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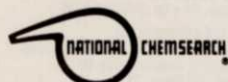
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seems to be more of a concern than equipment cost to the schools.

Schools that use contractors spend an average of \$4,700 for maintenance and \$4,000 for planting. The average amount spent per year for landscape equipment purchase is \$10,735. In addition, the schools spend an average of \$4,136 to maintain equipment each year.

The respondents spent an average of \$5,900 for landscape chemicals in 1982.

The riding mower is king to the school landscape manager. Less than 25 percent use large, walk-behind mowers, proven to be more efficient than riders in 32- to 60-inch widths for many areas. Trim mowers abound with an av-

erage of more than 8 per school. If school managers follow efficiency tests by landscape contractors, they will replace many of the trim mowers and a few of the riding mowers with mid-size, walk-behind rotaries.

More than three-fourths of the schools have seeder/spreaders (2.7 each average). Sixty-five percent have spray units (1.6).

Aerifiers, proven to help compacted, heavily used areas, are owned by more than 60 percent of the schools. Less than a fifth of the schools own wood chippers.

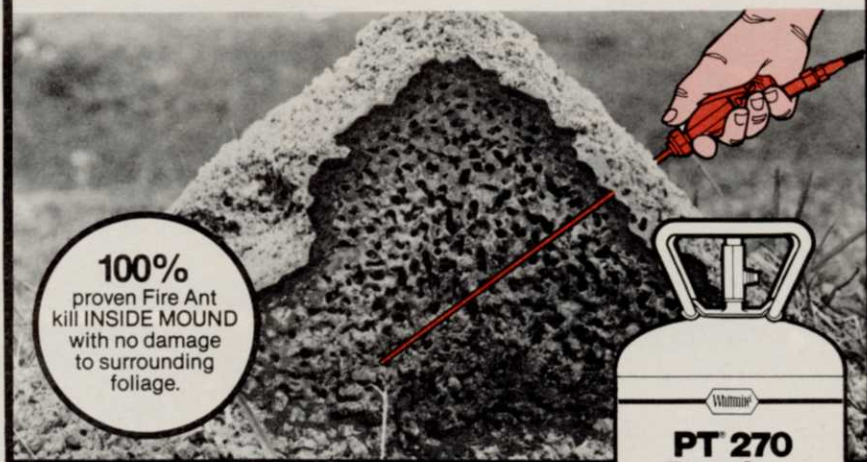
Pickup trucks are the primary transportation of school landscape crews with an average of 2.5 per school. Larger trucks are owned by nearly 60 percent of the schools responding and 35 percent use smaller turf vehicles and trucksters.

Comparing this year's survey to the one *Weeds Trees & Turf* published in August 1982, contractors are not gaining school work. They have actually lost some of the school work, dropping from 33 percent to 23 percent.

Equipment expenditures have risen roughly 8 percent and chemical expenditures have gained nearly 20 percent. It does appear that landscape staff size has decreased markedly. This year's respondents average only five full-time landscape crew members compared to eight in our last survey.

There is a clear desire to reduce labor-intensive landscape tasks by reducing high maintenance plant material and designs and using more efficient equipment. School landscape managers are trying to get students and the public involved in their programs to gain their support. They are also trying to get a better handle on job costs to justify the budgets they have or to receive increases. There is the sense they are seeking, and could justify, solutions to efficiency in maintenance. Increasing use of athletic fields is taking a bigger chunk of their budgets. They will invest in methods to lower maintenance costs where possible. **WTT**

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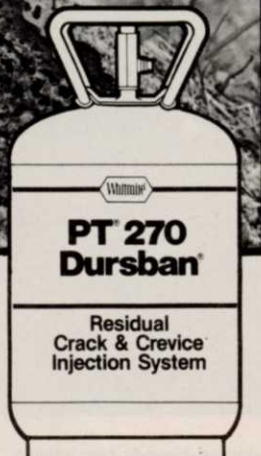
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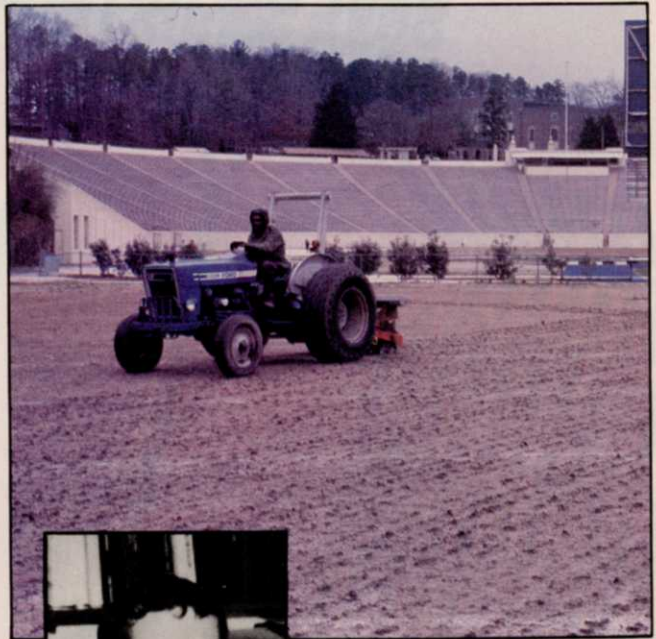
FORD TRACTORS



