# Aerial Pesticide Spraying of Coastal California Cities – Fact Sheet Shatters Government Myths & Implications



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| **1. How Long has the LBA Moth lived in California?** | |
| **CDFA used to claim "Only since February 2007." But they now have admitted the LBA moth has been in California for "several years." – CDFA Entomologist Robert Dowell on KSCO Radio Talk show Mar. 31, 2008** | **The first LBA moth caught in the wild and confirmed by DNA analysis was found June 2006. Prior to this, LBAM was intercepted in San Francisco, Honolulu and Los Angeles ports at least 55 times since 1984.**<br>**However, UC Davis insect invasion biology expert Dr. James Carey, and many of his colleagues, say that for the LBA moth to spread from Los Angeles to Napa north of San Francisco and so broadly across Santa Cruz County it must have been here for years and *possibly decades* -- similar to the 100 years it has been in Hawaii.** |

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| | **The LBA moth "is not spreading" according to USDA's Larry Hawkins on KRXA radio Sept 10, 2007** |
| **2. How much damage has the LBA moth done to California agriculture or ecosystems?** | |
| **<u>Zero. -- There is no dispute on this topic.</u>**<br><br>**According to CDFA's attorney when asked by Judge Burdick in Court on April 24, 2008 the <u>LBA Moth has done "no documented damage" to California ecosystems or crops</u> even though (in the words of CDFA's own entomologist) "<u>it has been here for several years</u>."** | |
| **3. Is the LBA Moth an Emergency?** | |
| **"If the insect is not eradicated while the infestation is still small, CDFA / USDA will be forced to deal with increased pesticide use, plant and environmental damage, and potentially, quarantines forever. This insect will become a permanent unwanted resident in California and the rest of the United States." (CDFA Q& A sheet Jan. 2008)**<br><br>**"LBAM, which is not native to California, is an extremely serious insect that threatens our state's natural environment and food systems. Entomologists tell us the larvae of this prolific...moth would severely impact plants ranging from native redwoods and cypress to fruits and vegetables to endangered species like the saline clover."**<br>**-California Agriculture Secretary AG Kawamura** | **This is a False Alarm, a False Emergency. Though it may eventually pose a <u>minor problem</u>, the LBA moth is NOT an Emergency. Even thought CDFA admits the LBA moth has been in California for years, and USDA admits it <u>is not spreading</u> – LBAM has <u>caused no documented damage to agriculture or ecosystems.</u> Natural predators may be keeping it from spreading and in control.**<br><br>**California Superior Court Judge Burdick on April 24, 2008 <u>ordered CDFA to rescind its Emergency Exemption</u> for the LBAM program, and to prepare environmental review as required by law (CEQA).**<br><br>**Unlike the West Nile Virus which has killed California residents, <u>the LBA moth doesn't kill anything</u>; not people, not ecosystems not even the fruit CDFA is trying to protect.**<br><br>**California CDFA bureaucrats made a "Finding of Emergency" specifically rejecting giving the public time to express concern about the pesticide spraying. CDFA also refused to prepare any Environmental analysis of the potential harm to California's environment.**<br><br>**Completely undermining CDFA's wild and groundless claim of emergency, the LBA moth has been in Hawaii for more than 100 years. Yet their Dept of Agriculture does NOT consider it a serious pest, and they even find it beneficial in some cases. (HDA, Press Release May 2, 2007)** |

**4. Will the spray stop the Billions of Moths I see on oak trees?**

**Different Moth, There is no dispute on this topic.**

**The billions of moths seen all around Monterey Bay are *NOT* the LBA moths. Those are the much larger Oak Moth which have lived here for many thousands of years as natural residents.**

**Oak Moths actually help Oak trees by removing their vegetation in drought times; by keeping the oaks from evaporating groundwater too quickly.**

**The LBA moth is much smaller, only a quarter of an inch long; about as long as your little fingernail is wide.**

**5. Can LBAM be Eradicated or should we simply Control it?**

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| **CDFA wrote "If the insect is not eradicated while the infestation is still small, CDFA / USDA will be forced to deal with increased pesticide use, plant and environmental damage, and potentially, quarantines forever. This insect will become a permanent unwanted resident in California and the rest of the United States." (CDFA Q& A sheet Jan. 2008)** | **Highly respected Invasion Biology expert, UC Davis' Dr. James Carey, says because the LBA moth is so widespread, from Los Angeles to north of San Francisco, eradicating the LBA moth is now impossible.**<br><br>**Carey adds that the experimental aerial spraying program by CDFA simply "won't work."**<br><br>**Eradication means the death of every last insect. By definition when you can't eradicate an insect - you can only hope to control it.** |

