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AS WE SEE IT

JERRY ROCHE, EDITOR-IN-CHIEF



The plight of the small businessman

We are seeing in this country over the last
10 years an increase in the number of
small businesses like landscaping and
lawn care companies.

The Internal Revenue Service says 19
million non-farm businesses filed tax
returns in 1988—an increase of seven mil-
lion (or 58 percent) over 1980 figures.

Federal government statistics indicate
that businesses with fewer than 20
employees represent approximately 85
percent of all American businesses. Attest:

No. Empls.	% of Businesses
1-4	47.1-51.7
5-9	21.7-23.1
10-19	12.3-14.6
20-49	7.9-10.6
50-99	2.6-3.4
100-499	1.9-2.3
500+	0.3-0.4

Those with fewer than 50 employees, then,
represent approximately 94.5 percent of
the businesses.

Can we surmise from these statistics
that more of our labor force is growing
disenchanted with the corporate profile?
To some extent, yes. Can we surmise from
these statistics that more of our labor
force sees value in controlling their own
destinies—regardless of the amount of
work it takes? Yes.

According to the National Association
for the Self-Employed (NASE), small busi-
ness owners list independence or the
opportunity to be their own boss as the
main reason for self-employment.

Independence is wonderful. But there
are some downsides, as most of our small
business readers doubtless realize.

The NASE—about which you'll be
reading more in future issues of this mag-
azine—also says that entrepreneurs work
an average of 52.5 hours per week, as
opposed to the national average of 43.5

hours per week.

That's one downside. Another is that
there are no large organizations in place
to effectively lobby for their interests in
Washington.

That is why it is of utmost importance
to you, the small businessperson, to get
involved with events like the PL-
CAA/DowElanco "Legislative Day on the
Hill" scheduled for Feb. 24-25 in
Washington, D.C.

In this particular program, attendees
visit personally with their Congressmen
and Senators to discuss and promote the
current issues, legislation and regulation
facing Congress.

I attended the first Day on the Hill two
years ago. Even after 20 years in the mass
media, I was surprised at the way our fed-
eral government works.

Of all the people I've met who attended
one of the first two Days on the Hill, I
can't say I've heard even one say that the
time and money wasn't well spent.

The PLCAA (404-977-5222) is handling
all reservations. Speakers for warm-up ses-
sions and some meals will be provided by
DowElanco. There will be a special educa-
tional session, "Lobbying Your Legislator"
at the Green Industry Expo to help pre-
pare Day on the Hill attendees.

If you are a lawn care company that
isn't a member of the PLCAA, you should
be. If you *are* a member, you should try to
attend its "Day on the Hill." If you're not a
member of the PLCAA, but of *another*
trade organization, let your leaders know
that this idea could work for their special
interest group, too.

Because one of the major plights of
owning a small business is that—when it
comes to the big issues:

*If you don't do it yourself, nobody else
will.*

Jerry Roche
Editor-in-Chief



THERE'S NOTHING



A revolutionary leap in the evolution of mowing.

To see where rotary mowing is headed, take a good look at the sleek new Jacobsen HR-5111.™ It delivers an 11'-plus, high-production cut and exceptional trimability in a rugged four-wheel-drive package.

Built for long life in rough country.

Hydrostatic 4WD, a heavy-duty axle with differential lock, and a reliable, fuel-efficient, 51-hp diesel let the HR-5111 confidently tackle tough hills that stall the competition.

Our new box-channel steel, straight-line frame takes the pounding of tough conditions like no other mower in its class. Plus, the full-fiberglass body keeps its good looks for years, even in the harshest environments. And it's all backed by a 2-year, 1,500-hour warranty.*

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For high productivity, 4WD mobility, heavy-duty durability and operator comfort, there's nothing like the HR-5111 on turf. So be sure to ask your Jacobsen distributor for a demonstration today.

*See your Jacobsen distributor for full warranty details.

