TABLE 2: CONTACT FUNGICIDES

<table>
<thead>
<tr>
<th>Common name</th>
<th>Trade name</th>
<th>Chemical class</th>
</tr>
</thead>
<tbody>
<tr>
<td>captan</td>
<td>Captan</td>
<td>carboximide</td>
</tr>
<tr>
<td>chloronebb</td>
<td>Terraneb SP</td>
<td>chlorinated aromatic</td>
</tr>
<tr>
<td>chlorothalonil</td>
<td>Daconil</td>
<td>nitrile</td>
</tr>
<tr>
<td>etridiazole (ethazole)</td>
<td>Terrazole, Koban</td>
<td>triadiazole</td>
</tr>
<tr>
<td>mancozeb</td>
<td>Fore, Manzate</td>
<td>ethylene bis-dithiocarbamate</td>
</tr>
<tr>
<td>PCNB (quintozene)</td>
<td>Turfcide, Terraclor</td>
<td>chlorinated aromatic</td>
</tr>
<tr>
<td>thiram</td>
<td>Spotrete</td>
<td>dithiocarbamate</td>
</tr>
</tbody>
</table>

a Also known as “protectant” fungicides. Contact fungicides remain on plant surfaces and don’t penetrate into tissues. All are multi-site inhibitors and have low risk for supporting fungal resistance development.

b Purported to have some systemic activity.

They don’t work equally against all fungi. It’s important that you develop your own information on fungicide effectiveness.

One of the main differences among the active ingredients of systemic fungicides is their mode of action. In selecting a systemic fungicide, use this checklist of considerations:

► What disease do you want to control?

► What fungicides have good activity against “my” disease?

► What order of resistance risk do various products show?

Then, choose the most effective fungicide. If repeated applications are needed during a single season, use another product with a different mode of action.

If you aren’t achieving adequate disease control, consult with a turfgrass pathologist before selecting other fungicides. LM

— The author is a professor at the University of Illinois.

They don’t work equally against all fungi. It’s important that you develop your own information on fungicide effectiveness.

One of the main differences among the active ingredients of systemic fungicides is their mode of action. In selecting a systemic fungicide, use this checklist of considerations:

► What disease do you want to control?

► What fungicides have good activity against "my" disease?

► What order of resistance risk do various products show?

Then, choose the most effective fungicide. If repeated applications are needed during a single season, use another product with a different mode of action.

If you aren’t achieving adequate disease control, consult with a turfgrass pathologist before selecting other fungicides. LM

— The author is a professor at the University of Illinois.

Visit our Web site’s “This Month’s Features” page for a Quick Reference Guide to contact and systemic fungicides for managing turfgrass diseases that spells out which products are most effective against which diseases.

---

OTTERBINE
BAREBO, INC.

1-800-AER8TER
610-965-6018 • www.otterbine.com

Product leasing available.

Maybe It’s Time to Look into an Aeration System

No one should have to live with poor water quality. Being the industry leader for over 50 years, Otterbine offers a variety of surface spray and sub-surface aeration systems that effectively circulate water and transfer oxygen. And with independent testing conducted by the University of Minnesota, you can rest assured that Otterbine systems will surpass all industry standards and your expectations. The result? Beautiful, healthy waterways—on the surface, as well as below where it counts!
BNA Corporate Center

A 2000 Grand Award Winner of the Professional Grounds Management Society for Small Site

It's rumored that AAA Lawn Industries employees who take care of the BNA Corporate Center whistle George Strait tunes while they're mowing and weed-eating. It probably has a lot to do with the fact that both AAA and BNA are located in Nashville, TN, where any cowpoke with a six-string and a dream can shoot for jukebox glory.

