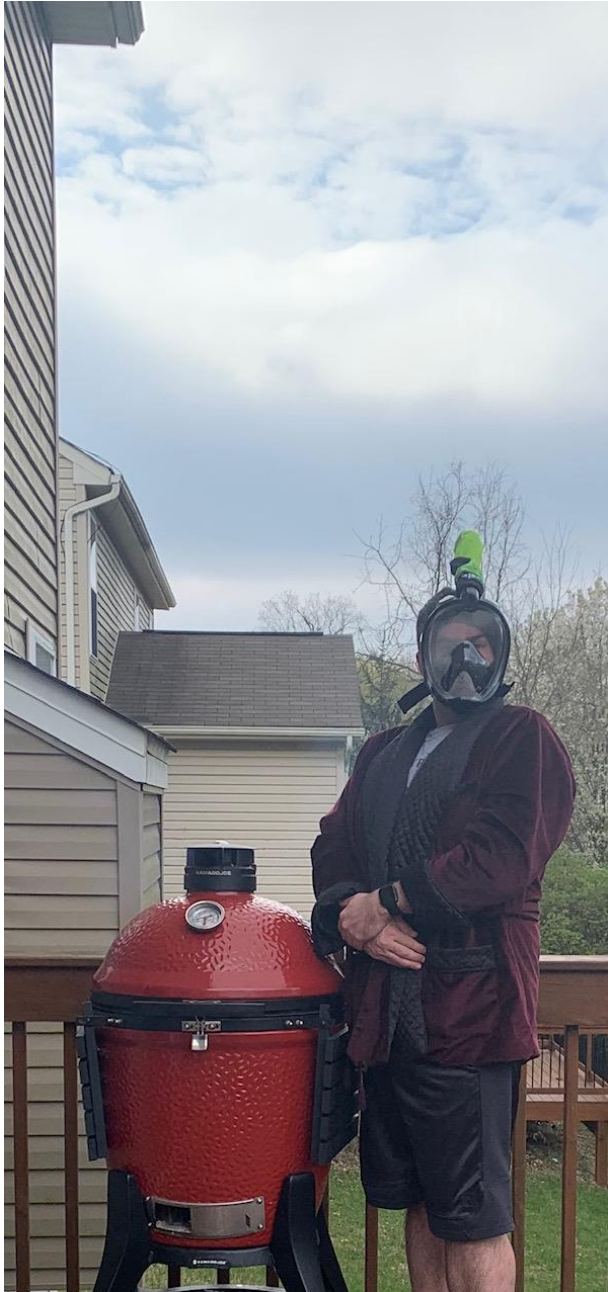




SMOKING:

A HACKERS GUIDE TO BBQ





Micah K. Brown

- Twitter: @MicahKBrown
- GitHub: <https://github.com/micahkbrown>
 - DLP Demystified (2018 talk)
 - Star Wars: How an ineffective Data Governance Program Destroyed the Galactic Empire (2019 talk)
- Vice President of Greater Cincinnati ISSA Chapter
- CISSP
- Served 45 pounds of free Pulled Pork to @DerbyCon 2019!
- Real Corp 2018 goal: “Learn to Cook Brisket Like a Texan.”
- Real Corp 2019 goal: “Continue to Cook Brisket Like a Texan.”
- Love a good old fashioned and a hickory smoked pizza!
- Studied at the tables of some of the finest Brisket-ers

*Thoughts and view are my own and do not reflect that of my employer.

