

Northwest Forest Worker Safety Review



News of regulations, research, developments, and coming events compiled by the Pacific Northwest Agricultural Safety and Health Center.

Issue 5

March 2007

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NIOSH Takes Note of Forest Worker Safety

Between December 2005 and March 2006 the National Institute for Occupational Safety and Health (NIOSH) hosted town hall meetings across the country to gather input on which occupational diseases, injuries, exposures, or populations required the greatest focus during the next ten years. Comments were also gathered through mailed and online submissions. Feedback was gathered from workers, professional societies, organized labor, employers, researchers, health professionals, government officials, and elected representatives.

A number of forest industry safety topics emerged from expert testimony:

- Equipment maintenance
- Safety equipment
- Heat stress/stroke
- Musculoskeletal stress and injury
- Changing workforce demographics
- Mechanization
- Hearing loss
- Respiratory hazards
- The aging workforce

Details, including full transcripts, are available online at: <http://www.cdc.gov/niosh/nora/townhall/details.html>. A searchable database has been posted online at: <http://www2a.cdc.gov/niosh-comments/nora-comments/commentrslt.asp>.

For a NW Injury and Fatality update turn to page 3.



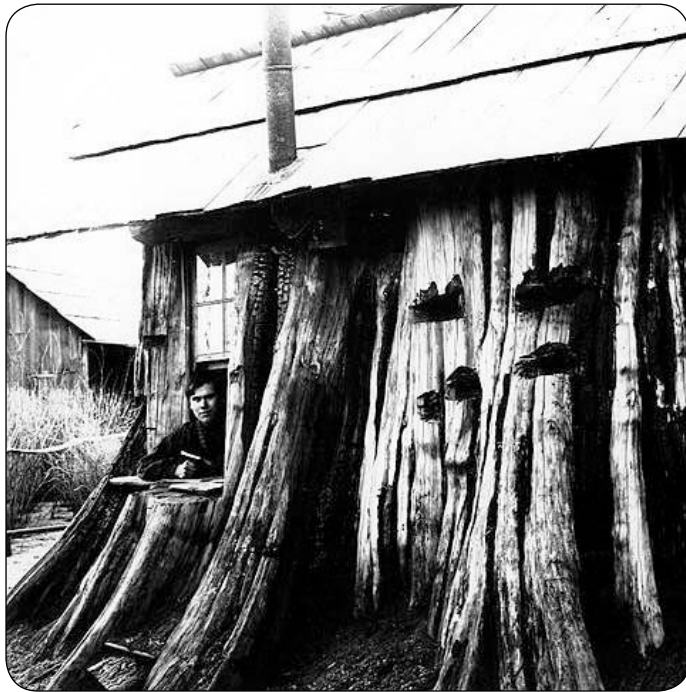
PNASH Center
Box 357234
University of Washington
Seattle, WA 98195

NEW AWARD

The PNASH Center has received funding for another five-year cycle for seven new projects. For more information visit our web site at <http://depts.washington.edu/pnash/>.

Pilot Research Projects – Small Grants Available

The PNASH Center is pleased to announce funding opportunities for pilot projects related to safety and health in agriculture (including forestry). Two projects will be funded for one year, with a start date of October 1, 2007. The Awards will be for up to \$25,000 direct costs per project. Selection of awards will be based on scientific merit and program relevance. Pre proposals are due June 15th and final applications are due on July 16th. For More information on how to apply visit, <http://depts.washington.edu/pnash/opportunities.php>.



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Northwest Forest Worker Safety Review



is produced by the Pacific Northwest Agricultural Safety and Health Center (PNASH) at the University of Washington's School of Public Health and Community Medicine.



PNASH conducts research, develops interventions, and provides professional education and outreach to improve occupational safety and health. We serve workers in farming, fishing and forestry in Washington, Oregon, Alaska, and Idaho.

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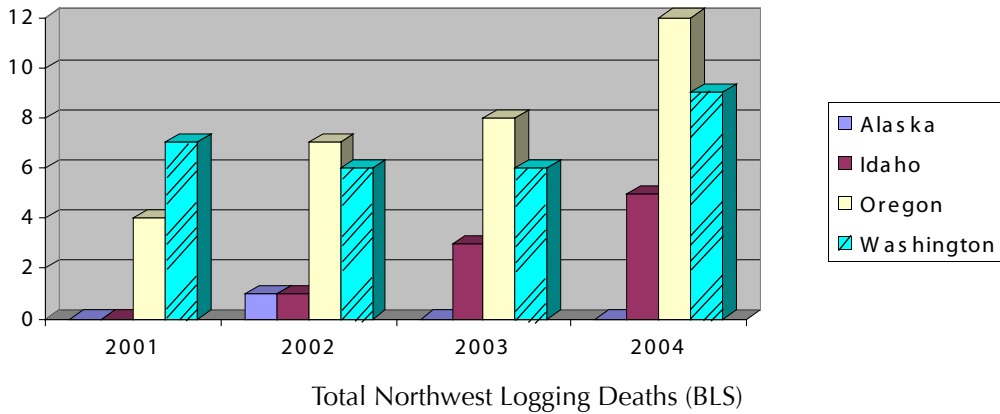


To add names to our distribution list, suggest ideas for future issues, or list events, please contact Marcy Harrington at 206-685-8962, 1-800-330-0827, or marcyw@u.washington.edu.

