respondents, and in addition I had at least two invitations by long distance telephone to appear in person on radio or TV shows, one of them in the New York City area, the other Philadelphia. This is certainly an activity that merits further attention and build-up if finances allow.

The Institute's reputation is apparently sufficient within the seed trade, now, that when the Lawn Seed Division of ASTA joined in sponsorship of a Washington public relations firm's gardening release to 600 newspapers, we were asked to prepare the stories on lawns, and furnish an illustration. You will note in the clippings several items bearing a photograph of Mrs. Schery and her hound dog, Montgomery, on the Marysville grounds, which are the result of this release. In the story, of course, the Institute is mentioned, and the grasses which we represent named. It's nice to have this extension of Institute "reach", without any added cost to the Institute (other than our time), but one can't help surmise whether additional coverage might not have been achieved if the thousand dollars provided Ketchum, MacLeod & Grove, Inc. by ASTA had instead been devoted to extending and upgrading our own kit which is released at a preferable time of year and without dilution by the nursery industry fare. In any event the report to ASTA indicates that 361 newspapers, with combined circulation of over 16 million, have either used or scheduled one or more items from the "Beautify Your Corner of America" Supplement, as this release was called. Our clipping service verifies reasonable pick-up of the photo and lawn stories, so we can be pleased with this addition to our usual coverage. A sample copy of the supplement as it was sent out is exhibited for your information. In addition, during the year, we have prepared custom stories for or furnished custom materials to the Kingsport, Tennessee, Times; the Muncie, Indiana, Star; the Louisville, Kentucky, Courier; and the Toronto, Ontario Star Limited. And the Borden Company issued a specially prepared story as its own press release, at no cost to the Institute.

I've spent some little time discussing magazine stories and press kits, because these are the backbone of Institute activity, especially so under the limited financial regimen of recent years. But our impact is by no means limited only to these two phases, as even a



quick skimming of Harvests will suggest. We regularly answer inquiries, by correspondence and frequently incoming telephone calls. One of the most recent was from the Washington News Bureau of the Scripps-Howard papers, requesting marketing information; we have noted credit given to the Institute in this story as it appeared in the Columbus, Ohio and other papers. We have had inquiry referred to us through the American Horticultural Society reflecting cognizance of the Institute as an authoritative source of information by a recognized horticultural group. We seem frequently to have inquiry from New York, about products, and recently from a prominent Long Island landscape architect who had read our story in the Bulletin of the New York Horticultural Society ("Lawnmaker's Year").

We continue to maintain a test and demonstration grounds that is raw material for story information, and a reference point when discussing lawns in technical circles. This addition to its public image costs the Institute little, in that the grounds are without charge (from Seed Technology and myself), their maintenance largely sponsored by a grant from the Borden Company; with Toro, Deere, Parker and others furnishing power equipment; Moist-O-Matic irrigation; and several donor's seed, chemicals and other products. It is unfortunate that an Institute created in the image of quality, must beggar maintenance of its own proving grounds.

We have followed winterseeding in the South, and made an autumn press mailing to over 500 newspapers in support of this attempt at market enlargement. Several stories were backed by reprints that included a second reprinting of the Southern Turf Newsletter that carried our winterseeding story. This spring, winterseeding was checked out in the Southwest, at only partial cost of the trip to the Institute. There has not been travel money enough to maintain our contacts in the Southeast, however, not visited for the last two winters. Seed has been offered our Board of Advisors, mainly at experiment stations across the country; several have requested the supply, and a winterseeding donation was arranged for Dr. Youngner in southern California last autumn, through the good offices of the Pacific Northwest Bluegrass Association, the Highland Bentgrass Commission, and the Fine Fescue Commission. Dr. Niehaus at the Ohio Experiment Station received foundation seed of Merion from the Institute through the courtesy of Jacklin Seed Co., Dr. Burt in Florida, a special experimental lot courtesy of Albert Dickenson Division of Grace and Company and Dr. Dudeck at the University of Nebraska a lot courtesy of Hogg and Lytle. Experimental seed was also sent directly to Dr. Burt in Florida, Dr. Ledebor at the University of Rhode Island, Dr. Kilgore at S.E. Kansas Experiment Station, and Mr. Robbins, Goldsmith Civic Garden Center in Memphis, and 2 lbs. of Penncross to the Ohio Highway Department Divisional Landscape Architect.

I have spoken before numerous garden clubs and turfgrass conferences during the year, enumerated in the various issues of Harvests. Principally these have been University and Rose Society sponsored gatherings in Ohio, Extension sessions in Missouri, sponsored cemetery and golf gatherings in Chicago and Cleveland, and, of course, there was the privilege of attending the Oregon Seed League meetings last December. We have continued to work with highway interests, especially the Ohio State Highway Department, by attending and appearing on the Short Course program, and by arranging for roadside plantings of all fine-textured composition, incidentally, with purchase of the seed by the department. This would seem a fruitful direction to enlarge activities, especially for the benefit of fine fescues (as a substitute for the widely used tall fescue).

Contact has been maintained with our national board of Advisors, experts in research centers and experiment stations across the country; from time to time sets of reprints are mailed each man. Last autumn I visited our several excellent contacts in Colorado, and participated in the final judging of "The Best Lawn in Denver", sponsored by the Denver Post. Liaison continues with commercial interests, such as equipment makers



interested in hydraulic seeding (Bowie Machine Works, for example, which has purchased reprints from us for distribution through its contacts). State extension services are furnished multiple copies of material, for issuance to and through county agents. I was able to attend the Agronomy Society meetings last September, papers from which were reported in Harvests. And as much professional literature as it is possible to review is at least scanned, for keeping up-to-date and for reporting, where pertinent, in Harvests. It amounts to a full schedule, though implementation is handicapped by insufficient funds for extending our contacts externally as much as I would like.

For all practical purposes use of the Institute film, Bluegrass Beauty, has now ceased with withdrawal from professional circulation (Modern); occasionally copies are let out for special showings. It is still listed in several catalogs, and was requested this year, for example, for a professional recreational meeting in North Carolina. Total TV audience for the film was in excess of 17 million, and live audience about 170,000. We continue to keep up our film library to the extent possible, since it is vital for public presentations and especially for illustrating magazine stories. More attention should be given if funds accrue, to creating diverse habitat backgrounds for our sponsoring grasses on the grounds, and to taking photos of specialized interest. During the year we lent photos for the cover of the University of Vermont booklet on turfgrass, for "Better Lawns for Your Home" distributed at the New York Flower Show by Rutgers University, and to several newspapers. There have been no appreciable capital investments in office equipment during the year, and we continue to keep our fingers crossed that there will not be serious breakdown in dictating, typing, mimeographing or other machines. Because of reduced budget, the most recent issue of Harvests was produced at Marysville, rather than professionally as in the past from Kansas City.

Much time and effort is taken in routine filing, literature and library maintenance, and in related activities. Mrs. McComas has taken time to winnow and improve the mailing lists. Several associated activities of the year are apt to reflect creditably upon the Institute, such as preparation of several items for Encyclopedia Americana, reviewing of the Advances in Agronomy book on turfgrass, and co-authorship (with colleagues from Purdue, Duke and Minnesota Universities) of a Crop Science textbook that deals in part with ornamental and forage grasses, and will picture harvest scenes of bluegrass, fine fescue and Highland bentgrass.

