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# Forest Applications

## NEWS

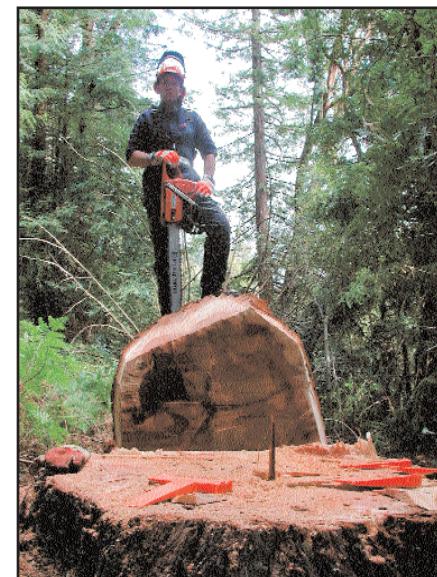
### Training Miles, this Quarter - 13,000.

By Tim Ard

First Quarter 2002 turned out to be one of the busiest three months of our business history. We put a lot of miles on the MCI Angola Bus this quarter. We began up north in January and ended the month of March in California, which you will hear more about in the second quarter's news. (A clue is the photo of David Perkins, Training Director of Husqvarna - "Upon a Redwood.") An interesting training session out west.

The *many miles* this quarter are also the reason for my apology in this, a late first quarter newsletter edition. I had a week designated to get the newsletter out on time and guess what... it became filled with training. Sorry! I plan to get back on schedule with the second quarter edition - so it won't be long after you receive this one the next edition will be showing up.

The next three months are also about as busy. That's great! We love our work and the ability to travel and to meet so many new folks in training and demonstrations. Take a look in this edition for our next schedule of upcoming events. See ya there!

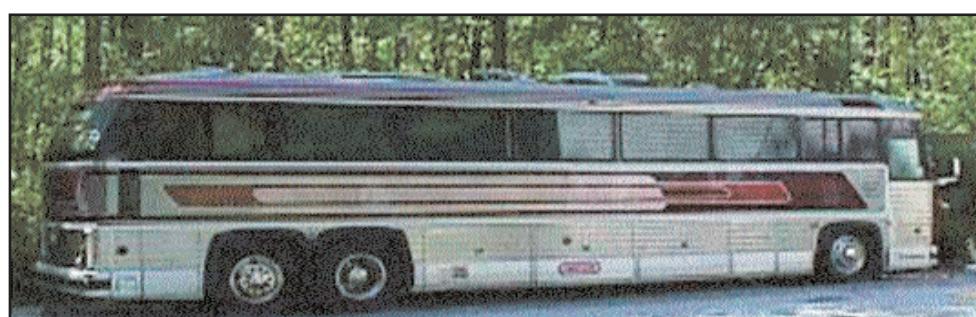


#### The Website

Forest Applications Training has a great new addition to the website. The eStore! Visit the eStore on our website where you can purchase the eBook, Cross-Sight and even place and or update your subscription to the newsletter.

#### Sponsors

We especially would like to thank our sponsors for their continued support in 2002. Without them, our ability to reach so many people with our training, demos and newsletter would be impossible. Thank you - Husqvarna®, Oregon® and PFERD Inc. for your support financially, product prizes and incentives.



In addition, a special thanks to the program organizers around the country that make Forest Applications Training programs part of their logger, tree care and municipality employee training. Thanks to all of you!

Thank you...  
Husqvarna, PFERD and Oregon  
for your 2002 sponsorship of the news!

## Oregon® Bar and Chain Tips

By Tim Ard

A common question during saw chain and sharpening clinics is "what causes a saw to cut in a circle?"

In a recent training session, one of the participants helped to illustrate a major cause of this dilemma. Watching as he cleared debris and small saplings from his escape route and cutting area. He did a super job cutting the brush/saplings to microscopic stumps. No problem with tripping over these brush stubs. This is the most important reason for cleaning your area... However, observing his cleaning technique I noticed small clouds of dirt and an occasional spark from rocks in the proximity.

After "mowing," he began his face notch and back cut on the tree to be felled. I noticed he had to apply more pressure to the saw to make the notch cuts and then when he began his back cut it was very evident his chain wasn't cutting as he would like. The chain and bar started to bind as it buried itself in the back cut kerf. The saw bound up and actually stalled the chain rotation and engine as he made the cut.

