

State of the **Mosquito Market**

EXCLUSIVE RESEARCH:

Leading Service Offerings

Key Market Trends

Most Popular Treatment Protocols

Marketing Tactics & Strategies

Mosquitoes & Public Health: Customer Perceptions



Sponsored by Zoëcon Professional Products





Mosquito Market Report

In this survey of the mosquito control market, pest management professionals weigh in on growth opportunities, control challenges, and application best practices.

Once relegated to municipalities and DEET, mosquito control is a growing source of revenue for pest management professionals (PMPs). Of the 38 percent of PMPs who offer this service, more than half expect revenue to increase in the next year, according to PCT's 2014 Mosquito Market Study, conducted by Readex Research. It is "definitely an area we want to grow" and it's "an easy area to grow" with the right marketing, said Andy Yant, owner of P.E.S.T. Inc., in Goodlettsville, Tenn.

THE MARKET OPPORTUNITY

➤ What percentage of your company's overall revenue is derived from mosquito control services?

- **Less than 5%: 56%**
- **5% - 9%: 20%**
- **10% - 14%: 14%**
- **15% - 19%: 4%**
- **30% or more: 3%**
- **20% - 29%: 2%**
- **No answer: 1%**

Number of respondents: 146

Source: PCT 2014 Mosquito Market Study conducted by Readex Research

The MARKET OPPORTUNITY

➤ How do you expect the percentage of revenue generated from your company's mosquito control services to change in the next year?

- **Increase: 55%**
- **Remain the same: 43%**
- **Decrease: 1%**
- **No answer: 1%**

Number of respondents: 146

➤ Over the past year, how has the incidence of mosquito issues changed in your market area?

- **Increased: 40%**
- **Remained the same: 53%**
- **Decreased: 7%**

Number of respondents: 146

Source: PCT 2014 Mosquito Market Study conducted by Readex Research

For 76 percent of PMPs, mosquito control makes up less than 10 percent of overall revenue, found the study, reinforcing the largely untapped nature of the marketplace. For others, it's a significant part of their business. Mosquito control accounts for 30 percent of total revenue at Community Pest Solutions in Woodstock, Ga., said Owner Rick Zunker. His plan: Increase this to 50 percent over three years by doubling the number of mosquito customers.

The potential exists: Forty percent of PMPs said mosquito issues have increased in their markets. The number of Yant's mosquito clients has increased yearly and "we have never had anyone cancel their mosquito service due to not being satisfied," he said.

THE SERVICE. Monthly, perimeter mosquito treatments (47 percent) are most popular with customers, followed by one-time treatments for special events (27 percent) and mosquito misting systems (14 percent), reported PMPs in the study.

Brett Lieberman, who owns My Pest Pros and a Mosquito Terminator franchise in Fairfax, Va., uses a backpack blower to perform a combined mosquito/tick treatment every three weeks during the season. He also installs and maintains misting systems.

As an add-on service to existing accounts, mosquito control is a "super simple service and very profitable," said Yant. Most PMPs (64 percent), however, say customers specifically request this service.

Some professionals use mosquito control to capture general pest work. Lieberman started My Pest Pros in late 2013 for this reason, as well as to even out the seasonality of mosquito service and retain quality employees.

About 20 percent of mosquito customers at Venus Pest Company in College Station, Texas, use a different provider for general pest control, said President Scott Lingren, BCE. Over time, he acquires some of this work. Mosquito control accounts for 17 percent of Lingren's residential pest control revenue.

THE CHALLENGES. PMPs typically experience a 4 percent callback rate for mosquito control service, according to the study. The wild card: *weather*.

Too much rain often means technicians have to re-treat. This happened to Zunker last July, when it rained 22 days of the month, prompting callbacks. Rain also played a big role in Bug Busterzzz's callbacks, said Owner Matt Allen in Vassalboro, Maine.

Re-treating a large number of unscheduled jobs in a short time span can be difficult from a staffing standpoint, said Allen. His ability to find quality employees will determine whether he pushes the service this season. "I don't want to disappoint people" by not providing service in a timely manner, he explained.