The Lawn Book and Householder's Guide to Outdoor Beauty continue to lend authority to the Institute, and under discussion is an additional popular book which may or may not eventuate, co-authored with a Purdue horticulturist. We have lent our name, and written Washington regarding National Spring Planting Week, and permitted listing in the Stanford Research Institute's publication of research activities.

Several radio scripts were prepared for the Oregon Fine Fescue Commission, and sent to Dick Kuehner for implementation through resources available to him. We have honored numerous requests for our literature from educational sources, including students taking turfgrass courses in college, authors and libraries. We prepared the "occupational brief" for Chronicle Guidance Publications, which issues resumes of career fields for high school students; sent information for Module 9 of Ohio State lawn teaching manual, and for a chapter in Dr. Logan's "Facts About Merchandizing" book; and for reference in the U. S. National Agricultural Library.

The Institute has been somewhat active in the joint USDA & HUD Conference on "Land and Water Management in Suburbia", having been extended a special invitation to attend. At the Oregon Seed League Meetings, an arrangement was set up through OSU to communicate with editors of key newspapers in the Willamette Valley regarding the field burning



problem, - successful, we gather, by the number of times the letter appeared and the correspondence it generated. I have continued to serve as a member of the Awards Committee of the Garden Writers Association of America. We have cooperated in a light form of research, in furnishing seed to Oak Ridge for radiation treatment, and checking the influence on germination. Our past contributions to such gardening encyclopedias as that of the Reader's Digest marks us as research-minded, and we grow all of our sponsoring grasses on the Institute grounds, under differing treatments, to the extent we can afford custodial labor.

It was especially pleasant to have the Penncross Association participate in the Institute this year, as well four firms join in response to the excellent Membership Committee efforts engineered by Gordon Newton. New members are: McKenzie Seed Co., Ltd., Michael-Leonard, Inc., Quebec Seed Company, Ltd., and Wetsel Seed Company. We have continued to service the "Seal of Approval", a topic for later discussion on today's agenda. Clippings sheets were assembled, xeroxed and supplied the Oregon Associations. We are especially indebted to Mr. Jim Carnes for his able leadership in organizing the Pacific Northwest Bluegrass Association, and guiding its support in our direction.

As to the industry, during the year we have witnessed an increasing trend towards the sodding of turfs. Seed for sod may represent a somewhat less voluminous market, but a higher-priced one, of decidedly higher quality standards; an increasing trend towards special varieties can be expected to satisfy it. Breadth of interest in turfgrass seems increasing, too. Turfgrass is now given sophisticated coverage in industry publications (such as we often write for) in fields such as construction, industrial landscaping, outdoor recreation, travel, roadside management, cemeteries, and other specialized facets. As to home lawns, there seems the beginning of changed landscaping ideas that come with the crowding of more peoples on land increasingly scarce and expensive; we must be alert to these changes, and anticipate more sophisticated and intensive maintenance of specialty turfs than in the past.

In summary, it appears as though we have been able to carry through another year quite successfully, in spite of increasing financial problems. The Institute has been successful beyond expectations in having the names of the grasses that support it appear frequently in print, and especially in gaining recognition for the "fine-textured" categorization of the newer labeling. We have seen influential columnists, such as Earl Aronson, compose whole syndicated features solely from material of our press kit, and acknowledge the Institute source therein.

That we have fulfilled a service is, I think, evidenced by the unsolicited "testimonials" which you have all seen in Harvests under the "What They Are Saying" pages. Even though much of our energy is devoted to just keeping the "show on the road", we do seem to be getting through to key audiences, and being appreciated. Of course this would not be possible without the help and support of the Oregon commissions and the Pacific Northwest Bluegrass Association; without the encouraging efforts of Gordon Newton and his Membership activities; without Roy Edwards taking time to manage our business affairs in Kansas City; and without President Mangelsdorf putting aside his busy schedule to follow through on Institute affairs. Having had this help it is possible to look back a year no less gratifying than last, about which I was able to say a year ago (equally pertinent today):

"I am pleased to report to the trustees for the fiscal year, no little success in our primary efforts of publicizing the various quality lawn seeds represented in the Institute. This has been in spite of budget restrictions which in many respects were even more onerous than for the fiscal year preceding. Our most spectacular achievements lie in the promulgation of the printed word, through (1) newspaper pickup, from the press kits; and



(2)stories appearing in magazines, the readership for which is extended through distribution of reprints. That the Institute has been so well accepted in these areas results, of course, from many years of careful building. The Institute has earned through hard years of effort a position as an authoritative, honest and helpful source of information. Such excellent acceptance and so favorable a public image could not have been achieved without our full gamut of activities. I am thinking primarily of creating a "research atmosphere" by maintaining an Institute testing grounds, by fostering liaison and scientific intelligence (as with generously shared facilities of Seed Technology, product donation and intercommunication with several sponsors and members), and by attending national scientific and trade gatherings. It involves, too, your Director maintaining contacts and engaging in "extra-curricular" activities at the university level.

Successfully placing stories and headlines is as much a means as an end. Not only is it important to have the grasses which sponsor the Institute mentioned by name in release materials, but to improve the public appreciation of the industry. We must lend a service valued by our 'users', that contributes to the betterment of gardening, outdoor beauty and the useful employment of turfed areas. And we must help guide the industry itself, in production of the highest quality seed possible, in cooperating with allied industries, and in appreciation of trends and needs of the times."

#### STORIES READIED FOR SPONSORED MAGAZINE

Lloyd Zeman, editor and owner of National Farm and Home Publications, flew his Cessna to Marysville in mid-June, to discuss with Dr. Schery proposed stories for Better Turf and Garden, a dealer and homeowner magazine delightfully done in color for Borden Chemical Company. Dr. Schery has agreed to be "lawn expert" for the magazine, answering inquiries concerning turf. The Lawn Institute will be mentioned in by-line stories as an independent informational service. Expected to be used in autumn issue is a map detailing appropriate lawn grass zones for the United States, with text mention of the quality lawn species and their varieties. We look forward to helpful association with National Farm and Home Publications.

#### REPRINTS CONTINUE OF SERVICE

Several thousand reprints were distributed during the quarter, through requests from several members, as stuffers in mailing, and in preparation of the autumn press kit authorized at the annual meeting. Among titles frequently used were: "How to Buy Grass Seed" (Better Homes and Gardens); Keep Sheet (Flower and Garden); "Steps to Assure a Good Lawn" (House and Garden); "Quackgrass Can Be Controlled...." (L/G/O); "Thatch and Your Lawn" (Parker Sweeper Co.); "'Shabby Look' of Spring Lawn Can Be Avoided" (Resort Management); "Lawns" (Horticulture); and "Now Lawns" (The Floral Magazine).

