

OFTANOL

One application controls white grubs from season-to-season.

There's only one insecticide that controls white grubs from season-to-season.

New OFTANOL insecticide from Mobay.

OFTANOL delivers unparalleled residual control of white grubs. In fact, you can expect one application of OFTANOL at the highest recommended rate to control white grubs until about the same time next year.

OFTANOL also offers these additional advantages compared to present white grub materials:

- OFTANOL does not require watering-in.
- OFTANOL does not tie-up in thatch.
- OFTANOL does not require critical application timing.

One application. Once a year. That's the OFTANOL one-shot advantage.



Mobay Chemical Corporation
Agricultural Chemicals Division
Specialty Chemicals Group
Box 4913, Kansas City, MO 64120



**New,
one-shot
white grub
control.**

OFTANOL also controls these major turf insects.

OFTANOL has been proven effective for control of sod webworm, Hyperodes weevil, billbugs and chinch bugs. Consult the product label for the proper timing for control of these pests.

New OFTANOL. For one-shot white grub control and in-season control of other pests. Available from many leading turf chemical suppliers.

The use of OFTANOL for turf pest control is registered in many states. Check with your state extension office for details.



SOD WEBWORM



BILLBUG



CHINCH BUG



HYPERODES WEEVIL



Mobay Chemical Corporation
Agricultural Chemicals Division
Specialty Chemicals Group
Box 4913, Kansas City, MO 64120

OFTANOL and BAYLETON are Reg. TMs of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

MAIL TO: Mobay Chemical Corporation
Agricultural Chemicals Division
Specialty Chemicals Group
Box 4913, Kansas City, MO 64120

Send the new OFTANOL Fact Sheet to:

Name _____

Company _____

Address _____

City _____ State _____ ZIP _____

What are your major turf pests? _____

What are your major turf diseases? _____

Who is your turf chemical distributor? _____

Yes. I would like to receive the [®]BAYLETON Turf Fungicide Fact Book.

FREE
OFTANOL
Fact Sheet

To learn more about OFTANOL, just fill out this card and mail it today. We'll send you the all-new OFTANOL Fact Sheet by return mail.

8181



Printed in U.S.A.

CO-OPING LANDSCAPE STUDENTS PUT EDUCATION INTO ACTION

By Gil Troy, editorial assistant

Managers of Green Industry businesses, although focused on different aspects of landscape preparation and management, share common complaints. Government regulation, inflation, personnel management, and misunderstanding of their work all contribute to the headache and heartache about which managers commiserate. For those who hire college students, there is a common statement to express disdain: "Those smart-assed kids don't know how to work."

Unfair as it is to fresh graduates, this reaction is often justified. They are filled with horticultural intellectualism and microeconomic theories, but act clumsily with a pruner, edger, or set of design prints in their hands. They can't learn everything in college, but they need basic skills to immediately apply to a job. In the summer when they often begin a new or first landscaping job, supervisors are too busy to teach every aspect of the job. Grads may see this lack of help as impatience or disgust. The supervisor says, "another damn college kid."

To cope with this frustration between the manager and college graduate employees, the Associated Landscape Contractors of America (ALCA) worked with the faculty at Mississippi State University to develop a program of cooperative education similar to the type engineering and other academic disciplines had been successfully using for years. Together, the school and professional association developed a model curriculum, which is now used as a base to help other schools with curriculums in landscape contracting. Mississippi State also has a landscape architecture co-op program. Faculty, students, and employers of firms that hire Mississippi State's co-ops laud the program without reservation. "We're marrying theory and reality," says Bob Callaway, assistant professor of landscape architecture.

Co-op Programs

Cooperative education began in 1906, but has only recently become available for landscape majors. Today, 54 of the 165 landscape majors at Mississippi State, almost one third of the entire department, are in the co-op program. The program takes four and a half to five years to complete. The academic year is divided into three semesters—fall, spring, and summer. The student alternates a semester of school with a semester of work. Upon graduating, the student will have worked for three to six semesters, or for one to two calendar years with his co-op employer.