When he cleared the area, he also cleared the points from just about all the right cutters on the saw chain. Because the right points were damaged, the left side cutters on the loop were able to penetrate the fiber and were more aggressive. The bar was pulled upward in the kerf toward the sharper chain side and the bar binding occurred in the saw kerf. Alas, a cut resembling a rocking chairs runner. Possibly in addition, a serious safety situation was created in the tree-felling task. The saw couldn't finish the task until the chain was corrected. The tree was partially cut and the chain had to be sharpened before proceeding.

Remember the five parts of the tooth: 1. Depth Gauge or Raker. 2. Point. 3. Side Plate. 4. Top Plate. 5. Chisel Angle. If the saw tooth (teeth) is

not correctly angled and free of any abrasion, there is very little hope of the chain cutting correctly.

There are other saw chain and bar area's that can cause curved cuts, but point damage is a definite common cause. Keep your saw chain out of the dirt and rocks. You will cut a much straighter kerf line.

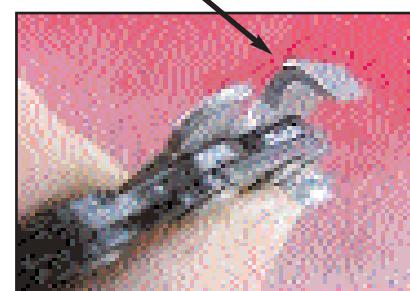
Oregon® guide bars and saw chains are the best in my book. As operators, we're essential to their *productive use* precision, life and safe operation. Check out other information on other Oregon® products and maintenance at their website [www.oregonchain.com](http://www.oregonchain.com) .



Forest Applications Training, Inc. is proud to have Oregon® as a National Sponsor of this News publication and our training programs across the country. Visit the Oregon® website at <http://www.oregonchain.com>. You can find a lot of information on products, safety and general use of chain saws as well as purchase from their unique online dealer system. Let 'em know where you heard about it... Tim



**With damaged points cutters cannot begin to penetrate the fiber properly.**



### Macon, GA

I had the opportunity to work recently with a student from the past. About eight or nine years ago, a young fellow was working with Deck Trevitt Logging of Forsyth, GA. Deck hired me to put on a GOL program for his logging employees. This young employee, who turned out to be a top GOL score holder in that program, was Matt Peed.

Who'd a thunk it? That I would get a message from a Piedmont Tree Specialties, Inc., they would like to sponsor a GroundWorks program for their Tree Care company in Macon,

GA. Come to find out, the owner was Matt Peed. The saw training Matt went through while logging, was something he wanted to offer to his Tree Care Company employees. He also had an associate company from the area as a fifth participant - Bryan Steele.

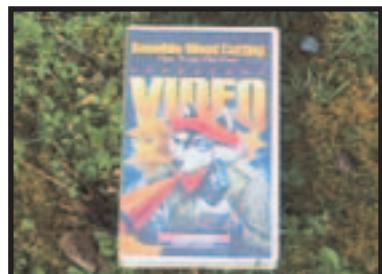
We had a great time on Matt's property near Smarr, GA. We covered saw use, PPE, maintenance and several techniques of felling, wedging and rope use in tree removals.

Often I hear that employees feel they have learned all that's available in chain saw operation and safe use in their many years of hand's-

on experience in actual job site work. That's not always the case. It's great to have folks like Matt using and promoting Forest Applications Training programs. Thanks Matt! We hope your team will find the training useful in their upcoming work. Maybe, in a year or so, I will get a call from one of them, now a multi-crew supervisor, wanting to organize a program for your many crews and employees. Ya never know...

### Training...

Sensible Woodcutting Videos are still available. Contact us via the website registration and we will send it to you no charge!



**Find out more on our NEW e-book...**  
**The Complete Guide to Chain Saw Safety & Directional Felling**  
by Tim Ard and Mike Bolin



Oregon® nationally sponsors the Forest Applications Training programs and is a major contributor in making Forest Applications News possible. I hope you have tried and support Oregon® with use of their products.

## Cross-Sight



Photo L-R Back - Jose, Michael, Matt  
L-R Front - Pedro, Bryan.

# LAURA'S CORNER

Here it is already going into the second quarter of the year..... Where does the time go? We have traveled and trained this first quarter from the East Coast to the West Coast.

Training dates are now being booked for Oct-Dec 2002 and beyond. There are a few slots left June – September 2002 but they would be contingent on existing travel routes.