#### PHOTOCOPIES TO OREGON GROUPS

One of the exhibits circulated at the annual meeting was an impressive accumulation of clippings having appeared in newspapers, corraled by our clipping service. In order that members of the Oregon commissions and associations, unable to attend a meeting distant from the West Coast, might have a chance to see first hand this publicity, groups of clippings were assembled and photocopied. Separate sets of 15-20 Xeroxed sheets were mailed to each the Oregon Fine Fescue Commission, the Highland Bentgrass Commission, and the Pacific Northwest Bluegrass Association. Minutes and comments on the annual meeting were sent to those few trustees unable to attend in Kansas City.



#### SEAL OF APPROVAL ROYALTIES DUE

In order to allow time for full accounting of the spring season, Seal of Approval royalty statements were not mailed this year until the end of June, and will be on a semi-annual basis. Seal users are asked to remit payments promptly, and of course these escrow monies are immediately refunded for verified advertising expenses. The Board of Directors authorizes share-for-share payment of local advertising (whether newspaper or radio), that equally features approved seed mixtures and the Seal of Approval itself.

If there are members not now utilizing the Seal of Approval who would like to adopt it, please send your request and the blend analysis for which it will be employed to the Marysville office for submission to the appropriate committee of the Board. Rules governing issuance of the Seal remain as in the past, - at least 75% of the blend of perennial, sod-forming, fine-textured grasses, the remainder unobjectionable nursegrass, inert, or other harmless inclusions.

#### JOHN DEERE CONTINUES COOPERATION

We are grateful to the John Deere office in Columbus, Ohio, for again supplying the Institute with a garden tractor and mower for the summer season. A modern tractor of this type is useful not only for intermediate mowing, but as an attractive accouterment to lawn scenes. These modern garden tractors are a far cry from their older agricultural antecedents, coming as they do with balloon flotation tires that will not rut, automatic starter, and a variable forward speed independent of the mower that permits adjustment to the momentary needs of the turf.

#### MAILING LISTS SCRUTINIZED

While we try to continuously upgrade the Institute mailing list for press kits, retiring "dead" names and adding potentially useful new ones, several man-days were spent in especially close scrutiny after the annual meeting this year, updating the lists. For the first time in several years the complete mailing list was ordered from the letter service in Kansas City, and checked against the Marysville cards.

As a result of this "overhaul" over a hundred new inclusions were made, largely counter-balanced by the cropping of addresses which seemed to duplicate or be of no current value. It is surprising how there can be slipups between the master list in Marysville, and the one used by the mailing service, even though an exact system of making changes by correspondence was supposedly in force.

Especially helpful should be the several days Mrs. McComas spent in checking addresses against clipping service receipts, showing just which newspapers made greatest use of lawn stories. We certainly don't want to do anything to "upset the apple cart" where our stories are well used. On the other hand consideration should be given (after a trial notice), of dropping addresses which seem never to utilize the stories (we are hesitant to drop them automatically, since it merely may be that the clipping service does not catch the usage?).

#### ADVISOR MAILING MADE

In mid-June a seasonal mailing to seventy-five advisors (technical experts at research centers across the country) was completed. The advisors were informed of developments at the annual meeting, - new officers, supporting organizations, and changing trends within the quality lawnseed industry. We continue to offer courtesy seed for demonstration and



test at research grounds. All advisors are supplied a full complement of reprints, for their files, and in case additional copies may be useful for extension activities or other informational uses. Since all advisors do not receive the press kits, seasonal mailings such as this "display" the Institute before this influential body of technical people.

#### MAY 26 SEED WORLD

We are pleased to note in this issue, as "Bulletin Board Suggestions", the story credited to the Institute "Bluegrass in the Yard by the Yard". This reviewed Canadian findings on the spread of bluegrass, and ends with the comment, "Park Kentucky bluegrass sprouts very quickly, while slower Merion spreads prolifically".

#### FEATURING FESCUES

"Fescues for Woodlands", with byline credit to the Institute, appeared as the Bulletin Board Suggestion in the April 28 issue of Seed World. The story emphasized that with the help of fine fescues it is possible to maintain reasonable turf in shaded areas, " - largely because fine fescues such as Chewings, Illahee, Pennlawn, Rainier and Highlight are now in abundant supply from Oregon."

#### L/G/O STORY

An Institute story (using control of quackgrass as a vehicle for mentioning quality turf-grasses) appeared in the June issue of Lawn/Garden/Outdoor Living. While the names of quality grasses are given, the editor so rearranged the story that there is some confusion in out-of-context statements. Because of this the story was not reprinted and circulated in the usual fashion, although copies were sent to members for their information. It may be of interest that on the Institute grounds we have had some success in eliminating quackgrass through the extra-heavy application of picloram mentioned in this item (7 lbs. active/A). The story opens, "Quackgrass is one of the worst perennial weeds to eliminate from Kentucky bluegrass, fine fescues and bentgrasses".

#### INSTITUTE RELEASES APPRECIATED

We are encouraged when a member finds Institute releases helpful. We are grateful that McKenzie Seed, Manitoba, took time to write the Marysville office, "I would like to take this opportunity to congratulate you on the excellent material that has been forwarded to us. We here at Brandon have found this material to be very informative and has helped us a great deal."

#### BUILDING MAINTENANCE & MODERNIZATION STORY

The story done for Building Maintenance & Modernization appeared in the June issue, under the title "Turf Preparation for Summer Heat". The introduction mentions the quality lawn species, and the newer labeling which identifies them as "fine-textured". On the facing page is a colored tabular box giving thumbnail sketches of the Kentucky bluegrasses, the fine fescues, the bentgrasses and bermudagrass. Mowing, fertilizing, and irrigation are the main items of coverage, with final suggestions about weeding. Re the latter, the final paragraph reads in part, "Of course prevention is far more effective than a cure, - a good reason for choosing your seed carefully so as to avoid 'coarse kinds' contamination. Bluegrass, fine fescue and bentgrass blends from reliable sources at a fair price comes essentially free from crop and weed seed. Most weeds arise from residual seed in the soil, - "



#### L/G/O REPRINT CIRCULATED

We are pleased that the reprint concerning selective removal of quackgrass from Kentucky bluegrass, that appeared in Lawn/Garden/Outdoor Living has attracted attention. Among replies received we are delighted that Patco Products has been able to make use of multiple copies as part of its informational program.

#### TORO HELPFUL

We are very grateful to the Toro Manufacturing Corporation, not only for loan of small mowing equipment, but for continuing interest in the automatic irrigation system (Moist-O-Matic) that permits the Institute grounds to sport some semblance of research area of technical interest. The Moist-O-Matic unit has proved very successful, encountering a minimum of troubles through 3 summers and 2 winters of continuous operation. The control box (automatic clock) remains running through winter, and there has been no material damage from freezing and winter weather.

#### STORIES PREPARED FOR GOLF PUBLICATION

Following up on arrangements set up by John Hooper, Nutro representative in the Chicago area, the press kit and custom stories have been provided Tom Burrows, editor of the "Bullsheet", official publication of the Midwest Association of Golf Course Superintendents. We are delighted with the opportunity to have access to so influential a group.

In addition to the assortment of spring press kit stories used by Mr. Burrows, two special items were prepared advocating Highland bentgrass seedings of fairways (when these must be close mowed), in combination with fine fescues and bluegrasses. In another item the use of fine fescue for shaded areas was reviewed. Because of the type of publication, these articles will not be reprinted for circulation to the Institute membership unless there are special requests.