Students are normally employed in pairs, with



Mississippi State students in landscape architecture apply what they have learned in the field to designs.

one working while an alternate studies on campus. Most Mississippi State students are employed by design/build firms and government agencies. Employment with more landscape architecture firms is being sought.

During the work period, the student is evaluated by his employer. The evaluation carries comparable weight to the student's academic marks in assessing his college performance. "The monitoring works extremely well," according to Len Spencer, president of the Spencer Co. in Houston. "The school gets a commitment from the students and holds them to it." Spencer's division managers do the grading, "because they associate with the students the most."

The phenomenal success of Mississippi State inspired the development of a co-op program at Ohio State University. The program is two years old. Last year two students were involved, but this year, explains Assistant Professor James Hiss, the co-op coordinator, after a "heavy-duty sales pitch at the ALCA convention in New Orleans," they placed 14 students in a "variety of firms."

Ohio State is on the quarter system. The students work the summer after their sophomore year, the spring and summer of their junior year, and the summer and fall of their senior year. They graduate in five years with one-and-a-half years' experience.

The Ohio State program, like the Mississippi State program, is trying to expand placement opportunities for landscape architecture students.

Continues on page 25

MERIT

*If they held
an **Olympics**
for Bluegrass,
Merit would
win the **Gold***

That's because this low maintenance variety so often outperforms the biggest names in Kentucky Bluegrass.

The record shows that Merit is consistently rated high in turf quality and color as well as disease-resistance, including good resistance to leaf and dollar spot.

A variety that is praised for its excellent spring color, Merit also holds its own when subjected to minimum irrigation and fertilization.

Look at the record. In 1972 NE-57 trials, in a five-year New Jersey test, in a New York trial, at an eight-year Purdue study, a three-year Ohio trial and in a four-year Missouri test, Merit often outperformed such bluegrasses as Baron, Nugget, Fylking, Adelphi, Glade and Bonnieblue.

Merit ... it's a Kentucky Bluegrass worth looking into.



INTERNATIONAL SEEDS, INC.

P.O. Box 168, Halsey, Oregon 97348 U.S.A.

Telephone (503) 369-2251 • TWX 510/590-0765



Professor Hiss explains that, presently, "most landscape architecture students are working with landscape contractors. It's a problem placing landscape architecture students in landscape architecture offices. Co-op is a new system of hiring. Some firms can't make a commitment, they don't know what their work will be like. Some can't fit it into their schedule of hiring and firing."

Two of the fourteen Ohio State co-ops this year are working in L.A. offices. Professor Hiss wants to use the two in L.A. offices as a starting point, and hopes to gain the confidence of landscape architects at the American Society of Landscape Architects' (ASLA) Convention. "If we can promote it enough, get enough students in L.A. offices, we'll have something to offer the industry."

● "It's the nearest thing we have to old world apprenticeships." . . .
Len Spencer, president, The Spencer Co.

Although establishing the program is "very difficult" and takes a "heck of a lot of time," Hiss feels that it's worth the effort. "Most students love it. They are put to the test and are given a lot of responsibility. They return to school with a heck of a lot more confidence and are better able to put their schooling into perspective."

At California Polytechnic State University at Pomona, the co-op program has more requests from employers for co-op students than willing students. "The students don't want to interrupt their education," says Dr. William Sparks, department chairman of ornamental horticulture. "Also, at Cal Poly we have a unique program which allows students to gain experience while in school."

"The department has a retail nursery operation," Sparks explains. "The students grow and sell plants to the general public. Students can graduate with a minimum of two years experience, and they don't have to go out."

Nevertheless, about half of the 65 students who graduate from the department each year are in a co-op. Cal Poly has both alternating co-ops like Mississippi State and Ohio State, and parallel co-ops in which students work for twenty hours per week and study for twenty hours. Most students and most employers prefer the alternating co-ops. Sparks asserts that, in general, "most employers prefer a longer period of at least six months for co-op students."

Other schools that have co-op programs or provide similar opportunities to work and to study include Lake City Community College, Michigan State University, California Polytechnic State University at San Luis Obispo, New Mexico

State University, Purdue University, and Texas A&M.

