carolina farm stewardship association

Farmland Access Manual

A Practical Guide to Evaluating Farmland for New and Beginning Farmers

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INTRODUCTION

Today less than 2% of the population of the United States is employed in agriculture and that number has been similarly low for several decades. That means aspiring farmers are less likely to have grown up on a farm and are less likely to have access to family land on which to establish a farm business.

Perhaps you are one of these landless, aspiring farmers. You want to go into farming because you want to help provide healthy food for the people in your community or you are interested in the proper stewardship of the natural resources in your community. Maybe you feel a strong desire to work for yourself or to spend time working outdoors. Whatever the combinations of reasons leading you to explore a career in farming, unless you were born into a family with farmland, you are going to need a system to help you evaluate farmland as you develop a plan for your new farm business.

All too often individuals try to force a specific agricultural activity onto a specific parcel of land for which is not appropriately suited. This manual will help you reverse that thinking.

How to Use This Manual

Before you begin your search for farmland you need to know what you're looking for. The first section of this manual will help you identify your goals. The second section will help you establish a realistic picture of the kind of farm business you would like to develop. Once you've established a basic plan for the type of farm business you want to develop, the third section of this manual will help you evaluate a particular parcel of land and decided whether or not it will support the vision of your future farm.

The order of operations is as follows:

1. Establish your goals
2. Establish your farm plan
3. Evaluate a particular parcel of land and decided whether or not it will support the vision of your future farm.

Why not jump right in and start evaluating farmland? Because you cannot evaluate a particular parcel of farmland unless you are clear about the way in which you intend to use it.

How ***Not*** to Use This Manual

This manual is not going to help you *find* farmland. Searching for farmland that is appropriately suited to your intended agricultural activity is not covered in this manual. NC FarmLink, a program of NC State Extension, can help connect you to landowners and service providers across North Carolina.

I. GOAL SETTING

This section of the manual will help you take a step back and think through all the practical matters involved the life-shaping decision to start a farm business. Starting any new business involves risk and uncertainty, even more so however when that new business involves the kind of capital expense and time commitment associated with starting a new farm business. This Setting Goals section is designed to help ensure your plan for a new farm business aligns with your overall life goals. Those goals fall into the following categories: Career, Health and Wellness, Finance, Education, Family, Attitude, Pleasure, Public Service.

Career

How long do you intend to farm as a career?

Do you have an exit strategy to transition out of farming at the end of your farming career?

If you plan to farm until you retire how do you plan to finance your retirement?

Health and Wellness

Can you handle the physical demands of farming?

Are you prepared to work long, hard hours in all weather conditions?

How do you intend to finance your own private health insurance plan and additional medical expenses?

Finance

What are your lifetime financial goals? Be as specific as you can.

How much do you want to earn, by what stage? Savings? Retirement? College accounts for children?

Are you willing to work at a job that offers earnings below that of many other career opportunities?

Education

What knowledge and skills will you need to have in order to achieve your farming goals?

How do you intend to acquire this knowledge and these skills? How long will this take and how much will it cost?

Is there any specific knowledge you want to acquire unrelated to farming?

How do you intend to acquire this knowledge and these skills? How long will this take and how much will it cost?

Family

Are you married/partnered or do you intend to get married married/partnered and how might this affect your farm business?

Do you plan to have children?

How do you want to be seen by a spouse/partner or by members of your extended family?

Attitude

Do you have the determination needed to succeed in a job that takes a long time to learn and a lifetime to master?

Are you prepared for the relative isolation of this work?

Are you prepared to work weekends and holidays?

Leisure

How important is it that you take time to enjoy your life outside of work?

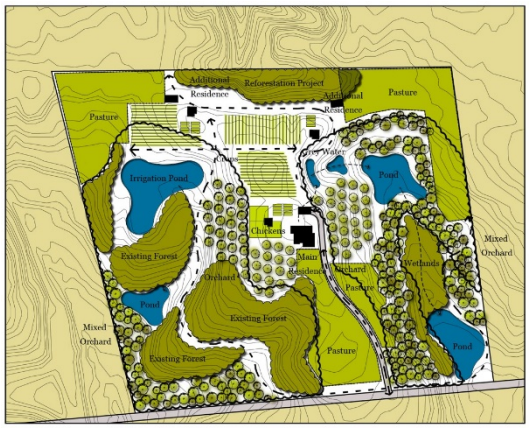
What types of activities to you engage in during your leisure time?