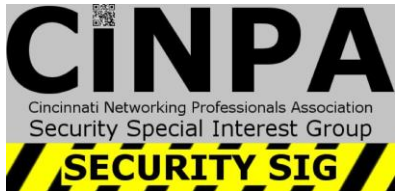
Greater Cincinnati IT Security groups



<http://www.cincy-issa.org/>



<https://sites.google.com/view/cincysmba>



<https://www.meetup.com/TechLife-Cincinnati/events/>



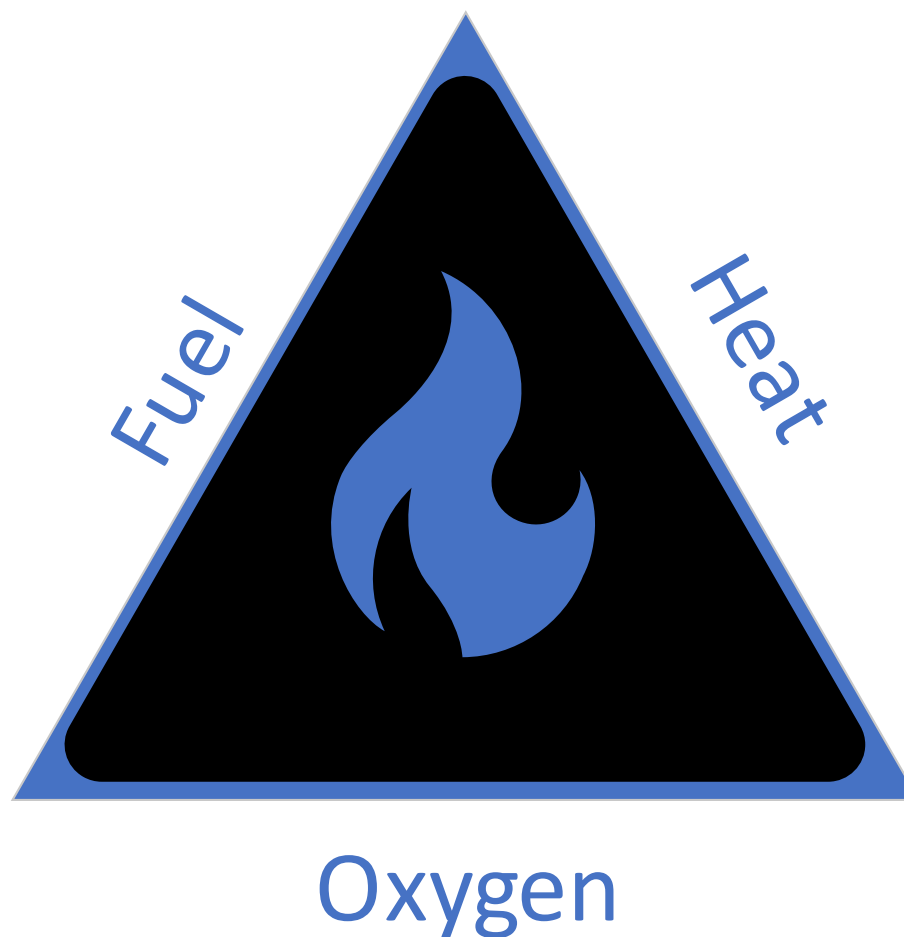
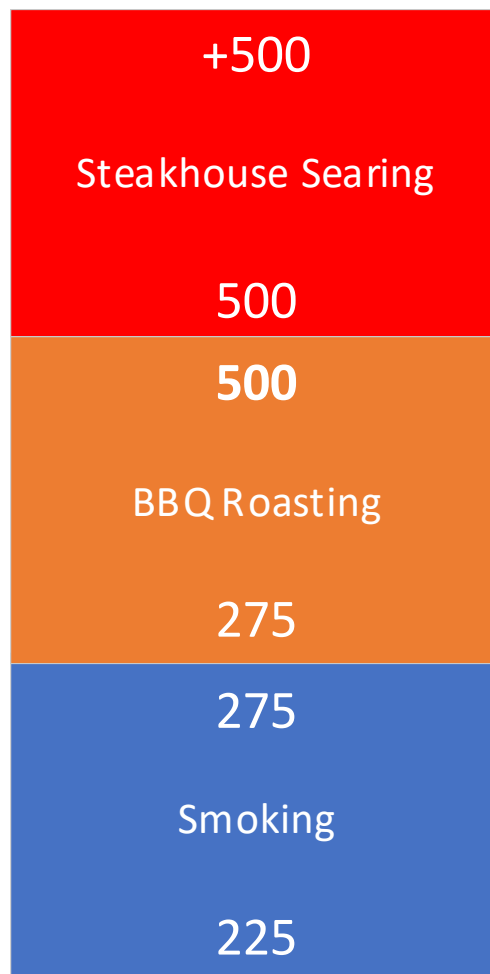
<https://www.infosecincy.org/>



