

BETTER LAWN - - HARVESTS

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ANNUAL MEETING ELECTS NEW TRUSTEES AT KANSAS CITY

Trustees elected unanimously for the 1978-79 fiscal year term were:

Ross Allmon - Hercules, Inc., Wilmington, Delaware
Dick Bailey - Merion Bluegrass Association, Hubbard, Oregon
Bob Buker - FFR Cooperative, W. Lafayette, Indiana
Jim Carnes - International Seeds, Inc., Halsey, Oregon
Gabe Eros - OSECO Limited, Brampton, Ontario, Canada
James Jenks - Jenks-White Seed Co., Salem, Oregon
Ben Klugman - Twin City Seed, Minneapolis, Minn.
Bob Peterson - E. F. Burlingham & Sons, Forest Grove, Oregon
Norm Rothwell - Norm Rothwell Seeds, Lindsay, Ontario, Canada
Bob Wetsel - Wetsel Seed Co., Harrisonburg, Virginia
Kent Wiley - Pickseed West, Inc., Tangent Oregon
John Zajac - Garfield Williamson, Jersey City, New Jersey

The by-laws call for appointment by the executive committee of seven additional trustees. Appointed to fill out the Board, were:

Chase Cornelius, Northrup, King & Co., Minneapolis, Minn.
Doyle Jacklin - Jacklin Seed Div., Vaughan-Jacklin, Post Falls, Idaho
Peter Loft - Loft's Pedigreed Seed, Bound Brook, New Jersey
Ed Mangelsdorf - Mangelsdorf Seed, St. Louis, Missouri
Gordon Miller - Stanford Seed Co., Plymouth Meeting, Pennsylvania
Robert Russell - J. & L. Adikes, Jamaica, New York
E. R. Townsend - Whitney-Dickinson Seed Co., Buffalo, New York

The Board of Trustees elects its own officers. Expressing willingness to serve another term, the same officers who served so ably the year past were renominated and elected unanimously. They are:

President - Doyle Jacklin
Vice President - Gordon Miller
Secretary-Treasurer - Robert Russell

In addition to the officers, who are automatically members of the executive committee, the President appointed: Ross Allmon, Jim Carnes, and Chase Cornelius to be members of the new executive committee for fiscal year 1978-79.

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ANNUAL MEETING ELECTS NEW TRUSTEES AT KANSAS CITY - Continued

Other appointments by President Jacklin included:

Research Grant Committee -

John Glattly, Whitney-Dickinson
Richard Hurley, Lofts
Robert Peterson, Burlingham, Chairman

Variety Review Board -

Richard Bailey, Turf-Seed, Inc.
Howard Kaerwer, Northrup, King & Co.
Peter Loft - Loft's Pedigreed Seed, Inc.
Gerald Pepin, International Seeds, Chairman

Product Review Board -

Ross Allmon, Hercules Chemical Co., Chairman

SUMMARY OF LAWN INSTITUTE ANNUAL MEETING

The annual meeting of the Lawn Institute was held on June 27, 1978, at the Crown Center Hotel, Kansas City (Roanoke Room), at 1:00 P.M. Upon call to order by President Jacklin, the minutes of previous meeting as mailed were approved. The financial report was discussed briefly by Treasurer Russell. Influenced partially by some doubling up of proprietary payments into the previous fiscal year (and therefore their deficit in this fiscal year), outgo exceeded income during the fiscal year in the neighborhood of seven thousand dollars, a reversal of the accumulation of the previous fiscal year. It was the feeling of the Treasurer that this is a matter for concern, but not cause for alarm; it will likely be self-correcting as new proprietary payments are received on a larger seed crop (with summer arrearages possibly also still to be cleared up at the mid-year reporting period).

Mr. Carnes, reporting for Dr. Pepin, chairman of the Variety Review Board, reviewed that board's activities for the fiscal year. Director of the Institute, Dr. Robert Schery, presented his annual report to the membership, with circulation of exhibits. President Jacklin closed the general meeting with his summarization of the year. These reports are presented at length later in this issue of Harvests.

Vice President Miller, reported upon efforts to contact Mr. Stiffler, to see if Chesapeake might serve as an "agent" for the Institute in its southeastern promotional program. Arrangement has been delayed because of Mr. Stiffler's absence at the time Mr. Miller visited the Norfolk offices. Mr. Miller will report to the executive committee after he is in touch with Mr. Stiffler.

New bylaws, as circulated by the Secretary prior to the meeting, were approved as circulated. Due to the excellent groundwork by Mr. Russell, only brief explanation and discussion were necessary for this monumental task. The new bylaws became fully in force by subsequent approval of the Board of Trustees.

Considerable discussion centered upon the Lawn Institute's Seal of Approval. It was pointed out that under the new bylaws emphasis of the Seal changes from an

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SUMMARY OF LAWN INSTITUTE ANNUAL MEETING - Continued

attestation of quality for a seed mixture (based upon its content of fine-textured, perennial grasses), to one emphasizing approved proprietary cultivars (to be utilized only on packages consisting entirely of VRB varietal acceptances). Further interpretations may have to be taken by the Executive Committee to clarify to what extent special "approval" is needed, especially for mixtures (i.e. whether an "inappropriate" mixture, such as bentgrass with bluegrass-perennial ryegrass, should be permitted to utilize the Seal). At the moment it is envisioned that most usage will be for single cultivar packaged goods, or for combinations that include VRB listed bluegrasses-perennial ryegrasses-fine fescues in reasonable proportions.

Mr. Carnes, chairman of the nominating committee, presented the slate that was reported in the lead item: election was unanimous. Mr. Jacklin then closed the general meeting, and convened the new Board. The Board made "official" the revised bylaws, and elected its officers for the forthcoming year (Messrs. Jacklin, Miller, and Russell, as reported separately). President Jacklin then completed committee assignments, which are also given in a separate item. Trustees confirmed the Variety Review Board recommendations of new cultivar acceptances, with Blazer and Fiesta perennial ryegrass, and Ram I Kentucky bluegrass receiving favorable vote (complete documentation is still to be received on the two ryegrasses, however).

