

Alley Cropping at Good Work Farm: Planting Trees to Fill a Market Niche

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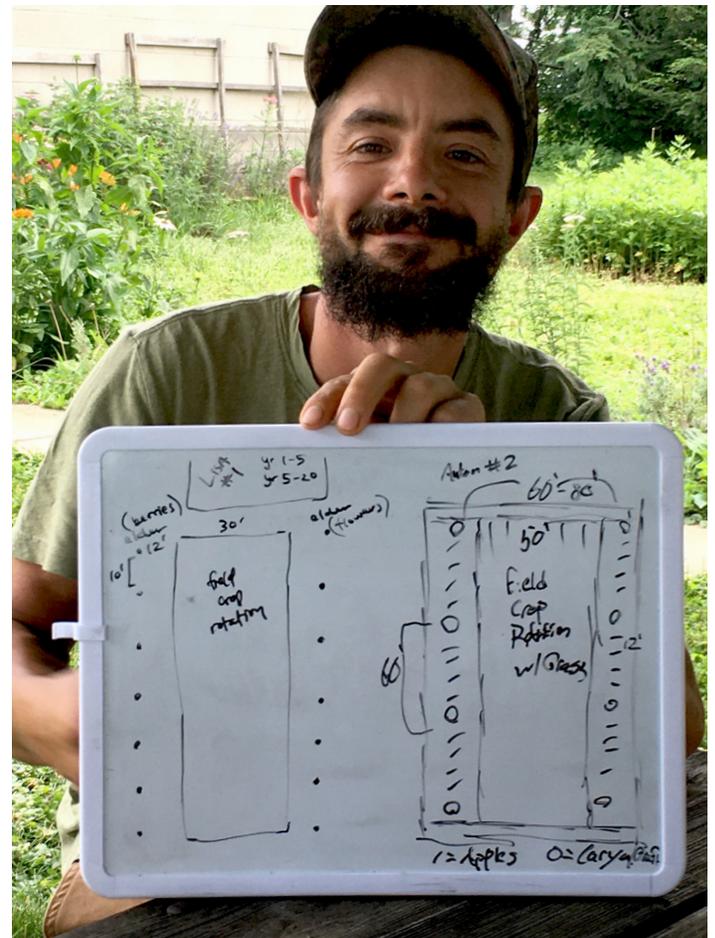
Alley cropping is a type of agroforestry practice where farmers grow annual or perennial crops in “alleys” between rows of trees selected for their environmental and income-producing benefits. This case study highlights a farm that worked with Pasa Sustainable Agriculture and Interlace Commons to design an alley cropping site plan that would accommodate its unique goals.

Anton Shannon and Lisa Miskelly run Good Work Farm, a 12-acre vegetable farm on land increasingly surrounded by suburban development in the rapidly growing Lehigh River Valley region of northeastern Pennsylvania. Anton and Lisa were interested in integrating trees into their site to diversify their crops, though their goal was not to produce relatively small amounts of a vast array of crops. Instead, they sought to develop a market niche to complement, rather than compete with, the offerings of other local farmers. Since there was a large consumer base nearby, they were also considering starting a pick-your-own agritourism enterprise. Additionally, their windswept site has several environmental issues that alley cropping could help address, such as wind-based soil erosion and invasive plant species.

Challenges

Though Anton and Lisa have many years of farming experience, Good Work Farm itself is in its early years. The start-up costs of financing even a modest-sized farm are substantial, and debt can be hard to overcome. Anton and Lisa had been considering integrating livestock into their operation, but animal agriculture is difficult when surrounded by residential development, where neighbors might object to noises and smells. Also, funding new equipment and buildings that would have been needed for livestock would have added even more financial burden. They ultimately decided a larger and more diversified vegetable and fruit operation brought to life by alley cropping—which required a much more modest

financial investment in trees, and would provide both short- and long-term income streams—made more sense for their location and finances.



Farmer Anton Shannon of Good Work Farm plans the alley cropping site design

Alley cropping site design

Anton and Lisa designed a basic alley cropping system. They planned to add rows of trees and shrubs to their open fields, and to expand an existing tree buffer. They selected trees and shrubs that would mature and produce crops over a seasonal continuum, from short-term berry production (elderberries) to longer-term nut tree and fruit tree production (apples, pears, and eventually hazelnuts and figs), all of which are known to be in demand within their local Lehigh Valley market. The trees will add protection from wind, and the organic matter in their fields from tree and shrub leaves and twigs will also build soil health.

PLANT LIST

Trees/shrubs:

Plums, European pears, Asian pears, apples (multiple varieties), ornamental willows (multiple varieties)

Annuals/perennials:

Nettle, comfrey, horsetail, mountain mint, borage, lemon balm, asparagus, elderberry



Farm dog Rocco surveys the freshly draft-horse cultivated alley cropping site

Insights

Though it meant setting aside their animal agriculture aspirations for now, Anton and Lisa chose a path forward for their young operation that seeks to work in harmony with their neighborhood dynamics and with other local farms. By focusing on producing a limited number of specialty crops—rather than producing everything for every possible market—Anton and Lisa can coordinate with other farms in the region to sell from cooperative farm stands, and can tailor their system to fill niches no one else is currently filling.

Funding for this project was provided by a state Conservation Innovation Grant awarded by the Pennsylvania office of the Natural Resource Conservation Service. Find this case study and others at pasafarming.org/resources.



Agroforestry consultant Meghan Giroux of Interlace Commons considers Good Work Farm's needs as she helps plan the alley cropping site