

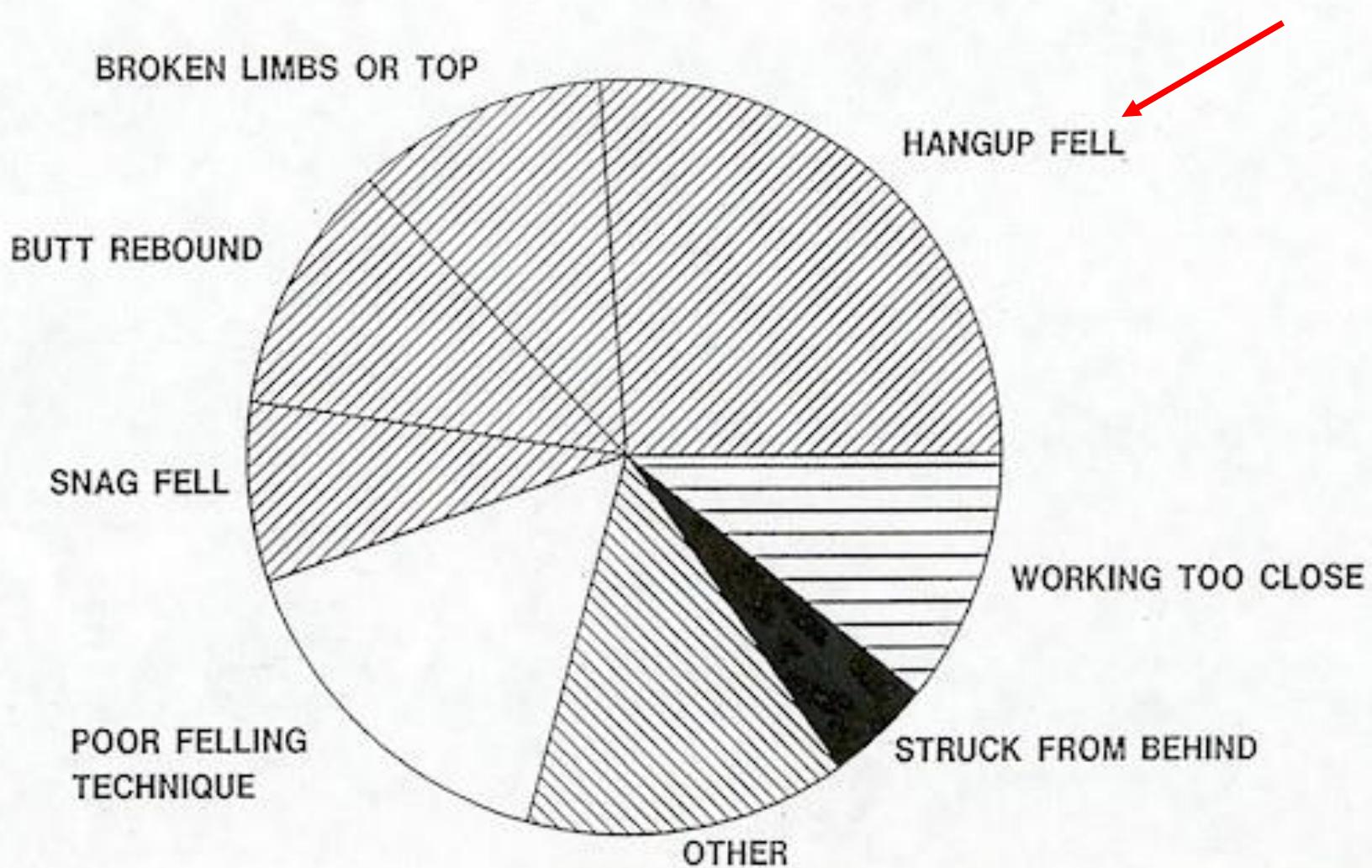
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# HUNG UP TREE AWARENESS

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## CHAINSAW FELLING FATAL ACCIDENT CAUSES



# CHAINSAW FELLING FATAL ACCIDENT CAUSES

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- **Hang-up fell:** A little over 25%
- **Broken limbs or top:** About 12%
- **Agency trends:**
- The majority of near miss reports we receive concern hang-ups and are related to the top coming out or the snag not falling where they **thought** it would.
- We have had serious injuries because the top came out while removing hang-ups.