On the flip side, extreme drought in south-central Kansas has meant little mosquito work over the past five years for Patton Termite & Pest in Wichita, Kan., said President Mike Patton. Last year's rain wasn't enough to produce large mosquito populations; several years of greater-than-average precipitation is required, he explained.

More competition is likely. Forty percent of PMPs have offered mosquito control for less than five years, found the study. Venus Pest Company has offered it for eight, said Lingren. "Now it's catching on" with smaller companies and a large competitor rumored to be introducing the service this season, he said.

It's the "best thing that could happen to us," Lingren smiled. "I can't wait until the big company starts running TV spots on the evening news," which will help customers overcome their skepticism, he said.

THE CUSTOMER. Even though 59 percent of customers are concerned about mosquitoes, they're generally skeptical of mosquito control until they experience it first-hand, reported PMPs.

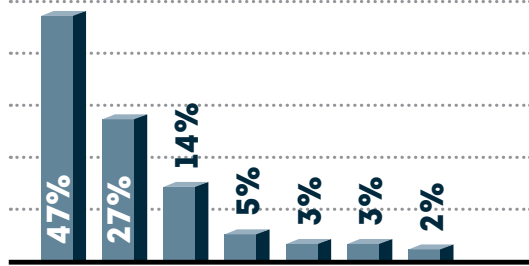
When customers attend a barbeque or pool party and aren't attacked by mosquitoes, they want to know how they can do the same at their house, explained Lingren. "Word of mouth is a pretty big deal," he said.

Zunker uses Living Social promotions to convert skeptics to believers. He offers a one-time service for a low price to get them to try it; 600 did so the first year. He expects to pick up 200 customers each year using this approach.

Living Social and Groupon promotions require a solid follow-up

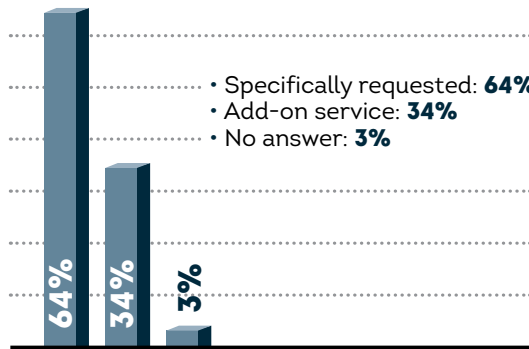
The SERVICE

➤ Which one of the following mosquito control services has proven to be the MOST popular among your customers?



- Monthly mosquito treatments: **47%**
- One-time treatments for special events: **27%**
- Mosquito misting: **14%**
- "Green" mosquito services: **5%**
- Neighborhood-wide mosquito treatments: **3%**
- Other: **3%**
- No answer: **2%**

➤ Is mosquito control a primary service requested specifically by customers, or one that is added on when treating other infestations?



- Specifically requested: **64%**
- Add-on service: **34%**
- No answer: **3%**

Source: PCT 2014 Mosquito Market Study conducted by Readex Research

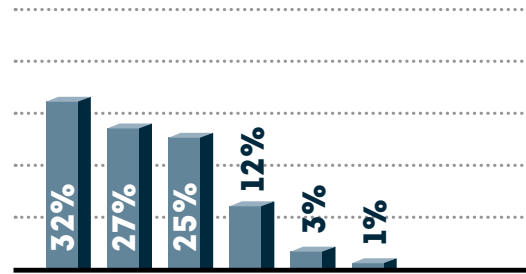
sales process, advised Lieberman. He also suggested getting the exclusive offer in a category, not being one of several companies listed, to increase success.

According to the PCT study, marketing messages usually mention certified technicians (42 percent), the ability to "take back your backyard" from nuisance bites (40 percent), and public health and safety benefits (33 percent).