COUNTERACTING CUTBACKS

Duke's David Love uses computer and talking to students to take the bite out of across-the-board cutbacks

By Maureen Hrehocik
Associate Editor



David Love, manager of operations at Duke University in Durham, NC. Recent jobs included a \$400,000 renovation to the varsity soccer stadium and intra-mural fields.

Everyone today seems to be looking for ways to reduce operating costs while maintaining a high rate of services and quality. David Love, manager of operations at Duke University in Durham, NC, is no exception.

Constant interaction and communication with administration and students, a good working knowledge of his campus and a little help from an IBM personal computer are things helping to take the bite out of across-the-board cutbacks.

Love is using a computer to handle administrative problems, keep track of attendance and start a preventive maintenance program for his 900-acre facility which is divided into three main areas - the campus, medical center and golf course.

"We're also looking at possibly putting our work schedule on the computer as well," Love said.

Use of a computer really underscores the type of problems Love finds himself contending with.

"My problems are really more

business-related now, than with turf," he admitted. "We're trying to change our operation from labor intensive to equipment-oriented.

One turf area Love does have problems with is shade. He said the campus, some parts of it built in the 1800s, has very few large, open grass areas. One of the reasons for this is Duke's School of Forestry Department. Because of it, large

tracts of forest were left intact for research purposes.

"The inner campus is populated with large oak and white and Southern pines, he said. "We've had to go to alternate solutions for groundcover such as ivy, vinca or mulching with pine bark or pine straw. We're going toward a more natural look. Love also said this

continued on page 66

Duke University campus-steeped in tradition



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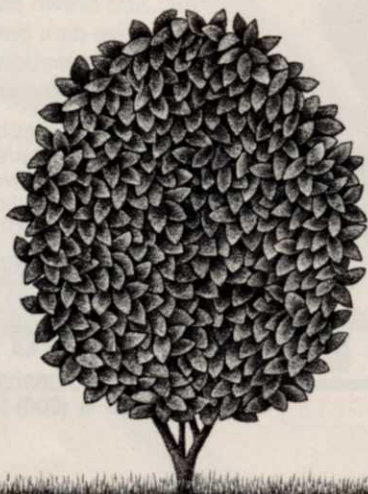
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move toward a more natural look cuts down on his mowing. He said he wants to reduce his 24 riding mowers by eight. To do this, he is also using more growth retardants such as Embark to cut down mowing areas.

Love uses eight Yazoo YR 60s and 12 Toro Groundsmaster 72s. He has four of the newer diesel models, which, he says, he's very happy with.

"Because of the students, we've found using a rear discharge mower is safer and it also cuts down on grass clippings getting on the sidewalks." Love uses a Turfpro 84 reel

"My problems are really more business-related than with turf . . ."

mower to mow the athletic fields.

"We have been pretty much using Toro equipment because of its availability and it's easy to maintain," he said.

Love is responsible for 125 pieces of motorized equipment.

Of the 900-acre campus, 300 acres are in turfgrass and 57 acres are athletic fields. Love used to overseed all areas and used paraquat and Roundup on his bermudagrass fields.

"This year I didn't overseed the football fields or the practice fields. We used the irrigation system right up until December to keep the fields green. The soccer, baseball and intramural sports fields were overseeded with Legend ryegrass, which we've found to be a hardy-type rye. On other areas of the campus, we use a Baron mixture in the shade problem areas."

Love also has an 18-hole golf course to maintain which has its own \$130,000 budget, not including major equipment purchases. Designed by Robert Trent Jones, Love says the course is hard to maintain on its current budget which includes five full-time staff members and six to eight students in the summer. There is currently almost

year-round maintenance on the course which is open to the public. The master plan for the course calls for upgrading the irrigation system, building seven bridges over various stream locations, and changing some of the greens. (The course has bentgrass greens with bermudagrass fairways). Love said contributions from the alumni are funding a \$1 million goal to accomplish the upgrading.

"The course is really in extremely good shape turf-wise," Love said. "We'll be adding some bunkers and deleting some."

