

GREEN INDUSTRY NEWS

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LANDSCAPE MANAGEMENT

SEMINARS

Los Angeles landscapers taught to water smarter

LOS ANGELES — Facing a mandate to cut watering by 10 percent, key landscape planning and maintenance personnel for the City of Los Angeles reacted last fall. They sharpened their water management skills and heightened their awareness of unnecessary water use at a day-long water budgeting seminar.

The seminar, one of a series being given to municipalities and other government agencies throughout the Southwest, is part of an ongoing program sponsored by the Toro Company's Irrigation Division and Pacific Equipment and Irrigation, a Toro distributor.

Richard Klink, chief landscape architect for the city's Department of Parks and Recreation, says he picked up valuable skills for determining water requirements and cost. "We're practicing better methods of programming our controllers, based on evapotranspiration rate," notes Klink, "so we are able to use the minimum amount of water necessary to keep things growing without risk of stressing the plant material.

"We have a mandate from (the Department of) Water and Power to cut back on water use at least 10 percent, and we believe we can do that just by properly programming our clocks."

Jerry Fragnoli of Pacific Equipment and Irrigation came up with the idea for the program.

"We are facing a water



Seminar participants are led through a series of practical water budgeting exercises in the Toro Company's day-long seminar.

crisis," says Fragnoli. "The seminars are designed to help save our landscapes and our industry. It's as simple as that. For the third year, California's using more water than is being replenished by rainfall. If it happens again in 1989, there's a great possibility that the entire state may cease approving new landscaping."

Los Angeles is considering closing parks with manually-operated quick-coupler sprinkler systems, because water use cannot be accurately monitored with the systems. Also the East Bay Municipal Water District (which includes Oakland, Calif.) recently adopted regulations that severely curtail new landscape installations. □

INDUSTRY

Ag schools note industry for its growing importance

LAS VEGAS, Nev. — Dick Bitterman, associate dean at the University of Nevada at Reno, says more colleges of agriculture are recognizing the importance of the green industry.

Speaking at the Desert Turfgrass Exposition, Bitterman said more colleges "are working more with the students, and are turning out some of the industry's future leaders."

Bitterman also said he sees two problems facing the green industry in the near future: one, soil depletion caused by increased chemical use, and two, water conservation.

According to Bitterman, \$750 million of pesticides and herbicides were purchased in 1988. "But we can't do that much longer," he warned. "A great deal our soils are being destroyed due to pollution problems.

"Water waste is another problem that will get worse before it gets better," said Bitterman. □

Break up soil to lower thatch

FT. WORTH, Texas — An ironic aspect about thatch is that it can come about as a result of you doing your job well.

"In general, practices that promote vigor, growth and persistence in turf also promote thatch development. That's just the nature of the game," says Robert Green, research associate at Texas A&M University, College Station.

Thatch has a number of potential causes, says Green, including excessive nitrogen fertilization, poor drainage, a soil pH above 7 and the liberal use of broad-

spectrum pesticides.

"We're recommending more judicious use of specific pesticides," says Green. "As far as watering is concerned, we need to wet it, let it dry. Wet it, let it dry. That's the kind of watering that's ideal in thatch prevention."

Green also notes that everyday practices such as mowing no more than 40 percent of the turf's leaf blade and avoiding turf cultivars prone to thatch problems (such as zoysiagrass, some Bermudagrasses and St. Augustinegrass) is a good idea.

If you have a thatch problem, engage the soil just below the surface by kicking up the thatch, says Green, as is done through aerifying or slicing. However, he adds, "Aerification should not be so severe that it takes more than 10 days for the turf to recover." It's better to aerify more often and not as deep, he suggests, when the turf is experiencing its most active growth period (in warm season climates, summer; in cool, usually the fall).

Coring, described by Green as the most effective way to control thatch,



Thatch gets built up in high-maintenance turfgrass.

should introduce at least one hole per six inches of turf. Also, allow the cores to dry out before you reintroduce them into the soil. □

LAWN CARE

PLCAA starts education foundation

MARIETTA, Ga. — The Professional Lawn Care Association of America (PLCAA) recently formed the PLCAA Education and Research Foundation.

Purpose of the foundation is to enhance the public understanding of benefits of turfgrasses to the urban environment and to fund activities such as research and education to further this understanding.