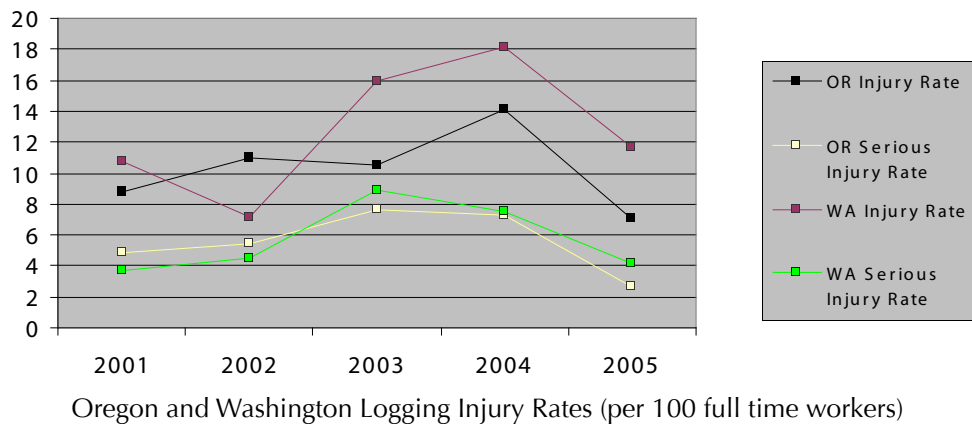
Northwest Injury and Fatality Update

The logging industry experienced 91 deaths in 2005. While each death is tragic, this nationwide total is down for the third year in a row since the new federal record-keeping system (NAICS) went into effect. Washington is the only Northwestern state for which preliminary fatality data has been published. Washington's Department of Labor and Industries reports five deaths in the logging industry in 2005. To learn from and prevent work place fatalities, the national Fatality Assessment Control and Evaluation (FACE) program provides detailed investigation reports on their web site (see resources page 5). These reports are an excellent source of information for the logging safety educator - for example, cases from just the Northwestern states provide a range of information on skyline, helicopter, and salvage logging.

Final 2005 figures have not been released for Northwest logging fatalities. After our last edition was published, several fatalities were added to the Washington data when the reports went final. The above is a corrected chart reflecting those numbers. While fatalities are down nationally the northwest has not experienced a similar decline.



After seeing a rising overall injury rate in both 2003 and 2004, we have now seen a substantial drop in 2005 in both Oregon and Washington. Fewer than 5% of workers in Oregon and Washington experienced a serious injury that resulted in lost work in 2005.



Trucking and Transportation – a Growing Concern

Since the use of new NAICS data in 2003, 20 to 25% of national logging fatalities have been transportation related. As the industry continues to react to the increased cost of fuel and transportation services, this is a number to keep an eye on. Many industry and safety leaders are concerned that trucks are increasingly being overloaded as the cost of transportation rises.

In some cases, running your own log truck can be of substantial financial benefit; however there are several factors regarding employee and road safety to take into account when considering such a change. The following information can help with this decision and with your selection of a contract trucking company. Remember that transportation accidents are often the most public face of logging safety.

“Today’s logger must stress efficiency and safety in his trucking operations. To do otherwise will result in reduced revenue or even insolvency. The following checklist describes 10 steps that may help to improve log trucking efficiency. Some or all may apply to your operation.”

- Robert M. Shaffer, Professor of Industrial Forestry and Extension Specialist, Virginia Tech



Ten-Step Check List

- ✓ Know the applicable federal and state regulations covering trucking, and comply with them
- ✓ Stress safety at all times in your trucking operations
- ✓ Consider organizing your trucking as a separate legal entity
- ✓ Establish a sound preventive maintenance program for your trucks
- ✓ Minimize the tare (empty) weight of your log trucks.
- ✓ Choose the proper loading technique
- ✓ Maximize legal payload by improving your control over load weights.
- ✓ Consider using an off-road tractor to forward loaded trailers to the highway
- ✓ Consider radial tires for your log trucks
- ✓ Look for a possible back-haul

While some specifics are particular to certain regions or forest types, additional detailed advice on maximizing trucking efficiency is available at <http://www.ext.vt.edu/pubs/forestry/420-094/420-094.html> , also see OR-OSHA Division 7 Rules.

Is Mechanized Harvesting Right for You?

The terrain logged in the Northwest is some of the steepest in the country, posing a substantial barrier to mechanized logging. Technology is now beginning to catch up with our slopes. The latest generation of feller bunchers feature models designed as “steep slope” fellers for use on work areas with slopes of up to 26 to 38 degrees (50-75% grade) depending on the model.