SMOKING BASICS



SMOKING BASICS



MANY DIFFERENT TYPES OF SMOKERS



<https://www.thespruceeats.com/barbecue-smokers-by-type-and-function-336210>

ELECTRIC SMOKER / BOX SMOKER



- Very economical dedicated smoker.
- Make a great starter grill as they are very easy to operate.
- Largest smoking capacity for consumer smokers.
- Generally use fine wood chips and / or pellets
 - Soak wood chips for 24 hours prior to using for best effect
- When placing food in heating element is at the bottom so place larger portions closer to it.
- Often has a dedicated liquid retention pan. Do not be afraid to use it!
 - I like 1.5 hard cider, a couple shots of whiskey, and top off with apple juice
- Lining the bottom of the smoker with aluminum foil helps with cleanup
- CAN make your own chips but takes a lot of effort

PELLET GRILL



- Medium to high price point.
- Make a great starter grill as they are very easy to operate.
- Often includes 'smart' functionality
- Need to monitor cook time a little bit more than electric as while grill might have 'hot' areas and 'cooler' areas. You might need to rotate meat.
- Very difficult to make your own pellets.

OFFSET SMOKER



- Low to Medium price point.
- Classic look and design but often lacking the smarts.
- Extra burden to monitor heat.
- Need to monitor cook time a little bit more than electric as while grill might have 'hot' areas and 'cooler' areas. You might need to rotate meat.
- You can use a variety of wood sources. Check with Lumber Mills for scraps!!!

CERAMIC SMOKERS



- Most expensive! (this is the luxury car of smokers)
- You have to watch these smokers a lot and make many micro adjustments
- In my opinion, this is the most fun smoker to 'drive'.
- In my opinion, this smoker is the most flavorful.
- Fresh from the smoker Hamade Pizza
- You can use a variety of wood sources. Check with Lumber Mills for scraps!!!
- They are heavy. Talk to me privately if you want to get one!

SMOKING BASICS

 **CaveTools.com** | **Meat Smoking Guide**
 Receive your free copy of "The Grill Master's Essential Barbecue Recipe Book" at www.FreeBarbecueRecipeBook.com

Meat Type	Smoking Temp.	Target Internal Temp.	USDA Min.	Suggestions
Pork Butt/Shoulder	225-275°F (107-135°C)	195-205°F (90-96°C)	145°F (63°C)	Cook until tender when probed. Approximately 1.5 hours per pound.
Pork Tenderloin	225-325°F (107-163°C)	145-150°F (63-66°C)	145°F (63°C)	Wrap in a bacon weave to help keep it from drying out.
Pork Ribs	225-275°F (107-135°C)	195-205°F (90-96°C)	145°F (63°C)	Remember to remove the back membrane on the bone side first.
Beef Brisket	225-275°F (107-135°C)	195-210°F (90-99°C)	145°F (63°C)	Estimate 1.5 hours per pound for smoking time.
Chicken	250-300°F (121-149°C)	165°F (74°C)	165°F (74°C)	Finish off over high heat 325°F for 20 minutes to crisp the skin.
Turkey	250-300°F (121-149°C)	165°F (74°C)	165°F (74°C)	Try brining for 24 hours prior to smoking for maximum moisture.
Fish	225-250°F (107-121°C)	145°F (63°C)	145°F (63°C)	For fish like salmon & trout absorb smoke faster.