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LANDSCAPE MANAGEMENT

INCORPORATING LAWN CARE INDUSTRY

DECEMBER 1991 VOL. 30, NO. 12

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VBPA ABP

ASK THE EXPERT

DR. BALAKRISHNA RAO



Will B.t. eliminate bagworms?

Problem: We are having severe problems with bagworms on evergreens and locust plants. We are thinking of using a *Bacillus thuringiensis* biological control product. How effective is this material, and when is the best time to use it? (Pennsylvania)

Solution: Generally, bagworms on evergreen and other plants appear near mid-June. This is the time to treat.

Bacterial biocontrol products such as Thuricide, Dipel or Foray 48B Flowable concentrate can be used to manage bagworms. These B.t. products contain different *Bacillus thuringiensis* strains. The Foray 48B Flowable concentrate reportedly can give eight days of residual without using a spreader-slicker. This is about three days longer than other *Bacillus thuringiensis* Kurstaki formulations.

During the winter, removing the bags by hand is another way to manage next year's population. Eggs overwinter in the female bag. Remove, and then destroy or dispose of the bags in tightly sealed plastic trash bags. This sort of sanitation practice and biocontrol approach will help minimize the bagworm problem.

Mushroom control strategies

Problem: We are finding a large number of mushrooms growing around wolmanized wood. In this area, they had lots of trees which were removed before building the house. Is there any fungicide which can be used to eliminate the mushrooms? (New York)

Solution: The mushrooms you describe are growing on organic matter under the wolmanized wood. The organic matter's source is probably roots left behind after the trees have been removed. Another source would be leftover lumber from the house's construction.

The mushrooms can be hand-picked when found. To minimize the problem effectively, the underground buried objects need to be removed. This may be laborious and time-consuming. Another method is to fumigate the area. (This would kill the desirable plants or treat roots in that area, so be careful when using fumigants. Read and follow label specifications for better results.)

Paint for gypsy moths

Problem: Are there any paint applications which will eliminate gypsy moth eggs? (New Jersey)

Solution: Your idea sounds interesting. However, it may not work well because the paint may not penetrate deep enough to kill the eggs or prevent eggs from hatching because of hairs on the egg mass.

I am not familiar with any studies where this has been tried. Reports indicate that using materials like horticultural oil, vapor guard or some insecticides applied directly on the egg mass are not practical. One way to find out is to try it on a small egg mass.

Egg masses may be deposited at different heights on the tree. This may present a problem in treating all of them. Too, the

gypsy moth can produce silken threads and balloon from one tree to another, thus causing larvae re-infestation.

Another option is to scrape off the egg mass, where feasible, and destroy them. Again, with this approach, it may not be practical to reach and remove all egg masses and also manage the gypsy moth spreading from other areas.

You can also try wrapping valuable trees with burlap when spring comes. Gypsy moth larvae may take shelter underneath the burlap covers. Periodically inspect the wrapping and collect and destroy any gypsy moth caterpillars you find.

Managing white pine dieback

Problem: White pines in our area show 12- to 18-inch-long terminals that are dying back. They tend to bend like an inverted 'U' shape. (Pennsylvania)

Solution: From your description of the symptoms, the problem appears to be related to white pine weevil insect damage.

This insect is a very common pest of white pine in landscaping and in forest areas, attacking the terminal's new growth. Affected plant parts discolor and show dieback, curled into the shape of a shepherd's crook. Upon closer examination, minute holes about the size of the tip of a ballpoint pen can be seen. To further verify, remove the browned-out bark from the affected area and look for larval tunnelling and lots of sawdust-like frass. You may find yellowish larvae if the life cycle is not completed.

Larvae feed on the inner bark and sapwood of the leading branches and terminal shoots of the main trunk. The affected leader will be killed and the subsequent branches growing in that area will be destroyed or eventually will be killed.

