

exist between the management and non-management personnel.

In the three brief articles, the author has tried to emphasize several points relating to the understanding and motivation of employees. First, managers should recognize that there are no easy steps to motivation. To motivate people we must have a thorough understanding of the goals that employees carry into the work environment. Managers and non-managerial employees have formulated many misleading and common attitudes toward each other and some of these are very negative. These negative attitudes influence their decisions and generate negative reactions from those affected by the decisions.

Second, we are all goal achievers and establish goals in every environment in which we operate, including the work environment. The goals we establish provide us with direction,

guidance, continuity and consistency in life.

Third, the major importance of the goals we establish is that their achievement will result in the satisfaction of one or more needs. It is the needs of man that we must thoroughly understand if we are to acquire a knowledge of what must be done to motivate employees in the work environment. It is a lack of understanding of the need structure of man that creates most human problems in organizations. Many employees are demotivated inadvertently by managers.

Fourth, with a better understanding of the goal/needs concept of human behavior, the author recommended the use of certain motivational techniques that should result in establishing a more positive work climate. It was not the intent of the author to provide or suggest specific motivational methods as it was to make the reader more aware

of the type of thinking that should prevail in considering the needs of employees in the environment.

Fifth, the author tried to impart the idea of the importance of people as a resource in the organization. The success of any organization is completely dependent upon its people. The success of any manager is dependent upon his subordinates. From the experiences of the author in organizations (public and private, large and small), managers are not acquiring the best possible utilization of their people resource in the achievement of organizational objectives. People in the organization are not being motivated to achieve organizational objectives. And the greatest waste in our society stems from management's failure to understand and motivate the human resource. □

¹The Human Side of Enterprise, Douglas McGregor, McGraw-Hill Book Company, New York, New York, 1960.

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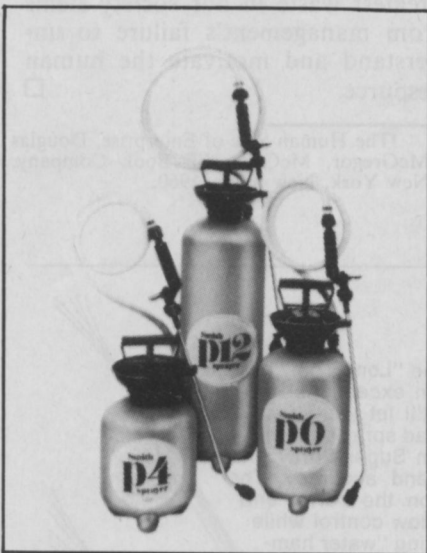
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New Products

COMPRESSED AIR SPRAYERS:

Lightweight sprayers from D. B. Smith and Co., Inc., have tanks and pumps formed from polyethylene and nylon. Corrosion-proof sprayers are lighter than metal tanks of same capacities and are said to be easy to fill and non-spillable. Features include no-drip trigger and handle with thumb release and lock for long spray jobs, cone spray nozzle with stainless disc for long wear, easy disassembly, extra-long PVC hose and wide heavy-duty shoulder strap option. Tank capacities for models (in actual gallons) are: P4, 1 gal.; P6, 1½ gal.; P12, 3 gal.

Circle No. 701 on the reply card.



12RC SPRAYER: FMC Corp.'s new model 12RC air carrier sprayer for golf courses is built with same features as 10 RCTR air carrier sprayer but has a Bean 20 gpm pump instead of a 10 gpm capacity allowing greater spraying speed. Sprayer covers 40 to 45 feet without driving over playing surfaces allowing spray of most fairways in two passes. Can also be used for leaf blowing and greens drying. Bean 12RC features stainless steel tank and piping, complete pto powering and rotating air head.

Circle No. 702 on the reply card.

POWER PACK: A portable power pack for operating hydraulic pruners, circular saws and chain saws has been introduced by Causco, Inc. Compact, 8 hp gasoline engine powered unit is completely self-contained and is mounted on wheels to it can be handled by one man. In addition to hydraulic pump and 10 gal. oil reservoir, unit also includes oil cooler to keep oil from overheating and

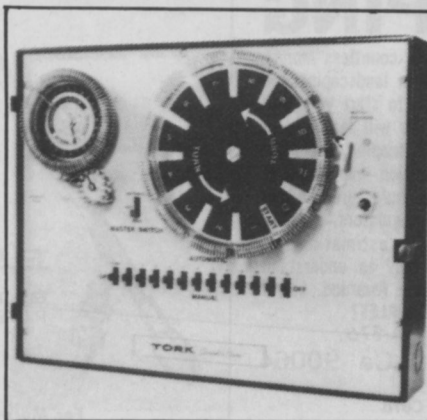
selector valve which permits changing tools without shutting off power plant. Dimensions: 37 in. L x 36½ in. W x 26½ in. H; dry wt. — 125 lbs. Power pack can be used with any tool designed to operate on an open-center hydraulic system.

