

**Before the  
Federal Trade Commission  
Washington, DC 20580**

In the Matter of	)	
	)	
Complaint and Request for Investigation	)	COMPLAINT AND REQUEST
of Deceptive Practices in Marketing	)	FOR INVESTIGATION
Residential Mosquito Misting Systems	)	
to Consumers	)	

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**COMPLAINT AND REQUEST FOR INVESTIGATION**

**Submitted by**

**Public Employees for Environmental Responsibility**

Public Employees for Environmental Responsibility  
2000 P Street, NW Suite 240  
Washington, D.C. 20036

August 6, 2015

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**Complaint of Deceptive and Unfair Advertising of Home Mosquito Misting Services**

**I. Introduction**

Public Employees for Environmental Responsibility (PEER) asks that the Federal Trade Commission investigate the manufacturers and vendors of mosquito misting systems (also known as mosquito misters) to determine whether the companies' websites violate Section 5 of the Federal Trade Commission Act, which prohibits unfair and deceptive marketing practices. Our review of numerous websites advertising mosquito misting systems shows at least four different types of deceptive or unfair marketing common among these businesses. These include the following false and misleading statements:

1. Mosquito misters are "effective;"
2. Mosquito misters kill ticks;
3. Mosquito misters eliminate the need to use personal protection, such as insect repellent; and
4. The pesticides used by mosquito misters are "safe."

Therefore, we ask the FTC to end these unfair and deceptive marketing practices and any others it uncovers in its investigation.

## II. Complainants

PEER is a non-profit public interest organization headquartered in Washington, D.C., with field offices in California, Colorado, Florida, Massachusetts, and Tennessee. Among other public interest projects, PEER engages in advocacy, research, education, and litigation relating to the promotion of public understanding and debate concerning key current public policy issues. PEER focuses on the environment, including the regulation of toxic substances and the remediation of pollution; public lands and natural resource management; public funding of environmental and natural resource agencies; and ethics in government.

## III. Background

Outdoor residential mosquito misting systems are designed to spray insecticides at timed intervals in outdoor areas. The systems involve a set of nozzles that are connected to tubing that leads to a supply of insecticide. The nozzles are mounted on the perimeter of the property or house, on fences, or in the landscaping. Some systems can be set to spray at timed intervals, while other systems can be turned on and off by a remote control.<sup>1</sup> Generally, the systems spray the insecticides in intervals of 30 or 60 seconds at a time.<sup>2</sup> In many systems, the homeowners can adjust the time settings to spray as often as they desire. Each system has a set of tanks to hold the pesticide mixture. These systems most often use pyrethrin or synthetic pyrethroid insecticides to kill the mosquitoes.<sup>3</sup> The most commonly used synthetic pyrethroid insecticide is pyrethrum.

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<sup>1</sup> *Mosquito Control: Mosquito Misting Systems*, ENVTL. PROT. AGENCY, <http://www2.epa.gov/mosquitocontrol/mosquito-misting-systems> (last updated Nov. 25, 2014).

<sup>2</sup> *Mosquito Mistors: What You Need to Know*, SAFER PEST CONTROL PROJECT, <http://www.spcpweb.org/factsheets/MosquitoMistors.pdf> (last visited June 23, 2015).

<sup>3</sup> *AMCA's Position on Misting Systems*, AM. MOSQUITO CONTROL ASSOC., <http://www.mosquito.org/position-on-misting-systems> (last visited June 23, 2015).

According to the Environmental Protection Agency (EPA), pyrethrins “are toxic to all insects” including beneficial insects like honeybees, ladybugs, and butterflies.<sup>4</sup>

#### **IV. Mosquito Misting Companies Make False and Deceptive Claims about Their Products**

The companies that offer in-home mosquito misting systems for sale, such as MistAway, Mosquito Nix, and Mosquito Squad, make false and deceptive claims to consumers about the safety and efficacy of their products. These claims include statements that mosquito misters are effective at controlling mosquito populations, that mosquito misters eliminate the need for personal protection from mosquitoes, that the pesticides used by the misters are safe, and that the misters kill ticks. We address these four claims in turn.

##### ***Mosquito Misting Systems Are Not Effective***

Various websites advertising mosquito misting systems contend that the misting systems are “effective” at killing mosquitoes and controlling the mosquito population. These websites contain claims such as, “...MistAway – the revolutionary automatic mosquito misting system that effectively eliminates mosquitoes and other biting insects from your yard,”<sup>5</sup> “There has never been a more effective outdoor mosquito control product,”<sup>6</sup> and “The MosquitoNix custom misting system provides effective mosquito control for you, your family and your pets.”<sup>7</sup>

Mosquito misters, however, are largely ineffective systems. Even the American Mosquito Control Association, a leader in mosquito research and education, states that misting systems are not an effective form of controlling mosquito populations.<sup>8</sup> In order to kill mosquitoes, the

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<sup>4</sup> ENVTL. PROT. AGENCY, *supra* note 1.

<sup>5</sup> MISTAWAY SYSTEMS, <http://www.mistaway.com/mosquito-misting-basics/effective-outdoor-mosquito-control.html> (last visited July 21, 2015). *See also* Exhibit A, Screenshot of Mistaway Systems website.

