



SAFETY FIRST UNC—FIRE SAFETY



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

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Tornadoes can happen anytime!

There is not a specific season for tornadoes, according to Ron Jones of NOAA's National Weather Service in Silver Spring, MD. "While they occur most frequently in March, April and November, tornadoes can occur any month of the year." The Glossary of Meteorology defines a tornado as "a violently rotating column of air, pendant from a cumuliform cloud or underneath a cumuliform cloud, and often visible as a funnel cloud. They form when "warm moist Gulf air meets cold Canadian air and dry air from the Rockies". Often appearing from any direction, most move from southwest to northeast, or west to east. Some tornadoes have even backtracked. While large hail can indicate the presence of

an unusually dangerous thunderstorm, and can happen before a tornado, don't depend on it. Hail is not a reliable predictor of tornado threat. Tornadoes can last from several seconds to more than an hour, although most last less than 10 minutes.

North Carolina is a far distance from Tornado Alley which runs south from N. Dakota to Texas, Iowa, Missouri, Arkansas Louisiana, Indian and parts of Ohio, Kentucky, Tennessee, Wyoming and Colorado. But according to <http://www.disastercenter.com> NC averaged 26 tornadoes in 1995 causing \$12,336,882 in damage, 1 death, and 174 injuries.

Hurricane Katrina (2005)



When a tornado approaches, your immediate action may mean life or death.

spawned numerous tornadoes after its LA/MS landfall. For more information contact, <http://www.spc.noaa.gov>.

—Kitty Lynn

Tornado Watch—means tornadoes, severe thunder storms, or both, are possible.

Tornado Warning—means a tornado has been sighted or spotted on radar.

UNC Implements Enhanced Security Measures for Radioactive Materials Roger Sit, EHS Radiation Safety Manager

As a result of the terrorist events which occurred on September 11, 2001, the Nuclear Regulatory Commission (NRC) determined that security enhancements are needed by licensees who possess quantities of concern of certain radionuclides (radiation). UNC and UNC Hospitals are such licensees. The NRC along with the State of North Carolina Radiation Protection Section (NC-RPS) has issued regulatory requirements that

UNC must meet for the purpose of increased controls or enhanced security of radioactive materials in quantities of concern.

During the past year the Radiation Safety Office (RSO), with the help of an Ad Hoc Committee for Irradiator Security and the UNC Radiation Safety Committee has established a strategy for enhanced security measures and is in the process of implementing these measures. These measures

are scheduled to be fully implemented in the Spring of this year. Special funding was provided by the UNC Budget Committee for these security upgrades. These new security measures will not only meet the new regulatory requirements set forth by the NRC and NC-RPS, but will constitute another step taken by the RSO to reduce the radiological risks at UNC to the students, staff, faculty, and surrounding environment.—Roger Sit

Researcher, Cordula Mora helps the *Caretta caretta*



Cordula Mora holds a *Caretta caretta* in the Sea Turtle Facility at UNC.



After two years, all turtles are released into the Gulf Stream.



Monitors allow Mora to view turtles during testing.



“You know something’s that floating is not alive, and less likely to be eaten.”

UNC researcher, Cordula Mora hands me goggles to wear while in the Sea Turtle Facility at The University of Chapel Hill at North Carolina. She holds an older turtle, two years old, “She is larger than those in the wild, because she eats much better in captivity. These turtles have excellent survival prospects once we release them back into the wild,” She explains. The two-year-old turtle’s name is Lisa. Mora came to UNC to work with the sea turtles, although UNC had never housed turtles before.

She is working with two different turtle projects. One of the projects has a purpose in conservation. She is studying sea turtle vision as part of a larger international study looking at how the use of fluorescent light sticks that are attached to fishing nets to attract fish unfortunately also attract sea turtles. The turtles are drowned or seriously injured in the process. She wants to understand exactly what turtles can see to prevent them from becoming entrapped in the net. Turtles are also attracted to plastic bags; which when eaten will kill them. Her study proves that they can see polarized light and quite possibly plastic appears to the turtles like polarized light.

The other project is to learn more about the turtle’s sensitivity to magnetic fields. There are power cables that run along the ocean floor, and Mora wishes to know more about how these cables affect

the turtles. She is hoping to understand these sensory systems and how animals perceive the world.

Lisa’s scientific name is *Caretta caretta*, more commonly known as the Loggerhead sea turtle. “I got my Master degree studying Rainbow Trout, and my PhD studying pigeon’s and both of them I did in New Zealand.” In addition to the turtles, these are also species which can detect magnetic sensitivity. Magnetic sensitivity can be seen by ants, bees, lobsters, rainbow trout, probably all the way up to whales. She explains that many animals use magnetic fields to navigate.

Mora did the work to get all the permits to keep turtles at the university including building the equipment that houses the turtles while they are resting away from the testing equipment. Now, she has successfully studied the sea turtles for three years. “I want to keep working with sea turtles in the future.” Soon, she will be leaving the lab behind and continue her research elsewhere.

It takes months to train the turtles to participate in the studies. Mora describes them as going to their job every second day. “By feeding them every two days, they are more motivated to participate and work for their food. All are released after two and a half years into the Gulf Stream at the Carolina coast.” Mora says. “The juveniles will be released this summer.”

