

How to European mount your own wildlife skull



By Storm W. Usrey
Conservation Education Manager

Introduction

Making your own European mount out of one of your hunting trophies can be rewarding and will likely save you some money in the long run. Here are some suggestions on how I do my own European mounts. These are just suggestions and meant to serve as a guide. There is lots of information on DIY for making a European wildlife skull, so spend sometime researching what method will work best for you.

Remember: protected wildlife species in the state of New Mexico must have a license, permit or possession certificate to legally possess. Retain these for your records.

The following presentation is just an example of one method for preserving a skull for your collection or your own Natural History Museum.

Let's get started!

Equipment



Photo credit: Storm Usrey

Getting your supplies together before you begin is a must. The next few slides will list some of the recommended and/or needed equipment to prepare your own wildlife skull for your Natural History Museum or wall using the European method.

Equipment

- One boiling pot of proper size to boil skull you are working on
- Turkey fryer burner with regulator (to heat water in boiling pot)
- Propane bottle (fuel source for burner)
- Lighter or matches (to light burner to heat water)
- Apron
- Safety goggles
- High pressure water sprayer
- Rubber or vinyl gloves
- Leather work gloves (to handle hot skulls as they come out of boiling water)
- 2-3 foot metal rod (used to wire skulls with antlers to so you don't get antlers in the boiling water)
- Roll of wire
- Pliers
- Needle nose pliers
- Sharp knife
- Metal wire with a hook on one end (can be made from thick wire coat hanger)
- Small paint brush (to put on 40 crème mixture and to aid in washing off)
- Paper bowl (for mixing 40 crème and whitening powder)
- Plastic spoon (for mixing 40 crème and whitening powder)

Equipment

- 40 volume crème developer (get from hair salon supplier store. 16 oz. should be sufficient for one skull and should have extra product left over)
- Quick light powder lightener (get from hair salon equipment business, 1 oz. package should be sufficient for a skull)
- Biz Laundry Detergent Booster Powder (will use about +2 cups per boil). This has sodium carbonate, which is great for removing flesh from skulls during the boiling process. You can use other products that have this ingredient as well.
- Water
- Plastic type shopping bags, aka Wal-Mart bags (for use in wrapping horns on horned animals)
- Duct tape (for use in taping bags on horned animals)
- Large garbage bag (for use in “sweating” horned animals)
- Borax
- Rubber mallet and grinder (for use on horned animals, when needed)
- Cardboard (to place skulls onto after applying 40 crème and whitener powder mixture)
- Garden hose with sprayer (to clean 40 crème from skulls)
- Super glue (to glue any nasal bones or teeth back to clean skull)
- Newspaper (can use cardboard)
- Linseed oil & Paint thinner (1 part Linseed oil to 3 parts paint thinner) for horns

Safety considerations



- Always wear your safety goggles, appropriate gloves (either nitrile/latex or leather) and apron.
- Wear old clothing you are not too concerned with “ruining” (just in case).
- Remember fire safety where you are running or operating your burner to boil your water.
- Be careful with the extremely hot water.
- Make sure to read any safety warnings and labels on any equipment or ingredients you plan on using!

Prepare skull



Photo credits: Storm Usrey

When prepping any skulls to boil, it will be imperative to remove as much flesh as possible and to remove brain material using your wire hook. Make sure to remove eyes and tongue as well. You want as little material on the skulls when you begin the process of “boiling” them. I like to hook pieces of wire on the skulls I am working with as it makes it much easier to get them in and out of the HOT water when I need to use the pressure washer. You want to European your skulls when they are fresh, and this is especially true with horned animals as trying to “sweat off” the horn sheaths is tough when they are dried and not fresh. “Sweat off” the sheaths first, then boil the skull.

Considerations for horned animals

- To “sweat off” the horn sheaths on horned animals such as pronghorn antelope and barbary sheep, take time to wrap the horns tightly in plastic shopping bags and duct tape them. Make the wrapping thick around the horns and it will almost be like a cast of shopping bags with duct tape holding it on the horn. This will serve as insulation and make sure to wrap from below the horn sheath on the skull all the way to the horn tip.
- After wrapping the horns, place the head in a large plastic bag for at least 2-3 days or up to a week, and get the horn sheaths to slip off. This needs to be done in a warm environment. You may need to utilize a rubber mallet to aid in getting sheaths off.
- After sheaths slip off bone core, you want to make sure to remove the tissue inside the horn sheaths. Next, power wash the inside, air dry and fill up with Borax and place the horn sheaths in Borax for a few weeks to a month to cure out. I will boil the skull at this time. Some folks like to boil the horn sheaths off, but this can take away the integrity of the horn so I prefer sweating them off over boiling them off.