<sup>6</sup> *Id.*

<sup>7</sup> MOSQUITONIX.COM, <http://www.mosquitonix.com/mosquitonix> (last visited July 21, 2015). *See also* Exhibit B, Screenshot of MosquitoNix website.

<sup>8</sup> *See* AM. MOSQUITO CONTROL ASSOC., *supra* note 3.

pesticide droplets must make contact with the mosquitoes. The systems spray on timed intervals, regardless of whether or not mosquito populations in the area are active at that particular time. Due to this, sprays emitted when mosquitoes are not active will be ineffective.<sup>9</sup> Different mosquito species are active at different times; therefore, it is unlikely that a misting system would be able to control all mosquito populations unless the sprays are activated each time certain species are active throughout the day and evening.<sup>10</sup> Additionally, it is well established that spraying adult mosquitoes is the least effective way to manage mosquito populations.<sup>11</sup> Furthermore, regular spraying of mosquitoes can lead to mosquito populations growing resistant to the pesticides.<sup>12</sup> Spraying these pesticides indiscriminately can also lead to killing other insect populations that assist in controlling mosquito populations, therefore allowing mosquito populations to grow.<sup>13</sup>

The EPA has stated that there are no valid studies showing that misters are effective at killing mosquitoes.<sup>14</sup> Mistaway cites one study which purports to show the efficacy of their system, and provides a link to a summary of that study.<sup>15</sup> However, the original study on which the summary is based<sup>16</sup> demonstrates that the automatic misting systems are ineffective. The study involved (1) sampling mosquito abundance in actual backyards and (2) recording “knockdown/mortality” numbers in a simulated backyard.

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<sup>9</sup> SAFER PEST CONTROL PROJECT, *supra* note 2.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> ENVTL. PROT. AGENCY, *supra* note 1.

<sup>15</sup> James E. Cilek, Charles F. Hallmon, and Reginald Johnson, *Misting Matters*, PEST CONTROL TECHNOLOGY, Apr. 2009, available at <http://www.mistaway.com/assets/files/How-Misting-Matters.pdf>.

<sup>16</sup> Cilek J.E., Hallmon C.F., and R. Johnson, 24 *Evaluation of an Automatic-Timed Insecticide Application System for Backyard Mosquito Control*, J. AM. MOSQUITO CONTROL ASS'N. 560, 560-65 (2008) available at <http://www.freshfromflorida.com/content/download/3592/22473/Automatic%20Spray%20System-2008.pdf>.

For the first part of the study, researchers looked at mosquito abundance in only four backyards, two using the Mistaway system and two that were untreated.<sup>17</sup> Despite the exceedingly small sample size, researchers used a log transformation on the data without determining first whether the data were normally distributed or not. The summary that Mistaway’s website cites misleads the reader into thinking that the backyard abundance sampling showed that misting systems work, stating that for the last eight weeks of the 35-week study, “mosquito populations in yards with the misting system remained significantly lower...compared with yards without the systems.”<sup>18</sup> In fact, the original study shows that there were significantly lower numbers of mosquitoes in the treated backyards than the untreated backyards for only *two* of the last eight weeks of the study, and overall only four weeks out of 35 showed a significant difference in the number of live mosquitoes between the treatment site and the control site.<sup>19</sup>

For the second part of the study, the researchers created a simulated backyard to test “knockdown/mortality” rates of the misting system.<sup>20</sup> The fact that the researchers do not distinguish between mortality and knockdown (a period when mosquitoes are unable to fly or stand, but from which they might recover) renders the study misleading. In addition, the simulated backyard experiment showed that knockdown/mortality of mosquitoes decreased substantially beyond 6 meters of the spray nozzles.<sup>21</sup>

The study concludes that the “application of pesticides on a calendar basis without regard to pest population levels ... [is] inconsistent with integrated pest management practices.”<sup>22</sup> The

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<sup>17</sup> *Id.*

<sup>18</sup> Cilek et al., *supra* note 15, at 104.

<sup>19</sup> Cilek et al., *supra* note 16, at 564 fig. 2.

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* at 563.

<sup>22</sup> *Id.* at 564.

authors also list “[a]dditional areas of concern” with the use of misters, including the nontarget effects on other species, “the effects on human health from inhalation and exposure,” chemical trespass onto adjacent properties, and the possible contribution to insecticide resistance.<sup>23</sup> Even the misleading summary document linked to the Mistaway site admits that the droplets released from the misters were too big to travel beyond 10-20 feet from the nozzle effectively, and that in order to obtain “effective and sustained reduction of local mosquito populations for their clients,” companies would also have to teach clients how to identify and remove mosquito breeding habitats, and use personal protection.<sup>24</sup> The summary also warns that immigration of adult mosquitoes from neighboring areas will also affect the level of reduction afforded by any automatic misting system.”<sup>25</sup> In short, the one study cited by Mistaway does not show that misting systems are effective in killing mosquitoes.

Many companies offer customer testimonials on their websites to show that the misting systems are effective, but testimonials are not a reliable source.<sup>26</sup> In fact, FTC regulations provide that any advertisement using consumer endorsements “about the performance of an advertised product or service will be interpreted as representing that the product or service is effective for the purpose depicted in the advertisement. Therefore, the advertiser must possess and rely upon adequate substantiation, including, when appropriate, competent and reliable scientific evidence, to support such claims...”<sup>27</sup> Consumer endorsements are not “competent and

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<sup>23</sup> *Id.*

<sup>24</sup> Cilek et al, *supra* note 15, at 105.