But the only string AAA employees play with is located at the end of a trimmer. And just because BNA is a small property doesn't mean they have time to sing in the sun. Extra care is taken to keep grass clippings out of 1,800 sq. ft. of flower beds. Crew members edge tree wells once a week, and clear curbs, sidewalks and patios with backpack blowers after they mow and edge the property. On the property's north side, they use weedeaters to attack a slope steeper than Clint Black's Stetson. There is plenty to prune on this property, including pfitzer junipers and creeping euonymus. Since the irrigation system is old, it needs to be constantly monitored.

The quality work at BNA is reflected in crisp edge lines and eye-pleasing mowing patterns. On a bright spring day, the Bradford pear trees are breathtaking, as are the Yoshino cherry trees and specimen Japanese maples. Color? The crew puts out over 10,000 annuals each spring.

Flower beds are meticulously weeded and groomed by a dedicated specialty crew.
Japanese maples decorate a courtyard between the buildings where tenants can take a break from their hectic day. (Inset) A bright pansy and tulip display welcomes building tenants to work.
Hardline on hardscape

BY VICKY POULSEN

Three landscape company managers talk about the risks and rewards of installing hardscaping

Hardscaping done right can be a landscape professional's signature mark, especially in high-end residential and commercial markets where price isn't a huge factor. Those contractors who can "deliver the goods" at the price promised are a hot commodity.

Whether it be a simple brick-edge design to showcase a flowerbed or an elaborate, natural-looking stone wall nestled around a koi-filled pond, it seems like everyone these days wants to add a feature to their outdoor space. Consumers are hungry for products and materials similar to the ones they see on HGTV (Home and Garden Television). The astute contractor will find a way to feed their insatiable appetite with appealing designs that will make their homes stand out.

Unlike plant installations, hardscapes carry huge financial risks. Retaining walls that fail and pavers that crack cost contractors thousands of dollars to redo. Whether the installer or the manufacturer is to blame, the results can be disastrous to a contractor's reputation.

The rewards for properly installed hardscaping are big, though. To get an idea of how others have succeeded in this field, we asked three contractors from across the country to lay out their blueprints for hardscape project success. Here's what they had to say:

**LARGE CONTRACTOR**

Name: Kurt Kluznik, CCLP
Title: President
Company: Yardmaster, Inc.
Location: Painesville, OH
2000 revenues: $9 million
Business mix: 50% residential, 50% commercial
Employees: 250
Company profile: Started business in 1971. Has three locations in Cleveland area, one in Columbus and another in Detroit. Operates 50 to 60 crews of up to six members
a team, depending on the job. More than half of the design/build services the company provides are devoted to hardscapes (i.e. water features, walls, patios, walks, arbors, fences, gazebos, pools, etc.).

Product picks: "We buy a lot of stone from manufacturers and from quarries in Ohio and Pennsylvania. We also use a lot of the Unilock products." Wood, liners, filters, pumps, outdoor lighting and irrigation supplies also top their product list.

Design stage: "We have landscape architects on staff who do our design work. Through their interview process with our clients, we get a feel for what our clients like and what will work well with the site. We try to pick up colors and textures that already exist on the site and match those styles or properties with the products we'll be using. I think more people are being exposed to creative and functional landscape design, and that exposure is driving the market.

"We also have a studio loaded with photos portraying samples of our work and pallets of materials and styles, so when customers visit they actually pull a photo or material from our display board and find exactly what suits their tastes. It also exposes clients to other hardscape possibilities they weren't looking for when they first came in."

Profit tips: "We get our budget clues from the types of homes our customers own. We also have an excellent estimating process that develops the most cost-effective budget for each project."

Extra help: "We subcontract some of our work (even some design work) to meet the 'seasonability' or demands at the time. We'll also use subs who worked for us at one time but now have their own design or construction businesses."

Words of wisdom: "Hardscaping is a lot of fun because it allows you to get creative. However, there are lots of risks involved. If you build a wall and it falls, or if a patio doesn't drain right and you have to redo it, it can cost you $100,000. It takes a lot of experience. Plus, there's a lot of non-billable time that's involved before you set foot on the site. If you don't estimate that time, it can be a nightmare."

