

# Points to consider before starting an Ohio hops growing business

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Hop farming requires a substantial investment in capital, time and management. To be successful, those considering hops production should pre-plan well in advance of planting. This includes the development of a business and marketing plan. This fact sheet outlines some of the pre-planning points that should be addressed up front to assist with the development of a financially successful hop business.



*A successful Hop business requires important pre-planning and preparation. This could take up to three years or more to complete.*

## Main points to consider before you start growing hops

When pre-planning a hops farm there are several points that need to be addressed before any investment is made. To be economically successful as a commercial hops grower, it is recommended that these points be addressed and included in your hop business plan at least a year before you choose to plant.

The infrastructure and land is a small piece of a hops business and the easiest part. Contact your county Agriculture Extension Educator they may be able to conduct a hop site evaluation for your farm. Find your county office at this site <http://extension.osu.edu/lao>.

New hop growers are encouraged to pay attention to these points before they make an investment. Production budgets indicate in excess of \$25,000 per acre may be needed to establish a high trellis hop planting and \$100,000 investment for a small-scale hop processing, drying, pelletizing, cooling, packaging and freezing facility built to pass USDA, FDA and Ohio Department of Agriculture (ODA) food safety standards and annual inspections.



**Establish Your Market FIRST:**

You will need to have your buyers lined up in advance for they will dictate the hop varieties and volumes they want to buy. Before you purchase the first rhizome or plant, find out from your buyer which variety of hops they need. The types of brews they are producing or anticipate producing require different varieties of hops or blends of varieties. For a list of Ohio brewers, visit the Ohio Craft Brewers Association for a listing of most Ohio craft brewers <http://ohiocraftbeer.org/> and the Ohio Division of Liquor Control <http://www.com.ohio.gov/liqr/>. When you contact your buyer/brewer, you will need to ask them what kind of brews they want to make with your hops. Hops for green brews would be used within 24 hours of harvest and would require no processing from the producer; they are brewed fresh. If your buyer wants dried hops, your hops will need to be processed according to the brewing process and filtration equipment they are using. Brewer survey results indicate most are currently using pelletized hops.

**Labor:** You will need access to labor to get production, management, harvesting and processing tasks completed in a timely manner. This requires much hand and stoop labor.

**Harvesting, Drying, Processing, Packaging and**

**Pelletizing:** Ask your market how they want their hops processed and packaged. This could be fresh, dried whole cone, dried pelletized, vacuum packaged, inert-gas (Nitrogen) packaged in oxygen-barrier packaging material. All hops will require a cooling facility and dryer at a minimum, and freezer for storage of a week or more.

**Processing Requirements for State of Ohio:** Hop processing facilities, equipment and procedures to process your hops (grading, drying, processing, storing) will need to pass an Ohio Department of Agriculture (ODA) Food Safety Audit and Inspection prior to using the facility to process your hops. Contact ODA Food safety for pre-inspection prior to building or refabricating your processing/drying facility. This facility will have to be inspected annually by ODA prior to the processing season. For pre-inspection, contact: Jason Holleran [Jason.Holleran@agri.ohio.gov](mailto:Jason.Holleran@agri.ohio.gov), Matt Fout [MFout@agri.ohio.gov](mailto:MFout@agri.ohio.gov), or Jason L. Channels [JChannels@agri.ohio.gov](mailto:JChannels@agri.ohio.gov). They are all located at Ohio Dept. of Agriculture, Food Safety Division, 8995 E Main St, Reynoldsburg, OH 43068, (614) 728-6250 or [foodsafety@agri.ohio.gov](mailto:foodsafety@agri.ohio.gov).

**Processing Requirements for the Federal Food & Drug Administration (FDA):**

Hop processing facilities and procedures for processing hops (grading, drying, processing, storing) will need to follow and be approved according to the new law, the FDA Food Safety Modernization Act, enacted November 2015. To view the most recent updates and the compliance requirements of this law go to <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm359436.htm>

**Develop a Written Hop Business and Marketing Plan:**

To assist with writing your hop business and marketing plan consider utilizing the resources of the Ohio Department of Development Small Business Development Center (SBDC) with local offices throughout Ohio. Find your local SBDC at <https://clients.ohiosbdc.ohio.gov/>. Business planning resources and business plan templates are available at <http://southcenters.osu.edu/small-business/toolbox>

**Develop a Develop a Farm Business Structure :**

Don't be a risk taker. Developing a farm business structure may protect yourself . OSU Extension has resources available to assist you with business formation questions and information.