To organize a training session in your area here are a few things you need to know to get you started:

First, decide if you are going to hold a demonstration or a hands-on session.

#### Demonstration - 4 hours

Group size should be 30 or more people

Area inside or outside

One or two trees for Tim to fell, limb and top

#### Hands-on - one or more days

Group should be 12-15 people max

Classroom for ½ a day

Cutting site with one tree per person for felling

If no trees are available then logs 5 feet in length and 15-20 inches round

Once you've decided on the type of session you would like, you can call our office at 770-459-3791 or e-mail to [info@forestapps.com](mailto:info@forestapps.com) to discuss the training date possibilities. We're looking forward to hearing from you.

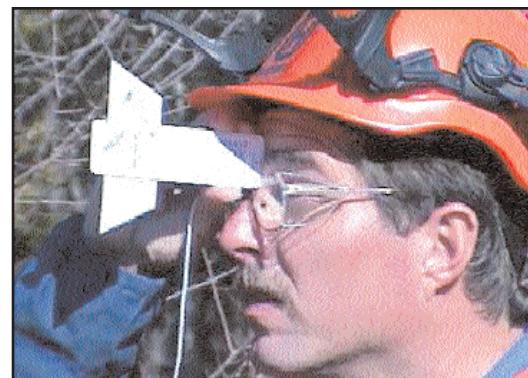
Videos and eBook's are being mailed out weekly, if you would like a copy of one of the free videos we have available - go on our web site [www.forestapps.com](http://www.forestapps.com) and register. If you have not ordered your copy of the Forest Applications Training eBook you can now do so by going to our eStore. Credit cards or invoiced to pay by check, now both are accepted. Again, that is [www.forestapps.com](http://www.forestapps.com) - Laura Ard

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#### Up A Tree...

Is it important to know how tall a tree may be? If there are hazards and obstacles within its reach, it may well be! Now you can be a bit more confident in your planning process before felling a tree. The Cross-Sight from Forest Applications Training, offers you pocket size tree measurement. Folding to fit easily in your pocket, you can now have a tool at hand to quickly size up a tree.

You can read more about the Cross-Sight on our web at <http://www.forestapps.com>. The tool may be purchased from **our new eStore on the web or** from Sherrill, Inc. at 1-800-525-8873. The cost is \$12.00.



## On Tour...

### Florida

**SWFWMD** - The past few years we have been working with employees of the South West Florida Water Management. The visit in March to the Sand Hill, FL area involved a day session for new participants and a refresher day with previous students. Thank you Ilka Linhart for letting us participate in your training programs.

### Leon County -

We had 76 attend a demonstration at Trumbell Park in Tallahassee right on Lake Jackson. It turned off a little cool - 19

degrees- a bit chilly for March in Florida, but everyone was still attentive and we had a super day. Thanks go to Karen Harrell for her super job coordinating the event.



**Amsler's** - As always we appreciate Tim and Charlene Amsler and Amsler Saw in Brooksville, FL for their support of our training programs. Every trip we schedule to Florida, Tim calls and books a day or two. He really promotes saw training for his customers.

When someone buys a Husqvarna tool from Tim the Tool Man Amsler, he or she is invited to the next training day. Tim uses the training

demonstrations to encourage proper use of the saws but also to reinforce the purchases of PPE and other accessories discussed in the program Forest Applications Training programs.



**Ocala** - January 23 we participated in a Husqvarna demo at the County Extension Arena in Ocala. Rose Marsella of BiLow's the local Husqvarna dealership , David Holmes of the County Extension office, Keith Carmichael and Brian



Gardner of Husqvarna put the session together for 63 county and DOT employees.

### Minnesota

**City of Plymouth** - It seems like a *little loss of mind thing* to hold training in February in MN.

MN. Believe it or not

the week before we arrived for the session it was in the 60's weather wise. Naturally, as we arrived a snowstorm blew in the same night. The weather didn't effect the great job Paul Buck did in recruiting demo participants, about 115 folks. The next day, we had 12 participants for a hands-on session in the snow. The site was super and the group did a great job!



### City of Minneapolis -

We left Plymouth and traveled a few miles down the road to Minneapolis. We held a demo for the parks and rec. departments in the city. The session was organized by Bob Meich and Matt Timmins of the City. Sixty-six attended



the session and the demo tree was a tough one. Luckily, everything went well and the group seemed to enjoy the session. The weather began warming a little for the day and we were able to finish Minnesota and head south before the really bad weather hit... the following week.

