2 0 1 6 State of the **INSIDE** > Exclusive Industry Research > Selling Mosquito Services > Market Forecast > Preparing for the Coming Season Sponsored by MGK®



nce considered a niche product, mosquito control has quickly become a key service offering for a growing number of pest management professionals.

More than half of PMPs (54 percent) now provide this service, found the PCT 2016 State of the Mosquito Market survey. That's up from 49 percent in 2015 and 38 percent in 2014, according to earlier PCT reports.

While the percentage of total service revenue remains small — about 5 percent or \$5,000 for the typical provider in 2015 — three-fourths of survey respondents said mosquito control represents a significant growth opportunity for their business.

In fact, 59 percent of PMPs said the percentage of revenue from mosquito control services increased in the past three years.

At Blasingame Pest Management in Locust Grove, Ga., mosquito control accounted for 25 percent of total revenue in 2015, up 35 percent from 2014, said CEO Billy Blasingame. Growth is "through the roof" and this service is "probably our fastest-growing segment" of the business, he said.

HOW IT'S DONE. Mosquito control is performed at residential (97 percent) and commercial (64 percent) accounts, mainly as an add-on service (83 percent), found the survey. Generally, treatments involve targeted applications of adulticides (73 percent). These often are applied with backpack sprayers to mosquito resting areas and foliage near the structure and outdoor living spaces, according to PMPs in follow-up interviews. A fewer number of PMPs (12 percent) offer automatic mosquito misting systems as part of their control program.

Some PMPs offer customers a choice between conventional and "green" mosquito control. According to the survey, 27 percent of respondents said green/natural products are an increasingly valuable tool in their mosquito control efforts.

More than half of PMPs (53 percent) include larval control in their mosquito control programs. It's a key tactic for Carson, California-based Revolution Pest Solutions, which treats a significant number of foreclosed homes with stagnant swimming pools, said Sterling Barbour, executive director.

Most PMPs (88 percent) offer treatments for special outdoor events and 66 percent conduct ongoing mosquito monitoring and maintenance, found the survey. As a season-long or bundled program, mosquito control can create new streams of recurring revenue, said PMPs.

Last year, The Bug Master in Austin, Texas, bundled mosquito service with quarterly general pest control and revenue for the combined service "grew substantially" compared to that for its "hard to move" one-time mosquito treatments, said President Dauphin Ewart. The new program involves 8 to 9 service visits during mosquito season; some are performed during quarterly service.

Ewart charges a monthly fee for the bundled service instead of billing per service visit, which can be higher on some months when both mosquito and quarterly pest control treatments are performed. The lower monthly rate appeals to new customers, so far the most likely to sign up. "We didn't have massive conversions of current clients" to the bundled service but it does offer great potential as an

About the Survey

The PCT 2016 State of the Mosquito Market survey was sponsored by MGK and compiled by Readex Research, a privately held research firm based in Stillwater, Minn. A sample of 3,434 owners, operators and executives of pest control businesses was systematically selected from the PCT database. Data was collected from 337 respondents — a 10 percent response rate — via an online survey from Jan. 28 to Feb. 8, 2016. The margin of error for percentages based on 337 respondents is plus or minus 5.2 percentage points at the 95 percent confidence level. Charts may not equal 100 percent due to rounding.





WHERE DO YOU CONTROL MOSQUITOES?

The majority of survey respondents -67 percent - operate businesses in the South, followed by the Midwest (16 percent), Northeast (10 percent) and West (7 percent).



A MARKET ON THE RISE: YEAR-OVER-YEAR TRENDS (2014-2016)

2014 — Does your company offer mosquito control services? **2015** — Does your company offer mosquito control services?



2016 — Does your company offer mosquito control services?



Number of respondents: 381

Number of respondents: 192

Number of respondents: 428





TO BE HONEST, I THINK WE MISSED THE BOAT OVER THE PAST SEVERAL YEARS." — DAN FLEISCHER, PESTEX, NEWTONVILLE, MASS.

add-on product for clients we already have relationships with," explained Ewart.

