

WORKING SAFELY IN THE WOODS

Mark A. Heath
Shelterbelt Builders

What kind of workers are we?

Beyond what we consider ourselves, we are classified as agriculture and forestry workers.

Agriculture, forestry and fisheries trades are recognized as the most hazardous industries in the United States.

In the 90's, these industries averaged over 1,000 fatalities per year

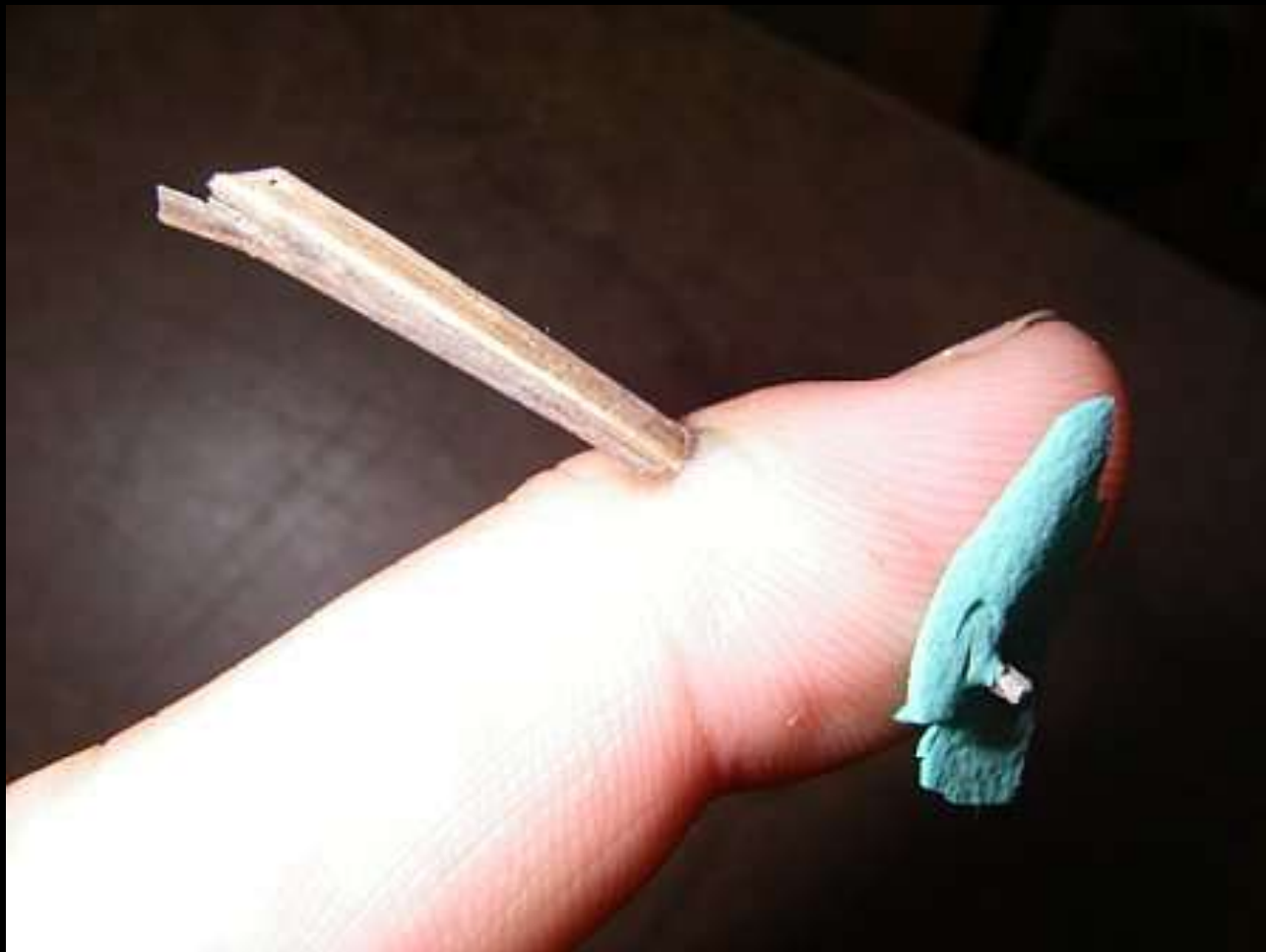
Forestry workers are 23x more likely to die at work than any other US worker

1 in 5 forestry workers is injured yearly

In a 1990's Swedish study, 30% of forestry workers can expect some type of permanent disability during their career

Because of the extreme nature of our work, our work culture accepts minor and chronic injuries as standard conditions unlike any other US industry

Oops, sliver – do we have tweezers?













