Biomass Estimates

Gradient Sites, July 2015

**Biomass Collection**

Collected biomass of all plants (live and standing dead) plus litter within the confines of one 0.25 x 0.25 m quadrat per plot. Vines whose leaves projected areally over the quadrats were collected even if they were not rooted in the quadrat. For all other species, we made an effort to only collected aboveground biomass from plants rooted in the plot.

Bags were stored in a cold room until they could be sorted. Once sorted they were dried at 60 °C and weighed.

**Biomass Sorting**

Each site will have 15 bags:

UN=plots not invaded with cogon. These bags will contain litter and native plant species.

REF=plots invaded with cogon. Will have mostly cogon and maybe some native plants. There will likely be live cogon, “standing dead” cogon and litter.

GLY=these are invaded plots that have been sprayed with glyphosate (roundup); will be nearly all litter because vegetation has been removed with glyphosate

GS=will have only or mostly herbaceous (non-grass) species b/c grass species have been removed

UNGLY=uninvaded plots sprayed with roundup; will be mostly litter.

Samples should be separated into the following groups:

Cogon (green, live)

Cogon standing dead (rooted into the plot but dead or senesced >%60 of tiller)

Other grass (any grass but cogon)

Vine

Woody

Forb

Litter

Use the printout of common plant species to distinguish vines, forbs, etc.

For cogon:

Separate out tillers and count them. If blades of grass have become separated from their parent tiller, don’t count them again. Separated blades will have a round/hollow bottom that clearly used to be wrapped around the base of the tiller.

To begin, leave live/dead blades of a given tiller together. Measure the length of the longest green blade in the tiller. Do this for 10 haphazardly chosen tillers. After the tiller length is measured, separate out live from dead grass blades.

If the bag contains a lot of cogon “stubble”, measure 10 pieces of stubble and take the average. Enter this number into the column that says “correction factor”. The stubble is the bases of the tillers that were not cut at ground level on the first pass during removal from the plot. Need to add this correction to get accurate tiller length. (Will only be the case in a few instances.)