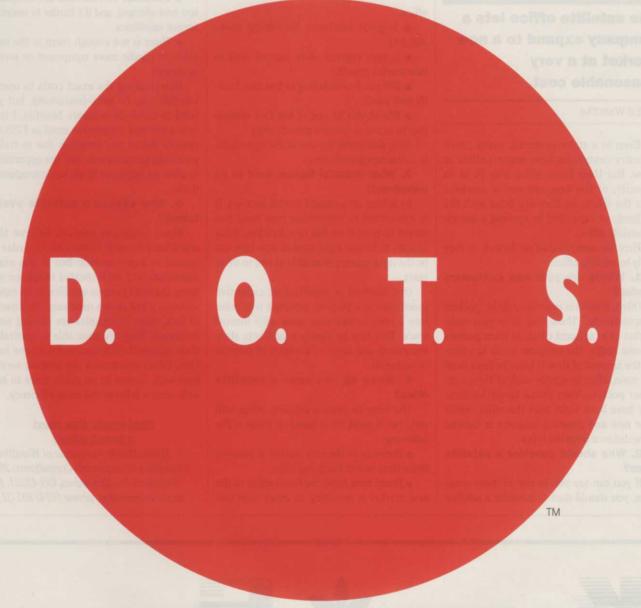
On the S.P.O.T. news...



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Expanding your business via a satellite operation

The satellite office lets a company expand to a new market at a very reasonable cost.

by Ed Wandtke

Even in a static economy, many green industry companies have opportunities to grow. But their home office may be at its capacity, or the new business is nowhere near the office. So they are faced with the challenge of expanding by opening a branch or satellite office.

Here are some evaluation factors, as they apply to satellite offices:

1. Where are your new customers located?

Often, growth is available only in "pockets of opportunity." These may be in your main market or in adjacent cities. As these pockets become larger, the company needs to evaluate the amount of time it takes to drive from the main office to service each of these customer pockets. Your initial target business may have been right near the office, while your new and growing business is located some distance from the office.

2. Who should consider a satellite office?

If you can say yes, to any of these guestions, you should start to consider a satellite office:

- Is your business becoming more mature?
- Is your current office located close to new market growth?
- Will you be marketing to this area heavily next year?
- · Would you be one of the first companies to locate in the new growth area?

Also, determine the size of the opportunity in the new growth area.

3. What financial factors need to be considered?

In setting up a second service location, it is important to determine how long you expect to operate in this new location. What appears to be the right market now may not be the right market in as little as two to three

One method of avoiding an expensive investment in a property purchase is to enter into a one- or two-year lease with limited space. This may be merely a facility to store equipment and serve as a source of supplies or materials.

4. When do you open a satellite

The time to open a satellite office will vary, but is most often based on some of the following:

- · Business in the new market is growing faster than nearer the home office.
- Travel time from the home office to the new market is resulting in more than two

hours of "windshield time" each day.

- Traffic to and from the new market is heavy, and opening a satellite office would allow crews to avoid long delays.
- · Customer service calls are becoming less cost-efficient, and it's harder to maintain service excellence.
- There is not enough room at the main office to handle more equipment or service personnel.

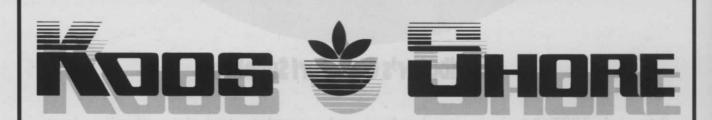
Determining the exact costs to open a satellite may be time-consuming, but you need to carefully compare benefits. I have seen a mowing company as small as \$750,000 operate out of two locations due to traffic. proximity to customers, and the opportunity to allow an employee to assume management duties.

5. Why choose a satellite over a branch?

Many company owners believe that a(nother) branch is needed in order to expand to a new market. But in this era of computers and sophisticated telephone systems, the need to open an office in an expansion city is not always necessary. As a matter of fact, many companies are closing some locations. They are thus able to centralize their administrative operations at one location. Other companies are renting service bays with limited to no office space to help with service delivery and route efficiency.

Next month: How about a branch office?

-The author is a principle at Wandtke & Associates Management Consultants, 2586 Oakstone Dr., Columbus, OH 43231. For more information, phone (614) 891-3111.



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Degree-day method of pest control shows it can work in Pennsylvania

The scouting method that relies on temperature readings can help predict when insects might become a problem.

■ Landscapers, golf course superintendents and horticulturists in Pennsylvania are using the "growing degree-day" (GDD) method of insect scouting on ornamentals, resulting in better-timed and more efficient control product applications.