The use of mechanized harvesters has been shown to dramatically reduce traumatic injuries within a logging workforce. Studies in West Virginia have shown mechanization can more than halve the traumatic injury claims a company experiences. The hurdles to the spread of mechanization in the Northwest have always been price and steep terrain. Major manufacturers are seriously tackling some of the terrain issues and increasing the utility of the machines. It is up to the logging outfits to make the safest choice they can for their employees.

For more information is on this subject, visit <http://www.cdc.gov/niosh/docs/2005-129>

- NIOSH fact page on Mechanization reducing injury claims, A checklist for efficient log trucking, <http://www.ext.vt.edu/pubs/forestry/420-094/420-094.html>
- NIOSH Fatality Assessment and Control Evaluation (FACE) Program, <http://www.cdc.gov/niosh/face/>
- NIOSH FACE Fatality Investigation Reports, <http://www.cdc.gov/niosh/injury/traumalgface.html>
- WA Safety and Health Assessment & Research for Prevention (SHARP), <http://www.lni.wa.gov/Safety/Research/About/>
- Oregon OSHA, <http://www.orosha.org/>
- Oregon OSHA Div. 7 – Forest Activities Rules, http://www.cbs.state.or.us/osha/standards/div_7.html
- Center for Research on Occupation and Environmental Toxicology (CROET), Logging Resources <http://croetweb.com/links.cfm?topicID=31>
- North American Industry Classification System, Standard Industrial Classification BLS Injury, Illness, and Fatality, <http://www.bls.gov/iif/>

Note: in 2003 BLS moved from the SIC standards to NAICS, for info on the differences see: <http://www.census.gov/epcd/www/naicsdev.htm>

Improvements in Emergency Rescue

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Whether you are logging, planting trees or thinning, the one thing we all have in common when working in the forests of the Northwest is that when someone gets hurt in a remote location, it is difficult to get them to medical help. Here in Idaho, the logging community has worked hard over the years to come up with a plan to implement when an accident occurs.

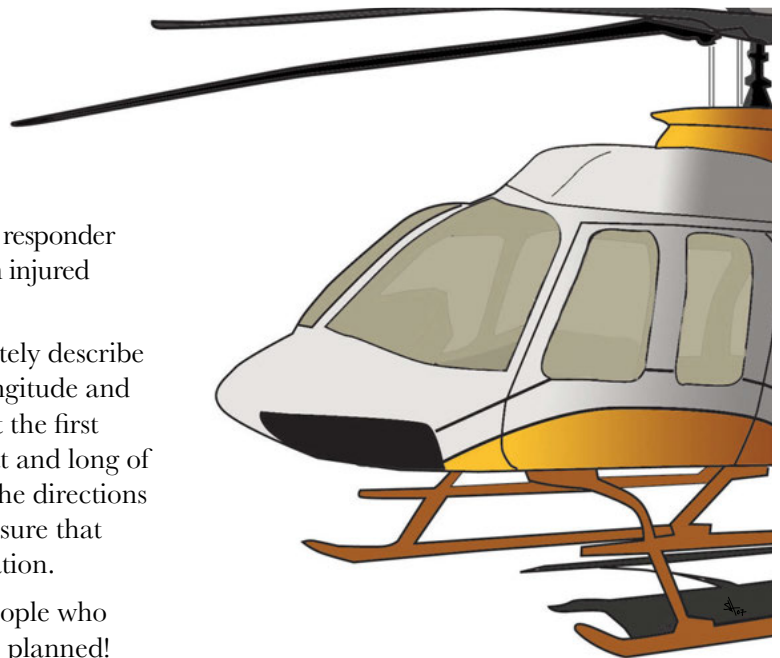
Here is a scenario: one of your crew members is lying on the side of the hill. Rain is coming down, and it is getting late in the afternoon. The obvious first step is putting your first aid training to work, but then what? You need to get the medical professionals headed your way in a hurry. You need to know who to call.

In Idaho, the State Communication Department is that source. “State Comm” is in direct communication with every air ambulance and ground ambulance in Idaho and air ambulances in the surrounding states.

Having just one phone number has cut down on the confusion. Calling individual ambulance or helicopter services often delayed response. With State Comm, if one responder is busy, the dispatcher moves instantly to the next. With an injured worker on the side of the hill, every minute counts.

The next key to the emergency rescue plan is to accurately describe your accident location. Our loggers have found that longitude and latitude are the best descriptors. Take a GPS device out the first time you arrive on a new job site and write down the lat and long of a few good helicopter landing areas. Also, write down the directions for a ground ambulance to reach the area. Then make sure that everyone on the crew knows where to find that information.

So that is the way it is supposed to work. But, as you people who work out in the woods know, things do not always go as planned!