**6. Has CDFA ever successfully eradicated an agricultural pest?**

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| | **Apparently rarely – if ever.**<br>**From 1982 to 2007 CDFA conducted more than 250 Eradication programs for a mere 9 insects. All but two of the insects are still being fought. If any were successful, why does CDFA have to keep fighting the pests?** |

| **7. Which species of plants does LBAM threaten?** | |
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| **CDFA claims more than 2,000 plants including redwoods, cypresses and Monterey pines are "susceptible" to the LBA Moth.**<br><br>**"[The LBA Moth] would severely impact plants ranging from native redwoods and cypress to fruits and vegetables to endangered species like the saline clover." CDFA Secretary AG Kawamura** | **There is absolutely <u>zero evidence</u> that the LBA Moth harms more than a handful of plant species.**<br><br>**There's a huge difference between "threaten" and merely "feed upon." The moths only "threaten" nursery businesses with orchard stock, but not by harming the plants, but by having their sales restricted in area by quarantines.**<br><br>**The claim that the moth harms conifers including redwoods and pines can be based on a single moth found once on one tree – even if it didn't cause ANY damage.**<br><br>**Remember - CDFA has been forced to admit <u>they cannot document a single dollar of harm to California agriculture or ecosystems</u> - even though the LBA moth has been here for years and maybe decades. They have also failed to show any evidence that the LBA moth has harmed any conifers at all.**<br><br>**The LBA Moth may feed on many species, but it does not threaten any species with extinction, nor does it threaten many crops.**<br><br>**CDFA has repeatedly refused to provide any evidence of harm to the 200 crops they originally claimed it threatens. (We have given up trying to get evidence of the 2,000 they are now trying to claim.)** |
| **8. Is the Aerial Spray a Pesticide?** | |
| **"Pheromones are extremely safe and if persons believe they have experienced sickness as a result of the pending treatments, they are advised to see their doctor." (CDFA)** | **While there is no dispute on this topic, CDFA and USDA continually try to hide the fact that <u>*the spray is indisputably a pesticide.*</u>**<br><br>**The spray is registered with US-EPA as a pesticide and can only be used under pesticide regulations. When forced to, CDFA & USDA have admitted the spray is a pesticide.**<br><br>**Oddly, the only people wrongly claiming that the Checkmate spray chemicals is not a pesticide are spray advocates who actually know the chemical spray is classified, registered, and used as a pesticide.** |
| **9. Are the Checkmate Pesticides Safe?** | |
| **"Pheromones are extremely safe** | **No, because they're <u>Not Just Pheromones.</u>** |

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| **and if persons believe they have experienced sickness as a result of the pending treatments, they are advised to see their doctor."**<br><br>**" This pheromone and many others like it are present in our environment every day as many insects use them to attract mating partners or signal other behaviors."**<br><br>**"Humans and other mammals do not use these insect pheromones and cannot detect them." (CDFA Q& A sheet Jan. 2008)**<br><br>**The pheromones are specific to LBAM. – Pheromone manufacturer Suterra's website.** | **The two Checkmate pesticides sprayed on us are not just pheromones, they are an untested cocktail of secret chemicals misleadingly called "inerts," and the little we know about those secret chemicals is that they are not harmless.**<br><br>**Despite their harmless sounding name, many of the 2,000 so-called inerts are dangerous chemicals that can cause cancer, reproductive harm, nervous system damage and other health harm.**<br><br>**Ethyl Benzene has known toxicity to our nervous systems; o-cresol causes genetic damage, o-phenylphenol is a known cancer causing chemical – yet EPA allows them to be secretly used as an Inert.**<br><br>**Further, the pheromones themselves are not specific to the LBAM and could affect at least 100 of the more than 900 species of butterflies and moths in Monterey County alone.**<br><br>**Whether mammals can "detect" a pheromone is irrelevant. The only relevant question is do the pheromones affect other species. The answer is unambiguously yes. No one knows how the pheromone affects mammals and other specific species - because it hasn't been tested for effects, let alone harm !** |
| **10. Were the Checkmate pesticides tested? ("US-EPA has signed off on the pesticide - so isn't it safe?")** | |
| **"All the research shows the moth pheromone is non-toxic to plants, animals and insects. It doesn't even hurt the moth."**<br><br>**"The pheromone materials CDFA/USDA use have been registered and approved for aerial treatment by the federal Environmental Protection Agency (EPA) and the state Department of Pesticide Regulation (DPR). Before registration, all product uses must pass a rigorous safety review to protect human health, wildlife, and the environment."** | **The Checkmate LBAM pesticides sprayed on Monterey and Santa Cruz were never tested.**<br><br>**Checkmate pesticides were given a "crisis exemption" and only one (OLR-F) had even cursory testing by US-EPA. None have had full testing required of all other pesticides.**<br><br>**While US-EPA did register and approve them for use, on June 24, 2007 US-EPA refused to make the LBAM pesticide go through any testing - and refused to let the public have even a 5-day comment period.**<br><br>**Instead of requiring testing - all US-EPA did was read articles about pesticides related to the one that was sprayed on us.**<br><br>**These three extremely misleading CDFA claims in a single sentence makes it falsely sound as though -- 1) the actual pesticide sprayed on us was tested before spraying, 2) it was tested in the six standard methods, and 3) it was tested** |