SILTERBELT

Old Town









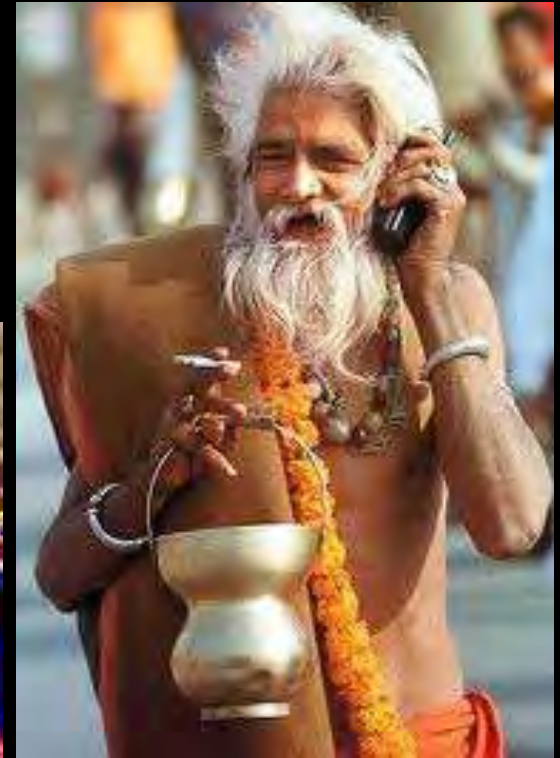
Beyond the basics of PPE

- Are you working safely in remote and challenging environments?
- Adapting safety measures to your actual task?
- Do you have a safety plan?
- Do you know where you are?

Communication with the Rest of the World

Implied Safety vs. Real Safety

The Ubiquity of mobile phones



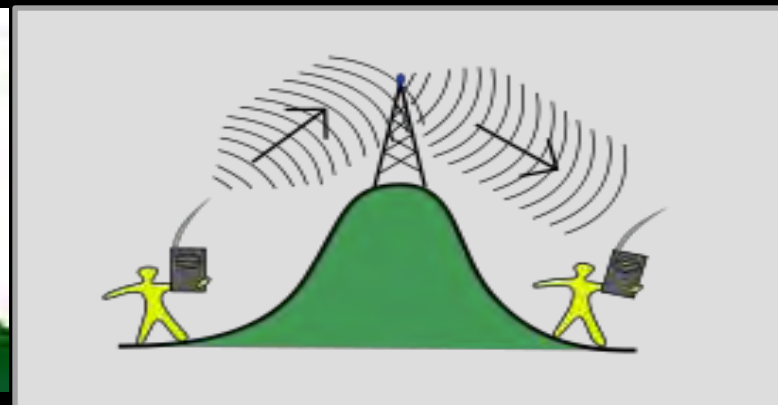
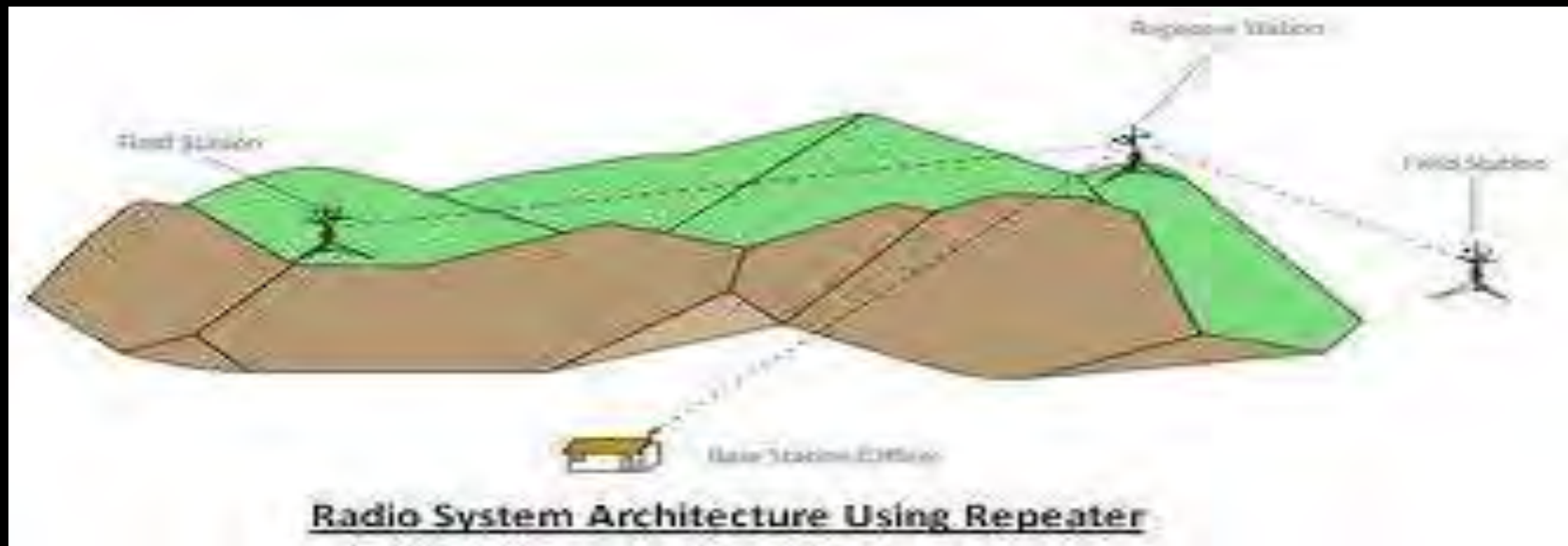
But do they work here?