Eric Vorodi, an extension agent for Lehigh and Northampton counties in southeastern Pennsylvania, compiles information recorded by 17 horticulturists in eight counties who track degree-days every spring. Information on pest sightings is then supplied, via a weekly pest report, to ornamental professionals who pay an annual fee of \$25 for the service.

(For an earlier report on the degree-day method of insect scouting, see LANDSCAPE MANAGEMENT, February 1992.)

Vorodi decided to give the GDD method a try after listening to a presentation on

Integrated Pest
Management (IPM)
by Dr. Warren
Johnson of Cornell
University. Vorodi,
Dave Suchanic, a
reg-ional nursery
agent, and Jeff
Jabco, superintendent of grounds at
S w a r t h m o r e
College, formed
the Southeastern
Pa. IPM Research



College, formed the Southeastern reveal best time to scout for pests.

DEGREE DAYS FOR SOD WEBWORMS AND WHITE GRUBS			
Target pest	Base 50° F		
Larger sod webworm (1st generation)	1050-1950		
Larger sod webworm (2nd generation)	2600-3010		
Bluegrass sod webworm (1st gen.)	1250-1920		
Bluegrass sod webworm (2nd gen.)	2550-3010		
Cranberry girdler	1700-2750		
Northern masked chafer (1st adult)	898-905		
Northern masked chafer (90% adults)	1377-1579		
Southern masked chafer (1st adults)	1000-1109		
Southern masked chafer (90% adults)	1526-1679		
Japanese beetle (1st adults)	1050-1180		
Japanese beetle (90% adults)	1590-1925		
A CONTRACTOR OF THE PARTY OF TH	Source: Dr. David Shetlar, Ohio State University		

Group to provide education and information about Integrated Pest Management to the area's ornamental horticulture industry.

The spring activity of most temperate plants and most insects is based on the accumulation of thermal units called degree-days. Degree-days for any given 24-hour period are calculated by averaging the highest daily temperature (T max) and the lowest daily temperature (T min) and subtracting a threshold temperature (Tt).

The threshold temperature is defined as the cardinal temperature below which no morphological development occurs.

To obtain data, the scouts use an Omnidata biophenometer—a small, battery-operated microcomputer. The device measures temperature and calculates, accumulates and stores GDD information.

Each Tuesday after 4 p.m. or before 10 a.m. Wednesday mornings, the scouts

record the accumulated degree days, insects observed over the past week, which host plant the insect was occupying, and the insect's stage of development (egg, larvae, nymph or adult) and any seasonal diseases such as powdery mildew or apple scab.

The scouts also use phenological indicators—for example, a plant at bud break or in bloom—to determine when a pest might be expected to appear. "If you don't have any way to measure growing degree-days, you can use the stage of plant development (as a guide)," says Vorodi.

Since timing is so important, the information is same-day faxxed to the extension office and the results mailed to 230 subscribers, including arborists, nurserymen, landscapers and golf superintendents.

The program has grown from 30 subscribers in 1991 to 230. Another 200 joined after realizing the benefits of the reports.

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ELSEWHERE

Examining water content in soil, page 46

Water, fertilizer not critical to plant health, page 46

DEGREE from page 45

"If subscribers scout on their own," says Vorodi, "this information keys them in to the best time to scout for pests; it tells you when they may be emerging.

"If someone in Allentown knows that a pest was sighted some distance to the south, then he can know when it will be time to scout. He'll know he can expect to see *this* pest on *this* plant, *this* week."

Vorodi likes the discipline built into degree-day monitoring. "It forces people to keep records, which they can have for the following year," he says. However, he further notes that the information should be used only as an estimate, since sightings can change from year to year.

The program does require more scouting time. Each cooperator now spends six hours per week scouting, up from 3.5 hours per week before they began using the degree-day method.

According to the research group, degree-days are not 100 percent reliable. They use only ambient air temperature, and do not take into account the warming

effect of solar radiation on solid surfaces. Also, degree-day information is not yet available for all insect pests, and the ranges for certain pests can be functionally too broad.

But the benefits of growing degreedays—disciplined record-keeping; a more accurate assessment of possible insect populations; and less indescriminate spraying—at least to Vorodi and his associates in Pennsylvania, far outweigh the limitations.

-Terry McIver

Important to monitor water in your soil

■ The movement of water in soil significantly influences plant development and demand for irrigation. The following terms are useful in understanding soil and water relationships:

Gravitational water: water pulled out of large pores by gravity after rain or irrigation. As the water is pulled out, it pushes out toxic gases and a new oxygen supply moves into the soil.

