Transitioning from a Grower to a Farmer

keep pollutants out of your streams and regulators off your back

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What is the difference between a grower and a farmer?

<table>
<thead>
<tr>
<th>Grower</th>
<th>Farmer</th>
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<tbody>
<tr>
<td>A grower's plan is to make money</td>
<td>A farmer's plan integrates all the elements of a property and landscape while providing for ecosystem functions and rural economic stability</td>
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<tr>
<td>Short term profit drives decisions and actions</td>
<td>Long term sustainability drives decisions and actions</td>
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<tr>
<td>Invests to create profit with little to no regard for current or future generations of landowners</td>
<td>Invests to assure their property will be in as good or better conditions for their children or future owners</td>
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<td>Contributes little or cares less about community development</td>
<td>Helps build a sense of community</td>
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<td>More often than not causes environmental damage and has no plans for protecting or enhancing the property for the long term</td>
<td>Includes restorative agriculture in their long term plans for the property</td>
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<td>Forces their will upon the natural environment to benefit themselves</td>
<td>Works within the context nature has provided</td>
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4 Common Elements of Ranch Planning and Product Branding

- Water Procurement and Storage
- Soil Erosion and Sediment Delivery to Streams
- Restoration Agriculture
- Compliance with Regulatory Guidelines
Water procurement and storage……
……the 500 pound gorilla……

*Discussing Water Rights, A Western Pastime*
Lets get something straight here regarding water use and the current drought conditions in Northwestern California.....

• Its not the amount of water farmers in Northwestern California are using that is the problem....The problem is much more complex than that.....

• The main problems that can and should be addressed by all responsible rural landowners are:
  • Timing of water drafting from streams- Develop a robust plan to procure and store water in the wet months and completely eliminate water drafting from streams in the dryer months. Drafting water out of streams in late summer in unnecessary, contributes to cumulative impacts within your watershed, has devastating impacts on salmon, and is inexcusable.....Period....
  • Keep your water on your property- You should design or modify your road systems, graded pads, and buildings to disperse and infiltrate rainwater rather than collect and concentrate it (unless it is part of a system specifically designed to capture and store rainwater)
  • Make sure your soil medium has appropriate moisture holding capacity and your irrigation system is not wasteful or inefficient
  • Manage your property beyond the greenhouses
Water Procurement
From what source are you filling your water storage facilities for crop irrigation? There are limited options for procuring a water appropriation in northern California

- Appropriative water right- Expensive, time consuming, not practical
- Small Domestic Use (SDU)- Only for domestic use not irrigated crops
- Small Irrigation Use (SIU)- only available in limited geographic area
- Well water- Currently unregulated, soon to be regulated
- Non-jurisdictional springs- Few and far between
- Rainwater capture- Subject to mother natures cooperation, challenging to scale up to required use levels
Geographic area where land owners can apply for a Small irrigation use appropriation

Geographic Area Identified in Water Code section 1259.4 and California Code of Regulations, title 23, section 2921
Water Storage
Large capacity water storage facilities
Water Storage
Large capacity water storage facilities
Most local farmers try to figure out how to create enough storage to meet their current needs, while the higher functioning ones figure out how to reduce their water use while still meeting their needs.
Water Management

Use your water responsibly, have a well thought out irrigation system, good planting medium, and large deep beds.....
Soil Erosion and Sediment Delivery to Streams
Properly upgrading your road network provides stacking functions

1) Significantly reduces or eliminates road related erosion and sediment delivery.
2) Normalizes the hillside hydrology which can lead to improved water resource availability on your property.
3) Reduces your long term maintenance time and costs for your road network.
4) Allows you to sleep well at night knowing your road is not blowing to smithereens during those nighttime storm events.
5) Provides environmental protection on one of the most important infrastructure developments on your farm.
Roads can route water off your property very quickly if not properly designed and constructed.
The Hydrologic cycle and keeping your rainwater on your property
Before
After
Before
After
Managing the rest of your property for protection of water resources.....Don't be singly focused on how your cash crop is using water

• Manage your forests-Youthful forests use significantly more water than second and old growth forests......In other words, lots of small trees use more water than fewer old trees. Conduct pre-commercial thinning of thick conifer stands with the help of a licensed forester..

• Remember....Old unused roads still route water off your property and pose a threat to water quality. Decommission unused or unnecessary roads based on a thorough ranch plan...