Public Service

Do you want to make the world a better place?

How does this fit into your efforts to farm for a living?

II. PLANNING YOUR FARM



Before you begin to look for land it's important to have a better understand of what your farm business will ultimately look like. The USDA provides Technical Assistance for Planning Your Business for new farmers, which includes useful resources to help you develop a farm business plan; which is perhaps the most important step in establishing a successful farm business, and asks you to answer the following questions:

- What do you want to grow?
- Are people in your community willing to buy it?
- Where will you sell your product and to whom?
- How much land and what type of land will you need to produce it?
- What kinds of equipment and facilities will you need on your farm to be successful?

When I work with a new growers I start by asking them to write a one page description of their farming operation 10 years into the future. The physiological effects of envisioning your future have been described by many but the practical considerations are also important when looking for land. Perhaps you want to grow blueberries or raise alpacas, or both! Different farming businesses will require different kinds of farmland. Start with a vision for what you want to do and then consider all the aspects needed from the land you wish to acquire.

- Does it need to have water and if so, how much and from what sort of source?
- Does it need to have electricity?
- What sort of security will be needed?
- Dry storage, post-harvest handling, greenhouses or other facilities?
- Will you live on the land?

Next consider different land access strategies and their implications.

- Do you want to own your land or rent it? And what are the advantages and disadvantages of these strategies for you?
- What are the costs of purchasing or renting land in your area?

- Will you live on your land?
- Who will be your neighbors?
- What are the planning, zoning and tax considerations of purchasing (or renting) different parcels of land in your area?
- What sort of financing might be available to you?

III. LAND EVALUTATION

Permaculture teacher and site developer, Peter Bane describes the levels of carbon that farmer Joel Salatin has been able to sequester in his soil through thoughtful management practices on his farm over the last 40 years. How is it possible to determine this pattern of increased soil quality over decades of management? Baseline data is one of these keys. Joel Salatin knew he was purchasing land with low quality soil all those years ago because he tested it. And he made his purchase because that was all he could afford at the time. He knew however what he was getting into and planned accordingly and has been able to improve the soil and can prove it.

You might have to settle for less than ideal soil conditions on the farm you chose to purchase or lease but at least have a good understanding of the existing soil conditions and all of the other categories of listed below. Most of them relate directly to the questions you answered above. For instance if you listed above that you're intended farming activities require flat topography with excellent solar access you can exclude parcels of land that consist of forested, rolling hills. You could potentially cut down the trees and terrace the hills but you are better off evaluating other parcels of land. Key questions to consider:

Markets

Are customers within our community willing to purchase what you intend to grow?

How farm from your farm will you need to regularly travel to connect your products with your customers?

Is there an aggregator or distributor who would serve your farm on this parcel of land?

Soil type and topography

What type and quality of soil will your farming activities require?

Are your farming activities best suited to flat land or tolerant of sloping, hilly topography?

Hydrology

How much water will your farming activities require?

What quality of water will you require to meet health and safety requirements for your intended farming activities?

Is there a particular source of water (well, pond, stream, municipal) that is prohibited, required or best suited to your farming activities?

Climate

What sort of consistent temperature patterns are needed for your intended farming activities?

What sort of precipitation requires will best suit your intended farming activities?

Are there specific weather conditions that you require or must avoid in order to achieve your farming goals?

Microclimate considerations

Are there specific microclimatic conditions that would be favorable to your intended farming activities? For instance would cool valley conditions help or hinder your farming operation?

Forest and Fields

Do you need entirely cleared land for your intended farming activities or would a mix of forest and field suit your farming operation?

Nature Species

What natural species are you interested in avoiding? Deer pressure for instance could hinder specific vegetable production operations.

What natural species are you interested in including? Pollinators are a good example for the same vegetable producer who might want to exclude deer.

Structures

What types of infrastructure will you need to be successful in your intended farming activities? Greenhouses? Refrigeration? Animal enclosures?

Do you plan to include agritourism in your farming operation and what sort of structures would that necessitate? Zoning and building codes?

Circulation

What sort of vehicular access might be necessary to connect the different parts of your farm?

How will you move animals around on your farm?