### Louisiana

**Roy O. Martin Lumber Co.** - Kolin, Louisiana had seen 80-degree days for a week or two until we arrived. I guess you've figured out by now, cold weather seems to be following the back bumper of the bus this quarter. It was in the 30's the day after we arrived in Kolin. We are excited about our training with Martin. We

had no idea when Greg Monroe, safety manager with Martin, contacted us about a program, that they were such a large company. They have several thousand acres of timber holdings

in LA and mills for plywood, OSB and lumber across the state. We worked with 15 of their foresters in a two-day forester's program and then a one-day mill site program at their mill in LeMoyen, LA. and a mill site program at their Chopin, LA plant. Thanks for the opportunity Greg! We are looking forward to more work with Roy O. Martin Lumber in the next few months.

### Southern Chapter ISA

**Memphis, TN** - Laura and I hadn't participated in an ISA meeting in three or four years. It was great to be able to attend the 2002 Southern Chapter meeting in TN. and be part of the Husqvarna booth. The weather didn't cooperate, so the plans we had for a demo in the outdoor display area didn't work out but we had a super time talking with those coming by the indoor exhibits.

### Georgia

#### Piedmont Tree Specialties -

**Macon, GA** - It's not often we have a small company hire us to come in and train all their employees. Matt Peed has four employees. He purchased a special hands-on training

for them in chain saw operations. We went



through a two-day GroundWorks Program with his guys. They did super!

I met Matt during a training session years ago when he

was an equipment operator for a local logger in Forsyth, GA. Matt was trained in a four day GOL program I did for Quality Forest Products. Matt is good with a saw, and could, and has done a super job passing along the training he learned to his employees. Nevertheless, he wanted to offer them the opportunity to learn from someone else. Thanks Matt for choosing Forest Applications Training.

### Illinois

**PDRMA Parks Training** - Three sessions were held around Illinois for PDRMA a risk management and workers comp group for parks and recreation - city, county organizations. The sites were Champaign, Lisle, and Waukegan. This trip to Illinois, all the sessions were small group hands-on one day programs. All the participants



did a super job. The cold weather caught up to us in Waukegan. It was blistering cold and the wind was really whistling.

#### Principia College - One program we always look forward to is working with college and university groups.

One of the first collegiate GOL programs I organized was Paul Smith's College in NY. The contact to put that program together at PSC was Mike Rechlin. Laura and I received a call from Mike last fall and he had made a move to Elsha, Illinois near St. Louis, right on the Mississippi River. They have a great facility there and several acres where the Natural Resources Department headed by Mike is developing a harvesting program and a sugarbush-maple syrup program.

The students did a super job! Nineteen students participated in the two-day program. Maintenance and felling was a breeze for this group. Two young ladies tied for first place in the competition of the second day. Congratulations are in order for Rachel and Haley they are chain saw pros! Thanks Mike for the opportunity. I hope we can get together again at Principia in the near future.

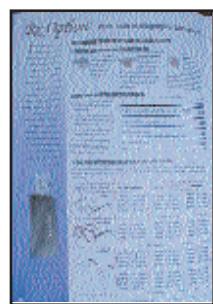


#### Crews Safety Eyewear

During our visit to Memphis, TN and the ISA Southern Chapter meeting, Laura and I met with Floyd Clifton of Crews Inc. Floyd brought us samples of the latest safety glasses from Crews.

Over the past year I have developed, as many of you I'm sure, a need for focal lens safety glasses. I hear from chain saw operators in our travel the need to wear safety glasses—but they wear prescription glasses and can't afford custom lens safety glasses just for occasional use. The over the glasses styles, or most anyway, cause side distortion and they would rather not use them. What alternatives are there? Mentioning the situation to Mr. Clifton, he said, "Crews has just the solution".

Many people go to the local drug-store and select reading glasses from the display of +1 to +2.5 magnification. The same selections are now available from Crews with safety frames. The Crews literature has a chart you simply read at 26" (arms length) to select the magnification you need. Three frame styles are available and lenses are ground in full, half and progressive magnification. These glasses are not designed to



#### eBook Critique

The Forest Applications Training, Inc. eBook is doing well in the field... and woods. We have had several super comments from across the country. We thought you might like to see how those who have a copy of the eBook responded to it...