Participation in the Lawn and Garden "Supplement", if this seems desirable as plans shape up, at a cost not to exceed that of the past fiscal year, was voted. Robert Peterson reported upon his attendance at the organizational meeting of the National Federation of Turfgrass Associations. He felt that many uncertainties remain, and that operational patterns are not clear. It was the sense of the discussion that no action was called for by the Institute at this time, awaiting to see what further developments occur. With time running short, other matters, including discussion of the staff office budget, were left to Executive Committee attention. Mr. Cornelius had helpfully prepared an outline concerning a perennial ryegrass overseeding program for the South, which can serve as a plan-for-action into the future. Several members had excellent comments to offer, but unfortunately lack of time limited the fullness of the discussion; the matter will be carried forward to future board and committee sessions.

PRESIDENTS REMARKS TO 1978 ANNUAL MEETING

Our Company has just completed, or is in the process of completing, a major office and processing facility relocation. My feeling as a result of that move is that maybe we have finally grown to a point that we are no longer a small proprietorship but, rather, a somewhat larger entity managed by a Board of Directors instead of a single manager, and a business which can influence through both experience and size.

At the same time I can't help but feel exactly the same way about the Lawn Institute. We are no longer a small operation run by a single director and a single president. Although the day to day affairs are being handled quite admirably by Director Schery, the policy decisions are being made by your executive committee and the director, which means that a broader base of advice and know-how is being consulted to insure the continued effectiveness of the Institute effort. Additionally, your Institute is now supported primarily by over 30 different proprietary turfgrass varieties and sponsoring products, not to mention the many important supporting members. Each proprietary variety or product member contributes substantial funds to the Institute and each must have an input in determining how the Institute will operate. Hopefully,

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PRESIDENT'S REMARKS TO 1978 ANNUAL MEETING - Continued

this input will come through their Board of Director influence to the executive committee and the Institute director. I can even remember back not too long ago when the Institute was supported primarily by a limited number of commissions and associations on a much smaller budget than what we have today. That's growth and change!

We're not small anymore - - the Institute is growing up and with that growth comes a need to expand into new areas as evidenced by our new effort into the Southeast. Growth means we will also have to provide possible personnel assistance and backup for Director Schery which accounts for Vice-President Miller's meeting with Bob Stiffler.

We've come of age - - and with that maturity we now have influence which must be used to continue informing consumers and professions about new varieties and products which produce better turf. Really, we are an information service and we must be sure that we have adequate and accurate information to supply to as many garden writers, editors, and other people for maximum distribution to our consuming audience.

I am personally proud to be a member and president of the Lawn Institute. More than that, I am proud to be a member of the Lawn Institute team of directors and executive committee who work closely with Director Schery to formulate current and long range direction planning. I now ask for your continued support and input as we move ahead in our role of disseminating information about our products. Our reward will be acceptance and usage of those products which in the end will benefit us all. Let's keep growing! - Doyle Jacklin

ANNUAL REPORT OF THE LAWN INSTITUTE VARIETY REVIEW BOARD

Applications for Blazer and Fiesta perennial ryegrass and Ram I Kentucky bluegrass were received by the Variety Review Board during the past year. It is recommended by the VRB that all of the above varieties be added to the list of approved varieties.

During the past year, the following cultivars were voluntarily withdrawn by their sponsors from the Lawn Institute list of approved varieties: Arista, Cheri, Galaxy, Pennstar, Prato, and Sodco Kentucky bluegrass; Compas, NK 100, Pelo, and Yorktown perennial ryegrass; Jamestown Chewings fescue and Holfior Colonial bentgrass.

The remaining cultivars on the approved list were reviewed to determine their suitability for continued listing. It was voted that Game perennial ryegrass be removed from the list of approved varieties due to generally poor performance in many turf trials. We recommend to the Board of Directors that Game be deleted from the list of approved varieties.

With the new additions and the deletions of many older varieties, I feel that the present list of approved varieties is the best we have ever had. The complete list is listed below:

<u>KENTUCKY BLUEGRASS</u>		<u>PERENNIAL RYEGRASS</u>		<u>FINE FESCUE</u>	<u>SPECIALTY VARIETIES</u>
Adelphi	Majestic	Blazer	Pennfine	Banner	Emerald Creeping bent
Arboretum	Merion	Citation	Regal	Highlight	Highland Colonial bent
Baron	Nugget	Derby	Yorktown II	Koket	Sabre <u>Poa trivialis</u>
Birka	Plush	Diplomat		Ruby	
Bonnieblue	Ram I	Fiesta			
Enmundi	Sydsport	Manhattan			
Fylking	Touchdown	NK200			
Glade		Omega			

- G. W. Pepin, Chairman

YEAR-END REPORT TO BOARD OF TRUSTEES

By and large the 1977-78 fiscal year has been a good one for the Lawn Institute. The Institute has never been more successful in placing stories influentially. Other activities, too, flowed smoothly, following the patterns of the past. We continue with approaches that have proven successful, and take advantage of whatever opportunities eventuate.

A notable expansion of activity has been initiation of new press mailings for the Southeast; these have emphasized chiefly wintergrass seeding and the effectiveness of gradual-release fertilization in that region. Approximately four hundred newspapers and garden specialists in the southern-grass region received a first class mailing in March, and will receive another shortly. Costs for this, and increased cost of mailings generally, have been met by holding expenses in other areas below budget forecast.

Fortunately, no large capital expenditures were required during the fiscal year, and the chief travel expenses for the Third International Turfgrass Conference were prepaid in the previous fiscal year. Payroll-tax expenses were slightly up, but compensated-for by reduced office operating costs; as a result outgo exceeded income less than might have been anticipated, with draw-down of capital reserves amounting to about eleven percent for the fiscal year.

1. Press mailings. Members are familiar with our seasonal press kits, mailed in the familiar identifiable envelope and grassy-green file folder to some one thousand addresses. In autumn seventeen pages, including twenty-eight stories ranging from fairly long to short-fillers, were included, plus three back-up reprints for background. In spring the statistics were seventeen pages, twenty-five articles, with three back-up reprints.

Additionally, a joint release in cooperation with three other associations (American Association of Nurserymen, the Fertilizer Institute, National Swimming Pool Institute) is prepared each autumn for spring issuance. Our costs are shared by the Lawn and Turfgrass Division of ASTA. This release appears in newspaper-column format, produced again this year by William Pflaum Associates of Reston, Virginia. It is designed chiefly for about three thousand smaller papers and house organs many of which lack an in-house garden editor.