Equipment

What types of equipment will you need for your intended farming activities?

How will you store, repair, maintain and access this equipment?

Is there any equipment on site?

What is the condition of any equipment and what are its needs in regards to storage, repair, maintenance and access?

Soil Type

What is the soil type on this parcel of land and does it suit your farm's needs listed above? You can use the USDA's Web Soil Survey and the North Carolina Realistic Yield Expectation (RYE) service to give an overview of the soils on any parcel of land.

Soil Testing

As a way to access the conditions specific to the property you are considering and in a more detailed manner send in a soil sample to the North Carolina Department of Agriculture and Consumer Services (NCDACS) Agronomy Department Soils Lab. Soil testing kits with directions are available at the Cooperative Extension Center that serves your county.

Hydrology

Where is the surface water on this particular parcel of land? Streams or rivers? Lakes or ponds?

Is the parcel served by any municipal sources of water? What is the cost for use of this water or for extended municipal water to this parcel of land?

Are there below ground sources of water like spring or existing wells on site? What is their flow rate and quality of water? Testing with the local health authority or a private lab should inform you of the following upon request: coliform, pH, total dissolved solids, nitrates. It might be

prudent to ask about the possibility of arsenic or other local water quality issues and test for those as well.

Topography

Sites with slopes of 1.5 % (18″ elevation change per 100′) or more should be avoided for vegetable production to prevent excessive erosion problems.

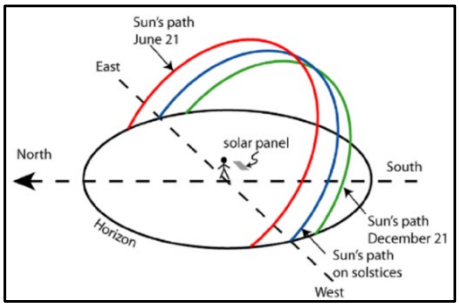
Climate

The State Climate Office of North Carolina has data that can help you establish the history of weather patterns for a particular parcel of land. Choose your region and review temperature and rainfall data for each month or as an average for the last several decades to get an idea of the climate in the area.

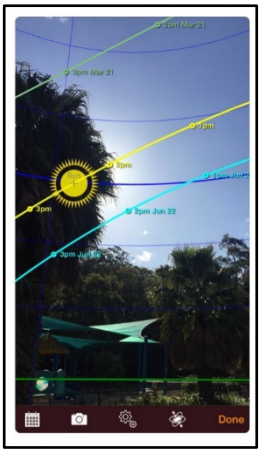
Weather Underground also provides historical weather data that can help in anticipating future weather condition in a particular area. You can look at specific dates but more useful are historical averages available here.

Microclimate Considerations

Are there any noticeable variations in the climate within the parcel that might improve or impair the ability of this site to support your intended farming activities? Perhaps the climate for the general area is relatively warm enough to support your farming intentions but this particular parcel is situated in a lowland area in which cooler than average air tends to settle.



Solar access will vary considerably throughout the year based on the changing azimuth and angle of sunlight striking the property. The National Oceanic and Atmospheric Administration's (NOAA) Solar Calculator can further help you understand the specifics of the solar orientation of your parcel of land. Trees and other objects can restrict solar access. Apps like Sun Seeker can help you better determine where the sun will be at a particular time of day on a particular day of the year on the property you are evaluating.



Forest and Fields

Aerial imagery is available with a google search of almost every location in the United States. Google Earth even offers 3d perspectives of the parcel you are considering.

The aerial images will help you better understand the forest to field coverage of the parcel. It can also help identify other key component of the site including location of water features and structures.

Nature Species

Are their key species or circulation pathways for species crossing the parcel?

Circulation

What are the roads, driveways and paths that connect the features of the site with each other and with access roads? How do animals, both wild and domestic, move across the site?

Structures

Is there a house on the site? Are there other useful structures? What kind of utilities are present and what would it take to improve the utilities if need be?

Soil and Water Conservation Plans and Forest Management Plan

Does the site had either a Conservation Plan, a Conservation Easement and/or a Forest Management Plan? If so what useful information do these plans provide? Are they any legal restrictions on the property?

Other Assets

What other assets might benefit your intended farm activities successful?

Other Limiting Factors

What other limiting factors might hinder or make your intended farm activities successful impossible on this site?