The Biochar Collaborative

Featuring Also: Two Other Uses of Woody Biomass We're Developing

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Overview

- The Biochar Collaborative
- Our Various Products
- Our Uniting Interest
- How We're Exploiting Opportunities

The Biochar *Collaborative*

- Independent businesses working together to achieve common objectives:
  - Rural wealth creation
  - Excellent natural resource management
  - Implementing Carbon Sequestration Practices
  - Developing scalable integrated solutions

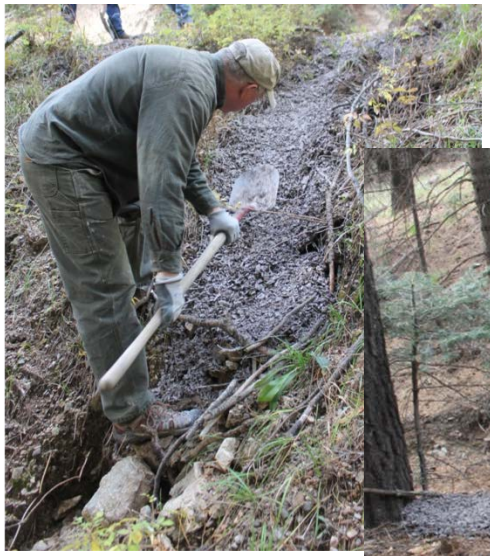
Our Path so far…

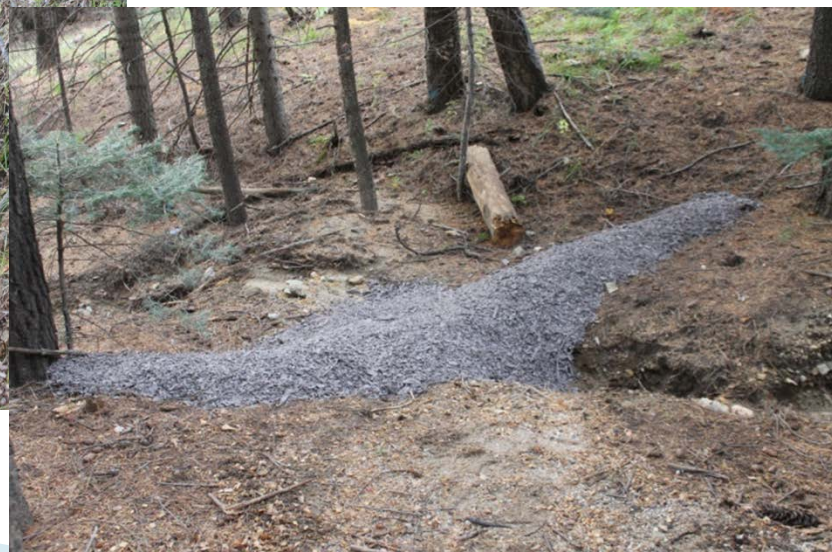
- Cooperation on a series of long term projects focused on forest improvement, rural development, and woody biomass utilization

- Four product lines/technologies have been developed
  - Zerosion
  - Chipcrete
  - Biochar and Lump Charcoal from a variety of feedstocks