MEDIUM CONTRACTOR

Name: Mike Wheat
Title: Owner
Company: Wheat's Lawn & Custom Landscape
Location: Vienna, VA
2000 revenues: $6.7 million
Business mix: Mostly residential
Employees: 80 off-season/90 peak season
Company profile: Started in 1978, the company serves high-end residential accounts. Service mix includes 30% design/build, 55% maintenance and 15% turf and tree/shrub care. Of design/build services, 25% is devoted to hardscape. Also employs a mason. Specific hardscape services include pavers, retaining walls, benches, arbors and gazebos. Operates two- to three-man crews; number of crews depends on the job.

Product picks: "We look for quality products with great manufacturer and dealer support. That's critical to us."

Design stage: "We have landscape architects and designers on staff."

Profit tips: "We interview our clients to learn what their wants and needs are, and then we present various options to them based on what they tell us. We're in a high-income area, so price really isn't an issue."

Extra help: "We do everything in-house. We subcontract some electrical work."

Words of wisdom: "Be selective with clients, and make sure you price accurately. We're not in it to make a quick buck. We're in it for the long-term relationship with our customer. Our customer service is second-to-none, and that's key to our success."

SMALL CONTRACTOR

Name: Michael Becker
Title: Co-owner
Company: Estate Gardeners, Inc.
Location: Omaha, NE
2000 revenues: $470,000
Business mix: Mostly residential
Employees: 15
Company profile: Estate Gardeners, Inc. was established in 1993. Landscape design/build installation work amounts to 80% of the services they provide, with the remaining 20% devoted to garden maintenance. Operates three-person crews devoted to both installation and maintenance. "In our area, we have the highest percentage per capita of millionaires. We have one customer who hired us to install..."
Educate yourself about the materials and processes of installing them properly by talking with your suppliers. Never cut corners. Follow the manufacturers' suggestions.

Product picks: “When purchasing products for our hardscape projects, I'm looking for quality and appearance. I can't use a highly durable product if it doesn't look good. Looks and durability have to go hand-in-hand. If I'm doing segmental concrete retaining walls, I want blocks I can break for corners. With pavers, I'm looking for a variety of colors and shapes. Unfortunately, I think these man-made walls lack the soul of natural products, but they're effective for what they're made to do. You can't beat these walls when it comes to strength. And we do incorporate natural materials such as moss rock boulders and rubble stones when we can.”

Design stage: “We do our own landscape designs with the help of a computer software program. We also charge for our landscape designs, and make that clear when we meet with clients. At the end of the design process, the customer can keep the design and do what they want with it.”

Profit tips: “Before we plan designs for customers, we want to know their budget constraints and ultimate goals for the entire site. From there, we develop a master plan and begin to inventory their favorite colors, garden preference such as an Italian or French design, and lifestyle needs. Communication is key to our success. We listen to our customers as well as educate them. Many times, they’ve never worked with a design/build firm and don’t know what to expect. They want a nice garden, but they don’t know how it comes together.”

Extra help: “A good network of subcontractors is key in keeping ahead of a project. However, any communications go through us first. We’re the ones our customers go to if they have a question or concern. This gives us control over the entire project.”

Words of wisdom: “Educate yourself about the materials and processes of installing them properly by talking with your suppliers. Never cut corners. Follow the manufacturers' suggestions. Like your lawn chemicals, always read the labels first. Unlike landscape work, hardscape work can cost you thousands of dollars if something goes wrong.”
All natural

Manufacturers talk about the increasing demand for natural-looking hardscape products

BY VICKY POULSEN

Natural products seem to be all the rage when it comes to hardscape. But since they can't always be used to create the desired look, manufacturers offer synthetic products that can withstand tough weather conditions and look as beautiful as the real thing.

As a result of watching home improvement projects on television and visiting large retail home outlet stores, consumers today are more savvy. They demand innovative design, expert workmanship and quality products. They also look for outdoor products that reflect their lifestyle and the personality of their home.