Larvae pupate in woody chip cocoons and emerge as adults. The beetles begin to emerge in late July to late August, leaving distinct emergence holes in the bark. Adults feed on the bark of terminals before dropping to the litter to overwinter. On warm spring days, adults move from the litter to the tree tops to mate and lay eggs in the bark. This insect also attacks spruce. Treat valuable pines and spruces with insecticide.

To manage the problem, prune and destroy all infected branches in early spring. Applications such as Dursban, Ficam, lindane or methoxychlor can help manage the adults. Treat leaders when overwintering beetles appear, about mid-April to mid-May. Valuable plants also should be treated again between mid-August and mid-September.

Provide proper mulching, watering, fertilizing and pest management as needed to help improve plant health.

Balakrishna Rao is Manager of Technical Resources for the Davey Tree Co., Kent, Ohio.

Questions should be mailed to ASK THE EXPERT, LANDSCAPE MANAGEMENT, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2 to 3 months for an answer to appear in the magazine.



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LANDSCAPE MANAGEMENT

COVER STORY

Natural organic fertilizers



Why you can't ignore them any more: a percentage of your customers or constituents will demand that you apply them. Or they'll find someone else to do the job.

■ Poultry manures. Sewage sludges. Seed meals.

It's hard to believe that anything made from these materials could look attractive to anybody; but they do. Fertilizers made from these materials are beginning to catch the eye of professional turf care providers.

This, in spite of the perception that these so-called natural organic fertilizers:

- have an odor;
- are dusty;
- don't give turfgrass that initial burst of dark-green growth in early spring; and
- are significantly more expensive than synthetic fertilizers.

Odor and dust are marginal problems

with some natural fertilizers. But the concerns about turfgrass green-up and cost, to a greater or lesser extent, are legitimate for all of these fertilizers.

Whatever shortcomings these materials have, increasing numbers of you *will* use *some* natural fertilizers on some of the turfgrass under your professional care.

More likely, because of cost and green-up considerations, you'll use a hybrid product containing both natural and man-made fertilizer materials. (ChemLawn's two-year-old Organix alternative program uses a fertilizer that's 52 percent natural organic, 48 percent manmade.)

Why will *you* use some natural organic material?

A percentage of your customers or constituents will demand that you apply them. Or they'll find someone else to do the job.

Proponents of natural organic fertilizers claim their products possess attributes that synthetic turf fertilizers, for all their efficiency and economy, lack. They insist that their natural products:

- 1.) improve soil structure; and
- 2.) provide energy sources for an incredibly complex combination of soil micro- and macro-organisms that,

through their biological processes, reduce thatch and lessen the incidence and severity of turf diseases. (A small but growing body of university research suggests this is true.)

Also, natural fertilizers depend upon microbial action to break down complex organic molecules into nitrogen and other elements necessary for plant growth and health. These nutrients become available to turfgrass plants over weeks and months, providing slow, consistent turfgrass growth. Because of low salt indexes, natural fertilizers pose little danger of burning turfgrass.

With all these advantages, why haven't turf managers used them more extensively before? There are two answers:

- 1.) they haven't needed them, and
- 2.) cost.

The better-grade manufactured turf fertilizers, long available, do a good job of maintaining turfgrass. They also release nutrients slowly and, applied properly, aren't likely to burn turfgrass either. Also, manmade fertilizers are easy to apply, and their performance is predictable.

Along with these comparable benefits, manmade fertilizers—even the highest-

quality slow-release materials—are less expensive and contain two and sometimes three times more nitrogen by percentage than natural fertilizers.

Natural service is not something lawn and landscape maintenance businesses can barge into with their eyes closed. But, it is something they're increasingly willing to offer in addition to their established programs to attract that still-small and specialized portion of the market.

Or they want to protect their own clients from the encroachment of a competitor's new and aggressively marketed alternative program.

Even the larger, production-driven application companies show refreshed interest in customer service. Increasingly,

they're tailoring programs to accommodate smaller markets within markets.

Today's natural organic products are processed, deodorized (as much as raw materials will allow), and some are pelletized. Several suppliers claim their products can be applied in spreaders as conveniently as manmade materials.

