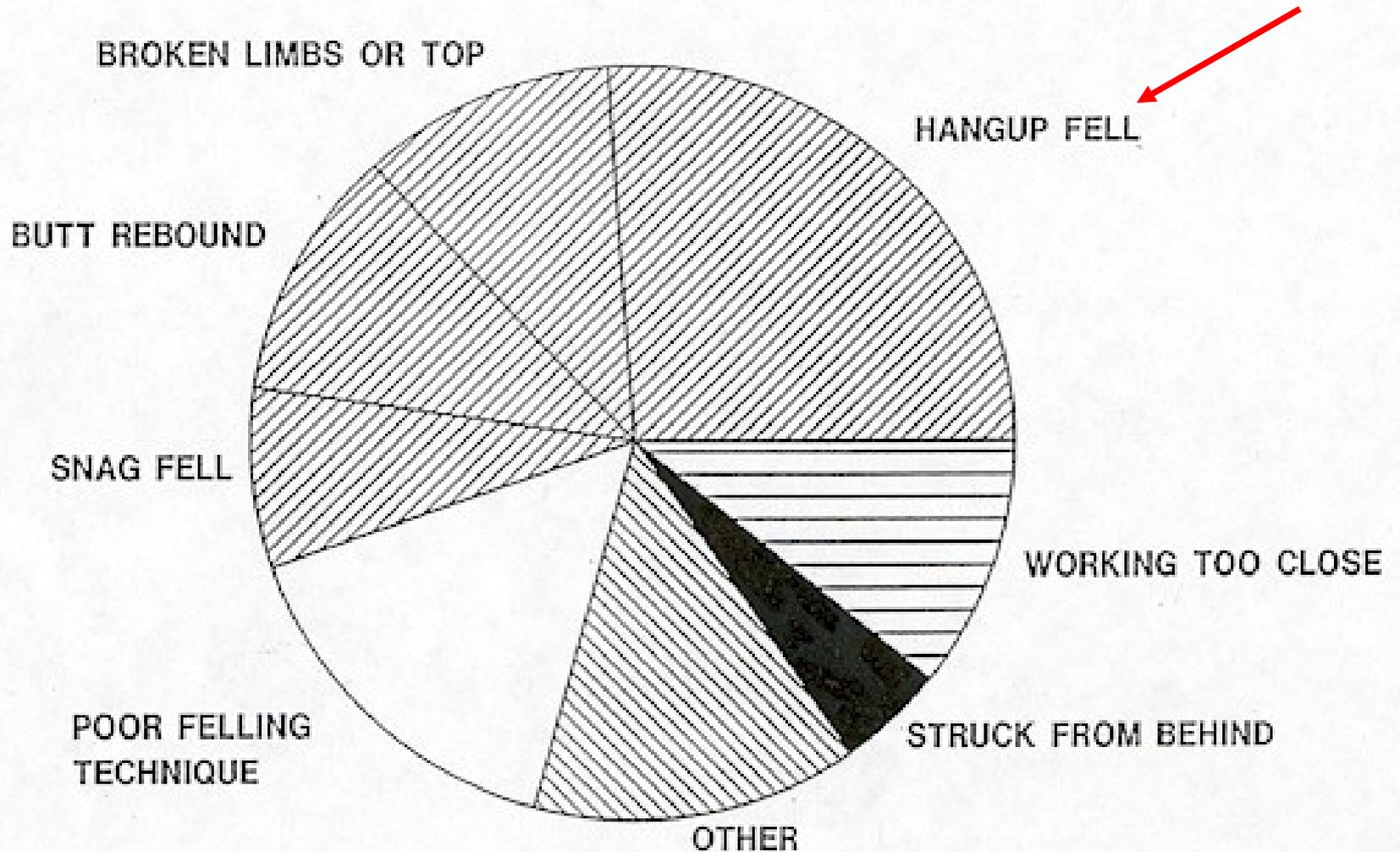

HUNG UP TREE AWARENESS



CHAINSAW FELLING FATAL ACCIDENT CAUSES



CHAINSAW FELLING FATAL ACCIDENT CAUSES

- **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

- **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

- 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

- **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

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?

