

The legal stuff

In the state of Georgia it is legal to own a still as long as the still is not used to distill spirits or to manufacture moonshine. A still can be owned and operated to distill water, essential oils, vinegar, etc. As long as the end product is not ethanol.

Georgia also allows residents to produce beers and wines for personal household use.

Manufacturing beer for personal household use:

Code §3-5-4

- (a) (1) Malt beverages may be produced by a person in his or her private residence subject to the limitations provided in this Code section.
- (2) The total quantity of malt beverages that may be produced in any private residence shall be as follows:
 - (A) Not more than 100 gallons per calendar year if there is only one person of legal drinking age living in such residence; or
 - (B) Not more than 200 gallons per calendar year if there are two or more persons of legal drinking age living in such residence; provided, however, that no more than 50 gallons shall be produced in a 90 day period.

Manufacturing wine for personal household use:

Code §3-6-3

- (a) A head of a household may produce 200 gallons of wine in any one calendar year to be consumed within his own household without any requirement to be licensed for such purpose. Wine so produced shall not be subject to any excise tax imposed by this chapter.

Possession stills & moonshine

[2006 Georgia Code - 3-3-27](#)

Any person who violates the provisions of: (1) Paragraph (1) of subsection (a) (Distill, manufacture, or make any distilled spirits) of this Code section shall be guilty of a felony and, upon conviction thereof, shall be punished by imprisonment for not less than one year nor more than five years;

Along with a unlisted fine and jail time the still, spirits and distilling equipment will be seized.

Any apparatus, article, or other tangible personal property used in the unlawful distillation, manufacture, or making of any alcoholic beverages is declared contraband and shall be destroyed by the officers or agents seizing the property or otherwise disposed of as the commissioner directs”.

[Georgia Statue Section 17-10-3\(a\)\(1\)](#)

Selling or being in possession of illegal moonshine is a Misdemeanor and a fine of \$1,000.

Now for some good news now that all the doom and gloom legal stuff is covered!!!!!!!

Fuel Alcohol Permit

How To Apply For A Fuel Alcohol Permit

In order to legally make fuel alcohol one must have the proper permits. A federal fuel alcohol producer permit is available for free from the TTB. The application must be submitted and approved by the TTB before fuel alcohol is manufactured. The TTB is the division of the government that is in charge of regulating and overseeing distillation. TTB stands for Alcohol And Tobacco Tax And Trade Bureau which is part of the U.S. Department of the Treasury.

Even though the Federal Government allows the manufacture of fuel alcohol with a permit it is important to realize that some states don't allow fuel alcohol production. State distilling laws vary from state to state. Some states have no laws on owning a still, but prohibit the distillation of alcohol while other states prohibit possession of a still unless it's for fuel alcohol. States such as as North Carolina requires a state fuel alcohol permit as well as the federal fuel permit. Some states may prohibit possession of distillation equipment and distilling altogether. It is important to research local state laws before applying for a federal fuel permit.

These guidelines will help you complete the State of Georgia Distillery License application online using the [Georgia Tax Center](#) website.

Before You Begin

All required documentation must be scanned and saved as individual PDF files. You will upload them to the Georgia Tax Center during the application process.

Required Documents

[ATT-104 Brand & Label Registration and Designation of Sales Territory](#)

[ATT-17 Georgia Alcohol & Tobacco Personnel Statement](#) (requires notarization)

[Liquor Manufacturer/Distillery Bond](#)

Scanned copy of Federal Basic Permit

[Power of Attorney](#) (if applicable)

[Citizenship Affidavit](#) along with [secure and verifiable documents](#), i.e. government issued photo ID (requires notarization)

Fees

[Distillery License Fees](#)

You may also have to submit to a Background Investigation.

Now that you're legal lets start by making with the recipes!!!

