



William R. Michaels has been named president of Lockwood Corporation, a wholly owned subsidiary of Alaska Interstate Company. The company is a leading manufacturer of center pivot irrigation systems and specialized farm equipment, headquartered in Gering, Neb.

## Herbicide Antidote Gains Recognition for Stauffer

A herbicide antidote developed by Stauffer Chemical Company has been recognized as one of the 100 most significant new technical products of 1974 in the "I-R 100" competition, sponsored by Industrial Research magazine.

President H. B. Morley accepted the award for Stauffer at an awards banquet at the Museum of Science and Technology in Chicago, Sept. 19.

Herbicide antidotes have been viewed as a major breakthrough in weed science by leading university agricultural authorities. The antidotes are chemical agents that are used in combination with thiocarbamate herbicides and permit application rates sufficiently high enough to control difficult weed species without damaging crops.

Stauffer's first commercial herbicide antidote, R-25788, is being marketed in combination with Eptam® and is called Eradicane®, and in combination with Sutan®, called Sutan®+.

## Enrollment Open for Irrigation Course

Space is still available for students to enroll in a three-day short course on Turf Irrigation Principles and Practices to be held in Fresno, Calif., on Dec. 10-12 at the Airport Marina Motel. The course is sponsored by the Sprinkler Irrigation Association.

Instruction material in the course is not of an advanced nature but will begin with the basic concepts of sprinkler irrigation and cover design and application through lectures, examples and problem-solving techniques.

Enrollment fee for the course is \$125 per student which includes participation in all sessions, luncheons each day and provision of copies of the *Third Edition of Sprinkler Irrigation*, the *Supplement to the Third Edition*, and the *ABC's of Lawn Sprinkler Systems*, as well as other materials provided by the instructors.

Enrollment in the course is limited to 50 students. Applications are accepted on a first-come, first-served basis. Those completing the short course will receive a special certificate from the Sprinkler Irrigation Association stating that the individual has attended and partici-

pated in a course covering basic sprinkler irrigation theory, technique and system design.

Instructors for the course include Dr. Falih K. Aljibury, University of California; Jerry L. Boesel and David Davis, Rain Bird Sprinkler Mfg. Corp.; William Closter, Closter Brothers, Inc.; Del Crummey and Purnell Thomas, FMC Corp.; and Edric Green, Moody Sprinkler Co.

Full programs and registration forms are available from the Sprinkler Irrigation Association at its national offices at 13975 Connecticut Ave., Suite 310, Silver Spring, Md. 20906.

## Echo Chain Saw Division Hosts Distributor Meeting

The Echo Chain Saw Division, Kioritz Corporation of America, recently hosted more than 75 chain saw "enthusiasts" at the firm's first national distributors meeting.

Held in Northbrook, Ill., the three-day event was staged to "pro-

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The Midwest Agricultural Chemicals Association, Inc. elected new board of directors and officers for the 1974-75 year. Seated (left to right): Dean Roy, Cole Chemical Co., second vice-president; Ray Smedul, Chevron Chemical Co., president; Gene Neuwirth, Shell Chemical Co., first vice-president; and R. C. (Bud) Moreau, Velsicol Chemical Co., secretary-treasurer. Standing: Dick Carritt, retiring board member, P.P.G. Industries; Tom Foster, Guth Corp.; Ray Dreger, Mobil Chemical Co.; Larry Bert, Midwest Agricultural Warehouse Co.; Keith Boyer, Brayton Chemical Co., past president; S. E. Cook, Hercules, Inc.; and Swede Roskam, Oil-Dri Corp. of America.

vide a closer liaison with Echo Chain Saw Division and Kioritz Corporation personnel and all distributors," according to Donald A. Bartelt, general sales manager of the division.

At the meeting, award plaques were presented to the top ten distributors for the 1974 fiscal year: Chain Saw Sales, Inc., Eureka, Calif.; Rental Distributing Company, Houston, Tex.; Outdoor Equipment Distributors, Inc., Raleigh, N.C.; Timberland Machines, Inc., Lancaster, N.H.; Industrial Equipment Service, North Little Rock, Ark.; Lummis Supply Company, Inc., Philadelphia, Pa.; Timberland Supply Company, Kosciusko, Miss.; Brown Equipment Distributors, Inc., Corydon, Ind.; Red McDevitt, Inc., Syracuse, N.Y.; and Wallenberg Sales Company, Santa Fe Springs, Calif.

## Slow-Releasing Nitrogen Produces Quality Grasses

Organic and slow-release nitrogen sources at two pounds of nitrogen per 1,000 square feet per month have produced excellent quality bermudagrass turf in tests on southern golf greens, according to the Texas Agricultural Experiment Station.

The turf had acceptable growth, limited thatch accumulation and minimum leaching losses.

On the other hand, inorganic nitrogen sources and higher rates of organic and slow-release sources produced excess growth and thatch build-up.

Potassium fertilization produced no measurable effect on turf quality or thatch. Nitrogen losses through leaching were very high from soluble sources compared to organic and slow-release sources.

In addition to nitrogen source, application rates, irrigation practices and soil type had strong influences on the amount of nitrogen leached. Losses were as high as a half-pound of nitrogen per 1,000 square feet per month on sandy mixtures irrigated daily and fertilized with soluble sources at a rate of two pounds of nitrogen per 1,000 square feet.

Organic (Milorganite) and slow-release nitrogen sources resulted in less than five percent leaching losses after applications of three pounds per 1,000 square feet.

Potassium losses through leaching also were high on golf green soil mixtures. On coarse-textured mixtures, as much as one pound of potassium per 1,000 square feet leached away in a three-month period.

## Total Control Herbicide Receives EPA Clearance

A new herbicide for total vegetation control on railroad roadbeds and ballasts and industrial sites was recently cleared by the EPA. The product will be marketed under the trade name, Spike®, by Elanco Products Company, Indianapolis, Ind.

The new chemical, a thia-diazolylurea compound, was field developed by the Lilly Research Laboratories, a division of Eli Lilly and Company, also of Indianapolis.

The new chemical was widely tested for four years on over 100 commercial-size railroad sites and many large industrial locations under an experimental permit granted by EPA. Features of Spike, according to the manufacturer, include control of more species of tough weeds and most brush species, long-lasting residual control, application timing flexibility, and resistance to leaching and lateral movement in the soil.

Elanco marketers indicate that Spike is now available for commercial use. Additional experimental testing of the product is now underway for control of woody plants in pastures and rangelands.

For more information, contact: Specialty and Technical Chemicals Department, Elanco Products Company, Indianapolis, Ind.



David T. McLaughlin, president of The Toro Company, holds a rendering of Toro's new assembly plant being built in Tomah, Wis.

## Toro Breaks Ground for Wisconsin Plant

State and community representatives gathered in Tomah, Wis., for a groundbreaking ceremony for The Toro Company's \$3.5 million assembly plant.

During the ceremony, which took place on 7,500 square feet of fresh sod laid in the shape of a map of Wisconsin, Governor Patrick J. Lucey, Tomah Mayor C. E. Bean and Toro President David T. McLaughlin each operated a Toro mower to cut a swath in the blue

Merion grass.

The new plant, Toro's first in Wisconsin, will be a single story steel and masonry structure with 160,000 square feet of space. Scheduled for completion late next year, it will provide employment for 350 men and women by 1976. Toro, headquartered in Minneapolis, Minn., is the nation's leading independent manufacturer of maintenance and irrigation equipment for lawn and turf care.