Wood Type	Flavor Strength	Flavor Profile	Pork	Ribs	Beef	Chicken	Turkey	Fish	Symbol Key
Alder	Mild	Sweet and nutty smoke				*	*	✓	✓ Highly Recommended
Almond	Medium	Nutty and sweet flavor, little ash	*	*	*	*	*	*	* Tested and Approved
Apple	Mild	Sweet, fruity taste	✓	✓	*	✓	*	*	
Apricot	Mild	Hint of sweetness and fruitiness	*	*	*	*	*	*	
Cherry	Mild	Fairly sweet and fruity	✓	✓	*	✓	*	*	
Chestnut	Mild	Slightly sweet and nutty smoke flavor	*	*	*	*	*	*	
Hickory	Strong	Sweet to Strong with heavy bacon flavor	✓	✓	✓	*	*	*	
Jack Daniel's	Strong	Made from Jack Daniel's barrels, Strong	✓	*	*	*	*	*	
Lemon	Medium	Tangy, citrus smoke with hint of fruitiness	*	*	*	*	*	*	
Maple	Mild	Somewhat sweet, subtle flavor	*	*	*	*	*	*	
Mesquite	Strong	Earthy smoke flavor	*	*	✓	*	*	*	
Mulberry	Mild	Sweet, tangy, blackberry-like flavor	*	*	*	*	*	*	
Nectarine	Mild	Mild and sweet smoke	*	*	*	*	*	*	
Oak	Medium	Traditional smoke flavor	*	*	✓	*	*	*	
Orange	Medium	Tangy, citrus smoke with hint of fruitiness	*	*	*	*	*	*	
Peach	Medium	Slightly sweet and woody flavor	✓	✓	*	✓	*	*	
Pear	Mild	Earthy flavor with a hint of fruitiness	*	*	*	*	*	*	
Pecan	Mild	Sweet and mild, similar to hickory	✓	✓	✓	✓	✓	*	
Pumuk	Mild	Mild and sweet smoke	*	*	*	*	*	*	
Walnut	Strong	Bitter, commonly mixed with other woods	*	*	*	*	*	*	

FIVE STEPS to PERFECT BBQ

- Marinate
- Inject
- Rub
- Smoke
- Sauce

CAVE TOOLS: Do not smoke meat with Cedar, Cypress, Elm, Eucalyptus, Fir, Liquid Amber, Pine, Redwood, Sassafras, Spruce or Sycamore. Copyright © 2012

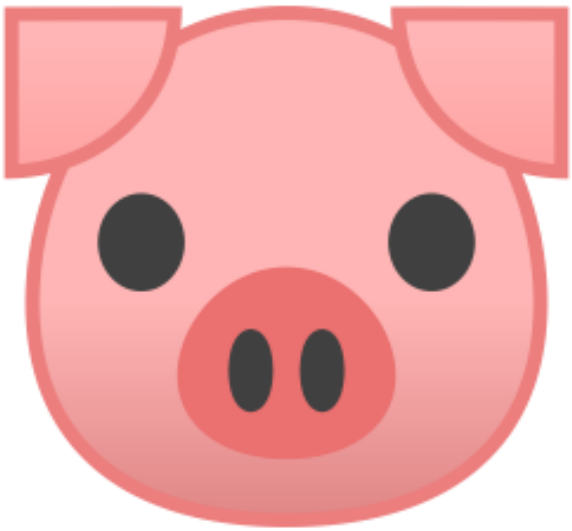
- Find yourself a good smoking guide / temperature table.
- For me I generally like to smoke on the 'low and slow' 225
- Most Pork and Beef hit a 'stall zone' around 170 DO NOT PANIC

PRACTICAL PULLED CHICKEN



1. Get Some high quality chicken breasts and rub at the store. (Do not freeze)
2. Wash hands!!!
3. Open check, remove from package and dab excess liquid off the chicken before placing them on a cookie sheet.
4. Use shaker to apply rub to taste to all sides and place back on tray. Repeat as needed.
5. Fire up smoke and let come up to temp. Also add wood chips / pellets / charcoal. (225 – 275)
6. Insert temp prob and place chicken into smoker.
7. Let chicken come up to temp adding wood as needed.
8. Once it the temp raises to 165 – 175 pull out of smoker and let stand for 30 min to an hour before pulling. (I like a consistent 168)