<sup>25</sup> *Id.*

<sup>26</sup> AM. MOSQUITO CONTROL ASSOC., *supra* note 3.

<sup>27</sup> 16 C.F.R. § 255.2 (emphasis added).



reliable scientific evidence” that can be used to prove that a product is effective.<sup>28</sup> The consumer endorsements on the mosquito mister websites are not supported by such scientific evidence.

According to the EPA, mosquito misters also have not been scientifically proven to prevent the spread of West Nile virus or other diseases spread by mosquitoes,<sup>29</sup> although many of these companies claim that these systems will reduce the spread of these diseases. For example, the Mist Guard website states, “We will clear your yard of mosquitoes, ticks, no-see-ums, and gnats, reducing your risk of contracting the dreaded West Nile Virus and EEE [(Eastern Equine Encephalitis)].”<sup>30</sup>

The EPA and Center for Disease Control (CDC) recommend a using mixture of methods to control mosquito populations known as Integrated Pest Management (IPM) as the most effective way to control mosquito populations.<sup>31</sup> This management technique includes removing all standing water from the area to keep mosquitoes from breeding.<sup>32</sup> In addition to draining all standing water, the American Mosquito Control Association also recommends wearing personal mosquito repellent and light-colored loose fitting clothing to protect oneself from mosquito bites.<sup>33</sup>

### ***Mosquito Misters Do Not Kill Ticks***

Many of these mosquito mister companies advertise that the systems will kill ticks in addition to mosquitoes. Examples of such statements include, “Kill[s] or repels mosquitoes and

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<sup>28</sup> *Id.*

<sup>29</sup> ENVTL. PROT. AGENCY, *supra* note 1.

<sup>30</sup> *What We Do*, MIST GUARD, <http://mistguard.com/what-we-do.htm> (last visited July 21, 2015). *See also* Exhibit C, Screenshot of Mist Guard website.

<sup>31</sup> ENVTL. PROT. AGENCY, *supra* note 1.

<sup>32</sup> *Id.*

<sup>33</sup> *Mosquito Prevention and Protection*, AM. MOSQUITO CONTROL ASSOC., <http://www.mosquito.org/assets/Resources/mosquito%20prevention%20fact%20sheet.pdf> (last visited June 24, 2015).

ticks in all treated areas,”<sup>34</sup> “Our traditional mosquito control spray kills adult ticks on contact,”<sup>35</sup> and “We will clear your yard of mosquitoes, ticks, no-see-ums, and gnats...”<sup>36</sup> Some mosquito misting system companies also make statements alleging that the systems kill all or almost all species of insects. While ticks and spiders are not technically insects, but rather arachnids, the language does imply that the misters also kill arachnids such as ticks and spiders. For example, the website for Quality Mosquito Systems states “Almost all insects are killed or repelled effectively by pyrethrum including mosquitoes, flies, spiders, gnats, roosting wasps and all other insects.”<sup>37</sup> The failure of the companies to state clearly which pests the pesticides will kill, leads customers to believe that the misting systems will kill ticks also.

The statement that these systems will kill ticks is an unsupported claim. As stated above, ticks, like spiders, are in the class Arachnida, not Insecta like mosquitoes. While pyrethrins and pyrethroids *impregnated in clothing* have been proven to repel ticks, there are no studies or data showing that indiscriminately spraying these pesticides into the air will control tick populations. Permethrin can be used to repel or kill ticks, but is recommended for use only on shoes, camping gear, and clothing.<sup>38</sup> Just as these misting systems have not been proven to efficiently control mosquito populations, they have not been proven to control tick populations.

### ***Mosquito Mistors Do Not Eliminate the Need to Use Personal Protection***

Since mosquito misting systems are ineffective at killing mosquitoes or ticks, the systems do not eliminate the need to use personal protection against mosquitoes, other biting insects, and

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<sup>34</sup> *Automatic Misting Systems*, MOSQUITO SQUAD, <https://www.mosquitosquad.com/services/automatic-mosquito-misting-systems/> (last visited July 21, 2015). See also Exhibit D, Screenshot of Mosquito Squad website.

<sup>35</sup> *Tick Control*, MOSQUITO SQUAD, <https://www.mosquitosquad.com/services/tick-control/> (last visited July 21, 2015). See also Exhibit E, Screenshot of Mosquito Squad website.

<sup>36</sup> MIST GUARD, *supra* note 30. See also Exhibit C, Screenshot of Mist Guard website.

<sup>37</sup> *Frequently asked Questions*, QUALITY MOSQUITO SYSTEMS, <http://www.qualitymosquito.com/faqs.html> (last visited July 21, 2015). See also Exhibit F, Screenshot of Quality Mosquito Systems website.

