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Daconate 6 is the postemergence herbicide that can be used according to label directions on bluegrass, bermudagrass and zoysiagrass. Controls nutgrass, crabgrass, goosegrass, bahiagrass, chickweed, barnyardgrass, wood sorrel and sandbur.

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People on the Move

Orin R. Smith has been appointed senior vice president of the minerals and chemicals division of Engelhard Minerals & Chemicals Corp., Menlo Park, N. J.

Smith was formerly affiliated with M & T Chemicals. He holds a B.A. in economics from Brown University and an M.B.A. in management/marketing from Seton Hall University.

The appointment of **Dennis Kirven** as product manager has been announced by W. R. Grace & Co. Horticultural Products, Cambridge, Ma. Kirven holds B.S. and M.S. degrees in agriculture from Ohio State University. For the past 14 years he was county extension agent on the staff of Ohio State University.

Richard A. Gore has been appointed southern regional sales manager for the trade division of the Harvest Publishing Co. Gore is based in Atlanta, where he serves the southeast and south central regions of the U.S. He holds a B.A. in business administration from the University of Alabama.

Diamond Shamrock's agricultural chemicals division named Jerry L. Pauley mid-western region's agricultural chemical sales specialist. He will be responsible for sales and service of the division's products in Illinois, Missouri and Iowa.

Pauley's experience includes positions as assistant manager for Williamsdale Nursery in Columbia, Mo. and as a research technician for the University of Missouri. He holds a B.S. in horticulture from the University of Missouri.

Newly elected officers of the National Landscape Association are:

Dale K. Manbeck, Manbeck Nurseries, Inc., New Knoxville, Ohio, president; Frank Tomlinson, Tom-



William D. Brooks



Marcus Colloton



Dennis M. Kirven

linson's Select Nurseries, Whittier, Calif., vice president; and Richard L. Ammon, Ammon Garden Center & Landscaping, Inc., Florence, Ky., secretary-treasurer.

Bill Amick, Daytona Beach, is the new president of the American Society of Golf Course Architects. Amick, who established his own firm in 1959, has designed many leading municipal and real estate development golf courses in Florida.

Other newly elected officers include: Rees L. Jones, Montclair, N. J., vice president; Jack Kidwell, Columbus, Ohio, secretary; and Dick Phelps, Evergreen, Colo., treasurer.

Winner of the Society's second annual Donald Ross Award was Herbert Warren Wind, author of numerous golf reporting books.

William D. Brooks, has been promoted to director, marketing planning-agricultural marketing services and planning for Elanco Products Co. He has been serving as manager of national accounts — animal products since July 1976.

Brooks, who holds a degree in business administration from Hastings College, joined the company in 1968 as a marketing associate for agricultural chemicals.

Marcus Colloton has been appointed chief engineer for Bluebird International. Colloton, who has over 20 years of experience in the design and management of products in machine tooling, agricultural tractors, and lawn and garden industries, came to Bluebird from AMF Lawn & Garden, Des Moines, where he was project engineer for rotary lawn mowers.

Colloton is a graduate of Dunwoody Industrial Institute, Minneapolis, and has studied at the Universities of Minnesota and Wisconsin, and at the Milwaukee School of Engineering.



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Excavation and the planting of large trees helped bring a character to the Villas at Park Aire that has brought numerous landscape awards to the contractor.



LANDSCAPING THE MULTI-FAMILY COMPLEX

Turning an abandoned airstrip into a showplace of turf, trees and shrubs is an exhilarating experience, says Jim Gibbs, president of Green Bros. Landscaping Co., Inc., in Smyrna, Georgia.

Gibbs ought to know, for it was his company that helped transform the old Parkaire airport in Cobbs County, Georgia, into the Villas at Park Aire, a condominium complex that has brought Gibbs several landscaping awards, including the Grand National Landscape Contractors Award and an award of merit from the National Landscape Association.