Capillary water: adheres to a soil particle the same way a film of water adheres to any object. This film of water moves, by way of "capillary attraction" from one soil particle to another. The smaller particles, such as clay, have greater, exposed capillary surfaces. As a result, water will rise higher in a one-inch tube containing clay than in a one-inch tube containing sand.

Hydroscopic water: a very thin film of moisture that "sticks" to each soil particle. Even in very dry soil, some hydroscopic water is present. The only way to remove all of the hydroscopic water from a soil sample is to bake the sample in an oven for a long time. Hydroscopic water is so tightly bound to the soil that roots cannot absorb it.

Field capacity: the maximum amount of water that a particular soil can hold; the amount of water remaining after gravitational water has been pulled out.

For a guide to estimating moisture content of soil, see the accompanying chart.

-Source: "The Virginia Gardener"

A Guide for Estimating Moisture Content of Soil

% of field capacity	Influence on plant growth	Loamy sand, sandy loam	Silt loam, loam	Silty clay loam
100+	Saturated soil. Too much moisture and too little air in the soil; persistence can damage plants.	Free water appears on soil when squeezed.	Same as sandy loam.	Same as sandy loam.
100	Excess mois- ture has drained into subsoil after rainfall or irrigation, and optimum amounts are available in rootzone for plant growth.	When squeezed, no free water appears on the surface, but it leaves a wet outline on your hand. Forms weak ball; usually breakes when bounced in hand; will not stick.	Same as sandy loam, but forms a very pliable ball that sticks readily.	Same as sandy loam, but rib- bons out (can be formed into thin strand when rolled between thumb and fore-finger) and has slick feeling.
75	Adequate mois- ture for plant growth. Lower moisture is mar- ginal.	Tends to ball under pressure, but breaks easily when bounced in hand.	Forms a ball, somewhat plas- tic, that sticks slightly with pressure.	Forms a ball, rib- bons out between thumb and forefinger; has slick feeling.
50	Inadequate moisture for plant growth.	Appears to dry; will not form a ball with pres- sure.	Somewhat crumbly, but holds together with pressure.	Somewhat pli- able, balls under pressure.
25	Moisture in soil is unavailable for plant growth.	Dry, loose, falls through fingers.	Powdery, some- times crusty, but easily broken down into a pos- dery condition.	Hard, cracked, difficult to break down to powdery condition.

Water, fertilizer not crucial for some woody plants

■ Research published by the Horticultural Research Institute (HR) in its June 1992 issue of the *Journal of Environmental Horticulture* (JEH), said frequency of irrigation and fertilization had only "minor impacts" on plant growth and survival of five selected drought-tolerant woody land-scape plants.

The results suggest that if the total volume of water is within the tolerances of the species, the frequency and duration (frequent shallow or infrequent deep applications) are "not critical," says researcher T.D. Payne of the University of California at Riverside, where the study was conducted.

Plant species included:

- •the Carmel creeper (Ceanothus griseus var. horizontalis),
- •Santa Ana (Ceanothus griseus var. horizontalis 'Santa Ana'),
- •California coffeeberry (Rhamnus californica),
- •Eve Case (Rhamnus californica 'Eve Case') and
- •Fraser photinia (*Photinia fraseri*), the only plant in the study that was not native

to California.

Noting a high mortality rate due to root pathogenic fungi, the researcher also suggested that, in addition to visual appeal, care should be taken to preserve disease and insect resistance when selecting cultivars for propagation and sale.

For a copy of the complete study as it appears in JEH, send \$15 to HRI, 1250 I St., NW, Suite 500, Washington, DC 20005. For more information, phone (202) 789-2900.

-Terry McIver

LAWN CARE

'People power' fuels ChemLawn rise

A year or two on customers' lawns and ChemLawn specialists think they know it all—or at least enough to be a manager.

■ "A circus," says Rick Knepper, grinning enormously. "But I would do every bit of it again."

Consider the former nomadic existence of one-time ChemLawn employee Knepper: 1973, Toledo, Ohio; 1975, Findlay, Ohio; 1977, Pittsburgh; 1978, Buffalo, N.Y.; 1980, Detroit; 1981, Columbus, Ohio.

Many former ChemLawn co-workers agree with Knepper. The company's business explosion in the middle to late 1970s colored their lives with the kaleidoscopic excitement of a circus: the next brass ring being no farther away than the next big city with suburbs and lawns.

