ESM 102 Energy Workshop

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type of stove used: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Starting weight of wood or gas canister: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ending weight of the wood or gas canister:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cups of water used :\_\_\_\_\_\_\_\_\_\_\_\_\_

Start time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ End time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time it took to get the water to boil:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Start time of rice:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ End time of rice:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time it took to cook rice:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Start time of beans:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ End time of beans:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time it took to cook beans:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Coleman Propane** | **StoveTec**  | **Wood-Gas Stove** | **Electric Hot Plate** | **Hibachi Open Flame** |
| **Time to cooking temp** |  |  |  |  |  |
| **Time to boil H20** |  |  |  |  |  |
| **Time to cook rice** |  |  |  |  |  |
| **Amt Fuel Used** |  |  |  |  |  |
|  |  |  |  |  |  |
| **Bean cook time** |  |  |  |  |  |

If a meal for a family of 5 takes this much fuel or electricity, how much wood, propane or electricity would be used over a year just for meals? (3 meals per day \* 365 days/year)

What is the impact on the forest? How much wood is extracted from the forest by 20 families or 100 families (families of 5)?

How much wood could be saved by switching from the least efficient to the most efficient wood stove?