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| | **thoroughly.**<br><br>**All three claims are wholly false. The Checkmate LBAM pesticides sprayed on Monterey and Santa Cruz were never tested.**<br><br>**All other pesticides have to go through six standard tests. There are two pesticides - one has had zero testing, US-EPA only made the other one endure minor tests.**<br><br>**California's Dept of Pesticide Regulation (DPR) did not require any pesticide testing at all.** |
| **11. Is Aerial Spraying Effective?** | |
| **CDFA has openly stated (when questioned by the Santa Cruz Board of Supervisors) that they do not know how effective aerial spraying will be.** | **UC Davis' Dr. James Carey, a highly respected invasion biology expert says that the experimental aerial spraying program by CDFA simply "won't work."**<br><br>**No, there is no evidence that aerial spraying is effective. The only way to measure effectiveness is to catch LBAM in sticky traps. CDFA's first analysis of trapping data (May 2008) showed in the Monterey bay area *an INCREASE in LBA moths after spraying* -- while an unsprayed control area had only a minor increase. Any increase is going the wrong direction.**<br><br>**This indicates the aerial spraying is worse than not spraying.**<br><br>**Aerial spraying has been called the 'least effective' way to control the light brown apple moth because at least 99 percent of the spray never comes in contact with the widely dispersed moths at all.** |
| **12. Are there more Effective Alternatives?** | |
| | **At least one far more effective solution exists – Targeted pheromone-baited hanging Sticky Traps.**<br>**See – www.1hope.org/nonspray.htm**<br><br>**All 17,000 moths known in California so far were caught with sticky traps, pheromone-baited hanging sticky traps.**<br><br>**Aerial Spraying of pheromone pesticides does *NOT* catch or kill the LBA moth. Only sticky traps catch and kill the LBA moth. CDFA is already using Targeted Sticky Traps on a statewide scale, HOPE is urging they use it on a local scale.** |

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| | **Other viable alternatives exist instead of crop dusting cities with pesticides --**<br><br>**1. Male moths can be sterilized and released as in the Medfly program.** |
| **13. Does CDFA want to Succeed?** | |
| **?** | **A reasonable person would believe that if CDFA wanted the LBAM program to succeed, they would <u>embrace alternatives</u>, particularly an alternative that would not anger the public.**<br><br>**HOPE has prepared a non-spraying, non-toxic alternative solution for controlling LBAM. It is called "The <u>Targeted</u> Use of Sticky Traps."**<br><br>**Instead of welcoming this gift, CDFA could not be more hostile to this alternative. Every time they are asked about it – they persistently mis-describe it as saturation trapping (thousand of traps per square mile rather than a handful of additional traps) and attack what is not being proposed.**<br><br>**Saturation trapping is "thousands" to 160,000 traps per square mile. HOPE's proposal in sharp contrast, adds only 4 traps for each LBA moth found – about 20 traps for the <u>physical</u> Monterey Peninsula where only 5 LBA moths were found by Fall 2007.**<br><br>**So if CDFA wants to succeed -- why is CDFA fighting this solution harder than they are fighting the moth?** |
| **14. Is any Public Health Agency collecting, analyzing and reporting on adverse human symptoms?**<br><br>**<u>There is no dispute on this topic.</u>**<br><br>**No Public Health agency, state or federal, is collecting, investigating or evaluating the hundreds of complaints of unusual symptoms arising during and right after the aerial spraying of humans; nor is any agency required to do so.** | |
| **15. Has the <u>LBA moth</u> caused any harm to human health?**<br><br>**<u>There is no dispute on this topic.</u>**<br><br>**No. The LBA Moth poses no threat to human health in sharp contrast to the West Nile Virus which has killed California residents. The moth does not kill anything; not even the fruit trees of concern.** | |