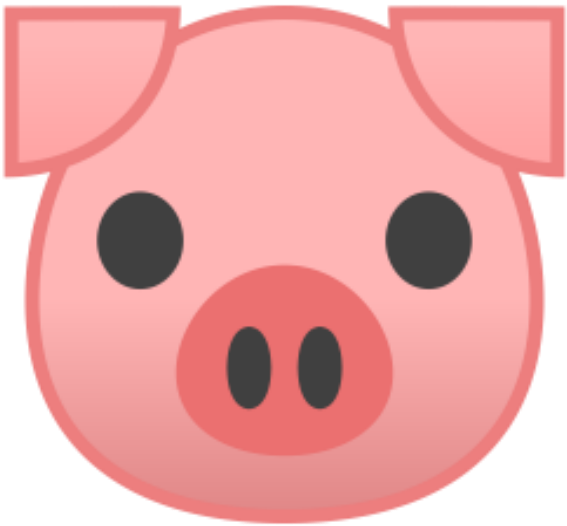
PRACTICAL PORK BUTT / PULLED PORK



1. Get Some high quality pork butt and rub at the store. (Do not freeze)
2. Wash hands!!!
3. Open check, remove from package and dab excess liquid off the pork butt before placing them on a cookie sheet. Trim to taste.
4. Use shaker to apply rub to taste to all sides and place back on tray. Repeat as needed.
5. Fire up smoke and let come up to temp. Also add wood chips / pellets / charcoal. (225 – 275)
6. Insert temp prob and place pork butt into smoker. I use two probes and trust the lower temp one.
7. Let pork butt come up to temp adding wood as needed.
8. Once it the temp raises to 195 – 205 pull out of smoker and let stand for 30 min to an hour before pulling. (I shoot for a consistent 198)

Allocate 90 min per pound

PRACTICAL RIBS



1. Get Some high quality pork butt and rub at the store. (Do not freeze)
2. Wash hands!!!
3. Open check, remove from package and dab excess liquid off the ribs before placing them on a cookie sheet.
4. Turn ribs over and use a spoon to start to lift up the inner membrane. Once you can grab the membrane with a paper towel, slowly peel it off.
5. Use shaker to apply rub to taste to top and place back on tray. Repeat as needed.
6. Fire up smoke and let come up to temp. Also add wood chips / pellets / charcoal. (225 – 275)
7. Insert temp prob and place ribs into smoker. I use two probs and trust the lower temp one.
8. Let ribs come up to temp adding wood as needed.
9. Once it the temp raises to 195 – 205 pull out of smoker and let stand for 30 min to an hour before pulling. (I shoot for a consistent 198)

Allocate 90 min per pound

PRACTICAL BRISKET



1. Get Some high quality brisket and rub at the store. (Do not freeze)
2. Wash hands!!!
3. Open check, remove from package and dab excess liquid off the brisket before placing them on a cookie sheet. Trim as much fat off as you can.
4. Use shaker to apply rub to taste to all sides and place back on tray. Repeat as needed.
5. Fire up smoke and let come up to temp. Also add wood chips / pellets / charcoal. (225 – 275)
6. Insert temp prob and place brisket into smoker. I use two probes and trust the lower temp one.
7. Let brisket come up to temp adding wood as needed.
8. Once it the temp raises to 195 – 205 pull out of smoker and let stand for 30 min to an hour before pulling. (I shoot for a consistent 198)

Allocate 90 min per pound

TIPS TO LEVEL UP YOUR BBQ



- Do not forget to have fun with it!
- If the door is open, are you even smoking?
- Not all experiments are going to turn out good.
 - Wasted an entire quartino brisket with sub optimal hard cider!
- Invest in remote temperature Monitors / Probes
- Generally when you smoke, you cook a lot of food!
 - Sous Vide is great to restore life to BBQ meats.
- I enjoy using BBQ Claws to pull meat.
- Good coolers make great friends.
- While not strictly required, a good smokers jacket is essential!



LET'S BUILD A SMOKER



SAFETY FIRST, @HACKINGDAVE INSISTS

- Never leave your smoker un-intended while smoking.
- Always have tool(s) to put out a fire in easy reach.
- Wash your hands before and after touching proteins.
- Clean and protect your surfaces.
- Gloves are your friend.
- Buying advanced temperature probes has really helped me level up.
- Have Fun!