Professionals are cautious about promoting mosquito control as a way to reduce the risk of mosquito-borne disease. Customers can get bit somewhere else and you can't control the species of mosquito you're controlling, reminded Lingren. "Our goal is to reduce bites," he said. Lingren still warns customers to take

The CHALLENGES

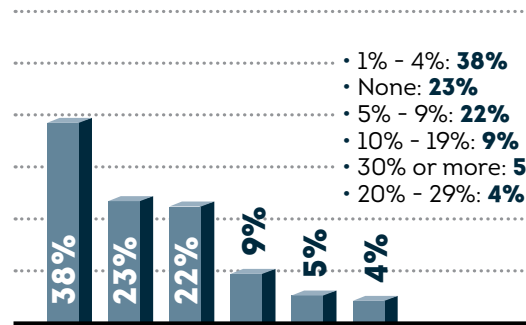
➤ How difficult are mosquitoes to control with the products currently on the market?



- Somewhat difficult: **32%**
- Less difficult: **27%**
- Difficult: **25%**
- Not at all difficult: **12%**
- Very difficult: **3%**
- No answer: **1%**



➤ What is your typical callback rate for mosquito control services?



- 1% - 4%: **38%**
- None: **23%**
- 5% - 9%: **22%**
- 10% - 19%: **9%**
- 30% or more: **5%**
- 20% - 29%: **4%**

precautions at peak mosquito activity times. "You don't want to put the health of anybody at risk to advance your marketing plan."

PMPs said most customers just want relief from nuisance bites so they can enjoy their pools, patios and decks. Some have told Lieberman monthly mosquito service is cheaper than building a screen porch. According to Zunker, "We can do very well with the program at \$40 to \$50 for service and make it affordable for the average person."

While some regions of the country offer more mosquito control opportunities than others, a growing number of PMPs have enhanced their bottom line and diversified their service offerings by expanding into this important vertical niche market. ●

The CUSTOMER

➤ How concerned are your company's customers with mosquito issues around their homes?

Very concerned	21%
Concerned	38%
Somewhat concerned	33%
Less concerned	8%
Not at all concerned	1%

➤ Percentage of PMPs who think the public understands well or very well the following health implications of mosquitoes:

Mosquitoes transmit West Nile virus	59%
Mosquitoes transmit malaria	24%
Mosquitoes transmit encephalitis	19%
Mosquitoes transmit dengue fever	8%
Indicated none	38%

➤ What aspects of your company's mosquito control services do you feature in your marketing efforts?

Certified technician(s)	42%
"Take back your backyard" from nuisance bites	40%
Public health/safety benefits	33%
Excellent control	29%
Free inspection	25%
Eco-friendly products	21%
Protection against West Nile virus	21%
Service guarantee	19%
Misting services	18%
Low prices	5%
Other	3%
Do not market company's mosquito control services	28%

Public Health Awareness

More than half of PMPs believe the public is aware that mosquitoes transmit West Nile virus. The customers of Venus Pest Company are "very aware" of this fact; West Nile virus has been a recent and significant threat in Texas, said President Scott Lingren, BCE. When news stories about the disease appear late in the season, the phones start ringing, said Community Pest Solutions Owner Rick Zunker in Woodstock, Ga. Fewer PMPs believe customers realize malaria, encephalitis and dengue fever are transmitted by mosquitoes.



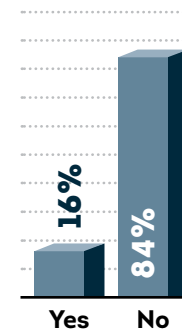
Resistance Management

Resistance in mosquitoes is more likely to occur when implementing wide-scale, municipal control programs, not treating individual backyards, said Mike McLean, an entomologist at the Metropolitan Mosquito Control District in St. Paul, Minn. Still, pest management professionals should follow best practices to reduce this risk.

Rotate the classes of products (not brands) used in the mosquito treatment regimen. If PMPs always use products with the same mode of action, a small percentage of pests may survive and a resistant population will grow, McLean explained.

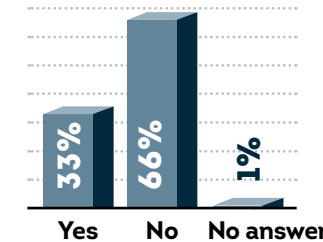
Use mosquito traps to monitor program effectiveness following treatment. It's the "responsible thing to do," said McLean. "The most effective way of making sure that you don't run into problems like resistance or a non-target effect of a pesticide is to use the material the way it's supposed to be used," reminded McLean. Use the recommended dose rate; don't skimp. If the label recommends setbacks from flowering plants, observe those setbacks. "If you follow those labels the way they're written, you can avoid a whole range of problems and do a much better job of controlling the pests," he said.