#### CONFERENCE ON SOIL, WATER AND SUBURBIA

Dr. Schery, as representative of the Lawn Institute, was invited to the Conference on Soil, Water and Suburbia, sponsored by the Secretaries of Agriculture, and Housing and Urban Development. The program was organized into four sessions, - "Land in Transition", "Knowledge for Transition", "The Suburban Land Resource and Its Use" and "Community Action". The first of these included addresses by several high government officials, and M. J. Gleason of Portland, Oregon. The remaining sessions were organized to provide two formal papers, followed by two discussant criticisms. Water technology and economics, land use and availability, site planning and development, were some of the main themes under the consideration. The planting of turf (lawns) obviously has a bearing on many of these matters, but was not of itself a topic of discussion. This is one of those marginal activities that it would be interesting to participate in, for the contacts and prestige offered, but dispensed with under tight budget strictures.

#### FESCUE PUTTING GREENS?

In his column in Golfdom, Fred Grau makes this statement: "When water shortages are felt more deeply in our economy, we may once more see fescue putting greens." Fred mentioned that in earlier years fine fescue mowed at  $\frac{1}{4}$  inch was not an uncommon putting surface in northern Pennsylvania.



#### NEW OFFICER FOR HIGHLAND BENTGRASS COMMISSION

Wally Hunter informs us that Robert Humphreys has been newly elected Secretary-Treasurer of the Oregon Highland Bentgrass Commission. Mr. Humphreys succeeds James Heater.

#### BUSINESS INTEREST IN LAWNS AND LAWNSEED

In late April Mr. Dietsch of Scripps Howard newspapers called from Washington, D. C. for a "briefing" on how big a business is lawn planting and care. The Marysville office was able to give Mr. Dietsch some general information, from which he intended to develop a story. The incident indicates continuing interest in business aspects of the lawnseed industry.

#### ITEM IN TRADE JOURNAL

"Stop Crabgrass", with byline credit for the Institute, appeared in the April 14 Seed World. Advice given is, "Thicken up the earlier bluegrasses, fescues and bentgrasses by fertilization, bolster seeding and sufficiently high mowing. --"

#### CHAIN OF INFLUENCE

The following instance illustrates the influence from supplying lawn stories to magazines. After reading "The Lawnmaker's Year" in the Bulletin of the New York Horticultural Society, a landscape architect prominent on Long Island telephoned for specific information concerning varieties of lawn grass and their blendings as seed, especially for the Long Island estates and croquet courts. It was possible to suggest combinations of Kentucky bluegrass and fine fescue for situations where bentgrass "greens" are not resilient enough for croquet play.

#### MUNCIE STAR REQUESTS STORY

Bill Brantley, Garden Editor for the Muncie, Indiana, Star, telephoned the Marysville office asking for a series of spring stories. Because of shortness of the season it was decided best to adapt the many stories in the press kit, but that photos from the Institute files would be sent to lend distinctiveness. Five different selections were sent to Brantley by Mrs. McComas. We are pleased to have this continuing excellent acceptance of Institute materials by the Muncie Star.

#### COLLEGE INTEREST CONTINUES

John Rizzo, student in Botany at Springfield (Mass.) College continues Institute cooperation in a worthwhile educational effort. Writes John, "---- I have selected for my project The Problems of Maintaining and Planning Golf Course Grounds. I would greatly appreciate any information you could provide that relates to -- problems of turf, including type of grass, length of grass, care of grass and the reasons for them."

#### "QUICK TURF" FRANCHISES

The hydraulic seeding-mulching machines developed by Bowie (Texas) are being utilized in franchise offerings by Quick Turf, Inc. While a system of spraying seed or sprigs along with fertilizer and mulch onto a seedbed seems to have greater applicability in the South than the North (longer growing season and summer planting), the approach may have seasonal usefulness in association with landscaping services farther north. We are especially



intrigued with the idea of mechanized, specialist winterseeding for southern golf courses. This has been suggested to Quick Turf. Jack Manry of Quick Turf wrote the Institute requesting multiple copies of all reprints in our "Portrait" series, sent to Dallas for inclusion in informational kits. We hope that this may be instrumental in encouraging greater use of hydraulic seeding.

#### "HIGHLAND FOR LAWN PATTERNS"

This was the title of the item, credited to the Institute, in the May 12 issue of Seed World. The story mentions, in part, "One of the lawn grasses most noteworthy for its subtly contrasting color is not an expensive prima donna, but the Highland variety of colonial bentgrass."

#### INTEREST AROUSED

In most instances when stories are picked up from our press kit by local newspapers, our address isn't given. Nevertheless, letters from readers occasionally find us, indicating gratifying effectiveness of Institute stories. The following, for example, was received from a reader in Bloomington, Indiana: "Our local paper carried an article regarding kinds and uses of grass seed. As this article is recent and timely I was wondering if you have any free brochures on grasses, their care and choice."

#### SYSTEMIC FUNGICIDE ANNOUNCED

The May Quarterly Report of Uniroyal, announced Vitavax, a systemic fungicide said to be effective in the growing of grain plants throughout the season from a seed treatment. It protects wheat, for example, from rust and smut, increasing yields up to 25%. One naturally wonders if it might have the same sort of effect upon lawn seeds? Could seed treatment prevent leafspot, for example, in susceptible bluegrass varieties?

#### SEED WORLD USES ITEM

"The Spring Lawn Program" appeared with by-line in the March 24 issue of Seed World. We are grateful for this cooperation. Members may recall the advice in this story, - "This is also occasion to upgrade poorish turf. Introduce only top flight lawn species such as Kentucky bluegrass, Oregon fine fescue and select bentgrass. --"

#### NEW SURVEY OF NON-FARM FERTILIZER USAGE

A National Plant Food Institute survey reports the following consumption figures for non-farm fertilizers:

|                      |           |
|----------------------|-----------|
| Lawns and gardens    | 1,587,000 |
| Industrial grounds   | 300,000   |
| Golf courses         | 227,000   |
| Streets and Highways | 205,000   |
| U. S. Government     | 71,000    |
| Cemeteries           | 77,200    |
| Apartment houses     | 10,000    |
| Miscellaneous        | 822,700   |
| Total non-farm usage | 3,300,000 |



### STORY IN FERTILIZER SOLUTIONS

"The Spring Lawn Program", with by-line to Dr. Schery and the Lawn Institute, appeared in the May-June issue of Fertilizer Solutions, the journal of the National Fertilizer Solutions Association. The story advocated bolster seeding, and of course lawn feeding. Part of the advice was to: "Introduce only top flight lawn species such as Kentucky bluegrass, Oregon fine fescue and select bentgrass". Modern labeling that groups the quality grass seed together as "fine-textured" was discussed. Under fertilization, "Bentgrasses such as Highland should be fertilized each few weeks, but most Kentucky bluegrasses and fine fescues such as Chewings, Illahee and Pennlawn may be fed rather lightly until the surge of spring growth is mostly spent".