Zerosion

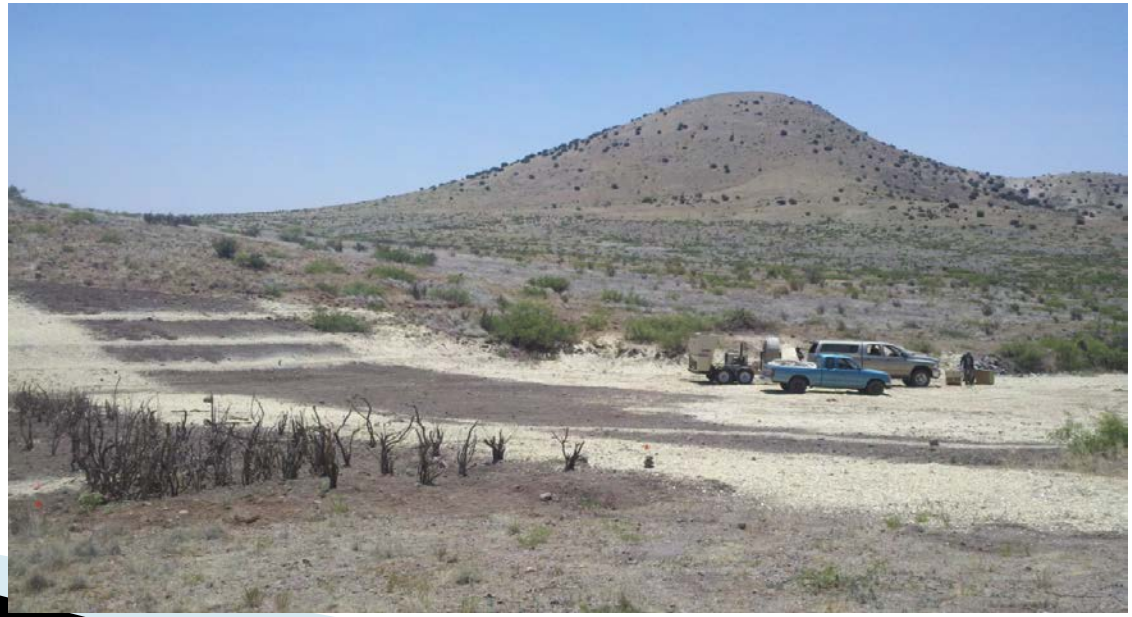
- Ground armoring and stabilization product
  - Can be blown (like straw)
  - Can be placed (like concrete)
  - Has “designer” mechanical properties
  - Can entrain various additional components
    - Biochar
    - Seed
    - Amendments





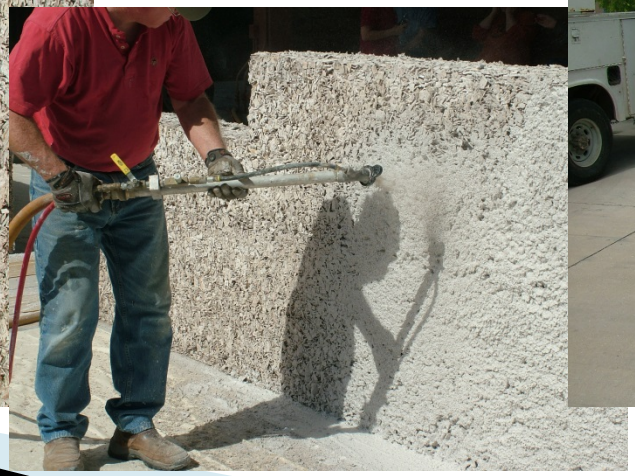
Zerosion Cont'd

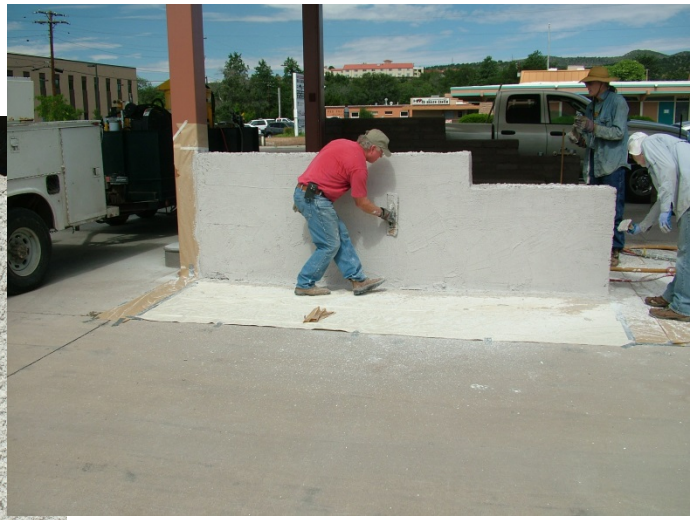
- Provides long-term soil protection and erosion mitigation
  - Allows build up of silt to provide further dispersion of run-off energy
  - Provides base for growth of plants
  - Will breakdown over time
  - If properly placed, will not blow-out like bales, coir, or silt fence



