How to buy the right tractor.

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Buying the right tractor is another matter. It's not hard to do. But there are a couple of important things to keep in mind.

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Kubota L-185 tractor (17 h.p.) shown with mid-mount mower.

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TREES

EPA officials observe tree spraying by NAA



Bob Felix discusses the spray rig and safety equipment as EPA officials watch and listen.

Approximately 15 state and Federal pesticide enforcement officials gathered in June near Washington, D.C., to watch members of the National Arborist Association demonstrate tree spraying. The purpose of the demonstration was to provide enforcement officials with an opportunity to observe all the details of the application of pesticides to shade trees, ornamentals, evergreens and shrubs.

As Robert Felix, NAA executive director, narrated, a crew from Guardian Tree Experts of Rockville, MD, demonstrated tree and ornamental spraying using water only. Earl J. Sinnamon of Swingle, Inc., Denver, CO, chaired the committee which arranged the demonstration. Walter Money and Charles Cissel of Guardian helped set up the meeting.

The enforcement officials seemed concerned primarily about drift and protective clothing on applicators. However, experience with EPA inspections has shown the greatest interest in the tank mixture.

One interesting twist brought out was the effect of pollution alerts on tree spraying. Maryland law requires that tree spraying stop during an inversion and resulting pollution alert. Not only can air pollution harm some trees, but it also can make care of trees impossible under alert conditions.

Following the demonstration attendants asked questions and discussed misunderstandings at a luncheon at a nearby country club.

The demonstration was the first of its kind by arborists for EPA officials.

ORNAMENTALS

Soil pasteurization is cheaper alternative

Dr. David Rosberg of Texas A & M University has developed a cheaper type of soil sterilization called pasteurization. The process can cut the cost of sterilizing soil by 75 percent.

The current method of sterilization involves 212-degree steam heat which requires large amounts of energy. Soil fumigants are also used to sterilize soil.

Rosberg's method uses aerated steam to produce a temperature of 150 degrees for 30 minutes, with only ten minutes of steam.

The system uses a drum type mixer. Beneficial microflora are not destroyed by the process unlike the higher temperature method. Rosberg says the beneficial organisms compete with plant pathogens that colonize soil mixes and cause root disease.

GOLF

Use of wastewater subject of survey

The American Society of Golf Course Architects Foundation, the National Golf Foundation, and the United States Golf Association are jointly involved in a survey to determine the status of the use of recycled water (effluent and other waste water) on golf courses.

Data received will be placed in a central data bank. The groups have promised complete confidence in information obtained through the questionnaires mailed recently.

A conference has been planned in Chicago, Nov. 13-14 to discuss the results.

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Landscape Contractor News

OSU offers MA in landscape architecture

Ohio State University in Columbus, will offer a master's degree in landscape architecture, beginning with the coming Autumn quarter. OSU will be one of only 19 schools in North America offering such. Their program will focus on environmental planning. This differs from most schools, which tend to focus on environmental analysis. The new graduate program at OSU will also train students to produce designs. The undergraduate degree only prepares students to help implement designs.

While 200 master's degrees are awarded annually in landscape architecture in the U.S., job opportunities exceed the supply of graduates by at least 50 percent, according to a recent OSU bulletin.

ALCA's Denver program detailed

Educational sessions at the Associated Landscape Contractors of America's Erosion Control and Revegetation Symposium in Denver, August 1-3, will include a presentation by Ed Johnston of Weyerhaeuser on "Revegetating Logging Roads." Other topics will include mulch and its effect on seed and surface, an engineered flow study evaluation of temporary erosion control liners, revegetation of a sand dune, and revegetation and stabilization in the coal mining industry.

After the meeting, on Friday, August 4, a two day tour will be sponsored by the High Altitude Revegetation Association. The field trip will visit Trail Ridge Road and other areas revegetation projects in the high Rockies.

For information, contact: Rick Randall, chairman, Erosion Control/Reclamation committee, 6000 S. Old Mill Road, Littleton, Colorado, 80120; or phone 303/795-2582.

NMC releases preliminary consumer findings

The Nursery Marketing Council has released its preliminary findings in an intensive study of the nursery marketplace. Emerging trends show that, in the minds of the typical consumers in the initial focus groups, a "nurseryman" is a businessman who knows what he is doing with living plants, no matter what his specific role.

