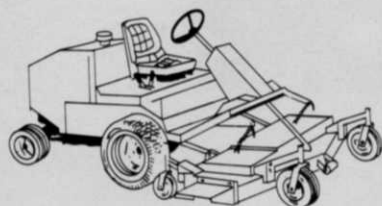


Doing More With Less

School landscape managers seek ways to increase maintenance efficiency.

By Bruce F. Shank, Executive Editor

School Mowing Equipment.



Riding Mowers

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Trim Mowers

88% of schools have an average of 8.7



Mid-Size Walkers

23% of schools have an average of 3

Managers of school landscapes are facing a potentially severe mismatch between funding and property use according to the latest *Weeds Trees & Turf* survey. Nearly 70 percent of the school landscape managers reported their budgets have grown less than the inflation rate. Thirty percent said their budgets had not been increased at all.

"Doing more with less" was a common remark from survey respondents. "We have to be able to keep the campus and playing fields in usable condition with less help and more field use," said one respondent. A private college director of grounds said, "The most significant challenge in the next ten years will be to keep the campus maintained to high standards. With talk of budget cutbacks, reduction in manpower, and the college wanting to make the campus a showplace, it will be necessary to come up with new ideas and equipment to get more work with less money, labor, and water."

A public university landscape manager told *Weeds Trees & Turf*

accountability for expenditures and labor will be asked before budgets are increased or saved from cutbacks. "Computerization of operations by the school administration will force us to look at our work more as preventative than

"With budget cutbacks, manpower reductions, and the need to make the campus a showplace; we need new ideas to do more work with less money, labor, and water."

just maintenance. I would say my position will and has become more of a manager and planner than a working position."

A management view of his private school by one director of facilities is, "Probably the biggest challenge to me has been to

accommodate all of the various teams with playable fields. Next in line is water availability. Then women are becoming more interested in all sports. This is putting a drain on the available space. We are now in the process of proposing construction of two new fields, but this also adds to our water problem."

A public school general foreman has a bare bones attitude, "Due to the excessive damage done to school property, landscaping will have to become more basic, meaning a bare minimum of shrubs and beds. Flowering plants and bulbs are now extinct. Trees have to be larger when planted or they don't stand a chance. Seeding lawn areas is almost impossible to do anymore."

School landscape managers are more equipment oriented than chemical oriented. Some feel a responsibility to keep chemical usage down in public areas. As a result, they favor an equipment solution to efficiency. "Manufacturers and distributors can help me by producing things that can do more than one job," said a public school landscape manager.

General campus areas and athletic fields are the predominant responsibilities of school landscape managers. A third of the respondents also are responsible for gardens or an arboretum. Interior plants were described as a responsibility by 12 percent of the group. Less than five percent cared for golf courses.

A fourth of the respondents give some jobs to landscape contractors. While a large majority of the managers feel their crews can do a better job than the contractors, nearly half see the benefits of less equipment overhead and freeing up staff for other duties. Labor

Continued on page 62

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.

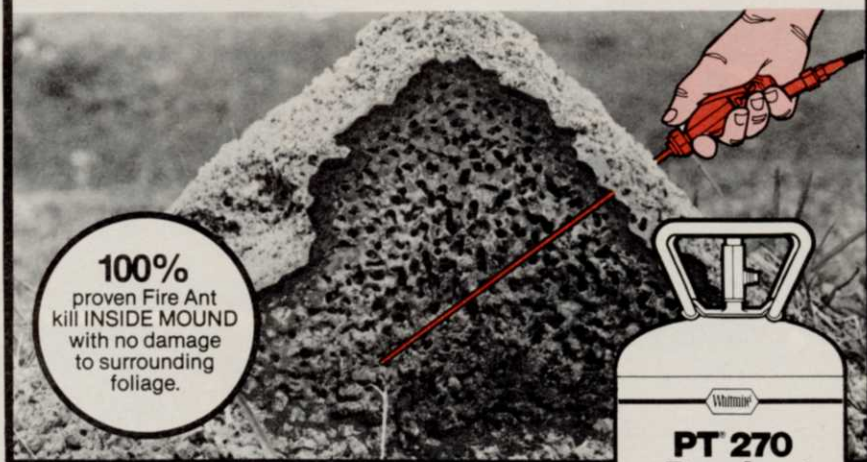
Pickup trucks are the primary transportation of school landscape crews with an average of 2.5 per school. Larger trucks are owned by nearly 60 percent of the schools responding and 35 percent use smaller turf vehicles and trucksters.