• Collect rainwater off impervious surfaces- Rooftops, roads, building pads, and greenhouses can be a friend or enemy of water retention on your farm....its your decision....Store it or slow it-spread it-and sink it...
OK....So now we can see how farm infrastructure and water resource availability are directly linked on your property and how they can be influenced by the design and layout of your farm.
Soil erosion and sediment delivery to streams

Important points-
1) Understand cumulative impacts
2) Treat the cause and not the symptom of erosion
3) Erosion control vs sediment control
Do the following photos look familiar?
If so, then you have a problem and need to take action
Cumulative impacts...AKA
(The tragedy of the commons)
(Death by a thousand cuts)
(Mauled by a pack of chiwawas)

- Individuals acting independently
  and quasi-rationally according to
each's self-interest behave
contrary to the best interests
of the whole group by depleting
some common resource such as
water volume, water quality, and
fisheries resources
Road Surface Rilling
An excellent example of treating the symptom and not the cause

remember......every complex problem has a simple solution that doesn't work
Gullies from road surface runoff
Another gully...
Treating the cause by dispersing road runoff
Other farm related issues that can impact water quality
Regulatory compliance
Soil management?
Pests?
Problem solved....
Integrated Pest Management

- Biological Control- Use natural enemies
- Cultural Control- Reduce pest establishment, reproduction, dispersal and survival.
- Mechanical and Physical Controls- Kill pest directly or make the environment unsuitable for it.
- Chemical control- Pesticides, last option

- Integrated Pest Management Programs
  - Pest identification
  - Monitoring and assessing pest numbers and damage
  - Guidelines for when management action is needed
  - Preventing pest problems
  - Using a combination of biological, cultural, physical/mechanical and chemical management tools
Farm Planning

OSU Extension
Farm Planning Model

Self Assessment
Communication Skills
Financial Skills
Production Skills
Management Skills

Personal Goals

The Farm Family
Family & Farm History, Current Farm Operation, Current Family Status

Family Values

Family Goals

Vision and Mission Statement

Business Analysis
Land & Capital Resources
Labor Management
Marketing Plan
Managerial Skills
External Factors

Business Goals

Vision and Mission Statement

Business Plan
Production & Operations
Marketing
Personnel
Financial
Risk Management

Retirement Plan
Timing of Retirement
Life After Retirement
Retirement Income Needs
Retirement Inc. Sources
Farm Withdrawals

Transition Plan
Grooming Successors
Fairness To All Heirs
Transfer Strategies
Financing The Transfer
Tax Planning

Estate Plan
Valuing The Estate
Liquidity Needs
Planning Your Will
Establishing Living Powers
Tax Planning

Investment Plan
Disposable Income
Time Horizon
Investment Options
Risk Management
Tax Planning
Regenerative agriculture

Economic, Environmental and Social
**Local Climate**

**Weather**
The warm season lasts from June 24 to October 13 with an average daily high temperature above 62°F. The hottest day of the year is September 2, with an average high of 64°F and low of 50°F. The cold season lasts from November 26 to April 14 with an average daily high temperature below 56°F. The coldest day is December 23, with an average low of 39°F and high of 54°F. [weatherspark.com]

**Average Rainfall and Season**
The average annual rainfall is 49 inches due to the Mediterranean Climate. This rain occurs predominately between Oct. and April with limited rainfall during the summer months. December is the wettest month on average, at 8.44 inches.

**Growing Season**
Due to the close proximity to the coast this site as well as all of coastal Humboldt County is prone to mildews and mold issues. The average weather during the growing season consists of morning and evening fog with afternoons of sun. The warm season lasts from June 24 to October 13 with an average daily high temperature above 62°F.

**Farm Climate**
The Johnsteen Tree Company is the current owner of the farm, and operates a niche seedling tree nursery growing redwoods, and other native trees to North America, that is sells to gift shops and other outlets around state and national parks. The business currently provides the main source of income for the farm. The business is a partnership with two owner’s and provides numerous jobs as well as acting as an incubator site for agricultural based enterprises. The most recent project was established in the spring of 2011 when Woody Ryno Farms began to opporate a small garden on the lower half of the property. This project has evolved into livestock production and has begun to manage the largely under utilized ag land on the lower 10 acres of the property. The capital and time to develop the farm operation has largely come from Chris and Amber the owners of Woody Ryno Farms with technical and equipment support from Steen of Johnsteen Company. The primary goal of Woody Ryno Farms is to regenerate the land through production of high quality meats and produce as well as developing a sustainable business model for small ag land within Humboldt County. Amber and Chris both hold full time jobs and have two young children so time is limited but there is a commitment from Johnsteen to provide farm labor whenever possible.

**Risk**
Currently the owners of Johnsteen Company are providing the land at no charge to Woody Ryno Farms to operate the farm business. Woody Ryno Farms is strongly against taking out traditional loans and is relying on CSA members to develop new farm ventures and support heritage meat production.