- Business Structure taxation characteristics [http://ohioline.osu.edu/bst-fact/pdf/Tax\\_Characteristics.pdf](http://ohioline.osu.edu/bst-fact/pdf/Tax_Characteristics.pdf)
- IRS Business Structures- <https://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Business-Structures>
- Business Structures- <http://ohioline.osu.edu/bst-fact/pdf/3613.pdf>
- Limited Liability Company (LLC) [http://ohioline.osu.edu/bst-fact/pdf/LLC\\_Farm\\_Business.pdf](http://ohioline.osu.edu/bst-fact/pdf/LLC_Farm_Business.pdf)

**Enlist Your Farm with USDA :**

You should consider having your farm property listed with the USDA Farm Service Agency (FSA) and getting an USDA Farm #. Contact your County USDA Farm Service Agency office at this web site <http://www.fsa.usda.gov/>.

**Financial Assistance:**

Once you have your farm listed with USDA, you may want to explore USDA financial assistance programs that may help your hop farm start up

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/>

USDA Farm Loan Programs such as Micro-Loan for New & Beginning Farmers, Socially Disadvantaged Farm Loan Program, Beginner Farm Loan Program

<http://www.fsa.usda.gov/programs-and-services/farm-loan-programs/>

and Environmental Quality Incentive Programs (EQIP)

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>

<http://www.fsa.usda.gov/>

**Farm Liability Insurance:**

Don't be a risk taker. Protect Yourself.

A general farm liability insurance coverage policy should be considered for your new hops business. Consult with several insurance companies, including, but not limited to, the agent who issues your farm or homeowner's policy. Many agents are not aware of what growing hops entails, thus are unlikely to quote a good rate. Often a rider on an existing policy is far less expensive than a whole new policy. The important thing is to look around for the best coverage.

**Crop Product Liability Insurance:**

More than likely your brewer/market will require product liability insurance coverage. If they do not, you may wish to consider this just to protect your investment. Study the information and checklists in these resources to assist you with your product liability insurance requirements.

<http://extension.psu.edu/business/farm/management/risk/insurance-documents/product-liability-insurance>

**Worker's Compensation Insurance:**

If you will be having others employed or helping you with farm and processing operations on your hop farm, it is Ohio law that you have adequate Workers' Compensation Insurance coverage. Review these requirements and options from the Ohio Bureau of Workers' Compensation.

[https://www.bwc.ohio.gov/basics/guidedtour/generalinfo/employer\(faq\).asp](https://www.bwc.ohio.gov/basics/guidedtour/generalinfo/employer(faq).asp)

<https://www.bwc.ohio.gov/basics/guidedtour/generalinfo/employergeneralinfo16.asp>

<https://www.bwc.ohio.gov/downloads/blankpdf/u3.pdf>

**Planting Material:**

Line up the plant/rhizome varieties your buyers want as early as possible (January) to guarantee timely delivery, amounts and quality. This is one of the biggest start-up hurdles for new hop farms. Once you know what varieties of hops your buyer wants and how many pounds they estimate they will use, then figure how many acres or % of an acre you will need, then you can determine how many rhizomes or preferably locally grown plants you will need. Then you will need to find a nursery that produces the variety(ies) you need. Your order is usually paid for in advance of delivery up to a year in advance in some cases.

**Nutrition, Fertility and Soil Testing:**

Have your soil analyzed by a reputable soils laboratory for major and minor nutrients, alkalinity and acidity to see how much additional elements to apply to get the soil adjusted for planting. Hops are a perennial crop. Therefore, it is very important to adjust these nutrients to plow layer because you will never have another chance to deep incorporate for the life of the planting. Hops are very deep-rooted, it is suggested soil be tested at both the top soil layer (4 to 6 inches) and at the subsoil layer (7 to 12 inches) and amendments made accordingly. Soil test values will need to be amended before planting and it could take up to 6 months to adjust these levels at plow layer 4 to 6 inches. Here is a list of labs you can use

<http://ohioline.osu.edu/hyg-fact/1000/pdf/1132.pdf>.