NEW RELEASE FALLERS LOGGING SAFETY

Trees Kill

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Oregon Fatality Assessment and Control Evaluation (OR-FACE) has just released a draft Fallers Logging Safety training manual that tells the stories of 11 fatal incidents among fallers in Oregon over three years, 2003-2005. Working as a faller is by far the most dangerous job in the state.

About half of the fallers in the manual were killed by snags. The remaining incidents involved kickback of the log butt, and being caught in the falling zone of a tree. Each incident is used to illustrate relevant safety recommendations.

Two repeated issues appear: “Watch for impacts!” and “Train before you cut!”

The manual contains a five-step faller safety plan developed by Jeff Wimer, manager of the Student Logging Training Program in the Department of Forest Engineering at Oregon State University. Hazard trees, escape routes, communication with coworkers, and many other topics are organized under five basic steps as a memory aid.

- ✓ Assess the area
- ✓ Assess the tree
- ✓ Establish a safe work area
- ✓ Fall the tree
- ✓ Get in the clear

State safety regulations are also covered, as well as a selected glossary of terms related to fallers, emphasizing the remarkable complexity of the job.

To Receive a Review Draft

A review draft of the manual is expected February 2007. The OR-FACE Fallers Logging Safety manual is available online (www.ohsu.edu/croet/face) and will also be distributed to logging firms for use in training programs and at retail saw and logging supply shops.

The OR-FACE website also contains a number of investigation reports and hazard alerts, including other fatal incidents in logging related to yarding operations and heavy equipment operations.

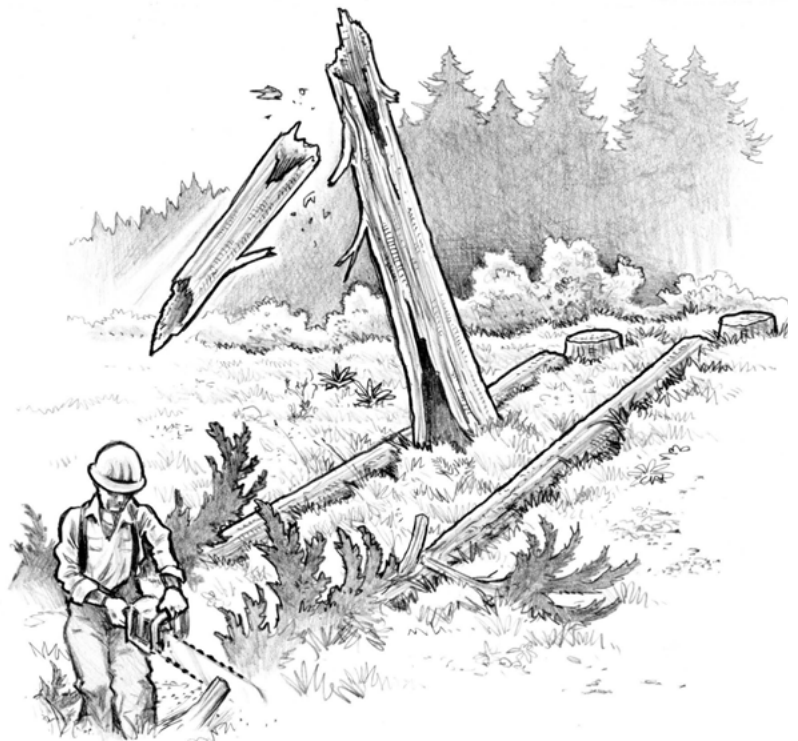


Illustration: Phil Fehrenbacher

The Changing Work Force in Pacific Northwest Forests: Salal Harvesters

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Article based on Masters Thesis from UW College of Forest Resources

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Recent news articles and research papers have highlighted the growing presence of Latino immigrant workers in the forestry industry. Although Latino workers have been providing valuable work in forests throughout the United States since the 1970s, they are often “invisible” due to the nature of their work and their social status. It is important to understand who composes this “invisible” workforce in order to effectively address issues of worker health and safety, and sustainability of the forest lands. These workers generally harvest non-timber forest products (NTFP), plant trees, and fight fires. NTFP have the potential to provide economic livelihood and diversify forest ecology, helping to maintain healthy communities and forests.

This article will focus on salal (*Gaultheria shallon*) harvesting; however, there are some similarities between this workforce and other forest ecosystem workforces.

Salal Industry in Washington State

The floral industry is heavily dependent upon salal (also referred to as brush), which is harvested in the Pacific Northwest and Southwestern Canada. Its tough, leathery, attractive leaves add structure and background to floral bouquets and its robustness makes it ideal for global shipping. Harvesting floral greens is a \$150 million industry in the Pacific Northwest annually.ⁱ

Most brush is shipped to Europe and by the time it reaches its final destination, it has passed through several intermediaries and been marked up by as much as 500-2000%.ⁱⁱ From 1991 to 2000, the Northwest harvest grew from 2.8 to 4.0 million pounds.ⁱⁱⁱ Salal harvesters are considered to be independent contractors, buying individual permits to harvest on private or public lands. Harvesters sell the product to “sheds” or “shops,” which then sell the salal to larger sheds or wholesale floral companies. In many areas, large tracks of private land are leased to the highest bidder, who then manages this land and can sell NTFP harvesting permits.

