
Barnett Elected Chairman Of ICI United States, Inc.

Robert P. Barnett has been elected chairman of the board and chief executive officer of ICI United States, Inc., Wilmington, Del., succeeding Edward J. Goett. Barnett will retain his position as president of the company.

Goett will devote full time to duties as president and chief executive officer of ICI Americas, a company responsible for activities of ICI group companies in North, Central and South America.

ICI United States is the United States operating subsidiary of ICI Americas. Both Delaware-incorporated companies are subsidiaries of Imperial Chemical Industries Limited (ICI) of London.

Wastewater, Land Treatment Subject of New SIA Manual

The Sprinkler Irrigation Association has announced a March 1 publication date for its Wastewater Resource Manual which will deal with land treatment and recycling of municipal and industrial wastewater. The manual will stress the practical engineering concerns associated with wastewater project design and has been written for use by systems designers and operators.

The Manual will be issued in a green, hard-cover post-binder containing approximately 500 pages. Periodic updating and revision of material on the latest state of the art will be available after the first year on a subscription basis.

Part I of the Manual deals with both the legal and technical aspects of land treatment. The legal section covers federal, state and regional laws, local ordinances and regulations and land use aspects and social considerations.

The technical portion of Part I is concerned with wastewater characteristics; pretreatment and storage of wastewater; hydrogeologic site considerations; soil physical, chemical and biological processes; botanical components; climatologic considerations; hygienic and nuisance concerns; conventional sanitary engineering treatment processes; hydraulics, with emphasis on irrigation system design; and a review of existing land application technology.

The Manual presents a detailed study of project design and describes in detail typical systems as examples. Under this section, Part II, factors effecting the criteria or data needed include discussions of geology, soils, hydrology, weather, agricultural practices and adjacent land use.

Included will be a design and engineering section which will cover pretreatment and storage, piping, (continued on page 27)
spray distribution equipment, field layout considerations, operational and management considerations, project economic evaluation and a review of environmental considerations. Typical systems described will include those for municipal, industrial and agricultural areas.

The appendix of the Manual will include a listing of firms engaged in design or installation of wastewater systems; a listing of federal, state and local wastewater regulatory agencies; a buyer's guide of firms manufacturing equipment for the wastewater field; a bibliography of technical information; a "dictionary" of sprinkler and wastewater terminology; and useful tables and conversion factors.

Pre-publication sales are being taken until Feb. 28 at the Association's offices at 13975 Connecticut Ave., Suite 310, Silver Spring, Md. 20906. Cost for the Manual in pre-publication orders is $40. After March 1, the Manual will sell for $45. Orders should be accompanied by check or money order.

Forest Service Announces Move of 3 Research Units

U.S. Forest Service research units in Columbus, Ohio, a part of the Northeastern Forest Experiment Station, will transfer to the Station's Delaware, Ohio, laboratory this month, according to F. Bryan Clark, station director. Clark said the primary reason for the move is to achieve a more efficient and economical operation.

Current Forest Service research at Delaware deals with forest insect and disease problems affecting eastern tree species. The Columbus units will add three new research functions to the laboratory's programs — forest economics, wood utilization and forest management.

Objective of the economics unit is to determine the income potential from forest lands in the Northeast when management for timber and other uses is applied. Another unit is responsible for defining and classifying tree and log characteristics affecting the quality and usefulness of hardwood and eastern softwood species. The third unit develops improved techniques for measuring the growth and yield of forest stands in the upland oak region of the eastern United States.

The Northeastern Station, which is responsible for forest-related studies in 14 states, is one of eight Forest Service regional research stations with programs aimed at protecting, managing, using and replenishing the nation's forest resources.

New Synthetic Insecticides Shown To Be Less Toxic

New pyrethroids, synthetic substitutes for the natural insecticides of the pyrethrum plant, may be even more effective against target insects and less hazardous to people and animals than the natural product, according to USDA scientists.

