

Tropical Storm. Image credit courtesy of New York Sea Grant.

When Disaster Strikes: What to do with Your Boat and Boat Bottom Products

If your boat is stored/docked at your home and you are under a threat of a hurricane/tropical storm/dangerous nor'easter:

If the boat is under 20 feet in length, store it upside down next to a building. Lash it down by attaching to building if possible. Do not make the mistake of storing the boat between buildings because the wind may actually be stronger in such a location due to the wind tunnel effect and you may end up with extra damage.

Even better, if possible or if the boat is longer than 20 feet, keep the boat on a trailer. This will both stabilize the boat and keep it elevated so low levels of floodwaters do not dissolve compounds in the boat bottom paint.

If the boat is longer than 20 feet park the trailer if possible in a carport or garage to prevent the boat and trailer being blown over or moved. If no structure is available, move to higher land/further out of the flood zone or park the boat and trailer so that the outside wall of a structure may shield it from the wind.

Even if the boat and trailer are inside, there is no guarantee that damage will not occur. Check for heavy items on walls and shelves that could be blown, floated or vibrated loose during a storm and move to the floor. If possible, cover sensitive parts of the boat with padding of some sort and/or cover with plastic tarping to reduce the impact of any debris. A garage door can be reinforced with 2 by 4s or aluminum hurricane reinforcements.

Sea Grant New York

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Boat on trailer. Image credit courtesy of New York Sea Grant

Regardless of whether the boat is inside a structure or outside, all drains should be cleaned, all trailer springs checked and all equipment removed and stored securely indoors and out of the storm. Store motors and especially canvas inside if possible.

Whether the boat is inside a structure or outside, tie down both boat and trailer with heavy duty rope and make sure that the movement of the rope during severe weather will not damage the boat, trailer or cleats. Make sure tie down ropes are not attached to trees or objects that themselves can be uprooted, blown down, or floated away.

The tires of the trailer should be partially deflated. This allows any stormwater filling the boat to drain from the back of the boat without damaging the trailer. Another important tip is to put heavy blocks against the trailer wheels to keep it from moving under the force of the wind or floating away under the force of floodwater (hopefully).

After the storm, check for invasive plant and animal species that may have blown or floated into the boat or trailer during the storm. Check between the boat and the cleats of the trailer if there has been flooding that may have floated the boat slightly off the trailer even with the restraining ropes for any invasive material that may have gotten caught there.

Things you may not have thought of if your boat is stored in the water or a marina and a storm is coming

If you either rent a slip or have your boat in dry storage at a marina, do you know precisely who is responsible for prepping your boat before a storm and for any damage your boat might do during storms? Is it in writing? This is extremely important from an insurance and liability perspective.

Gas up your boat as soon as you hear even a faint rumor of a potential storm. It will take you much longer (at a much higher price) to get gassed up the closer you get to potential landfall.

Make sure your bilge pumps work. You are going to need them after the storm.



Boats in dry storage. Image credit courtesy of New York Sea Grant

If you are in the water, your boat should be anchored from the bow AND stern, tied 10-15 feet from the dock in deep water, using weighted lines with enough slack for a full five-foot rise in the tide. Even then, tires to make a bumper between you and the dock are a good idea. NEVER tie a boat to a dock

when there is a storm coming. If several boats are tying up together, there MUST be tires or some sort of cushioning fender between them.

NEVER tie up to dead trees when a storm is coming. As water erodes soil around dead roots, they are likely to snap causing the tree to float free and fall over, damaging your boat and allowing it to come loose in the storm. If you are going to tie up to a living tree (risky because of limb loss or the trunk snapping) they should have very deep and strong roots that cannot easily be eroded from the soil.

What about hiding and riding out in a canal? Canals usually have a great number of private docks. If you are tying up GET PERMISSION from the owner of the dock. Do not assume it is ok because again this can lead to lawsuits if the boat damages something due to the storm. You can also use "spring lines" to distance the boat from the dock structure but do not do this in such a manner that you prevent other boats from moving back and forth, especially if you are not going to be on the boat (not a good idea to be on it in a storm) to move the lines.

What should you remove to safety if the boat is going to ride out the storm in the water? Remove batteries, any water sensitive equipment and boat records (these should always be stored in water repellent containers anyway, but take them off the boat during a storm. Also make sure to clean all tiedown gear that cannot be safely removed and all cockpit drains at the first hint of a storm.

After the storm, check for invasive plants and animals as described above.

Boat Bottom Products

Boat bottom paints are pesticides. Boat bottom paints and products should have special care taken of them before and after a hurricane, storm or flood. During a storm, boat bottom products may leak or be swept away, contaminating water and soil both near and remote from the site of storage.

Before the storm:

Have a detailed inventory, and if you own or run a marina, share this inventory with your insurance company.

Keep your inventory to a minimum. Keep a paper inventory that is not located where you store your materials.

If a storm is coming and you are concerned about the vulnerability of your storage location, move your products to higher ground as long as this will not compromise the potential to contaminate water or soil or to have contact with people or animals. Or, move products off floors or levels that may flood to higher shelves.

Turn off electricity to storage before the storm hits so you can safely access after the storm if there has been a spill.

Lock the storage area prior to evacuation for a storm.

Again, it is imperative to properly label, store and keep an inventory of boat bottom products so you know what you are dealing with before an emergency and afterwards.



Boat bottom paint. Image credit courtesy of New York Sea Grant

After the storm:

If there has been wind, vibration or flooding, pesticides may leak or tip over and spill. This means that the surrounding standing water is contaminated. If a boat with a kind of paint that dissolves into water is left standing in water in a garage or structure that means that water is also contaminated. The first step is to make sure you are protected if you are going to be exposed to the contaminated water and that means using personal protective equipment as suggested on the boat bottom product label to minimize contact with the products. If there has been a major spill due to a storm, then do not attempt clean up yourself. Report to NYSDEC or EPA and let them decide what steps to take next. If the contamination is small and you have the appropriate protective equipment and proper ventilation, anything that was knocked over and not leaking can be restored to an upright position.

If there are leaking boat bottom products, NEVER touch them with your bare hands. Use the label recommended type of glove. You can create a "dam" of cat litter around spilled boat bottom products to try to prevent their spread into greater areas of water. You can use cat litter or other absorbent materials on impervious surfaces such as pavement or cement floors.

Once the absorbent materials have done their job you can use a dedicated broom or shovel to move all damaged containers, contaminated absorbent material, and other materials and contaminated personal protective equipment into heavy duty double contractor's bags for proper disposal. If there is any doubt about the material, contact the emergency numbers on the label or the NYSDEC.

Don't try to clean up a large spill or deal with an unknown situation by yourself; contact local authorities to report spilled quantities of chemicals and to request assistance. Dial 911 if you already know there are spilled or damaged containers in the building. Never enter a damaged building without protective clothing and equipment.

Resources

https://www.sun-sentinel.com/news/weather/hurricane/guide/fl-ne-hurricane-car-boat-protection-20210526-d7i-og2qib5dqzhcso5g4drsbnu-story.html

https://sites.google.com/a/vt.edu/virginia-tech-pesticide-programs/info-center/protecting-your-chemical-storage-area-from-storms-and-floods

https://www.farmprogress.com/cotton/pesticide-regulators-urge-caution-aftermath-hurricane-flooding

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