

Drought beleaguers Delaware River Basin

Drought conditions in New Jersey, and portions of Pennsylvania, and New York are expected to continue through the summer and into the fall.

Hardest hit is the Delaware River basin where 15 million people live.

George Klenk, an official with the New Jersey Bureau of Water Resources, tells WEEDS TREES & TURF, "the long range forecast doesn't make us optimistic that the situation will improve significantly in the near future."

New Jersey, suffering a 35 percent drop in capacity of its reservoirs and going into its peak water usage period, declared a water emergency in mid-April, an action followed days later by 16 counties in east Pennsylvania and portions of southwest New York.

"It could very easily be the worst drought we've ever experienced in

eastern Pennsylvania," says Dave Masek of that state's department of environmental resources. Lawn watering, other than newly seeded or sodded lawns, is forbidden in the stricken counties, while the owners of private gardens or landscaped areas are allowed to water by handheld hose with automatic shutoff valves or bucket only from 5 p.m. to 9 a.m. As of press time, commercial nurseries were exempt from the regulations in Pennsylvania.

Conditions in New Jersey resulted in the closure of 2 million acres of public and private woodlands in hopes of heading off what is feared will be the worst forest fire season since 1963, and a 12-agency task force recommended residents limit themselves to 50 gallons of water each day.

As conditions in New Jersey worsened by late spring, the irrigation of golf course fairways was forbidden and tees and greens were allowed water only from 3 a.m. to 5 a.m. on odd numbered days. Nurserymen were asked to water their stock by handheld hoses for an hour on even numbered days. Lawn irrigation, other than on newly installed sod, was curtailed.

In New York, Mayor Edward I. Koch called on residents to take quicker showers and flush toilets less often.

Similar restrictions were imposed in southeast Florida earlier this spring, and this at a time when local governmental bodies in northwest Ohio and southeast Michigan begged for relief from the opposite problem, too much water from Lake Erie which was at a historically high level.

EDUCATION

Shade tips help turfgrass

Shade is a problem for the development of healthy grass, Keith Karnok, Agronomy Department, University of Georgia, told attendees at the recent Southeastern Turfgrass Conference.

Karnok says turf managers can make their jobs easier if they understand why. A Pennsylvania study indicates as much as 20 percent of all turfgrass is maintained under some shade.

Karnok says shade has three immediate effects on turf: 1. It reduces light intensity and removes "quality" light; 2. It restricts wind movement, resulting in a higher relative humidity and a better environment for diseases; 3. It puts turfgrass in competition with trees for water and nutrients.

Good management coupled with the planting of the right types of turfgrass can offset these handicaps somewhat, he explains.

St. Augustine, centipedegrass and zoysiagrass are some of the best warm-season grasses for shade conditions, while tall fescue and Kentucky bluegrass top the cool-season shade list.

Karnok recommends infrequent but deep irrigation, higher mowing heights ("you want as much leaf surface as you can get"), and the avoidance of too much nitrogen which he claims stimulates leaf growth without



Keith Karnok

a corresponding strengthening of the root system.

By selectively pruning limbs of nearby trees, sun flecking is increased helping the turf. And by removing underbrush air circulates more freely which reduces the chances of turf disease.

CHEMICALS

Pesticide and fertilizer sales at \$3.3 billion

Manufacturers' sales of pesticides to commercial users jumped from \$1.2 to \$1.9 billion since 1981, reports the research and marketing firm of Charles H. Kline & Co., Fairfield, NJ.

Reasons? Kline points to the rapid

growth of the chemical lawn care industry (turf and grounds accounted for 53 percent of the consumption), increasing numbers of pest control operators, and the growing popularity of slow-release fertilizers.

"Some leading manufacturers are placing greater emphasis in developing new products for professional use as opportunities in agricultural applications mature," Kline & Co. reports. "Many of the same products used on crops find rapid acceptance here, provided manufacturers are aware of the market needs."

Overall, about 125 companies offer some 350 different formulations for professional end uses. Pesticides account for 60 percent of commercial dollar sales in 1984, fertilizers the balance of 40 percent, the report states.

The consumer market for pesticides, fertilizers, potting soils, and soil conditioners was pegged at \$1.4 million. Insecticides, spurred by the growth of household products, accounted for about 38 percent of sales and was the largest category. Fertilizers, previously the leader, ranked second with 36 percent total sales.

Kline & Co. says the consumer industry will grow at "a relatively moderate rate" but it won't be until 1989 that consumer sales of pesticides and fertilizers reach the \$1.9 billion figure already reached by sales for professional end uses. Together, consumer and commercial sales of pesticides approached \$3.3 billion in '84.

