Before you begin the actual cutting of steaks, chops and roasts on your pig you will need to break down your pig into primal cuts. Primal cuts of meat are initially separated from the carcass during processing. These are the basic sections from which steaks and other subdivisions are cut.

**Pork Primal Cuts**

- Jowl
- Shoulder
- Loin
- Belly
- Spare Rib
- Fresh Ham
Processing your Pig

Breaking into Primal Cuts

Removing the Head

Remove the head by cutting from the top directly adjacent to the bone down through the atlas joint (first cervical vertebra) with your knife.

Removing the Shoulder

Remove the shoulder square between the 3rd and 4th Rib sawing straight down.

Removing the Fresh Ham

Remove the fresh ham by sawing straight down from the 1st vertebrae 2 inches parallel from the aitch bone.
Breaking into Primal Cuts

Removing the loin from the belly

Part A.

With your knife cut straight 2 inches from the inner tenderloin to the first rib bone.

Removing the loin from the belly

Part B.

Line up your up saw from the tip of the bottom vertebrae with your knife cut. Saw straight through, finishing with your knife.

Removing the Spare Ribs from the Pork Belly

With your knife start flush with the spare rib bones on the top of the belly and gently cut flush along the bone removing only the spare ribs.
Processing your Pig

Prepping and cutting fresh cuts

**Removal of the neck bone**

Starting at the rib end release the meat from around the neck bone leaving as little meat as possible on the neck bone, scrape the rib cage end next and remove down the back bone to the atlas joint removing neck bone in one piece.

**Separating the Pork Butt from Picnic shoulder**

Line up the pork shoulder and cut straight through approximately two inches from blade bone.

**Preparation of shoulder roast(s) and fresh hocks**

Depending on size preference, make a shoulder roast cut. You could get one or two shoulder roasts. Just make sure to cut before the elbow joint on the fresh hock.
Processing your Pig
Prepping and cutting fresh cuts

**whole Boston butt, shoulder roast and cut up fresh hocks**

Here is a separated pork shoulder. You can see the whole Boston butt, two picnic “arm” roasts, and the fresh hock cut up into three pieces.

**Cutting the Boston Butt into Pork Steak**

Line up your pork butt to cut parallel with the blade bone. Square it up first to ensure straight uniformed cuts. You can cut 1/2”, or 3/4” or 1” thick steaks to your choosing. Apply mild pressure with hands to bottom of pork butt while cutting. After cutting a quarter to half way through each steak you can help guide the rest of the cut with your left hand, still maintaining mild pressure with the other hand.

**Whole cut up Pork Shoulder**

Here is a whole cut up pork shoulder. 1 inch thick pork steaks, two shoulder “arm” roasts and a cut up fresh hock.
Quartering the Spare Ribs

Carefully trim with knife or pull off with your hands any excess fat on rib belly. Then cut off the sternum bone to make whole rib rectangular in shape “St. Louis style.” Cut in half long ways, double up rack and cut in half again. (quartered)

Quartered Spare Ribs

Shown here are the quartered spare ribs.

Preparing the Pork Loin

Before the whole pork loin can be further processed it is necessary to trim some of the back fat.

Trimming can depend on your preference of amount of fat left on your pork chops. Note* (you can always take more off but you cant put back on!) Standard industry trim is 1/4” of fat on loin. Palm grip your knife with blade facing you. Position yourself with your elbow acting as a safety block to your stomach. Carefully “peel” the back fat off the loin to the desired amount. NEVER PLACE YOUR HANDS IN FRONT OF KNIFE. Your knife can slip suddenly when trimming.
Removing the pork loin roast

Place the top of the loin (slanted end) and count down two or three vertebrae from where they straighten down the back bone. You can choose “generally where” to make your cut dependent on what size pork loin roast you desire. Note* cutting the pork loin roast really large, say a 5 lb roast plus, means you will cut into some of the pork loin chops.

Cutting the Country Ribs  A.

One popular option is removing the rib end of the pork loin and making country ribs. Count four ribs in from the bottom of the pork loin and cut straight. Then “chime” the vertebrae bone off leaving only the rib bones and back bone.

Cutting the Country Ribs  B.

Turn the cut and chimed rib end, meat side up. Cut straight down the exposed meat end one and a half inches from bottom (do not cut all the way through) now open up and “expose” the cut and lay flat meat side up. You may then cut “slits” lengthwise along the meat making ribs.
Processing your Pig

Prepping and cutting fresh cuts

Cutting the Pork Chops
Place either end of pork loin flush to the saw. Square off the loin if needed for straight cuts and uniformity. Then cut to desired length.