The Institute received perhaps a bit more than its share of space this year, - possibly because two of the other associations were delayed in submitting prepared materials (ours were in Pflaum's hands amply before deadline), and we did offer an abundance of illustrations. While stories are not credited by supplier or author in Lawns Gardens & Pools (popularly called the "Supplement"), twenty-six of them are of Institute origin, as were seven of the eighteen illustrations. Additionally several other items prepared by fertilizer and other interests related to lawns.

That efforts such as these bear fruit is proven by the continuing trickle of requests received at the staff office for reprints. In our own press kit we invariably include an item offering an up-to-date listing of Variety Review Board cultivars (and other literature), free of charge for anyone sending in a self-addressed, stamped envelope. This service costs little. It is a good measure of editors' friendliness towards the Institute that so many freely permit this "advertising" of the Institute in their papers or columns.

Continued -

YEAR-END REPORT TO BOARD OF TRUSTEES - Continued

Requests for literature come from all sections of the country. Additional supporting evidence of press material usage is the occasional publication we run across ourselves. For example, I happen to subscribe to the St. Louis Post Dispatch; the April 14, 1978 garden section picked-up twenty-five Institute titles. We note similar appearances in the Columbus, Ohio Dispatch, and are occasionally informed by others of appearances in various papers and magazines that we do not ourselves scan.

2. Custom stories. The Institute's second thrust is publicizing lawngrasses, lawns, and their care, through preparation of authored stories that are published in influential magazines of various types. Listed in the accompanying table are nearly two dozen items which have been printed, reprinted, or prepared (and are now in press) during the fiscal year. I don't know of any other association that comes close to achieving this widespread acceptance year after year. Obviously, were this amount of publishing to be self-sustained, the entire Institute budget could not cover the cost. Nor, of course, would we be able to entice the readership that is automatic for articles in independent magazines. In effect the editors are paying us the compliment of saying to readers, "Here is something worthy of your attention!". That of itself is *raison de etre* for an Institute with far more lavish in-house services than we can afford (special photography, artwork, lay-out artistry, etc.).

Doubly rewarding is that the Institute achieves still further mileage from authored stories inexpensively reprinted by photocopy methods. Reprints are offered to members, and many times are distributed by the thousands through the merchandising channels of individual houses. The staff utilizes reprints as a labor-saving means for answering inquiries, and as a general envelope-stuffer. We encourage the public to request reprints, such as the latest Variety Review Board listing of new cultivars. I have already noted that many editors generously put forth this offer from the press kit, to anyone willing to send in a self-addressed, stamped envelope. It is a wonderfully efficient technique; costs are minimal, and above all the recipients are "screened" for interest (anyone going to the trouble and expense of making a request sincerely wants to read the literature, and will not simply throw it into the wastebasket with the "junk mail").

Moreover, published stories lend a tone of authority to the Institute. You are aware of how a few seasonally appropriate reprints are included for background information in the press kits. This not only provides editors and writers with information, but establishes that we are an accepted organization whose informational releases appear in the "best places". The same is true when the director makes a personal appearance at a horticultural meeting or any time there is occasion for leaving a reminder with an audience. Reprints listing the Variety Review Board cultivars are especially useful when giving talks, so that the audience has the names in hand, and need not attempt to write down confusing names of grasses recommended from the platform.

So, you see that we try to wring every last bit of usage out of the reprinted stories, and I hope that the membership will help by recommending us to magazines and editors. As with press kits mailed to you for your information, lawn stories do the industry no good until they are put into the hands of others, and thus into a position where they can influence the buying public.

Continued. -

YEAR-END REPORT TO BOARD OF TRUSTEES Continued

Lawns	Hortus Third
Bluegrasses Make Best New England Lawn	The Boston Herald Magazine Section
What You Should Know About Quality Seed Testing	Grounds Maintenance
Curious Double Life of Rosa Multiflora	Horticulture
Ibid.	Am. Rose Annual
The Value of a Variety Review Board for Better Turf	Seedsmen's Digest
Lawn Care - Troubles - Causes - Cures	Resort Management
Where Are We In The Search For Better Turfgrasses	Park Maintenance
If you Sell Lawnmowers, You Should Know More	
About Lawnseed	Outdoor Power Equipment
Care of Lawns In Europe Not Special as in U.S.	Lawn Care Industry
The Tidy Lawn . . It's Easier Than You'd Think	Woman's Day
The Alternative to Lawns	Brooklyn Botanic Garden
Lawn Products Sales Challenged	Seed World
A Guide For Lawns - Part I - Choices and Aims	American Nurseryman
A Guide For Lawns - Part II - Starting a New Lawn	American Nurseryman
A Guide For Lawns - Part III - Caring For a New Lawn	American Nurseryman
New Grass Cultivars	Golf Superintendent
Lawns For Modern Living	Plants Alive
Winterseeding, - Cool Weather Glory for Southern	
Golf Greens	Golf Superintendent
Evolution of Improved Lawngrasses In America	Proceedings International Turfgrass Conference
Science & The Lawn	Horticulture
Preventive Weed Control; Autumn Treatments Bring	
Spring Benefits	Proceedings Ohio Turfgrass Conference

TABLE 1. Items published, first reprinted, or first prepared (i.e. in press) during the fiscal year. In approximate order of appearance.

3. Supporting Functions. While our main public exposure comes from press kits and custom stories, staff activities must back-up the efforts. A good bit of correspondence results, - inquiries of various sorts, requests for literature, and personal topics needing individual answer. The flow of correspondence involves many influential people (e.g. garden columnists such as George Abraham, "The Green Thumb"; Earl Aronson, Associated Press, "The Weeders Guide", etc.). We receive many requests from colleges, libraries, and school systems, and make every effort to service non-commercial requests for literature and information.

Another frequently-used means of communication is the telephone. Because of costs we seldom place outgoing distance calls, but continuously receive incoming calls, many of them from non-specialists and prominent commercial interests often seeking information about the size of a market or suchlike.

Fortunately, for the more serious and sophisticated we have books and pamphlets to recommend. Sufficient reprints can hardly be stuffed into an envelope at any reasonable postage level to cover lawns and lawn products in depth. Lawn Keeping, Prentice Hall, is still reasonably fresh, and serves for integrated information on all aspects of lawngrass choice and performance. Briefer booklets (Better Lawns, Countryside Press; Ground Covers for North America, AAN) also help.

