Market activity for North American hardwood lumber is weighed down by weak economic conditions worldwide and an underperforming domestic residential construction industry. It has been difficult, if at all possible, to retain consistency in established business, let alone develop a meaningful amount of new business. In some respects, Northern area producers and resale operations are faring better than their counterparts in other producing regions. The reason for the difference, in part, is because of the indigenous species mix; demand is holding up for Maple, and Northern Red Oak has an appeal with some buyers. Perhaps more significant are reductions that have been made to Northern sawmill production this past year. Many mills have either pared back hours of operation or suspended production altogether until market conditions improve. Demand has held up well from industrial markets, with pallet manufacturers and tie buyers actively pursuing raw materials from established sources. Prices are responding to competitive market forces.

Yards, distributors, and secondary manufacturers are approaching purchases with caution for two main reasons. First, there is no indication demand will improve from domestic or international customers in the near-term. Secondly, most primary manufacturers are unwilling or unable to invest in significant volumes of timber or logs. Obtaining financing, especially for companies in the wood products industry, is difficult. Overall log inventories are down from this same time last year, and slightly higher than in the fall of 2009. Sales competition has grown for green grade lumber, and pricing has declined for a number of key species. Limited to falling demand has slowed activity, and transactions point out continued downward price pressure.

In the midst of a five year downturn, it is difficult to remain optimistic about business conditions. However, companies that have survived the industries’ contraction could stand to profit when markets do regain momentum. In the meantime, most mills are carrying minimal log inventories into the winter months, and yards and secondary manufacturers have limited in-process lumber inventories. The latest projections for new home construction show moderate growth in 2012, though initial forecasts for this year also indicated housing starts would increase. In the meantime, businesses are guarding cash flow and capital for more promising hardwood markets.

(Source: Condensed from Hardwood Market Report, October 15, 2011. For more information or to subscribe to Hardwood Market Report, call (901) 767-9216, email: hmr@hmr.com, website: www.hmr.com)
### Hardwood Lumber Price Trends—Green

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ash</td>
<td>815</td>
<td>800</td>
<td>790</td>
<td>800</td>
<td></td>
<td>580</td>
<td>570</td>
<td>570</td>
<td>570</td>
<td></td>
<td>405</td>
<td>405</td>
<td>405</td>
<td>405</td>
<td></td>
</tr>
<tr>
<td>Basswood</td>
<td>705</td>
<td>705</td>
<td>705</td>
<td>705</td>
<td></td>
<td>375</td>
<td>375</td>
<td>375</td>
<td>375</td>
<td></td>
<td>205</td>
<td>205</td>
<td>205</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td>635</td>
<td>635</td>
<td>625</td>
<td>625</td>
<td></td>
<td>435</td>
<td>435</td>
<td>425</td>
<td>425</td>
<td></td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>Cherry</td>
<td>1395</td>
<td>1415</td>
<td>1480</td>
<td>1530</td>
<td></td>
<td>655</td>
<td>655</td>
<td>655</td>
<td>655</td>
<td></td>
<td>330</td>
<td>330</td>
<td>330</td>
<td>330</td>
<td></td>
</tr>
<tr>
<td>Elm</td>
<td>635</td>
<td>635</td>
<td>635</td>
<td>635</td>
<td></td>
<td>420</td>
<td>420</td>
<td>420</td>
<td>420</td>
<td></td>
<td>245</td>
<td>235</td>
<td>235</td>
<td>235</td>
<td></td>
</tr>
<tr>
<td>Hackberry</td>
<td>475</td>
<td>475</td>
<td>475</td>
<td>475</td>
<td></td>
<td>455</td>
<td>455</td>
<td>455</td>
<td>455</td>
<td></td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td></td>
</tr>
<tr>
<td>Hickory</td>
<td>670</td>
<td>655</td>
<td>640</td>
<td>640</td>
<td></td>
<td>560</td>
<td>540</td>
<td>530</td>
<td>530</td>
<td></td>
<td>415</td>
<td>405</td>
<td>405</td>
<td>405</td>
<td></td>
</tr>
<tr>
<td>Soft Maple</td>
<td>920</td>
<td>870</td>
<td>870</td>
<td>870</td>
<td></td>
<td>585</td>
<td>570</td>
<td>570</td>
<td>570</td>
<td></td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td></td>
</tr>
<tr>
<td>Red Oak</td>
<td>900</td>
<td>985</td>
<td>985</td>
<td>1040</td>
<td></td>
<td>640</td>
<td>680</td>
<td>680</td>
<td>680</td>
<td></td>
<td>510</td>
<td>525</td>
<td>555</td>
<td>555</td>
<td></td>
</tr>
<tr>
<td>White Oak</td>
<td>1000</td>
<td>1020</td>
<td>1020</td>
<td>1035</td>
<td></td>
<td>625</td>
<td>635</td>
<td>635</td>
<td>645</td>
<td></td>
<td>470</td>
<td>470</td>
<td>470</td>
<td>480</td>
<td></td>
</tr>
<tr>
<td>Walnut</td>
<td>2155</td>
<td>2155</td>
<td>2130</td>
<td>2105</td>
<td></td>
<td>1160</td>
<td>1160</td>
<td>1140</td>
<td>1125</td>
<td></td>
<td>770</td>
<td>770</td>
<td>755</td>
<td>740</td>
<td></td>
</tr>
</tbody>
</table>