Base Moonshine Ingredients and Materials:

5 Gallons of Water
8.5 Pounds of [Flaked Corn Maize](#)
1.5 Pounds of [Crushed Malted Barley](#)
[Yeast](#)
[Mash Pot](#)
[Fermentation Bucket](#)
[Heat Source](#)
[Thermometer](#)
[Long Spoon](#)

Procedure:

Place your mash pot on its heat source and pour in 5 gallons of water.
Heat water to 165 °F.
Turn off heat source when you reach 165 °F and immediately stir in 8.5 pounds of Flaked Corn Maize.
Stir mixture continuously for 7 minutes.
Check temperature and stir mixture for 30 seconds every 5 minutes until the temperature cools to 152 °F.
When the mixture has cooled to 152 °F, stir in 1.5 pounds of Crushed Malted Barley.
Check temperature and stir for 30 seconds every 20 minutes until the mixture has cooled to 70 °F. *This process takes several hours on its own, but can be sped up significantly with the use of an immersion cooler.*
When the mixture has cooled to 70 °F, **add yeast**.
Aerate the mixture by dumping it back and forth between two separate containers for 5 minutes.
Pour the mixture into your fermentation bucket. *We carry complete kits for these as well as the materials to produce your own.* It is important to have the bucket, cap, and air-lock. A spigot also makes for easier pouring.

Fermenting Your Mash

Materials:

[Hydrometer](#)
[pH Meter](#) (Advanced)
[Siphon](#)
[Cheese Cloth](#)
[Citric Acid](#)

Fermentation

Store the mash to ferment for 1-2 weeks at room temperature. Temperature is important if it gets too cold the fermentation can stop because the yeast goes dormant.

For best results, use a hydrometer and check specific gravity at the start of fermentation and when fermentation is complete to ensure that all sugars have been used. This will tell you how much ABV (alcohol by volume) your fermentation produced. Be sure to write down the specific gravity reading at the start of fermentation and at the end of fermentation. Use formula to tell you how much alcohol was produced. See how to use hydrometer video

Straining

Siphon mash water out of the mixture, taking care to leave behind all solid material and sediment, and into a container to adjust pH. Straining your mash water through a cheesecloth is recommended at this step. Leaving solid material in your mash water can cause headaches you'd rather avoid.

(Advanced) Some distillers will add 2tsp of gypsum to their mash water at this point. They then test the pH of their mash water. The ideal pH is 5.8 to 6.0. Use citric acid to bring the pH down and calcium carbonate to bring it up.

Distilling

Materials

[Moonshine Still](#)

Fermented and Strained Mash Water

[Cleaning Products](#)

[Column Packing](#)

Great job! You've completed the heavy lifting of producing mash water for your moonshine! Now it's time to distill and separate all of that alcohol content into a purified form. Like making mash, distilling is as much an art as it is a science.

The best way to become a good distiller is to practice. We recommend taking notes throughout the process so you can become better with each run. If you're in need of equipment or supplies we've got you covered.

We carry everything from the traditional [copper still](#), to stainless reflux units, to the new [Grainfather](#) Brewing System. We also carry quality supplies from high quality grains to a [replacement carbon filter](#).

Prepping Your Still

Keeping up on prep-work for your still is mission critical. Even if you cleaned your still after your last run and let it sit for a while, it is still recommended to clean it before transferring your mash water. This is especially the case on copper stills that are showing a salt buildup.

If you add packing to your column, this is the time. Pack your column with the amount of copper packing that is appropriate for your setup.

If your setup has a condenser, hook up your water input and output.

Finally, it's time to add your mash water to the still. Again, you can use a cheesecloth or auto-siphon to transfer the mash water into your still without including solid material.

The name of the game here is reducing the sediment in your mash water to as close to zero as possible.

Running Your Still

Now for the fun part! Distillation is an incredible process. If you're not familiar with the science, here's the quick and dirty. Distillation is the process of separating different chemicals by taking advantage of different evaporation temperatures between the chemicals.

This process is not creating alcohol, it is separating it from all of the other substances in your mash water. You created all of the alcohol during fermentation (well, the yeast did). Slowly bring your temperature up to 150 °F. Once you reach 150 °F, if your setup has a condenser turn on the condensing water.

