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SCHERY SPEAKS BEFORE OREGON SEED GROWERS LEAGUE

On November 29, Dr. Schery spoke before the 20th Annual Convention of the Oregon Seed League in Portland, Oregon. In his presentation, entitled, "Turfgrass Promotion," Dr. Schery outlined the activities and goals of the Lawn Institute. He explained that "professional" selling implies greater emphasis on the turfgrass industry's educational approach, and that is exactly where we feel the Lawn Institute fits in." Institute endeavors, such as the extensive mailing program, the press kit releases, cartoon distribution, television and radio activities and Dr. Schery's personal appearances were then described in detail.

Appearing on the program with Dr. Schery was Senator Wayne L. Morse (D), Oregon, who spoke on "The Influence of International Trade on Farming."

MISSOURI TURFGRASS CONFERENCE PROCEEDINGS AVAILABLE

Copies of the Proceedings of the First Annual Lawn and Turf Conference, University of Missouri are now available. These may be secured by writing Dr. Ronald Taven, Department of Horticulture, University of Missouri, Columbia, Missouri. Here are a few excerpts from this publication:

In his article, "Lawn Grasses - Old and New" Dr. Schery summarizes: "This leaves us with only a few stalwarts, renowned as quality turfgrasses for northern climates - notably the Kentucky bluegrasses, red fescue varieties, and for specialty purposes the bentgrasses and tall fescues."

Dr. Hibbard suggests Korean lespedeza as a temporary cover until appropriate time for seeding, and Dr. Taven reviews the advantages and limitations of Zoysia in Missouri.

In a series of items relating to fertilizers, clipping height and root growth, Dr. Roberts of Iowa covers the fundamentals of these subjects. He states: "Common Kentucky, Park and Newport bluegrasses (*Poa pratensis*) are all recognized as moderate in their fertilizer requirements. Normally, applications of from 2-4 pounds of nitrogen per 1000 square feet per season will produce good vigorous growth. Merion bluegrass is a heavy feeder. Under most conditions it requires from 5 to 8 pounds of nitrogen per 1000 square feet."

And again: "The use of creeping red fescue (*Festuca rubra*) in bluegrass mixtures is recommended in order to provide greater stability and uniformity to the turf."

Several comments from Dr. Hibbard's review of "Watering - When, How Much" indicate his particular familiarity and respect for bluegrass in the Missouri climate. He starts out: "What I am going to say applies mostly to Kentucky bluegrass and the fine-leaf fescues." Then later there are such statements as: "In Kentucky, northern Missouri and throughout the Plain states there are many stands of this grass older than the memory of men" (referring to Kentucky bluegrass). "Under favorable conditions bluegrass can force out any other species." "In some of our orchards where the bluegrass sod has been continuous for periods of 30 to 40 years water can be applied at rates as high as one inch per hour" (in contrast to poor insoak without bluegrass sod). "If grass clippings are not contributing to a disease problem I do not believe they should be removed. There are times when the removal of clippings is a desirable practice, but I cannot go along with those who advocate this practice on a healthy, frequently clipped Kentucky bluegrass lawn." "During the drought years of the 30's and 50's healthy bluegrass stands came through and possibly were better the year following the drought than following seasons with excessive rainfall. You are not going to kill bluegrass from the kind of summer droughts which we have in Missouri. It is not necessary to water grass in order to keep it alive."

And finally there are a series of reviews giving the conventional information on "Lawn Diseases", "Lawn Insects", "Control of Soil Insects in the Lawn", "Moles and Their Control", by several of the members of the University of Missouri staff and Extension Service.

PROPOSED AMENDMENT TO UNIFORM STATE SEED LAW OPPOSED

The Lawn Institute has already sent to all members and associate members for their information, a reprinting of a letter from James Midyette, Jr., Chairman of the Legislative Subcommittee on Lawn Seed of the Association of American Seed Control Officials, and the proposed amendment to the Recommended Uniform State Seed Law. This information was sent out just a week after it was issued -- and preceded a similar announcement by the American Seed Trade Association. Here is a recapitulation of the proposed amendment as Mr. Midyette informed the Marysville office, in a letter to Dr. Schery:

PROPOSED AMENDMENT TO THE RECOMMENDED UNIFORM STATE SEED LAW

Subject - Lawn Grass Mixtures Prohibitions

Section 3 (a). It is unlawful for any person to sell, offer for sale, expose for sale, or to transport for sale any agricultural or vegetable seed within this State ---

1/ (8) In mixtures represented by printed labeling, by pictorial illustrations, or in any manner whatsoever, to be for lawn seeding purposes, unless they contain at least 70 per cent pure seed of perennial fine-leaved species which shall be specified by Rules and Regulations pursuant to this Act. Provided, however, Grass Mixtures which do not contain 70 per cent pure seed of perennial fine-leaved grasses may be sold in plain containers of a color other than green, provided further that when in packages of 25 pounds or less, they shall carry the statements "Not recommended for a fine-leaved perennial turf. Satisfactory for a temporary ground cover or where coarse grass is not objectionable".

1/ Underlined statement represents wording not currently in Recommended Uniform State Seed Law.