When “shop” or “shed” owners buy these leases, the line between employee and independent contractor can be blurred. Although illegal, sheds will often not sell a permit to a harvester the following year if brush off their leased land has not been sold back to their shed.^{iv} This hurts the harvesters because they are not able to look for the highest buying price for their product, nor are they provided basic workers’ rights as employees (i.e. workers compensation for loss time due to injury). This is an issue that the Washington State Department of Labor and Industries has been examining over the past few years.

Until recently, the industry has gone mostly unnoticed and unregulated. As it expands, there is a need for more attention to ensure the health and safety of the workers, rural communities, and the environment. Not only does the well-being of the harvesters depend on the income generated from picking salal, but the surrounding communities benefits from their buying power and the environment depends on sustainable picking.



Centre for Non-Timber Resources, Royal Roads University

Salal Harvesters – Who Are They?

NTPF harvesting has transitioned from a source of supplemental work and a way to earn extra money to a primary source of income. It has also transitioned from an industry dominated by Anglo workers to an industry dominated by immigrant workers. “There is an estimated 3,000 to 5,000 brush workers in Washington state according to the Washington State Department of Labor and Industries”.ⁱⁱⁱ By 2002, it was estimated that 90% of floral greens harvesters were Latino.^v Most harvesters are from Mexico and Guatemala and are of both mestizo^{vi} and indigenous^{vii} ethnicities.ⁱⁱⁱ Each indigenous group has its own language and cultural beliefs. Spanish is their second language and immigrants can have a limited knowledge of Spanish or English when they arrive. This diverse harvesting community can have difficulty communicating among themselves, as well as with the surrounding community in which they live.

Worker Safety and Health Concerns

At first thought, salal harvesting may not seem like labor-intensive work; it involves picking sprigs off of a bush. However, harvesters must walk over miles of forested land in rainy and cold weather. They gather salal in bunches of one and a half pounds. Experienced pickers can finish a day with up to 200 bunches (300 pounds), which they must then carry out of the forest.

The price of salal fluctuates throughout the season according to availability and quality of the brush. Brush harvesters can receive anywhere from \$0.75 to \$1.05 per bunch. On leased land, pickers often pay a “stumpage fee”^{viii} instead of buying a permit. In addition, harvesters pay a fee to their “raitero” for transportation.^{ix} At the end of the week harvesters may make from nothing to \$500 depending upon the weather, price and availability of the plant.^x

To maximize their wages, workers often work six or seven days per week, leaving before dawn and returning to the sheds to sell their salal after dusk. There are also costs for buying good boots and rain gear to protect them from the elements.

Another health risk for salal pickers is unsafe vans. The death of four harvesters in a van accident in March 2004 brought attention to this issue. A Washington State Labor and Industries investigation found that vans are sometimes modified to allow for more salal. This can result in insufficient seating, lack of seat belts, and the transportation of unsecured sharp objects such as knives and machetes.^{xi}

How Can Things Change?

Non-timber forest products provide an economic livelihood for niche workers and diversify forest ecology when well managed. In many situations, this industry has grown faster than the programs that regulate it. This has resulted in unhealthy and unsafe working conditions.

Possible ways to create a healthier and safer workplace may be to:

- Include brush harvesters in management discussions and decision-making - this would enable policy/regulations to address concerns of all stakeholders and create a more sustainable harvesting system.
- Provide materials (training and regulatory information) in multiple languages and in multiple formats (oral, written) so that it is truly accessible to all harvesters.
- Ensure workers make a livable wage – eliminating the need to over harvest and tax their bodies by working long hours and weekends.
- Provide workers’ compensation or access to affordable healthcare.
- Enforce safety regulations on work vehicles.

Would you like to know more on Forest Laborers Immigration and Working Conditions?

Many forest workers are not only affected by labor laws, but also by immigration laws. Some forest workers, such as reforestation workers, receive temporary working visas (H-2B) that allow them to be contracted for work through US companies. Other forest workers, such as salal harvesters, do not need visas to work, but instead buy permits directly from landowners and managers.

Immigrant forest workers can be vulnerable to exploitation and unsafe working conditions. They are often unfamiliar to our legal and health care systems and will not speak out for fear of retribution or because they may be indebted to contractors or employers for travel, visas and work supplies.