Note: Hardwood prices quoted in dollars per MBF, average market prices FOB mill, truckload and greater quantities, 4/4, rough, green, random widths and lengths graded in accordance with NHLA rules. Prices for ash, basswood, northern soft grey elm, unselected soft maple, red oak and white oak from Northern Hardwoods listings. Prices for cottonwood and hackberry from Southern Hardwoods listings. Prices for cherry, hickory and walnut (steam treated) from Appalachian Hardwoods listings. (Source: Hardwood Market Report Lumber News Letter, last issue of month indicated. To subscribe to Hardwood Market Report call (901) 767-9126, email: hmr@hmr.com, website: www.hmr.com.)

### Hardwood Lumber Price Trends—Kiln Dried

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ash</td>
<td>1160</td>
<td>1145</td>
<td>1130</td>
<td>1155</td>
<td></td>
<td>845</td>
<td>835</td>
<td>835</td>
<td>860</td>
<td></td>
<td>670</td>
<td>670</td>
<td>670</td>
<td>680</td>
<td></td>
</tr>
<tr>
<td>Basswood</td>
<td>965</td>
<td>965</td>
<td>940</td>
<td>950</td>
<td></td>
<td>595</td>
<td>575</td>
<td>575</td>
<td>585</td>
<td></td>
<td>415</td>
<td>415</td>
<td>415</td>
<td>415</td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td>725</td>
<td>725</td>
<td>725</td>
<td>—</td>
<td></td>
<td>530</td>
<td>530</td>
<td>530</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Cherry</td>
<td>1845</td>
<td>1970</td>
<td>2140</td>
<td>2260</td>
<td></td>
<td>990</td>
<td>990</td>
<td>990</td>
<td>1005</td>
<td></td>
<td>625</td>
<td>625</td>
<td>625</td>
<td>625</td>
<td></td>
</tr>
<tr>
<td>Elm</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Hackberry</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Hickory</td>
<td>1185</td>
<td>1145</td>
<td>1110</td>
<td>1110</td>
<td></td>
<td>990</td>
<td>960</td>
<td>945</td>
<td>945</td>
<td></td>
<td>790</td>
<td>790</td>
<td>790</td>
<td>790</td>
<td></td>
</tr>
<tr>
<td>Soft Maple</td>
<td>1210</td>
<td>1160</td>
<td>1120</td>
<td>1140</td>
<td></td>
<td>780</td>
<td>770</td>
<td>760</td>
<td>775</td>
<td></td>
<td>605</td>
<td>585</td>
<td>595</td>
<td>595</td>
<td></td>
</tr>
<tr>
<td>Red Oak</td>
<td>1300</td>
<td>1410</td>
<td>1355</td>
<td>1435</td>
<td></td>
<td>980</td>
<td>1025</td>
<td>1000</td>
<td>1050</td>
<td></td>
<td>810</td>
<td>820</td>
<td>835</td>
<td>865</td>
<td></td>
</tr>
<tr>
<td>White Oak</td>
<td>1525</td>
<td>1600</td>
<td>1560</td>
<td>1625</td>
<td></td>
<td>970</td>
<td>970</td>
<td>940</td>
<td>955</td>
<td></td>
<td>780</td>
<td>780</td>
<td>780</td>
<td>795</td>
<td></td>
</tr>
<tr>
<td>Walnut</td>
<td>3125</td>
<td>3185</td>
<td>3185</td>
<td>3110</td>
<td></td>
<td>1820</td>
<td>1820</td>
<td>1800</td>
<td>1765</td>
<td></td>
<td>1235</td>
<td>1235</td>
<td>1235</td>
<td>1235</td>
<td></td>
</tr>
</tbody>
</table>