The homeowner tends to think of the place where plants are installed and growing as simply "the yard." Landscape may be used where there has been some attempt at formal planning and planting. "Garden" seems to mean the place where flowers or vegetables are growing and "lawn" is where the grass is.

Major buying motivation seems to be "appearance" or "beauty." Adding dollar value to the home received more attention than was earlier predicted by some observers. Another possible buying factor is "therapy." As one research analyst put it, "Working with plants lets them relax, get their minds off problems, releases their anger, lets them take out their agressions by weeding, digging, etc."

Union landscape laborers wages rise

Wages for union landscape labor in Southern California has risen from \$7.95 an hour to \$8.65 an hour as of July 1. Of the 70¢ increase, 40¢ goes directly to workers in increased wages. The remaining 30¢ goes into vacation and health and welfare benefits. These increases affect union contractors signatory to agreements with the Southern California District Council of Laborers, which holds jurisdiction in 12 of the 13 Southern California counties. In San Diego, a total package wage increase of 40¢ per hour was scheduled, increasing laborers' wages from \$11.75 an hour to \$12.15 an hour.

COMPANY NOTES

Branches added, moves announced

The Kioritz Corp. of America has changed its name to Echo, Inc., and moved into new quarters in Northbrook, Ill.

Jacobsen Mfg. Co. has expanded its production facilities in Brookhaven, Miss., and named Turf-Aid of Billings, Mont., a distributor of turf maintenance products. Little Wheels Turf & Equip. Inc. of Iowa City, Ia., has established a second Jacobsen branch in Peoria, Ill.

Brouwer Turf Equip. Ltd. has appointed Mumford Medland Ltd. as its P.T.O. gang mower distributor in the Yukon territory and the provinces of Manitoba and Saskatchewan.

TREES

New tree wrap saves time, labor

Purdue University forestry research by Dr. Walter Beinke has shown a new material used to wrap tree grafts saves time and labor costs in grafting work.

The wrap has a paper-backed plastic film which eliminates the need to paint or dip the graft in paraffin. Work was performed on black walnut trees. Application time was cut to ten seconds from 40 seconds for grafting with paraffin painting.



A check for \$1,500 to begin a special fund for creation of a playground for the developmentally disabled in Salem, Oregon, is presented to Paul Koch (right), Salem recreational director, by Don Hector and Francine Liming of the Manhattan Ryegrass Growers Association. The Growers will also plant the grass for the park at no cost.

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GOVERNMENT UPD/ATTE

Door closed on warrantless inspections

The U.S. Supreme Court ruled in June that Occupational Safety and Health Administration enforcement officials can be denied entry into a business if they lack a search warrant.

In a case which may set precedent over other types of inspections by government agencies, such as the Environmental Protection Agency, the high court called warrantless inspections unconstitutional as a violation of the Fourth Amendment.

Meanwhile, an EPA regional judicial officer in San Francisco required EPA inspectors to have warrants for searches to pest control operators and issue first-time warnings to label violators. The EPA case involves a fuzzy distinction between applicators and distributors, where distributors are subject to inspection and applicators are not.

Amendments to the Federal Insecticide, Fungicide and Rodenticide Act have been in conference committee for months. Part of the holdup is wording which is meant to clarify the distributor/applicator status of pest control companies.

Labor reform act bogged down

Opponents of the Labor Reform Act have extended debate to block passage of the law until major changes can be made. Votes to stop debate take place daily, but fail by less than five votes. If cloture is obtained, more than 600 amendments to the bill have been prepared to slow down passage. The bill would make union organization of small businesses considerably easier than at present.

Fifth of restricted use products face cancellation

More than 300 of 1,600 restricted use products face cancellation because registrants have failed to file amended registrations or request hearings. EPA officials say the cancellation will not have a significant effect upon users because products identical to those in trouble are in compliance.

Conditional registration rules await FIFRA

Final conditional registration regulations will not be issued until the FIFRA bill is passed according to EPA officials. Regulations will ease registration of products identical or substantially similar to registered products or for new uses to registered products. However, such rules include aspects such as data compensation and elimination of redundant safety test data.

