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AS WE SEE IT

RON HALL, SENIOR EDITOR



Just another banana split?

I almost felt like reaching over the counter, snatching the waxed pint cup from her hands and thundering, "Here, this is how you're supposed to make a banana split."

Biting my lip, I kept my mouth shut on the other side of the glass counter.

The keen anticipation I'd felt when I'd finished my lunch salad ("Fat-free dressing please.") in a nearby burger joint faded by degrees.

Probably, few people have watched a banana split being built with more interest than I did that particular Sunday afternoon. In my short drive to the dairy, an almost weekly ritual in the summer, I'd worked up an unholy passion for that godly concoction of sliced, firm bananas, ice cream, strawberries and syrups. I hadn't treated myself to one for two full months.

So you can imagine the silly grin that lifted my ears when I marched into the dairy and saw the counter in front of me empty. The first nice weekends of the spring find the whole town lined up almost out the door here. You can wait 40 minutes to get a banana split. It's worth it, too.

Something didn't seem quite right this time, though.

I don't know exactly what it was. Maybe it was the attitude of the young woman who took my order. Yea, that's it. To her, it seemed to be only another banana split.

Had she looked up from her job, she would have recognized the anxious look in my face. I tried to make it read: don't you understand, if I'd wanted *just* a banana split, I would have stopped at *just* another dairy. I want a banana split like I always get here, a "you're-not-going-to-eat-all-that-are-you?" banana split.

As I watched, my apprehension grew.

The dairy worker was polite and nice and all that, but she didn't construct this banana split with the same reckless enthusiasm that has always made this particular dairy special.

The policy here has always been to keep piling on the ice cream, syrup and nuts until it starts tumbling off.

This time, though, she measured each scoop of ice cream, each dollop of strawberries. She even leveled off the spoonful of nuts, the excess falling back into a can, and not onto the top of my banana split.

Then, when she didn't crisply *rap, rap, rap* the bottom of the huge paper cup against the counter top so that everything would settle and she could pack even more bananas, ice cream and syrup into my banana split, that's when I wanted to reach over the counter and grab the cup out of her hands.

"Hey, this is how you do it!" I wanted to yell as I saw myself plunging the stainless steel ice cream scoop into the freezer. Again and again.

But, of course, I didn't.

Instead, I paid her the \$2.70, squeaked a feeble thanks and retreated toward a tiny booth along the wall.

No need to stick out my tongue anteater-style this time to lap up nuts and syrup so it wouldn't spill to the floor.

She had filled the banana split to the line on the paper cup indicating I'd received a full portion, never mind that the line is just two-thirds the way up the cup.

I don't know if this is a new company policy. I hope not. If it is, there's no reason for me to stop here anymore.

I can get *just* a banana split *just* about anywhere.

LANDSCAPE MANAGEMENT

'WE KNOW YOUR TURF'

FEBRUARY 1995 VOL. 34, NO. 2

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8 Golf activity...on the rise

This summer, at peak season, almost 200,000 people will be working in golf maintenance, which will also contribute about \$6 billion to the nation's economy.

Jerry Roche

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Few product categories offer the green industry as much selection or choice as utility vehicles.

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Terry McIver



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ON THE COVER: Makena Golf Resort in Maui, Hawaii. Shown is No.7 hole, South Course. Designed by Robert Trent Jones, Jr. Photo by Henebry Photography. Photo courtesy Robert Trent Jones II, Palo Alto, Calif.

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ASK THE EXPERT

DR. BALAKRISHNA RAO



Aphid damage resembles herbicide injury

Problem: One of our clients complained that their honeysuckle hedge plants were damaged by our lawn-applied herbicides. The symptoms did indeed look like a herbicide problem. However, upon close observation, we found small insects. The problem was mainly at the tip of the branches, with leaves showing a curling-up type of symptom. We tried to explain that it appeared to be an insect problem and not a herbicide injury. What do you think is the possible problem and solution? (Pennsylvania)

Solution: Based on your description of the symptom, the problem appears to be related to honeysuckle aphid injury. Honeysuckle aphid, *Hyadaphis tataricae*, is common in Eastern Europe and since 1976 has been found in many parts of North America, where bush honeysuckle plants are grown.