YEAR-END REPORT TO BOARD OF TRUSTEES - Continued

I urge members to take advantage of these compilations, recommending them while they are still relatively new; it is difficult to persuade a publisher to finance a lawn book, since apparently such books are not so readily saleable as are general gardening treatises with colorful flowers, landscaping, money-saving vegetable gardens, and so on.

Members' attention has been called to a trend criticizing lawns as unnecessary extravagances, not in tune with critical, present-day needs. A few years ago we fought this battle with fertilizers; - you will remember the criticism against utilization of fertilizer for ornamentals while people "starved in Bangladesh". Such bleeding-heart ferment was based upon the simplistic notion that by some magical means withholding fertilization from the American garden would result in more food for overpopulated countries. Much the same reasoning has now surfaced concerning lawns, the lawn being simplistically viewed as a "waste" of energy and resources that could be applied more productively. We have tried to show that the present world lives mostly upon disturbed habitat, and that under prevailing circumstances the evolution of lawns and their care is efficient, more so than would be unchecked growth of weeds and brambles. Articles in this vein have appeared in both the press kits and the "Supplement", and several magazine stories have been (and are being) directed toward setting the record straight. "The Alternative To Lawns", influentially published in Plants and Gardens (Brooklyn Botanic Garden), was a major move in this direction: at least one member has already taken advantage of this story, distributing 3,000 copies of it, and it will appear in the autumn press kit.

Since most of you have been members of the Institute for a number of years, the annual recitation of routine supportive functions by the staff office is "old hat". I'll not go into details here, since they are regularly reported to you in our internal newsletter, Harvests. This year the usual four quarterly issues of Harvests appeared, totalling 76 pages, about half devoted to Institute activities, the other half to summaries on the research front (primarily of research reported in technical journals). As in the past Harvests has been mimeographed at the office by Mrs. Scheiderer.

As heavily dependent as we are upon the mails, increasing postage rates are cause for concern. We have traditionally mailed one large press kit rather than a series of smaller ones (which might be preferable for repetitive imaging of the Institute), both to save on production costs (collating, envelopes, folders) and postage. We minimize costs by operating in a low-overhead rural environment (doing most of our own creative work), and by working closely with an economical Columbus printing house (Middleton Printing Company) rather than operating through high-priced public relations firms. I believe that our unit costs have been kept far below those for comparable national mailings, although it is obvious that fixed costs (notably postage) will rise in the future.

Other on-going activities include correspondence and liaison with professional turfgrass authorities. An extensive series of reprints has been sent to research centers throughout the country, under the Agronomy Society's Reciprocal Literature Exchange program. The annual meeting of the American Society of Agronomy was attended, focal point for the reporting of turfgrass research in this country, and we participated with a presentation to the Ohio Turfgrass Conference. I continue as Crop Science Society Liaison Representative with the Institute of Ecology.

Continued -

YEAR-END REPORT TO BOARD OF TRUSTEES - Continued

This year your Director has served as one of the Associate Editors screening for publication the presentations given at the Third International Turfgrass Conference in Munich, Germany. The International Conference and associated European tour of research facilities was eminently worthwhile, not only for broadening our own horizons, but for making and renewing contacts with leading turfgrass authorities worldwide. It has been reported upon at length in Harvests. Part of my assignment was to check out lawn promotions in Europe, reported upon to the president and in the October Harvests. Strange as it may seem it is usually easier (and more economical) to visit with American turfgrass authorities at a gathering place such as the Munich meetings than to visit with them individually at their respective home bases scattered over the United States. One story, appearing in Lawn Care Industry ("Care of Lawns In Europe Not Special as in U.S."), is directly attributable to the Third International Turfgrass Conference experience, and of course the proceedings of the conference will carry our conference presentation, "Evolution of Improved Lawngrasses in America". Proceedings of the conference are scheduled for publication around the end of 1978.

A number of personal appearances were made during the fiscal year, notably at Longwood Gardens (Pa.), Fernwood (Mich.), Cox Arboretum (Dayton, Oh., Parks Department), and before other more localized groups. We have cooperated in such things as the Time and Life "Garden Yearbook", in preparation of the American Association of Nurserymen's "Ground Covers for North America", and in offering information and photographs for others publishing in the field.

Among routine activities some twenty-five thousand reprints were purchased for distribution: four items were provided the Men's Garden Clubs of America for their national "Garden Leaflet Service"; mailing lists were constantly updated; foreign contacts were developed (e.g. Berkelbach and other visitors). Supervision of office expenditures and maintenance, involving separate accounts for payroll and for the office, has continued. Our photographic library serves us well, both for the illustration of articles, and as a source of slides for public and professional presentations. Unfortunately, photography has become so expensive that almost no additions have been made to our collections in recent years; we have been "coasting" upon accumulations from the past.

Our library of technical publications enlarges slightly, often through courtesy copies of books that are given me in exchange for review. Magazines have become so voluminous that storage and updating becomes a problem; we have cut back slightly on the less meaningful subscriptions.

The demonstration grounds, on which are planted Variety Review Board cultivars, have been maintained as usual, but are becoming an increasingly greater burden to keep up, lacking as we do regular maintenance personal or chance to replace equipment approaching obsolescence (it has become almost impossible, for example, to keep the automatic irrigation apparatus functioning).

We are indebted to Dr. Gerald Pepin and his Variety Review Board associates for continuing diligence through the fiscal year. The Variety Review Board gives us an excellent peg upon which to hang publicity about individual cultivars. Several older cultivars ceased to qualify in the face of newer varieties, and were dropped from the listings this year. At the same time other candidates were added to the list, and still others are currently under consideration.

Continued -

YEAR-END REPORT TO BOARD OF TRUSTEES - Continued

During the year the Institute undertook some outside support, notably to the Oregon Seed Trade Association (a grant of \$1,000 for study of field burning), and to the New York State Turfgrass Association (\$500 to the Cornell research program); other grants were of a minor nature, chiefly involving the donation of seed, literature, or absorbing postage for the mailing of manuscripts.

Sadly, former President of the Institute, George Osburn, died in December; a brief announcement and eulogy appeared in the January Harvests. We were most pleased that George's widow, Grace, was able to attend the Institute's presentation at Longwood Gardens February 15, providing time for a personal visit with this gracious lady and expression of Institute regrets on the passing of this fine gentleman.