Schools that don't have official co-ops encourage students to seek work experiences. Jerry Walkup, assistant professor of horticulture and landscape architecture at Oklahoma State University in Stillwater, says that Oklahoma State started working toward a co-op program for landscape construction, after industry called for it. "We're not sure we can sell the program to the university or to the students. Students are not willing to give up time and stay in school longer." The department encourages summer jobs and internships on a "volunteer basis" and does grant credit for work experiences upon evaluation.

Robert Reinmann, dean of landscape architecture at Syracuse University, says that despite the fact that "students are routinely positive about their work experiences," it's just not practical for his department. There are 300 students in the program and thus "more students than there are employment opportunities," especially in the Syracuse area. Yet concern exists about the "discrepancy between the workplace and the classroom. When we don't have linkage with practicing professionals or the workplace, we get a warped sense of what preparation is needed."

Student Benefits

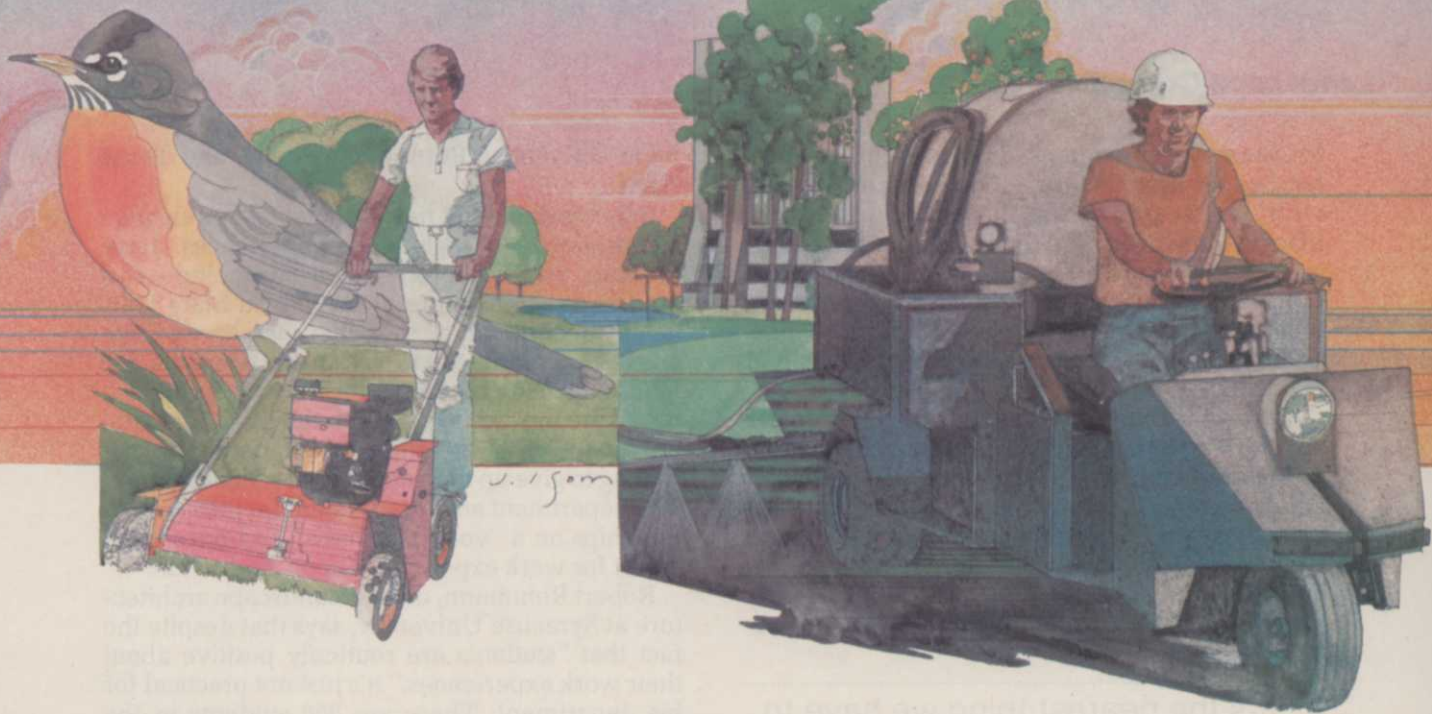
Co-op students have to overcome the problems of remaining an additional year in school, leaving their friends and relocating, and must find an employer who is willing to hire them. Those who surmount those obstacles support the co-op program wholeheartedly. "I was very doubtful at first," Laura Solano, a junior at Ohio State maintained. "I had been in school for so long, and I didn't want to add another year."