*"I find this book to be outstanding, the information is clearly presented and easy to follow. I have learned a great deal and I am just starting. Excellent Job! The book is great! Tim did an excellent job. The information is straightforward and easy to understand. Great job." - Mark R. Lien*

*"I definitely want to pass along congratulations on an exceptional job with the eBook. As you know, it is so important to get the information out there to eliminate needless accidents. Excellent job!" - Sean Gere*

*"The eBook is great. I am not far into it yet, but can see the value of it especially being able to quickly pull up on the screen a particular subject. Great job. Thanks again." - Paul Austin*

*"Thumbs up! I'd probably not make a good editor, because my review of the e-book is all positive. I have no immediate thoughts on how to improve it. The disc was waiting for me on Monday, and I scrolled through the entire text quickly this morning. Here's some random thoughts.*

*-bookmarks were very helpful in quickly finding a chapter and section.*

*-it took a bit for me to realize I had an older version of adobe reader. I had to resort to following the directions in the intro, and the rest went well. (latest Adobe Acrobat® is right on the eBook CD)*

*-this is the first interactive e-book I've ever used. After reading the directions, I found it easy to load and read.*

*-pleased to see the continuing emphasis on safety, with red text on important safety issues, and links to OSHA.*

replace prescription lenses but may work well for those needing focal lens safety glasses for use in part time chain saw and other work with eye hazards.

#### Check out the Rx lenses from Crews Inc.

Check them out at your local Crews Safety Eyewear Supplier or on the web at <http://www.crewsinc.com>. If you have more specific questions contact us at [info@forestapps.com](mailto:info@forestapps.com) and we will get you in touch with the right person at Crews Inc.

#### Rx Retails

Full lens \$25.90

Half lens \$27.90

Multi-focal lens \$29.90



*-the concept of being able to readily update the e-book is great. I trust this is the future for many textbooks.*

*-the cost of the Standard Version is a bargain.*

*Though I still prefer reading textbooks than screens. Hopefully technology will eventually get us to the hand held screens in time.*

*-I'll likely upgrade to the Standard Printable version, as it will be handy to print chapters to take to the field*

*I hope this book is well received. Though it cannot replace the hands on training programs provided by Forest Applications, it should be a staple of any arborist's company safety program. I am grateful to have had Tim's training in the past, and am pleased to be able to review and learn more through eBooks. Best wishes!" - Dan Tremblay*

So far, all the comments have been very positive. Thank you all who have purchased the eBook.

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The following eBook versions are available for two more quarters of 2002 at the intro special pricing:

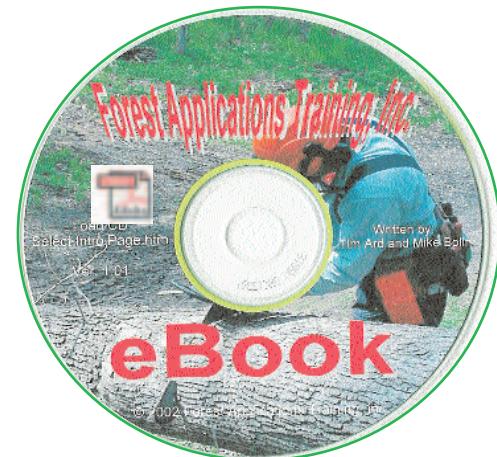
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# Husqvarna

Tough Name. Tough Equipment.™



## Husqvarna

Charlotte, NC

Going through intense training now at Husqvarna is a group of presenter/instructors to be called the Professional Power Team. Approximately a dozen hand picked personnel to carry product training to the Husqvarna Dealers and product shows in the field across the country.

You will hear more on the Professional Power Team in the next edition of the news once they complete their initial woods training with Forest Applications Training and ArborMaster® Training.

This project team should significantly increase the awareness of Forest Applications Training and the use techniques of our programs in the field. The group is headed by David Perkins of Husqvarna's Charlotte office. If you have any questions contact Mr. Perkins at 1-800-GET-SAWS. - Tim

### The alternative

For some applications, the alternative to the chain saw is use a brush or clearing saw. These tools offer the operator several alternative techniques and some increased safety opportunities. With a clearing saw or brushcutter set up properly, a huge advantage over the chain saw can be experienced in some clearing work.

1. The operator can do most of the clearing or cutting work from a stable standing position.
2. The units can be harnessed to the operator (with quick release straps) so the weight of the unit can be distributed to the entire body for less fatigue and muscle stress.

