Historically, income-producing options for transforming organic waste into value have been few and far between. However, new conversion technology, coupled with an increasing demand for organic, locally produced products is changing that.
Through a process called **pyrolysis**, wood and animal bones can be **heated in an oxygen-deprived environment** and converted into **carbonized outputs** such as lump charcoal, biochar and bone char.

Converted from wood, lump charcoal has high value to grilling enthusiasts. In its granular form, whether derived from wood or bones, it appeals to other users: organic gardeners and small farmers.
Today's consumers are more concerned with *where products come from and how they are made*. This has given rise to new organic and fair trade markets, as shoppers demand more responsible and sustainable products.

**Shoppers are buying local because they desire to:**

- Help the local economy
- Select from a better assortment of products
- Reduce their carbon footprint
- Increase natural and organic production
Natural Lump Charcoal

Grilling enthusiasts' new demands have led them to a sensible solution: lump charcoal.

Lump charcoal burns hotter and cleaner than raw wood and industrially-produced briquettes—making it great for the grill. Converting excess wood into lump charcoal provides an all-natural grilling option that you can market as a healthier, locally-made product.

As consumers look for fewer chemicals in their food, natural charcoal attracts many fans. Avid grillers love homemade lump charcoal because it does not contain the additives that traditional store-bought briquettes do (coal, starch, sodium nitrate).

Although a better product can result in a higher price.

“For the same reason that SPAM is cheaper than a whole ham, briquettes are cheaper to make than all-wood charcoal.”

-bonappetit.com

Thankfully, serious grillers are willing to pay more for all-natural charcoal, just like organic over conventional foods.
Biochar is granular charcoal used as a soil amendment by gardeners and farmers. Like lump charcoal, biochar is growing in popularity as more potential users learn about its beneficial properties.

Consider biochar as the soil’s sponge. With a high retention for water and nutrients, biochar increases soil fertility and crop yields. Unlike conventional soil amendments, biochar resists decomposition and can remain in the soil for hundreds of years. Because it is effective—and all-natural—it is increasing in popularity among organic gardeners and farmers.
Bone char

As with wood, the charring of animal bones produces a carbonized output that resembles the initial feedstock. Once ground or crushed, charred animal bones are known as bone char.

Bone char is growing in popularity as a soil enhancer because of its nutrient rich makeup. When it comes to soil enhancement, bone char works like its cousin, biochar. Gardeners love to use this additive with over 30% phosphorous and calcium to maximize both plant health and blooms.
By producing your own charcoal products, you can supply the growing demand for naturally made options in your local community and potentially your broader region. By selling local, you can offer your community reasonable prices without added transportation markups. There are many places near you to sell natural charcoal, biochar and bone char:

- Farmers markets
- Nurseries & garden centers
- Local retail stores
- Direct to end users

**Offer Biomass Disposal Services:**
You can realize additional revenue by providing disposal solutions to local farms, lumber mills, and animal processing operations in your area. You can take their excess biomass to convert into value-added charcoal products.

**Generate Revenue**
1 day of production of biochar can = $400 wholesale
Smaller packaging for retail and at farmers market could be $750+
Using the right equipment and the right materials, it’s easy to become a local producer of natural charcoal products. Seek equipment that is durable, can withstand the demands of high-temperature pyrolysis and that is sufficiently productive to justify your efforts.

**Exeterra offers a machine called the Exeter Charcoal Retort**, which allows you to take brush, branches, salvaged or culled trees and animal bones and convert them into charcoal, biochar, and bone char. Mobile, efficient, and easy to use, a daily batch from the Exeter Retort will produce high quality charcoal every time. And, unlike most homemade fabrications, there is no need to sort ash or uncharred pieces.

*About:* Exeterra is dedicated to offering sustainable solutions for biomass conversion. If you are interested in learning how to become a local producer of natural charcoal, contact Scott Bagley at 740-818-4017 to get the conversation started today.