FM/UHF Radios



Repeater Networks



Small, Inexpensive

Basic 100W Repeater



Mobile, Remote Repeater



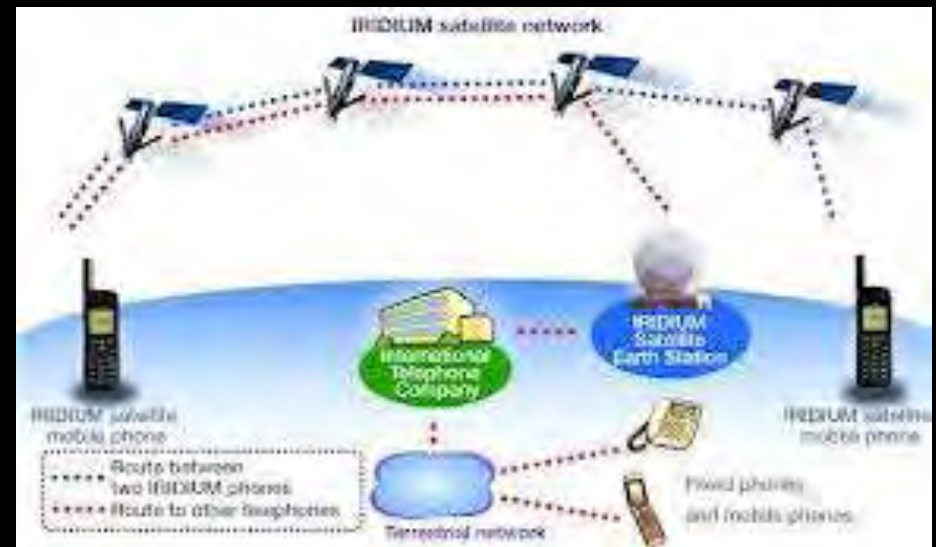
Issues

Private, controlled networks

Limited range, line of site
Frequency Coordination



Satellite Phones



Satellite Communicators

inREACH – satellite text messaging



SPOT – emergency beacons



Safety Planning



How good is your plan?

- 1) Have you defined where you are working?
- 2) Within that defined area, have you pre-calculated how long it may take for someone to assist you if you need help?
- 3) Have you determined how to call for help and demonstrated those methods are effective?
- 4) Have you determined how help can arrive?

CRITICAL ISSUES

- 1) Evaluating the hazards you may experience during the work day
- 2) Determine how you will communicate with the outside world and your support network
- 3) Know how you will react to each class of hazard you may face

Models for hazard planning

GAR Evaluation Scale
Color Coding the Level Of Risk

| | | | |
|-----------------------------------|----------------------------------|----------------------------------|-----------|
| 0 | 23 | 44 | 60 |
| 10 20 | 30 40 | 50 | |
| GREEN (Low Risk) | AMBER (Caution) | RED (High Risk) | |

Model Elements, score all 1-10

1) Supervision

2) Planning

3) Work Team Qualifications

4) Work Team Fitness

5) Environmental Conditions

6) Complexity of Work Task

Quantifying Real vs. Perceived Risks

CASE STUDY 1: Perceived risk of chainsaws versus actual risk



After evaluating the epidemiology of forestry injuries in US, Sweden and New Zealand

Slip and fall injuries exceed or equal those caused by chainsaws both represented about 20% of total injuries in the global forestry industry.

OSHA updated rules for proper footwear and seatbelts in forestry work to significantly reduce injuries in the industry



CASE STUDY 2: Perceived danger of respirator use with pesticides vs. actual risk



Respirators do the following to workers:

1. Increase anxiety and stress
2. Increase the risk of heat stroke
3. Increase heart rate
4. Increase systolic blood pressure
5. Limit field of view and obscure vision

In an attempt to reduce perceived chronic hazards to pesticides, inappropriate respirator use can alternatively cause acute injuries such as trips/falls, heat stroke and cardiac arrest.

If you go off label with PPE
recommendations

Always evaluate the total risk and do
so with a qualified individual (like a
physician!)

Things we may never think about

Stress and Mental Health

- Our work is generally extremely difficult but yields very little compensation compared to other similar industries
- Our work is highly seasonal and has environmentally driven boom and bust cycles
- Our work is irregularly funding and workers have little job security

All these factors lead to increased worker stress and anxiety which amplifies the risk to other types of injuries and overall mental health although these illnesses have only begun to be studied in these industries

Though our work is exotic and often remote, over 70% of forestry accidents overall occur on flat to moderate ground in open vegetation cover



Mentally prepare for all work equally. Get psyched for it!

Have a standard safety planning process in place for every work day

Make safety a fundamental component of your work culture

And always wear a seatbelt







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All the Past & Current Field Staff of
Shelterbelt Builders on how to do it
right on a daily basis