The foundation's goal is to raise \$100,000 in 1989.

Members of the foundation's board are: Bruce Augustin, Ph.D., Lesco, Inc.; Paul Bizon, Pro-Grass, Inc.; Thomas Delaney, Georgia Department of Agriculture; Robert Earley, *Lawn Care Industry* magazine; Jerry Faulring, Hydro Lawn; Mary Fischer, wife of the late Bill Fischer, PLCAA past-president;

Russ Frith, Lawn Doctor, Inc.; John Hall, Ph.D., VPI-SU; Dave Hansen, Industrial Landscape Services; Walter Houston, Encap Products Co.; Paul Moore, Lawn Green, Inc.; Martin Petrovic, Ph.D., Cornell University;

Paul Schnare, Ph.D., Accu-Grow; Robert Shearman, Ph.D., University of Nebraska; Barry Troutman, Ph.D., PLCAA; Keith Weidler, past PLCAA board member; and Ruth Ysursa, sister of the late Jim Marria, past PLCAA president.

Earley is group vice-president of *LANDSCAPE MANAGEMENT* magazine and Hall, Petrovic and Shearman members of the magazine's Editorial Advisory Board.

One of the original ideas in forming the foundation was in part to memorialize Marria and Fischer. □

LEGISLATION

Contracts could become standard for lawn care industry

COLUMBUS, Ohio — According to Marty Erbaugh of Lawnmark, Inc., the possibility of signed contracts going to all lawn care customers may become the rule rather than the exception in the lawn care industry.

"The wave of regulations are just beginning," Erbaugh told Ohio Turfgrass Foundation members at their annual conference. "Over 50 percent of our business is in New York where the Department of Environmental Control (DEC) has proposed signed contracts for all LCOs. You just watch it trickle to Ohio



Marty Erbaugh

and Pennsylvania and most of the rest of the states."

Erbaugh said his company started to like the idea of a signed contract for all

new customers. "It may have been the best decision we've ever made," he noted.

Erbaugh said Lawnmark, which had sales of \$8 million in 1988, made 15,000 sales—all under contract—before May 15.

"Ninety-two percent of the verbal agreements converted to signed contracts," Erbaugh pointed out. "The other eight percent—well, they're better off being serviced by the other guy."

"The marketplace appreciated us spelling out the rules. It helped business because we created more realistic expectations at the

start of our relationship with the customer."

The contract Lawnmark presents new customers is divided into eight sections: Services provided, Timing of treatments, Payment terms, Guarantee, Service calls/service continuity, Other services, Continuing service and Call ahead. Erbaugh says each section is carefully worded to suit all legal responsibilities imposed by New York's DEC.

Erbaugh believes that written contracts were part of the reason for 55 percent fewer skips and cancels from new customers in 1988 than in 1987. □

SHORT CUTS

KEEP IN MIND...that water is the "life-giving source," says **Richard White**, Ph.D. and turf research specialist at Cook College, Rutgers University. White reminds us that 98 percent of a plant's water is transpired, and only 1.5 percent is retained in tissue and is a component of that tissue. And 70 percent of a turfgrass plant is composed of water, says White. Water is essential for nutrient transport, cooling, energy, and growth support, says White. "The role of water is life."

FORMIDABLE FESCUE...A new revolutionary tall fescue has been named Shortstop, according to breeder **Jerry Pepin**, Ph.D. for Pickseed West Inc. Shortstop is a true dwarf that has exhibited the lowest and slowest growth habit of all varieties tested at the company's research station. It has been rated one of the best varieties for overall turf quality and color, according to a press release. Shortstop will be commercially available by this fall.

FOR THE LIBRARY...is "Diseases of Trees & Shrubs," by **Wayne A. Sinclair, Howard Lyon and Warren Johnson** of Cornell University. "It's the best book I've seen on the topic," says **Bruce Clarke**, Ph.D. at Cook College, Rutgers University. The 507-page book is composed entirely of color plates, and is a bargain at only \$49 from Cornell University Press, 124 Roberts Place, Ithaca, NY 14850.

WOMEN ORGANIZE...The Ontario (Canada) Professional Women in Horticulture meets four times a year. For more information, contact **Brenda Rice** at (416) 274-3109 or (416) 274-6918. You can write the group at 1564 Mississauga Rd., Mississauga, Ontario, Canada L5H 2K2.