BUILDING A SINGLE USE COLD SMOKER

- Hot smoker are designed to cook food while imparting delicious smoke flavor!
- Cold smokers are built to impart smoke flavor but are not designed to cook food. (perfect for meats, cheeses, etc)
- Parts ~ \$10
 - 2x metal tin of the same size (\$2 and up)
 - 2 – 4 metal clips (\$1)
 - Cooking grate that fits in your tin (\$3)
 - Risers to raise the cooking grate (if needed)
 - Aluminum foil (\$1)
 - A handful of wood pellets (\$10 per box)
 - Lighter (\$1)

BUILDING THE SMOKER 1:3

- Pure hickory wood pellets



- Wrap 2 – 3 shot glass full of wood pellets into a “wood pellet” cigar between the width of a quarter and golden dollar coin. It is critical to use as little foil as possible (allow more air flow in).



- When ready rip off the top and place natural wood starter on top. Place in single use smoker and light. (allow 15 / 30 minutes for pellets to light before putting food in.)
- Puncture the “wood pellet” cigar in multiple locations all around to allow maximum amount of airflow. Don't be afraid to open up further in case you need more air!

BUILDING THE SMOKER 2:3

- One inch hole on top back to allow smoke to escape.

■ SMOKE!!!

- Use metal binder clips to affix top and bottom.

- Lift smoker off surface by 4 – 6 inches to protect surface.

- One inch hole on front right to allow air into feed pellets



BUILDING THE SMOKER 3:3

- Sausages!



- Hamburgers!