GROWTH

Davey Tree builds new headquarters

About 160 administrative and technical service employees of the Davey Tree Expert Co. are moving to new corporate headquarters on a 54.5-acre site near Kent, OH. Work on the \$4.5 million facility began last summer.

The new complex includes a Corporate Office Building and a Human and Technical Resources Building. Design of the buildings is contemporary with a suggestion of Williamsburg, says a Davey Tree spokesman. The "naturalistic" setting of the 22 acres that are being developed is the responsibility of the land-



scape architectural firm S.W.A. Group, Houston, TX.

Davey's offices had been spread across upper floors of several connecting buildings in downtown Kent, OH.

INDUSTRY

Temik production resumes this month

The inventory of Temik 10g, a pesticide used by large-scale ornamental nurseries for insect control, was exhausted late this spring, but production could resume in July, a spokesman for Union Carbide tells WEEDS TREES & TURF.

"We expect it will be about four weeks after production begins that it will be available to consumers," Marketing Manager Larry Baird reports.

Temik 10g, like the more concentrated Temik 15g which is used in agriculture, was produced from methyl isocyanate. Production by the company was stopped early this year at the Woodbine, GA, plant following the methyl isocyanate leak in Bhopal, India, which resulted in an estimated 2,000 deaths.

Baird says Union Carbide does not

anticipate a price increase when Temik becomes available again.

GOVERNMENT

Long Island village 'regulates' landscapers

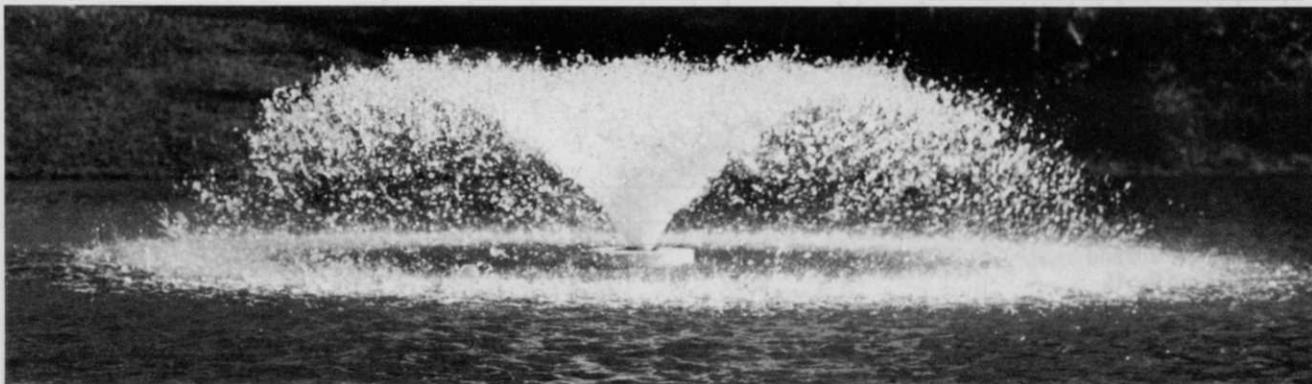
Old Westbury on Long Island, NY, despite opposition from landscape and tree care representatives, recently passed legislation regulating the Green Industry in that village.

Included in the ordinance is a provision calling for the pre-notification at least 72 hours in advance of all property owners within 300 feet of the spraying of pesticides.

"If they make it stick it'll set precedents for other communities," says Don Lehman of Lehman Tree, Upper Brookville, NY, who termed the legislation "devastating and totally unrealistic."

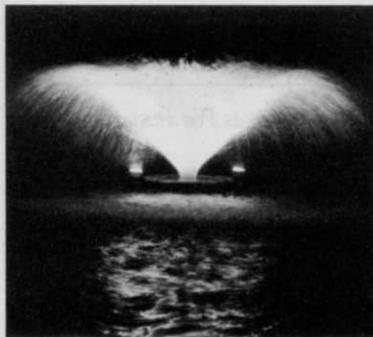
Jon Hickey, in nearby Hicksville, NY, and another member of the American Society of Consulting Arborists, Inc., tells WEEDS TREES & TURF he feels the ordinance "is not enforceable."

The new law licenses grounds companies that work in the village. As part of the procedure each contract



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lawn care operator, arborist, or landscaper must submit two photographs of "each employee" of his/her firm. Workmen must have the license, or a photocopy signed by the licensee, in their possession on a job site.

The ordinance also forbids contract work on Sunday, sets the hours for work from 8 a.m. to 5 p.m. Monday through Friday and 9 a.m. to 5 p.m. on Saturday, outlaws the blowing or raking of leaves or other debris onto roads, and stipulates that "no equipment shall be filled or refilled except over a dropcloth or other device de-

signed to catch and retain any accidental spillage."