Circle No. 703 on the reply card.



SPRINKLER CONTROL: A 12-zone lawn sprinkler control, introduced by York Time Controls, Inc., is designed to provide uniform saturation of turf and shrubs to promote deep root structure without wasting water. Three components comprise the master programming on fully automatic control model 5112N: 24-hour dial, settable in 15-min. increments for on and off water times; 14-day selector dial for setting sprinkling days; and 12-zone dial for setting amount of sprinkling time for each section. 12 individual circuit switches permit maintaining any zone on or off for prolonged periods without altering master watering program or other zones. Unit is housed in an indoor installation case, 15½ x 12½ x 4½ inches. Lockable weatherproof case for outdoors is available.

Circle No. 704 on the reply card.



FLAIL MOWER: Gravely has introduced a new flail mower for their line of two-wheel convertible tractors. The mower is made of heavy steel with welded reinforced housing; mower has 88 freeswinging blades and can be easily reversed. Dimensions: 37½ in. W x 17 in. H x 25¼ in. L; mows a 32-in. swath. Front caster wheels help eliminate scalping smooth lawns. Mower is reported to be easy to attach and remove.

Circle No. 705 on the reply card.

RAINDROP™ NOZZLE: In Delavan Manufacturing Co.'s concept of low-drift spraying, no additives are required. The nozzle design alone is reported to produce a spray pattern with droplets that are significantly larger and more uniform than those produced by conventional nozzles at comparable pressures and flow rates, resulting in few driftable fines (droplets under 100 microns). Raindrop™ is said to adapt easily to conventional spray booms, either ground or aerial. Raindrop™ was selected by Industrial Research magazine as one of the 100 most significant new product developments last year.

Circle No. 706 on the reply card.



LIQUID FERTILIZER: Liqua-Form® 14-7-4 LC/40% Organic, liquid fertilizer containing slow-release nitrogen, is now available from Plant Food Chemicals Co. in 50 lb. (5 gal.) containers. Lliqua-Form® is a fluid suspension fertilizer, containing soluble nitrogen, partly-soluble synthetic organic slow-release nitrogen, ortho- and poly-phosphates, potassium of low salt and chlorine content and traces of minor elements. Suspension contains fine urea formaldehyde water-insoluble nitrogen particles which are converted by soil bacteria to soluble nitrates usable by the plant. Best results are said to be obtained by probe injection into the root area. Surface application can be made on light to medium soils.

Circle No. 707 on the reply card.

Classifieds

When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

Rates: All classifications 50¢ per word. Box number, \$1. All classified ads must be received by Publisher the 10th of the month preceding publication date and be accompanied by cash or money order covering full payment.

FOR SALE

ARPS stump cutter teeth, top quality and best price in U.S.A., D. J. Andrews, Inc., 17 Silver St., Rochester, New York 14611. Call 716 235-1230.

SURPLUS HOSE: PVC spray hose — Bulk or coupled; cut to order; 800 PSI working pressure. Prices — 3/8" I.D. \$.30 ft., 1/2" I.D. \$.40 ft., 3/4" I.D. \$.50 ft. PVC air and water hose — Bulk or coupled; cut to order; working pressures to 250 PSI. Prices — 1/4" I.D. \$.10 ft., 3/8" I.D. \$.18 ft., 1/2" I.D. \$.22 ft., 3/4" I.D. \$.30 ft. Coupled — Add \$7.00 per assembly. Turfco Incorporated, P.O. Box 971, Glenwood Springs, Colorado 81601.

MISCELLANEOUS

TREE APPRAISALS, Surveys, loss evaluations and expert consultation services. For names of members of the American Society of Consulting Arborists, Inc., throughout the country, contact: Executive Director ASCA, 12 Lakeview Ave., Milltown, New Jersey 08850.

PUGET SOUND TREE SERVICE, INC., 1111 No. 98th St., Seattle, Washington 98103, Stump Chipper Teeth and pockets for the Northwest. Phone 206 523-2240.

POSITION WANTED

GROUNDSMEN, GARDENERS, TREE TRIMMERS: Two year vocational graduates in Golf Course Management, Grounds Maintenance and Arboriculture desire positions with private and public horticultural services departments. Willing to locate nationally. For additional information, contact E. L. Viramontes, Instructor, Landscape Career Center, Box 191, Anoka, Minn. 55303 — 612 427-1586.