The Institute grounds the last two years has experienced weather extremes of considerable magnitude. The last two summers were unusually hot and dry, proving that the newer perennial ryegrasses are not the "weak sisters" during that season as is often supposed; the better ryegrasses stayed green and actively growing better than did fescues, bentgrasses, and even bluegrasses. However, the winter of 1977-78, with unprecedented snowfall for Ohio, showed bluegrasses to great advantage. The perennial ryegrasses seemed mechanically less stable under the snowpack, tending to undergo "chemical dissolution" of cell wall constituents such that a slimy mat was exposed upon snow melt. Snowmold or other diseases do not seem to be involved. However, once warm weather came new growth initiated from the crowns showed that no permanent damage was sustained. We can see advantages from a balance of topflight perennial ryegrasses and Kentucky bluegrasses in mixture, for more foolproof turf, quick starting and dependable maintenance.

In conclusion, Mrs. Scheiderer joins me in thanking the officers, Board of Trustees, and all members, for their kindnesses and support during the fiscal year. We are especially indebted to President Jacklin for the time he has taken in spite of many obligations and change of quarters, and Secretary-Treasurer Russell, without whom (and the services of his controller, Walter Parker), we would be thoroughly snarled in government red tape over tax matters and payroll accounting. We would also like to acknowledge the friendly counsel from Doris Watson and Ross Allmon of Hercules. Thank you all for a pleasant fiscal year, and we look forward to another productive one for the Lawn Institute in 1978-79.

FINAL REPORT ON JOINT "SUPPLEMENT"

A report from Linda Cochran, of the Wm. C. Pflaum Co., producers of the "Joint Supplement" discussed in the directors report, was received in June. This year a questionnaire was included, and the scattering of responses that resulted are given in the report to sponsors. The Pflaum Co. feels that a great deal of satisfaction and enthusiasm over this years production was shown, and in organizing plans for the year ahead will include additional associations beyond this years sponsorship.

About half of the respondents indicated satisfaction with the present format (column width), the other half changing it to fit other specification. Also, about half said they would use the Supplement even if printed on both sides; half said the contrary. A good many indicated usage of the stories for ideas, as well as employing them exactly as written. Comment varied (probably according to region), some thinking too much emphasis is given swimming pools, bluegrass, or whatnot, and not enough their particular interest (such as house plants, Florida gardens, etc.). On the whole the comments were constructive.

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FINAL REPORT ON JOINT "SUPPLEMENT" -Continued

Over twenty different kinds of editors utilize the material, of which a "gardening editor" was most frequent, a "real estate" editor next most abundant. Circulation seems to have been chiefly in daily and weekly publications of less than fifty thousand, located in the more populous parts of the country (midwest, northeast, pacific, southeast, in order of frequency). Four hundred and eight photographs were sent out upon request, of which swimming pool scenes were apparently most in demand (or at least most often sent; realize that Pflaum represents the National Swimming Pool Institute).

NEW SOILS BOOK

The 6th edition of Fundamentals of Soil Science, by H. D. Foth has just been published by Wiley. It provides excellent all-around coverage, and is quite up-to-date. The treatment is of general, college-level caliber, but is understandably written so as to be intelligible to non-specialists (abstruse subjects such as mineral chemistry and soil taxonomy can easily be glossed over by the amateur not concerned with such details). The book is amply illustrated.

Early chapters follow the traditional practice of defining soil, and zeroing in on its importance. Soil physical properties constitutes an early technical subject, but this (and related soil water considerations) is given practical appeal through actual examples.

Soil ecology is treated broadly but not deeply, and a chapter is devoted to the obvious interrelationships of soil biology and soil organic matter. Probably the most difficult chapters (perhaps not completely clear even to the experts) relate to chemical and mineralogical properties of soils, and the influence of pH. Still, the terminology, and concepts (such as "cation exchange capacity") are of fundamental importance, frequently referred to in grass fertilization discussions.

Soil genesis is mostly common sense "geology", but its classification involves unfamiliar terminology. Still, it is important to have the latest logic behind soil classification available, and chapter 11 will prove useful as a reference. Later chapters again turn more familiar, involving plant nutrition; they discuss nutrients one by one. Chapter thirteen, about fertilizers, is an excellent general review worthwhile for refreshing one's understanding. Broader considerations of the affect of soils on cropping, health, and, indeed, the destiny of civilization itself, wind up the book. A thorough glossary is appended, as well as tables for translation of metric to English equivalents.

Fundamentals of Soil Science can be recommended as a helpful volume to have on the reference shelf, for anyone concerned with the broader aspects of agriculture and gardening. The book, of course, is not directed especially towards turfgrass, but has a surprisingly large number of turfgrass mentions, perhaps because Foth is a professor at Michigan State University where turfgrass research has achieved such prominence in recent years.

THANKS FROM FERNWOOD

"So kind of you to spend the morning with us, - - - The group had several favorable remarks at the end of the session, thanks to your expertise on lawn care. It was a pleasure meeting you." - Stan Beikmann, Director.

MORE "ANTI-LAWN" EXPRESSION

As has been predicted (previous Harvests, "Lawn Products Sales Challenged") ill-informed writers continue to take "pot-shots" at lawns. Lauren Brown, Botanist, has a page in the July Horticulture entitled "A Closer Look at an Unmowed Lawn". It's a simple, shallow piece, but unfortunately accepts uncritically the Niering (Connecticut College) premise (which we answered a couple of years ago in the Bulletin of the Ecological Society). Brown paraphrases Niering, " -- our closely cropped, lush lawns are a luxury, not a necessity, that they consume a great deal of fossil fuel in the form of fertilizers, pesticides and gas for mowers, and yet contribute nothing to human health or nutrition." It's a shame that such falderal, once printed gets perpetuated by the unthinking. The same could be said of most of our surroundings, and certainly our paved cities. Actually a lawn does refresh the atmosphere, and contributes to the ecological balance, and most certainly contributes to human "health" if things of the spirit are considered. Lawns must have considerable value; why else would there be so many (people are not complete fools about the way they landscape their surroundings, and spend their money in its management). The editors of Horticulture are being contacted, and hopefully will publish some rebuttal for the Brown item.