DON'T FORGET TO FOLLOW UP...**Rick Kuscinski** believes more attention should be given to plants after they've been installed. "Eighty percent of a plant's lifespan involves management, and there hasn't been enough attention given to that area." Speaking at the Missouri Lawn and Turf Conference, Kuscinski said maintenance is a joint effort. "It's best to set up a four-season program. Establish standards for care, and zone the landscape according to degrees of care required. Document the care required during the year to maintain a continuity of landscape from year to year, especially in times of employee turnover."

A WINNER IN VEGAS...was **Robert Morris**, chairman of the Nevada Cooperative Extension. Morris received the Clark County Conservation District's Water Conservation Award for 1988, for his contributions towards promoting better understanding of water conservation. "The desert is a complex area when it comes to water conservation," said Morris. "It's considered to be a resort area, known for its quality of life. But at the same time, we have problems with water shortages." Morris said conservation is a political and economic issue pitting the pro-legislation people against those in favor of unrestricted water use. "I just hope the two factions will find a compromise. We must strike a balance."

SHAKE, RATTLE AND...**Bill Martin** in Whittier, Calif., may want to change the name of his course from Friendly Hills to Rolling Hills. The epicenter of the earthquake that registered 6.1 on the Richter Scale last October was located in about the same area as the country club. "The course did fine, Martin wrote in *TurfComms*, "but some of the members' homes did not."

NEWS from page 11
RESEARCH

Potassium is an O-'K' element

ST. LOUIS — Paul Roberts, Ph.D., believes that too many turfgrass experts are overlooking the importance of high amounts of potassium in their turf's diet. Speaking at the Missouri Lawn and Turf Conference here, Roberts revealed results of his recent research.

Roberts found the benefits of potassium include better temperature disease tolerance and that potassium readily leaches, or adheres to and remains in sand, a feature that aids golf course supers who are converting more to sand putting greens. General benefits of potassium, according to Roberts, are improved heat, cold and wear tolerance.

"Potassium-nourished greens come out of drought well," says Roberts, which will come in handy should drought conditions continue in 1989. Roberts also credits potassium with imparting a high degree of disease resistance, and improved rooting systems.

Finally, Roberts believes potassium is essential for carbohydrate synthesis, protein synthesis, regulation of transpiration and chlorophyll development.

The tests were taken at Meramec Community College in conjunction with the University of Missouri and the Mississippi Valley Golf Course Superintendents Association. □

LEGISLATION

Reminder: OSHA remains in effect

ATLANTIC CITY, N.J. — If you haven't checked in at the clubhouse for the mail lately, you might be in the dark about the latest guidelines concerning hazardous chemicals.

Speaking to members of the New Jersey Turfgrass Association, George Hamilton, Ph.D. and

pesticide specialist at the Rutgers Cooperative Extension reviewed the latest requirements brought about by the OSHA Hazard Communication Standard.

Enacted in 1983, the Standard required chemical manufacturers and importers to evaluate the hazards associated with various chemicals and to communicate these hazards to workers via Material Safety Data Sheets. Worker training, container labeling, written programs, chemical lists and maintenance of data sheets are all part of the requirement. In 1987, OSHA expanded the requirements into the non-manufacturing sector, making golf courses and lawn care operations liable in the event of non-compliance.

The three main areas of concern have to do with labelling, Material Safety Data Sheets and training.

● Chemicals must have a label that states the OSHA hazard classification, active ingredient, name and ad-



Newly elected board members of the California GCSA discuss the GCSAA conference this month in Anaheim, Calif. Top row, from left to right are, David Lozoya, David Hein, D.J. Pakala, Tim Sedgley. Bottom row, left to right, Dave Fleming, Robert Tillerman, Melvin Summer and Paul Dias.

dress of manufacturer. Hamilton says pesticides in original containers are exempt from the labeling requirement, however, if the pesticide is in a service container it must be properly labeled according to both OSHA requirements and

state pesticide regulations for service containers.

● Each chemical covered under the standard requires its own safety data sheet, which contains information regarding acute and chronic health effects, any physical health effects and the chemical's potential for fire and explosion. Sheets also are to provide information on proper storage and disposal techniques, specific safety precautions, medical treatment information and steps necessary to prevent excessive exposure to the chemical.