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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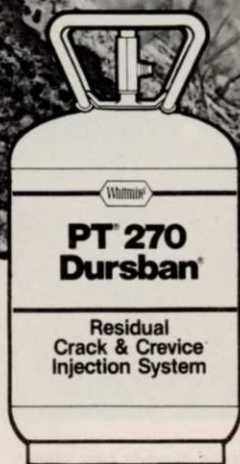
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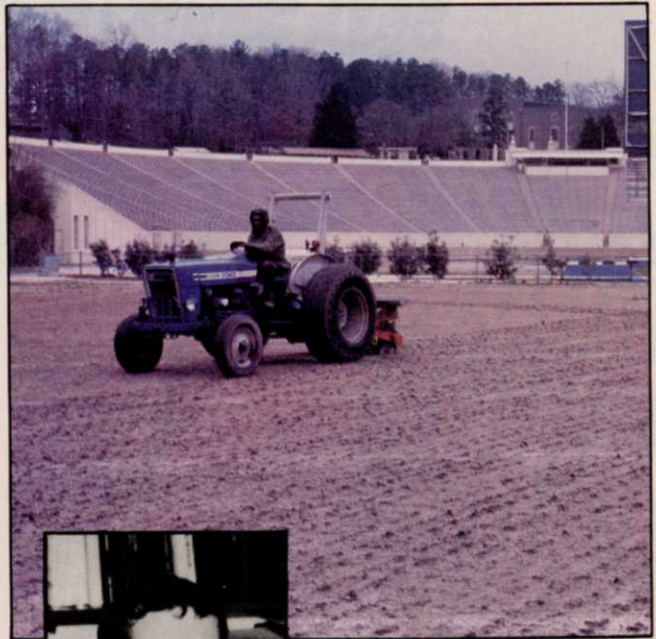
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Circle No. 160 on Reader Inquiry Card

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

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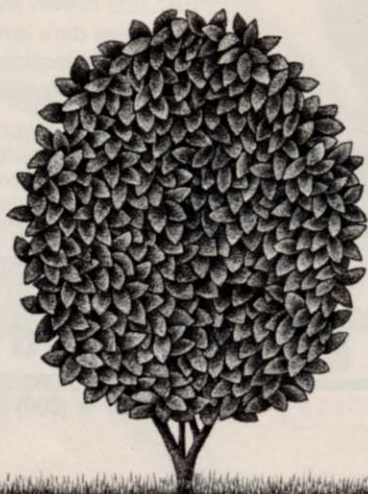
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move toward a more natural look cuts down on his mowing. He said he wants to reduce his 24 riding mowers by eight. To do this, he is also using more growth retardants such as Embark to cut down mowing areas.

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.

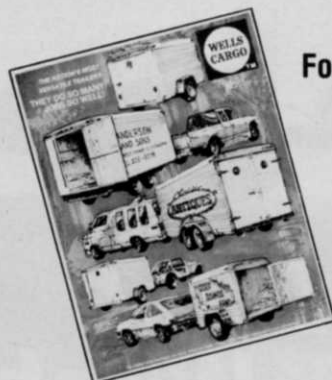
With 9,000 students, 12,000 employees and 900 acres of campus to contend with, Love's strategy for success is simple.

"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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Circle No. 159 on Reader Inquiry Card

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.

football field is seeded, not sod. Baseball fields have been renovated.

Bird rents aerators, fertilizer spreaders, grasscatchers and electric rakes. The district owns three tractors, one pick up truck and two buses which have been overhauled to use as maintenance vehicles.

"I encourage districts to use buses for utility vehicles," Bird said. "We've taken all the seats out and can store and haul whatever we need to the location we're working on. You can't buy a truck for \$1,200 these days."

Bird has lived in Woodhaven School District for 35 years. She admits it's been hard being a woman to gain acceptance in her position. In 1969, she volunteered to be a lunch aid and the following day became a school bus driver. In 1975 she was named transportation supervisor. In 1976, she was named director of support services.

"Most people out there don't be-

lieve a woman can do this job," she says. "I make mistakes like everyone else. I'm not a political person. If it's best for the district, I'm going to do it. I've found this is the way to earn respect."

Bird says she's going to school "to learn what I already know." She attends Wayne County Community College two nights a week working toward her Associates Degree in business administration. She is on the Dean's List.

Bird says her background as a homemaker and growing up on a 10-acre farm has given her the background to be able to fix and do things for herself, using common sense and experience. She has, however, conceded some operations to technology.

It is Bird's hope that some day her budget will match her future plans for Woodhaven, making it one of the most eye-pleasing and landscape-efficient districts in Michigan.

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