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SMALL SAWMILL BUSINESS WORKSHOP-BUSINESS GUIDE-SESSION 1-BUSINESS

Co-Sponsors

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NCSU AND WERC NOTICES

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BUSINESS AREAS TO MASTER-AGENDA

- Management-Session 1
- Marketing-Session 2
- Finance-Session 2
- Production-Session 3
- Equipment-Session 4
- Drying-Session 5

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WHY BE IN THE SMALL SAWMILL BUSINESS?

- Self employment
- Benefits of being a business
- Joy in running a sawmill
- May work from home
- Can be profitable
- Can be a vital contributor to the wellbeing of a community

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SOURCING LOGS-RURAL AND URBAN AREAS

Sourcing logs-urban and rural areas-

- Logging your own forest or buying timber
- Buying from loggers-drop off and pick up
- Drops from arborists and developers-may be free logs, may be able to charge for dropping, helps if you pick up the logs
- Shares-swapping sawing fees for logs
- Great Plains a mix of prairie and forests-plenty of logs for a small sawmill operation

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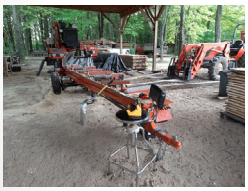
MICHIGAN AARON SMALL SAWMILL EXAMPLE 1



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WISCONSIN BOB SMALL SAWMILL EXAMPLE 2

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BUSINESS BASICS-TYPICAL FOCUS TYPES

- Single Owner/Operator sawmill
- Businesses with partners and/or employees
- Full time versus part time
- Cooperation with other businesses
  - Can share facilities and equipment
  - May buy/sell logs and lumber for better focus
  - Can sell slabs to a firewood processor

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ALIGNMENT OF THREE FOCUS AREAS-GOAL P & L + SCHEDULING + BIDDING/PRICING

- Goal profit and loss statement-the way you want things to be
- Production schedule-logs in and lumber out
- Bidding and pricing-costs + profit = price
- [Profit and Loss Statement is an Income Statement, where profits = revenues – expenses]

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FINANCIAL SAVVY

- Statements-monthly and yearly
  - Profit and loss
  - Balance sheet
  - Cash flow
- Planning-investing schedule for facilities and equipment
- Buying versus leasing equipment
- Want to grow a $ “Grubstake” so you have flexibility and can sieze an opportunity when one comes by!

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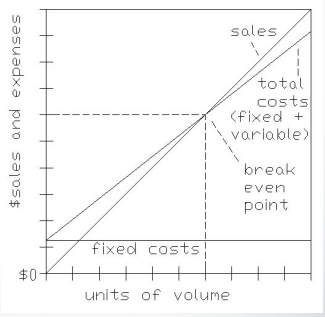
Financial-Business Breakeven Concept

Break Even Curve-Relates Fixed and Variable Costs to Revenues, Expenses and Profits



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BUSINESS-COMMON SAWMILL PRODUCTS

- Green lumber-lumber, cants, timbers, live edge slabs, pallet stock, crossties
- Kiln dried lumber
- Cants and timbers
- Shingles
- Stakes
- Squares
- Live edge slabs, mantles
- Crossties

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BUSINESS STRATEGY TO GROW SALES FROM LUMBER NOT OFF YOUR MILL = RESELLING

Buying and reselling for extra revenues and profits

- Lumber-can buy what customer want that you don't produce
- Logs-act as a woodyard and sell logs you don't want to saw
- Upside is that you are not limited in the volume of lumber and logs you can buy and resale!
- Can buy/sell used equipment too!

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BUSINESS-METRO FOCUS HAVE $ TO SPEND

- Metro areas have large populations and offer unlimited possibilities for selling sawmill products
- Retail prices are higher in metro areas than rural areas
- Offers possible value added services that are simple to perform, like planning and simple machining for customization, can offer thick products not found in big box stores
- Social media offers low cost marketing to metro areas
- A few hours of driving time can reach a metro area in most of the US

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BUSINESS-BE A SCHEDULER

- Be proactive and make a weekly production schedule even if you operate a one person sawmill business
- Use the schedule to project a profit and loss statement-use $ per day for labor and overhead to add to the cost of logs to create a schedule cost and profit projection
- Example-if you have $10,000 of logs on the yard, how does the profitability vary with the number of work days needed to process the logs into lumber?
- With a visible production schedule, employees are self empowered to work to the schedule!