The Villas at Park Aire is one of a series of four condominium complexes slated for the old airport property. The villa site is approximately 12 acres along an entrance boulevard developed for the four villages.

"The Villas at Park Aire presented a challenge to everyone concerned from its inception," said Gibbs. "The site is on the runway and plane storage area of the old airport and thus virtually flat. Using four building types, two of which are one story, a unit density of ten units per acre was achieved. This represented an extraordinarily high land coverage for a project of this type," he added.

"From the very beginning," said Gibbs, "the developers knew it would take a lot of imagination and ingenuity on the part of the architect, landscape architect and landscape contractor. Careful selection was made as to qualified firms that would be able to work together and coordinate all of the expected and unexpected problems that could arise."

Gibbs said the challenge was clear. In order to market and sell the condominiums, the team would have to create a look of lushness for the abandoned airport, and they would do this by creating a surrounding of low valley and mounded hills planted with large trees and shrubs. "Only with the creation of a newly planned and planted environment would the developer be able to offer what they felt the public was looking for in to-day's market."

Because of the complexity of the project and an awareness that all phases of this development would require special co-ordination, a carefully developed set of plans was prepared at a scale of one inch equals eight inches. This package included grading, staking, co-ordination of utilities (underground) and the planting plans.

The first step was to add interest to the flat and mostly asphalt covered site with regrading. This provided as much as 12 feet of vertical change within some of the courtyards between the buildings. Gibbs used retaining walls and large grass mound to break up the new spaces into more personal units.

A wide pallet of plant materials was selected for this project designed by Planners & Engineers of Atlanta. "Lacking any natural trees, it was important to bring in as many large trees as possible to offset the mass of wooded buildings and paved areas, to provide shade, and to give the complex an established feeling," explained Gibbs.

Specimen crepe myrtle, cederus deodara, pampas grass and multitrunk clumps of river birch were used for impact and interest at important locations.

A strong emphasis was placed on evergreen material throughout the project to provide a year-round feel-

ing of lushness. Potted plants were brought in to break up the paved surfaces. "They are softer to the eye and create a more relaxed atmosphere," emphasized Gibbs. Hanging baskets were added for color along with wisteria covered arbors.

Overall Gibbs thoroughly enjoyed the project. "What you are involved with in landscaping are areas," he said. "And when you have large areas, as with a condominium complex, you have to think in terms of smaller areas within the large ones to really landscape nicely.

"What's nice about the condominium challenge is that you can get into smaller areas more easily. You can use a lot of different plant materials too which makes the job more interesting."

Jim is particularly proud of the Villas because of its many levels of interest. "We mounded areas on the sides of the drives which create the effect of the drives being set in six feet lower than the surrounding areas," he said. In the pool area alone there are 12 feet of vertical change.

Perhaps the most outstanding aspect of the Villas is its feeling of establishment and character

LANDSCAPING

brought about by the planting of older, larger trees. "We couldn't plant six foot trees and wait ten years for them to grow" said Gibbs, "The project had to be sold soon." A 75-foot crepe myrtle was placed in a very prominent position near the pool with the help of a crane. The river birch were 25 feet tall, magnolias 20 and 25 foot.

This was accomplished despite a three-month delay in construction. "We had planned this job to be planted in April," Gibbs said. "But it worked out we were planting during the summer months which meant we had to move all of the plantings in full leaf."

To prevent loss, which amounted to less than three percent, bigger balls of earth were dug. The 35- to 40-foot cederas deodara placed at the entrance were dug in the summer months and moved right in. But many of the other plantings were brought in ahead of schedule to an on location storage area.

An automatic sprinkler system was installed to keep the plants

healthy for the months they were stored. "We started bringing in trees and shrubs as early as March," said Gibbs. "We would keep them misted until they were planted." Planting began in June and continued through August.

The on location "nursery" permitted better co-ordination with the construction. "As with most jobs," explained Gibbs, "someone would say, listen, in three weeks I want you to go in and do that area. But in three weeks they just didn't have the area ready. With the storage area, we were able to move into an open area quickly."