Many consumers consider their yard a natural extension of their living space, and that probably explains why there's been an explosive growth in patio, pond, gazebo, terrace and deck sales.

We went to product manufacturers and asked them what the hottest items in the hardscape market are today. Here's what they had to say:

**Bomanite, Madera, CA**

559/673-2411

Chris Stewart, Vice President/Technical Services

Hardscape products: Colored, textured and imprinted architectural concrete paving.

Key trends: “Consumers are looking for textures and colors that highlight patterns and achieve an antiquing effect. Some patterns vary from formal to abstract patterns to non-repetitive stone slate-type material that can also be combined with different textures to create a different look or accent different design areas.

The Bomanite process begins with a concrete mix poured into forms to create a monolithic slab. After initial floating, a dry-shake color hardener is hand cast evenly across the plastic surface of the wet concrete, then uniformly floated into the surface. A second shake of color is applied, then the surface is refloated. These pavers from Bomanite achieve an antiquing effect.

When textured tools are going to be used, a release agent is applied across the colored concrete's surface. The next step is the imprinting phase, then the sealer when the concrete is well-cured.”

continued on next page
continued from page 47

Best features: "The sealing process prevents moisture penetration and protects the color. Monolithic construction eliminates loose or "turned up" paving materials. Bomanite has greater durability and structural strength of its plain gray counterpart and can take on the color, texture and pattern of other materials."

Curv-Rite, Wayland, MI
800/366-2878
John Mindling, Director of Sales

Hardscape products: Aluminum landscape edging and paver restraints.

Key trends: "In today's market, there seems to be a movement toward more natural landscapes. Contractors are installing flower beds that have softer lines. Long, sweeping curves have replaced hard, formal rectangular bed shapes. People also seem to want new landscape installations to look as if they've been in place for years.

We've found that contractors are looking for landscape edging that's easy to install, flexible enough to incorporate curvilinear designs, and strong enough to maintain straightaways. They also want edging that maintains their bed design edges but doesn't draw attention to itself, and they want it to stand up to abuse from professional maintenance equipment."

Best features: "Curv-Rite was started with the intent of making a safe, easy-to-install landscape edging product. We chose to make the product out of aluminum because of its unique properties. Aluminum is a renewable resource that's lightweight yet extremely durable; won't rust like steel or rot like wood; impervious to heat and won't crack in the cold; and has the ability to be flexed into many shapes.

"Our telescoping design runs through the entire section of edging, eliminating waste and speeding up the installation process. This connection eliminates the need for separate connector pieces to join sections together. You also don't lose the ability to connect sections together if you cut a section in half. The profile of our landscape edging is symmetrical, which means it cannot be installed upside down."

Master-Halco, La Habra, CA
562/694-5066
Michael Lindsey, Marketing Manager

Hardscape products: Offers a variety of fence solutions, from chain-link to wood fencing, ornamental iron to vinyl.

Key trends: "We're seeing an accelerated growth in PVC (vinyl) fencing primarily because it's low maintenance. You never have to worry about painting, rotting, warping, termites, corrosion or rust. When you consider the benefits of vinyl, it's a cost-effective solution in the long run. Wood has also peaked in price lately, where the cost for vinyl has decreased in recent months as it becomes more mainstream."

Best features: "Ease-of-installation is an important factor to our installers. Our products are designed to be user-friendly and aesthetically-pleasing. A complicated installation can cost a contractor time and money. Our fence systems are engineered to reduce installation mistakes.

"For example, our Monu

tmental Iron Works fence is a modular system made up of many component parts designed to support each other. Using industrial rivets, the constructed panels have the solid look and feel of authentic ornamental iron."

Permaloc Corp., Holland, MI
800/356-9660
Bob Anderson, Director of Sales and Marketing

Hardscape products: Aluminum edging.