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INVENTORY MANAGEMENT

Inventory management-want to balance inventory $ and avoid losses to stain in lumber and logs

a. Logs-should know $ value and footages in inventory

b. Air dried lumber-should protect from degrade or will lose inventory $ value

c. Kiln dried lumber-want to move if excess inventory builds

d. Protect lumber and logs from the elements

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ADDING A DRY KILN TO A GREEN SAWMILL

The business argument for adding a dry kiln to a green lumber small sawmill business

- Higher value for kiln dried lumber
- Larger pool of buyers
- Wholesale and retail buyers available

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EMPLOYEES

Training-operating the mill, stacking lumber, running the edger, maintenance, etc. Have positive expectations of the employees

Inventive pay methods-reward good performances

Work scheduling-put out a weekly schedule to put a sense of urgency in the employee-customers want the products

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BUSINESS-GREEN SAWMILL EQUIPMENT

Match purchases of equipment to business needs-

- Mills-band-Woodmizer, Norwood, EZ Boardwalk, Timberking, others
- Mills-swing blade circular-Peterson, Lucas, Mobile
- Mills-fixed blade circular-Frick, Edminston, Foley
- Edgers
- Trim saw

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SAWMILL EQUIPMENT-BUYING EQUIPMENT

- New-normally from a manufacturer or a dealer
- Used-individuals, used equipment dealers, advertising media
- Internet ads-Craigslist, Facebook Marketplace

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SAWMILL EQUIPMENT-BUILDINGS

- Buildings for storing and working equipment-
  - pole sheds
  - enclosed buildings
- Lumber drying and storage
- Protecting equipment adds years to its use, resale $ value and the ability to work outside more days per year

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BUSINESS STRATEGY- WASTE MANAGEMENT AND A PROFIT CENTER

Sawdust
- Collect with a fan and send into a cyclone outside

Slabs
- Think about splitting into bundle firewood at $3 a bundle wholesale and $6 a bundle retail, can earn $20 a log for making bundle firewood from slabs-kinetic wood splitter with a wide splitter wedge
- Can use slabs for crafts
- Can rip off edges for a siding board
- Must have a system for dealing with slabs
  - Can chip using a PTO tractor powered chipper
  - Lots of potential buyers for gardening, farming, animals, landscaping

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BUSINESS INSURANCE

Insurance and business liability management

- Liability on grounds
- Equipment insurance
- Worker's compensation

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PRICING LUMBER-AN ART AND A SCIENCE!

- Have to cover costs of logs + labor + overhead
- Have to generate needed profits
- More sales $ volume helps spread out the overhead costs
  - If have $20,000 of overhead costs for producing 100 mbf of lumber sales, overhead costs = $200 of overhead per mbf of lumber sold
  - If have $20,000 of overhead costs for producing 150 mbf of lumber sales, then overhead costs = $133 of overhead per mbf of lumber sold

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PRICING LUMBER-AN ART AND A SCIENCE!

- Logs are often bought on scaled volume
- Overruns of the log rule reduces log cost per mbf
  - Example-if you pay $300 per mbf and have a 20% overrun, then your log cost for lumber produced is $300/1.2 = $250 per mbf
- Logs always saw out a variation of lumber quality from high grade to low
- Better quality logs saw out higher grade lumber and higher $ values for a log

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PRICING LUMBER-AN ART AND A SCIENCE!

- Labor costs vary with output, productivity
- Can think of labor $ per mbf
- Best to think of the Profit and Loss Statement as hitting bottom line profitability goals is more important than having a low cost of labor
- Think of ways to grow productivity of labor-better material handling, better logs, smarter sawing, better choice of products

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RESOURCES

Internet at US Forest Products Lab
- Dry Kiln Operator's Manual-www.fpl.fs.fed.us/documents/usda/ah188/ah188.htm
- Drying Hardwood Lumber-www.fpl.fs.fed.us/documents/fplgtr/fplgtr118.pdf

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RESOURCES

Publications-Sawmills
- Jonathan Kays-University of Maryland-publications-http://extension.umd.edu/woodland
- Harry Watt publications-https://outreach.cnr.ncsu.edu/ncwood
- Terry Conners-crossties https://forestry.ca.uky.edu/conners-pubs
- Brian Bond-Virginia Tech, bbond@vt.edu
- Wisconsin Department of Natural Resources-https://wi-dnr.widencollective.com/portals/84nd650p/ForestryPublications