● Hamilton says information and training must be provided to employees about those hazardous chemicals present in their work area. This information includes the purpose and provisions of the standard, areas where the chemicals are in use and location and availability of the written hazard communication program, including the list of hazardous chemicals and material safety data sheets. □

LAWN CARE

Drought stress programs an issue

ATLANTIC CITY, N.J. — If the drought returns this summer, will you be ready? Robert Carrow, Ph.D. at the University of Georgia,

thinks it's a good idea to focus on high temperature drought stress just in case.

"The effects of future droughts will depend on how you mold your entire program of lawn care practices," Carrow said, in remarks made at the New Jersey Turfgrass Expo.

Carrow said a drought care program is especially important considering that once the LCO leaves the property, it's in the hands of the homeowner.

"The lawn care professional has total control over what he does to correct problems, but very little control over how the homeowner cares for the lawn in his own way. Let's be sure," urged Carrow, "that we're doing all we can for the turf."

Carrow described two types of high temperature stress: direct and indirect. Indirect heat stress, the most common, happens every year.

Direct heat stress is much quicker and more harmful, and occurs when heat-sensitive proteins in the protoplasm are denatured, resulting in protoplasmic coagulation of the cell wall, which collapses.

To prevent high temperature stress:

- Irrigate properly.
- Promote hardiness by using drought-resistance species and cultivars.
- Plant shade trees to protect the turf in case of severe heat conditions.
- Plenty of water is needed for transpirational cooling.
- Recommend to the homeowner the best mowing practices, since mowing height influences the root system, density of surface turf and high amount of carbohydrate reserves.

Drought stress reduction includes:

● A good overall agronomic program. It does make a difference if you have good fertilization, weed control and insecticide programs.

● Continue to educate the homeowner. What the

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ATHLETIC TURF

Working on the ideal surface

"When you come in contact with the surface as much as you do in football, poor field condition has to be a concern." That's Penn State University head football coach Joe Paterno talking about his favorite playing surface, natural grass.

To improve athletic field conditions Don Waddington, Ph.D. and Trey Rogers have been working to develop the ideal surface. They gave results of their research at the annual meeting of the American Society of Agronomists late last year.

Most recently the pair (Rogers has since earned his Ph.D. and is an assistant professor of turfgrass science at Michigan State University) looked at cutting height and soil compaction and how they affect impact.

"There are two critical interactions between the player and the ground that determine the quality of a sports surface—hardness and traction," claims Waddington.

To measure traction, compaction and impact absorption, the researchers used a portable Clegg impact tester that drops weights from 18 inches and measures how quickly they stop.

"The Penn State research indicates that differences in cutting height of the grass are not as important in absorbing impact as the mere presence of the turfgrass itself," Waddington reports.

It is not the height of the grass so much as the amount of moisture in the ground that determines the surface's hardness. As soil moisture decreases, the importance of grass as a shock absorber increases. Practices that reduce soil compaction also become more important as the soil becomes drier.

The study concludes that for traction, field managers need to be looking at how well-developed the root system is. The deeper the roots, the better the traction. And to minimize injury from impact, managers need to be concerned about how much moisture is in the soil.

Timpanaro's field wins award

Ron Timpanaro, head groundskeeper at Jack Russell Stadium in Clearwater, Fla., won the "Baseball Diamond of the Year Award" for having professional baseball's outstanding baseball diamond.

The award is presented each year to three outstanding, well maintained and safe baseball facilities in the United States by the Sports Turf Manager's Association (STMA). Jack Russell Stadium is home to the Clearwater Phillies of the Florida State League.

Others accepting awards at the STMA's January presentation in Vero Beach, Fla., include Greg Petry, superintendent of the Waukegan, (Ill.) Park District, for his work on Al Grosche Field and Joe Ardolino, assistant athletic director, for Towson State University's Burson Field in Towson, Maryland.

Grau: Mediocrity is not enough!

We're happy to pass on this short essay by Fred Grau, who passed it on to us:

"We who bear or share the responsibility for the condition of sports turf can no longer continue with just good enough when players expect excellence.