● "The co-op student gets an opportunity to see all the different seasons." . . . Carl McCord, president, Landscape Design and Construction, Inc.

Solano was hired by William Behnke Associates in Cleveland, and has no regrets. She's been working in Cleveland since April 1 and thinks the experience is "really marvelous. I can think of no better supplement for the education of a landscape architect. It makes you realize just what it's all about, and gives you an overview. It's a great professional and educational experience. It's especially good for a student who is doubtful about L.A. or is frustrated by school."

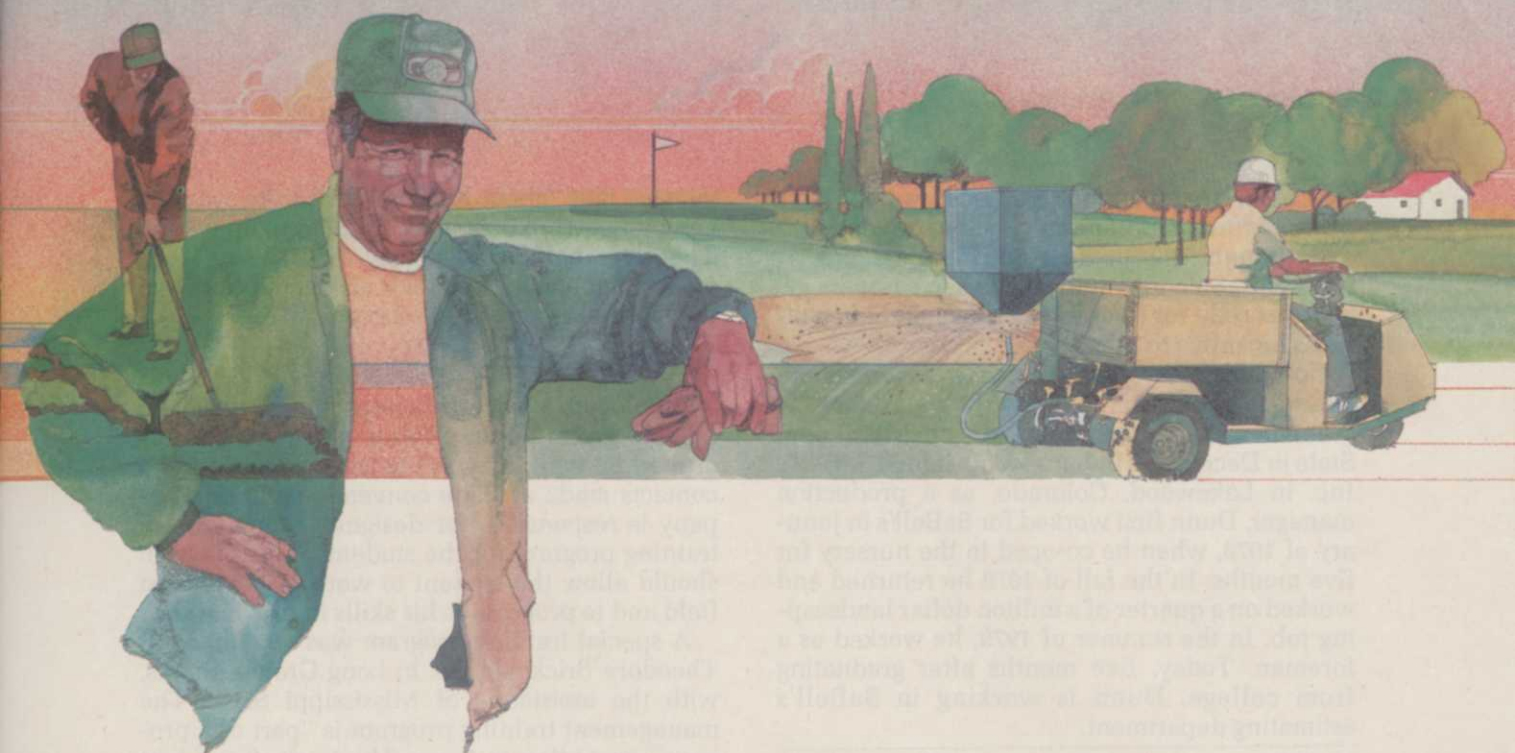
The "nomadic lifestyle" that comes from moving every two weeks doesn't faze Solano. "I was excited by the idea of moving to a different city, of travelling, of being independent." She says

