

Florida citrus preparation for 2008

HURRICANES

Fruit knocked to the ground by a hurricane

By Bob Rouse

Current oceanic and atmospheric conditions indicate an active Atlantic and Caribbean hurricane season is likely this year. This estimate is from the Colorado State University forecast team headed by hurricane prognosticator William Gray, who has been making predictions for 25 years. His prediction for 2008 includes 15 named storms and eight hurricanes, four of which will be major storms with winds exceeding 110 mph (category 3 and above). He predicts a 69 percent chance of a major storm striking the U.S. coast between Maine and south Texas, with a 45 percent chance of a hurricane hitting the east coast, including Florida, and 44 percent chance of one hitting the Gulf Coast from the Florida Panhandle west to Brownsville, Texas.

Fortunately, Gray's hurricane predictions have not been particularly accurate the past couple years. Yet in 2004 and 2005, when only a few storms were predicted, we had five hurricanes cross the state. The three impacting citrus in 2004 were Charley (August), ripping the Gulf

Coast up through Central Florida, and Frances and Jeanne (September), which devastated east coast groves. In 2005, we had a record 28 named storms, of which Wilma caused considerable fruit and some tree loss to south Florida groves in October.

The bottom line is that predictions are a curiosity and don't affect what we must do. We must prepare every year, regardless of weather predictions. Little can be done to protect trees and fruit from hurricane velocity wind, but we can take steps to protect the people, equipment and supplies that will be needed for the recovery. Citrus grove managers should have a checklist similar to the one below.

HURRICANE PREPARATION CHECKLIST

Personnel assignments:

1. Make a list of all tasks and make assignments.

2. Update the names on the damage inspection team.

3. Update worker contact list and means for them to call in after the storm.

Safety training:

Train workers in the safe operation of unfamiliar equipment they may have to use. Example: Drivers may have to use chain saws to remove downed trees blocking roads.



Building and equipment damage

Insurance:

Buildings, equipment (including tractors), irrigation and supplies may be damaged.

Liquid tanks:

1. Fuel, fertilizer and other tanks should be kept full so they don't move in the wind.

2. Ensure sufficient fuel is available.

Roads and Ditches:

1. Roads should be secure and ditches kept clean and pumped down.

2. Arrange with a flying service for the grove manager to survey grove damage.

Emergency equipment:

1. Test run generators, chain saws, torches, air compressors and other equipment.

2. Have shovels, slings, fuel, paint and equipment parts available in good repair.

3. Know where to get backhoes, front-end loaders and other large machines.

Communications equipment:

1. Ensure that radios are in good working order.

2. Have hand-held portable radios



Uprooted trees

with extra charged battery packs available.

3. Direct truck-to-truck radio and cellular phones save valuable time during recovery.

Hazardous materials:

1. Hazardous materials should be secured prior to a storm.

2. Gasoline pumps should be shut down.

Emergency contacts:

Emergency phone numbers, including electric utilities, sheriff, medical.

Cultural Practices:

1. Regular pruning can reduce broken limbs and minimize toppled or uprooted trees.

2. Windbreaks reduce tree damage and spread of citrus canker bacterium.

HURRICANE RECOVERY CHECKLIST

Damage inspection:

Make a visual assessment of the

damage and determine priorities and equipment needed.

Prioritize Damage:

A priority plan can help in quickly determining where to begin recovery operations.

Employee call-in:

When safe, call in those needed for damage inspection and recovery work.

Clear road access:

Clear roads to where trees must be reset or recovery activities must be conducted.

Water removal:

Remove excess water from tree root zones within 72 hours to avoid root damage.

Tree rehabilitation:

1. Resetting trees to an upright position should be done as soon as possible.

2. Toppled trees should be pruned back to sound wood.

3. Painting exposed trunks and branches with white latex paint

helps prevent sunburn.

Irrigation:

Check the irrigation system as rehabilitation is a long process and water is critical.

Fertilizer:

1. The major fertilizer elements should be applied as new growth begins.

2. Reset toppled trees will need less fertilizer due to reduced root system.

3. Reduce N fertilizer to remaining trees proportional to canopy or leaf loss.

4. The following year, trees may require more-than-normal rates to re-establish canopy.

5. Micronutrients should be applied in nutritional sprays to the leaves.

Weeds:

Row middles mowed and herbicide applications resumed on a normal schedule.

Bob Rouse is an extension specialist at the UF/IFAS-Southwest Florida Research and Education Center in Immokalee.