Extremely low mammalian toxicity of the pyrethroids is evidenced from data collected by industry. These data show that the new pyrethroids are less toxic to laboratory animals than DDT or carbaryl.

In greenhouse tests conducted by USDA's Agricultural Research Service (ARS) in Beltsville, Md., the new insecticides proved lethal to a wide range of agricultural and disease-bearing insects.

Pyrethroids are especially effective against aphids and certain other sucking insects, but will also kill chewing insects. Yellow fever mosquitoes, house flies, American and German cockroaches, Japanese beetles, boll weevils and Colorado (continued)
pyrethrum plant, *Pyrethrum cineræfolium*, and is used in insecticidal sprays and dusts. It is not harmful to plants and is regarded as one of the world's least toxic insecticides to man and animals. But supplies of these flowers are limited so natural pyrethrum is expensive.

Commercial interest in safer insecticides has been increasing since the first pyrethroid, allethrin, was synthesized in 1949 by Milton S. Schecter, chief of the Beltsville Chemical and Biophysical Control Laboratory.

In recent ARS research, entomologist William N. Sullivan applied the experimental pyrethroid compounds in aerosol and dust forms under conditions simulating disinsection of aircraft and other enclosed areas.

"These promising new pyrethroids are applicable to the home, the farm, greenhouse or warehouse as well as in commercial aircraft," Sullivan said.

The tests included the two percent resmethrin aerosol, which is approved by the World Health Organization as a substitute for a pyrethrum-DDT formulation used in disinsecting international aircraft to prevent the spread of insect vectors of disease. The two percent resmethrin formulation has just been cleared by the EPA.

Sullivan also tested three additional pyrethroids, all of which are still experimental.

**Small Businesses To Gain Penalty-free OSHA Advice**

On-site job safety and health consultations for small businesses, without citations or penalties, will shortly be provided by OSHA.

The new program will assist small businessmen in states where OSHA is enforcing federal job safety and health rules.

States operating their own job safety and health programs under OSHA-approved plans are already authorized to provide such consultative services to small businessmen.

John H. Stender, assistant secretary of labor and head of OSHA, said that as funds are made available for the new program, states without OSHA-approved plans may contract with OSHA (under provisions of the 1970 Occupational Safety and Health Act) to provide these services using state personnel.

"As in a normal inspection," Stender said, "each consultation will consist of an opening conference with the employer, a walk-through of the company facility, a closing conference, and a written summary of findings."

There will, however, be no citations issued for any alleged violations found and no penalties proposed, Stender added.

The consultation agreements also will contain provisions for immediate abatement of imminent danger situations and for protecting the confidentiality of trade secrets.

Under the terms of OSHA contracts with the states, a clear separation will be maintained between consultative and enforcement staffs. Stender emphasized that consultants' files will not be used to trigger an OSHA inspection. In the event of a subsequent OSHA inspection, however, a federal compliance officer will not be precluded from issuing citations regardless of earlier findings or recommendations of the state consultant.

During a walkthrough inspection, consultants will explain to the employer which OSHA standards and rules apply to his workplace, explain technical language and application of applicable standards, point out to the employer where he is not complying with OSHA standards, and, where possible, suggest means by which identified hazards may be abated.

The consultation program came about as a result of congressional action directing such a program and OSHA's concern for helping small businesses comply with job safety and health rules.

To date, 26 states or territories have OSHA-approved plans, so will not enter into the OSHA consultation contracts. They are: South Carolina, Oregon, Utah, Washington, New Jersey, North Carolina, California, New York, Minnesota, Maryland, Tennessee, Iowa, Kentucky, Alaska, Virgin Islands, Colorado, Michigan, Vermont, Illinois, Connecticut, Hawaii, Nevada, Indiana, Wisconsin, Wyoming and Arizona.

(more news on page 30)
NEWS (continued)

FMC Recalls 100 Workers

FMC Corporation’s Outdoor Power Equipment Division recalled approximately 100 employees in mid-January, according to John Platta, creative services supervisor for the division. These employees are part of a 200-man lay-off which took place Dec. 1, 1974.