Clearing saws and brush cutting machines can be purchased in many sizes ranging from units to mow grass and high weeds to 65cc units that will literally fell small trees in the 4" to 6" diameter range.

Directional felling techniques with clearing saws are quite predictable and quick. Using the rotation of the cutting blade in related positions to the stem will direct the tree butt from the stump and place the top of the stem in a desired direction. I will discuss more on felling/directional technique in a future article.

For now, lets look at the operator set up of the machine. I don't mean putting the unit together, I mean setting the clearing saw or brush cutter to the operator.

### Harness Adjustment

Put on the harness. Apply down pressure with your hand on the attachment clip. Adjust the length of the straps so the height of the harness mount clip is about a hand width (4-5 inches) below the top of the operators hip bone (waistline). Hook the mount clip in the center attachment hole of the clearing saw or brushcutter shaft mount. Now, adjust the shaft mount up or down the shaft, so the cutting attachment floats about 10" off the ground when suspended. If the shaft mount has several hole positions, try moving the attachment to other holes. This balance point is critical to operator comfort.

Adjust the shoulder strap's as evenly as possible to equal the load (weight) on the operators shoulders. Many times a cross strap is used that can be tightened to even out this shoulder weight even more precisely.

Now adjust the handlebars of the unit so the

operators arms are just slightly bent. In other words, pressing down, straightening the arms, places the cutting blade or attachment at its proper working height, close to the ground. When working I prefer to have the right handlebar up slightly higher (toward the operator) than the left. This will add to the comfort level once you begin using the machine for directional work techniques.

Properly harnessed, a downward arm position will place the machine in the working position. In addition, this harness adjustment gives the ability to lift the cutting unit to clear debris at waist height and to move it up and down in a chopping motion. This technique can be used for certain types of clearing in brush work.

### Clothing and PPE

As when using any powertool, there are several items of personal protective equipment that should be considered and used when operating a clearing saw or brushcutter. Heavy duty boots, long snag resistant pants, long sleeve shirt, gloves, safety glasses, face protection screen or shield, ear protection of muffs or ear plugs and a hardhat if cutting saplings or brush taller than your height.

### Unit Selection

The clearing saw or brush cutter should be fitted with the proper cutting attachment and limit stop or shield for the task. (I will cover more on these topics in the future also).

If the work to be accomplished will take several hours, it is best to use a clearing saw or brush cutter with bike style handlebars and equip them with a complete shoulder harness. The harness should be padded and fully adjustable to fit the operator.

Over the next couple of editions, we will look more closely at the clearing saw and brushcutter selection and the many cutting attachments for various applications.



**Husqvarna  
Clearing / Brush Saws**

## **Tim's Time**

### **Tim Ard's Schedule**

**Check the Website for up-to-date schedule listings**

#### **May 2002**

- 1 LTAP workshop - Hope, RI  
 2-3 Public Works Workshop - Yarmouth, MA  
 6-7 LTAP Workshop - Hope, RI  
 8 RI Contractor - Hope, RI  
 9 Demo - Stonington, CT  
 17-19 Richmond Logging Show - Richmond, VA Husqvarna  
 21 Logger Training Day One - Whitesburg, KY  
 31-1 Tamarack Utility Training - Canton, NY

#### **June 2002**

- 11-12 Logger Training - Covington VA  
 14 Logger Training - KY  
 23-26 Florida ISA Chapter Mtg. -Husqvarna

#### **July 2002**

- 15-16 Roy O. Martin, Louisiana (tentative)  
 19 Logger Training Day 3 -KY  
 23 Logger Training Day 3 - Covington, VA  
 27-29 Lawn & Garden Expo - Louisville, KY -Husqvarna (tentative)  
 31 Logger Training Day 4 -KY

#### **August 2002**

- 2 Logger Training Day 4 - Covington, VA  
 8-10 Oregon® Cutting Systems Training - Clackamas, OR  
 16-18 Woodsmen's Day's Booneville, NY -Husqvarna  
 31 Logger Competition - Duffield, VA -Husqvarna

#### **September 2002**

- 24-30 New England States

Have you tried one or all of the products we show in the News? Husqvarna Saws, Oregon Chain and Bars, PFERD Files, PFERD Chain Sharp/SharpForce, See Clear?

Send us a note and let us know what you think!