<sup>38</sup> *Repellants*, AM. MOSQUITO CONTROL ASSOC., <http://www.mosquito.org/repellents> (last visited June 23, 2015).

arachnids. However, the companies that sell the misting systems claim that the systems work well enough that personal repellants are unnecessary. They make claims such as, “You’ll never again have to spray your kids with nasty repellents,”<sup>39</sup> and “With our Mistars, there is never any need to apply product to the skin or inhale a constant plume of toxic vapors.”<sup>40</sup> However, as noted above, the systems have not been shown to be effective, and in fact the study that Mistaway cited specifically found that to obtain “effective and sustained reduction of local mosquito populations for their clients,” companies would also have to teach clients to use personal protection.<sup>41</sup> The CDC recommends using personal repellent and wearing protective clothing to avoid mosquito bites and to decrease the chances of contracting West Nile Virus.<sup>42</sup>

### ***The Pesticides Used by Mosquito Mistars Are Not Safe***

Mosquito misting systems commonly use two types of insecticides: pyrethrin or synthetic pyrethroids. Pyrethrins are taken from pyrethrum, a naturally occurring insecticide found in chrysanthemum plants.<sup>43</sup> Most of these systems use pyrethroids, synthetic derivatives of the natural pyrethrins. Synthetic pyrethroids are engineered to be more toxic and to have longer breakdown times, but neither the natural nor the synthetic forms can be considered “safe.” Pyrethroids are also often formulated with synergists, other chemicals used to increase the

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<sup>39</sup> MIST GUARD, <http://mistguard.com/> (last visited July 21, 2015). *See also* Exhibit G, Screenshot of Mist Guard website.

<sup>40</sup> *Frequently Asked Questions*, ALLCLEARMISTER.COM, <http://allclearmister.com/how-it-works/frequently-asked-questions/> (last visited July 21, 2015). *See also* Exhibit H, Screenshot of All Clear Mister website.

<sup>41</sup> *See* Cilek et al., *supra* note 14.

<sup>42</sup> *West Nile Virus*, CTR. FOR DISEASE CONTROL (Feb. 12, 2015), <http://www.cdc.gov/westnile/prevention/index.html>.

<sup>43</sup> BEYOND PESTICIDES, *Synthetic Pyrethroids*, 1, 1 <http://www.beyondpesticides.org/pesticides/factsheets/Synthetic%20Pyrethroids.pdf>.

pesticide's toxicity and persistence in the environment, giving them higher toxicity and weakening the human body's ability to detoxify the pesticide.<sup>44</sup>

Many mosquito misting companies claim that their systems and the chemicals in the insecticides are safe. They make claims such as, "...our mosquito control solutions are safe for your family, your pets, and your garden,"<sup>45</sup> "When used as directed, the product is very safe, and will not harm your children or pets,"<sup>46</sup> and "The treatments are safe for all pets and kids. Our treatments are odorless, stainless and non[-]toxic. It's comparable to flea and tick medicine."<sup>47</sup>

However, "safe" pesticides do not exist.<sup>48</sup> Permethrin, a pyrethroid commonly used in mosquito misters, has been labelled by EPA as "likely to be Carcinogenic to Humans" by the oral route due to the growth of tumors in mice and rats when fed permethrin in laboratory testing.<sup>49</sup> Pyrethroids have also been found to affect the endocrine system, "which can adversely affect reproduction and sexual development, interfere with the immune system and increase chances of breast cancer."<sup>50</sup> Exposure to pyrethrins and pyrethroids has known health effects. When a large amount of pyrethrins or pyrethroids contact human skin, it may result in "feelings of numbness, itching, burning, stinging, tingling, or warmth that could last for a few hours."<sup>51</sup>

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<sup>44</sup> *Id.*

<sup>45</sup> *About MosquitoNix*, MOSQUITONIX.COM, <http://www.mosquitonix.com/about> (last visited July 21, 2015). *See also* Exhibit I, Screenshot of MosquitoNix website.

<sup>46</sup> *Frequently Asked Questions about The Mosquito Mist Away System*, GULFSTATESMOSQUITO.COM, <http://www.gulfstatesmosquito.com/faqs.html> (last visited July 21, 2015). *See also* Exhibit J, Screenshot of Gulf State Mosquito website.

<sup>47</sup> *FAQ*, SKEETERBEATER.COM, <http://skeeterbeater.com/faq/> (last visited July 21, 2015). *See also* Exhibit K, Screenshot of Skeeter Beater website.

<sup>48</sup> SAFER PEST CONTROL PROJECT, *supra* note 2.

<sup>49</sup> ENVTL. PROT. AGENCY, *Permethrin Facts*, 1, 3, <http://www.epa.gov/oppsrrd1/reregistration/REDs/factsheets/permethrin-facts-2009.pdf>.

<sup>50</sup> BEYOND PESTICIDES, *supra* note 24.

<sup>51</sup> U.S. DEP'T OF HEALTH & HUMAN SERV., TOXICOLOGICAL PROFILE FOR PYRETHRINS AND PYRETHROIDS (2003), 1, 5 <http://www.atsdr.cdc.gov/ToxProfiles/tp155.pdf>.

Exposure to pyrethrins or pyrethroids can also occur through air, by eating food contaminated with the chemicals, or touching objects contaminated with the chemicals, though it is unlikely that those methods would cause enough insecticide to enter the body and cause other problems.<sup>52</sup> When large amounts of pyrethrins or pyrethroids enter the human body, they may cause symptoms such as dizziness, headache, nausea, muscle twitching, reduced energy, and changes in awareness. Severe cases of pyrethrin or pyrethroid ingestion can result in convulsions and loss of consciousness, which could possibly last several days.<sup>53</sup>

There are many dangerous products that are considered safe enough for consumer use when consumers follow safety guidelines. However, the automatic nature of the pesticide spraying inherent in mosquito misting systems distinguishes them from other dangerous products, as it is impossible for owners to ensure compliance with safety guidelines. For example, mosquito misting system companies instruct users not to spray when people, pets, or food are present. This is effectively impossible, given that the systems spray automatically at timed intervals and owners have no control over passersby or neighbors using outdoor areas adjacent to pesticide spray nozzles.