Next, dial up your heat source to high until your still starts producing. Time your drips as they speed up until you reach 3 to 5 drips per second. Once you reach this rate, dial down your heat to maintain it (usually the "medium" setting).

Collecting Your Distillate

Congratulations, you went from researching How to Make Moonshine to making your own moonshine! As you're producing your distillate, make sure you are dripping into a glass container. Never use plastic containers as this can lace your product with BPA among causing other issues.

Collecting Foreshots

The first approximately 5% of your production will be the foreshots. These contain the earliest-evaporating alcohols in your mash water and should never be ingested.

Foreshots can contain methanol and should never ever be consumed. Methanol can make you blind among causing other problems. Collect the foreshots in their own container and throw them out.

Collecting Heads

The next approximately 30% of your production are considered the heads. The heads also contain volatile alcohols like the foreshots. However, rather than causing blindness, the effects are less extreme – like one hell of a hangover.

The heads will have a distinct "solvent" smell from alcohols like acetone that are present. Like the foreshots, collect your heads in their own containers and throw them out.

Collecting Hearts

This is the good stuff, mostly ethanol. The hearts make up the next approximately 30% of your production. At this point you should start losing the harsh, solvent smell present during the heads. The flavor of corn mash moonshine should now be smooth and sweet. This is the stage where skill and experience come most into play. Isolating your hearts well, while maximizing production of them is a bit of an art. Using science and senses, a good distiller will "shine" at this stage.

Collecting Tails

As you reach the end of the ethanol and move into the final stage of your production you hit the tails. The tails will be approximately the last 35% of your production. The tails will taste very different from the hearts.

You'll notice a steep drop in sweetness, and even begin to see an oily top-layer on your product. The product will begin to feel slippery between your fingers. This is due to water, carbohydrates, and proteins present. You can set your tails aside for later distillation or toss them.

Conclusion

You made it, well done. We hope you made a knockout batch. Now all that is left is to thoroughly clean your entire setup. Allow to dry thoroughly and store in a cool, dry place. When learning how to make moonshine, you are playing the part of both scientist and artist. This is a delicate dance that can take years to really cultivate. We recommend always keeping detailed notes on your moonshine production. Then, upon review, you can identify opportunities to improve in the future.

How to Make Beer

Brewing beer at home is easy. If you can make mac and cheese from a box without help, you can make beer.

NOTE: This is a basic overview for brewing an [extract beer recipe](#). Click here to learn about [all-grain brewing](#).

THE 4 BASIC STEPS:

<u>PREPARE</u>	<u>BREW</u>	<u>FERMENT</u>	<u>BOTTLE</u>

[Step 1: Prepare](#)

1. Gather your [brewing equipment](#). You'll need:

- Brewing Kettle
- Fermenter + Air Lock
- Funnel (optional)
- Sanitizer
- Auto-Siphon
- Stir Spoon
- Beer Recipe Kit (or individual ingredients)

If gathering all of that sounds like too much work, simply choose one of Northern Brewer's [beer making kit](#) that have everything you need to brew beer, all in one box.

[VIEW BEER MAKING KITS](#) >

2. Sanitize, Sanitize, Sanitize. Your success will rely on how clean your equipment is. Anything that comes in contact with your beer after the boil process should be sanitized. PBW and Star San are great cleaners and sanitizers.

[Read more about preparing to brew.](#)

Step 2: Brew

1. Steep Grains. Fill your 5-gallon brew kettle with 2.5 gallons of water. As you heat your water, steep your grains for 20 minutes, or until your water reaches 170 degrees. When you remove your grains, let the water drip out of the grain bag and into the kettle. Don't squeeze your grain bag as you don't want to extract tannins, which may give your beer unwanted flavors.

2. Bring kettle to a boil - Once your kettle comes to a rolling boil remove it from heat and add malt extracts. Once the extract is dissolved return to a boil. Hops will now be added at various intervals. (Note: Be careful not to boil over when hops are added.) Refer to your exact recipe as to when you need to add [hops](#) to your boil.