Due to extensive aphid feeding activity and the toxic effect of aphid saliva, affected leaves show growth distortion and mimicking symptoms of herbicides. Extensive feeding can cause the shoot to grow slow, resulting in a "witches" broom of terminal twigs and foliage. The leaves will be folded and may be slightly chlorotic (pale) due to the sucking, feeding activity of aphids.

Honeysuckle aphids overwinter on twigs and stems, and hatch into stem mothers in the spring during budbreak. These stem mothers produce many young aphids asexually. Stem mothers and newly-born aphids feed on the underside of leaves. In late summer, additional generations of aphids will be produced. They feed on the upper surface of leaves, causing them to fold upward. This upward folding can be mistaken for dicamba herbicide injury. These aphids have a whitish powdery wax over their bodies. In September, winged males and wingless females can be found.

Reportedly, species of honeysuckle such as *Lonicera tatarica*, *L. kovalkovi* and *L. microphylla* are susceptible to these aphid problems.

Consider treating with insecticides such as acephate, malathion or a horticultural oil in early spring. Reports indicate that in order to stop them during the "witches" broom growth, applications should be made before foliage appears. Repeat applications as needed, and read and follow label specifications for better results.

To prevent run-off, spray only till wet

Problem: When we spray trees and shrubs with insecticides and fungicides, the excess pesticide mixture generally drops onto mulch underneath the plants. How can we avoid this? Can we use any sticker products to prevent this? And how long do we need to keep pets or the public away from the area? (Maryland)

Solution: Follow good application techniques to minimize drift and/or excess spray solution being deposited on understory plants or mulch.

Reports have indicated that it is sufficient to wet the foliage; there is no need to spray to the point of drip. In most cases where the problem is primarily foliar, spraying to the point of leaf wet-

ness is sufficient to manage pest problems.

Most pesticides contain a type of spreader/sticker material. Generally, there is no need to use a sticker-type material unless the label suggests to do so. Therefore, in my opinion, follow good application techniques and spray to the point of wetness.

For a reentry waiting period, as a general guideline, keep away from the treated area as per label restrictions. Since the mulch area is a non-target site, there should be very little spray deposit resulting from tree spraying.

Generally, keep away until the surface is dry. If someone is overly concerned, it would be better to avoid getting pesticide on the mulch by covering the area with a tarp.

Strange growth caused by oak leaf blister

Problem: What would cause oak leaves to have risen and uneven growth? There is no evidence of any spots, insects or mites on the leaves. Based on pictures and descriptions in reference books, we believe the problem may be oak leaf blister disease. If you think this is the problem, how do you manage this disease? (Ohio)

Solution: Oak plants have many leaf problems that will cause the symptoms you described. For positive identification, consult your local cooperative extension personnel.

Based on your description of the symptoms, I believe that the problem could be related to frost injury, herbicide injury, anthracnose or most likely, oak leaf blister. If it is blister, normally you will see the raised area on the upper surface of the leaves.

Generally, in the early summer, local areas of leaf tissues grow faster than the rest of the leaf and cause the "blister" effect. The lower surface of the leaves will curve inward, without any fluids. These blisters are often lighter green than the normal leaf tissue. Generally, it is not a major threat to oaks. However, if the disease is severe, it could be aesthetically objectionable, and can often result in mid-summer defoliation.

Oak leaf blister, caused by the fungus *Taphrina caerulescens*, doesn't often become severe enough to require fungicide treatment. However, for aesthetic reasons and to minimize defoliation, if the disease potential becomes great, an application of fungicides such as zineb, captan, maneb or mancozeb should help manage the problem.

Reports suggest that one application of fungicide before bud break should help manage oak leaf blister; however, applications after bud break are usually not effective. Read and follow label specifications for better results.

Dr. Balakrishna Rao is Manager of Research and Technical Development for the Davey Tree Co., Kent, Ohio.

Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.