### ADVICE TO BUILDERS

The Institute has been furnishing information to Buildings magazine, including a custom story for summer. We were gratified to note in the May issue, in an article devoted to landscaping this advice: USE LOTS OF GRASS - Liberal use of grass. Grass areas, mounded to give better visibility from a distance, are very effective. Even though grass must be cut often, it is cheaper to install than ground covers such as pachysandra or myrtle and is easier to keep clean and free from debris. Planted with seasonal flowers at the shopping center entrance, grass can be more pleasing than small evergreens in complicated masses.

### HIGHLAND ENTHUSIASM

Highland bentgrass growers will be interested in a recent experience indicating usefulness of Highland bentgrass in an area not ordinarily thought of as a prime market - southeastern Virginia. Dr. Lawrence Miller, of the Holland Experiment Station, visiting Marysville inquired where he could buy Highland bentgrass. As a long time resident of this location on the Carolina border, Dr. Miller indicated that only Highland among cool-season grasses has the durability to persist there, make an acceptable lawn able to hold its own in competition with "wiregrass" (bermuda). He mows Highland fairly tall, and reports that it survives well with minimum maintenance.

### MIAMI CONSERVANCY DISTRICT

In early June the Principal Engineer of the Miami Conservancy District, Dayton, Ohio, wrote Dr. Schery for suggestions for a new river channel seeding. About four miles of channel is to be relocated, and the engineers wanted a turf which would effectively control erosion while remaining reasonably low and attractive without mowing. Of course reasonable price is also a requirement with such extensive seeding. In the absence of any new "miracle", Dr. Schery recommended a blend of fine-textured grasses involving approximately equal quantities of fine fescue, Kentucky bluegrass and Highland bentgrass (on a seed count basis). It is felt that the fine fescue will provide quick cover, and colonize the upper slopes permanently (where soil is dry and impoverished), while the Highland bentgrass will eventually colonize the lower slopes and stream margins, the Kentucky bluegrass providing its vaunted rhizoming wherever growth conditions are suitable. It is encouraging to witness the increasing interest in attractive turf (as well as that easily maintained), in usages where once "coarse-kind" species were taken for granted. The Miami district reports one area in Dayton about 3/4 mile long seeded to fine-textured grasses (according to a previous recommendation), which has been left unmowed (but the weeds controlled with herbicides), seems to be performing quite acceptably.



### TURFGRASS FOR SHADE

Reported in Western Landscaping News, is a presentation by Dr. Robert Newman of the University of Wisconsin, on turfgrass for shaded areas. Newman suggests that special attention be given the conventional grasses, for there is no better turf than that derived from such species as Kentucky bluegrass and the fine fescues. He advocates extra fertilization, aerification of compacted soils, trimming of very dense trees, and switching of areas especially heavily used. He recommended overseeding Kentucky bluegrass with fine fescue, the latter being "much more shade tolerant than Kentucky bluegrass".

### CRABGRASS WITHSTANDS RADIATION

A report in Science by George Woodwell, Brookhaven National Laboratory, reviews reaction of vegetation to ionizing radiation. A mature forest is ten times more sensitive than is a newly abandoned field colonized by aggressive, low-growing grasses and weeds. But even in the colonizing field almost everything is eliminated by an exposure of 400 roentgens per day, - except crabgrass. At 1,000 roentgens crabgrass accounted for almost the complete production of vegetation, which actually was higher as the radiation dosage increased to this level. This does not mean that crabgrass "enjoys" radiation, but that it is so aggressive as well as resistant that it takes over from other species as they fail. Any wonder it is such a pest in the lawn? In general plants able to endure environmental stress endure radiation too, with small low-growing plants having small chromosomes being the most resistant. Pines are among the most sensitive plants, oak trees less so, shrubby heaths still less so, with sedges and grasses such as crabgrass among the least sensitive.

### DETAILED LISTING FOR CALIFORNIA

Dr. V. B. Youngner, Institute advisor in California, provided detailed analysis of turfgrass use and adaptation for the state, in the April issue of California Turfgrass Culture. Dr. Youngner divides the state into three major zones; where the subtropical grasses (the Central Valley and extreme southern portions), where the temperate grasses do well (most of the state, including High Mountain, Mojave Desert, Coastal Range, Dry Coast and Foothills and Humid Coast and Foothills sub-zones), and coastal areas where an option for either exists.

An accompanying chart names the different turfgrasses suitable to each of these zones and sub-zones, in terms of usage (viz. lawns, parks, playgrounds, athletic fields, golf greens, golf fairways, golf tees and bowling greens). Kentucky bluegrass, for example, heads the lawn list in all categories except the "sub-tropical" one, and even there is mentioned. Highland bent is suggested for sub-zones 1, 4 and 5 - mountains and coastal areas. It is frequently mentioned for golf course fairways, as are fine fescues and Kentucky bluegrass for all of the temperate sub-zones. Penncross is especially suggested for golf and bowling greens in every sub-zone except 2 (the Mojave Desert). Highland bentgrass, fine fescues and Kentucky bluegrass are suggested for golf tees as well as for fairways in most zones. All suggestions cannot be reviewed, but it is evident that Dr. Youngner visualizes wide usefulness of Kentucky bluegrasses, fine fescues and Highland bentgrass for almost all usages, in most of the sections of California.

### DIELDRIN DEGRADED

Dieldrin, one of the chlorinated hydrocarbon insecticides formerly much used for lawns and in the garden, is noted not only as a strongly toxic substance but one that is extremely long lasting in the soil. Now it is reported by University of Wisconsin researchers, in



the May 19 issue of Science, that several soil micro-organisms have been isolated which are able to degrade dieldrin. This suggests that in time a soil ecosystem develops that is effective in disposing of this especially stable insecticide. The effective fungi and bacteria were isolated from soils previously subjected to heavy dosages of insecticide.

#### BROADLEAF WEED CONTROL IN TURF

Canadian researchers, reporting upon the control of broadleaf weeds in turf, stressing safety to turfgrasses as well as efficiency in weedkill, concluded that a combination of 2,4-D (16 oz.), MCPP (16 oz.) and dicamba (1.5 oz.) was the optimum combination, when sprayed to 250 square feet in 1 imperial gallon of solution. Excellent control of knotweed, chickweed and clover resulted. There was no injury to Penncross, Seaside or Highland bentgrass.

#### POA ANNUA PREVENTION

Studies at Pennsylvania State University were reported at the Northeastern Weed Control Conference, showing that autumn applications of bensulide were quite effective in controlling Poa annua in various seedings and plantings of closely-mowed bentgrass. There was some root injury to the bentgrass, noticeable during periods of moisture stress. Siduron did not control Poa annua, and was deleterious to two vegetative strains and Seaside bentgrass. DCPA (dacthal) and other crabgrass preventing chemicals were injurious to Seaside bentgrass except at rates too low to be very effective against Poa annua.

#### OKLAHOMA RESEARCH REPORTS

The 1966 Progress Report on Turfgrass Research from Oklahoma State University was received in early June. Attention centered chiefly upon disease and weed control, noting phytotoxicity to the turfgrasses. Perhaps of chief interest to Institute sponsors is the frequent inclusion of Penncross bentgrass in the studies, indicating its acceptance for putting green usage in this southerly state. Joint authors of the report were Drs. Wadsworth, Young, McCoy, and Huffine.