**Holistic Goal**
*Quality of Life Statement*
We would like to have financial stability and quality time with family and friends for recreation. We also want to live healthy lives free from stress. This will be attained through good financial planning and productive farm enterprise, continuing our career's in education and habitat restoration, and producing nutrient dense food for our family and clients. Our vision is to be able rely on the farm to provide financial stability and produce meat as well as fruit preserves and Hard Cider.
Whole farm planning

Historic use and location information

**Historic use statement and location information**
The property: 2006 Woody Road, Dow’s Prairie, Humboldt County, California on the North American Continent 40° 59'56.27" N 124° 05'36.99" W. The elevation ranges from roughly 246' at the lowest point to 258' at the highest point. The area has been documented as one of the oldest known occupied sites on the North Coast by Native Americans, and has pollen records showing it was historically spruce and redwood forest transitioning to grasslands. By the early 1900's the area had begun to be logged then converted to agricultural use for grazing and food production for the logging camps. The farm was under production for flower bulb trade during the 1940's-1990's. During this time the use of fungicides and pesticides was widespread and mechanical cultivation depleted the productivity of the soils.

**Soils**
Soils on the farm are silty loam that can be up to 5 feet deep in areas. Though the soils are deep and are a good base to start a farm, they have largely been depleted of organic materials over many years of chemical agriculture abuse. We have been developing the soils through the use of compost, chicken tractors, cover crops, and rotational grazing of pigs.

**Geology**
The property is just over one mile from the ocean on a marine terrace that makes up the area known as Dow’s Prairie. This area is comprised of an uplifted marine terrace. The soils are believed to have been laid down through a process of wind blown sediments over thousands of years. Soils here are very deep but made up of fine grain silts and sands, with clay at depth.

**Proximity to Market**
The property is located 6 miles from the town of McKinleyville with a population of 16,903. Arcata is 12 miles to the south with population of 17,697 people, Humboldt State University makes up a large part of that population. Arcata's population is progressive and has the oldest running Farmer's Market in California. Eureka is 15 miles south and is the largest city in the vicinity of the farm with a population of 26,913 people.

**Processing for meat production**
The Redwood Meat Company in Eureka has recently stopped processing pork due to antiquated equipment that doesn't meet USDA requirements. This has forced us to transport live hogs to Petaluma, CA, 278 miles south on Highway 101. Humboldt County has two mobile chicken processing units (non USDA).
Whole farm planning

Farm zones

Legend:
- Winter Sun Exposure
- Summer Sun Exposure
- Cold NW Spring Wind
- Cool WNW Summer Breeze
- SW Warm
- Winter Storm Winds
- NE Cold
- Winter Storms
- Ocean View
- Sound
- Pollution

Zone 1a: This is the area around the home of the property owner and the future site of a Farm Stay B&B
Zone 1b: This is the future site for temporary housing of the farm manager and family with a small garden for specialty plants and kitchen garden (predominate herbs and medicinals)
Zone 2: This area will be converted from alder spruce second growth to a productive “you pick” food forest
Zone 3a: This area will be used for silvopasture and main crop farming with and emphasis meat production
Zone 3b: This area comprises the Johnsteen Company including future greenhouse sites, with limited grazing
Zone 4: This will consist of the area that makes up the major wind break and will be planted in crops species
Zone 5: This area is too steep for any production and extends into a large redwood forest to the east
Whole farm planning

Planting plan

Zone 2 planting plan
Zone 2 will be planted with a mix of stone fruits, berries, and other fruit trees that are proven to produce in Coastal Humboldt County but need a microclimate to do so. The planting pattern will follow the hexagon shape shown for Zone 4. (see attached plant list from Fruits of Humboldt Bay for more detailed info on plant selection.)

Zone 3a planting plan
Zone 3a will be planted in a mix of nut trees, hardy fruits, berries, and nitrogen fixing hardwoods for timber and firewood. This area will be used for silvopasture and will provide food for processing into value added products, and feed for grazing animals. Main crops will be grown in alleys.

Zone 4 planting plan
Zone 4 will be made up hedge rows and farm forestry for timber and firewood. The plants for this area will also be selected for their ability to provide for pollinators throughout the year. The planting pattern will be in the shape of a hexagon with the larger trees in the center & small shrubs on the perimeter.
Whole farm planning
Ranch zone descriptions

**Zone 1a:** This is currently the only residence on the property and will be developed with a series of raised beds for kitchen garden and perennial fruits and vegetables. There are two full-time residents and numerous long-term guests that occupy this area. Maintenance for the garden needs to be simple and easy for a newcomer to follow. The two full-time residents do not have large amounts of time to maintain complex gardens and would like to have a mix of perennial foods and ornaments that require minimal inputs. Much of the food will be produced in Zone 2 and Zone 3a. Raised beds will be a combination of Hugelkultur and keyhole based on space and location.