This year, Pestex in Greater Boston likewise expanded beyond its one-time service to a comprehensive mosquito-tick control program that involves four to six service visits during the season, said President Dan Flesicher. "To be honest, I think we missed the boat over the past several years," said Fleischer of not offering a recurring mosquito service sooner.

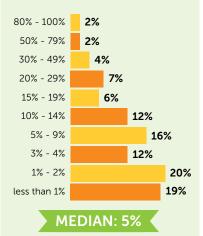
Effective control requires a thorough site evaluation to identify mosquito-breeding areas as well as to empty not-always-obvious containers of standing water. Technicians at Clark's Pest Control in Columbia, S.C., document conditions with photographs, which are

shared with customers via email, said Branch Manager Mike Gibson. Customers can see the overgrown shrubs or clogged gutters that are contributing to their mosquito problems. "We eliminate most of (these issues) if we can but some things are the homeowner's responsibility," said Gibson. More than one-third of PMPs perform habitat remediation as part of their treatment program, found the PCT study.

"The mosquito business, quite honestly, sells itself," said Blasingame. "It's such a tangible service. With mosquitoes, you have them and when you start these treatments you don't. It's that effective," he said. As a result, the retention rate for mosquito control is very high, agreed PMPs. •

MOSQUITO REVENUE IS MODEST, BUT GROWING

What percentage of your overall revenue is derived from mosquito control services?



How much total revenue did you generate in 2015 from all

mosquito control services?



Treatments are Effective, Callbacks Rare

"Callbacks are extremely rare" for mosquito treatments, said Andy Yant, owner of P.E.S.T. Inc., in Goodlettsville, Tenn. In fact, more than half of PMPs (55 percent) said the typical callback rate for this service is zero to 4 percent, according to the PCT 2016 State of the Mosquito Market survey.

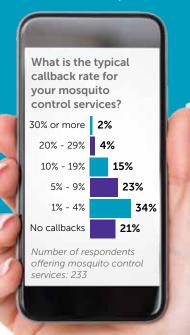
The biggest treatment challenge is rain, said Yant, who tries to adjust schedules to

the forecast. Still, pop-up thunderstorms can hit before applied product has dried fully and heavy rain lasting several days lessens product efficacy, he said.

That's why PMPs like Mike Gibson of Clark's Pest Control treat for mosquitoes every 21 days, an approach that he's found is "pretty successful."

Good training is key, and according to the survey PMPs feel technicians have an excellent or very good understanding of mosquito control (73 percent), behavior (64 percent) and biology (55 percent).

This helps when it comes to educating customers and setting realistic expectations. The service reduces the number of mosquitoes; it doesn't eliminate them, reminded Yant.



Number of respondents offering

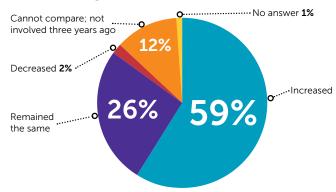
mosquito control services: 233





Mosquito Market by the Numbers

In the past three years, how has the percentage of revenue from mosquito control services changed?



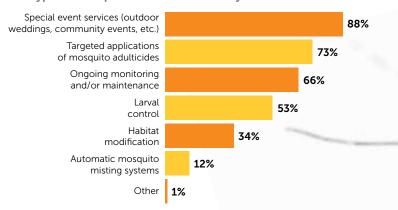
Number of respondents offering mosquito control services: 233

For what types of accounts does your company offer mosquito control services?



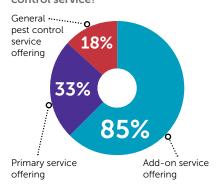
Number of respondents offering mosquito control services: 233 (Multiple answers)

What types of mosquito control services do you offer?



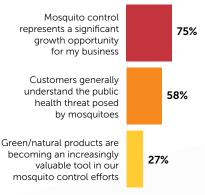
Number of respondents offering mosquito control services: 233 (Multiple answers)

How do you offer mosquito control service?



Number of respondents offering mosquito control services: 233 (Multiple answers)

Percentage of PMPs who agree with the following statements:



Number of respondents offering mosquito control services: 233 (Multiple answers)



2016 State of the Mosquito Market Report



PMPs say weather and consumer awareness will help make 2016 a very good year for mosquito control.