INSTITUTE CO-SPONSORS A.O.S.A. RESEARCH

In an article entitled "Bluegrass Blending," by Dr. Louis N. Bass, reprinted from the Proceeding of the Association of Official Seed Analysts, Volume 49, Number 1, 1959, the Better Lawn & Turf Institute is mentioned in the introduction as co-sponsor of the research. This is because annual grants were given Ames a few years ago. The Institute Board has voted continued sponsorship of these efforts relating to the storage of seed.

Reprints of "Bluegrass Blending" are now available from Dr. Louis N. Bass, National Seed Storage Laboratory, United States Department of Agriculture, Fort Collins, Colorado.

DR. SCHERY VISITS ILLINOIS ADVISORS

On November 10, Dr. Schery visited with Institute Advisors, Dr. Harleigh Kemmerer and Dr. F. F. Weinard, at the University of Illinois.

The following report of the visit will be of interest to the membership.

The University is just beginning to get into a full program on turfgrass research, initiated last year by the Illinois Turfgrass Council, sparked largely by Chicago interests. At present there are maintained research grounds at Downers Grove, in northern Illinois, just west of Chicago; and on the campus at Urbana. It is anticipated that later there will be similar developments for the southern part of the state. Very shortly the Horticulture Department intends to obtain a full time man for turfgrass work, to consolidate efforts now scattered part time among horticulturists, agronomists, and extension people.

Within the last year successful seedings are said to have been made at Downers Grove, giving some first year observations on crabgrass control and such like this summer. Extensive plantings were made at Urbana this autumn, but unfortunately

a heavy rain the day after seeding washed out many of the plots, and may have scattered seed from plantings up the slope on to plots lower down. Probably much of this will have to be done again next year. Drs. Weinard and Kemmerer asked for Dr. Schery's opinion on the layout of this plot area, and agree with the Institute philosophy that how a lawn planting is treated is certainly equally if not more important than minor differences in what is planted (such as differences between varieties, for example). It was suggested that they basically run their tests upon combinations of bluegrass-Oregon red fescue, to see what are the most appropriate techniques for maintaining this combination at its optimum in the differing parts of the state. The researchers are especially interested in studying management techniques that would contribute to greater rhizoming, and quicker establishment of quality turfgrass stands.

ASSOCIATE MEMBER UTILIZES INSTITUTE PUBLICITY RELEASE

The Oliger Seed Company, Institute Associate Member in Akron, Ohio, recently incorporated a Lawn Institute-prepared news release into its own promotion program. The release, entitled "New Lawns and Nursegrasses," by Dr. Schery, was reprinted on the Oliger Seed Company letterhead and was circulated to that firm's mailing list.

This is a good example of one method in which the membership and associate members can benefit from material that is prepared by the Institute. In addition, it serves to give a local atmosphere to the information.

Members and associate members are encouraged to utilize the facilities and material offered by the Institute to supplement their own promotion and publicity efforts.

WIDE DISTRIBUTION FOR ENCYCLOPAEDIA BRITANNICA-INSTITUTE FILM

The following television stations have certified that they have shown the Encyclopaedia Britannica Featurette, "Time to Plant Grass", sponsored by the Lawn Institute.

Fort Dodge, Iowa	KQTV	Grand Forks, Nebraska	KNOX
Boise, Idaho	KTVB	San Luis Obispo, Calif.	KSBY-TV
Indianapolis, Indiana	WTTV	Utica, New York	WKTV
Albany, Georgia	WALB-TV	Alexandria, La.	KALB-TV
Plattsburgh, New York	WPTV	Glendive, Montana	KXGN
Scottsbluff, Nebraska	KSTF	Clarksburg, West Va.	WBOT
Denver, Colorado	KLZ	Cheyenne, Wyoming	KFBC-TV
Albuquerque, New Mexico	KGGM-TV	Holdrege, Nebraska	KHOL-TV
St. Petersburg, Florida	WSUN-TV	Montgomery, Alabama	WCOV-TV
Baltimore, Maryland	WMAR	Madison, Wisconsin	WKOW-TV

Evansville, Indiana	WEHT	Lima, Ohio	WIMA
Tulsa, Oklahoma		Springfield, Missouri	KYTV
Lake Charles, Louisiana	KTAG	Texarkana, Arkansas	KCMC-TV
Wichita, Kansas	KTVH	Garden City, Kansas	KGLD
St. Louis, Mo.	KTVI	Durham, N. Carolina	WTVD
Milwaukee, Wisconsin	WTMJ-TV	Jackson, Minnesota	
Cedar Rapids, Iowa	WCRG	Jackson, Mississippi	WJTV
Dickinson, N. Dakota	KDIX	Steubenville, Ohio	WSTV
Huntington, W. Virginia	WHTN	Columbus, Georgia	WRBL

In addition, the following stations have received the Featurette, and are presumed to have made showings:

Birmingham, Alabama	WAPI-TV	Portland, Maine	WGAN
Anchorage, Alaska	KENI-TV	Boston, Mass.	WBZ
Phoenix, Arizona	KOOL-TV	Grand Rapids, Mich.	WOOD
Tucson, Arizona	KVOA-TV	Marquette, Mich.	WDMJ
Eureka, California	KUIQ-TV	Saginaw, Mich.	WNEM
Fresno, Calif.	KFRE-TV	Traverse City, Mich.	WPBN
Hollywood, Calif.	KCOP-TV	Austin, Minn.	KMMT
Sacramento, Calif.	KXTV	Rochester, Minn.	KROC
San Diego, Calif.	KFSD-TV	Columbia, Missouri	KOMU
San Francisco, Calif.	KRON-TV	Missoula, Montana	KMSO-TV
Denver, Colorado	KLZ	Las Vegas, Nevada	KLRJ-TV
Hartford, Connecticut	WTIC-TV	Manchester, New Hampshire	WMUR
Jacksonville, Fla.	WJXT	Roswell, New Mexico	KSWS
Miami, Fla.	WTVJ-TV	Buffalo, New York	WKBW-TV
Orlando, Fla.	WDBO-TV	New York, New York	WPIX
Palm Beach, Fla.	WPTV	Schenectady, New York	WRGB
St. Petersburg, Fla.	WSUN-TV	Syracuse, New York	WHEN
Tallahassee, Fla.	WCTV	Cleveland, Ohio	WEWS
Boise, Idaho	KTVB	Dayton, Ohio	WHIO
Chicago, Illinois	WBKB	Zanesville, Ohio	WHIZ
Rockford, Illinois	WREX-TV	Oklahoma City, Oklahoma	WKY
Ft. Wayne, Indiana	WKJG-TV	Portland, Oregon	KPTV
South Bend, Indiana	WSBT-TV	Pittsburgh, Pa.	KDKA
Terre Haute, Indiana	WTHI-TV	Providence, Rhode Island	WPRO-TV
Ames, Iowa	WOI-TV	Greenville, S. Carolina	WLOS-TV
Mason City, Iowa	KGLO-TV	Rapid City, S. Dakota	KOTA
Sioux City, Iowa	KTIV	Sioux Falls, S. Dakota	KELO
Waterloo, Iowa	KWWL-TV	Jackson, Tennessee	WDIX-TV
Great Bend, Kansas	KCKT-TV	Austin, Texas	KTBC-TV
Louisville, Kentucky	WHAS-TV	Lufkin, Texas	KTRE
Paducah, Kentucky	WPSD-TV	Midland, Texas	KMID-TV
Baton Rouge, La.	WAFB-TV	Odessa, Texas	KOSA
New Orleans, La.	WDSU-TV	San Antonio, Texas	KCOR-TV
Poland Spring, Maine	WMTW	Tyler, Texas	KLTV

Weslaco, Texas	KRGA-TV	Yakima, Washington	KIMA-TV
Norfolk, Virginia	WTAR-TV	Fairmont, W. Virginia	WJPB-TV
Richmond, Virginia	WRVA-TV	Green Bay, Wisconsin	WLUK-TV
Seattle, Washington	KOMO-TV	Casper, Wyoming	KTWO-TV
Spokane, Washington	KREM-TV		

ADDITIONAL REPORTS FROM OREGON SEED MEETINGS

During the Oregon Seed League meetings, James F. Short, the State Director of Agriculture, mentioned in his talk "Commodity Commissions and Grower Marketing Problems" the Oregon Fine Fescue Commission association with the Better Lawn & Turf Institute. He was quite complimentary about the effective service the Institute is providing the Oregon Fescue Commission.

The Highland bentgrass people have developed a commission in Oregon, based upon an assessment of 25 cents per hundred pounds of clean seed produced.

Another committee report indicates that there are 88 million pounds of quality turfgrass supply on hand (bentgrass, bluegrass, fescue), with an average demand for only about 60 million pounds. The suggestion was to seek more foreign markets, and to increase the tempo of promotion in this country.

The Oregon Seed council has gone on record as opposing adoption of the climax method (for Merion bluegrass), feeling that the research background is not convincing.

INSTITUTE DIRECTOR APPEARS ON PORTLAND TELEVISION STATION

While Dr. Schery was on the West Coast to appear before the Oregon Seed Growers League, R. C. Kuehner of the Oregon Fescue Commission arranged a television appearance for him. A one-half hour chat between Dr. Schery and Ivan Jones was videotaped for re-broadcast on December 4th over KGW-TV, Channel 8 in Portland. As guest on the show, Dr. Schery referred repeatedly to the excellence of fine fescues and Kentucky bluegrass and their compatibility together, compared to the coarseness of tall fescues and other "haygrasses". He especially discussed roadside seedings, and the needs of lower growing, finer-textured grasses where the right-of-way becomes great in the new interstate system. Several Lawn Institute pamphlets were displayed before the television cameras and were offered as give-aways to those who would write for them. Dr. Schery also explained the Lawn Institute, what it stands for and its goals.

OREGON STATE TECHNOLOGIST COMMENTS ON TESTING TECHNIQUE

While Dr. Schery was in Oregon, he had an opportunity to talk with Mrs. Louisa Jensen, Seed Technologist for Oregon State College.

Mrs. Jensen's testing has shown that when a blowing technique is used, the first blowing, and often subsequent ones, are completely out of kilter and must be discarded. This not only increases the expense and tedium of running a test, but the problem is to decide which blowings must be discarded. This finding counters to some extent the avid claims for greater uniformity between laboratories, that the AOSA has advanced.