Also, natural products can be mixed with manmade products such as urea-formaldehyde. The turfgrass rootzone biota benefits from the addition of organic matter and a host of micro nutrients, while the UF provides a green-up to the turf, particularly in the spring when the ground is still too cool for natural material to break down and release its nutrients.

Industry describes these products as

hybrid or bridge products. Most of the LCOs spoken to by LANDSCAPE MANAGEMENT magazine said the cost of these products (somewhere between manmade and totally natural organic materials) would make them easier to incorporate into a professional program.

Although some of the public is raising questions about groundwater contamination and chemical use on lawns, turfgrass managers can demonstrate—facts at hand—that the environmental benefits of using manmade fertilizers far outweigh any threat.

Yet some of the public *perceives* that natural products are somehow safer, at the very least more acceptable, than synthetic products.

—Ron Hall



Mangum: Would like natural organics priced lower

On the golf course: natural fertilizers a supplement

■ Golf course superintendents interviewed by LANDSCAPE MANAGEMENT like the *supplemental* benefits provided by organic fertilizers during the summer months.

But in the fall and winter, they still depend on the proven benefits of synthetic and synthetic organic products.

Ken Mangum, superintendent of the Atlanta Athletic Club's 36-hole facility, uses a natural organic fertilizer intermittently during the summer.

After recently sodding four new sand-based greens, Mangum tried a 6-2-10 formulation. "We found that a lot of the natural products tend to stay in sand longer, and they also add organic material and microbial activity to the sand," he notes.

Mangum does, however, wish organics were more reasonably priced. "I think if they can bring the price down to where it's a bit more cost-effective, you'd see more people using them," he says. "They do have advantages that we all like to have. It's a question of how much it's worth."

Natural organic fertilizer has other benefits: "We like the Ringer product in the summer when the bentgrass is under heat and traffic stress," Mangum explains.

Russell Bateman, superintendent at the Baltimore Municipal Golf Center, recently solved a summer patch problem, thanks in part, he says, to natural organic fertilizer.

Bateman says research at Michigan State University indicated that 1/2 pound of the fertilizer allows you to cut fungicide rates in half.

"We did in fact do that," he recalls, "and we did control summer patch, although we saw a slight amount (return) at the end of season."

The cost per 1000 square feet is more, but Bateman sees a trade-off with his "big savings" on fungicides.

Bateman says natural organics also fit in with his IPM program.



Pennypacker: Tissue analyses can predict turf problems

When asked about fairway treatments, Bateman says one fairway, treated organically, had what he describes as a "less visible" disease presence, although that was not supported by testing.

John Pennypacker, superintendent at the Greenbriar Country Club in Chesapeake, Va., began supplementing his synthetic fertilizers with a natural organic product (Sustane) in the summer of 1989.

"Sand-based greens have become the thing of the future," he says, "but they also have been a royal pain to a lot of superintendents. There are no bacteria or micro-organisms in the sand to help combat disease."

Pennypacker says he wanted to keep the greens growing without the surge growth he sees with IBDU (isobutylidene diurea) fertilizers. So he applied 8/10 lb. of Sustane per green per month from May to August and "started noticing a large reduction in pythium and brown patch."

Synthetic products remain a part of Pennypacker's arsenal, and are used from September to December, and in January if the weather is not too cold. "We need them after a long, hard summer," says Pennypacker. "You get root development, and you can't get that with the natural organic. There's not enough of it there to make it through the growing period."

For the club's fescue lawn, Pennypacker tried a "bridge product" (containing both synthetic and natural organic elements), at a 1 lb./1000 sq. ft. rate.

"In about five days, the synthetic that was present released, giving a quick green-up. And about 10 days later, everything greened up," Pennypacker notes. A second application after 15 days of rain brought "astounding" results.

A supplemental application of Lesco's Twosome helped eliminate some lingering brown patch.