"For those we serve we want to provide excellence. If the purse strings are drawn too tightly let the parents know the situation. They are fundraisers personified.

"We can do it— just loosen the reins and say Giddyap. No athlete who has enjoyed excellence will ever again be satisfied with good enough.' "

homeowner does reflect directly on the LCO.

● Don't oversell your service. You only control half of it.

● Work with your regulatory agencies to develop favorable water-use regulations. "Without good water-use regulations, many of today's companies will be out of business in five to 10 years. Sufficient water must be there," Carrow concluded. □

PESTICIDES

What kills most sells the best

MIDLAND, Mich. — The single most important consideration when buying a herbicide is percentage of broadleaf weeds controlled, according to lawn care operators (LCOs) surveyed recently by the Dow Chemical Co.

About 100 LCOs responsible for selecting chemicals and materials for their lawn care operations were surveyed. Eighty six percent of the respondents were from the Midwest and the rest from the Northeast.

The spectrum of weeds controlled was the second most significant consideration, accounting for 18 percent of their buying decisions and nearly 20 percent for purchasing spot chemicals. In both instances, LCOs preferred herbicides that provide total control for both difficult and easy-to-control weeds, to those giving only partial control.

The participants also indicated that a chemical's ability to reduce callbacks was the third most important factor in their purchasing decision, accounting for about 12 percent of their decisions to buy broadcast and spot herbicides.

Chemical cost per acre was reported to be significantly less important than efficacy, sales support and safety. Cost accounted for nine percent of the broadcast chemical decisions and four percent for spot herbicides. The results indi-

cated that LCOs will pay a higher price for herbicides that are more effective, better at reducing callbacks or cancellations, safer and manufactured by a company that provides business training. □

TREES

'Tree Museum' opens in Dallas

GARLAND, Texas — Under the headline "A Tree Museum," the *Dallas Morning News* reported in December that a large tract of unspoiled forest land was purchased by Dallas County and will be preserved for viewing.

The 69-acre site is home to trees more than a century old and over 100 feet tall.

Plans for the forest are still incomplete, but a trail and interpretive signs are likely to be installed, said Jim Stone, design and development coordinator for the Garland Parks and Rec-

reation Department.

Still, the question remains, will they charge the people a dollar-and-a-half just to see 'em? □

INDUSTRY

Get a job!

DALLAS — Robert Leenhouts, general manager of Bent Tree Country Club here, recalls the time when he was involved in the process of looking for a new club superintendent. Among the dozens of resumes that made its way to his desk was a sloppily-typed sheet paperclipped to a picture of the applicant sprawled across the hood of a 1957 Chevy. He didn't get the job.

"You've got to remember that you're selling yourself, that everything you supply to a potential employer is a marketing tool," Leenhouts told attendees at the Texas Turfgrass Conference recently. That means you offer a well-pre-

pared, neat resume (note accompanying chart).

When you get to the interview stage, be relaxed yet enthusiastic, show up on time (if not a bit early), wearing a dark gray or blue suit. Know a little bit about the club and community, he adds. Also, anticipate the questions you're likely to be asked, such as "What are your career goals?" or "Why do you want to be superintendent of this club?"

Finally, follow-up the interview with a brief note of thanks.

When the job is offered, make sure you know exactly what it entails. "Don't fool yourself," says Leenhouts. "Don't take it if you don't think you can do it. You going to hurt yourself, you're going to hurt the club and you're going to hurt your association."

If you do accept, make sure you have negotiated the important aspects of the positions: when you start, the salary, benefits and in-

cidental expenses, vacation, use of facilities, etc. □

Resume dos and don'ts

RESUME DOS:

- Include name address, phone number (at work and at home).

- List professional experience in reverse chronological order.

- Stress the positive, de-emphasize the negative.

- Include personal information about your spouse, children and any organizations you may belong to.

- Include information on your educational background, accomplishments and references (or a statement that they'll be provided upon request).

- Be objective about your career goals.

- Include a recent picture.

RESUME DON'TS

- Don't include information about your race, religion or political affiliation.

- Don't create false impressions. ("Remember," says Leenhouts, "if you're hired under false pretenses you may soon find yourself out of a job.")