Note: Kiln dried prices in dollars per MBF, FOB mill, is an estimate of predominant prices for 4/4 lumber inspected and graded before kiln drying. Prices for cottonwood and hackberry from Southern Hardwoods listings. Prices for ash, basswood, northern soft grey elm, unselected soft maple, red oak, and white oak from Northern Hardwoods listings. Prices for cherry, hickory and walnut (steam treated) from Appalachian Hardwoods listings. (Source: Hardwood Market Report Lumber News Letter, last issue of month indicated. To subscribe to Hardwood Market Report call (901) 767-9126, website: www.hmr.com.)
What, Why, How, for Whom

Privately owned businesses are part of the spirit of America. The right and privilege of “being your own boss” and “building your own empire” is an ingredient of our country’s freedom and success.

Suppose that you, or you and a partner, or a group of you, want to buy or build a new business, or expand an existing enterprise? Where do you begin-how do you actually do it? It almost always begins with the creation of a Business Plan.

A Business Plan is a document where “it” all comes together. “It” in this case means: a statement or explanation of exactly what your business is, a description of why your business will be an asset to the community and to the economy in general, a description of your location and facilities, a verification of the financial feasibility of your venture, a look at your administration, and a place where the answers to various agency’s and people’s questions may be found.

A Business Plan serves to distinguish a pipe dream from a reality. Is your business venture destined for success or doomed for failure? If the initial proposal does not look promising, this is not necessarily the end. It may mean that a revised plan with new or more diverse markets, or other changes will be required in order to put you over the top.

Once all the particulars are in place, the Business Plan becomes a plan to follow, at least for the first year or two of operation.

The creation of a Business Plan is not a difficult thing to accomplish. It is time consuming, but it is mostly just a collection of information. The most important thing is to work through the entire process. Once you have done that, you will have a foundation of knowledge and experience that can pay off many times in many ways throughout your entire career.

There will often be several parties interested in reviewing your finished product. Starting with you and your partners, the feasibility and reality of your proposed venture is now more easily seen. Are you ready to go forward as planned, or is it time to back to the drawing board for modifications?

Once the final draft is in place (a business venture destined for success), you now have a document that will serve as a financing proposal for banks and other investors, and as a document to support the various permits and approvals that may be required.

Consider the following outline as a guide to the creation of your Business Plan:

Outline/Guideline for a Business Plan

It is a professionally bound document with appropriate cover page and including:

Executive Summary, Introduction, Perspective (limited to one page): Readers can clearly see what they are about to read, what your methodology was, what the major contents of the piece are, your final conclusions, and a reference to supporting documentation. Major categories:

- Description of Business: a specific listing of your products and services, location, and major markets/customer base.
- Market Research/Date, Analysis, and Conclusion: a well-written summary narrative of your analysis of the competition and analysis of the customer base, ultimately leading to your sales forecast for the first one-to-three years of operation (with references to Appendix 1).
- Approvals, Permits, Licenses: an indication and verification that all of the necessary approvals and permits have been obtained through the relevant city/town, state, and federal agencies (reference to Appendix 2).
- Financial Data: sources and uses statement, projected income statements, cash now statements, and balance sheets for first one-to-three years of operation (reference to Appendix 3).
- Organization and Staffing: organizational chart with job titles and job descriptions for each staff member, along with credentials/resumes of management team, and operating procedures (references to Appendix 4)
- Other: includes additional information unique and relevant to your situation. This might include: buyer contracts, supplier contracts, equipment information, real estate/contractor quotes, etc. (reference to Appendix 5).