Mrs. Jensen also has noted that the blower varies unpredictably even during the day. Calibrated once in the morning, and used continuously through the day, there will be wide discrepancies, even on the same sample. The cause does not seem to be changes in voltage (this was checked), and she has been unable to link it to any atmospheric or temperature factor. However, to protect herself on these tests, she is keeping a record when the test is made of what the temperature, humidity, and time was at the time the test was run. She is definitely not satisfied that the blowing technique has the superiority claimed for it by AOSA.

Mrs. Jensen also emphasizes that the stained samples by which to calibrate blowers have not been generally available, and that it becomes impossible to effectively verify the findings of Ames and other eastern laboratories. This is a problem that will continuously exist if a blowing technique is adopted. The big question is, who is going to pay for and distribute adequate stained samples for calibrating blowers?

NEW ENCYCLOPAEDIA BRITANNICA TELEVISION FEATURETTE PLANNED

Promotion of the Lawn Institute's Seal of Approval will shortly receive increased impetus. President Gassner and Dr. Schery have just authorized production and release of a new Encyclopaedia Britannica featurette, which will be distributed to and shown on 108 television stations throughout the country. Extensive press releases about the Seal will also be issued to the trade and consumer news media shortly after the first of the new year.

The Institute is sparing no efforts in securing maximum television exposure of the Seal to the consumer -- in order to supplement the advertising and promotion activities which Institute members and associate members plan to conduct independently. Cost of the production and distribution of the featurette will be borne by the Lawn Institute. Other promotional efforts planned by the Institute include the development of streamers for window display and other point of purchase materials.

Encyclopaedia Britannica people have been most complimentary of the type of research materials that Dr. Schery and the Institute have provided them. James Colvin, of that organization writes the Institute Director: ". . . We'll be delighted to join you in the program for the spring, dealing with the Seal of Approval. And for this I'll be happy to pick your brains some more. I really get a laugh out of your compliments on our stories. All we've ever done is paraphrase your excellent copy! No, I'll grant you that Arnie Vail, the artist, is one of the most whimsical geniuses in the business. But seriously, it isn't hard to use wonderful source material such as you provide."

DR. SCHERY APPEARS AT 7TH ARIZONA TURF CONFERENCE

On November 17 and 18, the 7th Annual Arizona Turf Conference was held at the University of Arizona in Tucson. Attending the conferences in addition to University of Arizona research and extension personnel were representatives of golf courses, country clubs, parks, schools, plant nurseries, home landscaping, highway specialists and other research, educational and home interests. Dr. Schery appeared as banquet speaker, addressing the group on the subject of "Highlighting Lawn and Turf Developments." In addition, Dr. Schery appeared on two panels -- "Overseeding Effects of Rye Grass" and "Management of Trees and Shrubs in Turf."

In his remarks at the banquet, Dr. Schery pointed out that many of the lawn industry's problems are national in scope. "The Institute stresses that any seed mixture should satisfy these three requirements: be perennial for the climate, be attractively fine-leaved and be able to spread into the sod. It (The Institute) grants its Seal of Approval only to packaged seed in which at least 75% of the content qualifies by these standards," he added.

INSTITUTE MATERIAL TO BE QUOTED

Mr. G. B. Reese of Simplicity Manufacturing Company, Port Washington, Wisconsin, makers of Wonder-Boy and Simplicity equipment, has written asking permission to print a portion of a Lawn Institute story. The article entitled, "Modern Power Mowers," and authored by Dr. Schery appeared in the July issue of "Better Building Maintenance." In his request asking for approval to reprint the beginning section describing different types of grasses, Mr. Reese says: "After reading the article, we feel that it would be of benefit to our dealers to have this information in order to sell the customer the correct mowing attachment. We would give full acknowledgement to you as the source of the article ---."

SCHERY INVITED TO PARTICIPATE IN LAWN BOOK

Dr. R. P. Thomas, International Minerals, Chicago, has invited Dr. Schery to be one of the guest experts who will develop a lawn book for the firm. Included in the material which Dr. Schery will supply for this publication will be information on seeds and seeding.

PHILLIPS SALESMAN SEEKS INSTITUTE AID

Paul Nadler, Division Salesman for Phillips Petroleum Company, has inquired for information on the influence of fertilizing the lawn for the sake of the lawn trees.

BLACK & DECKER REQUESTS INFORMATION FROM INSTITUTE

Another example of the increased prestige of the Lawn Institute as a source for information on lawn and turf matters is the recent inquiry from Black & Decker Manufacturing Company, Towson, Maryland. This firm has requested details on the total market for seeds, garden as well as lawn.

CHAPTER BY SCHERY IN 1961 AGRICULTURAL YEARBOOK

Dr. Schery has just received first proofs of his chapter on "Grass Seeds for Lawn and Turf," which is to appear in the 1961 Agricultural Yearbook. It is interesting to note that government personnel concerned with the production of this book have accepted Dr. Schery's reference to "natural" Kentucky bluegrass, rather than substituting their preferred "common" description. The chapter will be illustrated by drawings of Kentucky bluegrass, red fescue and bermudagrass, which were furnished by the Lawn Institute.