Continues on page 28



Any turfgrass seed works

**RUGBY
KENTUCKY
BLUEGRASS
IS DESIGNED TO
WORK IN THE
REAL WORLD.**



well with constant attention.

RUGBY KENTUCKY BLUEGRASS. IT DOESN'T NEED CODDLING TO LOOK GREAT.

As a turf professional, you know all the tricks to making grass look terrific. You lavish water and fertilizer on it, overseed, apply herbicides, and take great care in mowing.

But times are changing. Increasingly you're finding yourself pinched by escalating costs for materials and labor. And there's a growing movement among environmentalists to lessen dependence on fertilizers.

Rugby Kentucky Bluegrass answers these problems.

YEARS OF TESTING.

Rugby is a new Kentucky bluegrass. But it's not unproven. Before it was ready to be introduced to you, years of extensive testing were performed under a broad range of climatic and soil conditions. Test sites were located not only in the United States, but Canada as well.

The results? Our testing has shown Rugby to be unique. It's a truly *different* variety from anything else on the market, with superior performance.

How is it superior? Read on.

A TRUE LOW-MAINTENANCE TURF.

The most singular advantage of Rugby is its ability to provide high-quality dark green turf when maintained at *low* nitrogen fertility and restricted moisture levels.

Most improved Kentucky bluegrass varieties are *not* low-fertility types. You may be told they performed well in turf trials. Unfortunately, you're *not* told that those trials are often conducted using *optimum* nitrogen levels. So it's no wonder you have to fertilize the heck out of these varieties to get good results.

Not so with Rugby. *You can actually get better results with Rugby than with other Kentucky bluegrass varieties while using less nitrogen fertilizer.*

And you'll also save on the *labor* it would take to apply that extra fertilizer and to do the extra mowing.

A HIGH-QUALITY TURF.

But no matter how much we tell you about the low-maintenance aspects of Rugby, ultimately you look for — and demand — *superior turf*. Your professional standards wouldn't settle for anything less. And we wouldn't want it any other way.

Rugby has a rapid spring green-up rate and excellent fall color. And it

also displays *sustained growth during the mid-summer heat stress period*, even under low nitrogen fertility and restricted moisture.

Moreover, Rugby possesses a high level of resistance to most of the common and current turfgrass diseases. This is another factor which may well result in significant savings in turf management costs.

THE ENVIRONMENTALIST'S GRASS.

Using less water and fertilizer means potential dollar savings for you, of course. But you can also take satisfaction in the fact you'll be using *fewer natural resources*.

By now you're well aware of the increasing social consciousness among the population in this regard. And by making available a Kentucky bluegrass that fits the world of the '80's, we believe we're fulfilling an important need.

For more information on Rugby, write Rugby Kentucky Bluegrass, P.O. Box 923, Minneapolis, MN 55440.

Rugby
KENTUCKY BLUEGRASS
For low-maintenance turf

that other students don't go because they have other commitments or don't want to travel.

Although the professional experience is sufficient, Solano would like to see co-ops get college credit for their work. "It would help a little as incentive to join."

Co-oping is a valuable experience which can assure the competent student of a job once he graduates. Bill Dunn graduated from Mississippi State in December. In January, he joined SaBell's Inc. in Lakewood, Colorado, as a production manager. Dunn first worked for SaBell's in January of 1978, when he co-oped in the nursery for five months. In the fall of 1978 he returned and worked on a quarter of a million dollar landscaping job. In the summer of 1979, he worked as a foreman. Today, five months after graduating from college, Dunn is working in SaBell's estimating department.