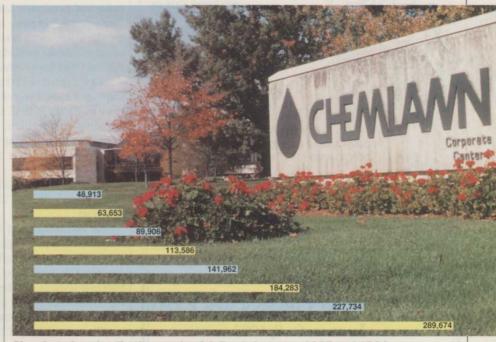
ChemLawn employees, confident that their efforts would be recognized and rewarded, fed off their own momentum. First opening markets in the Mideast. Then the East Coast and the Northeast.

"ChemLawn 'MacDonaldized' the market here. It changed the face of lawn care in the Northeast," says one longtime independent Connecticut operator.

"We would take the trucks and move the guys to the next city ourselves. Load them up, and get the guys moved in," recalls Willie Vorn Holt, a 20-year ChemLawn employee.

Up the ranks—The combined career paths of Knepper and Vorn Holt hop-scotched through a dozen Mideast and

This is part two of a three part series by senior editor Ron Hall outlining the rise and eventual disappearence of the ChemLawn Corporation from the lawn care industry.



ChemLawn's sales (in thousands of dollars), between 1977 and 1984.

Eastern cities. Starting as entry-level "lawn specialists" they rose to management jobs—Knepper in Columbus, Vorn Holt on the East Coast. (Knepper is now a franchise consultant in Columbus. Vorn Holt, in Baltimore, will be marketing a dry cleaning franchise system with several partners soon.)

"The strength of the ChemLawn organization was its focus on the individual," recalls Mark Cruse, 17 years with ChemLawn, vice president of operations 1980-85. "There were times when we had more opportunity than people."

Tad Grubbs in just eight years, for instance, worked in Columbus, Minneapolis, Buffalo, Toledo and Pittsburgh before becoming Detroit Regional Manager in 1981.

"I thought it would be a valuable experience, being a part of so many different marketplaces," says Grubbs, now national sales manger for C&S Turf Care Equipment, Canton, Ohio.

"Also, I think we enjoyed working with | vice philosophies that Dick Duke had start-

a lot of different people. We were having fun."

Dick Duke himself probably didn't foresee the wildfire he'd ignite.

Could he have foreseen that when he climbed aboard his first lawn care tank truck in Troy, Ohio, in 1969 ("Gertrude") he'd tossed a pebble into the American business pond that would ripple outward for another 15 years. Years, in fact, after his death.

Responsibility—This was partly due to a management system that Duke constructed. Or, perhaps more accurately, he allowed to evolve. Duke couldn't imagine that most people didn't crackle with the same fire to succeed that he did. He willingly—gladly almost—surrendered responsibilities to others, if they displayed any willingness to accept them at all.

"As a manager you felt you had the opportunity to use your own skills and your own judgment as long as you stayed within the confines of the people and service philosophies that Dick Duke had start-

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LAWN CARE INDUSTRY

ed the company with," says Grubbs.

Duke's judgment of people, in hindsight, now seems almost uncanny.

Two additions to ChemLawn's original management family-a group that remained basically intact through ChemLawn's first decadesustained the company's unparalleled growth following Duke's unexpected death on August 23, 1977.

Several years before his death, Duke had persuaded Larry J. Van Fossen, the company lawyer, to Knepper: "We didn't know become ChemLawn's president. The how big it could get, we didn't company founder similarly recruited know when to say stop." William Grant from Johnson Wax.

(Van Fossen directed Chem-Lawn until 1988, a year after its purchase by Ecolab in 1987. Grant, vice president of operations, remained seven years before leaving the industry for personal business interests in Atlanta.)

No crisis-Duke's sudden death (heart attack) stunned ChemLawn personnel.

But no management crisis ever materialized, even though the company had, just months earlier, began expanding its services by starting a franchise division, and test market- Beecher Smith was part of ing ChemScape tree & shrub care and commercial maintenance.

"The reason why ChemLawn didn't miss a beat was because Dick Duke had already empowered people with responsibilities," says Cruse.

"Jack (Van Fossen) came in, he helped re-organize the company, and set us off on the next stage," says Vorn Holt. "It became very obvious he knew how to run the show. And the same thing was very true for Bill Grant. If you had a new idea on how to do something, he was all ears."

ChemLawn topped a hectic 1977 (26 new branches, \$49 million in sales) with \$63.6 million in sales in Grubbs: Skills acquired in one 1978: this after a numbing winter market were used in opening and late spring in the Mideast, the next. ChemLawn's stronghold.