Showed above is a whole cut up pork loin with pork loin roast (cut from top end), one inch thick cut pork chops and country ribs (cut from bottom end). Note* if you want more pork chops you can pass on the country ribs.
Fresh Pork Trim
Cut up pieces of pork. Too large of pieces can jam grinder or get stuck on mixer arm if using one.

Ground pork
Grind fresh pork trim twice through a 3/16 inch grinder plate.

Bulk Pork Sausage
After first grind through add seasonings, mix thoroughly and grind again. You can put them in 1 lb bulk packages or leave in bulk for further processing.
Processing your Pig  

Making of Fresh ground products

Fresh Pork Sausage Links  
Bulk pork sausage stuffed into natural sheep casings.

Fresh bratwurst types of sausage  
Grind fresh pork trim, addition of ingredients, mix thoroughly and stuff into natural hog casings.

Notes on fresh sausage production

- You want to keep your meat as cold as possible throughout the process

- Sharp grinder plates and knives are a key value to texture

- Salt is key sausage ingredient. 2% addition is an old school standard.

- Stuff your casings firm but not too tight

- Natural Sheep Casings — pork links

- Natural Hog Casings—Bratwurst / Polish sausage
Processing your Pig  
Cutting and slicing of cured and smoked Ham and bacon

Whole Smoked Bone in Ham

After the smoking and cooking process the smoked ham needs to be properly cooled to 40 degrees or below. This firms up the smoked ham and then it can be cut in various ways.

Smoked Hocks

Hams can be quite heavy. Leaving the shank (or hock) on allows the perfect place for hanging your ham during the smoking process. This also produces smoked hocks that you can separate from the ham.

Whole Smoked Ham Cut into roasts and steaks

Line up your smoked ham parallel to the aitch bone for a cross grain cut. Cut your ham straight through in half. One half can be a large ham roast or cut in half again for two smaller roasts. Cut your other half of ham 1/2 inch thick to make smoked ham steaks.
Cutting and slicing of cured and smoked Ham and bacon

Slicing of Smoked Bacon
Slicing bacon can be done in basically whatever way you want. You can cut double thick slice it with your sharp knife. You can slab it into 3 inch pieces. Most standard preferred is to be sliced in thin strips on a sharp slicer. A medium thickness slice is approximately 16 to 20 slices per pound. Due to length, most bacon is corner wrapped with butcher paper. Anything not sliced is usually cut up into bacon ends therefore utilizing the whole smoked slab.

Slicing of Boneless Smoked Ham
If you take the bone out of a fresh ham cure and press it before smoking, you have a firm boneless sliceable ham. Slice cross grain any thickness. 1/2” slices for ham steaks, thin sliced for sandwiches or even shaved.
Curing Station

Curing of Ham, Bacon, Canadian Bacon, Hocks

Inject to 15%
Some will purge for a 10% pump

Cure submerged in cold brine for seven days (wet cure)
Or using a tumbler, tumble for 3 hours.
(tumbling accelerates the cure and extrudes the protein)

1 Gallon of cold water = 8 lbs.
1 lb. 12oz cure ingredients to 1 gallon of cold water
1oz California Ham Spice

Dry Cure Bacon
1 lb cure
1oz Ham Flavor

Rub onto meat side of belly and completely cover
Let cure for 7 days
Rinse and soak 1 hour in cold water
Smoked for 6 to 7 hours
Fresh Sausage tips and recipes

All Fresh Sausages

Select your meat / make sure it is free of bones and excess fat

Grind once through a 3/16 inch plate

Mix spices, ingredients and meat
You can add a small amount of cold water (up to 3% by law in fresh ground sausage)

Grind again through a 3/16 inch plate

Package or stuff into casings

-Besides pork, salt is your main ingredient.  2% salt added is a traditional industry standard.
-Grinding through a finer plate (1/8 inch lets say), is to small and will lead to smearing.
-Keep your meat cold.  If the temperature of the meat gets too warm, smearing will occur.
  -You want at least 20% fat for good texture and flavor profile.
-Keep your grinder plates and blades sharp. Sharp plates cut nice crisp cuts. Dull plates smear the product.
-Mix your added spices and ingredients well. Avoid “Hot” spots or areas where spices and ingredients could “clump together”. Also avoid over mixing. Over mixing increases the temperature of the meat and will result in smearing. A good standard for fresh sausage mixing is only a few minutes.
Fresh Sausage tips and recipes