Forest Working Conditions – General Background

- Working Conditions in Labor-Intensive Forestry Jobs in Oregon. Ecosystem Workforce Program's working paper 14, Fall 2006 written by Cassandra Moseley: <http://ewp.uoregon.edu/pdfs/wp14.pdf>
- Access, Labor, and Wild Floral Greens Management in Western Washington's Forests, by Kathryn A. Lunch and Rebecca J. McLain: <http://www.fs.fed.us/pnw/pubs/gtr585.pdf>

Northwest Legislation/Hearings for Forest Workers

- Transcripts from forum at University of Oregon, Jan. 31, 2007, on Working Conditions for Forest Workers: <http://www.sustainablenorthwest.org/pdf/policy/fwf/fwforum.pdf>
- Summary of forum at University of Oregon, Jan. 31, 2007, on Working Conditions for Forest Workers from The Register-Guard of Eugene: <http://www.registerguard.com/news/2007/01/31/a1.pineros.0131.p1.php?section=cityregion>
- Public Lands and Forests Subcommittee Hearing, March 1, 2006 – testimony from Dr. Cassandra Moseley, Institute for Sustainable Environment, University of Oregon: <http://www.sustainablenorthwest.org/pdf/policy/testimony/cmoseley03012006.pdf>
- Public Lands and Forests Subcommittee Hearing, March 1, 2006 – testimony from Ms. Lynch Jungwirth, Watershed Research and Training Center: <http://www.sustainablenorthwest.org/pdf/policy/testimony/ljungwirth03012006.pdf>

H-2B visa: Temporary workers and trainees: seasonal nonagricultural workers

H-2B visas allow nonagricultural workers to come to the United States to perform temporary services or labor that does “not displace United States workers capable of performing such services or labor, and whose employment is not adversely affecting the wages and working conditions of United States workers.”

New York Times story on the difficulties H-2B workers face:
http://www.nytimes.com/2007/02/28/us/28labor.html?_r=1&oref=slogin

Immigration Reform

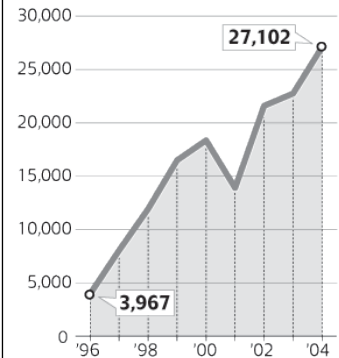
The 110th Congress and immigration reform from The Council on Foreign Relations: <http://www.cfr.org/publication/12628/>

Charts comparing immigration legislation and proposals:

- The National Immigration Project, http://www.nationalimmigrationproject.org/immigration_bills_comparison_chart_6.5.06_final.pdf
- The Migrant Policy Institute, http://www.migrationpolicy.org/ITFIAF/legislation_jan06.pdf
- Links suggested by the National Immigration Forum, <http://www.immigrationforum.org/DesktopDefault.aspx?tabid=732#Links>

Guest workers

Since 1996, the number of employer applications each year for forest guest workers has jumped from 3,967 to 27,102. By law, reforestation contractors must first offer the jobs to U.S. citizens, but most Americans won't do the work.



Most-needed jobs

Of the 66,000 foreign residents who fill low-paying, non-farm jobs each year under the H2B program, forest workers are the second-largest group.

1. Landscape laborer
2. Forest worker
3. Maid and housekeeping cleaner
4. Construction worker
5. Stable attendant
6. Sports instructor
7. Crab meat processor
8. Circus laborer
9. Dining room attendant
10. Kitchen helper

Source: Friends of Farmworkers Sacramento Bee

End Notes

- ⁱ Washington State Department of Labor and Industries. 2005. Quarterly updated. <http://www.lni.wa.gov/news/NewsLetters/QuarterlyReport/05spring.asp>.
- ⁱⁱ Loose, S. 2005. The Workers Behind the Wreaths. In Jefferson Center News. Portland, OR: The Jefferson Center for Education and Research.
- ⁱⁱⁱ Draffan, G. 2006. Endgame.org. Report on the Floral Greens Industry. <http://www.endgame.org/floral.pdf>. (citing Spreyer, Tales from the Understory)
- ^{iv} Lynch, K.A. and R.J. McLain. 2003. Access, Labor, and Wild Floral Greens Management in Western Washington's Forests. Portland: U.S. Dept. of Agriculture, Forest Service, Pacific Northwest Research Station.
- ^v Ibid.
- ^{vi} Mestizo people are of mixed ancestry. In this article it refers to people of Spanish descent.
- ^{vii} Indigenous people are native to the land. In this article, they are the people whose ancestors were in Mexico and Central America before Spanish colonization.
- ^{viii} “Stumpage fees” can be between five and ten cents per bunch or ten percent of the total harvest.
- ^{ix} Raiteros are van drivers who transport groups of harvesters to work for a fee. They are usually Latino immigrants. Their fee can be a flat fee or a percentage of the daily harvest.
- ^x Loose, S. 2005. The Workers Behind the Wreaths. In Jefferson Center News. Portland, OR: The Jefferson Center for Education and Research.
- ^{xi} Washington State Department of Labor and Industries. 2005. WISHA Hazard Alert. <http://www.lni.wa.gov/WISHA/hazalerts/Brushpicker.pdf>.