Considerations for horned animals

- When you affix the horn sheaths back on when completing your mount, you will use a little automotive body filler with hardener on the bone core (a small amount) and push the horn sheath on. Make sure the sheaths fit property before using auto body filler. You may need to grind the bone core a little for a proper fit.
- After putting the horn sheath on, I will make a mixture of 1 part linseed oil to 3 parts paint thinner and brush onto the horn sheaths (NOT the skull). Allow to air dry. This will shine up the horns and help to keep bugs from trying to burrow in the horns. I will also cut “half” of the bone core off on my barbary sheep.

The photographs in the following presentation show a barbary skull where I have done this.

Get water boiling

Get your water boiling in your pot and turn down to a slow “tumble.” You can add approximately 2-3 cups of your detergent that have some whitening capabilities and sodium carbonate. I will dump my water at least once for fresh water when I get close to completion. Repeat above when you do this.

For this process, you will use your turkey fryer burner and a full propane bottle and a lighter. Take care during this process. Look out for fire hazards, wear your protective equipment, and don't over boil your skulls. You don't want the skulls in extreme boiling water. Make sure the water is moving with a slow tumble.

Boil skulls for about 20 minutes, remove from pot and use your pressure washer to remove tissue. Repeat the process as needed and make sure you don't lose any teeth off your skull. Remove any loose teeth and you can always superglue these back in later.



Photo credit: Storm Usrey

Considerations



You can use a metal rod and pieces of wire to affix to any antlers so you don't boil the antlers in the water. This may cause them to lose their coloration and you might have to stain them after this process if you do boil them. You just want the skull in the hot water and not the antlers.

Photo credit: Storm Usrey

Back to boiling....spray and continue to boil & scrape



A portable power washer is a must and will aid in tissue removal. Skulls have natural holes in them. Spray all of these out along with the nasal cavity to get all tissue free. Nasal cavity and brain cavity need to be cleaned!



These skulls are finished. Make sure to not put skulls in water that is at a hard boil. You only want them in the water when it is at a light tumble. Boil for 20 minutes, spray and put back in boiling water. Repeat as needed. Refine your technique.

Once clean



Photo credit: Storm Usrey

Once your skulls are clean, allow them to air dry. Make sure to keep any loose teeth for your skulls in a Ziploc bag to keep from losing them. You will be able to superglue these in later on. The power washer can send loose teeth “flying,” so remove them before spraying so you don’t lose them. Dump your water pot slowly to recover teeth or nasal bones that may have come off.

40 volume crème & whitening powder



Photo credits: Storm Usrey

Mix some of your 40 volume crème with approximately $\frac{1}{2}$ to 1 packet of whitening powder and paint brush onto the skulls. Do not get on antlers or horns. Feel free to put out in sun for a few hours to help in whitening. Try to keep on cardboard, wear your safety equipment and wear old clothes. Don't get this on your skin or clothes!

Wash and repeat as needed



After 24 hours, wash the mixture off the skulls with a water hose and use a paint brush to aid in cleaning. Repeat process of crème mixture, if needed, to get whiter. Don't get on skin and wear old clothes and safety gear.



Photo credits: Storm Usrey

Let dry in secure spot in the sun

When you're finished, place the skulls somewhere secure. Try to get them in the sun for a few days to help whiten them up. At this time you, can glue in any teeth and finish the skulls out. Heads up: I have had canine teeth split during this process.



Photo credit: Storm Usrey

Horns that are finished



Photo credit: Storm Usrey

Here are some horned animals that are nearly completed and are air drying after putting on linseed oil/paint thinner mixture on horns.

Hang and enjoy your memories of your hunt or place in your Natural History Museum



Photo credit: Storm Usrey

Thank you & some closing thoughts

- This is a fun way to European your own wildlife skulls.
- Take your time and enjoy the experience.
- Make sure to retain your hunting license/tag or have a possession permit for all protected game animals and furbearers.
- Wear your safety equipment and think safety the whole time.
- Try to watch or read other materials on making European mounts or skulls to see other ways of doing this art work or trade.
 - Maceration and dermestid beetles are other options for cleaning skulls.
 - Whitebone Creations and others have great tutorial videos on YouTube with their techniques.



***Try to get a family member
or friend who has not
hunted or fished in a while
back into the Great
Outdoors in the future!***



Photo credits: Storm Usrey