# PHOTO: JOE BOGGS

# MARKET

## WATCH

PG 23 LAWN/TREE CARE Managing Asian longhorned beetles







# The killer in black and white

How to detect and manage Asian longhorned beetle infestations. By JOE BOGGS, AMY STONE and DAN HERMS

nless you live where the Asian longhorned beetle (ALB) (Anoplophora glabripennis) has been found in North America, you may view this huge beetle as just another non-native pest on what seems to be an ever-lengthening list of alien invaders. However, this exotic import is very different from anything that's ever arrived on our shores. Unlike other devastating pests and diseases of foreign origins such as the emerald ash borer (EAB) (Agrilus planipennis), Dutch elm disease, and chestnut blight that kill trees in one genus, ALB kills trees belonging to 13 plant genera. This non-native tree killer has the potential to cause a catastrophic loss of trees in North America like nothing we've ever seen before. Infested trees do not recover and they are continually reinfested until dead.

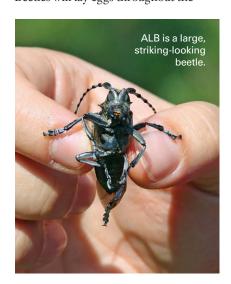
Because ALB is confined to relatively small and distinct infestations that spread slowly, eradication remains a viable strategy. However, successful eradication of ALB depends upon early detection.

#### **DETECTION**

Here are some of the key identification and diagnostic features for ALB:

▶ The beetle: ALB is a large, striking-looking beetle; adults measure 1 inch to 1.5 inches long. The beetle belongs to the family Cerambycidae; beetles in this family are commonly called "longhorned" because of their extremely long antennae.

▶ Oviposition pits: Every ALB infestation starts with female beetles chewing circular to oblong-shaped pits, around 0.5 inch in diameter, through the bark and down to the white wood of host trees. The pits remain evident for about a year, until wound tissue seals the pits. They are often more obvious in the spring and fall, when sap oozes out of the wounds and runs down the bark. The beetles will only lay eggs on *living* stems; new pits will not appear on firewood. Beetles will lay eggs throughout the



tree, and pits are as likely to be seen at eye-level as they are to be found high in trees. Trees of all sizes are selected as long as stem size can support complete larval development.

► **The larva**: It's the larval stage of ALB that kills trees. The immature stages are found inside infested trees, which is why it's important not to move wood (e.g. firewood, logs, etc.) outside ALB quarantine zones. Cerambycid larvae are commonly referred to as "roundheaded borers," and ALB larvae look like typical cerambycid larvae. So, when roundheaded borers are found in the living stems and branches of a preferred ALB host such as maples, the find should trigger concern and further investigation. ALB larvae tunnel into the xylem (white wood) of the tree, which weakens stems, causing branch breakage.

#### ► Coarse frass and wood shavings:

The larval wood-boring activity produces coarse white frass that's exuded from the infested stems. The frass looks like "wood wool" or excelsior packing material. Adult female beetles also produce similar wood shavings as they chew their oviposition pits. Both the larval frass and beetle wood shavings collect in branch forks and on the ground beneath infested trees.

\*\*Pencil test:" Adult emergence holes are 3/8 inch to 1/2 inch in diameter and the holes extend deep into the xylem. The holes are large enough to easily insert a No. 2 pencil and this "pencil test" is effective in separating phloem-feeding borers from ALB; emergence holes of phloem feeders are much shallower. Of

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continued from page 23 course, ALB holes are on living, healthy branches and trunks; there are a number of native longhorned beetles that infest dead or dying stems.

- ▶ Branch breakage: ALB larval feeding activity in the white wood (xylem) causes substantial structural weakening of infested branches, leading to branch breakage. Always look at the ends of broken branches to see why the branch broke. Look for heavy tunneling across the rings of the white wood. In fact, an infestation in Worcester, Mass., was discovered by U.S. Department of Agriculture personnel examining the ends of branches broken after an ice storm.
- ▶ Heavy woodpecker damage: ALB larvae bore into the white wood (xylem); woodpeckers must excavate deeply to extract these larval meat morsels.
- ▶ Tree dieback and death: ALB infestations eventually kill trees, however, death comes very slowly. While infested trees will show canopy thinning, this symptom on maple sometimes does not occur until the main stem is riddled with emergence holes. Canopy decline is *not a reliable indicator* of an ALB infestation.