E-mail us at [info@forestapps.com](mailto:info@forestapps.com)

If you haven't -- check out the Forest Applications website. You will find updated calendar events, special articles, up to date news, online newsletter... E-mail your questions, techniques, training interests and ideas of articles you would like to see in the news. All at <http://www.forestapps.com> e-mail: [info@forestapps.com](mailto:info@forestapps.com)

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After being on the mailing list for four editions, you make the selection to continue receiving the news for the following three years at a nominal fee of \$10.00 for a total of twelve editions – only \$.84 per issue. Your three-year subscription totaling \$10.00, is payable by check, cashiers check, or money order to Forest Applications Training, Inc. **You can also now pay by Credit Card from the eStore on our website.**

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# Chisel Bit Filing

By Tim Ard

A closer look at how the full-chisel square ground saw chain is filed.

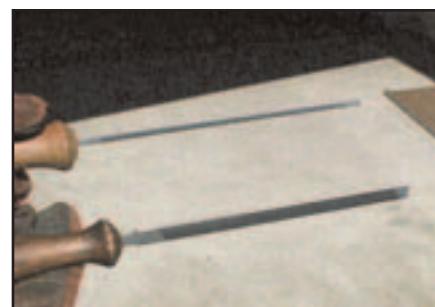
A channel is created with the side angles of the file.

Full Chisel Chain in square ground configuration is not new and is actually one of the first patented saw chain designs from Oregon® Cutting Systems. The use of the chain has remained close to the Western USA however. Few saw operators use the square ground chain in the east.

Square ground chain is deemed as a *professional use only* saw chain on all saw applications. This rating is because the design is very aggressive in most wood types and is proven so in the ANSI B175 design standard tests. Although aggressive, the chain is very smooth in the kerf because it tracks very straight. The square channel of the cutter face enables the tooth to cut with very little resistance in the wood fiber and doesn't have to move very far left or right in the kerf to clear the chip. Very smooth cutting chain!

I find the Oregon® 72CK square ground semi-skip chain type to work well in most all clean wood types. It's my favorite square ground chain in production situations.

Using the PFERD chisel bit files keep the chain in great cutting condition with little effort. The files cut fast and create a very smooth cutting edge. They also last. I consistently complete sharpening an entire chain loop's life and usually into the second chain loop. Sharpening the cutters and setting the raker's with one file it a plus also.



Two chisel bit file types are available from PFERD. A six-sided triangular and a six-sided flat version.



Square ground saw chain has a *channeled* cutting surface. This grind supports the point with a "v" and works more like a caving *v-tool* than a *gouge* action of a round filed saw chain.



The tooth style utilizes the full chisel cutter design. It has a flat top and side forming a distinctive sharp corner.



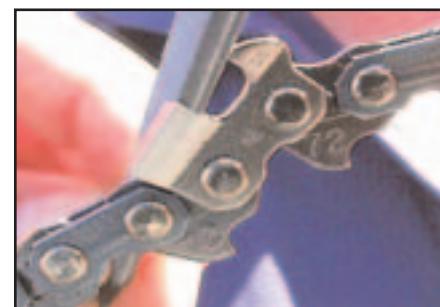
The angles of the file match the corner and the top plate chisel angle perfectly to form the channel.



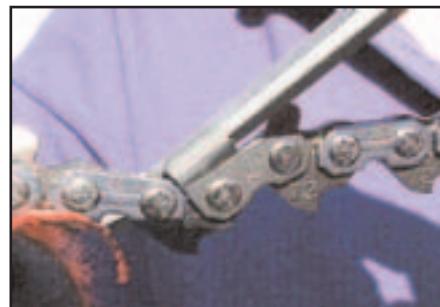
The top and the chisel angles are cut with the larger flat surface of the file. The top angle is less than that of a round ground tooth. It's only 20 degrees.



The "v" to the point is set with the bevel line at the edge of the larger flat file surface. Not the center line of the file's side bevel.



You can see how the side bevel on the file cuts the "v" to the point and the complete side channel of the tooth.



The side angle sets to right at a perfect 90 degrees. Holding the file at three 45's to the bar the PFERD Chisel file does the rest.

If you're an experienced serious woodcutter — try square ground chain. You may find it a huge advantage. *To keep the chain in top shape - use PFERD chisel bit square files.*

Like to know more on Square-filing?  
Contact Tim at  
[timard@forestapps.com](mailto:timard@forestapps.com)

## PFERD

We are amazed at the continued interest in the PFERD Chain Sharp (Husqvarna SharpForce) tool. Everywhere I go people are asking where to buy it and more details as to how to use the tool. - Tim

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