But for now, while they are in captivity, she distinguishes between them by painting a small circle of Juicy Melon pink nail polish on different sections of the carapace to identify each turtle. The babies have blue nail polish. The polish wears off in about a week. Counting the eight young turtles, there are a total of 16 turtles in the research program.

“Do you want to see a baby?” She asks. “Don’t put your fingers in front of their nose. They will think its food.” She climbs a step ladder to reach the aquarium where it swims around. The small turtle in her hands moves beautiful legs that feel soft yet like leather, and there is a single white claw in each front and rear leg. The baby turtle whose name is Reka holds her flippers tightly to her body as a defensive posture in trying to look like a piece of wood. “It’s something they do for the first few months of life to look uninteresting—you know, something that’s floating is not alive, and less likely to be eaten.”

We wish Cordula success in her future endeavors as we know the benefits of her research will be enjoyed by all, especially the sea turtles.

—Kitty Lynn



Emergency Coordinator's should designate a Fire Drill Assembly Area

Preparing for the next fire drill in your building requires some planning. Your first step is to designate a *Fire Drill Assembly Area* –FDAA (unless you already have one) for your building by following the provided instructions:

1. Select a location outside of the building that is far enough away to keep building occupants protected from harm without having to cross a street.
2. Location should be easy for building occupants to get to without obstructing the Fire Department or Law Enforcement from entering the building or conducting their operations.
3. During a fire drill, all occupants should report to the FDAA and remain there until directed otherwise by authorities. The Fire Department

should be able to see everyone and the Emergency Coordinator if additional information is needed, such as a head count of evacuated employees, or the location of building systems or injured persons.

4. Inform all occupants of FDAA by posting it on all the building doors and around elevator lobbies, and/or notifying by mass email once yearly.
5. Conduct a head count of evacuated persons and make note of it in the event that authorities request this information.
6. Disabled persons do not need to evacuate the building. They can wait for assistance in the Area of Rescue Assistance-ARA which should be in a designated room nearby or in a stairwell; however the Emer-

gency Coordinator should be familiar with the area the disabled person uses during a fire alarm activation so as to direct the authorities to that person to make a safe rescue.

7. Let disabled persons know of the ARA in your building. The ARA is above the first floor in the stairwell landings or a designated room where the disabled person typically works or is near.

Fire Drill Assembly Area-FDAA: Area outside of a building where occupants meet after an evacuation and wait for Fire Dept. Command to allow access to building.

Area of Rescue Assistance-ARA: an interior space that is protected from the effects of fire and used by those persons who are unable to exit the building.
–Kitty Lynn



Graham Memorial Hall Area of Rescue Assistance (upstairs) provides a telephone that calls the downstairs Fire Alarm Panel to speak with Fire Department.



Graham Memorial Hall Fire Alarm Panel (upper) works in conjunction with the Area of Rescue Assistance Control Panel (lower).

Neal's Column—Fire Extinguisher Disposal

Two questions I get asked frequently are:

How long is a fire extinguisher good for? and

How can I recycle my home fire extinguisher?

Dry chemical, ABC fire extinguishers (typical home fire extinguishers) must be hydrostatically tested every 12 years. Because most extinguishers sold for home use have plastic heads it is highly recommended that they not be tested but be disposed of at the end of 12 years. When you first buy an extinguisher use a perma-

nent marker to write the month and year when it was bought. In 12 years it should be disposed of and a new one bought.

If you happen to have a fire extinguisher with a metal head, have it hydrostatically tested at 12 years. This can be done through most hardware stores. However this may not be cost effective, check the price for testing vs. the price of a new extinguisher.

If the extinguisher has not been discharged on a fire be-

fore disposal, use it to have people in your family practice putting out a fire under controlled conditions. For example, start a small fire in a charcoal grill in your backyard and have everyone use the extinguisher to put it out. If you do this be sure outdoor burning is allowed.

To dispose of a used or old fire extinguisher, in Orange County, take it to the Household Hazardous Waste recycling site at the Eubanks Landfill. Cont. next page.
This site is opened 10:00 AM

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AND SAFETY



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Tornado Safety Shelter Rules

Identify a sheltered location near your workstation. Seek inside shelter, preferably in a basement, steel-framed or reinforced concrete building of substantial construction. Stay away from windows.

- In Campus Buildings of substantial construction– go to an interior corridor away from windows.
- In Campus Buildings of frame construction–go to the basement or to an interior part of the lowest level (a closet, bathroom, or interior hall). Get under something sturdy. Stay away from windows, or go to a more substantial building.
- In vehicles, trailers, or mobile homes– go to a building of substantial construction or if that is not practical, lie flat in a ditch or culvert with hands shielding your head.

For help in pre-planning for tornadoes or other emergencies, contact Billy Mitchell, University Fire Safety Officer, 962-5708 or mitchel5@email.unc.edu.

**Continued,
Neal's Column**

to 6:00 PM on Wednesday, Thursday & Friday and 7:30 AM to 12:00 noon on Saturday. The vendor removes the head, empties out the powder for possible reuse, and the cylinder is sold as scrap metal. If you do dispose of the extinguisher to the trash, be sure to discharge it and if possible remove the gauge.

1. For residents of other counties check with your county recycling program to find out if they have a recycle program for fire extinguishers. –Neal Mochel

A view from Cold Mountain, N.C. on the first day of spring 2006