Gibbs also helped speed the project by having two five-men crews on call. They would assist the five-man crew on the job continuously when a large area would open up.

Gibbs attributes the success of the Villas at Park Aire to co-ordination and co-operation. "Our company was involved with the project from its inception," he said. "We worked very closely with the architect and landscape designers. We also worked closely with our growers. When we bought the plants we had to make sure they were going to be shipped on time. Then we had to unload them and store them properly. In the meantime we co-ordinated our crews on site."

This co-ordination helped overcome problems with underground utilities, walkways that didn't turn out as planned and drainage. Drainage, he emphasized, was a big factor. "You've got to have good drainage for a successful project."

Gibbs sees a bright future for multi-family complexes but only if the total package is one of quality. "So many people, the wrong people, decided to build condominiums because it was the thing to do," he said. "They threw them up with little concern to quality in construction or landscaping. But people got smart. Now they look for quality.

"People are just more conscious of the environment and environmental improvement today. They really don't know what's inside the walls, but they can recognize good quality landscaping. They are looking for it and are willing to pay the price."

Portrait of a winner

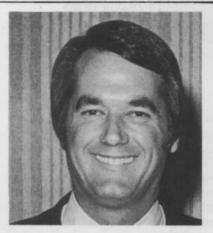
Jim H. Gibbs Jr., president of Green Bros. Landscape Co., Inc., is an affable young man with a zest for his work that is rare these days.

Gibbs, who holds 36 landscape awards, came to Atlanta in 1966 following graduation from the University of Georgia where he received a degree in horticulture and completed three years toward a degree in landscape architecture.

"I started out in business administration," he recalls, "but I just didn't like it. I wanted to do something more creative." Gibbs studied both horticulture and landscape architecture because he wanted "to be more involved with the installation yet have a design-built company."

When he began with Green Bros. in 1966, the company had six nurseries. Today it has 18. He began the landscape company working out of one of the nurseries then later moved the company to its present five and one half acre site in Smyrna. His staff includes designers, landscape architects and four five-man crews.

Gibbs' theory of management is simple. Get the best man for the job from your own ranks. "People who work as foremen for other companies sometimes aren't willing to make the



changes," he explains. "We've found our best foremen come out of the ranks. They start out knowing how to plant properly, how to do the job the way we want it done."

Although Gibbs holds education in high regard, he puts more emphasis on talent and attitude. "If you've got talent and are willing to work then that's it."

Gibbs believes too many people today are out solely for themselves. "They think what can I get out of the company instead of what can I put into it. They figure everything out to an hourly wage. We don't keep these type of people very long.

"If only more people would realize that if they thought more about the company, the company would prosper and reward them."

For Jim Gibbs and the Green Bros. Landscaping Co., this theory has worked very well.

Gibbs is married and the father of three children.

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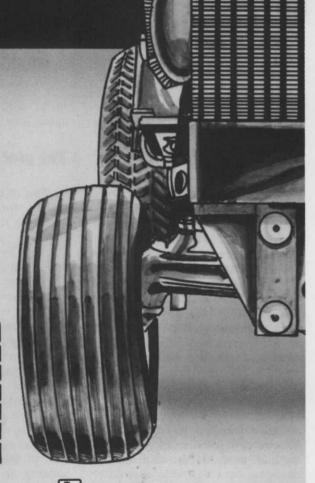
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HYDRO-MULCHING AS AN ALTERNATIVE

by Jim Lincoln



Hydro-mulching may be one of the fastest growing segments of the landscape industry. Landscape contractors are finding that the problems of grass establishment on projects of almost any size can be turned into significant profit centers by using hydro-mulching as an alternative to seeding or sodding.