#### NITROGEN RECOVERY

Research undertaken by Nash and Johnson, in Colorado, reported in the May-June Agronomy Journal, indicates that soil texture has little influence upon nitrogen uptake by grass. However, the nitrate form of nitrogen was much more efficiently recovered than was ammonium nitrogen. In cited research of others there are reports of fertilizer nitrogen recovery as low as 7.6%, and as high as 94.5%.

#### PURDUE TURF CONFERENCE

Proceedings for the 1967 Turf Conference of the Midwest Regional Turf Foundation, Purdue University, appeared in late June. This is a 78 page report, embracing dozens of presentations, many of them of limited or local interest.

Bentgrass seed producers will be interested in a report by Raymond Phillips, former superintendent at the Louisville Kentucky Country Club, reporting on "My Experience With Bent". Phillips reported successful employment of bentgrass fairways in this fairly southern zone, using a seeding mixture about half bluegrass and half bentgrass (on a seed count basis). Common, Newport and Delta bluegrasses were employed; Penncross, Highland and "Colonial" bentgrasses, (all bentgrasses in about equal proportion). The fairways were irrigated, mowed at 5/8 inch.



Also appearing in the proceedings under the title "Turfgrass Varieties", is a summary by several Rutgers University researchers chiefly about bluegrasses. The complete report was received separately from Rutgers, marked not for publication. Bluegrasses are rated especially with regard to their resistance to Helminthosporium. Having good resistance are Merion, Fylking, Warren's A-20 and several experimental selections including Anheuser dwarf. Cougar, Primo, Newport, Prato, Campus, Windsor, and other Warren selections are intermediate; Common, Delta, Arboretum, Park, and several others are listed as susceptible. In resistance to stripe smut Park, Delft, Fylking, Anheuser and several experimentals show good resistance; Cougar, Newport, Common and Delta intermediate susceptibility; Prato, Merion and Windsor high susceptibility. Ratings are also given for rust. Listed as low-growing are Fylking, Merion, Cougar, Windsor and Anheuser along with a number of others (mostly experimental); Prato, Campus, Delft and Newport are included as moderately low growing; Delta, Common, Park and several others as erect. Most dense in the ratings were Warren A-20 and A-34, Fylking, Merion, Prato, and a large number of experimentals; moderately dense were Newport, Cougar, Campus, Delft and Arista; of below average density were Common, Park, Delta, Anheuser and a couple of others.

A short summary of each of these varieties is then provided. The researchers conclude: "Currently, blending of several selections is preferred. As they are available, then mixtures of a number of elite, low-growing, compatible varieties, each with good resistance to leafspot and stripe smut, may be the best way of getting superior Kentucky bluegrass plantings adapted to a wide range of environmental conditions and management practices. Such mixtures should offer considerable insurance against turf failure which may happen when growing any single common apomictic selection."

#### COMPARING NITROGEN SOURCES

This summer, with the cooperation of Borden Chemical (furnishing the materials), comparisons of fertilization with nitrogen derived strictly from ureaform, urea, nitrates and ammonium are being compared. This is on a closely mowed bluegrass interplanted to Highland bentgrass, with marginal areas of higher-mowed bluegrass. One of the prime advantages of this sort of demonstration is that an audience interested in the fertility results automatically hears about Highland bentgrass and Kentucky bluegrass. In the same sort of way interest in weed control permits mention of quality turf grass species.

Results with the fertilization strips are about what would be anticipated. All except ureaform are quite effective (the ureaform requires a double or triple application to manifest as much influence as do the other sources). Of the soluble sources urea is, if anything, performing most adequately. Applied as prills there is no foliage burn (there has been some foliage burn on the unirrigated sections, especially with ammonium sulfate). Urea shows no delay in response, even in cold, wet spring weather, indicating immediate availability (hydrolysis or nitrification if necessary).

#### RUTGERS RESEARCH REPORTED

Of especial interest concerning Kentucky bluegrass, is documentation from Rutgers University on the interaction between mowing height and fertility level, and susceptibility of Kentucky bluegrass to Helminthosporium disease. Without any fertilization there was twice the percentage of disease at the one inch mowing height as at the 1½ inch, and only half as much at the 2½ inch as at the 1½ inch height. At all mowing heights the percentage of disease was approximately tripled under moderate fertilization, nearly doubled again under heavy fertilization. For Kentucky bluegrass, Rutgers research experts recommend generous autumn but light spring and summer feeding.



### COLORADO REPORT ISSUED

A summary of the 13th Annual Rocky Mountain Regional Turfgrass Conference held in late January, was issued in June. A wide variety of presentations are summarized, many of them specifically relating to golf courses or to maintenance of turf in arid sections.

Kentucky bluegrass is the "standard" grass for turf in Colorado. An "Evaluation of Bluegrass Varieties" by three state university researchers was inconclusive, and pointed out that there was "nothing wrong" with common Kentucky bluegrass. Brief summaries are given of familiar commercial varieties such as Merion, Newport, Delta, Park, Prato, Windsor, and a few newer entries.

In another presentation, chemicals for killing old turf prior to revival of Kentucky bluegrass, or reseeding with it, are discussed. Paraquat seemed to give the best results, but it is mentioned that strong nitrogen solutions or potassium cyanate are simple and practical.

Perhaps of especial interest to bluegrass growers is the report by Institute advisor Dr. William G. Macksam (formerly of South Dakota), relating clipping heights and other maintenance practices to appearance (as judged by impartial "outsiders"). In a combination of treatments whereby high, intermediate and low mowing heights were related to fertilization and clipping removal, rather surprisingly fertilization and clippings seemed to make relatively little difference; high mowing was judged definitely to favor appearance, especially with common Kentucky bluegrass. With Merion intermediate cutting height was equally as satisfactory as high, and fertilization usually helped appearance.

Various other presentation deal with dyeing turf, efficiency in irrigation, the impact of recreational programs on turf, the influence of high salt content in the soil, electrical heating of soil for football fields, and several other items.

### REPORT ON FYLKING

The June issue of Weeds, Trees and Turf carried a thorough resume by Doyle W. Jacklin on the "0217" selection of Kentucky bluegrass, more easily remembered as Fylking. The several tables of data, and striking photographs, should do much to whet interest in this new variety. It is recommended especially where Kentucky bluegrass must be low-mowed.

### POA ANNUA CONTROL IN BENTGRASS

Dr. Juska has mailed reprints of the Juska and Hanson reprint, "Factors Affecting Poa annua Control". Many may have read this when it appeared in the April issue of Weeds.

The authors find no perfect combination of herbicidal effectiveness and lack of injury to bentgrass. Trifluralin as a pre-emergent treatment is exceedingly effective in controlling Poa annua, but it is not practically useful because of injury to bentgrass. Among the herbicides that can be practically used, DMPA (Zytron) gave the best (but still imperfect) control, and was little affected by phosphorus content in the soil. Next was bensulide (Betasan), the effectiveness of which was slightly lessened by high phosphorus content. DCPA (Dacthal) and calcium arsenate provided about the same order of control, but the arsenate was badly inhibited by high phosphorus content. In a number of cases a higher pH also slightly restricted the effectiveness of the herbicide.