A spokesman for the affluent community noted for its large estates tells WT&T "gypsy" operators who park their equipment on village streets and create safety concerns with their spraying led to the ordinance.

As of press time the New York State Pesticide Users Council (NYSPUC) was considering an injunction against the implementation of the village law. NYSPUC President James Taylor says New York courts ruled in 1983 that the regulation of the applica-

tion of pesticides is a function of the Department of Environmental Conservation and not of individual communities.

FUNGICIDES

Half-rate mixing harms blight control

Dr. Houston Couch, professor of plant pathology at Virginia Tech, says mixing half rates of fungicides for pythium blight control to avoid resistance can backfire.

"When a half rate of one fungicide by itself is not enough, half of another fungicide added to it still equals zero," Couch says. "Not only does the mixing of half rates fail to provide an additive effect, but the use of Subdue and Banol at their borderline levels for disease control actually increases the possibility of resistance developing. To my knowledge, there is no written recommendation that advises using tank mixes of fungicides at half-label rates for disease control."

Couch says resistance to fungicides in turf is "unusual" and recommends preventative applications of Subdue or Banol to control pythium blight, starting in early to mid-July or when the combination of temperature and humidity equals 150 or more.

Adds Couch, "those who are concerned about the possibility of resistance can alternate applications of Subdue and Banol. The important thing to remember is not to reduce the rates from the label and not to apply more than one fungicide for the same disease at the same time."

PESTICIDES

EPA looking into use of diazinon on turfgrass

The Environmental Protection Agency is looking into the use of the pesticide diazinon on turf as a result of reports of wildlife kills.

A ruling about restricting use of diazinon on turf could be reached yet this year, an EPA spokesman tells WT&T.

This spring, Henry G. Williams, environmental conservation commissioner of New York State, termed the improper use of diazinon "a nationwide problem".

In a letter to the EPA he said a poll of fish and wildlife agencies turned up 54 incidents of wildlife mortality in 17 states involving 23 species of birds. The species involved in the largest number of incidents was the Canada goose (26), followed by mallard (12),

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brant (5), and pigeon (4). More than half of the 54 cases involved turfgrass applications of diazinon, Williams says.

Williams asked for the following steps:

—A stronger label warning to the effect that diazinon should not be used on areas where waterfowl feed.

—Further research under field conditions to better assess how the use of diazinon affects wildlife.

—Better investigation and documentation of wildlife mortality incidents which may involve pesticides or other toxic chemicals.

Speaking of diazinon, a source in the EPA says, "The EPA has authority to restrict a product in its entirety or in certain uses. In this case it's turf. The manufacturers have made some labeling suggestions. Right now we're in the process of determining if we've got enough data to make a determination."

Peter Gradoni of the New York DEC says turf managers should use pesticides other than diazinon in areas of where wildlife, particularly waterfowl, feed.

IRRIGATION

Reagan wields pick in Toro installation

President Ronald Reagan and two others used picks and shovels for three days this spring as a Toro irrigation system was installed at Reagan's adobe ranch house in Rancho del Cielo, north of Santa Barbara, CA.

The Toro system with pop-up sprinkler heads irrigates a 1,000 sq. ft. pasture area for horses adjacent to Reagan's ranch. The system, which was primarily dug by machine, carries water from Reagan's private well.

Toro's Irrigation Division is located in Riverside, CA.

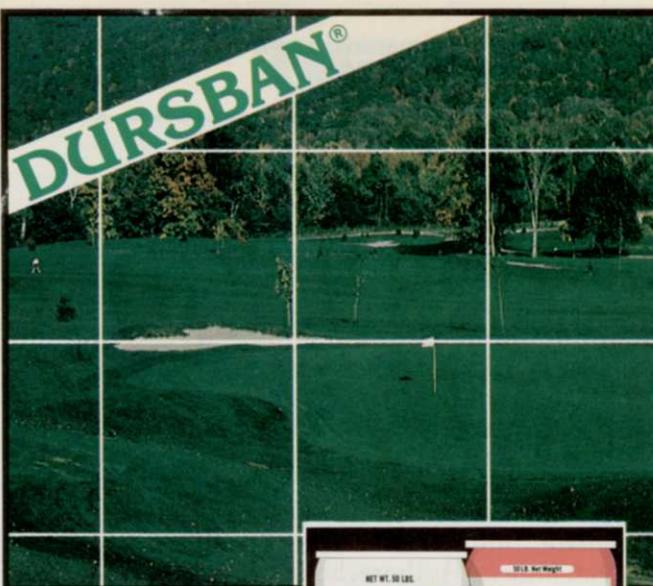
CHEMICALS

PBI-Gordon to fund MCPP re-registration

As re-registration for the turf herbicide mecoprop (MCPP) fast approaches, it appears that PBI-Gordon will be picking up the tab.

