Yes, That's a Huge Floating Mass of Live Fire Ants in Texas

Floods make them more venomous and more aggressive.



A fire ant raft after Hurricane Harvey in Pearland, Texas

Brant Kelly / Flickr

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When there is flooding along the Gulf Coast, there are fire ants. The invasive ants congregate into living rafts, drifting through water until they reach solid ground again. It's a time-honed survival strategy.

But when there is Hurricane Harvey-level flooding, there are not just small rafts but huge, dense mats of fire ants.

"Holy crap. I have never, in my entire career as an ant researcher, seen *anything* like this," tweeted Alex Wild, curator of entomology at University of Texas at Austin, in response to the image below.





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Meanwhile, in Cuero, the river has brought my aunt all of the fire ants. Yes, those are all (of the) fire ants.

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Of course, Wild told me, it is all perfectly logical. "They actually love floods," says Wild. "It's how they get around." Fire ants displaced by water form rafts; a lot of fire ants displaced by a lot of water will form really big rafts. But still! The sheer size of them is incredible.

After Hurricane Katrina, Linda Bui, an entomologist at Louisiana State University, remembers seeing evacuees from New Orleans come into a field hospital with bands of unexplained rashes around their legs and waists after wading through floodwaters. "They were like something none of the medical professionals had ever seen," she says. "I was like, 'Those are literally fire ant stings on top of fire ant stings."

The episode stuck in Bui's head, and later, she investigated the venom of flooded fire ants. The study, published in 2011, found that flooded fire ants deliver higher doses of venom because they have 165 percent as much venom inside them as normal fire ants. The flooding made them more aggressive and dangerous. It is also important, she says, to be careful during post-hurricane cleanup. Piles of debris can act like islands, where fire ants have congregated during the flood.

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Fire ant rafts do have a kryptonite: dish soap. "Dawn is a not a registered insecticide, but it will break up the surface tension and they will sink," says Bui.

Hurricane Katrina ended up permanently depressing fire ant populations around New Orleans. The rafts can last as long as three weeks, says Bui, but most start to fall apart after a week. Because parts of New Orleans stayed flooded for weeks in the time it look water to be pumped out from behind the levees, a lot of those ants ultimately drowned. Afterwards, Bui and her colleagues also initiated a pesticide program to prevent fire ants from returning and colonizing the previously flooded areas. It seems to have worked so far.

What will happen to the fire ant rafts in Texas will depend in part on how fast the waters recede. It could also depend who exactly is in these rafts. Fire ants originally formed colonies around a single queen (monogyne), but somewhere along the line, some populations lost the ability to recognize other colonies. These mutant fire ants live in one big interconnected colony with multiple queens (polygyne). "If they're polygyne, then that's basically one giant interconnected colony and they'll disembark and spread out but they'll be fine," says Wild. "If they're monogyne, it's going to be a territorial mess. Fights. Battles."

Whoever lives will have the land all to them themselves. There is at least one possible upside: Fire ants love to eat ticks. The area where the fire ants landed may be crawling with stinging ants for while. "But it'll have absolutely no ticks. So it'll be lovely from that perspective," says Wild.

ABOUT THE AUTHOR



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