



## Outsider Stock tips...

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Once you've tagged it, slipped it into your game vest, or clipped it to your stringer, you have the key to making something special: stock. Rich flavorful stock that has all but disappeared from the American kitchen. Of all the wonderful things you can do with game you rarely hear about stock. Which is literally a waste given that the main ingredient is normally discarded: bones and gristle.

You could also call this "bone broth" - a term that has become popular lately. Seems like everyone with a man-bun and a food truck is hawking bone broth. The difference between the definitions of broth, stock and bone broth are not consistent. Just consider them interchangeable unless an individual recipe gives more detail.

Whatever you call it, stock is a versatile culinary wonder. It's the perfect base for sauces and soups, for braising, and a flavorful replacement for water when cooking rice or soaking beans. Julia Child referred to stock when she said "Never cook with plain water if you can help it".

Though grocery store shelves are now full of various stocks, and they are all better than water, they are a bit expensive. And they are not nearly as good as homemade. Really.

But even stock made from commercial meat ain't what it used to be in the olden days. It comes from a critter that was fed a uniform diet, got little exercise, and was slaughtered quite young. That all works against good stock.

Wild game is different. That beast spent every moment of its life on nature's dime — the ultimate free range animal. Their bones make a stock with depth and richness you can't get from store bought bones. And I promise you, "depth" and "richness" are not code words for "gamey".

Stock is very simple — nothing more than what results from slowly simmering bones along with aromatic vegetables and some herbs and spices. The connective tissues break down into gelatin that gives great body and texture, what the foodies call "mouth feel". The resulting stock can be further processed into fancy stuff like demiglace, glace de viande (meat glaze), consommé and aspic — impressing the socks off of any culinary snob friends you may have. More on all that later.

[\(click for a video of how a good, gelatinous stock should look\)](#)

Good stock starts with good bones. Marrow spoils quickly (and rather spectacularly) so use bones that have been cared for at least as well as you would fresh meat. They should go straight from the cutting room into the stock pot, or into the freezer to be used when convenient. They freeze extremely well if vacuum sealed, or painstakingly wrapped.

Most stock recipes call for added meat. This is primarily for flavor, but using parts with lots of connective tissue brings texture too. Best are the gnarly looking bits you normally discard while butchering because they are too gristly to bother with trimming for grind. They are perfect for the stock pot — so long as they are clean and wholesome.

While butchering deer I package and freeze such scraps in 2 lb packs labeled "stock meat". If you're in the habit of discarding venison flank, rib or brisket because it's too fussy to process and less desirable than other cuts — stop. They're perfect for stock and are easy to prepare and package for that purpose.

But when it comes to stock meat, shanks are the star of the show — though they are so wonderful in the "[Braised Venison Shoulder](#)" recipe I try to save them, using other stock meat if it is handy. The heel, also known as the upper shank (the muscle attached to the top of the achilles tendon) is great too. Don't trim, just slice it into chunks. Even toss in the achilles tendon itself if it remained clean — it can get grimy in various hanging or dragging duties.

Never use any bruised or bloodshot meat or anything in any way questionable. But the venison that got lost in the back of your freezer for a couple of years? Trim away any freezer burned bits, call it stock meat and toss it in! Just keep in mind that while all meat brings flavor, only cuts rich in connective tissue bring texture.

With caveats, it's also excellent to supplement with bones rescued from a cooked roast. If making poultry stock, a leftover carcass is great. Save 'em up in the freezer and have a stock making party some dreary Winter weekend. The heavenly smell takes the sting out of cabin fever.

The caveats for using a cooked carcass are that the spices used could affect the flavor of your stock. That may be good or bad depending on how you plan to use it. Also know that cooked bones have already given up much of their collagen - so without raw bones your stock could turn out a bit "thin". We can fix that later.

Furnace weather is the perfect time for making stock. Simmering a pot on the stove all day takes a lot of energy which is practically free when it is taking a load off your furnace. But if it's fighting your air conditioner it's a wasteful double whammy of energy cost. Open-window weather is in between.

Fresh stock is volatile stuff with a short shelf life -- especially if unsalted. Freeze or use it right away. Bacteria love it, so give it 4 days max in the fridge. Any more than that, take it out and boil it hard a couple of minutes, quick chill in an ice bath, and return to the fridge.

## A word about veggies...

Nearly all stock recipes call for "mirepoix", the holy trinity of onion, celery and carrot at a 2/1/1 ratio. Yellow onions are normally preferred in a brown stock, because the papery yellow skins add color. White onions, shallots and even leeks are fine too, especially with a white stock (same as brown, except roasting step is skipped). Some even substitute fennel bulb for onion, but that is a more specific flavor that could conflict with some recipes.

Some recipes ask that the veggies be rough-chopped, others diced. In a shorter cook (e.g. with seafood stock) diced may be better. But the roasting step is more convenient with larger pieces. These are minor points, follow your bliss.

Below is a link to a basic brown meat stock recipe. You can substitute other bones as well (beef, pork, lamb, etc.) or mix and match, making your own custom blend. For more gelatin, veal knuckles and calves feet are the ticket. Or chicken feet if making a poultry stock. You may have to hunt around or find an ethnic market to buy chicken feet or calves feet.