Even protecting one's own family and pets from such systems would require careful attention to ensure that all areas within the mist's reach are completely vacant during the period when the automatic sprayers activate. Ironically, the companies selling these systems uniformly encourage the opposite, assuring customers that once the system is set up, they no longer need to pay attention to them. *See, e.g.,* Auto Mist Insect Control ("set it and forget it");<sup>54</sup> Mosquito

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<sup>52</sup> *Id.* at 5.

<sup>53</sup> *Id.*

<sup>54</sup> <http://www.automist.com/> (last visited July 23, 2015)

Nix, (“The Freedom to Forget”);<sup>55</sup> Mist Guard, (“So Easy to Use, You’ll Forget It’s There”);<sup>56</sup> Gorillas in the Mist, (“the automated controller does all the work”);<sup>57</sup> and Yard Guard (“It’s so self-sufficient, you will forget that its [sic] even there!”).<sup>58</sup> Anyone who has ever been surprised by a lawn sprinkler will appreciate the inevitability of accidents of this type. In short, people will inhale, touch, and even ingest these pesticides sprayed into the air whether or not safety instructions are followed.

## **V. Mosquito Misting System Companies Engage in Deceptive and Unfair Practices in Violation of § 5 of the Federal Trade Commission Act**

Section 5 of the Federal Trade Commission Act makes deceptive acts or practices in commercial advertising unlawful.<sup>59</sup> An advertisement or practice is considered deceptive under FTC policy when: (1) there is a representation, omission, or practice that is likely to mislead the consumer, (2) the act or practice is considered from the perspective of a reasonable consumer, and (3) the representation, omission or practice is material.<sup>60</sup> The advertising practices by mosquito misting companies meet all three of these elements.

### ***Mosquito Misting Companies Misrepresent Their Products in Order to Mislead Consumers***

As shown in detail above, mosquito misting companies make false and unsupported claims in their advertising to mislead consumers and make them believe that these systems are effective at killing and protecting them from both mosquitoes and ticks, and that the chemicals they use are safe. These companies include written misrepresentations of their products on their websites. They make claims that their products are effective and eliminate the need for personal

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<sup>55</sup> MOSQUITONIXAUSTION.COM, <http://www.mosquitonixaustin.com/misting-systems> (last visited July 23, 2015)

<sup>56</sup> MIST GUARD, <http://www.mistguard.com/mist-away--system.htm> (last visited July 23, 2015)

<sup>57</sup> GORILLASINTHEMIST.COM, <http://gorillasinthemist.net/services/mosquito-misters/> (last visited July 23, 2015)

<sup>58</sup> YARD GUARD INC., <http://www.yardguardinc.com/about.html> (last visited July 23, 2015)

<sup>59</sup> 15 U.S.C.A. § 52.

<sup>60</sup> *Cliffdale Associates, Inc.*, 103 F.T.C. 110, 174 (1984).

protection from pests, when it has been proven that they are not effective pest control systems and even the one scientific study cited to support claims of efficacy specifically states that customers must continue to use personal protection. They also claim that these systems will kill tick populations, which has not been supported by scientific studies.

***A Reasonable Customer Would be Deceived by These Practices***

In order for an advertisement to be deemed deceptive by the FTC, it must be likely to mislead a reasonable customer.<sup>61</sup> A consumer's interpretation of an advertisement "will be presumed reasonable if it is the one the respondent intended to convey."<sup>62</sup> These companies make statements on their websites that are presented to consumers as facts. Further, a reasonable consumer would not be aware of the scientific and technical studies showing that the chemicals used in these systems are toxic and that the systems are not shown to be effective. Considering these facts and that the number of mosquito misting companies continues to grow across the country, it is obvious that consumers continue to believe the claims made in these advertisements and continue to purchase these products and install them in their homes and businesses.

***The Marketing Strategies Used by These Companies Are Material***

The marketing strategies considered in this complaint result in material consequences for consumers. The strategies employed by these companies make consumers more likely to buy misting systems because they offer false promises of safety and relief from mosquitoes and ticks. Companies make thousands of dollars to install and maintain these complex systems, when consumers could be using far cheaper (and even free) methods approved by the American Mosquito Control Association, the EPA, and the CDC, such as eliminating standing water and wearing appropriate clothing.

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<sup>61</sup> *Matter of Cliffdale Associates, Inc.*, 103 F.T.C. 110 (1984).

<sup>62</sup> *Id.*

Furthermore, in convincing consumers that the chemicals used by the misting systems are “safe” and “natural,” the companies are leading unsuspecting consumer to spray their homes and families with toxic, carcinogenic chemicals. Further, in falsely assuring consumers that their products will effectively kill ticks and mosquitoes, and that the systems make it unnecessary to wear personal protection from ticks and mosquitoes, companies are putting consumers at risk for contracting West Nile Virus, Lyme’s Disease, and other diseases carried by ticks and mosquitoes. By using deceptive advertising practices, these companies are compromising the health and safety of consumers as well as their families, children, neighbors, and pets.