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

FALLING

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

**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

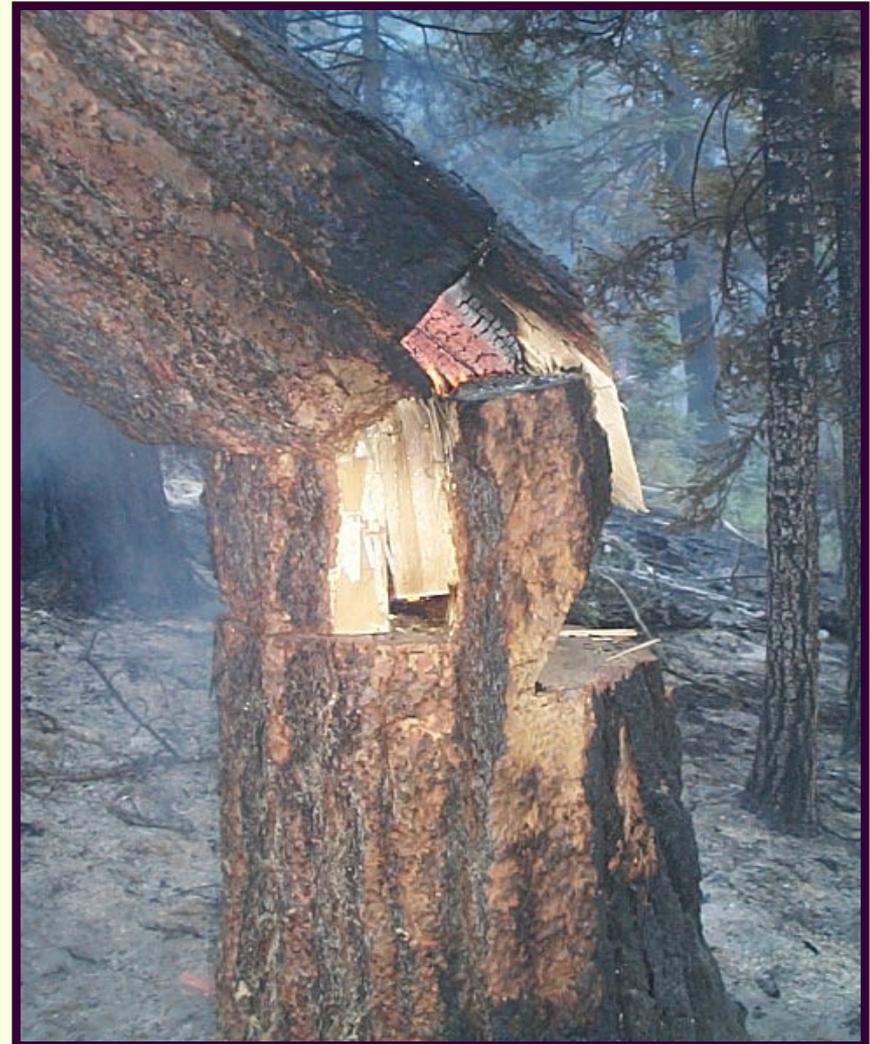
**Hang-up removal – Cutting a fallen tree
(*That hasn't hit the ground*) into sections
for removal.**