SUGGEST REVISION OF NOXIOUS WEED LISTING

Because of his membership on the Research and Development Committee of the Lawn and Turfgrass Division, ASTA, Dr. Schery has received a copy of the "Uniform Noxious-Weed List Committee Report," from L. D. Herink, Marketing Specialist, U.S.D.A., Washington, D. C.

Dr. Schery comments that there is apparently a move underway to revise the noxious weed listing for the Northeastern states. He has written Mr. Herink with the suggestion that lawn seed be treated separately, at least as far as package goods are concerned. It might be suggested to the membership and associate members whose marketing activities are limited to other areas, that they might want to urge revision of noxious weed listings for their particular regions.

INSTITUTE SEAL DISCUSSED IN CALIFORNIA

During November, Dr. Schery visited the Ferry-Morse organization in Mountain View, California. The chief matters of discussion were the launching of the Seal in the California market area.

Bob Smith, in charge of Ferry-Morse advertising, was interested in having a complete background on the Institute, so that he could begin in their advertising campaign to establish an "image" for the Institute, prior to launching of the Seal. He has been supplied with background material, reprints, and so on. Details on the Seal campaign for California are still being worked out, in the hope that there may be some cooperative advertising between several of the associate members prominent in the market there. Personnel at "Sunset Magazine" were also contacted during Dr. Schery's visit on the West Coast.

PUBLICATION BACKS INSTITUTE STAND ON "WINTER GRASS"

O. J. Noer, reporting in the September-October 1960 issue of "The Golf Course Reporter" provides backing for the Lawn Institute's suggestion for greater use of bluegrass and fescue in the South as "winter grass." (Dr. Schery suggests that, Institute members marketing in the South might recommend the use of bluegrass-fescue mixtures for autumn seeding of dormant bermuda.)

Excerpts from Mr. Noer's material follow:

"-- Rye may still be best for common bermudagrass greens, but the trend is toward the use of finer textured, cool season grasses on greens planted to improved, fine textured bermudagrasses."

"Redtop, bluegrass and bentgrass have been gaining favor for use in fine textured bermuda greens."

"The behavior of Pennlawn fescue, of *Poa trivialis*, and the bents are most interesting in test plots at East Lake in Atlanta and at Sea Island, Georgia. The fescue was the first to appear both places. It ranked best all winter at East Lake and had no adverse effect on recovery of Tifton 328 bermudagrass in the Spring during the so-called "transition" period. At the start, fescue was best at Sea Island, but not after *Poa annua* appeared. It did not mask or blend with annual bluegrass. There was no *Poa annua* on the East Lake green. The seeding rate was heavy, 50 pounds per 1000 square feet at both places. This is too costly for general use. Cheaper priced fescues such as Chewings should be a satisfactory substitute because persistence after the winter playing season is not necessary. *Poa trivialis* came quickly and masked *Poa annua* extremely well. Combinations of bluegrass, bent and *Poa trivialis* produced good turf."

REPORT ON SEED LABELING

Here is a quote that might be considered an assist from Ben Clark of New York. In Bulletin No. 788, February, 1960, Clark and H. L. Page review "The Quality and Labeling of Seeds in New York as Revealed by Sampling and Testing in 1959." On page 16 the following statement is made:

"In view of the fact that Kentucky bluegrass is the most desirable turfgrass for sunny lawns in upstate New York, it is apparent that most of the mixtures analyzed were of very low quality. This is also revealed by the number of samples which contained seeds of coarse grasses. A total of 128 samples contained ryegrass seeds and 76 samples contained seeds of tall fescue --."

"Seeds of red and/or chewings fescue, which are recommended for shade, dry banks and sandy infertile soils, occurred in 133 samples" "...there were a few high quality mixtures which contained no seeds of coarse grasses and high proportions of seeds of Kentucky bluegrass and the fine fescues.--"

From the Summary, Page 41:

"The average quality of the samples of lawn-seeding mixtures was very low. Most samples contained too few seeds of Kentucky bluegrass and the fine fescues (red and Chewings fescue) to provide persistent, fine-textured lawns. Many samples contained large proportions of seed of coarse grasses, such as ryegrass and tall fescue --."

COMPARISON OF SEED MIXTURES FAVORS BLUEGRASS-FESCUE

Following is a quotation from Dr. H. B. Musser, Professor Emeritus, Pennsylvania State University, and now a Turf Consultant with the Royer Foundry and Machine Company. This is from an article which appeared in the October 1960 issue of "Park Maintenance". Musser is talking about the cost of producing turf-grass, and is comparing two seed mixtures:

<u>Mixture 1</u>		<u>Mixture 2</u>	
Common ryegrass	50%	Kentucky bluegrass	60%
Tall fescue	30%	Red fescue	35%
Kentucky bluegrass	10%	Red top	5%
Red fescue	10%		

Based on normal market prices for the various kinds of seed, Mixture No. 2 would cost between two and three times as much per pound as Mixture No. 1. On the other hand Mixture No. 1 would have to be seeded at better than three times the rate of Mixture No. 2 to produce approximately the same number of plants per unit of area. Also, Mixture No. 1 has such a high proportion of the quick growing temporary grasses that it would seriously crowd and check the development of the limited quantity of good permanent types."