Other major changes Love has completed on campus are a \$400,000 renovation to the varsity soccer stadium and intra-mural fields. Outdoor lighting was installed and three more acres of bermudagrass turf were added to the playing fields. Love is also planning to replace the sand base of most of the campus' slate sidewalks with concrete bases to level the sidewalks. This job is expected to cost around \$350,000.

"We work on a five-year capital plan. We allot \$50,000 a year for equipment replacement. We're on a 10-year replacement schedule."

Love said the students as well as the administration take a more active involvement in the maintenance of the grounds than perhaps at most schools.

"We have lots of inspection tours here, with the administration taking an active role in how the campus develops.

"The students are very different here. They're very active in the administration of the campus. They're very boisterous in how they make their feelings known about how things are being done. There is a building and grounds committee, which is part of the student government, which I meet with once a month to discuss why we're doing things a certain way. We also have a faculty administrative oversight committee which even has input on what trees we cut down. We have a good working relationship, but these controls must be dealt with."

continued on page 68



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DUKE from page 66

While working with various administrative and student committees, Love is also responsible for administering a \$1.6 million budget which is divided into 10 individual budgets. The campus is divided into six major areas - East, West, Central, Athletic, Central Housing and Medical (which is the largest.) Each has its own budget.

"We started off at 0-base budgeting and worked out budgets from there. The administration developed four different sets of standards for each area - trees, shrubs, turf maintenance and litter control. They then choose the amount of funding they would allot to each area.

Landscape work around new buildings (the university averages about one a year) is contracted out. Also the work done around the student housing area including erosion control and planting trees, is also contracted out.

"It's easier and more a matter of sheer volume," Love said.

Love 33, has been manager of operations at Duke for the past 2½

Love said the students as well as the administration take a more active role in the maintenance of the grounds than perhaps at most schools.

years. He holds a degree in horticulture from Michigan State and a business degree from the University of Toledo. Prior to coming to Duke, he was director of grounds and housekeeping for three years at Bowling Green State University in Ohio.

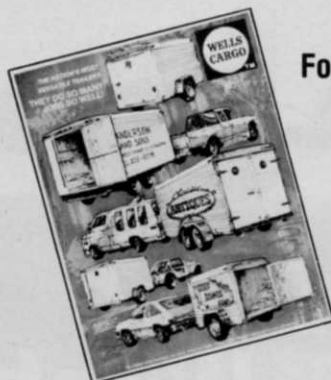
With 9,000 students, 12,000 employees and 900 acres of campus to contend with, Love's strategy for success is simple.

"Coordination is why it functions as well as it does," he says simply. "We are trying to deliver quality and maintain it with an expanding campus and with slight growth in our budget." **WTT**

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From Buses to Baselines

Grandmother goes from lunchroom aide to director of support services in seven years.

By MAUREEN HREHOCIK, Associate Editor

From housewife to director of transportation, grounds, maintenance and warehouses for the largest school district in Wayne County, Michigan, in seven years. For N. Faye Bird, that transformation has been an ongoing learning experience.

Bird is Director of Support

Services for the Woodhaven School District in Woodhaven, MI, a 22-square-mile city/township south of Detroit. Like many others, shortage of staff, equipment and finances are the largest problems that confront the 52-year-old grandmother of three. She has been forced to cut down fertilizing

and mowing and to forego name brand chemicals and fertilizers for less expensive types.

"My philosophy thus far has been to keep things neat, clean and presentable," says Bird. "If we had the finances, we would like to have everything landscaped. We could have beautifully-manicured grounds."

Besides overseeing a 25-bus fleet with 18 regular drivers, custodians, grounds maintenance staff, warehouses, 11 school buildings and a host of other duties pertaining to running a school district, it is also Bird's responsibility to administer 500 acres in grounds and prepare football and soccer fields and tennis courts for play during the school season.

"We have an eight-day mowing calendar for most of our turf," she said, "however, we do maintain our baseball fields on a daily basis. We fertilize three times a year with a 12/12/12 mixture and use a 20/10/4 mixture for greenup purposes. I'm a tightwad, so we don't use one product brand all the time. When I find something that works and the price is right, I use it." The athletic field overseeding mixture used is 45 percent K-31 tall fescue, 20 percent perennial rye, 20 percent Kentucky bluegrass and 15 percent creeping red fescue.

The school district leases 150 acres to local farmers who plant mainly corn and soybeans. Bird's responsibilities include seeing that the acreage is kept tidy. Thirty of the 500 acres stand idle.

Bird's budget to accomplish all this is \$150,000.

Of her 68-member staff, four are full-time grounds maintenance workers. The school district's one

Continued on page 72



Work on the district's athletic fields is one of the most time-consuming tasks.



N. Faye Bird, director of support services for the Woodhaven (MI) School District works on a \$150,000 budget. Students help with work in the summer.