Market Conditions Right for Growth

est management professionals who provide mosquito control service are pretty upbeat this year.

According to the PCT 2016 State of the Mosquito Market survey, 85 percent of providers surveyed expect mosquito revenue to increase from 2015 levels. That's up from 65 percent in 2015 and 55 percent in 2014, as reported in earlier PCT surveys

Andy Yant, owner of P.E.S.T. Inc. in Goodlettsville, Tenn., is hoping for a 50 percent gain this year. In 2015, revenue for mosquito control increased 15 percent (about the same as the company's overall growth) but this year Yant is introducing a new marketing initiative to boost sales of his mosquito control service offerings (see *Receptive Market* on page 9).

Pestex in Boston rolled out a mosquito-tick control program earlier this year and already had customers lined up for service by mid-March even with snow still on the ground, said Dan Fleischer, president. "I think the response is going to be fairly strong," given the early interest, he said.





"It should be a gang-buster year," pronounced Billy Blasingame of Blasingame Pest. He sold mosquito accounts in December and January and picked up a dozen new customers in the first two weeks of March, before the season even started. Blasingame expects to meet or exceed last year's 35 percent growth in this segment.

"Everything's kind of panning out to be a really, really big year for mosquito work," agreed Mike Gibson of Clark's Pest Control.

RAINY AND WARM = REVENUE. Typically Clark's Pest Control doesn't start mosquito work until about April 1, but this year — for the first time ever — it performed service for some customers throughout the winter months, said Gibson, who expects revenue for this service to double at his Columbia, S.C., branch. Like many parts of the eastern United States, Columbia had a mild winter and generous rainfall. Christmas Day

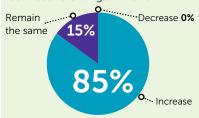
was 80 degrees, and there is still standing water (where mosquitoes are breeding) from a massive flood in October, said Gibson.

About 60 percent of Blasingame's mosquito customers asked for service to start early due to warm, rainy weather in Atlanta. Normally the season runs April to October, but "we were seeing mosquitoes all year long," he said.

In Southern California, El Niño delivered less rain than expected, forcing PMPs like Sterling Barbour of Revolution Pest Solutions to lower mosquito revenue expectations. Barbour's company is one of the few doing mosquito work in Southern California, but he can't attend to all customers because they're too spread out geographically. This will change when he opens a new Orange County location this year, but until then calls from worried young families outside his service area continue, he said.

2016 MARKET FORECAST: OPTIMISM REIGNS

Compared with 2015, how do you anticipate the percentage of revenue from mosquito control services to change in 2016?

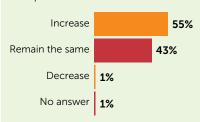


Number of respondents offering mosquito control services: 233

2015 — Expected Change in Percentage of Revenue From Mosquito Control Services



2014 — Expected Change in Percentage of Revenue From Mosquito Control Services



Not Just Aedes aegypti

Scientists from the U.S. Department of Agriculture recently said the Asian tiger mosquito (*Aedes albopictus*), which tolerates cooler weather and ranges as far north as New York and Connecticut and as far west as Texas and parts of New Mexico, Arizona and California, can transmit viruses such as dengue, chikungunya, yellow fever and Zika.

Aedes aegypti, the primary vector of Zika virus, occurs in Florida and along the Gulf Coast into Texas. Small populations are found in Arizona and California.

In fact, 90 percent of PMPs who provide mosquito control service think media coverage of the Zika virus will prompt more customers to seek professional mosquito control services from their company, found the survey.

"I believe that Zika will increase the desire for customers to want to protect their families," said Yant. Media coverage also has raised awareness of mosquitoes as a vector of other diseases, he said.

GETTING READY FOR THE BUSY SEASON. To meet expected

higher demand, 61 percent of PMPs planned to increase their mosquito control application equipment budgets in 2016, found the survey. Top items to buy in the next year included backpack sprayers (66 percent), foggers (40 percent) spray rigs (33 percent) and automatic mosquito misting systems (13 percent).