The authors find that bentgrass varieties react differently so far as injury from herbicide is concerned. Washington bentgrass, for example, is badly injured by siduron,



old orchard moderately so by calcium arsenate. Bensulide, DMPA (Zytron) and lead arsenates seem to give no injury. But the authors note that reports from differing areas are not consistent, and that additional research will be needed to evaluate pre-emergence herbicides for annual bluegrass control in bentgrass.

#### PECULIAR SPRING SEASON

The Institute grounds in Marysville experienced a very peculiar spring, as did much of the country. After a very early start, with grass and other vegetation looking resplendent in early April, persistent cold and rain followed until the middle of May. Growth was almost as if held in "cold storage". On the heavy soils of the Institute grounds (the Powell end moraine of the Wisconsin glaciation) waterlogging plus drain on food reserves by incompletely formed foliage, resulted in considerable loss to plantings such as roses. Lawn grass suffered less, except that seedhead formation having been triggered, but growth slowed, resulted in many low seedheads in late May and June so low as to escape the mower. Then all at once, in mid-May, rain stopped abruptly, with hardly any measurable precipitation the six weeks since. This was rough on grass appearance, although disease was not much of a problem. Irrigation systems proved their worth in June, normally a good growing month; unirrigated grass was seriously off color. All the way around, a mixed up season!

#### ROBERTS TO FLORIDA

We have noted in the Florida Turfgrass News Letter, that Dr. Eliot Roberts, Institute advisor at Iowa, has been named to head the Ornamental Horticulture Department at the University of Florida.

#### EXCELLENT MINNESOTA COVERAGE

A spring release from the University of Minnesota each year seems to draw excellent response from a myriad of small Minnesota newspapers. The column is titled "Yard 'n' Garden"; our clipping service found it used by over 40, mostly smallish, weekly newspapers this April-May. Among our clippings, only Michigan seemed to enjoy such extensive utilization of a single item. Thus Minnesotans in all corners of the state were informed:

"The Kentucky bluegrasses are best for sunny lawns and heavier soils. If the lawn is to be used for a play area, addition of creeping red fescue grasses will help to improve the wearability. Seed mixtures for sunny lawns should contain from 60 to 80 percent of Kentucky bluegrasses. Other percentages are often made up of fescue grasses. The Park variety of Kentucky bluegrass will germinate quickly and give a quick turf cover. Where sod has been laid it is often advisable to do some cover-seeding with creeping red fescue in order to improve the wearability."

#### SAMPLING OF HEADLINES AND COMMENTS

To convey something of the magnitude of the way quality grasses get into the headlines and key text of newspaper stories around the country, we have at random pulled the following examples from among spring press clippings received. The citations here are not direct quotes from the Institute press kit (those are reviewed under a separate title), but we do feel some of the mention probably stems indirectly from the constant flow of Institute press kits, magazine stories and authoritative background material in encyclopedias and books.

A headline in Memphis, Ark., "Fine Seed Is Best For Carpet-like Lawn": the text advises, "The fine-textured grasses with the narrow leaves include the bluegrasses, red fescues and



bentgrasses". Connecticut, a populous consuming state, saw such headlines as "Quality Turf Starts with Quality Seed", and "Paying for Quality Lawnseed is Economy in the Long Run" (New Haven, Meridan). Advice included, "The two quality grasses recommended for general turf use in this area are varieties of Kentucky bluegrass and fine-leaved fescues", and "In Connecticut, a combination of Kentucky bluegrass and creeping red fescue is recommended."

Pueblo, Colorado, had for headlines, "Seed Capable of Producing Desired Lawn is Available", and "Usual Kentucky Bluegrass Still Highly Recommended". Smaller towns received this counsel from CSU (under county agent names), "Common Kentucky bluegrass is still heartily recommended for the average homeowner.", and a full garden page in the Denver Post heralded, "Be sure bluegrass is the basic grass in your lawn, --". In Illinois large city headlines included "Vigorous Lawns Despite Traffic or Shade", while widely syndicated small newspaper columns advised, "--use a mixture of 50% Merion bluegrass and 50% creeping red fescue", and "you can figure the true value of seed from the label". In Rockford, Fylking bluegrass got a boost with the headline "New Bluegrass May Offer Merion Some Competition".

In Waterloo, Iowa, the headline blazoned, "Reading Labels Important when Buying Grass Seed", and many papers advised, "The two best 'fine-textured grasses' for Iowa are Kentucky bluegrass (which includes strains Merion, Park and Windsor) and creeping red fescue. These types make a fine-leaved perennial turf which is generally used for front lawns." In Indiana, Indianapolis read, "Lawn Seed Labels can be Deceptive" and Terre Haute, "Pest of the Week 'Tall Fescue'". In Kansas, "It's Time to Seed Bluegrass", "Grass; Sow What?", and "Tips on Buying Your Grass Seed". Advice dispensed included, "Your bluegrass or fescue lawn should be fertilized now.", "Learn to Buy a Lawngrass Seed -- You should select a seed of fine-textured species", and (for Wichita), "There are many cool season grasses including bluegrass, fescue -- in mixtures. Beware of mixture containing a large amount of annual rye, --".

In St. Louis, Missouri, we are informed of a new golf course, "The greens have been planted with Penncross bentgrass", while outstate there are headlines such as "Bluegrass Still Best", "Tips on How to Buy Grass Seed". In the Boston, Massachusetts area, under the headline "Grass is Best for Lawns," one reads "Kentucky blue, Chewings or creeping red fescue, and colonial bent. These are long-lived perennials and thrive well together." Down in Baltimore the headline reads, "Don't Worry About Your Kentucky Bluegrass", while local authorities advise, "---seed your lawn with permanent grasses such as Kentucky bluegrass and red fescue." and "A mixture of Kentucky bluegrass and Pennlawn fescue in equal parts will be a good choice." In Michigan, "What is in Lawn Seed Makes Price Difference", and "Your Lawn Grass Can Be Greener" were typical headlines, while such as this suggestion appeared in the Jackson Citizen-Patriot, "The fine fescues, such as Pennlawn and Chewings, also rate high on the popularity list. These thrive in shady areas and are commonly used in blends. Common Kentucky bluegrass and fine fescue provide a popular blend, --".

New Jersey headlines advise, "Buy Good Grass Seed, Oscar, or Lawn Won't Win Oscar", "Proper Seed Mixture Needed to Grow Lasting Lawn", and such general advice as, "A seed mixture that contains at least 75% of the permanent fine textured lawn grasses such as Common Kentucky bluegrass, Merion Kentucky bluegrass and Red Fescue is generally advised" (Is this an outgrowth from the Lawn Institute Seal of Approval?).

In New York some of the headlines were, "Read the Label Before Buying Grass Seed" (Syracuse), "You Can Get An Early Start on a New Lawn" (Buffalo) and "Common Bluegrass Best for Lawns" (New York), while Schenectedy heard "The best seed for a dry soil is Red Fescue", Geneva "Kentucky Bluegrass is best for lawns constantly in the sun -- The best seed for dry, highly drained soil is Red Fescue", and Spencerport "Bargain lawn seed mixtures seldom



produce quality lawns or satisfaction". In nearby New Hampshire, "Right Kinds of Grasses Important for Lawns", and way out in Santa Fe, New Mexico, "Ordinary bluegrass in a standard mixture of companion grasses is quite satisfactory in this region."