For the landscape contractor, the establishment of turf cost money and takes time. Laying solid sod usually costs the most and provides excellent survival and coverage the moment it is laid, assuming it is watered properly. The broadcasting of seed on unprepared surfaces usually costs the least but the amount of turf ultimately established is highly uncertain and the time required for coverage may be unacceptable. The budget for turf establishment and the time required for coverage usually determines the method used. Hydro-mulching is emerging as a desirable alternative providing low costs and good results.

Hydro-mulching is a process of rapid grass planting whereby a mixture of wood cellulose fiber, seed or sprigs, water and fertilizer are prepared in a Hydro-Mulch machine.

The process

This mixture is sprayed onto the ground through a high pressure pump to form a mat of material similar in appearance to green paper maché. The material resists erosion, retains moisture, and enhances initial growth. The fiber decomposes over a period of time, organically enriching the soil.

In comparing typical seeding to hydro-mulching, if soil and moisture conditions are similar, hydromulching yields a substantially better stand of grass than seeding. Where spot sodding is frequently used in a particular locale, hydromulching, if watered heavily, provides full coverage of grass in a fraction of the time required for spot sodding and provides much better erosion and weed control. Spot sodding requires less watering care to survive but requires substantially more time and labor for installation. Also, spot sodding is limited to spreading grasses.

Actual direct costs for installation are somewhat similar. Hydromulching, when compared to total sodding, is done on an equivalent area in a fraction of the costs, time, labor and materials. Even considering the probability of additional irrigation costs with hydro-mulching, sodding is considerably more expensive. Also, hydro-mulching is virtually weed free and yields a smoother turf, all other factors being equal.

A two man crew can apply the mulch mixture effectively with only a few hours training. Time required to do a job depends on the size of the job, the type of grass used, the source and location of water required for filling the machine, and the size of the machine used. An efficient two man crew with an 800 gallon Bowie Hydro-Mulcher, in an easy eight hour day can do about five normal size home lawns, or one 40,000-60,000 square foot apartment complex, or up to 100,000 square feet of football field or similar open area. These production times are based on averages



Hydro-mulch mixture is sprayed onto the ground with a high pressure pump to form a mat similar in appearance to paper maché.

of actual experiences and reflect the use of heavy applications of materials.

Variables influencing success

Results depend on temperature, moisture, and soil. Temperature and moisture are the factors which promote quickest seed germination. Seed-bed conditions determine growth rates after germination. During the ideal months for planting, with proper watering, hydromulched turf will require mowing and have excellent coverage in about three weeks. A football field can be made ready for play in 60 days with durable turf. During less desirable planting times, a good stand of grass will take more time to become established.

Without adequate irrigation, the establishment time and coverage varies substantially. Hydromulching provides a micro-environment which enhances quick seed

Continued on page 20

First Year Income Statement

With surveys, questionnaires, and financial analysis of the hydro-mulching contractors, the following income statement represents dollars and percentages which might be experienced the first year by an efficient operator and good businessman.

100%	Sales		\$50,000
60%	36% All Labor & Salaries 24% All Materials	18,000 12,000	30,000
30%	Rent, Depreciation, Gas & Oil Insurance, Repairs & Maintenance Legal &Professional, Advertising Tools & Supplies, Phone, Office Exp. Bad Debts, Other		15,000
90%	Total Expenses		45,000
10%	Net Profit Before Tax		5,000

The investment in a Hydro-Mulch machine, truck, miscellaneous items and start-up cost will not exceed \$15,000.

33% Return on Investment (before income tax)

\$\frac{5,000}{15,000}\$ Profit = 33% Return on Investment

Investment

Hydro-mulching

germination and holds the seed in place so that the coverage is uniform. Uniformity is extremely important with many of the cool season grasses.

The hydro-mulching process doesn't work automatically. Any planting requires water, either irrigation or rainfall. The hydro-mulch material is a water retaining agent which makes this process far more effective than ordinary seeding. Even so, poor growth due to lack of water, especially in the extreme heat of the summer, is by far the greatest and most difficult problem encountered in hydro-mulching. A hydro-mulching contractor must base his guarantee of results on anticipated irrigation or rainfall.

