Urban Forest Hurricane Recovery Program

http://treesandhurricanes.ifas.ufl.edu
Safety Comes First when Cleaning up After a Hurricane!

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Safety comes first!

Are these homeowners safe?
Most injuries in a natural disaster occur during cleanup!

Every year homeowners are seriously injured or killed trying to do their own tree work.
Storm damage cleanup is extremely dangerous, even for professionals!

Is this tree care ‘professional’ safe?
Safety comes first!

- Personal protective equipment
- Clearing and removing debris
- Overexertion
- Electrical lines and utilities
- Work zone safety
- Chain saws
Personal Protective Equipment

Wearing the appropriate gear is the best way to reduce the possibility of serious injury.

- Hard hat
- Eye protection
- Hearing protection

Just wear it!
Personal Protective Equipment

- Chaps (when using chainsaws)
- Gloves
- Safety footwear (no flip flops)

Just wear it!
Homeowners: Stay Safe!

• Do not use chain saw, tree chipper, tractor if:
  – inexperienced in operating it
  – you are not physically fit to handle it

• Do not perform tree work that involves:
  – climbing of any kind
  – working from a ladder to prune a tree
  – felling trees
General Safety Guide

• Do not work alone

• Establish good communication before you start

• During clean-up operations be aware of where others are
General Safety Guide

- Keep a well-stocked first-aid kit nearby
- Have the capability to contact emergency personnel
General Safety Guide

• Wear appropriate safety clothing/gear
  – wear light colored clothing
  – wear waterproof boots & gloves when floodwater present

• Use sun screen

• Use insect repellant

• Drink water regularly
  – avoid carbonated, caffeinated & alcoholic beverages

• Eat lightly
Avoid overexertion

- Take frequent rest breaks – most injuries occur where workers are fatigued
- Schedule the more strenuous work for the coolest part of the day
- Avoid lifting more than you are capable:
  - remember: wet debris are heavier!
- Lift with legs, not your back
Survey the site

- Assess the area for damages
- Assess the area for hazards and potential hazards
- Take pictures of the damage prior to any cleanup
Survey the site:
Look up, down and around

- Use a wooden stick to check flooded areas for pits, holes, or protruding objects
- Be aware of hazards that can lead to slips, trips or falls
- Be alert for dogs, rats and insects
- Be alert for sharp or jagged debris:
  - use heavy work gloves when handling debris
Look up, down and around: Trees and branches

- Watch for broken, hanging limbs and leaning trees that may be ready to fall
- Watch for attached vines
- Watch for trees or branches that are bent, twisted, hung up or caught under another branch or object
Look up, down and around: Power lines

- Stay away from downed power lines, wires, cables and other utilities
- Watch for electric wires dangling in trees
- Assume all power lines are energized

Do not touch!
Be aware of electrocution!

- Power lines can energize fences or any metal buildings they come in contact with.
- Use caution when moving metal objects (e.g. ladders) in the vicinity of power lines.

Treat any power line as ‘live’!
Be aware of electrocution!

- Call the power company to report trees or tree parts that have fallen or are leaning on a power line
- Only qualified line-clearance arborists should work near power lines
Plan before starting work

• Discuss safety protocols
  – identify and eliminate hazards
  – create a safe work zone

• Discuss work assignments

• Prioritize tasks

Take the time to do the job right!
Identify and eliminate hazards

- Clear loose debris
- Remove combustible materials
- Look for broken or dead limbs
- Assure that there are no power lines nearby
- Be aware of the context in which you are working. This includes knowing where people, structures, vehicles, and wires are
Create a safe work zone

• Keep non-workers safely outside

• Mark the area with tape or cones

• Appoint a flagger or use barricades and warning signs to control both vehicle and pedestrian traffic
Create a safe work zone

• Set a perimeter around the work area:
  – At least two times the height of the tree you are working on.
  – more distance if felling trees or dropping limbs

• Have an escape route handy
Chain Saw

- One of the most dangerous hand tools available!
- 80% of injuries are to hands, legs and feet
- Risk of injury increases after storms

Can you spot all the unsafe practices?
Common causes of injuries

- cutting above head
- kickback
- using saw one-handed
- careless cutting

How to prevent them

- cut below head level
- cut slowly
- keep both hands on saw
- wear protective equipment

U.S. Consumer Products Safety Commission, 1999
Personal Protective Equipment (PPE)

- Professionals tree workers are required by law to use PPE
- Homeowners should wear the same protection as the professional or NOT do the work!
Chain Saw Safety Tips

• Read and heed the owner’s manual!
  – for safe operation
  – for proper maintenance

• Familiarize yourself with the chain saw before using it – especially if saw is new

Photo courtesy of Kevin Eckert
Chain Saw Safety Tips

• Keep the chain saw handle clean, dry and free from oil and fuel

• Make sure:
  – the size of the blade is adequate for the work to be performed
  – check and adjust the tension of the blade

Photo courtesy of Kevin Eckert
Chain Saw Safety Tips

• Never use a chain saw to cut anything other than wood

• Look for safety features, such as:
  - chain brake
  - spark arrester
  - chain catcher
  - vibration reducer
Don’t forget to keep both hands on the handles

- 35% of chain saw injuries affect the hands
- They are the result of using the saw with just one hand

Photo courtesy of Kevin Eckert
Always cut at waist level or below

- 10% of chain saw injuries affect the head and 10% the upper body
- They are the result of making overhead cuts

Photo courtesy of Kevin Eckert
Avoid kickback

It occurs when the upper tip of the guide bar contacts an object, causing the saw to come straight back at the operator.

Keep in mind:
It happens so fast that there is no time for reaction!
How to prevent kickback: cont.

• **NEVER** cut with the upper tip of the saw!
• Watch where the tip of the guide bar is at all times
• Stand to the side of the chain saw so you are more balanced

Photo courtesy of Kevin Eckert
Be aware of “spring poles”

- Trees or branches that are bent, twisted or caught under another object may snap back, hit you or pinch the saw.

- To avoid it:
  - identify the point of maximum tension
  - cut at the point of least tension to slowly release tension
When operating a chain saw...

Be sure the operator is aware of your presence before you approach!
When fueling the chain saw…

- Clean the area around the site
- Use only appropriate gas containers for filling & transporting
- Set the saw on the ground when filling
- Let the chain saw engine cool before refueling
When carrying a chain saw...

- The engine should be shut off
- The chain brake should be engaged
- The scabbard should cover the guide bar to prevent cuts
- The chain saw should be carried backward
- The muffler should be carried away from the body to prevent burns

Photo courtesy of Kevin Eckert
Additional Resources

http://www.isa-arbor.com/publications/
click on TreeWorkerSafety

www.flagsafe.ufl.edu
click on Tractor safety for disaster recovery
Chain saw safety
Eye safety

www.osha.gov
Click on Emergency preparedness and response
Remember: Safety First!

- Wear the personal protective equipment
- Pay attention to your surroundings and maintain a safe work zone
- Follow safety tips closely to avoid preventable injuries, such as electrocution, overexertion, and chain saw injuries
- Get professional help if unsure of your ability to use chain saws or other equipment