- “Wood Pellet” cigar

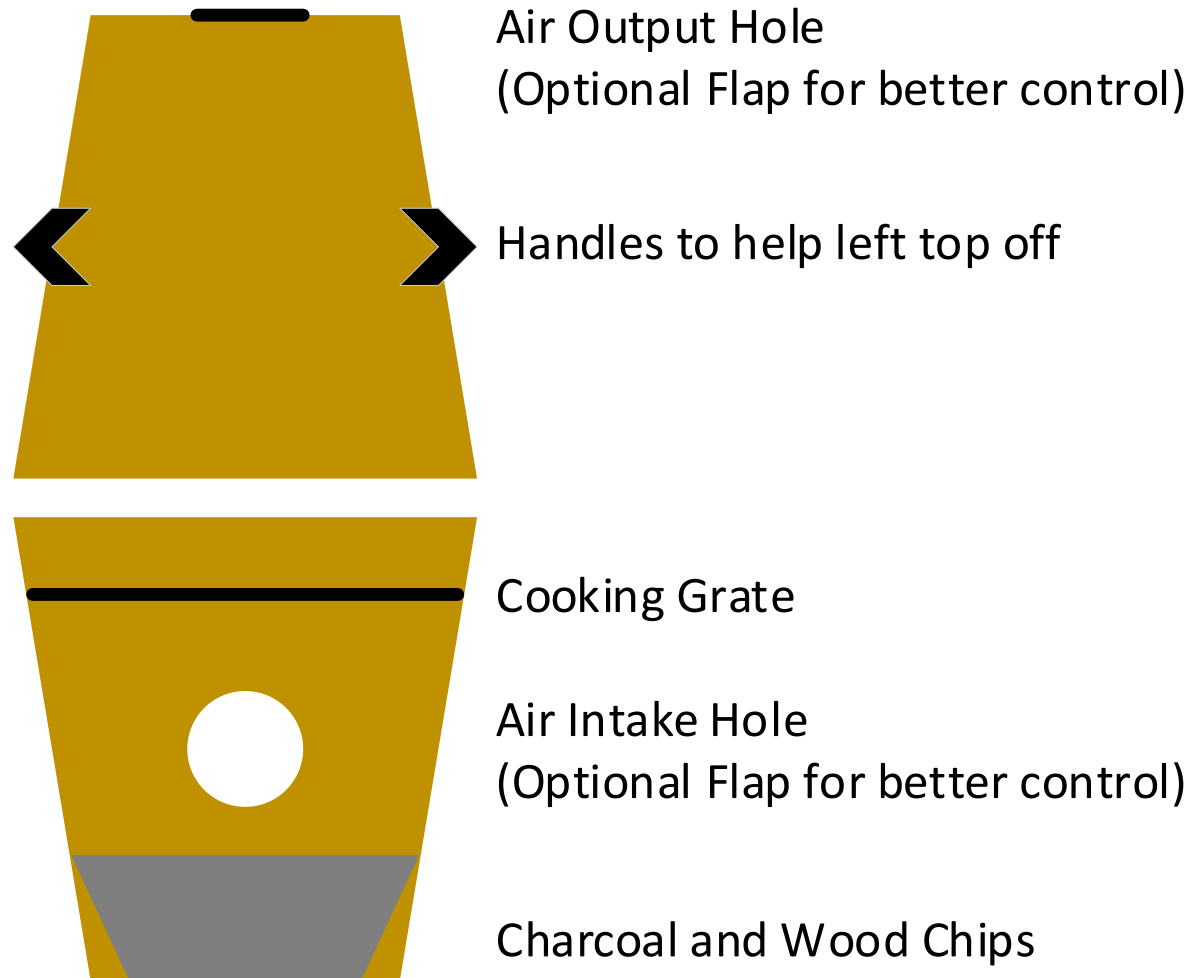
- Simple Cooking grate

USING THE SMOKER TIPS

- Proper air flow both via the bottom flap and top flap will help you control the fire. Feel to increase airflow by opening holes or turning the bottom hole into the wind.
- Allow the food to sit in the smoker 30 – 60 minutes before placing on grill for final cook.