**Zone 1b:** This is the future location of the farm manager housing. It will be made up of a series of yurts to accommodate a family of four and will have an outdoor kitchen. The area around the yurts will be planted in Hugelkultur and be a testing ground for varieties that need close observation to determine if they will be planted out into the main crop field or into Zone 2 food forests. Electricity will be provided by solar and wind power. Water will be rainwater catchment and municipal supply. Detailed planning for this area is still needed and will come through future education during on-site trainings.

**Zone 2:** This area is currently a mix of alder and spruce that are 12'-20' tall with a minimal understory due to the density of trees excluding light. There is a small but defunct orchard on the north side of the farm track that splits this zone. The area will be prepared for planting through rotational grazing by goats, pigs, chickens and possibly cattle; at which point all conifers will be removed and used for firewood or hugelkultur, selected alders will be removed leaving many as the nitrogen fixing support for a food forest. The two smaller Zone 2 sections to the south of the access road will be part of a demonstration 6 acre plot. The small shed site will be the “Zone 1” for the 6 acres.

**Zone 3a:** This is the Johnstone Nursery area; currently the economic engine of the property. Currently they are utilizing about half of this area, there are plans to expand over the next few years and produce perennial food trees, shrubs, and support species for the farm and resale through online and other outlets. The major water catchment

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**Legend**
- Permanent fence
- Electric fencing
- Access Roads/lane way
- Farm Track/lane way
- New Barn
- Gate
- Shops and Sheds
- House
- Greenhouse
- Yurt
- Level spillway
- Water Tank
- Water lines
- Pond and over flow catchment
- Swale for Silvopasture
- Farm house
- Rolling dip

**Plant Legend**
- Hazel nut
- Assorted Berries
- Figs
- Meyer Lemon
- Willow
- Ceanothus thyrsiflorus (Blue Blossom)
- Keyhole/Hugelkultur beds
- Chestnut
- Black Locust/Alder
- Pears
- Fruiting Vines
- Cherries
- Keyhole/Hugelkultur beds
- Apple
- Peach Tree
- Plums
- Keyhole/Hugelkultur beds

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**Zone 3a cont:** comes from the large shop roof and OG greenhouse. Overflow from the main tank will top-off secondary tanks and then fill the small pond in Zone 3b.

**Zone 3b:** Portions of this area are in the initial phase of transition through planned grazing with pigs and chickens. The southern portion of 3b, where the swales are shown, is currently the pig grazing area and is broken into 8 paddocks and is being cleared of conifers slowly. The Main Crop area is grazed annually and is currently planted in winter squash and corn with cover crop. The large field to the northwest has a chicken tractor modeled after Geoff Lawton’s “Chicken Tractor on Steroids” video. We are lucky to have spent grain from the local brewery and okara from the tofu shop as our feed source for animals and compost that makes this style chicken tractor work for us. The field will be prepared through mix grazing and then planted into silvopasture of nut and fruit trees.

**Zone 4:** Much of this area is already planted in wind blocks and regrowth of alders and spruce. There will be in planting of high quality timber species and pollinator plants that will help promote the native pollinators and honey bees. The area will have limited grazing to help clear the underbrush and prepare for planting.

**Zone 5:** This area is already in native second growth forest comprised of spruce, redwood, and alders with native understory. The area starts at the edge of the property and extends to the east into timberlands. There is good mushroom picking and berry foraging that can be done in this area as well as hunting and recreation.
How to filter through and choose a consultant that can meet your needs

1) Check their experience: do they have a long and specific track record of environmentally protective and regulatory compliant projects.
2) Can they work well with others: Do they have strong working relationships with the pertinent regulatory authorities?
3) Check their resumes: Are their claims of skills supported by demonstrable accomplishments? Do they or their team have a diverse skill set?
4) Check their community credentials: Are they new to the scene (carpetbaggers) or are do they have a long term track record of working in the community?
5) Gauge their vibes: Don’t hire “yes men” and don’t hire consultants that propose actions that work against nature, get a second opinion if something doesn’t seem right.
Resources

707-839-5130

Legal advice and representation:
Mark Harris, Mel Pearlston, Patrick Griego

Forestry (3 acre conversions):
Timber Resource Consultants

Well Drilling
Fisch Drilling

Property Surveying
Points West Land Surveying