Yant invested in a new backpack blower mister — he tries to swap out old equipment yearly to prevent failures from occurring during peak season — as well as a new truck-mounted misting system to reduce back strain for some of his employees

The Asian tiger mosquito (Aedes albopictus), can transmit viruses such as dengue, chikungunya, yellow fever and Zika.





ZIKA HAS INCREASED AWARENESS.

Like many pest management professionals, Barbour gets a surge in phone calls following news reports on the mosquito-borne Zika virus, which has been linked to microcephaly in newborn babies and was declared a global public health emergency by the World Health Organization.

"It's a major concern" for young homeowners who are ready to start families, said Barbour. They're new in the neighborhood and are worried about mosquitoes; they call asking if there's been an increase in mosquito activity in the area, he said.

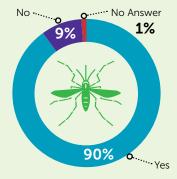
According to the PCT 2016 State of the Mosquito Market survey, 58 percent of PMPs believe customers understand the public health threat posed by mosquitoes, and about half (51 percent) said the public in their market area is concerned or very concerned about

mosquito-borne illnesses. That's up from 28 percent in PCT's 2015 survey.

Even where the primary vector *Aedes aegypti* is not present, like Boston, people are worried, said Fleischer. "Because Zika is in the news so much — the fact that it's a mosquito — I would say people are going to be more inclined to get treatment even though they know the Zika mosquito isn't physically here," he said. •

MEDIA COVERAGE DRIVING INTEREST, HEALTH CONCERNS

Will media coverage of the Zika virus prompt more customers to seek professional mosquito control services from your company?

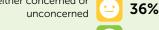


Number of respondents offering mosquito control services: 233

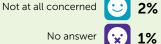
West Nile
virus in local
mosquitoes
ma Monroe County sample

How concerned is the public is about mosquito-borne illnesses in your market area?









How concerned do you think your customers are about disease transmission by mosquitoes?



Not at all concerned



15%

Compared with 2015, how will your budget for mosquito control application equipment change in 2016?



Number of respondents offering mosquito control services: 233





Making the Most of a

Receptive Market

PMPs say mosquito control is a relatively easy sell; they urge peers to avoid fear mongering.

iven the market potential for this year's mosquito season, a number of PMPs said they were ramping up efforts to promote their service. Word-of-mouth was cited by 76 percent of PMPs as the most effective way to promote mosquito service, according to the PCT 2016 State of the Mosquito Market survey. Other tools cited were online marketing (43 percent), email marketing (18 percent) and company blogs (12 percent).

"We get a lot of business off the Internet," said Billy Blasingame, who hired a company this year to manage the Facebook page for Blasingame Pest Management. Last season a happy mosquito customer shared comments on her subdivision's Facebook page and the company picked up 18 mosquito customers in two weeks.

Dan Fleischer of Pestex in greater Boston is sending out email notices and created a specific landing page on his website where customers can sign up for service and auto billing for his new mosquito-tick program. He's also making phone calls to all his existing customers.

More traditional forms of advertising, like door hangers/cloverleafing (15 percent) and direct mail (12 percent), also were found to be effective, according to the survey. A new direct mail campaign for Blasingame Pest Management complements the company's turf marker signs, which feature the company logo and mosquito service messaging along with the

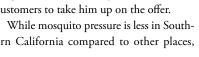
required exterior treatment notice. While walking and driving through the neighborhood, people see the yard signs and then receive a similar notice in the mail.

Andy Yant of P.E.S.T. Inc. took steps to promote his 10-year-old mosquito control program for the first time this year. He developed a leave-behind brochure, trained technicians to cross-sell the service, and is offering one free mosquito treatment to long-term clients. He expects 800 to 1,000 customers to take him up on the offer.

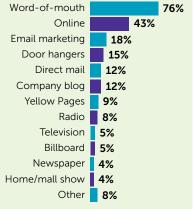
ern California compared to other places,

MARKETING EFFORTS IN 2016

PMPs RAMPING UP



What types of advertising have been most effective in promoting your mosquito services?