# Size up

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■ When assessing a hang-up you are confronted with one of the most complex situations there is. The first question you must answer is: Does the hang up really need to come down or can it be safely mitigated?

# SITUATIONAL AWARENESS

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- Key words:
- **THOROUGH** – *EXECUTED WITHOUT NEGLIGENCE OR OMISSIONS.*
- **COMPLEX** – *CLOSELY CONNECTED; A WEAVING OR TWINING TOGETHER. 1. CONSISTING OF TWO OR MORE RELATED PARTS.*
- **COMPLEXITY** – *THE CONDITION OR QUALITY OF BEING COMPLEX.*

# SITUATIONAL AWARENESS INDIVIDUAL COMPLEXITY

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- THE **COMPLEXITY** OF THE ASSIGNMENT MUST BE DETERMINED BY THE INDIVIDUAL SAWYER.
  - This is based on his/her individual *skill, knowledge* and *understanding* of personal *capabilities* and *limitations*.
  - The final decision to cut any tree is left up to the individual sawyer; therefore, giving him/her the choice to say “NO” and walk away from any sawing situation they have determined to be beyond their capabilities.

# SITUATIONAL AWARENESS INDIVIDUAL COMPLEXITY

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If a **thorough job** assessing the **complexity** of the individual situation has been completed, the decision to cut or not to cut will be determined by the GO-NO-GO process.

Straight forward- "**I FEEL COMFORTABLE WITH THE SAWING SITUATION, I WILL CUT IT**" or "**I DON'T FEEL COMFORTABLE WITH THE SITUATION, I WILL WALK AWAY FROM IT**"

**Do not base your decision on  
“I THINK I CAN DO IT”**

# **TAKING DOWN A HANG UP – IS IT FALLING OR BUCKING?**

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**What is the difference between falling a tree and removing a hang-up?**

# FALLING

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**Falling – Constructing a hinge to control and direct a tree to a predetermined lay.**

**The tree is connected to the stump by the hinge which is the controlling force.**

# **BUCKING**

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**Bucking – Cutting a fallen tree into sections.  
The tree is on the ground at foot level.**

**The movement of the tree is limited by  
contact with the ground which is the  
controlling force.**

# HANG-UP REMOVAL

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**Hang-up removal – Cutting a fallen tree  
(*That hasn't hit the ground*) into sections  
for removal.**

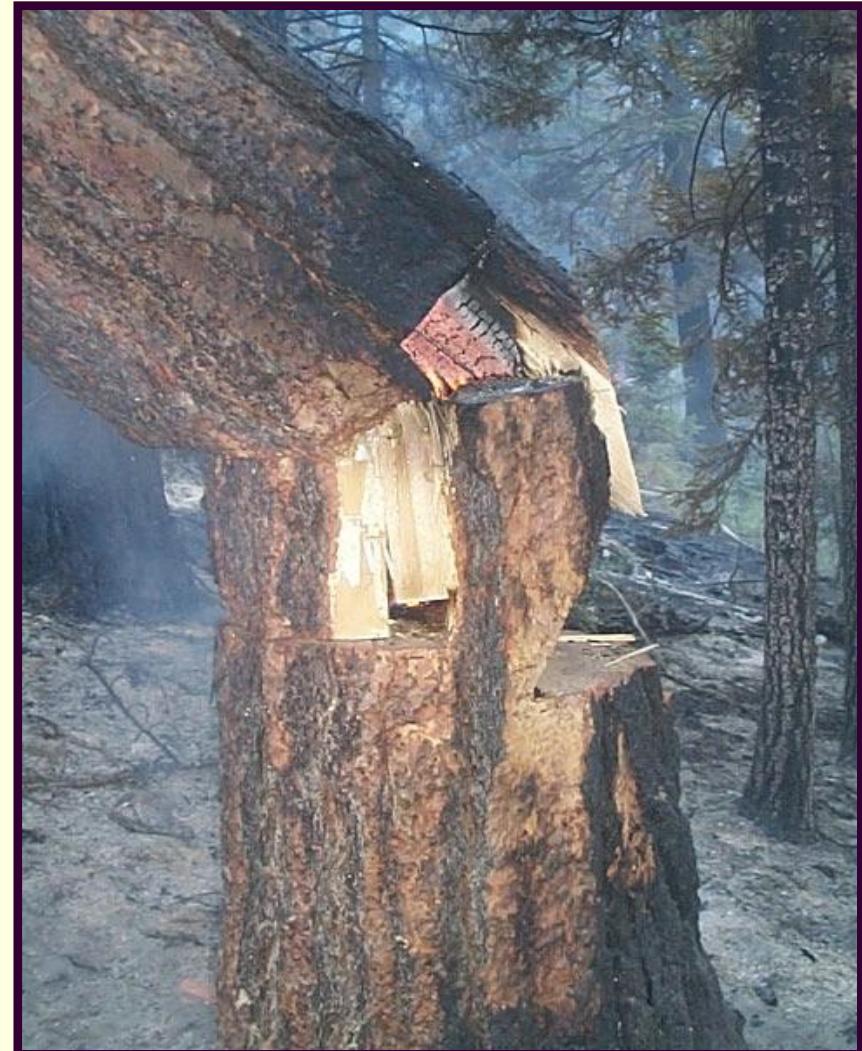
**Being in a vertical position gravity and the  
tree that is hung are the controlling  
force's.**

