

**Bat Control Should Not Drive You Batty:
How to Manage Bats Effectively in Your School District
Webinar Q&A
October 18, 2016**

Speakers

- John Hermanson, Cornell University
- Jeremy Theriot, Ascension (LA) Public Schools
- Ricardo Zubiato, Salt Lake City (Utah) School District
- Dianne Odegard, Bat Conservation International

Questions and Answers

The questions below were posed by webinar participants. Responses may have been refined following the webinar for clarification or to include additional resources.

1. What did you find to be the best way to clean up bat guano?

(Mr. Zubiato) We hired a contractor specializing in hazardous waste cleaning.

(Mr. Theriot) If it was just random droppings and they were fresh, we cleaned them up ourselves. If the guano was fully dried with no smell and no one could get to it easily, such as within a wall cavity, we decided to leave it undisturbed. A sure-fire way to deal with large amounts of guano is to hire someone who is used to removing hazardous waste.

2. What are the effects of bat guano to health?

(Dr. Hermanson) First, guano is not going to pose a danger of rabies. Rabies is ineffective if it is not at body temperature for extended periods of time. Dry guano can harbor histoplasmosis, a fungus. You do not want to get it into your lungs as it may have long-term health consequences. Vacuuming or disturbing old, dry guano could also expose a person doing the removal to histoplasmosis spores. So, care must be taken to protect the user from respiratory exposure (by having them wear a mask over their nose and mouth). At our university, we are encouraged to use a fitted respirator mask. Finally, you may want to use someone who is professionally trained to deal with the guano.

(Ms. Odegard) Histoplasmosis in most people causes mild flu-like symptoms, or no symptoms. Many people who live in areas where the fungus that causes it is endemic (mostly in the central and eastern states, particularly areas around the Ohio River and Mississippi River valleys) have been exposed to the spores and might have a positive skin test, but do not get the disease. However, it can be a very serious and life-threatening disease in people with a suppressed immune system — e.g., those who are HIV-positive, the very old or very young, or who are taking immune-suppressive medications. CDC's has lots of [information on histoplasmosis](#).

3. Along with bats, we have struggled to deal with bat bugs. Is there anything that might help?

(Dr. Hermanson) Bat bugs are highly specialized to living on their host – bats. I do not know of any danger people would have from the bugs if small numbers were living in the attic with bats. They do not seem to cross-over to humans.

(Ms. Odegard) You might have a temporary situation with bat mites, fleas or other bat ectoparasites if a large bat colony is suddenly excluded from an attic or other area of a building, leaving the parasites without a host. If you do, they will likely be short-lived and you can wait it out since they don't like our blood (or the blood of our pets). If you need to act immediately, do what you normally would for fleas from cats or dogs — vacuum frequently, use diatomaceous earth around areas where parasites might enter, or commercial pesticides (labeled for that use and only if you are sure bats are not present).

4. Besides rabies, what other diseases are carried by bats?

(Ms. Odegard) Other than above-mentioned histoplasmosis, I am not aware of any other diseases contracted by people from U.S. insectivorous bats.

For clarity, bats do not *carry* rabies (meaning that they do not harbor rabies without getting sick themselves). Like most mammals, they can contract the disease, but when they do, they die from it. The vast majority of bats do not get rabies. According to the CDC, even among bats turned in to rabies labs for testing, which may have been found on the ground or are otherwise easily captured, an average of only 6% test positive for rabies. The important message is to make sure everyone (especially children) understand they should not attempt to handle bats (or any other wild animal), because of the possibility of a frightened animal biting in self-defense.

5. What is the cost of bat guano cleanup?

(Ms. Odegard) I'm sure it varies considerably among companies who do it, and by the size of the job. It would be wise to call more than one company in your area to get a range of costs.

(Dr. Hermanson) That will depend on the situation and the condition of the guano (dry vs. wet) and the difficulty in getting access to the guano.

6. I have bat guano running down the walls in my classroom. What should I use to clean this up? Also, is this a health hazard to the children and staff?

(Dr. Hermanson) I would not think your health officials would be tolerant of this situation. It suggests that there are way too many bats living in this space and that they need to be addressed and excluded. The type of wall materials will dictate your remediation. Sheetrock walls may have to be removed and replaced. A hard material wall (sealed bricks) may be cleaned with bleach to remove the offending guano (and likely, urine) stream.

(Ms. Odegard) If it is running down the walls, it is likely coming from a larger deposit above. So, whoever is hired to deal with the main deposit should be able to take care of the droppings below. If the guano in the classroom is dry and dusty and the spores could become airborne, it might be a concern and should probably be cleaned before letting children occupy the room.

7. How can I get info on the bat boxes?

(Ms. Odegard) Please go to [Bat Conservation International's website](#) for extensive information about all things about bat houses!

8. We occasionally have a bat enter a school, probably from an unscreened window left open overnight. How can we catch these bats without harming them? Maybe a butterfly net?

(Ms. Odegard) It is difficult to capture a flying bat with a net and you run the risk of breaking a bat's bones with the edge of the net. It is best to wait for the bat to land, clear people out of the area where the bat is flying, and, if possible, close that area off from the rest of the building. If it is dusk or later, open the doors and windows so the bat can fly out on its own. Since that is unlikely to be possible in a school, when the bat lands, simply place a box over it and slide a piece of thin cardboard or a large envelope gently between the surface and the bat, capturing the bat in the box. Detailed instructions can be found on [Bat Conservation International's website](#).

(Dr. Hermanson) I usually catch them with a heavy garden glove, but, I'm up to date on my rabies vaccines and I know what I'm doing.

(Mr. Theriot) Find a local pest control company that is licensed for nuisance wildlife including bats. Due to disease and risk to the bat, leaving it to the professionals would be the best plan of action.