—Terry McIver

A matter of expectations

■ If *some* weeds, *some* insect and *some* disease damage don't bother your customers, then, by all means, consider reducing turf pesticide use.

But this is a big, big "if."

Irv Brawley, grounds superintendent at Davidson College near Charlotte, N.C., says "you've got to have a customer or a community that will accept a certain amount of weeds."

Brawley has, for almost 10 years, cared for about 100 acres of the college grounds practically without using pesticides.

Practically? Brawley says his crews sometimes have to fight an occasional insect infestation with control products. He says he chooses the least toxic material that he feels will solve the problem. "We don't do any preventive spraying," he maintains.

Brawley describes his grounds care philosophy as an extension of organic gardening, principles he read about and practiced before attempting them on a college campus with its 1600 students.

"In some respects I compare what we do to growing a zucchini or a tomato plant. The secret is in having a healthy soil, the right pH, the right varieties of plants (turfgrass)," he says.

The cornerstone of his program, he says, is developing a "healthy" soil. Basic to this, he feels, is the use of organic fertilizers. He's used Milorganite, Fertrell, Nitro-10, and Earth-Rite with good results, and this season he's been using Sustane's turkey litter product.

Although the campus itself is a picture postcard of buildings, trees and turf, Brawley admits the college's par-three golf course is not in good shape—particularly the greens.

Brawley says the college didn't pressure him to implement his "natural" grounds program; he developed it himself. "I



Mostly natural materials are used on Davidson College grounds.

started out on a small scale, and it evolved," he explains.

Mike Grandy, grounds superintendent of Oak Park, Ill., had no choice this past summer. "We were told we'd not use pesticides under any circumstances," he says of an April 1991 decree from the Park District Commissioners.

Grandy hurriedly put together a battle plan. Weeds would have to be removed by hand, he reasoned, but how?

First, Grandy rated all the parks, ballfields, playgrounds and public areas under his jurisdiction.

Category 1: areas where weeds are a safety problem or where they're so obvious they'd draw complaints (flower beds, tennis courts, around signs and memorials, etc.);

Category 2: commonly used areas where weeds are unsightly but not a safety problem (comfort stations, near playground equipment);

Category 3: areas where weeds aren't particularly noticeable.

Then he hired three "weed removers" at minimum wage. "If in doubt, pull it out," were his instructions to these laborers. The weeders would start in the the high-profile areas and weed these intensively, and then work into the other categories as time and their progress allowed. Weeding is hot, boring work and Grandy says worker turnover increased as the season progressed.

He says he finished the 1991 season marginally satisfied with the no-pesticide program.

"I believe our challenges next year will be bigger. Next fall might be our big test," he tells *LANDSCAPE MANAGEMENT* magazine.

Then, apparently, it will be up to the 53,000 residents of Oak Park to decide for themselves if they like what they see in the parks and playgrounds.

—Ron Hall

Avoid environmental spiels

■ Officers from Lawnmark lawn care operations will meet with state regulators in New York before devising marketing strategies for Lawnmark's alternative lawn care programs.

Lawnmark president J. Martin "Marty" Erbaugh says he wants to make sure nothing his company advertises or implies concerning the use natural products is misleading to customers or prospective customers.

Erbaugh's caution is understandable.

The U.S. Federal Trade Commission, during the May 1991 Senate subcommittee lawn care hearings, reported it had uncovered five instances of deceptive advertising by lawn care companies. Four involved claims made by companies purportedly offering "organic" alternatives to chemical lawn care.

These investigations focused on claims that the advertised services or products were safe, non-toxic or safer than other types of lawn care services or products,

reported the FTC.

Mark Nuzum, president of Harmony Products, thinks that lawn/landscape marketers should go easy on the save-the-earth angle.

"I think the message should be that you're providing a better product and a better service," he says.

Adds Scott Boutilier, Ringer Corporation: "I think a good thing to tell clients is that you're integrating the use of natural materials into your programs and you're using them at appropriate times.

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