**The trees movement is uncontrolled and  
unlimited after you release it.**

# You need to ask yourself:

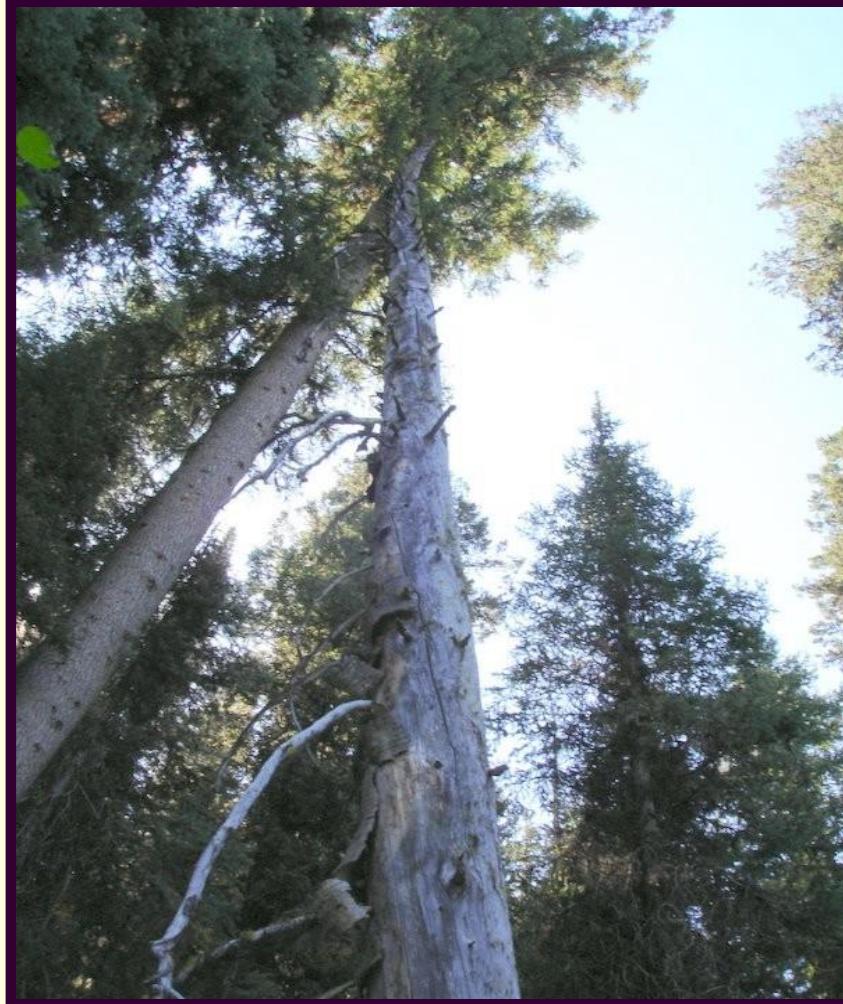
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- Did you create it?
- If so:
  - What did plan?
  - What happened?
  - What did you learn?
  - Will you ask for assistance?
  - Can it be left hung and mitigated?