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Golf maintenance:

a \$6 billion boost to the U.S. economy

**Superintendents
looking — with
much optimism —
to increased
activity in 1995.**

DURING THE HEIGHT of the growing season, almost 200,000 people are working on the nation's golf courses, according to an exclusive survey of the golf maintenance industry by *LANDSCAPE MANAGEMENT* magazine.

That statistic was determined by multiplying the mean peak-season employment (13.3 people, according to the survey) by the entire universe of U.S. golf facilities (14,648, according to the most recent National Golf Foundation report).

In addition, the golf maintenance industry pumped up to \$6.3 billion into our economy in 1994—an average maintenance budget of \$433,856 according to LM's survey, times the NGF's universe of U.S. courses.

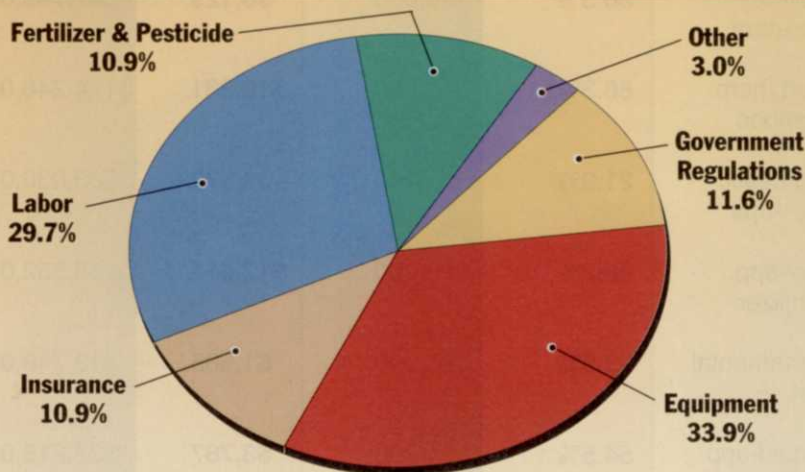
These figures, and others from the survey, are indicative of the increasingly prominent role which the game plays in our society.

"In 1960," observes golf course archi-



Fastest Growing Cost of Golf Course Maintenance

(by % of respondents)



Annual Budgets for Golf Course Maintenance

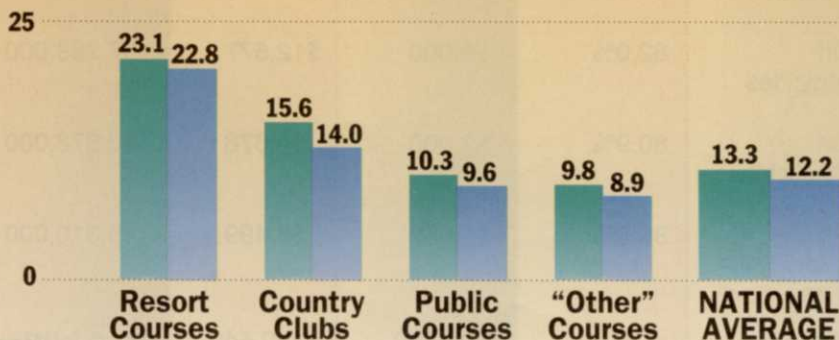
National Average=\$433,856

base:187



Number of Maintenance Employees

base:94



text Jerry Matthews, "there were about 6,300 golf courses in the United States and about 4.4 million players. Since then, the number of courses has more than doubled, and the number of players has quadrupled."

Resort courses, obviously, continue to be at the high end of the spectrum. They employ about 23 maintenance people on the average, compared to 15 for private clubs and 10 for public courses. Resort courses also spend an average of more than \$900,000 on maintenance functions, almost double that of private clubs and nearly triple the amount of public courses.

Good response rate—Our survey was mailed to 991 superintendents in November, 1994. We received 194 completed questionnaires by Christmas, a response rate of 19.6 percent. Forty-four of the 50 states were accounted for, with the highest response from Florida, California and Midwestern states like Indiana, Pennsylvania, Michigan, Illinois and Wisconsin.

By all indications, the industry's growth has not yet started to slow down.