"We (PBI-Gordon) are basically in the middle of this," notes J.S. "Skip" Skaptason, a PBI-Gordon vice-president. "We've known it was coming for 10 years."

The company is doing work on a multi-million dollar data base for MCPP. "It's not inexpensive," Skaptason says, "but much of it (money for data), has already been spent. This is a



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UPDATE

FIFRA revisited: Bad dreams don't go away

When Harper's Ferry fizzled out last year many hoped the issue had died a lobbyist's death. Hope increased when the chairman of the House Subcommittee on Department Operations, Research and Foreign Agriculture, George Brown (D—California) was replaced.

Like a bad dream, the legislation, backed by William Proxmire in the Senate, returned this spring and hearings have begun. The Green Industry is there, however, testifying against the inequity of local ordinances and the oversight of local governments to the ignorance and danger of the do-it-yourselfer.

Robert Miller, vice president of technical services for Chemlawn Services Corp., Columbus, OH, spelled out the situation during hearings in late May. "Local pesticide regulations are having a harmful and discriminatory impact on the ability of our members to continue to provide a safe, convenient and cost competitive alternative to the do-it-yourselfer use of outdoor products."

Most pesticides applied by professional lawn care companies are classified for general use under FIFRA (available to the do-it-yourselfer). Ironically, ordinances promoted by these individuals typically do not apply to the larger do-it-yourself market segment...where, because of a lack of training in the use of pesticides, the possibility of mishap is the greatest."

Miller outlined five problems with current pesticide regulation and urged the subcommittee members to limit the power of uninformed, ill-equipped local governments.

Miller's first point was the lack of uniformity among local pesticide ordinances and the problems this causes companies operating in more than one area. Second was the absence of scientific expertise at the local level causing pesticide regulation to be political rather than factual. Third, local governments lack adequate enforcement capability for laws they create and these laws cause an unjustified loss of public confidence in professional lawn care.

Fourth on Miller's list was the misperception that most professional products are more toxic than do-it-yourselfer products. Local governments, therefore, wrongly provide incentives to the do-it-yourselfer over the professional. Finally, Miller said current local pesticide ordinances are an unjustified burden on commerce.

3PF flags supervision rule

The Pesticide Public Policy Foundation, a non-profit lobbying organization for professional pesticide applicators, is alerting the industry to possible changes in FIFRA for on-site supervision by a certified pesticide applicator.

In a very thorough report on FIFRA, 3PF Executive Director David Dietz said the President favors a simple reauthorization of current FIFRA rather than the overhaul involved in Harper's Ferry.

problem we've been working on for a long time. We've been prepared for it."

MCPP is used on sports and ornamental turf for selective control of surface-creeping broadleaf weeds such as red and white clovers, chickweed, knotweed, plantain, dandelion and ground ivy, and in cereals, alone or in a mixture with other plant growth products.

Skaptason declined to give an exact figure for the cost of passage.

"MCPP is the most important herbicide in turf," Skaptason says. "Nothing does as good of a job. We will work with the people who make it for us."

The process MCPP will be going through for re-registration is similar to the passage of 2,4-D, which will cost approximately \$3 million.

A prerequisite for re-registering MCPP involves a "call-in" to the EPA, expected to begin this month.

In a call-in, the EPA requests additional information and studies (usually specific, such as environmental or toxicology), along with a response from the company that they plan to either provide the information, rely on others to provide it, combine with others to provide it, or cancel.

Companies have 90 days to respond to the EPA. All companies who have MCPP registrations will get notice from the EPA.

"This one looks like it may be a very, very expensive call-in," says Ray Russell of Dow Chemical, which also has an MCPP registration; Russell's guess is \$4 million to \$7 million.

"It just doesn't look like the product is worth the expense," Russell continues. "Dow will not assist in financing the call-in. We have determined that it is not something we can afford to do."

Russell notes that the EPA already has a lot of data on the product stored away, and that the remaining work required is almost complete.

The re-registration will involve two data call-ins, according to Skaptason. One relates to groundwater.

"We and people that we work with think we have all the information to answer that problem," he says. The second is the actual re-registration.

The requirement for re-registration evolved from a federal insecticide act in 1972 which imposed a new set of standards on the amount of data necessary to establish safety requirements. The act allowed all of the old products to stay in the channels of trade, while requiring the EPA to systematically go through the files, examine the data and bring the insecticide up to the new standards.