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

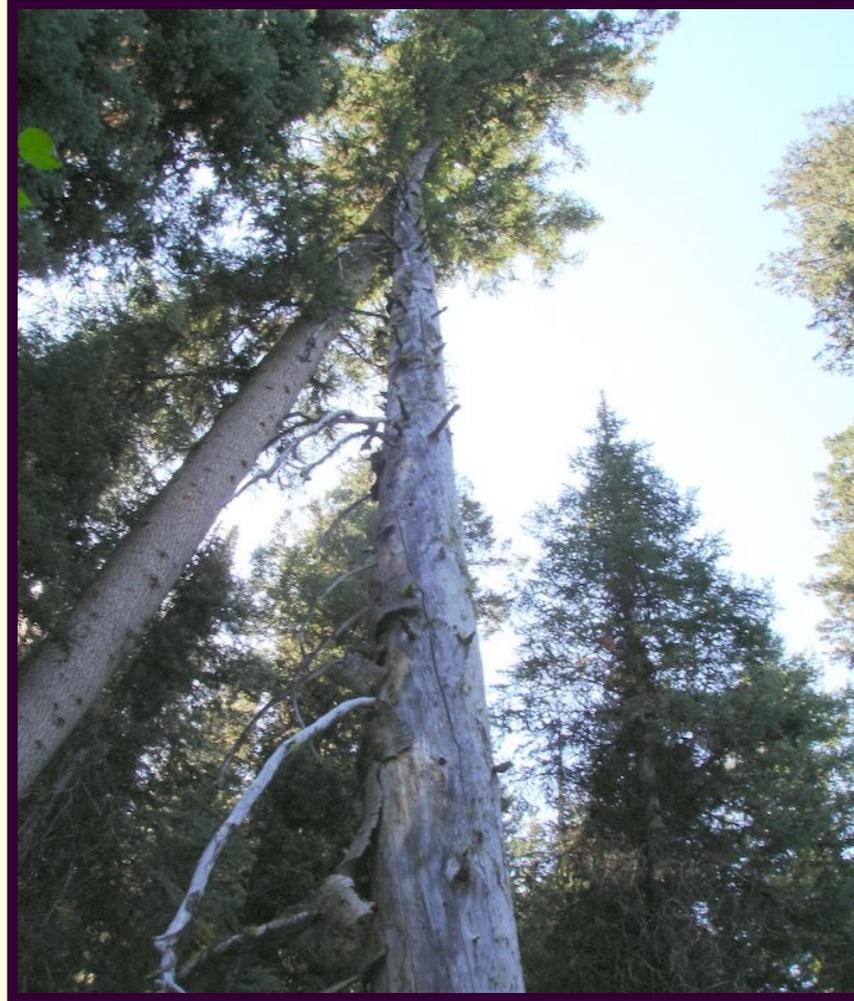
**The trees movement is uncontrolled and
unlimited after you release it.**

You need to ask yourself:

- 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?



Is it truly a hazard?

- **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.**

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?