## **VI. Conclusion**

The companies that sell mosquito misting systems are using unsupported, misleading, and false advertising claims to convince the public that these systems and the insecticides they use are a safe and effective method of mosquito and tick control and to consumers’ detriment. These deceptive practices constitute an unfair business practice warranting a thorough investigation by the FTC.

Dated: August 6, 2015

Respectfully submitted,

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## **VII. Exhibit List**

A:	MistAway	G:	Mosquito Squad (2)
B:	MosquitoNix (1)	H:	Quality Mosquito Systems
C:	MosquitoNix (2)	I:	Terminix
D:	Mist Guard (1)	J:	Gulf States Mosquito Control
E:	Mist Guard (2)	K:	Skeeter Beater
F:	Mosquito Squad (1)		

## Exhibit A: MistAway



[Home](#) | [Contact Us](#) | [English](#) | [Español](#) | [Find a Dealer](#)

# MistAway® Systems



[CLICK HERE TO FIND A DEALER](#)

THE BASICS   OUR PRODUCTS   BUYING EXPERIENCE   PRODUCT SUPPORT   WATCH OUR VIDEO

## Truly Effective Outdoor Mosquito Control with Mosquito Misting

When you want to take in the pleasures of your own yard - patio or pool, fun with kids or parties with adults - you deserve to do so in complete comfort. You shouldn't have to be at the mercy of annoying insects, mosquitoes, no-see-ums and their painful bites. Fortunately, you won't be with MistAway - the revolutionary automatic mosquito misting system that effectively eliminates mosquitoes and other biting insects from your yard.

A MistAway mosquito control system automatically sprays a very fine mist of [botanical insecticide](#) through a series of mosquito misting nozzles installed on your property. Once installed, our system virtually disappears into your landscape. You won't even know it's there. Whatever your requirements, a Mist Away mosquito misting system can be customized to fit your yard perfectly.

### There has never been a more effective outdoor mosquito control product than the MistAway Mosquito Misting System.






The automatic mosquito misting control unit - either our [innovative tankless mosquito misting model](#) or our [traditional drum-based mosquito misting model](#) - is located anywhere that is convenient to a water faucet and electrical outlet.






Our precision-engineered mosquito misting nozzles are installed about every 10-15 feet around the perimeter of your property; on fence lines, trees and risers positioned in the landscaping for a mosquito-free yard.





## Exhibit B: Mosquito Nix (1)

English | Español

[Partners Login](#)

MISTING SYSTEMS3-STEP TREATMENTPEST CONTROLFIND A PARTNERABOUT US

### MosquitoNix® Custom Misting System


OVERVIEWMAINTENANCEMONTHLY AUTO-PAYCUSTOMER SERVICEREFERRAL PROGRAMTESTIMONIALSFAQSGALLERY

**GET A QUOTE NOW**

Fill out the form below and a local MosquitoNix® dealer will contact you to schedule a no-obligation, free yard evaluation and free

## The Permanent Mosquito Control Solution

The MosquitoNix custom misting system provides effective mosquito control for you, your family and your pets. Our misting system is not an "off the shelf" product. Each customized system is built to address your home or businesses specific needs.



## Exhibit C: MosquitoNix (2)

### OVERVIEW

LOCATIONS

AT A GLANCE

LICENSING

TRAINING

EDUCATION CENTER

TESTIMONIALS

GALLERY

FAQS

### GET A QUOTE NOW

Fill out the form below and a local MosquitoNix® dealer will contact you to schedule a no-obligation, free yard evaluation and free estimate for your customized MosquitoNix® Outdoor Insect Mist System.

Name: \*

Address:

City: \*

ZIP: \*

State: \* Alabama ▼

## About MosquitoNix

MosquitoNix, a division of FEMO Group, is the nation's leader in mosquito misting systems, servicing tens of thousands of customers in more than 400 U.S. cities and nine countries. MosquitoNix offers custom installed misting systems and ongoing barrier treatments called QuickNix™, using effective solutions to eliminate flying, biting insects such as mosquitoes, no-see ums, flies, fleas, and ticks. MosquitoNix empowers customers to protect their families against mosquitoes and enjoy their outdoor lifestyles. An industry expert, MosquitoNix focuses on customer service and builds its own systems in America.



At MosquitoNix, our mosquito control solutions are safe for your family, your pets, and your garden. Our misting systems use pyrethrum, a natural mosquito killer made from chrysanthemums. Regardless of the size of your yard, your budget, or your individual mosquito control challenges, we'll engineer a custom mosquito system just for you. Our mosquito misting systems and QuickNix treatments are the most effective mosquito control solutions on the market, giving you back your backyard — and your peace of mind.



## Exhibit D: Mist Guard (1)



Contact us today  
for your **Free Estimate!**  
**781.899.4199**

The most effective way to eliminate insects from your yard!