#### **MANAGEMENT**

Managing ALB with insecticides alone can be problematic, because insecticides do not make trees "immune" to ALB. Once the larvae bore into the xylem, they

### THREATENED SPECIES

The beetle kills all species of Acer (all maple species); Aesculus (horsechestnuts and buckeyes); Ulmus (elms); Salix (willows); Betula (birches); Platanus (Sycamore / Planetrees); Populus (Poplars); Albizia (Mimosa); Cercidiphyllum (Katsura); Fraxinus (ashes); Koelreuteria (goldenraintree); Sorbus (mountainash); and Celtis (Hackberry). While the first six in this list of genera are generally considered the trees most commonly attacked by ALB, all of the trees in this list can be attacked and killed by ALB. All are food for ALB; all are considered hosts.

#### >> WEB EXTRA

For more information on ALB, including its history in North America, visit Landscape Management.net and click on Web Extras.









Clockwise from top left: It's the larval stage of ALB that kills trees; ALB larvae produce frass, and adult female beetles generate wood shavings; adult ALB emergence holes are large enough to easily insert a No. 2 pencil into; infestations lead to woodpecker damage.

are out of the reach of systemic insecticides that do not translocate effectively within the xylem. If a tree already has ALB larvae in the xylem, those larvae will successfully complete their development and new adults will emerge and disperse even if the tree is treated.

Adults are more susceptible to insecticides as they feed on twigs and leaf veins, however, insecticide efficacy is not 100 percent, which is required for eradication. Insecticide trials conducted on small (2-inch to 4-inch diameter) uniform trees in China found that ALB density was reduced by 71 percent to 90 percent. Achieving high adult mortality is challenged by the extended period of time that adults are active during the season (April through December, with peak activity from May to July), limitations associated with product label restrictions, and the fact that size matters (efficacy is uncertain on large trees). This is why insecticides always have been used in a supporting role with other eradication tools and primarily outside of the core infested zones. The most effective eradication approach has been

the removal and destruction of high-risk trees. Report suspected ALB infestations at http://beetlebusters.info.

Eradication can work if we all remain vigilant for new ALB infestations and remain informed and updated on new developments. Attend training programs on ALB and keep reading. Remember: Always ask yourself if your source is credible. Separate facts that are based on research from opinions that are based on speculation. Daniel Patrick Moynihan said it best: "Everyone is entitled to their own opinions, but not their own facts."

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#### **MAINTENANCE**

## A selective approach

Choosing maintenance clients carefully makes Cutting Edge Lawn Care a success.

By CASEY PAYTON

odd Tindel, owner of Cutting
Edge Lawn Care in Austin,
Texas, says he takes an "oldfashioned" approach to business. He keeps things simple and focuses
on customer service. As the owner of a
\$1.6 million company that does almost
all maintenance, Tindel is also selective
about the customers he works with and
the work he tackles.

"We get asked about other work such as design/build, but we've always primarily focused on the maintenance end," says Tindel. "We only handle irrigated yards, and we screen for customers that want weekly service at a *minimum*. We want to make sure the yards stay alive, so if they can't meet those criteria, then we pass on them as customers. That means we do turn down a lot of people. But we want to best service our clientele and in order to do that, we need to be on the property at least once a week, if not more."

Tindel shares more about his selective approach to business and why it's helped grow his customer base.

### What top trends are you seeing in the maintenance business?

Communication is key. We're old fashioned in many ways and we find that works. Customers just want a company they can rely on. One of the biggest complaints we hear is that landscape companies don't show up on time or they don't communicate. We try to be consistent and also maintain that communication with our customers. It sounds so simple, but it goes a long way. When you get busy, one of the first things you might do is ignore the phones or put a customer off for a few days, but that's something that we never let happen.

The little things count. We do what we say we're going to do, we have all our employees wear uniforms and we're fully insured. These sound like little things, but they go such a far way. We also try to give people more than they pay for and we guarantee



We only handle irrigated yards, and we screen for customers that want weekly service at a minimum ... If they can't meet those criteria, then we have to pass on them."