Pre-registrations up 30% for Expo

The Second Annual International Lawn, Garden & Power Equipment Expo seems to be on its way toward a record 12,000 attendees. Pre-registrations for the show, July 29-31, in Louisville, KY, are up more than 30% over last year.

Retail and wholesale outdoor equipment dealers and distributors from across the U.S. and from seven foreign nations will arrive at the Kentucky Fair & Exposition Center this summer. They will include buyers from Sears, J.C. Penney, Wal-Mart, Singapore, Venezuela, Germany, Italy, France, Spain, Holland, and your own home town.

Although the Expo is predominately consumer products, the commercial equipment and chemical companies have decided they should be represented too. Some commercial equipment manufacturers are finding consumer dealers make good commercial distributors.

The international nature of the show reflects the growing import market in the U.S. as well as the domestic models for the coming year.

A few landscape contractors have been seen roaming the aisles of the Expo to get a jump on planning. An extra benefit is the outdoor demonstration area where equipment can be operated by distributors, dealers, and their potential customers. More than 150 outdoor equipment companies will have demonstration models available this year.

The Kentucky Fair and Exposition Center has actively sought the "special customer" for this year's show. The only problem is hotel space can be hard to find for those three days. Interested persons should contact KFEC immediately, (502) 366-9592.

Andersons distributors sales soar

It's not unusual for one of The Andersons agricultural outlets to sell more than \$250,000 in fertilizers and chemicals in one year, but now its turf distributors are starting to do it.

The Maumee, OH, partnership honored its first \$300,000 Tee Time distributor recently, C.O. Lowe Sales of Columbus, OH. Clarence Lowe's 30 years in turf and eight years as a distributor are paying off and made Lowe the first Tee Time distributor admitted to Andersons \$300,000 Club.

Not far behind Lowe is Turf Products Ltd. of West Chicago weighing in at \$200,000. A group of distributors joined the \$100,000 Club: Outdoor Equipment Co., Maryland Heights, MO; Turf Specialty, Hooskett, NH; Lethermans Inc., Canton, OH; Cory Orchard Supply, Indianapolis, IN; Big Bear Equipment Co., Eldridge, IA; and Thorton-Wilson, Maineville, OH.

The Andersons has also been test marketing a hose-end weed and feed product for homeowners through its own stores and K-Mart. It is actively seeking new compounds for the turf market.

In-the-Middle covers the turf and landscape distributor and dealer. Distributors are invited to send news items to Weeds, Trees & Turf, 7500 Old Oak Blvd., Cleveland, OH 44130.

PBI-Gordon has been evaluating MCPP for use with crops. "By our standards we have almost enough data to put it in with crop use as well as turf," Skaptason says.

Other companies which use MCPP include W.A. Cleary, SDS Biotech and Rhone-Poulenc.

PEOPLE

Names in the news

Dr. Bruce Augustin, a member of the WT&T editorial advisory board, has been promoted to associate professor of ornamental horticulture at the University of Florida's Institute of Food and Agricultural Sciences in Ft. Lauderdale. Augustine has been at the U of Fla. the past five years and is the extension turf and water specialist.

Dr. James Miller's appointment as head of the Extension Agronomy Department is causing some reshuffling in the University of Georgia Turfgrass program. Miller had been responsible for weed control in turf and ornamentals in the extension service.

Louisiana native **Dr. Mike French**, who joined the department in 1978 and is now in Athens, GA, is taking over some of Dr. Miller's duties. Also assuming responsibility for weed control in turf and ornamentals is **Dr. Roy Bullock**, a three-year member of the staff who handles weed control in southeast Georgia.

In related news, **Dr. Robert Carrow**, a well-traveled Michigan native, is joining the Georgia Agronomy Department as a turf physiologist. He served as an assistant professor in the Plant and Soil Department at the University of Massachusetts and in the Horticulture Department at the University of Kansas prior to coming to the Southeast where he focuses on soil compaction and turf irrigation management.

Jim Lipari, who spent 26 years with the Upjohn Company, has joined International Seeds, Inc., Halsey, OR, where he will be concentrating on trade shows as well as calling on golf course superintendents and athletic field managers.

On May 1 **Carl A. Totemeier**, garden columnist for the Sunday weeklies editions of *The New York Times*, joined the New York Botanical Garden as vice president for horticulture. Since 1974 he has been director of Old Westbury Gardens in Long Island, NY.

Also in New York, **Mark E. Sosnowitz** has been named president of Northeastern Corporate Landscape in Armonk. **Emerson Vorel Jr.** takes over as director of operations.