RESEARCH AND TIME NEEDED TO VERIFY TESTING SYSTEM

Kneebone, page 553, of the September issue of the "Agronomy Journal" mentions studies especially on buffalograss. He mentions the generally accepted thesis that larger seeds give greater seedling vigor, which we generally find true for bluegrass. But he also points out that the smaller seeds were at no disadvantage in longevity, may even have exhibited a slight advantage if anything. Were the small seeds placed at a disadvantage by a blowing technique, one worth while attribute might have been sacrificed, at least for certain crop years.

Another item of possible interest appears on page 467 of the August 1960 "Agronomy Journal", by Rogler, entitled "Relation of Seed Dormancy of Green Needlegrass (*Stipa viridula*) to Age and Treatment". The article points out how different are various lots of seed; some are hard to germinate in the early years, but have

great longevity, while others can be germinated quickly, but may not retain viability very long. This again is evidence that the year of harvest has considerable influence on a grass. Statistics show that it is true for bluegrass also, that every so often a given crop year will be decidedly different in after-ripening and total germination characteristics. It is doubtful that the relationship to seed size (which would be in turn greatly influenced by a given blowing point) has been looked into sufficiently to embrace a blowing procedure such as "climax" without qualification.

QUOTES FROM "CROPS & SOILS"

The October, 1960 issue of "Crops & Soils", reviewing fertilizer use in New England, found that the average consumption per household was 41-1/2 pounds, and of this 41-1/2 pounds, 57% was used on lawns. Lawn usage was more than twice as much as the second highest usage, 26.7% on vegetables.

Another item, quoted from page 31 of this issue of "Crops & Soils", reports Dr. Youngner of the University of California (Institute Advisor there) reviewing the wear resistance of various turfgrasses under their new "walking machine". Dr. Youngner states:

"---bluegrass, ryegrass and fine-leaved fescues are intermediate in wear resistance, while the bentgrasses are the least resistant to foot traffic.

High mowing improves greatly wear resistance over low mowing. Heavy fertilization has only a slight effect on wear resistance, but aids turf recovery following heavy use."

REPORT ON ALABAMA MOISTURE - DEPTH TESTS

A report of the U.S.D.A. in Agricultural Research, 1960 gives the results for various grass species. These probably hold for lawn grass species as well. The tests were undertaken in Alabama.

The conclusion is:

"In general, rooting depth decreased as soil moisture increased and total root weight decreased as soil depth increased. Tested were Kenland red, California ladino, and intermediate white clovers, Atlantic and African alfalfas, orchard-grass, tall fescue, and reed canarygrass."

SCHERY ATTENDS ROADSIDE SHORT COURSE IN OHIO

The following is a resume of a few of the talks presented Wednesday, October 5th, at the sessions of the 19th Short Course on Roadside Development, Columbus, Ohio, which Dr. Schery attended.

First speaker was Dr. J. M. Aikman, Botany, Iowa State University. He discussed the use of native prairie grasses for seeding the roadsides, and analyzed the varying climatic zones that run across Iowa (extending them into the neighboring regions), pointing out that Iowa was originally 84% prairie. The line where evaporation and rainfall are equivalent runs northwest-southeast across Iowa from the northeastern tip, extending eastward into Ohio. Presumably as the figure drops (that is potential evaporation exceeds rainfall), as one goes westward, the native prairie grasses would be better adapted than the conventional commercial grasses such as bluegrass now frequently used.

Charles Finn substituted for Parker in "Establishment of Cover on Poor Soil and Stabilization of Sand through the use of Vegetative Mulch".

Bill Daniel, Institute Advisor at Purdue, spoke on the use of sod for roadsides and pointed up that the diversity of habitat is great along the new roadside systems, and that the public is going to expect that it be intelligently planted and attractively kept. Daniel believed that it was more important to do the correct things in the beginning, for the results would be on display for the next 25 or 30 years. Slower developing species should be chosen if they are the best; there is really no great hurry.

In seeding operations he suggested when mesh nets are used, that the mesh be at least one-half inch big so that it is not lifted by seedling weeds. He pointed out that there is a difference in roadside plantings between "survival" and "thriving". His testing has suggested that a 4 year period of fertilization is needed before enough organic materials are built up in poor soils to make the turf nutritionally self-sufficient. This would have a bearing upon the planting of bluegrass on roadsides. Daniel does not recommend Merion because of its high nitrogen requirements which up the cost of a fertilization program.

The remaining papers of the afternoon dealt with chemical treatment of weeds and brush. It was pointed out that certain shrubs and weeds may become poisonous to stock, after being sprayed with 2,4-D or other chemicals. It was stressed that the information on a chemical label is the most expensive literature in the world, probably costing 1 to 3 million dollars; therefore it should be heeded religiously. There followed considerable discussion of the public relations aspect of roadside treatment, with emphasis on preventing dissidence rather than dealing with an alarmed public later.

Here is a summary of the Field Tour held in conjunction with the Ohio Short Course:

The emphasis continues very strongly, upon mechanical means of planting the roadside with big equipment from the pavement. The Finn Equipment Company has a number of improved versions of their Hydroseeder which were demonstrated on the Short Course tour. As most of our members realize, present techniques are trending to mixing a slurry of seed and fertilizer, spraying these upon the freshly prepared roadside soils, in a single operation.