Appendices: Provide individual folders/files for each of the above:

- Appendix 1: Notes, observations, interviews and other data from analysis of competition and customer base that led to your sales forecast.
- Appendix 2: Appropriate completed forms and permits.
- Appendix 3: Supporting documentation to financials.
- Appendix 4: Relevant data.
- Appendix 5: As necessary.

It is always worth taking the time to think it through and put it in writing. That combination requires you to pay attention to, and consider the many factors and details required for success, and to modify your plans and actions to the extent possible before the fact.

The above Outline/Guideline, is just that, a guide. All Business Plans must include a section of marketing, finance, and personnel. That is because all businesses must have a market, must make money, and must utilize people. It is beyond these basics, that each business venture is and becomes unique.

The order and format your content should be a function of your priorities and your readers.

The written presentation should always be professional, and free of spelling and grammatical errors to the extent possible. Revision and editing are important, but remember that we are business people not English professors.

It has now been about twenty years or so since the formal Business Plan first appeared and became popular. It has held its own and stood the test of time. To this day, the first question often asked by prospective investors and approving agencies is: “Let’s see your Business Plan.”

(Source: The Northern Logger & Timber Processor, February 2003. Article by David E Tooch, Associate Professor of Business at the University of Hampshire’s Thompson School.)
A Baker’s Dozen Marketing Tips

Have you just purchased your first mill? On the other hand, maybe you are a veteran sawyer with a decade or more of experience under your belt. If you’re like most, the experience of sawing lumber is what make you tick. The smell of fresh-cut pine or oak, sawdust sprinkled from head to toe, and the sight of a well-cut stack of lumber are what keep you going. Unfortunately, these experiences don’t generate cash flow until a product is sold. Far too many sawyers stumble—or fall down—with the marketing side of the business. Here we highlight—in no particular order—some key marketing tips for your consideration.

1. Make a Quality Product
   Successful marketing is closely linked to a high-quality product. Customers aren’t eager to pay top dollar for lumber that is warped, bowed, cupped, split, and so on, or covered with spots, streaks, stains, holes, knots, and mud. A well-manufactured, high-quality product is key to marketing success. A sawyer told me recently that he has a customer who said he would “drive 200 miles for my wood because of its quality.”

2. Think Value-Added
   Are there ways to make your lumber more desirable to the customer? Can you add a manufacturing step that adds value to your product and directly appeals to the buyer? End-trimming boards, defecting-out knots, straight-lining the edges and planing the surfaces are all value-added steps that make your product more desirable. Also, non-traditional lumber such as short boards, wide boards, or even boards with a “story” (e.g., cut from the customer’s fallen yard tree) can be a value-added product.

3. Work on Moving the Low Grade
   Even the high quality logs produce a sizable amount—35% or more—of low or below-grade lumber or cants. The profitability of your business can easily hinge on how well you can move the lower-grade material from your lumber pile to the customer’s pickup truck. Mill owners should work on having multiple markets since you’ll likely saw different size logs and different species, perhaps at different times of the year. There’s no magic bullet on moving low-grade material, but a good first step is to know the local markets and develop a plan before getting buried (literally!) in wood without a “home.”

4. Focus on Retail
   Why let someone else take 40% of your profits? John Krantz of Wood Sales in Forest Lake, Minnesota, has this advice: “Take your product directly from the sawmill to the retail user!” Avoiding wholesale and selling retail at a higher price sounds good, right? However, marketing retail takes extra time, and where do you find the retail buyer? The Internet is one option. Setting up a retail outlet at your mill could be the right choice depending on location, traffic flow, etc. In some cases, like Krantz Wood Sales, the product — carving wood in this case — is taken directly to potential users—the wood carvers. Krantz notes, “We pay to rent tables at wood-turning shows. Others may wish to participate in art shows, woodturning exhibitions, flea markets, county fairs, or anywhere a crowd gathers. Think out of the box.”

5. Price Your Products Right
   Price is one of the 4 P’s of marketing (the others are Product, Promotion and Place), but Price often gets short-changed by producers. Pricing your product right can impact your overall marketing plan and make a BIG difference in your bottom line. I know some small-time producers who make great products and do everything else correctly, except they charge too little. (Sometimes, 10%-15% below what they could be charging without hurting total sales.) Here’s an example to get you thinking about pricing options.

