

METEOROLOGY

Hurricane Superstorms

Season for Atlantic's giant tropical storms is now. Advice offered concerning how to minimize damage to yourself and your possessions both before and after swirlers.

► THE HURRICANE season in the Atlantic is late summer and early fall. Swirling winds from the hot humid areas north of the equator are likely to lash out over the tropical portion of the western Atlantic, West Indies, and south and east coasts of the United States.

High temperatures and humidity team up with converging winds in the late summer and early fall to make these superstorms. The rotation of the earth causes the whirling motion.

Born in the belt of doldrums, towards which the trade winds blow from both sides, the hurricane is the western Atlantic's version of the typhoons of the western Pacific. Although the doldrums exist throughout the year, they are farthest north at this time, and so in the best position for the earth's rotation to start whirls.

The available energy to develop such storms is greatest now. This energy is in the form of the latent heat of the great abundance of water vapor discharged from the hot surface of the strongly sunned ocean.

The air in a circle anywhere from about 50 to 500 miles in diameter presses in toward the central low pressure core, swirling around in a spiral faster and faster until its centrifugal force is so strong that it moves in a circle about 10 to 30 miles in diameter, inside of which there is almost no wind.

As the whirling wind ascends, it cools and much of the vapor in it condenses, liberating latent heat. This keeps the central zone warmer and less heavy than the surroundings, and thereby maintains the low pressure, on the existence of which the continuance of the storm depends.

Because of the rotation of the earth, hurricanes swirl in different directions in the two hemispheres. In the northern hemisphere, the rotation is counter-clockwise, and in the southern hemisphere it is clockwise.

Hurricanes can take several kinds of paths, depending on the location of the pressure areas in their vicinity. A hurricane tends to follow the southern and western border of the semi-permanent Atlantic high pressure area. The hurricane thus usually moves in a parabola, though a comparatively straight line is common. Occasionally, it may loop, crossing over the same spot twice.

Tearing over the waters of the western Atlantic, the storms expend enough energy in a single day to run all the power plants in the world for several years. But this tremendous energy has never been har-

nessed. Thrown against coastal cities, it has caused great disaster. The worst American hurricane disaster claimed 6,000 lives at Galveston, Texas, in 1900.

Hurricane Safety Rules

► SINCE HURRICANE season is here, persons living or vacationing along the Atlantic seaboard or the Gulf Coast need to know and follow hurricane safety rules. The U. S. Weather Bureau, which has been giving hurricane warning service since 1873, gives the following directions on safety measures:

1. Keep your radio on and listen for late warnings and advisories.
2. Pay no attention to rumors. Rely only on the official Weather Bureau advices and warnings.
3. Get away and stay away from low-lying beaches or other locations which may be swept by high tides or storm waves. If your only passage to high ground is over a road likely to be under water during a severe storm, then leave early. Don't run the risk of being marooned.
4. If your house is up out of the danger of high tide and is well built (securely anchored to foundation with a good roof also securely fastened), then it is probably the best place to weather out the storm.
5. Board up windows or put storm shutters in place. When you board up, use good lumber securely fastened. Makeshift boarding may do more damage than none at all. Have strong bracing for outside doors.
6. Get in extra food, especially things that can be eaten without cooking or with very little preparation. Remember that electric power may be off and you may be without refrigeration.
7. If emergency cooking facilities are necessary, be sure they are in working order.
8. Sterilize the bathtub and fill it with water, advises the Weather Bureau. Also sterilize and fill all jugs, bottles, cooking utensils and other containers. Even for some time after service has been restored it may be wise to boil drinking water, unless you are sure the supply received from the city's mains is safe. Your health department can tell you about this.
9. Have a flashlight in working condition and keep it handy.

After the Storm

► YOU MAY escape injury during a hurricane, only to get hurt or sick later if you do not play it safe after the storm is over.

To avoid some of the post-hurricane dangers to life and health, follow these U. S. Weather Bureau rules:

1. Seek medical care at Red Cross disaster stations or hospitals for persons injured during the storm.
2. Don't touch loose or dangling wires. Report such damage to the light and power company, or nearest police officer.
3. Report broken sewer or water mains to the water department.
4. Don't empty water stored in bathtubs or other receptacles until you are sure that a safe water supply has been restored.
5. Guard against spoiled food in mechanical refrigerators if power has been off any length of time.
6. Take down shutters and save the lumber. Store in a handy place for future use.
7. Beware of broken tree limbs. Collect fallen limbs and debris around the premises and pile along curb to facilitate collection.
8. Unless you are qualified to render valuable emergency assistance, stay away from disaster areas where you may hamper first aid or rescue work.
9. Drive automobiles cautiously. Debris-filled streets are dangerous so keep your eyes on the road. Along the coast the soil may be washed away from beneath the pavement, which may collapse under the weight of vehicles.
10. Be alert to prevent fires. Lowered water pressure makes fire-fighting difficult after storms.

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PSYCHOLOGY

Quarrelsomeness Inherited From Parents

► WARLIKE, QUARRELSOME tendencies are inherited from the parents, not learned from them. At least, that is what happens in mice, Dr. Emil Fredericson told the meeting of the American Psychological Association in Washington.

At the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine, a fighting strain of mice has been bred, and also a strain of mice that get along peacefully together. The feuding breed will fight with each other over a morsel of food, not just when they are hungry, but also when they are well fed. The peaceful animals will gather in a group around a single bit of food. One may pull the bit away from the others in order to take a bite, but will immediately give it back again.

When young of the feuding strain are taken from their parents before they are five days old and given for adoption to parents of the peaceful strain, they nevertheless show their quarrelsome ways. Instead of teaching their adopted young peaceful ways, their foster parents learn to join in the squabble with the young over the food.

But the young of the peaceful strain, when adopted by the aggressive parents, retain their friendly ways.

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