In areas where straw is abundant, the mulching which follows is usually done with additional apparatus that blows out the straw with one or another forms of asphalt tack to hold the straw in place on the seedbed. It seems now that some major efforts are being undertaken to supplant straw, especially in areas where its supply is irregular and costs are high. In agricultural areas producing small grains, it is doubtful the newer techniques will yet be competitive.

International Paper Company has developed a wood pulp material called Turfiber, which is stirred into the slurry such as is applied by a Hydroseeder. Approximately a half ton per acre is said to be needed, at a cost for the raw material of around \$60.

Whether this wood pulp material, dyed green, can supplant straw generally remains to be seen. It seems doubtful that it will be as effective a mulch from the standpoint of retaining moisture, although no doubt as an erosion control preventive it will prove adequate. Sprayed onto a newly worked seedbed, along with fertilizer and seed as a slurry, it produces a series of small felt-like spots over the seedbed. One of the Finn Super Hydroseeders can apply approximately one-third of an acre of slurry with Turfiber before needing refilling.

There are other soil protection measures being actively pursued at present. Latex "paints" sprayed upon the seedbed are being vigorously pushed by the Alco Company. These have no mulching value, but do serve to stabilize the soil. Ludlow Carpeting makes a heavy burlap mat known as Soilsaver. Meshes in this burlap are nearly an inch big, and the material is used by burying one end at the top of a slope, then unrolling the roll down the slope, tacking the burlap to the ground with wire wickets. It seems very effective for controlling erosion in gullies and ditches that wash, the only place where it is economically feasible.

Combinations of netting, Turfiber, and various asphalt mulches are being tried, to lessen the cost of gully treatment. It is still too early to know which method will shape up as satisfactory, and yet economically feasible.

Obviously the various techniques will have an influence on seeds and seeding. For one thing, as better mulching techniques are perfected, there should be good reason to do away with some of the coarser hay grasses that sprout quickly, in favor of low growing quality species such as bluegrass and red fescue. This seems especially true in that there is an increasing recognition of the need for fertilizing, which if practiced on a repeat basis will permit the use of the better grasses on some of the poorer sterile road cuts.

It is obvious that short-cuts are going to have to be developed for maintenance of the Interstate right-of-way, which has about 25 acres to be cared for per linear mile, compared to an average of around 2-1/2 acres per linear mile on conventional highways. Mowing four or five times per season becomes economically prohibitive. It would seem worth-while to campaign for the use of lower growing, lawn-type grasses, with a concomitant educational approach to the public, indicating that unmowed grass is not only attractive, but is saving of their tax dollar.

The highway people in general are in favor of less frequent mowing, and have proven to their satisfaction that turf along the roadside looks attractive enough if the coarse weeds are eliminated by spraying once a year. We should try to get out some experimental sections of highways seeded only to low growing grass (bluegrass-red fescue) that receives 2,4-D weeding but no mowing. Under a reduced-mowing schedule, it would seem that bluegrass and red fescue have a definite advantage over the coarser and taller growing tall fescue, the most frequently used roadside grass at present.

"SEED TRADE NEWS" USES INSTITUTE PHOTO

The September 28th issue of "Seed Trade News" (page 5), shows a Lawn Institute photo, with credit line, to illustrate an article entitled "Lawn Feuders Raise Question of Fall vs. Spring Fertilization."

ASSOCIATE MEMBER IN CANADA ORGANIZING TURF COUNCIL

Norman Rothwell, Assistant Manager of Hogg & Lytle, Limited and associate member of the Lawn Institute has been instrumental in organizing the Ontario Turf Council in that province. Mr. Rothwell reports: "We have just, last Friday night, held our Second General Meeting of the group interested in forming the Ontario Turf Council. It has been decided that we would take out a charter immediately and now we have the ball rolling with two comprehensive committees, not the least of which is the 'ways and means'."

IOWA OFFERS COURSE IN TURFGRASS MANAGEMENT

Dr. Eliot Roberts, Institute Advisor at Ames, Iowa has advised the Institute of a Course in Turfgrass Management being offered at the University jointly between the Agronomy, Horticulture and Botany Departments.

There is a stiff curriculum in required subject matter, and a program now set up that should provide competent graduates in the field of turfgrass.

Dr. Roberts would be interested in having any potential enrollees referred to him, should any Institute members or Associates be guiding young men into this field of training; eventually they may be interested in employment of the graduates from Ames.

Dr. Roberts writes: "Enclosed for your information is a copy of our new leaflet describing specialized training in Turfgrass Management this course of study is open to both Horticulture and Agronomy majors. At present 19 students are registered in this program, about half in Horticulture and half in Agronomy. Since we are on the quarter system at Iowa State the credits represent quarter credits.

I would be glad to answer any questions you may have regarding our specialized training in this area or correspond with young men interested in turfgrass management with whom you may be acquainted."

Enquiries should be for the folder on "Turfgrass Management Course of Study".

STUDENTS SEEK HELP FROM INSTITUTE

Students in turfgrass study continue to come to the Lawn Institute for information. Neal Tempel attending the State University Agricultural and Technical Institute, Farmingdale, New York, who is preparing a term paper centering about redtop has written for material. Dr. Schery supplied a series of Institute reprints.