The Outdoor Power Equipment Division, located in Port Washington, Wis., manufactures the Bolens line of lawn and garden equipment. Production levels in the division are expected to continue at a reduced rate pending a change in economic indicators in the outdoor power equipment industry.

Advertising Agency Named For Lawn-Boy Equipment

Valentine-Radford Advertising, Inc., a nationwide advertising agency headquartered in Kansas City, Mo., has been named advertising agency for Lawn-Boy rotary mowers and outdoor equipment.

Lawn-Boy products are marketed by OMC-Lincoln, a division of Outboard Marine Corporation.

Valentine-Radford has represented OMC-Lincoln product lines for more than 16 years, first with Cushman golf and industrial vehicles, then Pioneer chain saws and Ryan turf equipment. A separate Valentine-Radford division also handles public relations for all OMC-Lincoln product lines.

President of Golf Architects Lauds American Designers

Golf course design and the practice of golf course architecture definitely has become “Americanized” during the past ten years, according to Robert Muir Graves, president of the American Society of Golf Course Architects.

“Today, golf course architects from North America are designing courses around the world,” Graves said. “When someone wants a great golf course—whether it is in Japan, Africa or Russia—he consults with American golf course architects.”

Graves said that while American golf course architects are no less aware of the early strategic concepts of plan and the three major types of design — the heroic, strategic and penal — they are responsive as well to the more mundane but equally important basic principles of maintenance, irrigation and drainage.

The result, he said, is some of the best-designed and most beautifully conditioned golf courses in the world.

“These courses, whether they are here in North America or in a remote corner of the world, are both a sound test of golf and a pleasure to play,” Graves said.

The first golf course architects in this country were either of Scottish origin, or else they went to Scotland, where the game of golf was first played around 1400 A.D., to study the great courses of Prestwick, St. Andrews and Musselburgh.

These early courses were often built on links land by the sea, and their charm lay in the infinite variety of the sand hills with their bends and hollows and valleys. These natural contours gave the holes individuality, with the lay of the land dictating the nature of play.

Early golf course architects became thoroughly familiar with the strategic concepts embodied in these courses and made every attempt to (continued on page 36)

Dr. Richard P. White, former executive vice president of the American Association of Nurserymen (AAN), gives an inventory of materials compiled during research for his forthcoming book, “A Century of Service: A History of the Nursery Industry Associations of the United States.” Henry Gilbert (left) and Dr. Richard Farley accepted the documents for the USDA Library. AAN Executive Vice President Robert F. Lederer (right) noted that the book will debut at the AAN 100th Convention in Chicago at the Palmer House, July 19 to 23.
reproduce them in courses built in this country.

When earth-moving was required to provide interest and variety, the natural hills, valleys and windblown bunkers of Scotland were imitated.

"Today," Graves said, "we attempt to blend the historic with modern technology to provide a beautiful golf course that provides a fair challenge, yet can be easily maintained with modern equipment."

The American Society of Golf Course Architects is comprised of the leading golf course architects in Canada, Mexico and the United States.

Velsicol Requests Hearing On EPA's Proposed Action

Velsicol Chemical Corporation has announced that it will request a public hearing regarding the Environmental Protection Agency's proposed action toward two of its products, chlordane and heptachlor insecticides.

In late 1974, the EPA announced its notice of intent to cancel certain registered uses of the two products. The proposed cancellation does not affect use of chlordane or heptachlor for subsurface ground insertion for termite control and the roots or tops of nonfood plants.

Sales of chlordane and heptachlor are not limited during the cancellation proceedings.

The EPA stated that chlordane and heptachlor appear to "pose an unreasonable risk to man," but that "these risks require further definition. Public hearings should allow all pertinent evidence to be brought forth ... and both the risks and the benefits may be more fully developed."