The hydro-mulch material is an erosion preventative but erosion caused by heavy rains can occur, especially if water run-off from a higher point flows over the hydro-mulched area. Sometimes, a hydro-mulching contractor will use a small amount of staked down sod in a small heavy run-off area to insure 100 percent coverage of grass. When complete coverage is required, a contractor must anticipate potential touch up work and figure that into costs.

Costs of hydro-mulching will vary significantly. Labor cost of a particular job will depend on the size of the job, the location of the job, the nearby availability of water, and the type of job. Open areas, such as parks, can be sprayed more quickly since over-spraying is not really a concern. Home lawns and apartments must be more delicately sprayed to avoid getting material where it is not wanted.

Since grass seed is planted at different rates and the price of seed varies significantly, this portion of the materials costs generally ranges from \$1.00 to \$5.00 per 1000 square feet. Mulch costs will range from \$5.00 to \$9.00 per 1000 square feet depending on the quantity purchased, the type of mulch used, and the transportation cost related to the

mulch. One of the more expensive mulches, Conwed "2000," is becoming quite popular because of its erosion resistant quality. The flow ability of "2000" also permits more mulch to be used per tankload. More mulch per tankload can lower labor costs somewhat offsetting the higher cost of the mulch. Also, less erosion can save touch-up costs.

Fertilizer costs usually range from \$1.50 to \$2.50 per 1000 square feet, but also can be affected by the related transportation.

As more landscape architects specify hydro-mulching for larger projects, marketing the process is becoming unnecessary. In parts of the country where the process is unknown, selling the first job can be a

Job failures are almost always related to lack of watering.

problem. After a few jobs have been successfully completed, then the contractor with a Hydro-Mulcher can anticipate many calls. Selling the process of hydro-mulching to the next customer is then quite easy.

Selling problems can arise when a job failure occurs. Job failures are almost always related to lack of watering. To get proper watering, the contractor must supervise the first or second watering and then follow up to make sure his instructions are being carried out. Very specific written watering instructions are a helpful aid in communicating the importance of proper watering to the customer. If this most significant watering routine is followed out with the customer, the public relations aspect of dealing with people is well taken care of.

Marketing: A costbenefits model

Internal problems occur within a hydro-mulching operation when

personnel time is not well budgeted. Selling takes time. Watering instructions and follow-up takes time. Answering the customers phone-in questions takes time. The customer now knows an "expert" he can call if he has grass problems in the future. He calls the person who put it in. The total of these time requirements can ultimately be as much as ten (10) man hours per job.

The direct cost pointed out earlier must be combined with the "advisory time" cost to determine costs of each job. If a very small job is done at a price of \$150.00, labor and materials (including touch-up) might cost \$60.00. If the typical customer contact is involved, the contractor has lost money. A job of 3000 sq. ft. (333 sq. yds.) priced at \$180.00 (6¢ per sq. ft.) is questionable in terms of profitability. A job of 5000 sq. ft. (555 sq. yds.) priced at \$300.00 (6¢ per sq. ft.) yields a handsome profit.

Growth seems certain

Typically, new construction areas have the greatest need for new grasses and provide the largest single market for hydro-mulching. With a slight upsurge in housing starts projected for this year, and a favorable prognosis for the construction trades by most indicators, hydro-mulch contractors ought to be picking up substantial amounts of business. As industrial parks outside of central cities continue to crop up and many industries continue to relocate from central cities, further markets will be generated for hydromulching in the landscape industry.

If contractors can study the trends in building and anticipate new construction and the need for grasses on these sites, marketing hydro-mulch technology and securing contracts can be made simpler.

Thus, with sound planning and financial realism, careful assessment of field conditions, tenacious marketing strategies and creative, positive thinking, rapid growth in the hydro-mulching industry can be assured

Jim Lincoln is the founder of Southwest Hydro-Mulchers Distributing Co., Dallas, Texas.