● "They come here primarily as a learning experience. Students go back knowing what they don't know." . . . David Pinkus, vice president, North Haven Gardens, Inc.

"In the beginning, I was a laborer," Dunn recalls. "Once I was in a position of authority, there was some rejection at first. Experienced laborers resented this 'college kid taking over,' but once they learned to understand me, some of them became my closest friends at work.

"You're better off going back to the person you co-oped with. You've worked out many of the bugs. You graduate knowing a lot about the company, and don't have a problem getting oriented." Dunn estimates that students who co-oped start out earning \$1500-\$3000 more than inexperienced graduates who didn't co-op.

Although students are paid for their co-op experience, Dunn cautions that co-oping is not a money-making venture. "If you moved away from school, all you could have saved goes to travel expenses. Mississippi is not that big of a market and most students have to get away. The biggest problem for the co-op student is transportation and living arrangements."

Nevertheless, the benefits outweigh the inconveniences. Co-oping, says Dunn, "lets you get some experience and find out what you want to do. You discover any adjustments in your curriculum you want to make. It makes you realize early on whether you like landscaping or not. I'd rather have somebody come sophomore year to work and then drop out, than have him suffer through school for four years."

Those students who do drop out of the co-op, but remain in landscaping, leave either because of the company or for personal reasons. Dunn

guesses that "about half didn't like the way the company is run; they just couldn't put up with it. The other half decided they didn't want to be away from home, from their girl friends, or from the lush landscape of Mississippi."

Industry Benefits

Employers who hire co-op students are not merely getting cheap labor. Students are recruited by mail, by visits to the campus, and by contacts made at trade conventions. Each company is responsible for designing some type of training program for the students. This program should allow the student to work in his chosen field and to progress as his skills improve.

A special training program was developed at Theodore Brickman Co. in Long Grove, Illinois, with the assistance of Mississippi State. The management training program is "part of a process," according to Bruce Hunt, vice president and general manager of the company. "Students go from one department to another; they work inside and outside. They experience all phases of the business—maintenance, construction, and estimating." Both landscape architecture students and others are exposed to office routine.

"We're pretty selective in our recruiting process," says Hunt. "Unless they're pretty sharp, we won't hire them. We're looking for quality, not just labor." Hunt and his company have been "generally pretty pleased" with the eight students they presently employ from Mississippi State, Ohio State, and Michigan State, as well as the 75-100 students who have worked at the company over the past ten years.

● "An employer gets to groom a person for four years so they can fit into the organization and begin contributing upon graduation." . . . Mike McMurray, landscape architect, Marvin's Garden and Landscape Service.

Most firms look for quality in their co-ops, and are more concerned with their potential than their actual experience or knowledge. "The students come here primarily as a learning experience," explains David Pinkus, vice president of North Haven Garden Inc. in Dallas. "We don't expect them to know a heck of a lot. Sometimes, we're surprised when they know something.

"Students go back knowing what they don't know," says Pinkus. "If you think you know it all, you're really in trouble. Experience shows you what you really need to be more concerned with. You hear a professor say something, or you read it

Continues on page 30

America – Fiesta



A grass team that won't break your budget

You can't control the spiraling costs of chemicals and fertilizer, but you can control the quantities that you have to use by planting improved turfgrasses like America Kentucky bluegrass and Fiesta Perennial ryegrass.

America and Fiesta, a new breed of turfgrasses that have the ideal turf qualities you want along with tolerance to summer and winter stresses and turf diseases. And you get all of this at a reasonable price.

America Kentucky bluegrass and Fiesta Perennial ryegrass — Two great turfgrasses that don't need pampering.

AMERICA
KENTUCKY BLUEGRASS

and

Fiesta
PERENNIAL RYEGRASS

Pickseed also produces

Touchdown
KENTUCKY BLUEGRASS

Produced by

PICKSEED
PICKSEED WEST Inc.