**Ohio Fertilizer Certification Law:**

In June, 2014, Governor Kasich signed the Ohio Agriculture Nutrients Law which requires farmers applying fertilizer to 50 acres or more to become certified. For information on how and where to fulfill your fertilizer training, certification and re-certification requirements go to <http://pested.osu.edu/NutrientEducation/appresources.html>.

**Field Drainage:**

Hops do not like wet root systems and require very well drained soils. Systematic drainage tile installation is recommended and should be installed prior to planting and trellis construction. Sub-surface drainage via grass waterways, raised plant beds or other sub-surface construction is also used to adequately drain hop fields. Information on soil drainage can be found at [http://irrigationtoolbox.com/ReferenceDocuments/BasicWaterManagement/f45\\_beneficial\\_and\\_adverse\\_effects\\_of\\_agricultural\\_drainage.pdf](http://irrigationtoolbox.com/ReferenceDocuments/BasicWaterManagement/f45_beneficial_and_adverse_effects_of_agricultural_drainage.pdf).

**Field Preparation:**

Weed control and field preparation needs to be done well in advance. If the land has been previously farmed, you need to get a history up to the past 5 years of the herbicide programs that have been applied to the soil to make sure you have no herbicide residues that could kill your newly planted hops. Annual and perennial weed seed banks will need to be destroyed and controlled up to a year before planting. Deep tillage moldboard or chisel plowing would be best done in the fall before planting. If you will be using a raised bed system these can be built the fall before you intend to plant. It is easier to construct your trellis system before planting, which can be done the fall before you plant.

**Irrigation system construction and testing:**

It is recommended to have your irrigation supply tested for water quality and discharge volume. You should also have your irrigation system designed and installed before planting. Have irrigation water tested for residues and alkalinity levels; an acidification system can be installed in advance if needed. Much deep well irrigation water is high alkaline water and may need to be acidified.

**Ohio Hop Growers Guild (OHGG):**

OHGG is an Ohio hop growers association incorporated in 2014. OHGG was established to expand Ohio hop grower networking, both internally and externally; to agree on common quality standards and assurance; to share information, training, and education; to jointly advocate for and market hops; and improve access to resources and cut costs; with one crosscutting theme: quality. OHGG members offer collective purchasing, local hop plant supplies, hop farm consulting, mechanical harvesting and custom processing and pelletizing services. <http://ohgg.org>.

**Pesticides Required:**

For a listing of labeled pesticides for Ohio hops go to <http://Greenbook.net> and search Ohio and hops this will be the most updated pesticide and herbicide materials list.

**Ohio Pesticide Applicators License:** Many hop pesticides are restricted use pesticides which require an Ohio Department of Agriculture Pesticide Applicators license to purchase and apply. County Extension offices can help you obtain the required study materials. Register at this link to take the exam: <http://www.agri.ohio.gov/apps/odaprs/pestfert-prs-ols.aspx?ols=rg>

**Hop Farm Taxation:** If your land is not already listed under Current Agricultural Use Value (CAUV) taxation then you may want to study and look into CAUV taxation [http://www.tax.ohio.gov/real\\_property/cauv.aspx](http://www.tax.ohio.gov/real_property/cauv.aspx)

<http://ohioline.osu.edu/cd-fact/1267.html>

**Taxes - filing a Schedule F:** You may want to study and have a discussion with your tax accountant regarding the recordkeeping and accounting necessary for farm tax filing of your hop farm.

[https://www.irs.gov/uac/Schedule-F-\(Form-1040\),-Profit-or-Loss-From-Farming](https://www.irs.gov/uac/Schedule-F-(Form-1040),-Profit-or-Loss-From-Farming)

**Business planning is very important**

As with the start-up of any new business, proper business planning is very important. These are some of the areas that should be addressed. Your personal situation may require additional points needing attention. It is suggested that you consult your attorney, accountant and business planner for additional requirements before starting a hops business.

**Useful References**

<http://southcenters.osu.edu/horticulture/other-specialties/hops>

<http://ohgg.org/>

<http://extension.osu.edu/lao>

[foodsafety@agri.ohio.gov](mailto:foodsafety@agri.ohio.gov).

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