➤ Is mosquito resistance a problem in your market area?



Number of respondents: 146

➤ Does your company practice resistance management in its mosquito control programs?



Number of respondents: 146

Source: PCT 2014 Mosquito Market Study conducted by Readex Research



A key step in any IPM program for mosquitoes is to larvicide. Larvicides stop the development of new mosquito populations in the water where they breed.

Mosquito Management Best Practices

Effective control requires the right approach, products, application techniques and, above all, client education.

According to the PCT 2014 Mosquito Market Report, 91 percent of pest management professionals (PMPs) believe mosquitoes can be controlled.

They also cited significant challenges: weather, bodies of water, swampy and marshy areas, hard-to-find breeding sites, and not having access to breeding sites on neighboring properties.

THE RIGHT APPROACH. Most PMPs (75 percent) rely on source reduction strategies to reduce mosquito breeding and resting conditions.

“We have our technicians keep an eye out for conditions conducive to mosquitoes early in the year while they are performing their regular service,” said Steve Woodruff, regional manager for Orkin in North Texas and Oklahoma.

Experts suggest inspecting the property with homeowners to

identify breeding areas caused by standing water, either from rain or irrigation.

Encourage customers to empty items that collect water (flower pot saucers, buckets, pet dishes, toys, ashtrays); change the water twice weekly of bird baths, fountains and wading pools; store or turn over items like canoes and garden carts when not in use; get rid of old tires and trash; tighten up sagging tarps that cover grills, patio furniture and woodpiles.

Point out clogged gutters, improperly angled downspouts, leaky outdoor faucets, puddles from air conditioning unit condensation, ill-fitting rain barrels and trash can lids.

Ask clients to fill noticeable knot holes in trees to prevent water from collecting and trim dense vegetation around homes to eliminate mosquito resting areas.

Matt Allen, owner of Bug Busterzzz in Vassalboro, Maine, works

Customer Education is Key

It is important to set accurate expectations. The service will not make mosquitoes disappear, reminded Rick Zunker, owner of Community Pest Solutions, Woodstock, Ga. “It’s not an elimination; it’s a reduction service.”

with landscape companies to improve drainage issues and trim vegetation if customers are unable or unwilling to do so. This results in more effective service and presents the company in a professional light, he explained.

THE RIGHT PRODUCTS. PMPs most commonly use adulticides (92 percent) and/or larvicides/IGRs (77 percent) to control mosquitoes, according to the PCT study (see chart at right).

They cited quick kill of adult mosquitoes (92 percent), adult control with residuals (88 percent), ease of application (75 percent), price (62 percent), larvicide pre-treatment (55 percent), and active ingredients (53 percent) as key factors in choosing products.

Adulticides are “huge for us,” said Allen. They make an immediate difference in the mosquito population; customers feel they’re getting what they paid for, he explained. Brett Lieberman, who owns My Pest Pros and a Mosquito Terminator franchise in Fairfax, Va., uses traditional pyrethroids or organic products, depending on the service customers want.

Venus Pest Company President Scott Lingren, College Station, Texas, prefers products that are less likely to cause skin sensitivity or impact non-target organisms. “The safer on bees and the less runoff, the better,” he said. The PCT study found PMPs’ top product concerns were labeling/label restrictions (82 percent), safety of bees and other non-target insects (77 percent), and vegetation burn (75 percent).

More decision drivers: long-lasting residual and rain fastness. Lingren adds a surfactant to the product mix to increase “stickiness.”

Many PMPs combine adulticide and larvicide applications to knock down hard-to-control species like the Asian tiger mosquito.