| **16. Has the aerial pesticide spraying caused any harm to human health?** | |
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| **" Pheromones are extremely safe and if persons believe they have experienced sickness as a result of the pending treatments, they are advised to see their doctor. In Santa Cruz and Monterey, only a small number of reports were filed with their County's Public Health officer, and the other complaints have been duly logged and noted. Again, we have confidence that the pheromone is safe. That being said - state agencies (DPR, OEHHA) with jurisdiction for public health produced a Consensus Statement that evaluated the complaints and found "it is likely that exposure occurred at levels below those that would be expected to result in health effects."** | **As of December 20, 2007 Governmental agencies and citizen groups have received 643 documented complaints of health problems after aerial pesticide spraying of Checkmate pesticides over Monterey and Santa Cruz cities, children and wildlife in September, October, and November 2007.**<br><br>**On the Monterey Peninsula, that is more than one complaint for every thousand residents. While some of the complaints may be duplicates, it is notable that many of those single complaints were for a family of several people who each experienced symptoms. It is also well documented that health complaints under report the number of people experiencing symptoms by as much as ten times.**<br><br>**Citizens complained of a variety of adverse reactions immediately and soon after the aerial spraying, including: *Asthma attacks, Bronchial irritation, Lung congestion and soreness, difficulty breathing and shortness of breath, Coughing or wheezing, Skin rashes (sometimes severe), Vision blurred, Eye irritation, Sore throats, Nasal congestion , Sinus bleeding, Chest pains and tightness, Heart arrhythmia and tachycardia (irregular and rapid heartbeat), Headaches (sometimes debilitating), An inability to concentrate and focus, Dizziness,* Muscle aches , Body tremors, Intestinal pain and diarrhea, Nausea , Swollen glands and lymph nodes in neck and under arms , Feelings of lethargy and malaise, Menstrual cramping, an interruption to menstrual cycles, and in some cases a recommencement of menstrual cycles after menopause.**<br><br>**Several people reported severe reactions, and some have required emergency room visits. Many report they have never had any similar symptoms previously. Some said the effects of the spraying were debilitating and made it impossible for them to focus, work, and take part in their normal activities.** |
| **17. Has the aerial pesticide spraying caused any harm to California ecosystems or agriculture?** | |
| **(no response)** | **Just as there is no law requiring the monitoring of human health impacts from aerial pesticide spraying, there is no law requiring study of harm to ecosystems or agriculture.**<br><br>**Checkmate pesticides are NOT non-toxic as the EPA required label describes. The Checkmate pesticides must be cleaned up under the federal hazardous waste law (the Resource Conservation and Recovery Act.)** |

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| | **Chemicals related to the pesticide kill aquatic invertebrates (e.g. abalone, crabs, vernal pool fairy shrimp and krill) in tiny amounts (parts per billion). This is from a page excerpted from the USDA Environmental Assessment, June 2007.**<br><br>**The public is less willing to purchase formerly "organic" produce that comes from an area where the pesticides were sprayed.** |

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| **18. Did any Elected Official approve the aerial spraying?** | |
| **"The decision to spray was made after sufficient public input."**<br><br>**"You don't get to vote." - CDFA spokesman Steve Lyle** | **No. While <u>there is no dispute on this topic,</u>**<br><br>**<u>Not one elected official approved the aerial pesticides spraying of cities.</u>**<br><br>**All decisions to aerially spray pesticides on cities were made by a series of bureaucrats and appointees in the USDA, US-EPA, California Food & Agriculture Dept, and California Dept of Pesticide Regulation behind closed doors in Washington DC and Sacramento.**<br><br>**The agencies are only holding public meetings after they made their decisions.** |
| **19. Does the aerial pesticide drift from its release location?** | |
| **" The airplanes are equipped with a GPS system to keep treatments on target. CDFA/USDA also deploy an environmental monitoring system to make sure the treatment only occurs during appropriate weather conditions and is effectively deliver within the treatment zone." (CDFA Q&A Sheet Jan. 2008)** | **Yes, the pesticides drifted significantly away from where they were released.**<br>**Apparently everyone (except CDFA) agrees the CDFA computer model for Aerially sprayed Pesticide Drift used assumptions that are significantly wrong, and that the spray will and did drift much farther than predicted. When using credible assumptions by world experts, <u>the spray can easily drift half a mile in calm winds and 3+ miles in 8 mph winds.</u> Will CDFA use the new assumptions, or keep using the discredited assumptions?**<br><br>**The night of Oct 24, 2007, the Checkmate pesticide was sprayed at 500-800 feet above ground level over Pacific Grove and Monterey in southerly winds measured at 5-10 mph at ground level. Since it takes the pesticide particles at least 20 minutes (and as long as hours to days) to reach the ground because of the height the airplanes released them, most of the pesticides are calculated to have drifted at least 2 miles north from their release locations. HOPE calculates that at least a third and possibly most of the pesticide drifted into Monterey Bay.** |