The Ethnically Diverse Forest Workforce

In our last newsletter and in this one, we discuss the growing Latino workforce in Northwest forests. Northwest Latinos are in demand and found in a wide range forest jobs, from brush harvesters to mechanized logging. Here are some tips and resources to minimize language and cultural miscommunication and maintain a positive working relationship.

Lack of awareness about cultural differences can make it difficult for both employers and employees to achieve maximum productivity and a safe work environment. Misunderstanding can affect best practices and behavior. Barriers include: Lack of knowledge, self protection and denial, fear of the unknown or new, feeling pressure due to time constraints.

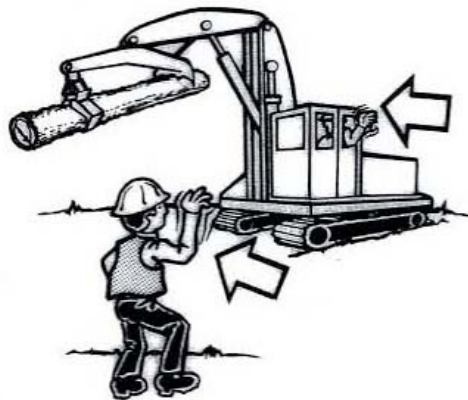
- Adapted from the Center for Collaboration and Effective Practice

Steps to Successful Multicultural Communication

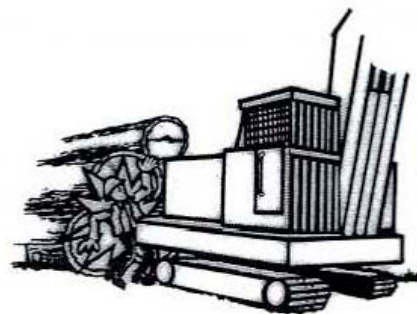
- ✓ Take the initiative to communicate, even if language is at first a problem.
- ✓ Show respect for your workers' culture.
- ✓ Learn how to properly pronounce names.
- ✓ When speaking English, speak slowly and clearly.
- ✓ Take time to listen.
- ✓ Be careful about promises. In English, we sometimes express the subjective (possibility, probability) in a way that may be misunderstood.
- ✓ Don't allow differences to become a basis for judgment or criticism.
- ✓ Use clear pictures or graphics when trying aid explanation.
- ✓ Use a workers' primary language for training, but also teach common logging terms and urgent warnings (in English).

A basic glossary of logging terms in English and Spanish is posted and available for download at www.depts.washington.edu/pnash/ORforest_training.php.

Prevent Miscommunication – Be Aware



ATENCIÓN
ATTENTION



PUNTOS DE APRIETE
PINCH POINTS

Illustrations by Don Poole

☆ *Spanish language materials available*

Logging and Safety

- ☆ • National Timber Harvesting and Transportation Safety Foundation: www.loggingsafety.com, video: Coaching the Professional Logger
- ☆ • Logging Hazard Training Cards and Glossary of Terms: www.depts.washington.edu/pnash/ORforest_training.php
 - Logging Safety Research, NIOSH: www.cdc.gov/niosh/injury/traumalog.html
 - Logging Safety Recognition, Control, and Standards, OSHA: www.osha-slc.gov/SLTC/logging/index.html
 - Forestry Safety Topic Centre, British Columbia Workers' Compensation Board (BCWCB): <http://forestry.healthandsafetycentre.org/s/Home.asp>
- ☆ • Oregon OSHA: <http://www.orosha.org/>
 - Amerisafe logging safety tips: <http://www.amerisafe.com/safety/tipofthemonth.html>
 - Associated Contract Loggers: <http://www.idahologgers.com/links.html> includes WA Contract Loggers Association, Associated OR Loggers, The AK Forestry Association, and others.
 - National Institute for Occupational Safety and Health (NIOSH) safety and health facts sheets: www.cdc.gov/spanish/niosh/index.html
- ☆ • Occupational Safety and Health Association (OSHA) hosts a Logging E-Tool: <http://www.osha.gov/SLTC/etools/logging/mainpage.html> that assists employers in developing and implementing safe work practices and programs.

Heat Stress

- WA Labor and Industries: <http://www.lni.wa.gov/safety/topics/AtoZ/heatstress/>
- OR OSHA: http://www.cbs.state.or.us/external/osha/subjects/heat_stress.htm
- OSHA: <http://www.osha.gov/SLTC/heatstress/>
- CDC: <http://www.bt.cdc.gov/disasters/extremeheat/>
- WA SHARP Program: <http://www.lni.wa.gov/Safety/Research/Focus/default.asp>
- ☆ • National Center for Farmworker Health offers educational materials for semi-literate patients on general health issues including heat stress: 800-531-5120, http://www.ncfh.org/00_ns_rc_pateduc.php