   Let’s assume you make and sell (retail) wood gadgets at $100 per gadget. Let’s also assume your total cost per gadget is $40, giving you a $60 profit for each gadget sold ($100 - $40 = $60). If you raise your selling price by 5% (to $105 per gadget), sales remain the same, your profit per gadget is now $65. Big deal, you might say, just an extra $5. However, consider the big picture. If your annual goal is to make a profit of $30,000, you will need to sell 500 gadgets at a profit of $60 per gadget ($30,000/60 = 500). At a profit of $65 per gadget, you only need to sell 462 gadgets ($30,000/65 = 462). By making fewer gadgets, you will also save on manufacturing costs, labor costs (if you choose to do so), and raw materials costs. (Note: Profits may actually increase by make fewer gadgets if your costs go down; also, you continue to make 500 gadgets and sell all of them at the increased price, you’ll realize even more profit.) All of these benefits by raising your price “just an extra $5.”

6. Promote Your Business
   You’re fortunate (and probably very skillful) if customers keep coming back to you, week after week, year after year. However, if you’re like most, you’ll need to promote your business every chance you get. One idea is to seek free publicity. For example, most small-town newspapers and radio stations are hungry for local news. Your task is to come up with a news angle about your business and then invite reporters for a visit. The opportunities are endless if you put your mind to it. Responding to a catastrophe (like recovering wood from Hurricane Katrina), human-interest stories (sawing a tree planted by your grandfather), or green topics (resawing boards from an old barn) are three examples that could land you on the front page of your hometown gazette. Every reader of the paper—or listener to the radio broadcast—becomes a potential customer.

7. Create a Positive Image
   Politicians, Hollywood celebrities, and Fortune 500 companies spend big dollars to enhance their public image. Small sawmill owners can also benefit from a positive image. Fortunately, you can put a positive spin on your business without having to invest your entire savings. For example, hosting a field day, open house, or mill tour can garner public support for your business. These types of events demonstrate you’re interested in the community and want so be a good neighbor—some folks don’t like the noise of a mill and blowing sawdust! This also gives you a chance to talk about selective logging, sustainable forestry, renewable resources, and other topics that the average person might not connect with your natural resources-based business.
8. Stay Close to the Customer

Don’t lose sight of the fact that to make a profit you need to satisfy the needs and wants of customers. If possible, get to know your customers one-on-one and always look to them for feedback on your products. Most customers have a unique or special need. A good tip is to keep a notebook and jot down the name, address, phone number, or e-mail address of customers, and note any special needs or past order information. When you saw a product a customer can use, check your notebook and contact them. Special touches like this keep the customer coming back to you again and again.

9. Develop a Business Mindset

Is your sawmill a hobby or a business? If it is a hobby, that is fine. Some folks buy bass boats or jet skis, others snow-mobiles and fifth-wheelers. Perhaps you bought your “mini-mill” as a way to unwind and make some wood products for your own use. However, if you plan to use your mill as a business (part-time or full-time), then you should think like a businessperson—preferably a successful businessperson. Be sure to prepare a business plan, which is especially critical if you plan to seek outside financing. A marketing plan – in writing (not just in your head) – is another critical part of developing a business mindset. These plans are important for beginning entrepreneurs as well as more experienced sawyers.

10. Look and Act like a Professional

Looking and acting like a professional doesn’t mean wearing a white shirt and tie while sawing logs! It does mean, however, developing a “professional appearance” when going about your business. If you have an office or public space where customers can visit, what kind of curb appeal does it have? How about phone calls – do you return them in a timely manner? Does your e-mail in-box have dozens of unread messages, many perhaps from current or potential customers? If you have a flyer that describes your business, products, and services, does it look professional? Even your business card can say a lot about you and the way you approach your business. I met a small Sawyer a few years ago who was complaining to me about the lack of markets for his lumber products. Thinking that maybe I could pass his name along to some of my contacts, I asked for his business card or a brochure describing his products. He said, “I haven’t made any of those yet.” My first thought was this guy is an amateur not a professional.