Number of respondents offering mosquito control services: 233 (Multiple answers)

Sterling Barbour of Revolution Pest Solutions is working with overwhelmed local vector control officials (who are getting many calls from citizens concerned about the Zika virus) to see how he might assist them.

AVOID SCARE TACTICS. PMPs urged peers not to strong-arm consumers into signing up for mosquito control by playing on their fears. News of the Zika virus "certainly creates awareness with our customers and potential customers," said Blasingame. But "it appalls me" when the advertising of some companies implies people will get ill if they don't sign up for service, he said.

Fear mongering creates "really terrified customers who want things that don't necessarily make sense" from a service standpoint and will freak out if they see even one mosquito, cautioned Dauphin Ewart of The Bug Master. Instead, take an educational approach with customers, which builds relationships and can "open up avenues" to other work, said Barbour.

And never promise to eliminate the pests. Mosquitoes can fly up to a mile and PMPs are just treating the backyard ecosystem, reminded Fleischer. While the service is "the best game in town" for reducing the mosquito population, you can't promise customers will never see another one, he said. "Are they going to notice a significant reduction? Absolutely."



MGK's Mosquito Product Portfolio Protects Lives

MGK has been protecting and improving the lives of people for over one hundred years. MGK develops and markets a broad portfolio of mosquito control products for residential, commercial, and equine structures. Over the past few years there has been increased awareness of diseases vectored by mosquitoes. Diseases such as West Nile, Chikungunya, Dengue, Yellow Fever, Malaria and most recently Zika.

As the media coverage around Zika continues, so will customer concerns, therefore, PMPs can expect increased requests for mosquito control services in 2016. PMPs should be prepared for the mosquito season by making sure all technicians are well trained, have well-maintained equipment and effective products. PMPs should also manage customer expectations by letting them know what to expect after treatment.

For effective control of *Aedes* mosquitoes, the primary vector of Zika, the following steps will help ensure effective mosquito control.

INSPECTION

Effective treatments start with an IPM approach. Inspect the entire area for harborage and breeding sites. Remove all sources of standing water and other breeding sites. These sites include bird baths, small containers, flower pots, rain gutters and any other sources of contained water. It is important to include the customer in this process and communicate the importance of correcting all conducive conditions.





What's Unique About Aedes Mosquitoes – aegypti and albopictus

- Only fly a few hundred meters from emergent sites
- · Small container breeders
- · Lay individual eggs usually near the waterline
- Eggs are laid in multiple sites (skip-oviposition)
- · Eggs can last for years and remain viable
- Active daytime biters, although they will also bite at dawn and dusk

PRE-TREATMENT

Remove all toys, pet or animal items from the treatment area. It is best to also turn off all sprinkler systems until after the application and the product has dried. For best results, schedule treatments when rain is not expected.

TREATMENT

Select an appropriate adulticide and larvicide, such as Onslaught® FastCap Microencapsulated Insecticide and NyGuard® IGR. Larvicides such as NyGuard IGR

can be applied to standing water and other sources of water that cannot be appropriately emptied (note: NyGuard IGR cannot be applied to sources of water that will enter natural bodies of water). NyGuard IGR has been shown to prevent mosquito larvae and pupae from becoming adults and also reduces egg hatch from female mosquitoes who have come in contact with the product. It is a good addition to any mosquito treatment program.

POST-TREATMENT

After treatment, re-inspect the area in 1 to 2 weeks. Always be aware of product retreatment intervals before reapplying. Onslaught FastCap can be applied once every 7 days. NyGuard IGR can be applied once every two weeks.

For homeowners and commercial buildings with misting systems, MGK has a wide variety of effective mosquito misting products which include Riptide® Water-based Pyrethrin ULV, Sector® Misting Concentrate, Hyperion® Advanced Mist Concentrate, VamPyre® Misting Concentrate and Troika® Misting Concentrate.



ACCIOS Mosquitoes



NyGuard IGR kills Aedes mosquito larvae before they become breeding, biting adults. NyGuard IGR larvicide application to contained water, according to label use directions, prevents the development of adult Aedes mosquitoes. NyGuard may also be tank mixed with an adulticide, such as Onslaught® FastCap, and applied with a backpack mist blower for best results.





NUGUARD