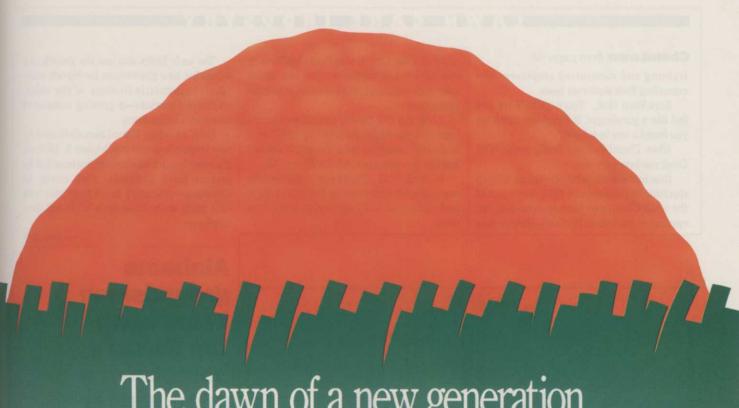


ChemLawn's westward expansion.



By the end of the 1980 season, ChemLawn, now also firmly established in the Mid-Atlantic and Northeast, eclipsed the \$100 million sales mark. In that year it opened 22 additional branches (16 in new market areas), 11 new ChemScape locations and five more commercial sales

Decentralized-It did this with basically the same structure it had always relied on: branches operating on a profit center basis with branch managers responsible for sales, expenses, and for producing a profit, continued on page 50



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Growing Better Through Technology

AWN CAREINDUSTRY

ChemLawn from page 48

training and motivating employees and expanding their customer bases.

Says Vorn Holt, "You'd go to work and feel like a gunslinger. If a problem came up, you found a way to solve it."

When ChemLawn was finally ready, West Coast markets were ripe.

Beecher Smith, who started as a lawn specialist in Columbus in 1971, was a part of the small ChemLawn team spearheading the opening of markets in Portland, Albuquerque and Salt Lake City. It was heady business as markets like Los Angeles and San Jose, under sales pressures, split, like amoebas, into multiple branches.

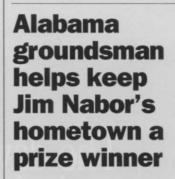
Entering the 1980s, ChemLawn could legitimately begin describing itself as a "national" company even though it opened just five new branches in both '81 and '82.

In April 1982, ChemLawn registered its one millionth customer. By the end of '82 it had registered \$165 million in lawn care sales.

The early 1980s also saw the growth of a somewhat new phenomena for branch managers, particularly in some of the older, established markets—a growing number of customer cancellations.

Even so, when ChemLawn dedicated its new corporate center on October 8, 1982—a glass-enclosed lobby/atrium surrounded by picture-book grounds, just north of Columbus—managers could justifiably look with pride at the company's 3,200 full time employees.

- Ron Hall



Groomed, flowering landscape is 'just like having another salesperson on the payroll,' grounds manager says.

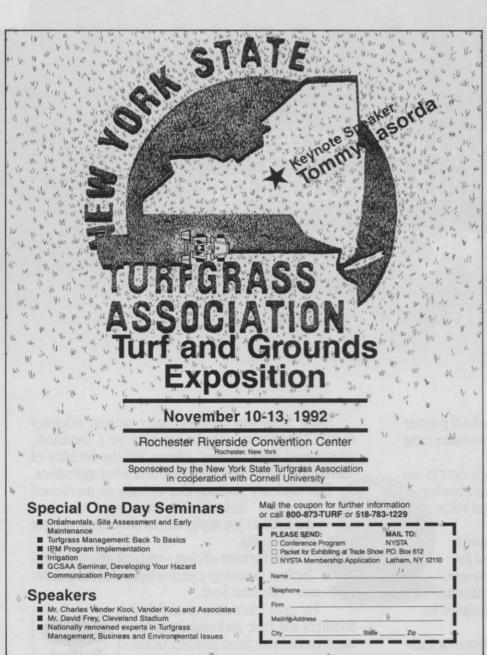
■ Sylacauga, Ala., is grounds manager Greg Bolton's hometown. Both Greg and Sylacauga are glad it is.

Sylacauga (pronounced sil-a-cog'-a) is also:

- Jim Nabors's hometown (Gomer Pyle). Gollllleeeev!
- The location of quarries that produce the whitest marble in the world.
- The only town where a person was known to have been hit by a falling meteorite. (She survived.)

This city of about 13,000 people prospers in the low, green hills of east central Alabama. It's a quiet but industrious town with four sizeable industries either in or around it—textiles, paper, fertilizer, and marble quarries. Pine and oak trees cool Sylacauga's pleasant streets and provide shade for homes that are neat but, for the most part, modest.

"A man sure would be sorry if he couldn't find work here," comments local fishing guide William Davis, Bolton's lifelong friend and an employee at the nearby continued on page 52



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