AN ASSIST FROM ARONSON

Earl Aronson, AP Newsfeatures, again this spring kindly boosted the Institute, by quoting from its press kit and releases. In his "Weeder's Guide: Grass Choices Varied", a syndicated release, (appearing in the Columbus, Ohio Dispatch, Sunday, April 15), Earl had this to say: " - - - And our friend at the Lawn Institute says turfgrass breeders have some dandy items in the way of grass cultivars. Already, says Dr. Robert W. Schery, Institute Director, the choice of fine grasses is so wide that a grass to fit almost any need or taste can be had." The item goes on to describe the major species, and the attributes sought in improved varieties. All of the Variety Review Board listings are named one by one, before the story winds up with advice for starting a lawn.

SEED WORLD USES INSTITUTE MATERIAL

We are pleased that the April issue of Seed World, traditionally emphasizing lawns, featured an Institute story, used an Institute color photograph for the cover, and carried mention of the Institute's press release "Lawn Institute Honors Dr. Funk". The story in question was entitled "Lawn Products Sales Challenged", and points out a subtle surge of anti-lawn feeling which Arthur Ode characterizes as "justifiably decrying the ecological unsoundness of modern lawns - - -". The Lawn Institute article attempts to correct the misconception, and refers to the Institute's aggressive campaign to counter this image.

PRO-LAWN RUBOFF

A letter and tear sheet from Jack Hinde, Owen Sound, Ontario, Sun Times, indicates some influence from our attempts to counter the anti-lawn sentiment (see Director's report). Hinde writes, "Your defense of formal lawns, in the current issue of the Brooklyn Botanic Garden record was quite convincing. Is it possible we could enjoy the best of both worlds? The realism of a natural lawn; and the elegance of a formal one?"

FROM AFAR

"This short note is simply to thank you and your organization for the assistance given after my inquiry of 31 March - - - Once again, my sincere thanks." - - David G. Muir, Palmerston North, New Zealand.

STORIES PREPARED, PUBLISHED AND REPRINTED DURING QUARTER

We were pleased during the quarter to have several influential magazine stories appear. Members are acquainted with them (as reprints) from mailings made to them.

Especially significant was the tripartite series in the American Nurseryman under the general heading "Guide for Lawns" (Part I - "Choices and Aims", Part II - "Starting a New Lawn", Part III - "Caring For a New Lawn"), which provides a comprehensive but condensed review of lawn establishment in general, presumably useful to non-professional personnel with limited experience and reading time, such as garden centers sales personnel and similar fields of interest.

Two items dealt with anti-lawn sentiment, which has been thoroughly discussed elsewhere. "Lawn Products Sales Challenged", from Seed World, analyzed the increasing incidence of such attacks on the conventional lawn, and "The Alternative To Lawns" (Plants and Gardens, Brooklyn Botanic Garden) offered rebuttal to the thesis.

As the quarter ended, "Science and the Lawn" appeared in Horticulture magazine, as one of a series of invited reviews commemorating the seventy-fifth anniversary of the American Society for Horticultural Science. This story covers the infancy and development of lawns and lawngrasses into a respected business and scientific field, mostly within the last half century.

In press, and due for publication during the third calendar quarter, are stories in Plants Alive (essentially an abbreviated coverage on the order of the first of the American Nurseryman series), and in the Golf Superintendent (reviewing southern winterseeding, emphasizing particularly use of the new perennial ryegrasses for southern golf courses).

AUTUMN PRESS KIT READIED

The usual autumn press mailing is in the process of preparation as of early July, to be ready for mailing around mid-month. Stories give emphasis to autumn seeding, both for new lawns and for renovating old ones. Perennial ryegrasses are featured, and the excellent qualities of Kentucky bluegrass are commended. For breadth of interest growth retardants are discussed, wondering if the best "growth control" is not that bred into the new cultivars (low growth, superior density, and conservative mein).

STAFF OFFICE ROUTINE REVISED

Beginning with July, Mrs. Scheiderer will be on duty at the staff offices in Marysville mornings only. Members wishing information (by telephone) that requires withdrawal from files, or statistics that Mrs. Scheiderer maintains, are urged to call in the mornings. Mail is normally received from the rural carrier about 10:00 a.m., and usually can be tended the same day. An automatic answering phone has been installed so that when neither Mrs. Scheiderer nor Dr. Schery is in the office, a message can be left and the call returned (or appropriate response made).

TECHNICAL

MISSOURI TURF CONFERENCE

Since Dr. John Dunn has assumed responsibility for turfgrass work at the University of Missouri, the Missouri Turfgrass Conferences have become more significant and better reported upon. We are grateful for the Proceedings of the 17th Annual Conference received this spring.

Many of the presentations are peculiar to golf, or to special aspects of horticulture, and will not be commented upon. A criticism of artificial turf, by George Toma, is quite specific and worthy of reading for evaluating artificial versus natural turf. Natural turf is far less expensive, far better liked by the athletes, and just as easily maintained as is the artificial covering. Some of the problems with artificial turf, especially cleaning up and repairs, are almost unbelievable.

Turgeon, from Illinois, discussed weed control. Reporting upon his experience he states, "Touchdown, Brunswick, and Warren's A-34 have been outstanding in their resistance to annual bluegrass invasion under close mowing and intensive nitrogen fertilization - - ". He notes a correlation between disease and weed invasion, disease apparently weakening or thinning the turf enough to allow entree of weeds. Turgeon goes on to analyze the differing soil, atmospheric and biological factors that influence weed ingress. He leans to managing the grass to minimize weed invasion, and only then would he enlist the conventional chemical treatments for (disease) and weed control. He notes that heavily thatched turf can be more readily injured from some chemical treatments. He finds oxadiazon hazardous to some bluegrass cultivars. Bentazon (Basagran) has given exceptionally good control of purslane, although the chemical is generally advocated for selective removal of nutsedge. Turgeon's viewpoints make a lot of practical sense.

Zoysia has become of considerable interest in Missouri, and received symposium discussion during the conference. Apparently there are plenty of problems, including serious thatch build up, attack by billbugs, spring susceptibility to frost (especially when fertilized then), and unsightliness because of winter weeds. Spraying of paraquat when the zoysia is dormant has been used to eliminate *Poa annua*. Some pre-emergence chemical treatments have interfered with good rooting of zoysia stolons. The consensus is to mow zoysia fairly low, keep it de-thatched, and not fertilize heavily. On golf courses, zoysia is very hard on the mowing equipment. It would seem as though there is no dearth of problems with zoysia.