P.O. Box 888, Tangent, OR 97389 • (503) 926-8886

Distributed in Canada by Otto Pick and Sons Seeds Ltd.
Box 126, Richmond Hill, Ontario • (416) 884-1147

in a textbook, and say 'Gosh, I wish I knew that last summer.' It sinks in after having had some experience and working."

In addition to training programs, some employers have implemented procedures for evaluating the co-op's experience. At Landscape Design and Construction, Inc., in Dallas, Carl McCord, president of the firm, "highly recommends that each co-op student write a report on what his experience has been. He can write what he has learned about people, about equipment, what he can do, problems with designing, maintenance, whatever he wishes. Based on what he puts into it, the report is graded on a scale of one to ten. We give him a bonus based on the grade. It gives us a gauge in the interest he had in the job, so we can start paying attention to prospects."

McCord suggests that employers recruit co-ops from a number of colleges. "The student returns as a recruiter with lots of praise or condemnation, if you've been hard on him." Greater variety decreases the chances of getting saddled with a bad or an inaccurate reputation.

He also suggests that professors visit the company. "They should have some sense of what's going on. It's not fair to recommend a place without having been there."

McCord doesn't like his co-ops to stay in the same city or the same branch of his company. He has them move around so they can "see different aspects of the industry."

"The co-op student gets an opportunity to see all the different seasons, the cycle," says McCord. "If a student is interning in the summer,

● "We're pretty selective in our recruiting process. Unless they're pretty sharp, we won't hire them."

... Bruce Hunt, vice president and general manager, Theodore Brickman Co.

that's all he knows. He's not getting experience throughout the year."

Another advantage of co-oping McCord sees is that it "breaks the nine-month syndrome. We've been trained after 12 to 16 years of schooling to live like that. It leads to demands after less than a year for promotion."

Landscape Design and Construction has been hiring co-ops since 1974. McCord estimates retention of co-ops at "60-70 percent, even higher. By the hiring time, they've discarded you or you've discarded them. You get the marriage or the divorce before graduation. Because of that, you can turn the co-op loose in the field faster than the young grad with no experience."

Cooperative education, like all programs, is

not a panacea. It is not problem free. Wally SaBell, president of SaBell's, Inc. has worked with co-op students for five years. Two years ago SaBell's employed 17 co-ops, and last year they employed 12. SaBell arranged to help students find housing, "to encourage students to get field experience. Especially in landscape architecture, before becoming directors of programs, students need field experience to relate to the problems of the contractors. You can eliminate problems due to prethinking, which comes from experience."

But SaBell was disappointed. "The co-op's staying power was not good after they graduated. Only one out of five remained. They don't know what they want to do in college or once they graduate. Many of them expect to start at the top and work their way down. I don't think they really understand the business.

"Some of the boys couldn't adjust to the real world," SaBell said. "The difference between college and industry output is not always smooth. You went and educated yourself, but there are a lot of humdrum, monotonous little events to deal with. Landscaping requires more common sense than just having a degree in your hand."

Another problem SaBell sees is that "we're trying to produce too many designers. Not all people should be landscape architects and horticulture designers—how many designers do you need? We need more superintendents, product managers, and foremen. We need more two year programs rather than four year programs."

SaBell's solution to the problem of the unrealistic expectations which burden the co-op student and their overtraining is not fewer, but more co-ops. "They've got to get more practical experience. You've got to find out what the world's all about."

SaBell is a "190 percent advocate of co-ops. It's best to get a job or co-op with a larger firm where there's a wider range of activity. We look for individuals seriously interested in the industry. Some co-ops have said to me 'we've learned more with you in three months, than in three years in college.' The industry should encourage co-oping. Students should serve—even if it costs them a fortune."

J. Grady Brown, president of Dallas Nurseries and Garden Centers, agrees. His experience with Mississippi State interns over the past several years has been "fairly satisfactory on the job, but unsatisfactory in getting them back." Too many of the students are "home grown folk" who are unwilling to leave home to "derive a living." Brown applauds the recent increases in out-of-state students attending Mississippi State, and is trying to establish co-op programs closer to Dallas at Texas Tech, Texas A&M, and in Steubenville.