Dr. Robert Peters of the University of Connecticut suggested to Kenneth C. Stevens, Jr., that he contact the Institute. Stevens is studying a crabgrass problem and wrote Dr. Schery for appropriate information and references concerning crabgrass in turf and its control.

Rodney L. Brown, Ames, Iowa, who is taking a special course in turf management under Dr. Eliot Roberts of Iowa State College has written Dr. Schery. He is interested in information dealing with methods of retarding the germination and early establishment of bluegrass turf, caused by competition from ryegrass.

MICHIGAN REVISES EXTENSION FOLDERS

Dr. James Tyson, Institute Advisor in Michigan notes that Michigan State University has updated several of its lawn booklets. Extension Folder F-261, on Lawn Weed Control, is under the date of June, 1958. Extension Folder F-212 was revised April 1960. It is entitled "Care of an Established Lawn". Extension Folder F-211 is revised, but undated.

The following is quoted from this revision: "--Do not confuse Kentucky 31 fescue and other tall fescues with Kentucky bluegrass or with the fine-textured red fescues suggested for dry areas on sandy soils and under shade trees."

"Do not plant mixtures containing coarse-textured grasses such as ryegrasses (Domestic, Perennial, Italian), or tall fescues (Kentucky 31, Alta), or fine textured bentgrasses combined with the medium textured bluegrasses and red fescues."

WEED AND GRASS "MUSEUM" OPENED NEAR DETROIT

Development of a 15-acre Lawn Research Center at Milford, Michigan has been announced by William H. Nolan, director of sales at Moto-Mower, Inc., leading producer of rotary, reel and riding power mowers and garden equipment.

Planned as a lawn-care experimental area, the center includes 3 acres devoted to a "weed museum" and "grass museum" and a 12-acre proving ground for testing Moto-Mower products.

Co-operating in the venture are agricultural and horticultural experts from the faculty of Michigan State University . . .

Studies already under way include investigations of insect and grass-disease control, proper grass-cutting height and lawn-watering procedure.

The weed and grass "museums" contain samples of different strains of such plants grown under a variety of conditions.

REPORT ON CRABGRASS KILLERS

The October, 1960 issue of "Weeds" carries an article entitled "Effect of Temperature on the Herbicidal Activity and Translocation of Arsencials", by Rumburg, Engel and Meggitt.

Conclusions are that the usual crabgrass killers, based primarily upon DMA, cause greater injury at higher temperatures, and translocate the arsenic somewhat more adequately.

WHAT THEY ARE SAYING ... ABOUT THE INSTITUTE AND QUALITY GRASSES

"Thank you very much for the reprints, which I have received today. Separately I am sending you some of our papers dealing with lawn problems."

-- Bjarne Langvad, M. Sc.,
Plant Breeding Institution
Weibullsholm, Landskrona, Sweden

"Your point on the listing of individual grasses is well taken, and I thank you for bringing it to my attention.

"I have a good size file of material from the Lawn Institute and refer to it quite often when I am preparing news releases."

-- Robert A. Purinton
the duPont Company

"We appreciate very much you sending us this material as it certainly gives a good coverage on any phase of lawns.

"We would like to be placed on your mailing list for additional information that might come out, if this is possible."

-- D. S. Doby, Manager
Sawan Wholesale Seeds
Guntersville, Alabama

"Here's a very belated thank you for the fine programs you gave at the Garden Center last month. For the second time, that one lawn talk keeps us busy with carry over questions and general interest for at least six weeks. The Garden Center really benefits a great deal from your programs, and I hope we can continue to make the September talk an annual deal.

"It is always a pleasant and informative experience to have you come to town. Thanks again for the last visit, I am looking forward to the next one."

-- Dr. John Baumgardt
Director, The Garden Center
Kansas City, Missouri

"Incidentally, Mr. Schery, we have been very impressed with the steady flow of good information that pours from your office. It is the best industry-sponsored program we have ever seen, and are doing our best in the local market areas to see that dealers and consumers alike are better informed on the importance of planting quality perennial grasses."

-- F. C. Trullinger, President
Portland Seed Company
Portland, Oregon

"It was certainly a pleasure to meet you at the Seventh Annual Arizona Turf Conference. Certainly your fine presentation at the banquet was the highlight of the two day program.

"Last night upon returning from the meeting I had an opportunity to read over the printed material which was given out at the meeting and I would like to have you send me several more copies of this material along with any other printed material you might have on turf and its management."

-- W. A. Burrell
Phoenix, Arizona

"We very much appreciate your letter of October 18 and the material which you have given us which included information on the pH of different lawn grasses ...

"We have taken your recommended ranges of lawn grasses and applied a letter referring to our chart to each grass. It would be very much appreciated and helpful if you would check this list and let me know if you think we have applied the proper letter. For instance in Zoysia the range is from quite acid to quite alkaline and we have given it a middle reading C. Bluegrass 6 to 7.7 slightly acid to quite alkaline so we have given it B etc.

"We look forward to hearing from you and getting your very helpful comments."

-- Nelson C. Latremore
Sudbury Laboratory

"We wish to thank you for taking the time and effort to analyze our merchandise information regarding grass seed and chemical fertilizers.

"You can be sure that the information and suggestions will be utilized in our current price list and information bulletins."

-- T. R. Renwick
J. C. Penney Company, Inc.