Turgeon also discusses thatch at some length. He notes the proclivity of grass to grow into the thatch layer, and intensify thatch formation. From the practical standpoint thatch is part of the growing medium of the lawn, and should be reckoned with in soil tests and other ways. In some ways it is analogous to sand, - dries readily, resists compaction, etc. It makes a layer, and does not receive much moisture by capillarity. Oftentimes pesticides applied to thatch reach the growing roots (in the thatch) more readily than they would roots in soil, and thus can injure the turf more seriously. Benefin can be toxic in thatch, although at the same rate it usually does not penetrate to the roots in soil.

A number of other presentations will be of interest to members marketing in the Transition Zone. In general Missouri has not made up its mind whether to stick with the northern grasses, or to go increasingly with zoysia and bermuda.

SPORTS TURF RESEARCH INSTITUTE REPORTS

An interesting 60-page booklet, Choosing Turfgrass Seed in 1978, was issued by the Sportsturf Research Institute of Bingley, England under a date-line of "January 1978". It was priced at 1.80 pounds. A complimentary copy was received from John Shildrick of STRI. The booklet is more involved than normally is the case with similar publications in America, with considerable early-pages briefings concerning United Kingdom seed laws and marketing customs. The chief turfgrass species and their characteristics are then described, corresponding essentially to what we have in America (although timothy and crested dogstail are very little used in the New World).

The Bingley researchers rate the bentgrasses as most persistent under close mowing, followed by fine fescues, then bluegrasses, with perennial ryegrasses last (least persistent). In tolerance of heavy wear the order is essentially reversed, with perennial ryegrasses rating first, followed by bluegrasses (and timothy) fescues, bentgrasses and finally *Poa annua*.

Seed characteristics, seed mixtures, and recommendations for various types of usage are discussed. Then each species is taken up individually, with a listing of cultivars, their originators, and sources of availability. Among the ryegrasses only the diploids are considered suitable for fine turf, the tetraploids being better fitted for agriculture. Individual cultivars are grouped ("rated") according to characteristics for which information about them is available.

With the perennial ryegrasses Manhattan rates best in tolerance to (artificial) wear, and along with Sprinter is "tops" for low growth. The fine fescues are broken down into the traditional subspecies (Chewings, creeping and "strong creeping or spreading"). Among the Chewings fescues no cultivar rates "high" in all of the five characteristics examined, although Highlight and Barfalla come close. Actually there is not a great deal of difference, except that Cascade rates poorly in a number of categories, as does Pennlawn among the creeping types (Dawson rates highly in all except one category).

Kentucky bluegrasses are rated for four characteristics, those being classed as "high" in all of them including Baron, Enmundi, Enprima, Fylking, and Sydsport. Only Sydsport rates "high" for freedom from each of four diseases, although Kimono lacks only information for mildew (no rating given). Enmundi rates almost as highly. Bentgrasses are in general quite similar, seven characteristics considered. Highland has an abnormally low score in this comparison.

INSECTICIDES AND ORGANIC DECOMPOSITION

A study reported in the Winter 1978 Ecology, by Weary and Meriam (Ottawa, Canada) showed that carbamate insecticide reduced organic decomposition approximately one third, thus resulting in an increase in "standing crop" (which might be likened unto thatch in turf). In this instance three applications of the insecticide Carbofuran were made over a period of two years, according to manufacturer's directions. Carbofuran is considered to be biodegradable, but is toxic to earthworms and collembolans. Here is a documented instance in which litter decomposers are inhibited by application of a non-persistent insecticide.

VIRGINIA REPORTS

The March issue of VPI Tech-Turf Topics discusses oxadiazon for goosegrass control, as well as reviewing fertilization, and seeding versus sodding. Bingham, confirms reports from farther north that oxadiazon (Ronstar) does an excellent job in controlling goosegrass or silver crab (Eleusine), as well as being effective against the usual annual weeds including crabgrass. It is a pre-emergent material that must be uniformly spread prior to the germination of annual weed seeds. Bingham notes that annual bluegrass is not well controlled by spring applications of oxadiazon, probably because so much has germinated through autumn and winter. A 2% granular formation is now available. It is recommended only for bluegrass and bermudagrass turfs, fescues and bentgrasses being injured (and possibly being removed from bluegrass or bermuda by this means). Ryegrasses and zoysia are somewhat more tolerant, but oxadiazon is best not used where these species predominate.

Bingham notes that summer influx of goosegrass occurs as annual bluegrass dies out; therefore, good control of goosegrass requires control of Poa annua the autumn preceding. Oxadiazon is relatively long-lasting in the soil, but its influence will be diminished after several months. A spring application to prevent crabgrass and early goosegrass may not suffice to repress summer influx of goosegrass. Apparently oxadiazon is absorbed by young seedlings as the shoot grows through treated soil, so that disruptions in the coverage with the chemical can allow some ingress of the weed.

ANNUAL BLUEGRASS REPORT

Research Report 352, Michigan State University (Beard, Rieke, Turgeon, Vargas) appeared under an April 1978 date. It was devoted entirely to annual bluegrass (Poa annua). "Description, Adaptation, Culture and Control". For the first time under one cover, this 30-page report summarizes what is known about annual bluegrass, a "weed" that is often the mainstay of northern golf courses.

The authors accept the premise that Poa annua results from the crossing of Poa infirma with Poa supina, and itself represents a highly variable mixture of subspecies, some of which are annual, some perennial. In the more northerly parts of the United States it is often a spring-summer annual, in southerly parts a winter annual; in middle latitudes it stands a good chance of persisting perennially.

Actually Poa annua is sensitive to various "stresses", including temperature, air pollution and light. Most of the familiar turfgrass diseases and insects attack it. Yet its proclivity for seed production adapts it well for survival and spread. The authors feel that low mowing height and abundant moisture favor Poa annua over Kentucky bluegrass, as does the early spring fertilization (nitrogen).

Two programs are outlined, one for encouraging Poa annua (as would be desirable with golf greens that have turned to the species), the other for controlling it as a weed. Selective herbicidal control has never been without drawbacks, although chemicals are available for removing Poa annua from bermudagrass in the South (e.g. pronamide; glyphosate during dormancy). The traditional control with soil arsenic has proven to have disadvantages for the major turf, but several of the pre-emergence crabgrass preventers probably help in its restraint. With lawn-type turf, management giving higher mowing and less watering usually suffices to control Poa annua

BLUEGRASS DISEASE RATING AT ILLINOIS

Shurtleff and Street, in "Report on Plant Diseases" number 400, discuss turfgrass disease control. Table II cites 27 cultivars for resistance to Helminthosporium, smuts, Fusarium, dollarspot, thatching and spring green-up.