HOME MADE CLAY SMOKER

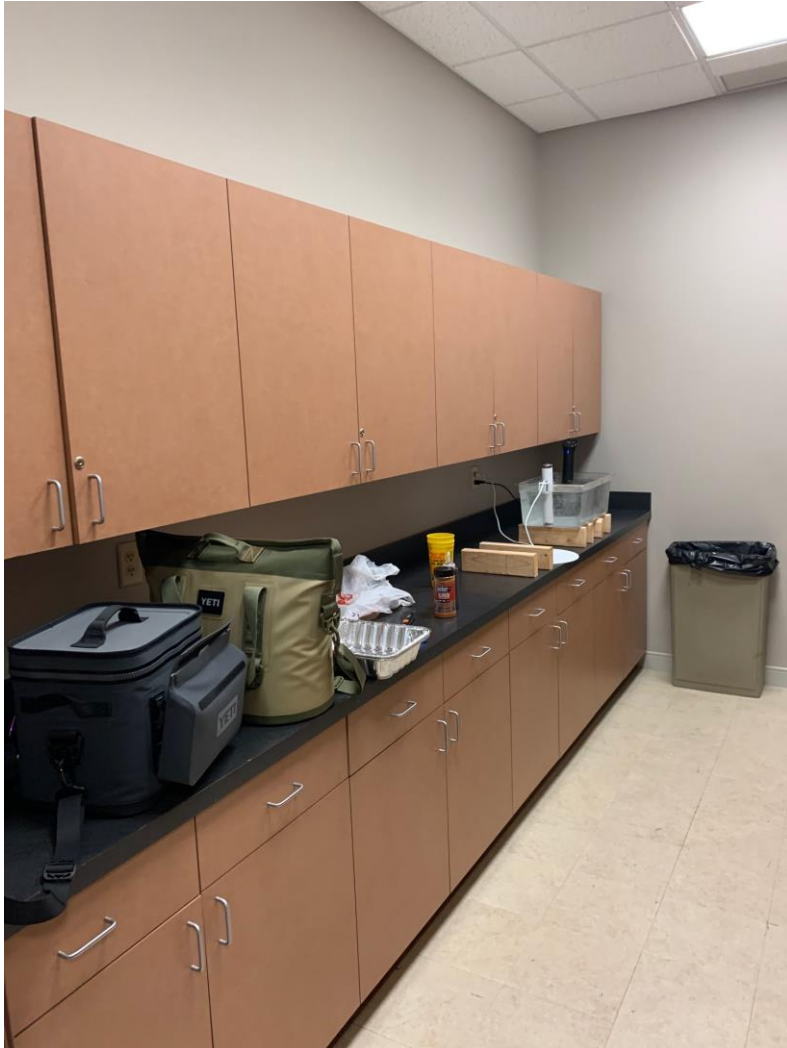




A NIGHT WITH DAVE KENNEDY SECRETS

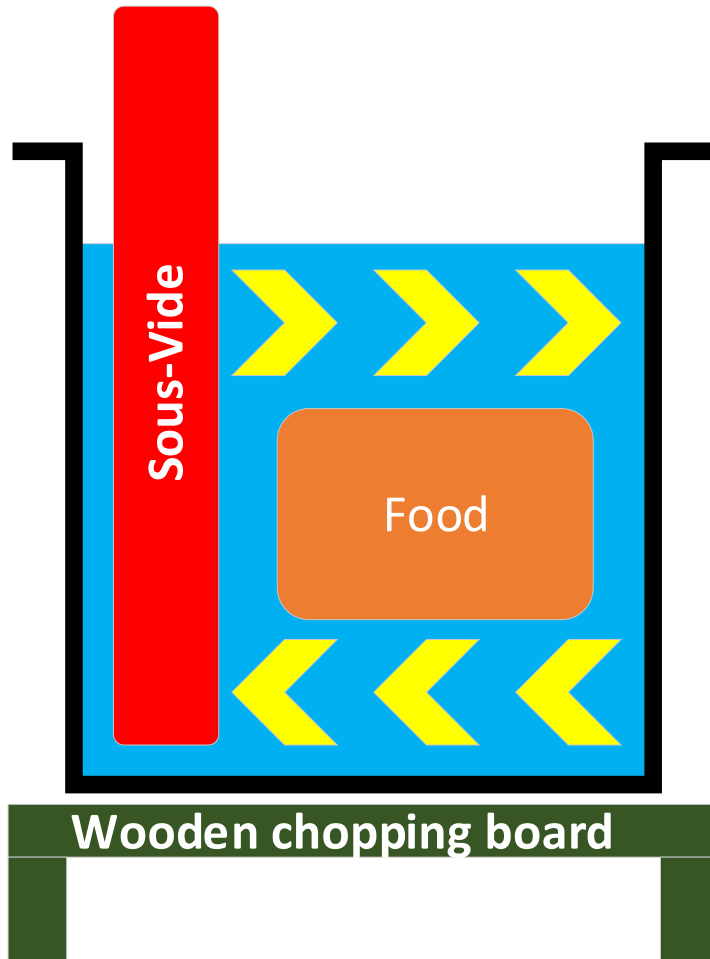


A NIGHT WITH DAVID KENNEDY SECRETS



- I cooked the entire meal the Saturday prior the meeting and then vacuumed sealed bags and froze it.
 - 1 - brisket
 - 16 – Chicken Breasts
 - 4 – pork butts
 - 1 Sausage
- 28 hour before the meeting I brought Sous Vide baths up to temp and then proceeded to reinvigorate the meats back to life

SOUS-VIDE OVERVIEW



- Roughly translated from French ‘under vacuum’
- A cooking technique in which food is placed in a plastic pouch or a glass jar and cooked in a water bath at a precise and consistent temperature.
- This temperature is much lower than usually used for cooking.
- The intent is to cook the item evenly, ensuring that the inside is properly cooked without overcooking the outside, and to retain moisture.
- It is very hard to overcook meats and other types of protein.
- Makes it very easy to cook in bulk but will take more time.
- Some meats require additional steps to put a nice sear (brisket, ribs, steaks, chicken).

SECRET SANDWICH: THE COWBOY

Bun Top

BBQ Sauce &
Cheese

Sausage

Pulled
Chicken / Pork

Brisket

Bun Bottom

- On a premium bun reinforce the bottom bun with a slice of brisket.
- Top the brisket with your choice of pulled port or chicken.
- Lightly top the pulled pork / chicken with smoked sausage
- Apply a thin glaze of BBQ sauce in a double helix model to celebrate the majesty of humanity.
- Top with sharp cheddar cheese (substitutes may be made but you are wrong)
- Toast cheese for no more than 5 seconds in any one place with torch.
- Serve to a friend!

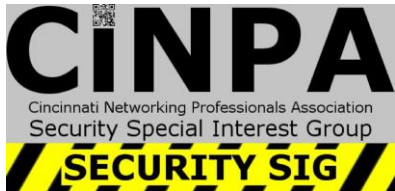
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