In Ohio there was talk of improved bluegrasses in Cleveland, with advice against using tall fescue. Some of the headlines were. "Buy Lawn Seed That is Tested", "Bluegrass Enemy Can be Prevented", "Plant and You Shall Profit". In nearby Pennsylvania, "You can be Fooled in Buying Grass", and advice on handling bluegrass during leafspot times. In Texas "Lawn Seed Tips Offered", while in Washington D. C. a Post headline heralds, "So You Planted Bluegrass --".

Wisconsin gave a lot of attention to releases from the state university, with headlines such as, "What Grass Seed Do You Need?", "Proper Turfgrasses for Lawnseed", "Seeding Days for your Lawn --", "Zoysia Grass Not so Hot When its Cold"; some of the advice proffered was, "Kentucky bluegrasses are winterhardy, long-lived grass--where acid soils with low fertility, creeping red fescue --", "The proper variety should be one of the bluegrasses or creeping red fescues for shaded areas", "We recommend Kentucky bluegrass or red fescue for use in Wisconsin", "The ideal for sunny areas is 60-70 percent Kentucky bluegrass and 20-30 percent red fescue. In shady areas the formulation can be reversed --", "Kentucky bluegrass is the most responsive lawn grass --", and "Of course it is always desirable to use the best grade of seed possible. The most commonly used lawnseed is probably a mixture that contains mostly Kentucky bluegrass. Merion bluegrass is often used --".

#### MORE ABOUT SPRING PRESS KIT

A mid-May envelope from the clipping service brought over a hundred thirty clips. More than half of these were directly attributable to the Institute press kit, certainly a gratifying response. We can't hope to report all the coverage, but a few sample headlines and comments from the text serve to show that the public is hearing about quality seed - bluegrass, fine fescue and bentgrass.

In Connecticut, the headline reads "Quality Turf Starts With Quality Seed", and continues "In Connecticut we find the best home lawns are invariably Kentucky bluegrass and red fescue". In Pennsylvania the headline proclaims "How to Buy Grass Seed", and in North Dakota "Bluegrass Best For N.D. Lawns". In Wisconsin, "Bluegrass is Recommended for Most Lawns in Wisconsin", and Pennsylvanians are advised, "Kentucky or Merion bluegrass, and Pennlawn red fescue are the most desirable Pennsylvania species -- [undesirable] include ryegrass, timothy, meadow fescue, orchardgrass --". In Massachusetts, "-- a good seed mixture is one containing 30% Kentucky bluegrass, 30% Merion Kentucky bluegrass, and 40% Chewings Fescue."

Milwaukee homeowners saw an adaptation from the press kit, "Use Only Top Flight Grasses such as Kentucky bluegrass, fine fescue and select bentgrasses. Persistent bolstering with such stalwarts can in time change the composition of the coarse lawn. When seeding new lawns be especially careful not to introduce unwanted coarse kind grasses, and be faced later with trying to get rid of them." In Duluth the headline reads, "Good Grass Seed Spares the Thumb", and in Kansas "Good Lawn Not Expensive".

The state of New York got the "full treatment", - 14 items, mostly in the New York city area, some with byline. "Buy Quality Grass Seed", "Some Tips on Grass Seed", "Lawn's Start Vital", "Quality Seed is Weed Free", "If you Want a Bargain Buy High Grade Grass Seed", "Esthetic Landscape Not Costly", are but a few of the headlines. Fescue people will be especially pleased with the news out of Michigan: headlines included "Try Fescues in



Mixtures" (Detroit), "Fescue Fine Grass Excellent for Lawns" (Pontiac), "Fine Fescue" (Lansing), "Know Your Fescues Before Buying Seed" (Benton Harbor and others), "Be certain Fescue Lawn Seed is Right" (Alma), etc. Equally gratifying was such headlines as "Best Grass Seed is Best Bargain", "Read Grass Seed Label, Advised Lawn Expert", "Quality Grass Seed Repays Buyer for His Lawn Work", "Read Lawn Seed Label", "Buy Good Grass Seed", "Quality Lawn Blends Garden Plantings with Surroundings", "Weed Free Seed Best", and so on.

Wisconsin, too heard liberally of the Institute opinion: "Multiplying Bluegrass Spreads Across Lawn", "Fine Textured Lawn is Asset", "No Bargains in Grass Seed - - Get What you Pay For", "Seed Bargains Need Scrutiny", and such like. Again, in Lowell, Massachusetts, "Good Lawn Can Be Grown in Shady Areas".

Other headlines through the Midwest include: "Skip Grass Seed Bargains; You Get What You Pay For", "Cheap Grass Seed is Seldom Bargain", "Don't Buy Bargain Grass Seed", "Best Grass Seed Most Economical", "Use Quality Lawn Products", "Don't Look for Bargains When Buying Grass Seed", "Bargains are Few in Grass Seed", "Quality is Only Bargain When Purchasing Seeds".

In New Jersey the headlines read: "Use Quality Lawn Products" and "Blending Seed Important". In San Diego, California, "Bargain Buy is Quality". In Texas, "Bargains in Grass Seed are Scarce", "No Bargains in Grass Seed Sales". In Virginia, "Use Quality Lawn Products", and "Quality Lawn Blends Garden Plantings with Surroundings".

#### BOOK ON RIGHT-OF-WAY MANAGEMENT

Dick Kuehner called our attention to a pending compilation by Dr. Frank Egler, for the Smithsonian Institute, on right-of-way management. Dr. Schery wrote to Dr. Egler, with whom he is acquainted from Nature Conservancy work. The "Portrait Series" on turgrasses were included, for such help as they might be. Dr. Egler writes, "I am happy to have your Turfgrass Portraits. My one -- criticism of the series is that there are only 9 of them. I most certainly would like to see more --". Egler adds, "Your interests with the Lawn Institute, and mine on the subject of right-of-way vegetation management, certainly do overlap. I am entirely willing and desirous of giving the Lawn Institute as much favorable recognition as possible." It is still not clear, however, just how this book is going to develop - whether be an ecological study, a manual of instructions, or something else. We hope to keep in touch with Dr. Egler if there are ways in which the Lawn Institute can be useful. Special information has already been sent on performance of fine fescues, Highland bentgrass and bluegrasses left "wild".

#### WHAT THEY ARE SAYING

"We would like to thank Mrs. Zucker and Dr. Schery for the excellent material included in the supplement." -Bruce Price, ASTA

"Thanks for your helpful letter of March 29 with the attached items from the "Portrait Series", ...and for your encouragement in my attempts at educating myself concerning the grasses." -Arthur W. Holweg, State of New York Conservation Department

"Thank you for reviewing our occupational brief on Landscape Architect. We feel that your comments and suggestions have contributed greatly to our revision." -Chronicle Guidance Publications, Inc.

"You certainly did us proud with the story, as always." -Martin Judge, Editor, Resort Mgt.