We anticipate a thorough and fair public hearing, said Robert M. Morris, Velsicol president and chairman of the board. "We firmly believe these products are important to the American people — especially to the American farmer. These hearings will allow us to present the EPA with evidence of the safety and efficacy of chlordane and heptachlor, so that current registrations may be sustained."

Freeport Minerals Raises Sulphur Price, Opens Mine

Freeport Minerals Company recently announced a $6 per ton increase in its domestic sulphur prices and also a planned $18 million program to reactivate an offshore sulphur mine in the Gulf of Mexico to help relieve the current sulphur shortage.

The mine, Caminada, was shut down in 1969 after sulphur prices began a long decline. A relatively high-cost operation, it is a sister mine to Freeport's nearby Grand Isle, the first and at present the only offshore sulphur operation in the world.

Recent price improvements in sulphur are helping make possible the reopening of Caminada and are

(continued on page 40)
prolonging the life of existing sulfur mines, according to the company. Freeport pointed out that reactivating Caminada — which is contingent upon securing the necessary natural gas supply — will cost not much less than Caminada's entire original cost of $23.7 million in 1968.

Freeport also announced that, on the strength of higher prices, it had launched a new sulfur exploration program in Louisiana.

**Forest Service Man Cited For Tree Decay Research**

Dr. Alex Shigo, a U.S. Forest Service researcher known for his contributions to the understanding of discoloration and decay in living trees, has been honored by the American Phytopathological Society.

**New Gravely Dealer Group Holds First Meeting in Fla.**

The ten members of the Gravely Dealer Council recently held their first meeting in Florida. The Council was formed to "give Gravely dealers an opportunity to express their opinions and ideas directly to the people who are responsible for Gravely's operations and policies," according to P. W. Cayce, marketing vice president. The meeting was scheduled as a result of suggestions made during Gravely's recent dealer meetings. Representing a cross-section of Gravely dealers, the ten members discussed a wide range of topics, from the outlook for 1975 to "What manufacturers should do to help their dealers in 1975." The consensus was that Gravely dealers believed the market will be looking for quality equipment, with greater emphasis on value.
to slump too? 

HERE IS SOMETHING TO CONSIDER!

There are hundreds of thousands of old homes in communities with sparse thin lawns because of shade too dense for most grasses. There are also hundreds of thousands of old Merion, Windsor and other type lawns that have become so badly infested with smut and other grass diseases, they are hopeless, or at best difficult to cure or control. Most of these old lawns are in well established communities where people want the best and have the means to purchase the best.

Why not go after this lucrative market which is not affected by a building slump, high interest rates or inflation? You can do so by becoming a franchised grower of Warren's A-20 and A-34 Kentucky Bluegrasses and other Warren grasses to be released as patents are issued.

Warren's A-20 is rated high for over all performance and disease resistance by research organizations doing turfgrass research.

Warren's A-34 is rated highest for shade tolerance by the same research people.

When you become a Warren Franchise or Associate Grower, you place yourself ahead of competition with better products, not available to your competition . . . and here is something else to consider . . . in 1974, when our competitors were reporting sales ahead of 1973, the reason . . . golf courses and athletic institutions all over the northern half of the U.S.A. were installing A-20 on tees, and athletic fields. Architects were writing specs for Warren grasses and owners of old homes were ripping out old lawns and installing A-20 or A-34. All because these people wanted the finest lawn areas available. You too can enjoy this business when you become a Warren Associate Grower.

Warren proprietary grasses are now produced in 15 states and in England, Scotland and France. There are a few territories still available.

Write today for particulars about a Warren Franchise. Should there be no Warren Nursery or Associate Grower in your area we will be pleased to consider you for an exclusive Warren Franchise.

WARREN'S TURF NURSERY, INC.
8400 West 111th Street
Palos Park, Illinois 60464

NUTSEDGE (from page 48)

Building slump causing you to slump too?

Tuber development was zero in mowed boxes and substantial in the unmowed boxes. However, competition with Kentucky bluegrass sharply reduced the amount of tubers produced.

