

SARE Farmer/Grower Grant Interim Report
“Open Range” Woodlands: An Untapped Resource for Small-Scale Farms
Grant ID Number: FNE08-649
Submitted by Chuck Talbott
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2. Restate the goals of your project.

Talbott is interested in diversifying his farm and enhancing the earning potential and sustainability of his woodlands. His goals include: 1) enhancing mast production from crop trees (trees that produce soft or hard mast) for livestock and wildlife production and 2) introducing new varieties of hard mast (Chinese and American chestnuts) and soft mast (persimmon and red mulberry) to extend grazing season. Our goal is to produce 60-70% of our feed requirements on the farm. By managing our crop trees to increase mast production, we may be able to lower feed costs as well as produce a niche-market pork for high-end markets

3. Update the information on your farm since your project started. Include acres farmed, your current crops or livestock, and other key background on your farm.

We are producing hogs on my 267 A farm in Mason Co. WV using heirloom breeds that will provide the kind of pork characteristics required to satisfy our charcuterie business. We produce an upscale pork by utilizing predominately oak and hickory mast as an alternative feed source. We document the environmental impact of integrated swine and sylvan systems (especially in mountainous terrain).

4. Describe your cooperators and their roles in the project.

Scott Eggerud (Tri-State Timber Management, Inc., Ona WV) is responsible for conducting a Forest Management Plan and identifying crop trees and cull trees for our study (photo 1). Drs. Dave McGill and Jim Rench (WVU Forestry Extension) will assist in determining the animal impact on the study and Farmer/Student/Consumer education. Mr. Rodney Wallbrown, Mason Co. WVU Extension Agent, advises in animal management and assists in conducting our farmer and youth group workshops.

5. Tell us what you actually did on your project and what remains to be done.

In March 2008, Talbott and Eggerud surveyed the 230A of woodlands and Eggerud submitted an approved Forest Management Plan in February 2009. Eggerud identified 511 crop trees and their respective cull trees for the prescribed 70A study area in April (see Table 1.). Eighty percent of the crop trees identified were managed accordingly: cull trees were dropped and removed (by horses skidding the sawlogs) or double girdled and left standing.

| Crop Trees (CT) Released | #CT | % Total | Avg. DBH/CT | Total Culled | # Culled/CT |
|--------------------------|-----|---------|-------------|--------------|-------------|
| White oak | 232 | 45 | 14 | 522 | 2.3 |
| Hickory | 140 | 28 | 10 | 327 | 2.4 |
| Black oak | 31 | 6 | 14 | 79 | 2.5 |
| Red Oak | 28 | 5 | 14 | 62 | 2.2 |
| Chestnut Oak | 44 | 9 | 13 | 100 | 2.3 |
| Persimmon | 13 | 3 | 9 | 30 | 2.3 |
| Walnut | 4 | 1 | 12 | 12 | 3 |

We set out 24 traps (photos 1 and 4) in August 2009 (3 species: White Oak, Chestnut Oak and Hickory; 4 reps per group: Study and Control; 3 mast collection traps per tree). Due to the unrepresentative production of mast for 2009, it was decided to ask SARE for an extension of the study and repeat the experiment. "Compared to the 39-year average, the 2009 mast index for all species combined decreased to an all-time low" (WV DNR 2009).

6. Describe your results and accomplishments to date.

We collectively (WVU Extension, Black Oak Holler Farm, LLC, USDA SARE and Rural Development) have undertaken a major study which could impact small-farm survival and profitability in Appalachia. Corn sold for over \$7/bu in 2008 and consequently became a major concern for small-scale farmers who have to purchase feed for their livestock. Consequently, we are keenly interested in the economic outcomes and potential for training others to manage their woodlots and produce niche-market pork.