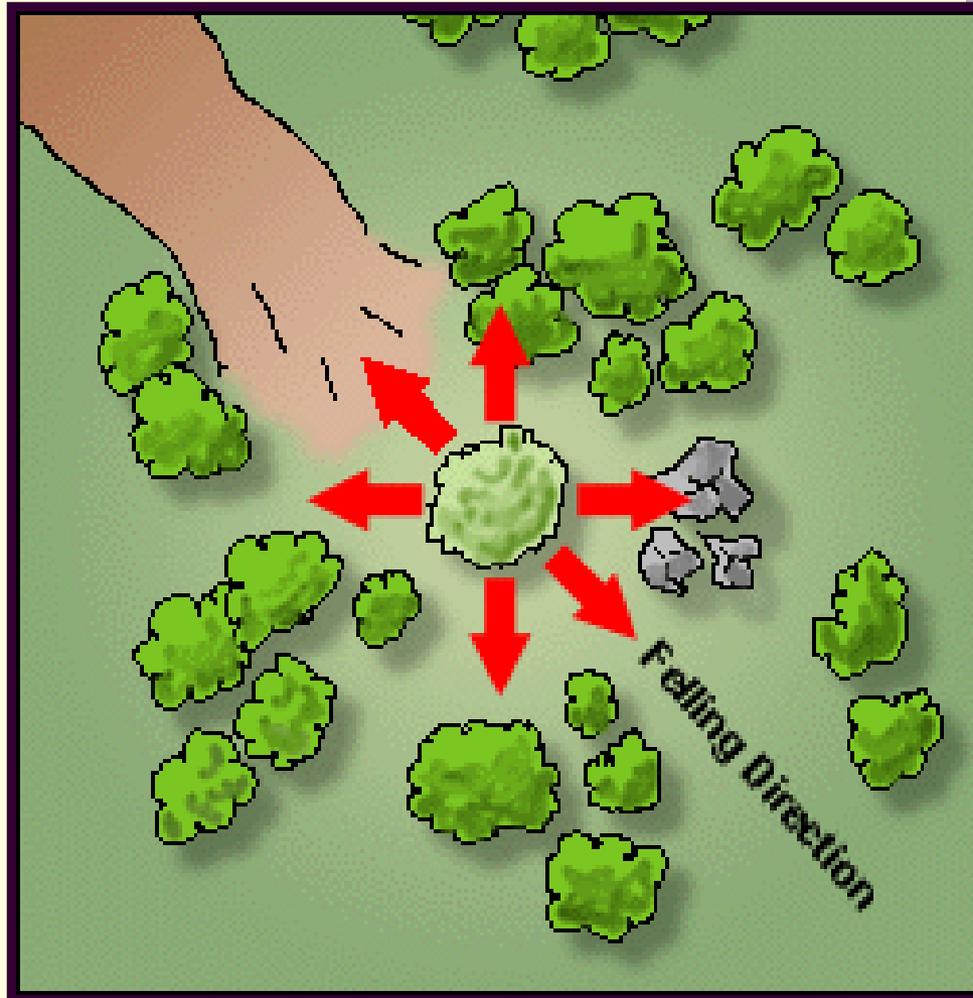
ANGLE CONSIDERATIONS

- **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.**

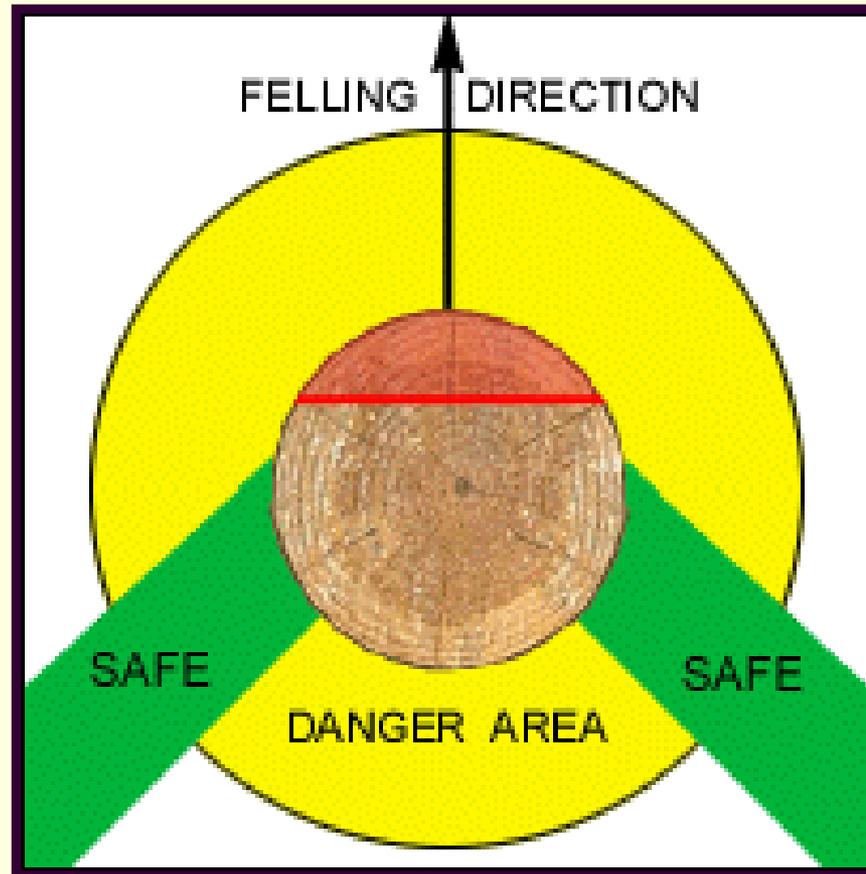
ANGLE CONSIDERATIONS

- **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?



ESCAPE ROUTE CONSIDERATIONS

- **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

- **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

- **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

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



Pulling method



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

Pulling method cont.



Pulling method cont.



Pull from a safe distance

Safely on the Ground



HUNG UP TREE AWARENESS