In a field study, yellow nutedge was planted in plots of Kentucky bluegrass turf and maintained at ½, 1 ½ and 3 inches cutting heights, and fertilized at rates of 0, ½, 1 or 2 pounds of nitrogen per 1,000 square feet per month from May to October. The highest nutedge density occurred in plots maintained at ½

(continued on page 61)

NEWS (from page 40)

Diamond Shamrock Corp.
Introduces Liquid Daconil

The Agricultural Chemicals Division of Diamond Shamrock Corporation has announced production of Daconil 2787® Flowable Fungicide in liquid form.

This flowable, broad-spectrum fungicide, which is said to be just as effective as the Daconil W-75 wettable powder formulation, can be used on over 25 species and varieties of grass and many ornamental plants for control of a number of diseases including dollar spot, helminthosporium leaf spot and melting out, copper spot, gray leaf spot and stem rust of bluegrass.

When preparing Daconil 2787® for application, it should be remembered that one pint of the new flowable is equal to one pound of the wettable powder formulation.

According to the manufacturer, Daconil 2787® Flowable Fungicide disperses quickly, requires a minimum of agitation, exhibits excellent turf tolerance even in hot, humid weather and provides excellent coverage and exceptional residue protection. For more details, circle (709) on the reply card.

Maryland Sod Conference To Study Current Troubles

Current problems of the Maryland sod industry will be the focal point of the 10th Annual Sod Conference to be held March 6 at the Adult Education Center, University of Maryland, College Park, Md.

A panel discussion on current sod marketing problems will highlight the conference, according to John R. Hall, extension turf management specialist from the University of Maryland.

Featured panelists will include Steward Knudson, president of Maryland Homebuilders, and Jack Foley, president of the Montgomery County Board of Realtors, who will talk on current housing needs and the situation as he foresees it.
NEWS (continued)

sees it for the next 12 to 24 months. Tentative plans for the panel also include a speaker on Maryland's problems with sewer moratoriums, and a representative from the banking sector who will discuss money availability for sod production and the possibility of incorporating lawns or sodding into a mortgage if the homeowner so desires.

Beetle Quarantine Expanded In Sections of Eight States

The USDA has extended Japanese beetle quarantine restrictions on the movement of certain agricultural articles to additional sections of eight states, and removed part of Wayne County, Mich., from regulation. The states where the quarantine was expanded were Alabama, Georgia, Illinois, Indiana, Kentucky, Ohio, South Carolina and Tennessee, according to T. G. Darling, acting deputy administrator for Plant Protection and Quarantine Programs in USDA's Animal and Plant Health Inspection Service (APHIS).

"When a Japanese beetle outbreak is discovered," said Darling, "the entire state or states involved are brought under federal quarantine, but movements of goods are restricted only in those parts of the states and counties that are actually infested. This procedure insures that individuals and industry in quarantined but uninfested areas are not subjected to unnecessary restrictions."

Articles regulated under the quarantine include soil, grass sod, plant crowns and roots for propagation, bulbs, used mechanized soil-moving equipment and plants with roots (except houseplants grown in the home and not for sale). Regulated items must be inspected, treated if necessary, and certified "pest free" before being shipped from infested to uninfested areas. Inspections are carried out by APHIS or cooperating state agricultural quarantine inspectors.

States currently under the Japanese beetle quarantine are Alabama, Connecticut, Delaware, Georgia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia and the District of Columbia.

Darling said that the Japanese beetle is a destructive insect attacking nearly 300 kinds of plants. The grubs feed on the roots of grasses and turf. Adult beetles feed on flowers, shrubs, trees, fruit and field crops such as corn and soybeans. "They can damage plants and small trees in a relatively short time," he said.

The amendment to the federal Japanese beetle quarantine took effect upon publication in the Federal Register, Jan. 7. Copies may be obtained by writing to Plant Protection and Quarantine Programs, APHIS, USDA, Federal Building, Hvatville, Md. 20782.