Chipcrete

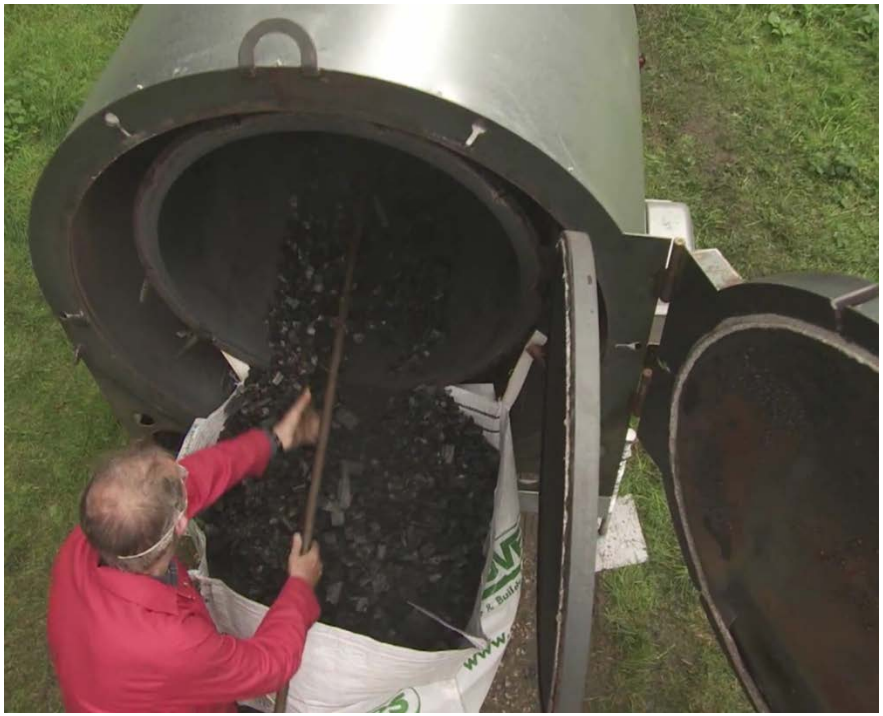
- Building material
  - Higher binder-ratio to increase lifespan and durability
    - Parged cementitious outer layer to shed water
    - Can be formed in-place, cast, or laid-up
  - Smaller footer requirements due to lower weight
  - Further testing needed for Building Code approval





Biochar and Charcoal Production

- Batch processes using different technologies for chunky and finer feedstocks.



Biochar Production Development

- Continuous TLUD in development (for non-chunky feedstocks.)
- Heat and syn gas recovery incorporated on TLUD, and in further development for all systems
- Design Objectives: Mobile and portable, scalable systems; affordable and productive

Cooperative Marketing

- Exploring national branding
  - With Regional and Local personalization options
- Discussing Aggregation Service
- Exploring Regional Bagging and Distribution

Collaborative Research

- Soil Ecology Studies
  - In partnership with Virginia Tech and New Mexico State
  - 22 growers in 13 US states
  - Wide variety of soils and crops
  - Common Garden Plots
- Development of National Cooperative
  - For distributed network of small/medium sized producer/growers
  - Sharing business, technology, and marketing …

About Dovetail:

Dovetail is a highly skilled team that fosters sustainability and responsible behaviors by collaborating to develop unique concepts, systems, models and programs. Dovetail excels at solving complex business problems and helping responsible firms to become successful. We also help regions define programs that increase the job creation and the job quality of resource-based industries.

Dovetail's Mission Statement:

To provide authoritative information about the impacts and trade-offs of environmental decisions, including consumption choices, land use, and policy alternatives.

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