HOMEWHAT WE DOmistaway systemsBOTANICAL INSECTICIDESTESTIMONIALSGALLERYPRESSCONTACT US

### What We Do - Kill Mosquitoes

If you want to kill mosquitoes, MistGuard can help you. We will clear your yard of mosquitoes, ticks, no-see-ums, and gnats, reducing your risk of contracting the dreaded West Nile Virus and EEE. You'll never again have to spray your kids with messy repellents or remember to fog your yard before an evening cookout.

MistGuard will come to your home and design a professional system customized for your yard. We know just where to install our precision engineered nozzles — whether on the eaves of your home, along a fence line, or in your landscaping, to stop mosquitoes at the source while preserving the beauty of your yard. Once installed, the system disappears into the landscape so you won't even know it's there. Whatever your needs, a system can be customized to fit your yard perfectly. MistAway systems work automatically and are virtually maintenance free.

### How It Works

The mist creates a protective barrier keeping your family and pets safe. The system is generally programmed to spray at dusk and dawn when mosquitoes are most active and when other more beneficial insects such as bees and butterflies, are not. The primary ingredients--derived from chrysanthemum flowers--are called pyrethrins. ([Read more about botanical insecticides.](#)) They are rapidly degraded by sunlight or rain, leaving your property free of residue. And, because of their plant-based origin, insects don't build up resistance to pyrethrins. There is no more effective or convenient system on the market.

At MistGuard we have been extensively trained on the installation and use of the MistAway system. Our installers are factory-trained and experts in all MistAway systems.



781.899.4199



## Exhibit E: Mist Guard (2)



**Mist Guard**  
Mosquito & Tick Control Systems

*Contact us today  
for your **Free Estimate!***  
**781.899.4199**

The most effective way to eliminate insects from your yard!

[HOME](#) [WHAT WE DO](#) [MISTAWAY SYSTEMS](#) [BOTANICAL INSECTICIDES](#) [TESTIMONIALS](#) [GALLERY](#) [PRESS](#) [CONTACT US](#)

### Welcome

MistGuard knows that your home is your personal sanctuary, your retreat from the world. You've worked hard to create an atmosphere that your family can take pleasure in. So when you want to take in the enchantment of your own yard — whether gardening or sunbathing, entertaining friends or family, having fun poolside with the kids or pets — you deserve to do so in complete comfort.

For all that you've put into your home and yard, you shouldn't have to be at the mercy of bothersome insects and their painful, possibly hazardous, bites. Fortunately, you won't have to worry with the MistAway system — the revolutionary automatic insect mist system that effectively eliminates mosquitoes and other annoying, biting insects from your yard.

There has never been a more effective, convenient way to prevent insect bites in your yard. In addition, the system works automatically and is virtually maintenance free. You'll never again have to spray your kids with nasty repellents or fog your yard before an evening cookout. The system sprays a very fine mist of botanical insecticide through nozzles installed around the perimeter of your yard. The mist settles on the grass and landscaping, killing any mosquito that comes in contact with it and repelling any trying to get in.

The MistAway system is timed to mist at dusk and dawn when mosquitoes are most active and beneficial insects, like bees and butterflies, are not. It also kills and repels other unwanted pests, such as spiders, flies and gnats.

MistGuard is a family-owned and operated company that distributes, sells, installs, and maintains mosquito and tick control systems in New England. We have been in business for almost ten years and are experts in the installation of the MistAway System.



781.899.4199



By clicking the image above, you can get the iMistAway APP. The iMistAway APP controls mosquito misting systems manufactured by MistAway Systems and fitted with connectivity hardware. If you do not have a mosquito misting system meeting this criteria, this APP will not work for you.

[E-mail](#) MistGuard or call Tony at 781.899.4199 if you already have a MistAway System but you do not have the connectivity hardware.

[Read more about this wireless monitoring system.](#)



## **Exhibit F: Mosquito Squad (1)**

MOSQUITO SQUAD®

Mosquito Control Barrier ProtectionAll-Natural ProtectionAutomatic Misting SystemsSpecial Event SpraysTick Control

Continuous mosquito control with an automatic misting system.

If you're in need of a more continuous mosquito control option, an automatic misting system may be perfect for your property.

Mosquito misting systems:

✓ Automatically release a 30-second spray 2-4 times daily.

✓ Kill or repels mosquitoes and ticks in all treated areas.

✓ Consist of inconspicuous nylon tubing that connects strategically placed, corrosion-resistant, nickel-plated, stainless-steel nozzles.

✓ Include a remote control allowing you to opt for additional or fewer sprays to suit your needs.

✓ Are automatically filled, serviced and winterized by Mosquito Squad so you never need to lift a finger.

Our trained team members will come out and install the system around your home. After installing your mosquito control system, Mosquito Squad will refill your product when needed, and service and winterize the system each year.

## **Exhibit G: Mosquito Squad (2)**

MOSQUITO SQUAD®  
No bugs. No bites. No kidding.

BLOGLOCATIONS877-667-7823ALERT THE SQUAD!

SERVICESBUGS & DISEASEFAQSABOUT USCONNECTSQUAD GIVES BACK

Mosquito Control Barrier ProtectionAll-Natural ProtectionAutomatic Misting SystemsSpecial Event SpraysTick Control

Tick control protects your family from the dangers of Lyme disease.

Lyme disease and other tick-borne illnesses have been on the rise in the United States. The key to protecting you and your family from ticks is professional tick control.