(more news on page 58)
possible to obtain the equipment you need when you need it.

**Leasing reduces the cost of inflation.** The bulk of your payments are made with tomorrow’s dollar which, if inflationary pressures continue, will be cheaper than today’s.

**Leasing may offer important tax advantages.** Today, the modern concept of leasing is not based on a tax program but rather on a capital conservation program; that is, the freeing of capital so that it can be used effectively to develop profits. However, since rental payments may be deductible as a normal business expense, a tax benefit might result from the difference in timing of the deduction for rent as compared to that for depreciation. Usually, the economic rather than the tax depreciable life of the asset determines the duration of the lease.

**Leasing can offer great flexibility.** Leasing offers a wide variety of plans and programs geared to fit specific financing needs — long or short term, straight line or accelerated, renewable or replaceable. Leasing may well play a valuable role in your plan to cope with inflation.

My final recommendation in coping with inflation is to stand back and take a management-by-objectives look at the total tasks you plan to perform in the coming fiscal year (programs, facilities, land, maintenance level desired, and so on). Work backwards from these objectives to define the number of people and their associated skill levels which you feel will be required to perform these tasks. Evaluate your present equipment fleet for its adequacy in achieving your goals. Then utilize the first three recommendations we’ve discussed to form several alternative operating plans.

Lay out the costs associated with each operating plan. The formal budget proposal then flows naturally from each operating plan. This will allow you the opportunity to present several operating plans with associated budgets for approval. Those involved in the approval process can then clearly see the results which can be expected from each budgetary level.

Consider these four general recommendations I’ve discussed:
- Evaluate sources of funding, including Federal Revenue Sharing.
- Examine the labor equipment trade-off, utilizing a cost reporting system.
- Evaluate leasing versus purchase.
- Manage by objectives. Take an overview of your goals for the year, then work backwards to develop alternative operating plans with associated budgets.

This business management approach can be quite effective when trying to sensibly cope with inflation.

**Stender Urges Managers To Start Safety Programs**

“Eliminate those things that cause accidents; train your employees in safe work practices.”

That was the advice of Assistant Secretary of Labor John Stender, head of OSHA, to the Genesee Valley Safety Conference.

Stender urged the predominantly management audience to encourage the establishment of safety programs in all segments of industry, large and small.

Stender said some 75 percent of all workplaces inspected turn up hazards. One of every nine workers suffers work-related injuries and more than 25 million work days were lost in 1972 due to on-the-job accidents.

**Standard Marks 50 Years In Golf Accessory Industry**

In 1975, Standard will celebrate their 50th year of producing golf course accessories. To mark this anniversary, Standard has changed their name from Standard Manufacturing Company to Standard Golf Company and added a new trademark. Their plant and offices remain at 220 East Fourth Street in Cedar Falls, Iowa.

The company actually started business in 1910 by making steel gates, wagon tongues and farm-related equipment. In 1925, Standard began making a few wooden poles, flags and steel cups for the golf industry. Three years ago, Standard sold their farm-related product division and now spends full time in the golf course accessory field.

**Gingery Appointed Member Of Mailers Advisory Group**

Lee E. Gingery, vice president in charge of sales for the Henry Field Seed and Nursery Co., Shenandoah, Iowa, was recently appointed by Postmaster General Klassen to represent the American Association of Nurserymen and the Mailorder Association of Nurserymen on the Mailers’ Technical Advisory Committee.

This committee, comprised of individuals from the private sector, meets quarterly in Washington, D.C., to advise the Postmaster General with respect to the improvement and expansion of postal services.

Gingery is immediate past president of the Mailorder Association of Nurserymen, and takes an active interest in the American Association of Nurserymen as well as the Direct Mail Advertising Association.

He joined Henry Field’s in 1960 as advertising manager and became a vice president in 1965. In 1969 he was named to the board of directors of that firm.

**NEWS (from page 54)**

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