3. You now have wort - Otherwise known as sugar water. Cool your wort as quickly as possible. This can be done one of two ways:

Ice Bath - Simply set your pot into a sink filled with ice water.

Use a [wort chiller](#) - Insert chiller into your wort. Run cold water from your tap through the chiller and out to the sink. A wort chiller is the most effective way, but either will get you the desired results.

[Read more about brewing.](#)

Step 3: Ferment

Don't forget to sanitize all your supplies! Then...

1. Pour cooled wort into the fermenter. Some brew kettles even have a valve for easy transportation from your kettle to your fermenter.

2. Add water to bring the level to 5 gallons.

3. Aerate wort by splashing it around in its container. Yeast need oxygen, and splashing your wort will help.

4. Add yeast. Dry yeast is the easiest, as you don't have to prepare it beforehand. Sanitize the yeast pack + scissors, cut the corner off the yeast pack, and pour the yeast into the fermenter.

5. Seal your fermenter, add a fermentation air lock, and store in a dark cool place. Ales should stay at 68 degrees to ferment properly.

Read more about [Beer Fermentation](#).

Step 4: Bottling

After fermentation is complete, typically within two weeks, it's time to bottle your beer.

1. Cleanse everything: bottles, bottle filler, bottle caps, bottling bucket, and any transfer hoses used. Use a bottle brush on your bottles.

3. Boil your priming sugar in 16 oz of water. After it cools, add it directly to the bottling bucket.

4. Transfer your beer. Siphon the beer out of your fermenter and into your bottling bucket. *Leave as much sediment in the fermenter as possible.*

5. Fill the bottles. Attach bottle filler to hose, and hose to bottling bucket spigot. Open the bottling bucket spigot and push the bottle filler to the bottom of the bottle.

NOTE: Fill each bottle right to the top. When you remove the bottle filler, it will leave the perfect amount of space at the top of the bottle.

6. Cap the bottles with caps and a bottle capper.

7. Store the bottles at room temperature for roughly two weeks. This gives your beer time to carbonate.

Read more about [How To Bottle Homebrew](#).

You did it. You made beer. All that's left to do is..

1. Refrigerate.
2. Enjoy.

How to Make Homemade Wine

Winemaking at home requires several pieces of inexpensive equipment, serious cleanliness, and a mess of patience. Turns out, Tom Petty was right: "The waiting *is* the hardest part."

Equipment Checklist:

- One 4-gallon food-grade-quality plastic bucket and lid to serve as the primary fermentation vat
- Three 1-gallon glass jugs to use as secondary fermentation containers
- A funnel that fits into the mouth of the glass bottles
- Three airlocks (fermentation traps)
- A rubber cork (or bung) to fit into the secondary fermentation container
- Large straining bag of nylon mesh
- About 6 feet of clear half-inch plastic tubing
- About 20 wine bottles (you'll need 5 bottles per gallon of wine)
- Number 9-size, pre-sanitized corks
- Hand corker (ask about renting these from the wine supply store)
- A Hydrometer to measure sugar levels

Ingredient Checklist:

- Lots and lots of wine grapes

Granulated sugar
Filtered water
Wine yeast

To the above basic list you can refine the process by adding such things as [Campden tablets](#) to help prevent oxidation, yeast nutrients, enzymes, tannins, acids, and other fancy ingredients to better control your wine production.

Making Wine

Part 1

Ensure your equipment is thoroughly sterilized and then rinsed clean. (Ask at the wine supply store about special detergents, bleaches, etc.). It's best to clean and rinse your equipment immediately before using.

Select your grapes, tossing out rotten or peculiar-looking grapes.

Wash your grapes thoroughly.

Remove the stems.

Crush the grapes to release the juice (called "must") into the primary fermentation container. Your hands will work here as well as anything. Or go old school and stomp with your feet. If you're making a lot of wine, you might look into renting a fruit press from a wine supply store.

Add wine yeast.

Insert the hydrometer into the must. If it reads less than 1.010, consider adding sugar. If you're adding sugar, first dissolve granulated sugar in pure filtered water (adding sugar helps boost low alcohol levels). Stir the must thoroughly.