11. Get Connected

A sure-fire way to boost your marketing success is to get connected with others in your industry. A great place to start is to join and become an active member of an industry association. Attend seminars and workshops, subscribe to magazines and trade journals, and develop networks from suppliers (i.e. equipment manufacturers) all the way to end-users of your product.

An example of the benefits of getting connected are shared by Rick Siewert, a cabinet and fixtures manufacturer in Minneapolis. Rick said, “I have been active in the Architectural Woodworking Institute by serving on their development council, nominating committee, and certification board of review. My AWI connections introduced me to one of my best customers.”

12. Don’t Take Markets for Granted

Markets are continually changing. Today’s “hot product” in tomorrow’s antique. I am reminded of this every time I clean out my garage and find my old and well-used Little League baseball bat, Flexible Flyer sled, and 1970’s era tennis racket. All three of these were once made from wood but are now manufactured from aluminum, plastic, and graphite composites. The important message here is: Don’t take your markets for granted!

In addition, keep in mind that “wood replacing wood” is very real as well. Examples include oriented strand board (OSB) taking the market share from plywood, particleboard-type furniture replacing solid wood, and laminated veneer lumber (LVL) substituting for large timber beams. Your goal as a small-mill operator — or a big vertically integrated corporation — should be to never get to complacent about your existing markets. Keep up on industry and market trends, closely monitor competitive products (wood, non-wood), and stay alert to new market opportunities that could benefit your business.

13. Find Your Niche

Last, but certainly not least, you need to “find your niche.” A sawmiller – whether large or small – should figure out what he or she does best and then become a specialist in that market. If you plan to saw for the cabinet industry, a clear 1-inch-thick board is great. The general craft market uses material that is mostly 1-inch or under. If you’re located in farm country, then lower grade, but wide 2-inch planks, sawn from semi-rot-resistant woods are good sellers. The woodcarving market pays premium prices for 3, 4, and 5-inch thick, properly sawn, soft hardwoods like basswood and butternut. The point here is to seek out a specialty because it is very difficult to be everything for everyone.

The other key with finding your niche is that you can co-exist – as a small sawmiller with nearly bigger mills. Professor Dan Cassens of Purdue University noted, “Whenever I talk to a new small mill owner, I recommend they visit every significant mill within 50 miles or so. Tell the bigger mill about your operation and how you’re looking for ways to work together and complement one another.” Many large mills don’t want to do specialty sawing, so they are often happy to refer some of their business to smaller operators. Cassens states, “A big mill can refer a landowner to the small operator by saying, “We’ll handle the large sale, but call Joe Thinkerf for specialty milling of your two cherry trees.” This type of co-operation enables both mills – large and small – to work in their particular niche area.

Final Thought

Many of these tips may not be as engaging, or interesting, as the production steps of your operation — the sawing, drying, edging, planing and so forth. Nevertheless, to keep the mill operating and show a profit a year’s end, you will need to master the marketing side of your business. The Baker’s Dozen is a good place to start.

(Source: Independent Sawmill and Woodlot Management Magazine, October/November 2007. Article written by Stephen Bratkovich, retired Forest Products Specialist, USDA Forest Service, St. Paul, MN. For more information or to subscribe to IS & WM, phone: 1-888-762-8476 or website: www.sawmillmag.com)
Nebraska Forestry Industry Spotlight

DEUTSCHE TREE SERVICE

Sam Gingerich purchased his Mobile Dimension Saw in 2008 from Kentucky to saw logs and lumber for building his own log home. This personal venture later developed into a small business making house logs and lumber for local customers.

The Mobile Dimension Saw turns logs into lumber by traveling through the log rather than the log traveling through the saw. Once the log has been placed on the deck, the log doesn’t need to be moved or turned to be completely sawed. Three circular saw blades - one vertical, two horizontal - saw the width, depth and length dimensions simultaneously. The mill will cut logs from 5 to 20 feet long and 8 to 72 inches in diameter with minimum edgings and slabs. No re-handling or re-sawing is required. The portable sawmill has been used in the jungles of South America to make lumber, and many other locations where this lightweight saw can quickly and easily be transported and set up. The motor is a Volkswagen air cooled engine. The Mobile Dimension Saw can be watched in actions at: http://www.youtube.com/watch?v=y07RP6N7o4

The source of most logs for the Deutsch mill is removal of shade and/or landscape trees from around local homes. Most sawmills won’t saw urban logs because of nails, wire, and other hazards, but Sam makes a valuable product from what might otherwise be waste wood. Deutsch Mill typically cuts Siberian elm, cottonwood, hackberry, ash, honeylocust, along with some walnut, pine, and eastern redcedar. He would like to saw more Russian-olive logs, which along with the Siberian (Chinese) elm, has beautiful grain for millwork.