—Todd Tindel, Cutting Edge Lawn Care Austin, Texas all our work. We also own up on our mistakes. It's just the right thing to do. If we ever break a window, we pay for that. I've run into other companies that tell the homeowner it's "just the risk of hiring a business." But we always pay for our mistakes. That's how you keep customers for the long term and prevent negative talk.

#### How about top obstacles?

The economic downturn. Like everyone else, we've definitely felt some of the impact of the economy. We lost more customers in the last year than we've ever lost. However, that being said, it wasn't that many. We generally don't lose a lot of customers, and that goes back to doing what we say we will. The economy also has introduced more competition. The guys that are looking to make a quick buck are always out there—as are the customers who are looking to save a buck. And that's fine. We've learned to live with that. We've got an A rating on Angie's List and customers see that. We're insured, and we invest in our business. While we may lose customers to the guys that don't charge as much, the bottom line is that in 10 years we'll still be here and those other guys won't.

Finding quality people is always a challenge. They're out there, but you have to look hard. We try to pay more

than the industry average and that does help attract a higher quality pool. We also give vacation and pay vacation. We can't afford to pay for health benefits, but we try to do other nice things for our employees to keep them happy. When we have good quality workers, we want to keep them.

#### What opportunities are out there for you?

Adding a segment. We plan to make more of a move into landscaping, which will be a big growth opportunity for us. We've always just focused on maintenance, but I have an employee right now that loves the possibility of design/build work, so we're going to expand into that. At some point we may consider getting into pest control, but we recognize that takes a larger base. If you're only going on a property twice a year, you need a pretty big base for growth in that market.

Besides possibly expanding into some new services, we see the biggest opportunity for growth is to continue doing what we do. We really believe that the old-fashioned ways of just doing what you say you're going to do is what helps grow a business. It's definitely what has worked for us. **IRRIGATION** 

## Smart marketing

ValleyCrest offers a few tips for promoting your firm's Smart Irrigation Month efforts.

By MARISA PALMIERI

s an industry, we need to step it up when it comes to using social media to get the message out about water conservation, says Richard Restuccia, ValleyCrest's director of water management solutions.

He can get away with such tough talk because he and his team are "walking the



walk"—so much so that their efforts earned them the top prize in the contractor category for the Irrigation Association's 2012 Smart Marketing

Contest. We spoke with him for advice other contractors can use when it comes to promoting July as Smart Irrigation Month in the future.

## What was the key to your Smart Irrigation Month promotional campaign this year?

When J. Carl Ganter, founder of Circle of Blue, spoke at the Water Smart Innovations Conference, he said social media is going to change the way we manage water. He's right. Our blog and our Twitter #landscapechat are a really big part of the success of our program. It's a great way to get the message out.

We have over 5,000 Twitter followers for @ValleyCrest and 800 following me (@H2oTrends). Those are people who are interested in water management or sustainability and all of them have the potential to influence others to hire ValleyCrest as a water manager. Our land-scape chats have up to 450,000 people



who've received the messages during one landscape chat. That's just in one hour.

### Do you know how many of those folks are customers?

It's a significant amount. In fact, we have received requests for bids through Twitter.

## When do you recommend contractors begin promoting July as Smart Irrigation Month?

At ValleyCrest we think every month should be Smart Irrigation Month. We start planning well ahead of the warm or dry season for Smart Irrigation Month. We'll start to plan what we're going to put in the blog, line up the guests for the Twitter #landscapechat and line up what email campaigns we're going to run. And we'll plan to have all the landscape techs add Smart Irrigation Month info to their email signatures. It starts about six months out.

# This year you focused on partnering with master-planned communities. Is choosing one area of focus the key to success?

I think you can do it with a broad stroke, and we've had success with that in the past. We have a partnership with Associa, which manages over 7,000 homeowner associations (HOAs) across the U.S. Partnering with their Associa Green initiative was a great way for us to get our message out to some of biggest

water users in the U.S. A big part of the message wasn't just "conserve water." It was to contact us and we'll provide a free water analysis for your property. It was more than just promotion, it was creating action.

### So are you saying you have to include an offer?

Creating awareness is great, but you can't manage what you can't measure. Analysis and audits start the process for proper water management. Having the offer is what's actually going to get the water savings done. It's the action part, not just the talking part.

# Small companies might say they don't have the same resources as ValleyCrest to devote to water conservation promotions. What advice do you have for a smaller company?