According to the NGF, 358 courses opened in 1993 (the last year complete figures are available) while 671 were under construction and 543 were in planning stages.

Currently-operating courses will see their budgets grow by an average of 4.4 percent in 1995, our survey notes, with public courses seeing the greatest increase, 5.1 percent. The maintenance budgets of private clubs are to grow 4.4 percent, resorts 3.4 percent.

Clearly, most of the growth is coming in the public sector. Of the 1,572 courses under development a year ago, the NGF says, 1,269 were planned to be either daily fee or municipal.

High-ticket items—Where are the nation's superintendents spending their money? According to LM's survey, about \$1.3 billion is used to purchase equipment, fertilizers and pesticides. Most of the rest—about \$5 billion—went toward paying the 200,000 workers (an average of \$20,000 per employee, after miscellaneous expenses).

High on the superintendents' list of "must-have" products are fertilizers, fungicides, turfseed and irrigation equipment.

The industry as a whole (extrapolating

survey averages to LM's total golf readership of 16,093) spent nearly a quarter of a billion dollars on dry-applied fertilizer in 1994, and an additional \$175 million on fertilizer/herbicide combination products. Superintendents also purchased \$118 million worth of turfseed and more than \$100 million worth of irrigation equipment.

It appears from the survey results that those are the very same products superintendents cite as becoming more expensive. When asked what one item's cost

34 percent of superintendents surveyed say equipment costs are growing fastest.

was growing fastest, 33.9 percent of our sample replied "equipment."

Other popular responses to that question were: "labor" (29 percent), "government regulations" (11.6 percent), "fertilizers and pesticides" (10.9 percent) and "insurance" (another 10.9 percent).

Another observation from the survey findings: with the recent emphasis on environmentally-friendly courses, "natural" control products are rapidly catching on. Eighty-two percent of our random sample said they are currently using organic fertilizers in their turf care program. An additional 48.4 percent report using biological controls like *Bacillus thuringiensis*, horticultural oils and soaps for pest control.

Despite the aforementioned increases in the cost of maintaining a well-groomed course, and despite criticism from the media and environmental groups, superintendents remain largely hopeful. When asked how they felt about their industry, 73.7 percent of our survey participants used the word "optimistic." Just 5.2 percent said "pessimistic" and the remaining 21.1 percent were neutral.

—Jerry Roche

Purchasing Power of Golf course Superintendents

PRODUCT CATEGORY	% OF SAMPLE	MEDIAN DOLLARS	MEAN DOLLARS	PROJECTED TO CIRC.
Soil aerators	36.5%	\$5,000	\$8,129	\$47,749,000
Fert./herb. combos	66.3%	\$10,000	\$16,331	\$174,246,000
Domestic pick-ups	21.9%	\$12,100	\$9,372	\$33,030,000
Dry-app. fertilizer	88.2%	\$10,000	\$17,511	\$248,552,000
Ornamental fert.	53.9%	\$1,000	\$1,585	\$13,748,000
Liquid-app. fertilizer	54.5%	\$1,200	\$3,787	\$33,215,000
Post-emerg. herbicides	75.8%	\$2,000	\$3,184	\$38,840,000
Pre-emerg. herbicides	68.5%	\$3,000	\$4,854	\$53,509,000
Small mowers	24.2%	\$1,000	\$1,656	\$6,449,000
Mid-size mowers	11.2%	\$7,750	\$7,790	\$14,041,000
Large mowers	30.9%	\$13,000	\$14,200	\$70,613,000
Turfgrass sod	59.0%	\$2,200	\$4,949	\$46,990,000
Irrigation/sprinklers	78.7%	\$2,000	\$8,082	\$102,360,000
Compact tractors	33.7%	\$11,000	\$13,167	\$71,409,000
Turf fungicides	82.0%	\$6,000	\$12,677	\$167,289,000
Turf insecticides	80.9%	\$2,000	\$4,676	\$60,878,000
Turf-seed	86.5%	\$4,000	\$8,499	\$118,310,000
TOTAL		\$93,250	\$140,449	\$1.3 billion