Venison Brown Stock Recipe: [KillerNoms.com/brownstock](http://KillerNoms.com/brownstock)

White stock recipes are similar to brown stock except they skip the roasting part. Fish stock is another option. Save those fish heads, bones and skins (non-oily fish only), shrimp, crab and lobster shells. Countless stock recipes can be found on the web and in many cookbooks.

*If adjusting the size of any stock recipe the limiting factor is either the amount of bones you have on hand, or the size of the pot. Start with that and work backwards, sticking near the following ratios:*

- *3/2 water/bones & meat, by weight. (Water: 1 qt = 2 lbs)*
- *6/1 water/mirepoix, by volume. e.g. 6 quarts water, 1 quart (4 cups) mirepoix.*
- *Mirepoix: 2/1/1 Onion/Carrot/Celery*

*You need a pot with at least twice the capacity of your water by volume, a bit bigger is even better.*

## Under-cover operation

Whether to simmer covered or uncovered should be decided based on how much water you have relative to the solids. If your water just barely covers the goodies, put the lid on.

If you have water to spare, you can leave it uncovered. As it slowly reduces it will become more concentrated and flavorful - but you need to watch it to be sure it doesn't drop below the level of the solids. Add boiling water to raise the level if you need to.

I favor simmering covered — especially in AC weather.

## Processing:

*Stock is volatile. For best shelf life and quality these next steps should be performed without delay. Start as soon as you turn off the heat. Plan to begin this part when you have enough time to finish. Leaving the stock cooking longer is fine if you are not ready. Do NOT just remove it from heat and postpone the filtering/chilling steps for a more convenient time. Be aware you are dealing with something heavy, and hot. Have assistants standing by if you need them.*

- Remove large items to a colander over a bowl to catch drippings. Filter out remaining solids using cheesecloth, muslin, old clean t-shirts, a chinois, etc., whatever you have handy. Ladle through the filter into another pot. How well you filter it is a matter of taste but be sure to get out any bone bits. Press or squeeze out and save all the liquid you can before discarding the solids.
- Add salt?
  - Pro: tastes good, adds shelf life.
  - Con: may interfere with recipes that expect unsalted stock (most do). Do not add salt if you intend to reduce the stock to a demi-glace or meat glaze.
- Whill to under 70°F to discourage bacteria. Giving the pot an ice/water bath in the sink, gently stirring the stock with one spoon and the ice/water slurry with another works well. Be sure not to let the surface of the water/ice get higher than the surface of the stock or the pot will start to float.
- Move to the fridge to finish chilling overnight.
- In the morning the fat will be solidified on top. Remove and discard.
- Optional: clarify, using egg whites and instructions available in many cookbooks and on the web. Google "egg raft". This nearly magical process removes the microscopic bits that naturally cloud stock, leaving a crystal clear liquid - desirable if you are making consommé, aspic or any soup which you prefer to be very clear. No need to do it otherwise, though a side benefit is it leaves you with a bunch of yolks you'll need to [find a use](#) for. Om nom nom nom.

## Demiglace and Glace de Viande (meat glaze).

I'd never heard of meat glaze until a buddy on an online hunting forum said "It's what bouillon would be if it could convince the devil to buy its soul."

After my first batch I was hooked. I'll always have some of this handy in my freezer.

Demiglace is any stock reduced by half to three-quarters. Glace de viande (meat glaze) is the same thing only reduced by a factor of about 10, which will be syrupy when hot, but chill to a solid consistency.

Start with any quantity of stock, but remember you are reducing it a lot so be sure you have enough.

Medium simmer in a heavy, uncovered vessel. For reducing, wide is good — surface area is your friend. If using a straight-sided pot you can mark a depth gauge (like a disposable chopstick or wooden skewer) to help track your progress accurately.

If using a slope-sided vessel you could mark your gauge using a measured volume of water before you

put stock in the pot. So if you were reducing 5 quarts (20 cups) of stock, and looking to make meat glaze, you would put 2 cups of water in the pot and mark where that hits your gauge. Then dump the water, add the stock, and get reducing!

Stir periodically -- taking care to work the stuff that sticks to the side of the pot back down into the liquid. Lots of flavor there.

For demiglace, stop when the liquid is half to three-quarters gone. Store it the same as you would stock but be aware it will be more prone to gel to a very stiff consistency as it cools. Use it as called for in recipes, or add water and heat it up to make "instant" stock.

For meat glaze just keep going until it coats the spoon well and starts to get an almost syrupy consistency. This means you are starting to run out of water and most of the remaining liquid is gelatin. If it gets too shallow before it's done, transfer to a narrower pot (don't leave anything behind!) and continue.

If you start with a large pot of stock first thing in the morning the whole process should be finished by evening - a great wintry day project. It takes a long time but only needs occasional brief attention -- once every half hour or so. I set an alarm to remind me.

To speed things up you can raise it from a simmer to a boil, but you'll need to tend it much more often -- like every 5 minutes. If you do this slow back down to a low simmer right near the end.

