

Flooding and Fire Ants: Protecting Yourself and Your Family

Paul R. Nester

Extension Program Specialist—Integrated Pest Management
 Texas A&M AgriLife Extension Service

Tremendous amounts of rain can fall in a short time, flooding low-lying areas. With this flooding comes the problem of various “critters” trying to find safe, dry ground. In areas infested with the red imported fire ant, *Solenopsis invicta* Buren, the ants and their colonies can present a potentially serious medical threat to people and animals during times of flooding.

Floodwaters will not drown fire ants. Instead, their colonies emerge from the soil, form a loose ball, float, and flow with the water until they reach a dry area or object they can crawl up on. Floating fire ant colonies can look like ribbons, streamers, mats, rafts, or an actual “ball” of ants floating on the water. These amoeba-like ant masses contain all of the colonies’ members: brood (eggs, larvae, pupae), queen ants, winged reproductive males and females, and worker ants (see [What happens to fire ants during a flood](#)).

As the flood waters recede, these floating fire ant colonies will get onto anything they come

in contact with and are attracted to—anything that might give them shelter until a mound can be re-established in the soil. This means that debris piles left from the floodwaters or from flooded homes are extremely inviting to the fire ant. In times of flooding, a general, preventive treatment for controlling the fire ants is out of the question. Ants and ant colonies must be dealt with quickly.

DURING FLOODING

Avoid contact with floating mats of fire ants. If you are in a row boat, do not touch the ants with the oars since they can “climb aboard” via the oars. Occasionally, floating ant masses are encountered even indoors in flooded structures.

Dress appropriately when working in floodwater. Cuffed gloves, rain gear, and rubber boots help prevent the ants from reaching the skin. If they do, they will bite and sting. Remove them immediately by rubbing them off. If submerged, ants will cling to the skin and even a high-pressure water spray may not dislodge them. However, a spray made of diluted biodegradable dish-washing liquid may help immobilize and drown them.



Reports of successfully sinking floating ants by spraying them with soapy water led to an assessment of using biodegradable liquid dishwashing detergent as a method of fire ant control in flood water (see *Detergent as a Method of Fire Ant Control in Floodwater*). Two fluid ounces of dishwashing liquid mixed with 1 gallon of water sprayed on ants floating in a 5-gallon bucket filled with water caused 80 to 95 percent mortality within 10 minutes. This is not considered to be a registered pesticide by the Environmental Protection Agency. With verification in actual floodwater conditions, this method could be suitable for emergency personnel to use.

AFTER FLOODING

Be cautious. Be aware that fire ants can be underneath anything. When picking up debris, pay attention to what is on, under, or in it—especially if the debris has been sitting in one area for several days. Fire ants love to get under carpet strips, furniture, and old wood to re-establish their colony.

Protect yourself. Wear boots, gloves, long pants, long-sleeve shirts, and socks. Spray insect repellent containing DEET onto your shoes and lower pants legs. This may help deter foraging fire ants from climbing onto your legs, but may not repel ants defending their colony. If using shovels or other tools, spread baby powder or talcum on the handle. Fire ants cannot climb onto vertical surfaces dusted with talcum powder unless the surface gets wet or the powder is rubbed off.

If you see fire ants in a pile of debris that you must handle, use a shovel or other tool to avoid ant contact or treat the pile with a fast-acting household or lawn and garden insecticide. Aerosol spray products containing pyrethrins or pyrethrum derivatives (tetramethrin or allethrin) labeled for use on “ants” or “crawling insects” have a quick “knock down” and break

down quickly. Spray as many of the ants as possible. However, these products can be quite toxic to aquatic organisms, so avoid spraying into water. Also spray cracks and surfaces of infested debris and objects. Come back after the product has had time to act. Fire ant bait products should not be used after flooding. They are slow-acting, the flooded mounds will be disorganized, and worker ants will not be foraging for food.

Treat stings. To treat fire ant stings, use over-the-counter medicines for insect bites or stings (see *Medical Problems and Treatment Considerations for the Red Imported Fire Ant*). Relieve the irritation from a fire ant sting within the first 15 to 20 minutes using a sting-relief medication or remedy. Some people report relieving fire ant stings by “dabbing” the area with a 50:50 solution of bleach and water. Other home remedies include using ammonia, camphor, meat tenderizer (papain), and tea tree oil. An antibiotic cream can help prevent secondary infections. Some people may be allergic to fire ant venom; reports of sting victims going into anaphylactic shock are not uncommon. Nausea, shortness of breath, or unusual swelling of the sting area are symptoms that should prompt immediate medical attention.

Prepare for next year. Take preventive measures to reduce ants in your area and lower the probability of ant problems. However, when flooding occurs along rivers and streams, floating ant colonies can also originate from upstream.

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REFERENCES

What happens to fire ants during a flood?
www.extension.org/pages/62880/what-happens-to-fire-ants-during-a-flood

Detergent as a Method of Fire Ant Control in Floodwater
bug.tamu.edu/fireant/research/projects/pdf/1990-1991%20resdemos.pdf#56

Medical Problems and Treatment Considerations for the Red Imported Fire Ant
u.tamu.edu/ento-005

Managing Red Imported Fire Ants in Urban Areas

www.extension.org/pages/11004/managing-imported-fire-ants-in-urban-areas-printable-version

Broadcast Baits for Fire Ant Control

www.agrilifebookstore.org/product-p/e-628.htm

Fire Ant Control: The Two-Step Method and Other Approaches

www.agrilifebookstore.org/product-p/ento-034.htm

For more information regarding fire ant management, see Extension publications *Managing Red Imported Fire Ants in Urban Areas*, *Broadcast Baits for Fire Ant Control*, or *Fire Ant Control: The Two-Step Method and Other Approaches* posted on <http://AgriLifeBookstore.org>.

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