Cover primary fermentation bucket with cloth; allow must to ferment for one week to 10 days. Over the course of days, fermentation will cause a froth to develop on top and sediment to fall to the bottom.

Making Grape Juice | Photo by Meredith

Part 2

Gently strain the liquid to remove the sediment and froth.

Run the juice through a funnel into sanitized glass secondary fermentation containers. Fill to the top to reduce the amount of air reaching the wine.

Fit the containers with airlocks.

Allow the juice to ferment for several weeks.

Use the plastic tube to siphon the wine into clean glass secondary fermentation containers. Again, the purpose here is to separate the wine from sediment that forms as the wine ferments.

Continue to siphon the wine off the sediment periodically (this is called "racking") for 2 or 3 months until the wine is running clear.

Part 3

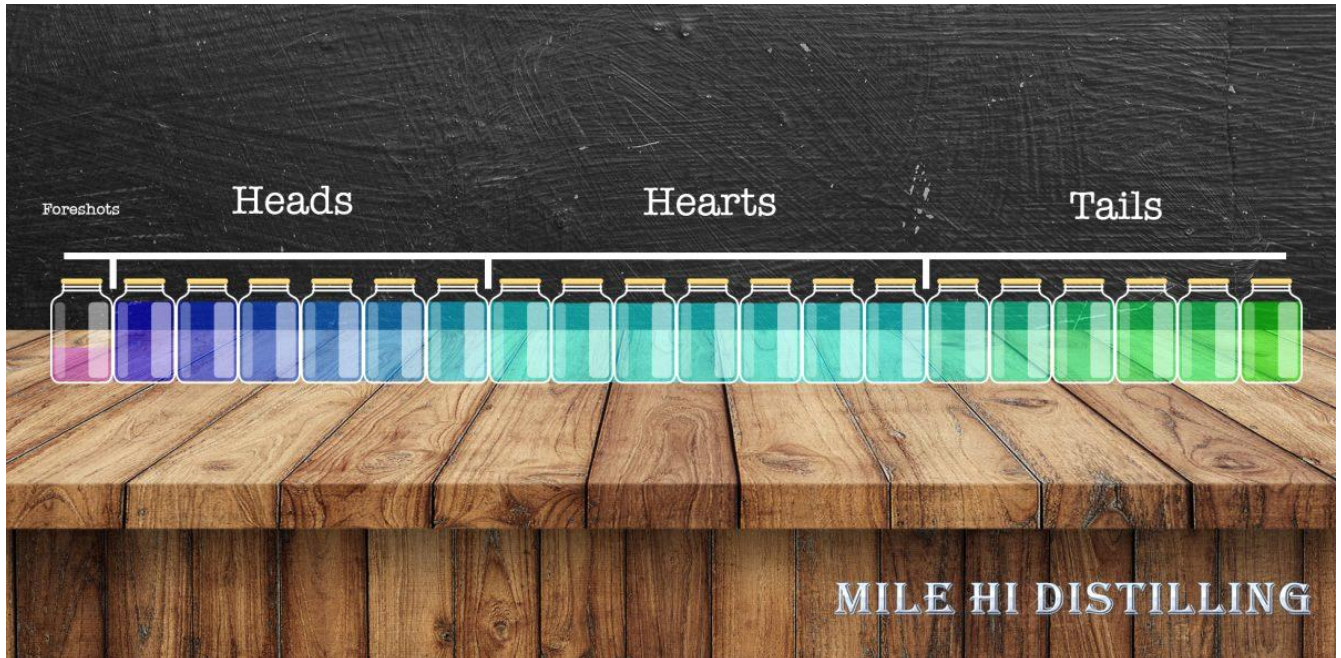
Run the wine into bottles (using the cleaned plastic tubing), leaving space for the cork plus about a half inch or so of extra room.

Insert corks.

Store the wine upright for the first three days.

After three days, store the wine on its side at, ideally, 55 degrees F. For red wine, age for at least 1 year. White wine can be ready to drink after only 6 months.

Enjoy!



Sources

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