At Mosquito Squad, we utilize an effective blend of our barrier spray treatment and tick tubes to eliminate ticks before they can get to you. Our traditional mosquito control spray kills adult ticks on contact, while tick tubes are placed around your property to entice mice. Yes, we said mice.

Mosquito Squad controls ticks with tick tubes that rely on the natural nesting instincts of mice and deliver a tick controlling insecticide directly to its home. Tick tubes are made of biodegradable tubes with treated cotton inside. When placed in their environment, mice collect the cotton for bedding. Since most ticks get their first blood meals from mice, they are exposed to the treated cotton, effectively eliminating the ticks.

It's important to consult a professional, like Mosquito Squad, to determine the timing and quantity of tubes and placement.

*\* Tick control not offered in Michigan without a license.*





## Exhibit H: Quality Mosquito Systems

# Quality Mosquito Systems


ONLINE DIVISION

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[Contact Us](#)  
[Pyrethrum/Insecticides](#)



[About QMS](#)[Products](#)[Installation](#)[What do I need](#)[Support](#)[FAQs](#)[Links](#)

### > Frequently Asked Questions



**→ How "Safe" is pyrethrum, the natural insecticide?**  
Pyrethrum is extracted from the chrysanthemum flower. It is clear and free of allergens. Furthermore, Pyrethrum has a low toxicity level, it is water based and biodegradable. This insecticide protects the chrysanthemum flowers from plant-eating insects. Insects do not build up immunity to pyrethrum as they do other chemicals and synthetic compounds dangerous to humans.

**→ Does pyrethrum leave a residue like other chemicals and synthetic compounds?**  
NO. Pyrethrum is completely biodegradable. After pyrethrum affects the mosquitoes and other insects, it decomposes harmlessly.

**→ Will pyrethrum insecticides harm my pets?**  
Used according to the label instructions, the insecticide is considered non-toxic to mammals. Pyrethrum insecticides have been used in agricultural and equine applications for a quarter century with no known harmful effects.

**→ Is pyrethrum effective against any other insects?**  
Yes. Almost all insects are killed or repelled effectively by pyrethrum including mosquitoes, flies, spiders, gnats, roosting wasps and all other insects.

**→ How "automatic" is the system?**  
Totally automatic and maintenance free. This is one of the key advantages of the system. You will never have to worry, or plan ahead to be able to enjoy your yard!

### Resources

**Pyrethrum**  
A natural insecticide found in chrysanthemum flowers


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**West Nile Virus**  
Learn more about the dangers of the mosquito spread virus



## Exhibit H: Terminix





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[Videos](#)

[FAQ](#)

[Product Manuals & Additional Information](#)

## Frequently Asked Questions

- ▲ What is the Terminix ALLCLEAR Mosquito Mister?
- ▲ How do the Misters work?
- ▲ Are the Mosquito Misters safe?
- ▲ What concentrates do the Terminix ALLCLEAR Mosquito Misters use?
- ▲ Where can I purchase an Terminix ALLCLEAR Mosquito Mister?
- ▼ Can I use the Mister in yards with children and pets?

Our Misters and Concentrates give you and your entire family – children and pets included – the freedom to enjoy the outdoors at home or on-the-go without being bothered by mosquitoes. With our Misters, there is never any need to apply product to the skin or inhale a constant plume of toxic vapors. To learn more about our misting solutions visit our how it works page.
- ▲ What kinds of insects do Terminix ALLCLEAR Mosquito Misters eliminate?
- ▲ When should I use my Terminix ALLCLEAR Mosquito Mister?
- ▲ Where should I place my Terminix ALLCLEAR Mosquito Mister?

## Exhibit J: Gulf States Mosquito Control



# Gulf States Mosquito Control

It's Your Yard, Not Theirs.  
**713-828-9789**

Home  
Mist Away System™  
Outdoor Lighting  
Outdoor Misting  
Pyrethrum Info  
**FAQs**  
Photo Gallery  
Contact Info

**Gulf States Mosquito Control**  
**713-828-9789**

We provide answers to frequently asked questions about the Mosquito Mist Away System™ so you can be assured that our automated misting system is the right choice for your backyard insect control.

### Frequently Asked Questions about The Mosquito Mist Away System™

**What are the benefits of the Mosquito Mist Away System?**  
The Mosquito Mist Away System effectively eliminates mosquitos and other biting insects from your yard. It is fully automated and maintenance free. And it's safe for humans and animals.

**Does the system help control more than just Mosquitoes?**  
Yes, the Mosquito Mist Away System dramatically reduces pests in your yard. The HydroPy-300, the Pyrethrin insecticide, aids in the control of over 200 different pests.

**Is it safe?**  
When used as directed, the product is very safe, and will not harm your children or pets. As with all products, you should read and follow the manufacturers instructions.

**What is the system warranty?**  
We offer a lifetime guarentee for parts and installation. Ask for full details.



Total Protection  
where you need it




Call Today!  
713-828-9789

## Exhibit K: Skeeter Beater

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[Get a Quote](#) [888-58-SKEETER](#)

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FAQ

Here are answers to our most frequently asked questions.

**Is it safe for pets & kids?**

Yes! The treatments are safe for all pets and kids. Our treatments are odorless, stainless and non toxic. It's comparable to flea and tick medicine.

**How effective is it?**



REQUEST A QUOTE

Name \*

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