Deutsch Mill’s primary products are rough lumber for trailer flooring, fences, and other local farm uses and also does custom sawing. Sam also has a molder and shaper to produce tongue & groove boards and other millwork.

Deutsche Tree Service and Sam Gingerich can be contacted at: 3402 Rd. 55, Dix, NE  69133; phone: 308-682-5504.”

You know you’re from Nebraska if...

You know what “The good life” means.
**Proper Method of Bore Cutting Revisited**

Editor's Note: Lee Schauman, the author of the following article, taught an excellent “Logger Safety Training” workshop for Nebraska woods workers in Valentine, NE in September, 2009.

Experience has show us that the bore cut or plunge cut is best suited for staying in control of the tree instead of the tree controlling the sawyer. It also makes directional felling much more predictable and generally produces better quality butt logs because of the reduction of stump pull, fracturing, and side scarring.

To use this technique however, it is strongly suggested that professional training be a prerequisite. Without proper training, understanding the physics of this technique might be vague and/or totally misinterpreted.

One of the first items that must be mastered is to know the reactive forces to the bar and chain. Understanding that bore cutting done incorrectly can provide severe kickback potential, it is imperative that know how to prevent kickback during the bore cut is critical. Knowing the reactive forces of the bar and chain is the first step in that process. Remember that the tip of the bar is always used to start the bore cut, and that using the bottom half of the tip of the bar (attack corner) will help prevent kickback, while using the top half of the tip of the bar (the kickback corner) will almost always result in kickback, or the potential for kickback.

That being said, properly performed, the safety and quality aspects of bore cutting cannot be overstated. Safe because of the ability to control the tree, both in its release and its direction to fall, and quality because of the ability to reduced stump pull, side scarring, and barber chairing.

Basically, the bore cut technique starts with using the open face notch, which was discussed in earlier articles. Then, starting with the bottom of the tip of the bar, (the attack corner) penetrate the trunk of the tree at the same level as the notch cut apex (where the two notch cuts met) and far enough behind the notch to ensure enough hinge wood. While performing the bore cut, be sure the saw is running at maximum rpms and is sharpened properly – That will allow the saw to bore smoothly into the trunk of the tree. Always be sure the travel of the bar during the bore cut is AWAY form the hinge so the hinge will not be cut off or cut too thin. The size of the hinge is determined by a simple formula. The thickness of the hinge should be approximately 10% of the trees DBH, while the length of the hinge should

(continued on page 8)
**Proper Method of Bore Cutting Revisited** *(continued from page 7)*

be a minimum of 80% of the trees DBH. The thickness of the hinge should be approximately 10% to something less depending on the lean of the tree and the requirement to control its direction. As the Sawyer gains experience in this technique, he/she will make those adjustments, but the beginner should always use this formula.

As the bar exits the opposite side of the trunk of the tree, the Sawyer can come forward toward the north to set the proper thickness of the hinge. Once that process is complete, the Sawyer can cut back towards the back of the tree, and depending on the lean of the tree, and by which technique the Sawyer feels comfortable with, the tree can then be released by pulling the saw out of the cut after establishing holding wood or trigger wood, or by continuing the bore cut completely through the back of the tree. If trigger wood is established it should be approximately two times the thickness of the hinge wood, to be sure the tree is secure prior to its release. If continuing the bore cut is the technique used, the Sawyer should stop momentarily to look around to be sure no one is in the danger zone prior to cutting the trigger wood from the inside out.

To prevent side scarring during the felling technique, cutting the sides of the hinge deep enough to sever the last 5 years of growth, (generally no more than one inch on either side of the hinge,) will allow the hinge to control direction and release without side scarring.

Remember, using the boring technique is a specialized felling technique which normally requires professional training. Attempting this technique without proper training can create severe kickback of the saw and possible injury.