HORTICULTURIST: Seeking managerial or sales position, diversified experience, adaptable, challenges welcomed. Reply Box 128, Weeds, Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

EDUCATION-BOOKS

AUTOMATIC IRRIGATION COURSE Sprinkler heads, remote control valves, controllers, vacuum breakers, precipitation rates, etc. all variations covered. System design, installation, operation, maintenance. Send for free course out-line. Larson Company, P.O. Box 4453, Santa Barbara, Ca. 93103.

SEEDS

SOD QUALITY Seeds Merion, Fylking, Delta, Park, Newport, Nugget, Adelphi, Cheri, Glade and Baron bluegrasses also fine fescues. Manhattan rye grass. Custom mixing available. Michigan State Seed Co., Grand Ledge, Michigan 48837. Phone 517 627-2164.

USED EQUIPMENT

FOR SALE white tandem with Prentice log loader, bunks, and 10 ft. snow plow. 1968 G.M.C. 7500 17 yd. dump with 11 ft. power angle plow. 1971 Chevy. 3/4 ton 4 W.D. pickup, new 8 ft. Fisher plow. 1965 International T.C. 5 bulldozer, winch, blade, and cab. Model 10 Vermeer stump cutter. 1968 Fitchburg chipper 16 in. V8 powered 6 ton deck over trailer. One buyer take all. Phone 413 786-0522. Gregory Nowhill, P.O. Box 27, Feeding Hills, Mass. 01030.

1970 F-600 FORD 52' Hi-Ranger with chip box, \$18,500.00; 1971 Woodchuck brush chipper, 4 cylinder, 12", \$2900.00; 1967 Chevy stake with 1968 John Bean 35GPM sprayer, \$6000.00; 1972 Fleco 26" tree shear, \$4500.00. Jim Green, Ohio Chipper & Equipment Company, Div. of Osborne Brothers Tree Service, Mentor, Ohio 216 951-4355.

BEAN ROTO-MIST-100, like new, under 100 hours. 300 gallon stainless steel tank, only \$5,500. Cheshire Tree Service, Cheshire, Conn. 06410. Phone 203 272-0391.

VERMEER STUMP CUTTER, model 10, excellent condition, new engine, \$3,500.00. Shearer Tree Surgeons, 300 Basin Rd., Trenton, New Jersey 08619. Phone 609 924-2800.

STUMP grinder log splitters, chippers, sprayers, bucket trucks, all reconditioned; let us know your needs, Essco, 5620 Old Sunrise Highway, Masspequa, New York 11758. Phone 516 799-7619.

WANTED Finn hydro seeder. Briggs Turf Farm, Box 3, Stilwell, Kansas 66085. Phone 913 681-2384.

VERMEER TREE SPADES TS-30, TS-44T, TS-66T. Phone 817 469-8943.

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PROFESSIONAL POSITION OPEN — Landscape design and sales, must be college trained and at least 5 years experience in the residential and light commercial field. Excellent opportunity for the aggressive person. Will match your existing salary plus more if you qualify. Contact F. R. Micha, Monroe Tree & Landscape, Inc., 225 Ballantyne Road, Rochester, New York 14623

MAN TO WORK AND MANAGE all phases of tree and spray business in Michigan. Salary open. Please send resume, salary requirements, and any questions to Box 129, Weeds, Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

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Trimnings

The Horticultural Research Institute is inviting any organization conducting research beneficial to the nursery industry to apply for one of a number of \$500 Richard P. White grants. Recipients are selected from information provided on a questionnaire. Application questionnaires are available from the Institute at 230 Southern Building, Washington, D. C. 20005. Applications must be submitted prior to May 1.

The dynamic duo of Train and Butz recently signed an interagency cooperative agreement calling for Federal, State and local cooperation in the training and certification of pesticides applicators. Russell E. Train, EPA head, said the agreement will provide guidelines for development of applicator training programs. Butz pledged his Extension Service's assistance in implementing training programs.

University of Missouri-Columbia Forestry Researcher, Tom Hinkley, is studying tree behavior. One of Hinkley's favorite projects is recording the shrinkage and swelling of tree trunks. He says the shrinkage occurs every warm day when stems are their fattest around 8 a.m. and slimmest around 3-4 p.m., the hottest part of the day. Hinkley is making extensive studies of tree behavior under environmental conditions. He feeds this information into a computer with hopes of being able to simulate tree growth and anticipate tree behavior.