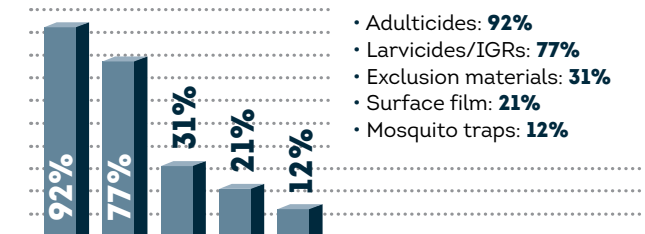
Larvicides contain an Insect Growth Regulator (IGR), such as (S)-methoprene, that prevents mosquito larvae from developing into biting adults. They work in water and affect mosquito larvae on contact or through ingestion. Larvicides have low toxicity ratings and don’t adversely affect non-target organisms, such as fish, waterfowl, mammals or beneficial insects.

THE RIGHT TECHNIQUES. “Being aware of the physical challenges you will face such as koi ponds, wind drift, areas of excessive moisture and landscape features must be factored into the equation when a technician develops and delivers a mosquito treatment,” says Woodruff.

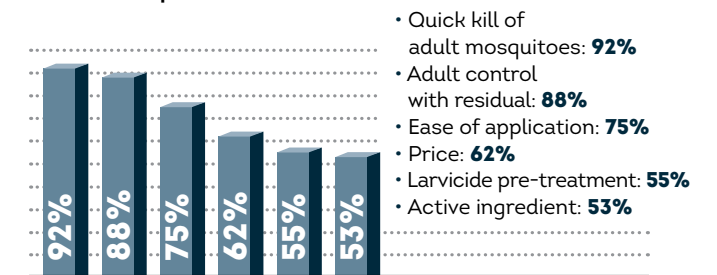
Apply adulticides using backpack mister/blowers to high-impact areas allowed by the label, report experts. These include vegetation, the undersides of soffits and eaves, and around covered windows and doors. New label language has limited certain classes of pyrethroids to 3 feet or less on buildings.

To reduce pesticide drift, misting applications of adulticides should not be performed when wind speeds are in excess of 1.7

What types of products does your company use for mosquito control?



How important are each of the following factors to you when purchasing mosquito control products?



Source: PCT 2014 Mosquito Market Study conducted by Readex Research

meters/second, according to The Mallis Handbook of Pest Control, 10th edition. Try to time treatment when mosquitoes are most active.

Lingren urged PMPs to use caution around fish ponds and backyard chickens. His technicians are trained to observe bee activity on flowering plants. If bees are active, they will not treat that spot, he said.

Larvicides in granule, pellet and briquet form can be applied precisely. They are ideal for challenging habitats like salt marshes, flood-prone areas, and where standing water cannot be eliminated. During regular inspections, look for standing water that has not been treated.

Always consult the label for specific uses and rates.

EDUCATE FOR SUCCESS. Customer cooperation is the cornerstone of a successful mosquito control program; this requires education. Sometimes it doesn’t hurt to include customers’ neighbors in on the lessons, reported PMPs.

It is important to set accurate expectations. The service will not make mosquitoes disappear, reminded Rick Zunker, owner of Community Pest Solutions, Woodstock, Ga. “It’s not an elimination; it’s a reduction service.”

Technician training remains essential. “We always reinforce the key elements of mosquito control, including insect biology and behavior, how to conduct a thorough initial inspection, and how to effectively communicate with customers about the service,” said Charlie Jones, senior vice president of operations, Arrow Exterminators, Atlanta. ●



GO MAVRIK

on your mosquito treatment

For mosquito and broad-spectrum insect control, treat barriers and foliage with Mavrik® Perimeter.



- Active ingredient: Tau-fluvalinate
- Approved for application to plantscapes, ornamentals and shrubbery
- Surface residual
- No visible residue or lingering odor
- Control of over 35 insects (including mosquitoes)
- Efficacy at a variety of application rates



Dried residues are non-toxic to bees.

Cost effective and easy-to-use, Mavrik® Perimeter can extend your reach with commercial and residential accounts.

Always read and follow label directions. Mavrik and Zoëcon with design are registered trademarks of Wellmark International. ©2013, 2014 Wellmark International.

To learn more about Mavrik® Perimeter visit zoecon.com or call 800.248.7763.