# Did it occur naturally?

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# Is it truly a hazard?

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- How solid is it?
- Will cutting on it make it a hazard?
- Bole hung or limb hung?
- Do we really have to work around or under it?
- If so, are there alternatives to falling it?
- Mechanical, blasting, equipment.
- Creating a no work zone.

Link to [Hazard tree Assessment 03\\_20\\_06.zip](#)

# NATURALLY ACURING

- Is it still rooted or fastened to the stump?
- Or has it rotted off the stump?



# Can you see all of it?

■ Can you identify all **overhead hazards**?

- Rotten top?
- Lose limbs?
- Will it come out?
- Has it damaged the tree it's in?



# What is the condition?

- Is it a green tree?
- Is it hollow?
- Is it sound?
- Size, how large is it?
- Can you **mitigate** all **hazards**?



# What is the angle?



# ANGLE CONSIDERATIONS

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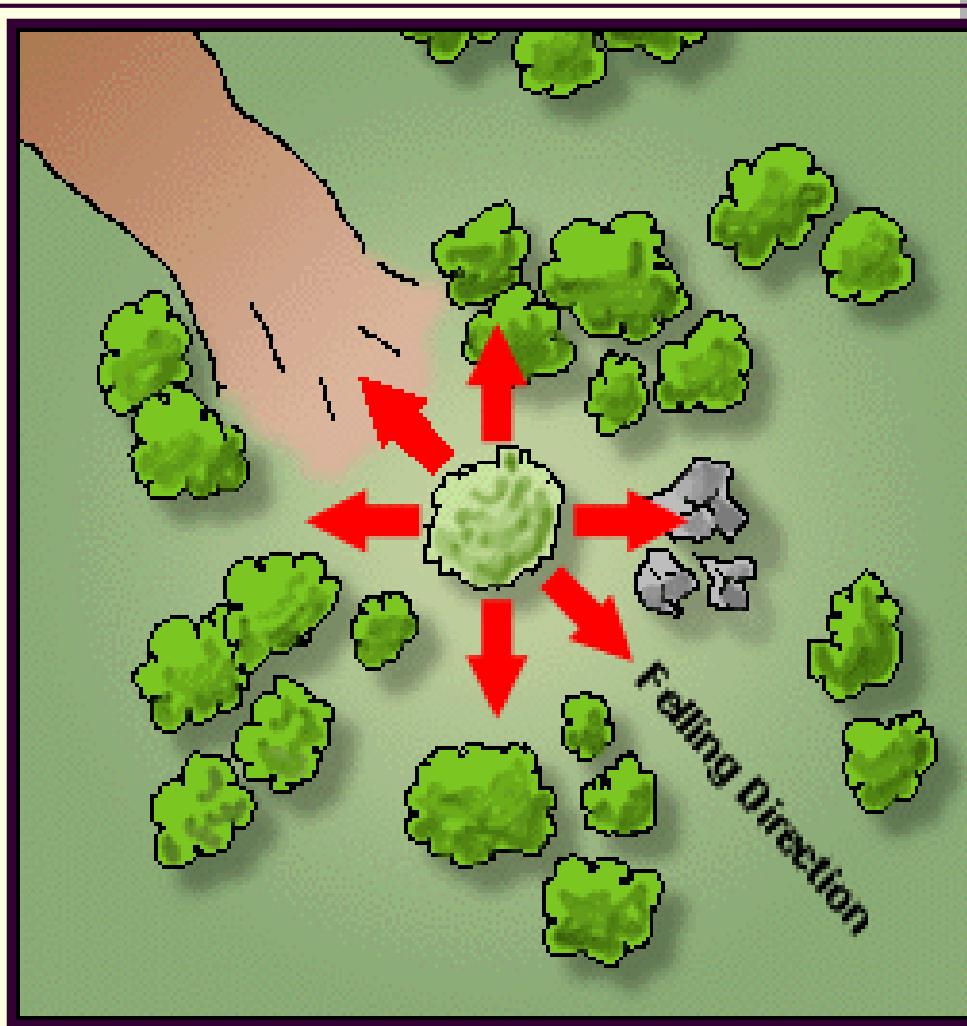
- The closer to vertical the more dangerous it is due to:
  - Harder to control.
  - Creates extreme end bind.
  - Need to work directly under hazards.
  - Potential exposure to overhead hazards.
  - Harder to determine where it may fall.