Social media's the real key, especially for the small business. It's the great equalizer. It allows you to broaden your message at a lower expense than traditional advertising. People think they have to do social media in addition to everything else. Once you ramp up your social media effort, you can do less traditional marketing and more digital marketing and touch more people, save more water and bring on more customers.

Disclosure: Marisa Palmieri is a member of the Irrigation Association's Smart Irrigation Month committee.

#### **GETTING SMART**

Congrats to all the winners of the Irrigation Association's 2012 Smart Marketing Contest.

Affliate category: The Municipal Water District of Orange County

Contractor category: ValleyCrest Landscape Maintenance

Distributor category: CPS Distributors

Manufacturer category: The Toro Co.

For more information about how to participate in next year's contest, visit smartirrigation-month.org.



# On the road

Andrew Cole-Tyson designs landscapes for middle-class clients with his mobile design studio. By MARISA PALMIERI

schewing the high overhead of bricks and mortar, entrepreneurs nationwide are hopping on the mobile business bandwagon, launching food trucks, beauty shops and retail stores on wheels. One landscape professional in Birmingham, Ala., has joined their ranks with his mobile landscape design studio.

"The business is founded on simplicity," says Andrew Cole-Tyson, owner of Cole-Tyson Land & Garden Studio.

In June, at the suggestion of several industry contacts, he visited with Tony Bass, Green Industry consultant and CEO and founder of the Super Lawn Truck system. He sought Bass' advice on how to begin consulting with other professionals about the best use of tablet devices for landscape design sales, but their discussion took another route. Bass challenged him to think more broadly about his business, namely why it was taking him several weeks to produce a design that should take less than a day. How could he work more efficiently?

Borne of this brainstorming session was the mobile design studio and "designs in a day" concept. Over the next month, Cole-Tyson, who has a master's degree in landscape architecture from Auburn University, formulated a plan to bring his new business idea to life, including researching vehicle options. He chose a Nissan high-top van, and he built his studio in eight days.

It costs Cole-Tyson \$700 to \$800 per month to operate his studio, not including gas. He gets about 18 miles to the gallon,

and he hopes to one day convert to a hybrid vehicle. When the van's not running, the studio is powered by solar panels.

#### A MOBILE MODEL

The business model is focused on selling and collecting a design and project management fee. His target clients are middle-class households, many of which, he says, don't realize they can afford landscape design services. Cole-Tyson

says educating them about the importance of design has been a major part of the process, but that's where potential lies.

Andrew Cole-Tyson runs

his landscape design and project management busi-

ness entirely from his van.

"Many people in our market simply build pieces and parts of landscapes, often in an uncoordinated manner," he says.

During design consultations Cole-Tyson parks his vehicle at his clients' homes and welcomes them into his 20-square-foot lobby and marketing space, featuring a papasan chair and flat screen (the remaining 30 square feet of space is for designing and storage). Here he goes over the clients' wants and needs and introduces them to his three design packages, which range from \$150 to \$2,000. Clients pay on the spot via a Square mobile credit card reader.

After they select a package, he stays on site in this studio until he completes the design.

"It's much easier to work with clients and schedule meetings this way, and they can typically meet during a lunch break, after work or all throughout the day, as we stay put and make ourselves available for clients to collaborate with us," he says. "It's all about the clients and being a better steward of their money. In terms of fuel costs, you don't have to drive around town if you forget a measurement. You stay focused and you stay inspired when you're on their property."

From a 10-inch tablet device and laptop, Cole-Tyson runs all of the necessary design and business management systems.

In addition to consolidating overhead, the vehicle's graphic wrap does heavy-duty marketing for the business.

"It's got tremendous marketing value," he says, adding that when he's designing, neighbors frequently stop by to see what's going on. "I also envision it becoming our booth at a farmer's market."

Though he didn't disclose revenue figures so far, Cole-Tyson says he's met the weekly billing goal he set for himself at the outset of pursuing the mobile design studio. As for the future? He'd like replicate the model in other markets, adding designers and project managers to duplicate the set-up and transfer the same systems to each new vehicle.

He's excited about where things are headed.

"It's really cool to be able to serve more of the middle class," Cole-Tyson says. "They really take pride in the fact that they're working with a landscape designer."