Our sylvopastoral- integrated farming systems have solicited interest from several Sustainable Agricultural Groups across the East Coast. I spoke at four professional conferences in 2008: 1.) The Swine School Conference, at Stone Barns Center for Food and Agriculture, co-sponsored by the Animal Welfare Institute ("Feeds and Feeding: Influencing Pork Flavor with Swine Diets", April 18, 2008 and "Silvo-Pastoral Opportunities with Pigs", April 19, 2008, Tarrytown, NY). 2.) Pastured Swine Conference presented by Innovative Farmers of Ohio and The Ohio Department of Agriculture's Rural Rehabilitation Program on January 10, 2009: ("Marketing Appalachian Pork While Promoting National Food Security" and "Integrated Crop and Sylvan Systems with Swine: Underutilized

Resources for Appalachian Farms”, January 10, 2009, Mount Vernon, Ohio) 3.) Organic Gardening and Farming Conference, sponsored by Northeast Organic Farmers Association of NY (“Crop-Trees:”, January 24, 2009, Rochester, NY). 4) To Market To Market: Adding Value to Your Farm, the American Grassfed Association conference co-sponsored by Animal Welfare Institute (“From Spain to Kentucky: Acorn-Finished Ham”, February 5, 2009, Lexington, KY). In 2010, I was asked to give two presentations (“From Spain to West Virginia: Acorn Fed Hogs to Produce Appalachian Gourmet Hams”, Parts 1 and 2) and on our project at the Southern Ag. Workers Group in Chattanooga, TN. Three hundred people attended the two sessions and we sampled our hams from the 2007 harvest.

Dry-cured Appalachian Ham received favorable impressions from chefs (Chefs Collaborative for the 21st Century), March 2008; Innovative Farmers of Ohio. In May, Chuck Wesley of Whiskey Magazine and three chefs from Louisville, KY paired our cured pork products with various bourbons (article and results forthcoming).

Dr. Dave McGill (WVU Forestry Extension) conducted a FFA workshop on November 7, 2008. Twenty-eight FFA and Vocational Education Students from Hannan Jr./Sr. High School visited the pig plots and observed our crop tree study in progress (Photos 7-12). Talbott and McGill discussed the “Crop Tree” study to the students, record keeping (Excel spreadsheet, attachment), reviewed tree identification and identified wildlife habitats and scat. McGill also presented topics on Ginseng Production, Identification of Maple Trees for Producing Appalachian Maple Syrup and Shiitake Mushroom Inoculation. The students inoculated their own logs and took them home. Due to the lack of mast produced in the 2009 season, our 2009 farmer workshop was rescheduled for 2010. There was also concern for possible N1H1 swine virus contamination with farm visitors.

In July 2010, I visited four farmers who raise swine in Webster and Pocahontas Counties with Greg Hamons, WVU Extension, and presented a workshop on niche-market pork to 17 participants. Surveys indicated farmer interest in developing value-added, direct marketing options.

7. Describe any site conditions or conditions specific to your farm and this growing season that may be affecting your results.

As with the 2009 mast season, killing frosts during the flowering of the crop trees will effect results. Drought will effect mast production.

8. Describe your economic findings, if any. This would include changes in expenses or net farm income triggered by the project. We have sold our dry-cured hams in NYC and Atlanta for \$20/lb (average cured ham weight is 25 lbs). We have initiated work on alternative grazing systems (Photo 3.) and cost of production for self-harvesting crops.

9. Say whether the results from your project generated new ideas about what is needed to solve the problem you were working on. Once this project is complete, what do you think is the next step?

Last year we had a dry fall and we had only one portable watering system for 50 A of fenced woodlot. We are currently examining ways to water our acorn finished hogs more sustainably. Preliminary results indicate that swine placed in woods for indeterminate short periods may help reduce infestation of Japanese Stiltgrass, an invasive weed to woodlands (Photo 5). The next step of this project is to determine the cost of production and "Fair Farm Price" for extensive grazing systems in woodlands and pastures.

10. Include your name and the date at the end of the report.

Chuck Talbott, Ph D and Farmer
Farmer

August 7, 2010
Date

Send one electronic copy of your report to nesare@uvm.edu by email attachment and send one hard (paper) copy to NESARE, 655 Spear Street, University of Vermont, Burlington, VT 05405-0107. If you have questions about writing an interim report, call 802/656-0471.