MANAGEMENT

Tips on selling design projects

NASHVILLE, Tenn — To be successful at selling your design projects, it's important that you—not the customer—remain in control of the sale, says green industry consultant Ed Wandtke, who discussed how to do that at the Landscape Exposition here.

Since 90 percent of your initial client contacts will be over the telephone, says Wandtke, start by having an experienced, professional person on the line that will give the caller a favorable impression of your firm. That person should put together a master list of data that includes the name and sex of callers, their addresses, phone

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numbers at home and work and a time when you can call back or meet with them.

In addition, the phone person should have a checklist on hand of the types of projects you perform. That way, they can more accurately record what type of project the caller has in mind. If it's a commercial project, get the name of the purchasing agent or building manager you'll be working with.

"If you're not getting that information, you're missing the first chance you have to sell your company," says Wandtke.

On your initial visit, show up early, take morning, daytime and evening photographs of the site and never ask the question, "how much do you plan on spending for this project?" "Who really wants to reveal that kind of information?" asks Wandtke, who advocates offering the client a more expensive design

they may finance over the course of several years.

If you're invited into the customer's home or office, make a mental note of their tastes in design. "Your mind needs to start building an inventory of ideas about what these people are like."

Here are some additional tips from Wandtke:

- When presenting the plan, let the drawing speak for itself. "Just let it happen," says Wandtke. "You can sell more effectively by waiting than you can by pushing them into an opinion."

- After the project is sold, always keep quality, price and time in mind. All your projects should be done well, but if the client wants the cheapest design possible, schedule the work for when your more important projects are finished or near completion. If they want it done right away, it should cost them more, and remember that the customer

is always right, says Wandtke. "If they say, 'I can get it done cheaper,' tell them that they could have bought cheaper clothes, a cheaper car or a cheaper house. Tell them 'I don't design cheap projects. I designed one for you.'" □

RESEARCH

Researcher after the truest green

RIVER FALLS, Wisc. — Some day, millions of golfers will owe a debt to Donovan Taylor.

The University of Wisconsin-River Falls professor has spent the last three summers conducting experiments at a Falcon Heights, Minn. golf course to determine bentgrass performance in five types of soil.

According to Taylor, bentgrass is usually planted in a sand/soil mix for less compaction and better drainage. Golfers prefer sand for its truer and faster putting results. The stumbling block has long been sand's inability to hold moisture, resulting in thinning greens.

Taylor's experiments involved five different mixtures:

- 80 percent sand mixed with 17.5 percent silt and 2.5 percent clay

- 94.5 percent sand with 4 percent silt and 1.5 percent clay

- 85 percent fine mortar sand, 15 percent reed-sedge peat

- 100 percent sand with sphagnum peat tilled into the first four inches

- 85 percent uniform medium sand and 15 percent reed-sedge peat.

Taylor reports that due to the dry summer of 1988, the grass grown in 100 percent sand experienced more water stress than other mixes with lower sand ratios. Grass grown in this mixture showed water stress after 24 hours without water. Constant turf growth was a problem, even though irrigation was used almost all summer long.

Taylor believes that with more water, the green with

sandy soil might have stayed as dense and healthy as the other sections. The mixtures other than 100 percent did the best and did not show any drought damage. □

INDUSTRY

Urban tree success not easy

SEA ISLAND, Ga. — Arborists should help local tree specifiers introduce the right tree into the urban environment, says Nina Bassuk, Ph.D., director of Cornell University's Urban Horticulture Institute.

The limit on space for tree roots causes compaction, which leads to nutrient deficiencies. Street salt, carbon monoxide, heat reflection from buildings and absorption of black masses such as asphalt also cause stress.

Dr. Bassuk advises planting trees adaptable to the urban environment and recommends diversification—planting no more than five percent of any one species. □

EQUIPMENT

Drought affects power equipment

OLD TOWN ALEXANDRIA, Va. — According to figures from the Outdoor Power Equipment Institute, the drought of 1988 has affected power equipment shipments.

Although fiscal 1988 shipments topped the 7 million units figure for the second straight year, a decrease of three percent over fiscal 1987 was recorded.

An OPEI press release stated, "The industry attributes the average decrease in shipments to the drought during the latter part of the shipment year (July, August).

Walk-behind mowers, in particular, showed a five percent decrease. Rear engine riding mowers remained steady while garden tractors increased 13 percent. □

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