Most modern bluegrass varieties have excellent or good resistance to Helminthosporium, the exception being "common" types such as Kenblue. Among "Institute cultivars" rating "excellent" are Adelphi, Bonnieblue, Fylking, Galaxy, Majestic, Merion, Nugget, Sydsport, and Touchdown. "Excellent" for leaf smut resistance is accorded Adelphi, Bonnieblue, Glade, Majestic, Nugget, Plush, Sydsport, and Touchdown.

No cultivar is rated better than "good" for Fusarium resistance, but Adelphi, Baron, Bonnieblue, Glade, Majestic, Sydsport and Touchdown are all so rated. As to dollarspot resistance, "excellent" ratings go to Adelphi, Baron, Bonnieblue, Majestic, Plush, Sydsport and Touchdown.

Bonnieblue is the only Institute cultivar with a "low" rating for thatching, while Adelphi and Majestic are the only cultivars rating "excellent" for spring green-up (Bonnieblue, Glade, Merion, Plush and Touchdown rate "good").

Very good over-all ratings would have to be accorded Adelphi, Bonnieblue, Majestic, all characteristics considered, with Sydsport and Touchdown only a shade behind (on spring green-up and thatching tendency).

RESPONSE TO SMOG

Dr. Youngner, California, reports in the April Western Landscaping News that low levels of ozone persistently applied can have markedly different results than high levels for brief periods. Newport Kentucky bluegrass was severely bothered, even though it showed only slight injury symptoms at high levels. Manhattan perennial ryegrass showed no growth reduction whatever, even though it had shown leaf injury at high levels. Meadow fescue and tall fescue were affected to an intermediate degree. It made no difference whether the grass was mowed or left unmowed.

VARIANTS OF ANNUAL BLUEGRASS FOUND EXCELLENT

D. T. Duff, Rhode Island, reporting in the University Turfgrass Research Review for March 1978, compares selections of annual bluegrass with Kentucky bluegrass and fine fescue cultivars. The subspecies reptans yields a series of low-growing, perennial forms often found on golf greens. In quality ratings at Rhode Island some selections of reptans score better than most familiar bluegrass cultivars, and root just as deeply, grow just as well. Duff accepts the thesis that highly variable Poa annua represents a natural cross of P. supina with P. infirma.

REPORT FROM GERMANY

The March issue of Rasen (Turf/Gazon), edited by Dr. Boeker, Bonn, Germany is devoted to reports by German authorities, with the usual English summaries. A review by Trautmann and Lohmeyer, Bonn, may be of some interest to members. Roadside tests extending back to 1970, near Darmstadt, showed only these species maintaining themselves satisfactorily: red fescue (except on sandy soils), sheep's fescue and orchardgrass. Persisting but losing influence were Colonial bentgrass, perennial ryegrass and timothy. All bluegrasses (Poa), redtop and Deschampsia were failures.

REPORT FROM KANSAS

Dr. Carrow, reporting from Kansas State, has these observations to make in his newsletter of May 1978. "These cultivars have performed well under Kansas conditions:

1. Citation - excellent quality; resistant to brown patch; good mowing quality; does not normally exhibit iron deficiency and thus could be used in Western Kansas.
2. Derby - Excellent quality; resistant to brown patch; good mowing quality; does not normally exhibit iron deficiency.
3. Diplomat - excellent quality; moderately resistant to brown patch; good mowing quality; may exhibit iron deficiency under high pH, high P, and/or heavy soils.
4. Manhattan - very good quality; moderately resistant to brown patch; fair mowing quality; may exhibit iron deficiency under high pH, high P, and/or heavy soils.
5. Pennfine - excellent quality, moderately resistant to brown patch; good mowing quality; does not normally exhibit iron deficiency.
6. Yorktown - very good quality; moderately resistant to brown patch; fair mowing quality; response to Fe deficient conditions unknown."

SOIL CONDITIONERS NOT HELPFUL

Research by McGuire, Carrow and Troll, Massachusetts, reported in the March-April Agronomy Journal, indicates that none of the recent soil improvement chemicals (including bitumenous emulsions, polyacrylamides, and polyvinyl alcohol) improved soil conditions or grass growth, and in some instances were actually detrimental.

NUTSEDGE CONTROL IN BLUEGRASS

Michigan researchers reported upon great success with bentazon and cyperquat for selective control of nutsedge in Kentucky bluegrass sod, in May Weed Science. Best control was obtained with a double application spaced about 2 weeks (approximately 1 lb./A rate each time.).

NUTSEDGE CONTROL, RENOVATION CHEMICALS APPROVED

The Ohio Turfgrass Foundation newsletter reports that permission is now given in Ohio for use of Basagran (bentazon) to control yellow nutsedge in turf (commercial operations) and that Roundup (glyphosate) has been labeled by EPA as a non-selective herbicide for turfgrass renovation. Both chemicals are applied to actively growing plants, the spray being absorbed through the foliage and translocated. Rates of 3/4- 1 1/2 oz. per thousand sq. ft. for Basagran, and 1 1/2- 4 oz. for Roundup, are suggested.

MASSACHUSETTS ADVISORY

The "Spring 1978 Conference Issue" of the Massachusetts Turf and Lawngrass Council Turf Bulletin carried a thorough discussion of the intricacies of phosphorus in turf fertilization, by Dr. Silva, of the University of Massachusetts. Also covered in the issue was a report on the 1977 trials with fungicides to control dollarspot on bentgrass.

LENGTH OF WEED SEED LIFE IN SOIL

Viability of weed seeds buried 2 1/2 yrs. is reported upon in Weed Science, May, from research by Egley and Chandler, Mississippi. Of those species frequently a problem in lawns goosegrass retained greatest germination (33%), with crabgrass 12%, purslane 10%, prostrate spurge 6%, barnyardgrass 1% and chickweed 0%. The percentage of retained viability with these species is considerably lower than for many of the agricultural weeds (e.g. Anoda and Ipomoea each 71%, johnsongrass 62%, velvetleaf 58%).