This is the first report of a three year study (2006-9) on the restoration of pile burns to reduce post-fire weed expansion. During the first year, 45 piles of varying sizes (small, medium, large) were monitored pre- and post-burn for:

- fuel loads,
- bulk density,
- particle size distribution,
- fuel consumption, and
- soil temperatures during pile burning.

After pile burning, samples were taken 3 meters outside the pile, at the edge of pile, and in the pile center for:

- total nitrogen,
- total carbon,
- phosphorus (highest in center),
- ammonium (highest in center, intermediate at edge, lowest in unburned),
- nitrate (too early for nitrate differences),
- microbial biomass to a depth of 10 cm (no difference), and
- mycorrhizal viability to a depth of 10 cm (no difference).

Analyses are on going.

This fall:

- resin capsules were buried in burned piles to determine \textit{in situ} ammonium and nitrate concentrations,
- 12 piles were divided into fifths and received 5 treatments (control, scarified soil, scarified soil+ native soil, scarified soil+ compost), and
- 12 piles were seeded with native grasses (Bitterroot NF restoration mix), divided into fifths, and received 5 treatments (control, scarified soil, scarified soil+ native soil, scarified soil+ compost).

The research is on schedule and we will be getting our first results for restoration efficacy next spring.