Key trends: "The addition of elaborate and complex bedding designs using aluminum landscape edging, brick pavers and increased amounts of decorative stone is the hot trend."

Best features: "The vertical grade changes and curvilinear demands incorporated into these new residential designs require the installer to use professional grade products such as..."
aluminum landscape edging and paver restraints to achieve long-term integrity."

**Versa-Lok Retaining Wall Systems, Oakdale, MN**
800/770-4525
Matt Singer, National Sales Manager

Hardscape products: Segmental retaining wall systems.

Key trends: "Landscape professionals are seeking more natural-looking products like our weathered Accent segment and Mosaic retaining wall systems which provide an attractive, random appearance. Our weathered concrete units undergo a tumbling process to create rustic, old world character. We carefully blend specific colors to give our products a more natural look. For example, in the midwest, we can dye our block with a brown/tan blend to fit the aesthetic needs of that region. Because they’re integrally-colored, units may be split or modified without loss of color. Our concrete SRW units can create beautiful hardscapes such as planters, staircases, columns, free-standing walls, concrete patios and large retaining walls."

Best features: "Our concrete segmental units offer unlimited design capabilities. Solid units are so versatile that curves, corners, steps and columns can be made using only one block. By sawing or splitting solid units, structurally stable corners ranging from 25-degree outside corners to 140-degree inside corners can be built. With all our products, no mortar or concrete footings are required."

---

**Temporary / Seasonal Labor Visas**

Receive work visas for your peak season and have a loyal, productive labor force that you personally choose! Every day you delay shortens the duration of your visa.

Join us in our sixth year of obtaining and maintaining a legal work force. You can trust that our experience and motivation is sincere and our customer service is unbeatable!

Call now for information packet and a quote.

Foley Enterprises
Your labor solution for the millennium and beyond...

*Other Industries are also eligible for this type of work permit...call us now to find out if your company is eligible*
HARDSCAPE products

**Chip off the old block**

Presto’s Geoblock porous pavement system is a series of interlocking blocks designed to offer turf protection and load support in areas used by heavy vehicles. The blocks create a flexible structural bridge system within the topsoil layer to support and distribute concentrated loads. For more information contact Presto at 800/548-3424 / Circle no. 273

**Paving the way**

Bomanite Corporation offers a variety of colored, textured and imprinted architectural concrete paving. The company offers 100 patterns and 25 colors in textures such as slate, granite, limestone, sandstone, cobblestone and used brick. Also offered are two types of imprinting tools for smooth surfaces (such as tile or brick patterns) and natural textured surfaces (such as granite or wood patterns). For more information contact Bomanite at 559/673-2411 or www.bomanite.com / Circle no. 272

**Edging along**

PermaLoc Corporation’s CleanLine aluminum landscape bed edging is easy to install and available in 1/8- or 3/16-in. thickness by 3-, 4- or 5-1/2-in. depth. Finishes include mill (natural aluminum), black duraflex (electrostatically applied, baked on paint) and black anodized. Heavy aluminum stakes lock on to the edging and anchor it into the ground. An interlocking snap-down connection eliminates possible weak points in the system. For more information contact PermaLoc at 800/356-9660 / Circle no. 274

**Go mosaic**

Versa-Lok’s mosaic retaining wall system provides an attractive, random appearance while maintaining installation simplicity and durability. Mosaic walls use three solid concrete units of varying heights and widths to achieve a complicated yet classic appearance. The split face of each unit blends well into any natural or architectural environment. For more information contact Versa-Lok at 800/770-4525 or www.versa-lok.com / Circle no. 275

**Nice curves**

Curv-Rite’s aluminum edging system is available in two different thicknesses — 1/8-in. and 3/16-in. — and is available in mill finish, deco-black, deco-bronze, deco-green or black anodize. Its telescoping design runs through the entire section of edging, eliminating waste and speeding up installation. For more information contact Curv-Rite at 800/366-2878 / Circle no. 276