# ANGLE CONSIDERATIONS

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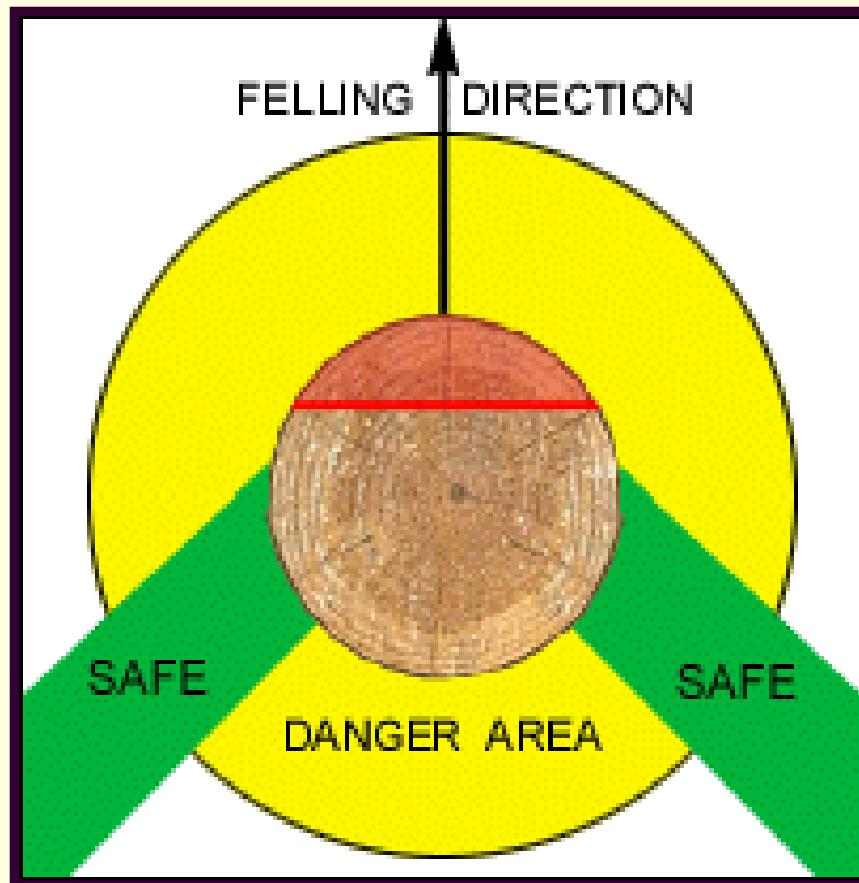
- The greater the angle, the greater the tension and usually:
  - Closer to the ground.
  - Less exposure to overhead hazards.
  - Easier to determine where it may fall.
  - Easier to construct a hinge to control and slow the fall.

# Do you know where it will fall?



# Do you truly have an escape route?

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# **ESCAPE ROUTE CONSIDERATIONS**

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- The most over looked part of the evaluation process when dealing with hang-ups.
- Consider how fast a hang-up hits the ground compared to a normal falling situation.
- Can you even get one step away?
- Would you stand at the base of a tree while it fell? So, why would you accept the risk when falling a hang-up?

# CUTTING CONSIDERATIONS

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- Does it really need to be cut?
- Have you identified all overhead hazards?
- Is there a place to work without standing under any overhead hazards?
- Do you have an escape route?
- Do not practice a stand and dodge escape tactic.
- Do you have the proper equipment?
- Have you done a thorough assessment?
- Is your gut telling you this is unsafe?

# CUTTING CONSIDERATIONS

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- **Avoid kerf cutting! (*Single saw cut for relief*)**
- **Why?**
- **Easy to get bar pinched.**
- **Difficult to make cuts match.**
- **Stalls then releases fast, limited time to step back.**
- **May not release.**

# CONSIDER

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- A wedge cut.
- This allows hinge construction which gives some control and slows the movement some.
- Allows more time to move away.



# Pulling method

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- Start by securing a rope or fire hose to hang-up

# Pulling method cont.

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# Pulling method cont.

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**Pull from a safe distance**

# Safely on the Ground



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# HUNG UP TREE AWARENESS