Rice isn't the only thing shot from cannons. It seems some Australians are using a cannon primed with hay, fertilizer, bitumen and grass seed as a type of hydromulching process and converting barren landscape into grassed areas. The bituminized bombshell explodes in a spray over the target area. Within an hour the mixture sets, glueing it firmly to the

ground. Each coating is usually from 4-6 inches thick.

One way to fight inflation, says OSHA boss, John Stender, is to maintain safe and healthful conditions for American workers. Stender said that by working together to enforce federal and state job safety regulations "we can put the lid on inflation by holding down costs that accompany an unsafe or unhealthy work situation."

Forest Service is sponsoring a spring symposium on the possible problem of rising levels of acidity in rain, snow and hail. Acid precipitation is believed to be caused by air pollution associated with burning of fossil fuels. All aspects of acid precipitation and its possible effects on the forest ecosystem including atmospheric transport and chemistry, forest vegetation, soil environment and water resources and hydrology, will be considered. Additional information can be obtained from Dr. Leon Dochinger at the U. S. Forest Service Laboratories, P.O. Box 365, Delaware, Ohio 43015.

National Obsolete Parts Program, a service designed to locate discontinued Jacobsen parts, is in full swing. The equipment owner need only contact the factory where a listing of obsolete parts is recorded and the parts location becomes available in seconds. The program will: move dealer and distributor parts stocks by sale not scrap; help keep older products performing efficiently longer and reinforce the company reputation for quality and service with the general public.

The Fertilizer Institute has published a new information package entitled "The Fertilizer Crunch." The booklet explains facts behind the current fertilizer supply situation and outlines steps to manage during the shortage. Also available is a supplementary 25 slide set. For order form and price list contact: Publication Service, The Fertilizer Institute, 1015 18th St., N.W., Washington, D. C. 20036.

Happy birthday to US. One of the many ways our nation will be celebrating its bicentennial is by community park and recreational area projects. The green area projects are becoming increasingly popular throughout the country and seems a most appropriate means of observing the birth of our nation.

The Fertilizer Institute's turf and garden committee put wheels in motion to utilize a lawn and garden writer for emphasizing environmental benefits of turf fertilization.

One group of concerned citizens in Eastern Pennsylvania successfully curbed an invasion of gypsy moths in 1974 using one of the popular formulations of *Bacillus thuringiensis*. The project was so successful and well organized that Sandoz, Inc. has produced a full-color booklet entitled "The Gulph Mills Story" describing in detail how the city of Gulph Mills saved their trees from a moth invasion. Other communities or interested groups can receive a free copy by writing: Sandoz, Inc., Dept. G, P.O. Box 1489, Homestead, Florida 33030.

An herbicide "hot line" has been opened on a year around basis by Velsicol Chemical Co. The company decided to expand the facility after having received and answered over 1,500 calls during a trial four month period in 1974. An experienced company representative mans the phone during regular business hours answering questions and providing information. After hours calls are automatically tape recorded and answered by mail or return telephone call within 48 hours. Velsicol is attempting to answer all inquiries by drawing on a variety of information sources including extension service recommendations from each state in the U. S. as well as product labels from many other competing firms. For more information contact: Velsicol Chemical Co., 341 E. Ohio, Chicago, Ill. 60611. The toll free number is 800-621-4129.

Remember the famous old Turf King?

Just like the rest of us Jacobsen Distributors, Al Van Pelt of the Boyd Martin Company in Salt Lake City, Utah has fond memories of the 76" and 84" Turf Kings.

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The variable speed drive

has been replaced with a hydrostatic drive that's better. The transport speed has been increased to over 8 MPH.

The old handle bars are gone. You'll find a sleek new steering wheel instead because it makes turning easier and offers more control.

The rope starter has been replaced by recoil starting right from the driver's seat. Speaking of the driver's seat, you'll notice it's now high-backed for firmer support. And it's even more comfortable. The gas tank is bigger for fewer fuel stops.

There are some things that

were too good to change, so we didn't.

The Turf Kings can still cut their way through 30 acres in a day. With beautiful results. The mowers are fully articulated to follow the dips and slopes of uneven ground.

And the constant speed reels put a consistently fine and smooth finish to any turf.

You'd better talk to your Jacobsen Distributor about these new three-reelers. A simple demonstration will make you forget all about any second best equipment.

Even our old Turf Kings.

Your Jacobsen Distributors.

Before we sell it, we buy it.



For the name of the distributor near you write: Jacobsen Turf Distributor Directory, 1721 Packard Avenue, Racine, Wisconsin 53403.

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