Pork Sausage

25 lbs. Fresh Pork
8oz Witts Southern Pork Sausage Seasoning
8oz Water

Pepper or specialty ingredients to taste

Can package bulk or into patties or into casings

Fresh Bratwurst

25 lbs. Fresh Pork
8oz Water
8oz Salt
1oz Black Pepper
3oz Witts Wisconsin Bratwurst Seasoning

Can package bulk or into patties or into casings

You can add specialty ingredients to taste preference such as onions, garlic, cheese, cranberries, etc. Make sure your ingredients do not react negatively with the meat.
**Swedish Potato Sausage**

25 lbs. fresh pork trim  
8oz water  
6 lbs. of peeled and chunked up potatoes  
secret* (You can also use hash browns)  
1 lb. onion  
8oz Salt  
2oz Black Pepper  
1oz Garlic

This will make you a traditional Swedish Potato Sausage. From the old country, this was a family friends recipe.

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**Fresh Italian Sausage**

25 lbs Fresh Pork Trim  
8oz Water  
8oz Salt  
5oz whole fennel seed  
1oz garlic powder  
1/2 oz black pepper  
1/2 oz leaf basil  
1/2 oz red pepper

You can add more pepper if you prefer hotter. You can package this bulk, make into patties or stuff into casings or casing ropes.
Pig Roast

Wisconsin River Meats and Kansas City Style

Break Pig into Primals

Load into pan(s) fat side up

Hand Rub Seasonings
Remember salt is your base
it extrudes the protein

Smoke and cook / 180 degrees to 220 degrees
Hickory or Hard Wood Smoke
Cook to an internal minimum temperature of 150 degrees
(average of 6 to 10 hours)
Pork should fall off the bone
Slice cross grain
We serve some with BBQ sauce and some without
Packaging and Wrapping

18 inch wrapping paper

Heavy freezer paper

Tight packages

Properly mark them

Spread them out to freeze, do not leave in a big stack or pile

In the good old days they did not have the technology for paper production that they have today. Many folks would double wrap for better freezer protection. Nowadays there are different types of butcher freezer wrapping paper. We use a heavy freezer paper called a super loxial, which is a thicker paper with a wax protective coating on the inside. Essentially a “double wrap” by the old standards. Packages are wrapped as tight as possible to the cuts to try and leave as little air in the package as possible. A properly wrapped packaged should last a year in a properly stored environment.
Pork School Attendees Checklist

We want to ensure you get a chance to experience in some form or another close observation if not hands-on training involving the various aspects outlined for the class below. Due to revolving stations, possible rotating of duties and demonstrations a handy check off list has been compiled for you so you can make sure your experience meets the criteria.

- Receiving of your brand new wood handled Butcher knife

- Cutting or observing of your half pig being processed

- Fresh ground pork and fresh ground pork sausage

- Fresh Bratwurst and Bratwurst types

- Wrapping of cuts

- Dry Rub Bacon

- Wet curing of Ham / Bacon

- Cutting of Ham

- Slicing of bacon
How Did We Do?

As we have learned in business, striving for improvement is a large part of the teaching process. Please take the time to fill out the comment sheet below and mail to us in the self addressed stamped envelope provided in the sleeve of your booklet. We appreciate any comments, good and bad, tell us how we did, what could be improved and how we could make this experience better in the future.

Pork Processing School
May 2nd, 2015
Wisconsin River Meats
N5340 County Road HH
Mauston, WI 53948

Met My Expectations

1. How we do regarding:
   a. Usefulness of topics to me.........................
   b. You understanding the material................
   c. Communicating clearly............................
   d. Answering/addressing questions............... 
   e. The way I was treated.............................
   f. Eventual benefit of this program to me.....

<table>
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<th>Fell short of my expectations</th>
<th>Somewhat</th>
<th>Well</th>
<th>Very Well</th>
<th>Greatly Exceeded My Expectations</th>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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2. Overall, how would you rate this program.....

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3. Would you attend another program similar to this? .........................................

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<tr>
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4. Do you feel the information gained will help you?

   | 1 | 2 | 3 | 4 | 5 |

5. What could we do to make this event better?

Comments:

_________________________________________________________________________
_________________________________________________________________________