

# Fuel Cost Comparison: Wood Vs. Natural Gas

## Wood:

Assume: Dry chips contain 7,500 BTU/lb

Fuel Value:  $1,000,000 \text{ BTU} / 7500 \text{ BTU per lb.} = 133.34 \text{ lbs per million BTU}$

Wood Cost:

At \$20/ per BDT (Bone Dry Ton)=\$0.01 per lb.

At \$30/ per BDT (Bone Dry Ton)=\$0.015 per lb.

At \$40/ per BDT (Bone Dry Ton)=\$0.02 per lb.

Cost per Million BTU:

At \$20/per BDT:  $133.34 \text{ lb.} * \$0.01 \text{ per lb.} = \$1.33 \text{ per million BTU}$

At \$30/per BDT:  $133.34 \text{ lb.} * \$0.015 \text{ per lb.} = \$2.00 \text{ per million BTU}$

At \$40/per BDT:  $133.34 \text{ lb.} * \$0.02 \text{ per lb.} = \$2.67 \text{ per million BTU}$

## Natural Gas:

Assume: 10 therm of natural gas contains 1,000,000 BTU

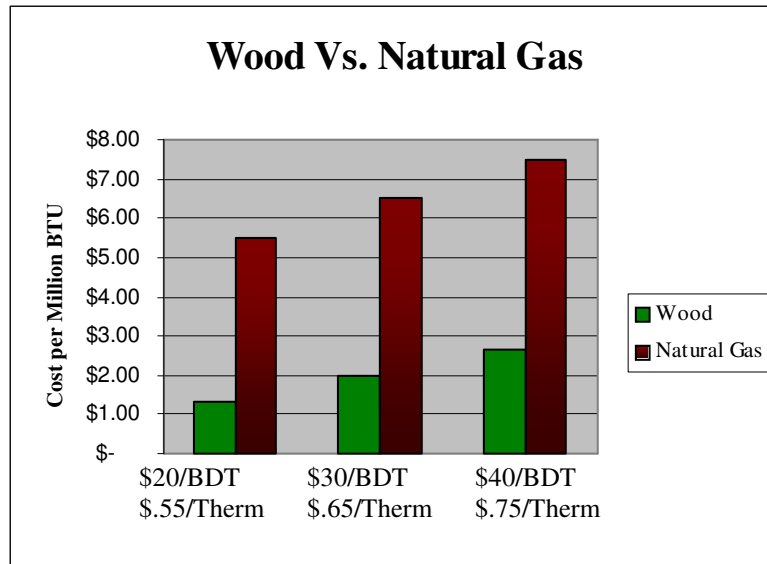
Cost per Million BTU:

At \$.55/per therm:  $10 \text{ therm} * \$.55/\text{per therm} = \$5.50 \text{ per million BTU}$

At \$.65/per therm:  $10 \text{ therm} * \$.65/\text{per therm} = \$6.50 \text{ per million BTU}$

At \$.75/per therm:  $10 \text{ therm} * \$.75/\text{per therm} = \$7.50 \text{ per million BTU}$

\*\*Note: This is only a guide and is subject to change depending on location and the market price for the two fuels. The wood cost is an average range of current local market prices. The natural gas cost was based on a average monthly bill in Grass Valley from PG&E. Natural gas is not used at the camp.



# Fuel Cost Comparison: Wood Vs. Oil

## Wood:

Assume: Dry chips contain 7,500 BTU/lb

Fuel Value: 1,000,000 BTU / 7500 BTU per lb. = 133.34 lbs per million BTU

Wood Cost:

At \$20/ per BDT (Bone Dry Ton)=\$0.01 per lb.

At \$30/ per BDT (Bone Dry Ton)=\$0.015 per lb.

At \$40/ per BDT (Bone Dry Ton)=\$0.020 per lb.

Cost per Million BTU:

At \$20/per BDT: 133.34 lb. \* \$0.01 per lb. = \$1.33 per million BTU

At \$30/per BDT: 133.34 lb. \* \$0.015 per lb. = \$2.00 per million BTU

At \$40/per BDT: 133.34 lb. \* \$0.02 per lb. = \$2.67 per million BTU

## Oil:

Assume: 1 gallon of #2 oil contains 140,000 BTU

Fuel Value: 1,000,000 BTU / 140,000 BTU per gallon = 7.14 gallons per million BTU

Cost per Million BTU:

At \$.48/per gallon: 7.14 gallons \* \$.48/per gallon = \$3.41 per million BTU

At \$.58/per gallon: 7.14 gallons \* \$.58/per gallon = \$4.16 per million BTU

At \$.68/per gallon: 7.14 gallons \* \$.8/per gallon = \$4.87 per million BTU

\*\*Note: This is only a guide and is subject to change depending on location and the market price for the two fuels. The wood cost is an average range of current local market prices. The oil cost was based on an average monthly rate of spot prices of Heating Oils during Jan -April 2002. Oil is not used at the camp.

