

Grinding Guidelines for LTER/FS Burn Exp. 1998

For the 1998 LTER/FS Burn Experiment we will be using the Wiley Mill for the initial grinding and combining of field samples. We'll follow the usual rules for minimum sample size that may be put through the Wiley grinder: a sample (or combination of samples) that is less than 2.0 - 2.5 grams should not be ground on the Wiley Mill, but put aside for ball mill grinding.

The manner of combining samples for grinding will be different from any combining pattern which we have used in the past. Some parts of the pattern will be familiar, while others will be completely new to us. Here's the combining pattern for the Burn Exp. 1998:

1. Do not grind OPPO samples. (Actually, there should not be any OPPO samples, but if you do find any, don't grind them.)
2. Grind the PACH (Lichen) samples separately.
3. Combine BOGR and BUDA samples for grinding.
4. Grind "Standing Litter" separately.
5. Grind "Down Litter" separately. This is the litter that was raked off the ground at each plot after the clipped samples were taken. It is expected to have some dirt in it, so we will be ashing each of these samples individually after grinding, in order to correct their initial weights for ash (non-vegetation) content.
6. Don't grind Dead Shrubs or Dead Bushes that are singled out separately.
7. Combine all other samples not mentioned on the above list.
8. If you have any questions about where a particular sample fits in on this list please ask Judy, or put the samples for that plot aside until Judy is here to ask.

After the initial combining and grinding on the Wiley Mill, we'll grind the samples on the Ball Mill as usual, except for one change. All large Wiley Milled samples may be subsampled for Ball Mill grinding, except the "Down Litter" samples. These must be ball milled as complete samples, so that we are able to get the most accurate subsamples for ashing as we possibly can.

Milled samples will be placed in labeled scint vials, as usual. It would be helpful to keep the vials for the Down Litter samples separated on one side of the vial box, so that we won't need to be searching for them when ashing time comes.

Thank you!