Illegal aliens subject of Senate action

U.S. Senate Bill 2252 now before the Judiciary Committee would fine employers up to \$1,000 for knowingly hiring an illegal alien. The law will require suitable identification documents so employers can determine the status of alien applicants. The Chamber of Commerce backs the bill saying illegal aliens deprive residents of jobs and opportunities.

RECLAMATION

Idaho foresters get revegetation results

University of Idaho forest management researchers have been studying an area in northern Idaho since 1972 to determine which species and planting methods can be used most successfully to revegetate the slopes and stream channels which have been damaged by mining and refining operations for almost a century.

"The results from the project have been very encouraging," says Roger Gordon, one of two research associates assigned to the project. "Certain species, including container-grown Ponderosa pine, Austrian pine and hawthorn, have had a high rate of survival in many test plots, and the mining companies have been able to use our findings to develop long-range revegetation plans for their lands."

TURF

Scotts gains label for Ataenius control

The Proturf Division of O. M. Scott & Sons has announced its Nematicide/Insecticide has received national registration for control of Ataenius spretulus larvae.

The product is applied as a granule which is watered into the turf rootzone after application. The active ingredient is ethoprop. It is not for use on bentgrasses, fine fescues, or ryegrasses.

AQUATICS

Tilapia fish has dual benefit

The *Tilapia*, a tropical fish originally from E. Africa, was successfully introduced into the United States in the 1950's as a control agent for weeds in irrigation canals in Southern California. Now, pending research, the fish may also become a harvestable resource.

The *Tilapia* has a spawning cycle of every 28 to 40 days and grows amazingly fast. Without harvesting, severe overpopulation would occur.

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Pictured left to right: Model 698, Model 608, Model 657, and Model 600. WEED EATER®, Inc., a subsidiary of Emerson Electric Co.

PEOPLE



New officers and directors for the American Society of Consulting Arborists, elected at their annual meeting in February, are: (left to right) President Elect **Jack Schultz**, New York; Immediate Past President **William Lanphear**, Ohio; President **F. L. Dinsmore**, Missouri; Director **Henry Carroll**, Maryland; Vice President **John Duling**, Indiana; Executive Director **Spencer Davis**, New Jersey; Director **Jack Kimmel**, Ontario, Canada; and Secretary Treasurer **William Griffin**, California. Directors **William Rae**, Massachusetts and **William Owen**, Oregon, were absent at the time of the photograph.



Dr. Bernard J. Bienvenu, Professor and Head of the Department of Management and Administrative Studies at the University of Southwestern Louisiana, will give the Keynote Address at the 103rd Annual Convention & Trade Show of the American Association of Nurserymen, July 15-19, at the Fairmont Hotel in New Orleans. His

address will take place at the Keynote Luncheon on Monday, July 17. At the same time, the Garden Communicator's, Norman Jay Colman, and L. C. Chadwick Educator's awards will be presented.

Dr. Bienvenu is author of the book, New Priorities in Training — A Guide for Industry, and has contributed to eight other books. His articles have appeared in many business magazines and journals. He has conducted management development seminars for business and government employees here and around the world. He recently conducted such a program for high officials of the government of Haiti under the sponsorship of the U.S. State Department and the International Management Development Institute, of which he is a member. **Dr. Reed Funk,** Turfgrass Breeding, Rutgers University, recently received a plaque of appreciation and a hearty commendation from Doyle Jacklin, elected president of the Lawn Institute. Dr. Funk is the originator of many of America's modern turfgrass cultivars. Jacklin noted (speaking to Funk), "A primary factor in the Lawn



Institute's successful program of public education and encouragement of lawn efficiency has been availability of today's superior turfgrass varieties. Many have been originated by you and your students under the outstanding breeding program at Rutgers. This token is in deep appreciation of your leadership and excellence of research."

This is only the second award of merit ever given by the Lawn Institute, the first have gone to George Osburn of Hercules Chemical, recently deceased. Osburn, a past president of the Lawn Institute, was prominent in fostering the "gradualrelease" concept of turf fertilization.