Once you first notice it start to develop texture, or your measurements tell you it is approaching 1/10th of your starting volume, **start paying close attention and tend it more often until finished**. If all the water boils off the gelatin will scorch and be ruined. You'll have wasted all your effort and all that stock!

When done, remove from heat and process for storage right away, before it cools and hardens. An ice cube tray works well. Wipe it with vegetable oil or spray with non-stick spray first. Trust me on this.

A couple of tablespoons per cube makes a convenient chunk. They are very sticky -- so after thoroughly freezing, dump some cornstarch into a bag, empty your chunks into the bag and toss to coat. Do this as soon as you remove them from the freezer -- don't let them start to thaw. Then shake off the excess, package for long term storage, and return to the freezer.

I vacuum seal them, but a freezer bag with most of the air expelled is fine. It lasts forever in the freezer.

Even though you rarely see meat glaze or "glace de viande" in a recipe, it fits well in everyday cooking. A chunk or two in any gravy, sauce or soup works magic. I'm always looking for an excuse to toss some into whatever I am cooking. Go easy though, you don't want it to take over - it is intense stuff!

I promise you will never again use bouillon if you have meat glaze handy.

## Long Term Storage for Stock:

Like most other things stock will [last longer in a very cold chest freezer](#) than in the freezer compartment of your fridge.

Pressure canning your finished stock is an alternative that saves freezer space. If you follow good canning procedures (pressure canning only, not water-bath), your stock be good for 6 months to a year in your pantry.

Only folks who understand and follow established safe methods such as [those published by the USDA](#) should try pressure canning. You don't want to accidentally reduce the number of friends or family members available to enjoy your stock.

For most of us, [freezing](#) is the way to go. Your choices are freezer bags, canning jars or other freezer safe containers.

Pint sized wide-mouth canning jars are widely available in a "freezer safe" version. If they don't have them at your local store, you can get them mail order or on the internet. Ball also recently introduced a 1.5 pint widemouth jar that is freezer rated.

No quart jars rated freezer safe, though some people use them anyway. You might get away with using a non-freezer rated jar, but why risk it? You don't want the job of cleaning up a mess, including glass shards, in your freezer. If you insist on using quart size canning jars, at least use widemouth, which will be less prone to break as the freezing liquid expands. No matter what size you use, be sure to leave headroom for expansion.

My preferred method is to label quart size zip-top freezer bags, ladle in 2 cups of stock, expel the remaining air, seal and place in the freezer on a flat surface like a cutting board or a cooling rack. Once frozen you have a convenient space-efficient shape for long-term freezer storage.

Beware though, freezers are rough-and-tumble environments and your freezer bags might take some hits over time. Thaw in something that catches any leaks.

### **Optional Oven-finish:**

Once your stock has achieved a nice gentle simmer on the stove, about 185°F, you can cover it with a lid and move it to your oven.

Obviously the oven needs to be large enough to accommodate the lidded pot. You may need to remove all but 1 rack, and likely need to use the lowest rack position.

There are big advantages to using the oven, and one big disadvantage.

Advantages:

- More efficient — makes less heat, which is nice if making stock when it's not furnace weather.
- Safer to leave unattended.
- Frees the stove for normal cooking duties

- Very gentle (stock "likes" this)
- The lid means you don't need to worry about adding more water.
- No need to fiddle with a frustrating stove that doesn't want to maintain a slow simmer.

The one big disadvantage is that ovens are finicky beasts - often running well off of their indicated temps. Each has its own personality. You can't take instant readings from your oven to get an idea. Setting it to 190°F may mean, for example, that it cycles up and down from 175 to 205°F.

A full stock pot is quite dense and can take a long time to settle in with whatever your oven is doing. Check the temp of your stock every hour or so until you are positive it has stabilized at the desired temp before you leave it unattended for hours. Once you figure it out for a given oven, make a note and you can always use the same setting on that oven.

You want the stock to settle in around 180-190°F degrees. Lower than that and the magic starts to slow down. Higher and you are pushing the stock too hard. That's what I read anyway — though that conflicts with the great results reported from using pressure cookers to speed up the process.

**IMPORTANT:** Many ovens have an automatic 12 hour shutoff. So if you are running it longer you should turn it off and back on every few hours -- most importantly just before you go to bed if you plan to leave it running overnight.

### Or go old-school:

An even better alternative to the stove or oven is a stand-alone electric roaster. They're inexpensive and come [as large as 22 quarts](#) — which would be a big batch of stock! Plus they are still great at the thing Grandma used them for, a place to cook the Thanksgiving turkey while freeing up the oven for other duties.

Most have a simple control knob. Once their temp is stabilized you should make note of the setting, or just make a mark with a sharpie so you can easily repeat it next time. You can use it in a garage or any covered area if you're cooking in AC weather and prefer not to heat up the house, so long as you have an outlet close enough that you don't need an extension cord (not safe!). In furnace weather do it in the house — it smells great!

**Mushroom soup:** [KillerNoms.com/mushroomsoup](http://KillerNoms.com/mushroomsoup) — really shows off brown meat stock.

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