



Most people would take cover from a deadly tornado like this, but brave weather researchers get close to study it.

# Tornado Hunters

Experts are learning how twisters are born

SCIENTIST ROBERT DAVIES-JONES watched nervously from his car. At first the tornado had been just a harmless wisp trailing from a cloud. Then suddenly three new funnels appeared and began spinning around it, picking up dust and speed. He had started out chasing a tornado. Now tornadoes seemed to be chasing him!

This is not a scene from the new movie *Twister*. Davies-Jones, a researcher at the National Severe Storms Laboratory in Norman, Oklahoma, hopes to learn how deadly, mysterious twisters are born. To get closer to the truth, he must get very close to the tornadoes.

## CHASING THE WIND

A government project called VORTEX was started in 1994 to gather facts about twisters. For months storm chasers like Davies-Jones have set weighted bundles of equipment in

the path of storms. As a twister spins by, the devices measure its speed, temperature, moisture and pressure.

"What storm chasers see first is a big dark cloud, then a bright spiral slicing into the base," says VORTEX field coordinator Erik Rasmussen.

## Did You Know?

At least 127 tornadoes touched down in the U.S. during the Super Outbreak of April 3 and 4, 1974.

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Tornado damage is oddly selective. One twister lifted a refrigerator, but it left a nearby tableful of drinking glasses untouched.

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Ninety-nine of the 304 people killed by tornadoes from 1985 to 1990 were inside mobile homes.

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Better radar has upped the average warning time before a tornado from three minutes to eight minutes.

## WHAT CAUSES A TWISTER?

A tornado twirls down from a giant storm system called a supercell. This mass of moisture, wind and energy results from warm air crashing into cooler air. A supercell, miles wide and up to 65,000 feet tall, can produce lightning, hail, rain, creepy dark clouds and sometimes twisters.

Inside a supercell, a big spinning wind mass called a mesocyclone forms when warm air rises through cooler air blowing in a different direction. Mesocyclones create tornadoes. Radar systems, greatly improved during the past 25 years, can now detect mesocyclones. When radar finds a mesocyclone, a tornado warning is issued so people can take cover.

Here's the tricky part: more than half the time, a mesocyclone does *not* create a tornado. VORTEX scientists want to learn why, so they can improve storm prediction and avoid issuing false tornado warnings.

Scientists believe they will have some answers once they've analyzed the piles of VORTEX data. Says meteorologist Peter Hildebrand: "We got more good data out of VORTEX than we'd collected in 30 years." **E**

JOHN LUHN—TORNADO STORM

Name \_\_\_\_\_

### Tornado Hunters

1. What magazine is this article from?
2. What is the name of the project to study tornadoes?
3. The devices set out by VORTEX measure 4 things. What are they?
  - a.
  - b.
  - c.
  - d.
4. How does a tornado start?
5. What is a mesocyclone?