Spanish Language & Other

- ☆ • Labor Occupational Health Program (LOHP) offers training resources and publications such as, "The Right to Understand," a manual designed to introduce health and safety trainers to the needs of workers with limited literacy skills and to provide tools and tips for material development: 510-642-550, <http://ist-socrates.berkeley.edu/~lohp/>
- ☆ • National Alliance for Hispanic Health hosts hotline and helplines, safety and health fact sheets: <http://www.hispanichealth.org/>
- ☆ • Migrant Clinicians Network offers a federal directory of migrant clinics, safety and health, and environmental and occupational health resources: <http://www.migrantclinician.org/>
- ☆ • Environmental Protection Agency (EPA) offers general health effects, pesticides, and sun exposure information: <http://www.epa.gov/espanol/pesticidas.htm>
- ☆ • Amerisafe has logging specific safety tips online: <http://www.amerisafe.com/safety/tipofthemonth.html>

Northwest Logging and Forestry Safety Events

2007

Intermountain Logging Conference

April 2 – 4

Mirabau Park Hotel & Convention Center - Spokane, WA

208-245-3425

Timber 2007

June 1 & 2

Presented by Pennsylvania Forest Products Association and

Penn State University Rock Springs, PA.

patimbershow.cas.psu.edu, 814-863-2873

Central Oregon Occupational Safety & Health Conference

September 18 - 21

Eagle Crest Resort Conference Center - Redmond, OR

www.cbs.state.or.us/osh/conferences/OSHA_conference/cntrl_or_occ_sfty_hl.html

Southern Oregon Occupational Safety & Health Conference

October 17 & 18

Smullin Center - Medford, OR

www.cbs.state.or.us/osh/conferences/OSHA_conference/sthrn_or_occ_sfty_hl.html

98th Pacific Logging Congress Annual Convention

November 5 - 7

Westin Maui Resort - Maui, HI

<http://www.pacificloggingcongress.org/>

2008

Oregon Logging Conference

(not yet scheduled; last week of February most likely)

P.O. Box 10669, Eugene, OR 97440

USA Phone: 1-800-595-9191, International Phone: (541) 686-9191

Email: oregonlogging1@aol.com

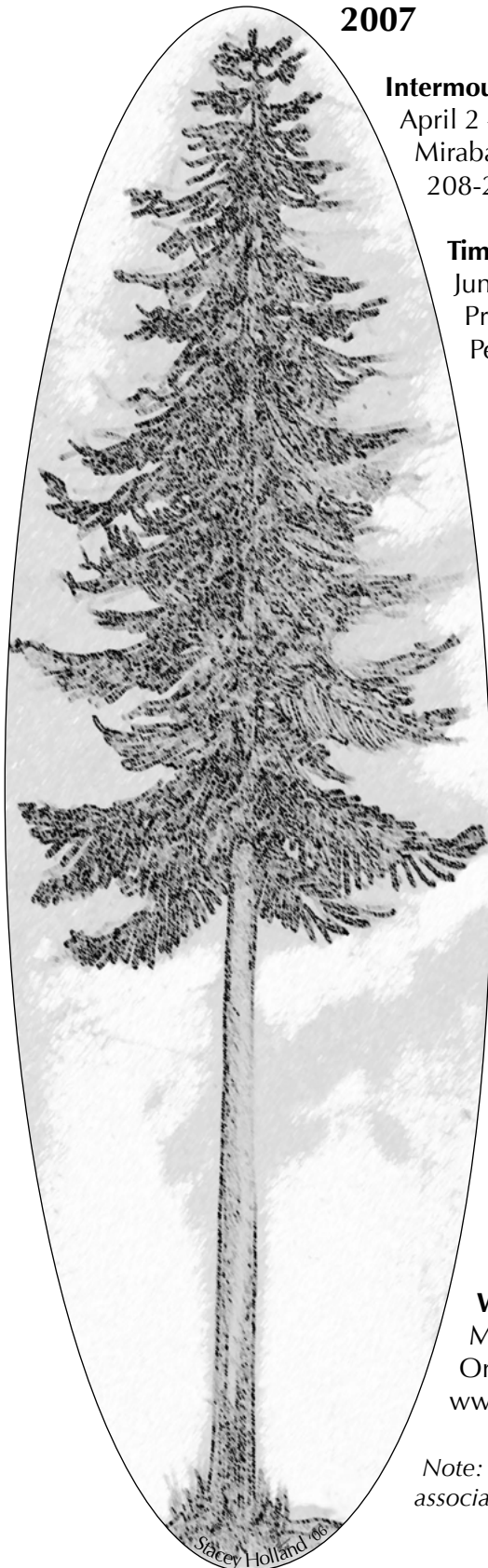
Wood Technology Clinic & Show

March 12 – 14

Oregon Convention Center - Portland, OR

www.woodwideweb.com

Note: Logging safety courses are offered to members of state contract logging associations. Please contact your association for more information.



PACIFIC NORTHWEST AGRICULTURAL SAFETY AND HEALTH CENTER
(800) 330-0827, pnash@u.washington.edu