Lawn Institute headquarters is in Marysville, Ohio under the direction of Dr. Robert W. Schery.



Quentin Nakagawara, a horticultural instructor at Butte College in Oroville, California, is the 1978 recipient of the Bert Kallman Award, presented by the California Association of Nurserymen and the Kallman family for outstanding achievements and contributions to horticulture.

Nakagawara received the award from Gary Hartman, CAN president, during the association's annual Refresher Course in San Luis Obispo.

A specialist in ornamental horticulture, Nakagawara has been associated with Butte College since 1969.



These officers were elected by the New York State Nurserymen's Association at their annual meeting: (left to right) Director-at-Large George Schnichtel; 2nd Vice President Jack Lander; 1st Vice-President Henry Well; President Alfred Krautter; and Treasurer Arthur H. Steffen. Secretary Frank Ferraro was not present for the picture.

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HOW TO IMPROVE THE LANDSCAPE CONTRACTOR/ARCHITECT RELATIONSHIP

"The Contractor walks on the job site with his back already against the wall. There is no way to come out a winner unless you gamble." Carpenter.

Incorporation of natural materials in site construction is growing on both commercial and residential levels. Both landscape contractors and landscape architects are experiencing increased demand for creative and well-constructed landscapes. Meeting this demand calls for the best possible relationship between the contractor and the architect.

To get to the bottom of the lingering anxiety between the contractor and architect, Weeds Trees & Turf interviewed a number of principles in both fields. We also tried to measure the importance of the design/build firm in the U.S.

The relationship between the landscape contractor and landscape architect has improved in the past five years because of rethinking of old attitudes by landscape architects and the overall improvement in the quality of landscape contractors. However, the position of the contractor in the construction process is seen as the primary cause of dissension, and this does not appear likely to change.

The Associated Landscape Contractors of America (ALCA) and the American Society of Landscape Architects (ASLA) are working together to resolve the things that can be changed.

Low Bid Process

"The low bid process immediately puts the contractor in an adversarial position," says Jot Carpenter, chairman of the Ohio State University Department of Landscape Architecture and president-elect of ASLA. "The contractor walks on the job site with his back already against the wall. There is no way to come out a winner in the bidding process unless you gamble. There is no way to disqualify poor contractors who submit unrealistically low bids."

Richard Brickman, president of the design/build firm Theodore Brickman & Assoc. in Chicago and past president of ALCA, views bidding in this way: "The person doing the design is trying to get the maximum amount of impact for the budget he has. The contractor doing the implementation is trying to get the maximum amount of profit from the job with a fixed budget based on the lowest bid. You can see the conflict." Ways to improve the low bid process required in public work and often in private work, are registration of qualified contractors, changing the bidding process, the performance bond, and pre-bid conferences.

Very few states have licensing programs for landscape contractors, although 38 states have some type of registration for landscape architects.

California has required licensing of landscape contractors for nearly 30 years. Mike Leeson, executive director of the California Landscape Contractors Association, says licensing is ineffective because the courts can't keep up with the number of complaints and public agencies ignore requirements that bidders be licensed. "Court cases against unlicensed operators haven't been too successful, "Leeson states. "Fines are small. It is cheaper to pay the fine than to take the examination and pay the fee to become licensed. Actually, I think the licensed person is at a disadvantage because the state isn't enforcing the law."

"The association could do a better job than the state of enforcing a certification program, a better job of examining, and a better job of protecting the public," Leeson claims.

Carpenter uses a system in private work where the low and high bids are thrown out, the remainder are averaged, and the bid closest to the average is accepted. "Perhaps successful use of this practice in private work could set a standard for public work."

"We separate the men from the boys with our bonding procedures," says Lane Marshall, president of Lane Marshall & Assoc. in Sarasota, Fla., and current president of ASLA. "Bonding is required in all public work and most significant private work. If the work is limited to installing plant material, I don't have strong feelings about registration. If installing walks and patios is involved, then a building contractor's license is required in Florida."

Too often contractors bid from incomplete or inadequate specifications. Consequently, estimates made by the contractor before bidding may be too low to make a profit. Prebid conferences between the landscape architect and the landscape contractors involved in the bidding allow for clarification of specifications and permit changes or addenda.