

**BLACKSMITHS' GUILD of the POTOMAC, INC.  
Gulf Branch Nature Center, Arlington, Virginia**

**SHOP RULES and PROTOCOL**

**PURPOSE**

The purpose of this document is to outline the shop rules and protocols to ensure safe and efficient use of the BGOP Forge. The shop rules are mandatory for each member. The protocols are guidelines to provide a clean, safe, well-run forge.

**EMERGENCIES**

**Call 911.**

**The address is:**

**Gulf Branch Nature Center  
3608 N Military Road, Arlington VA 22207**

**Include directions to the shop from the Nature Center. If possible have someone meet the responders at the nature center to guide them back to the Forge.**

**Any injuries requiring medical attention must be reported to a board member.**

**OPEN DOOR POLICY**

The continued good will towards and support of the Guild by the adjacent homeowners and Nature Center users are essential to the Guild's use of the forge. Many enjoy watching the work of Guild members and expect a reply to their questions. When Guild members are working at the forge, guests and other observers are welcome. If the visitors have no questions or comments, the guild members working at the forge may initiate a conversation by explaining the task/skill being used. Members are reminded that safety precautions are especially important when visitors are present.

**SHOP RULES**

1. The BGOP Forge is for the sole use of BGOP members in good standing and their guests. Members are responsible for the safety and conduct of their guests.

2. Members must be approved by the Shop Master or other authorized board representative as having basic proficiency with shop techniques and tools and sound knowledge of safety issues, shop practices and etiquette.
3. **There must be at least two adults present to perform hot work or use power tools at the forge. No member is allowed to work alone. A member must be present at all times the forge is open.**
4. **No one under 18 years of age is allowed to work unsupervised.**
5. Each person using the Forge must sign-in the Forge logbook upon arrival.
6. **Forge hours of operation is posted on the door of the Forge and will be strictly adhered to.**
7. *No electronics with a loudspeaker are permitted to be used in the forge*
8. No alcohol or drugs are permitted on the Gulf Branch Nature Center property; violations are subject to BGOP sanctions and/or criminal report.
9. Members are required to be mindful of and comply with all posted signs and information in the Forge, Shop and Gulf Branch Nature Center and be familiar with the location of the fire extinguishers, electrical breaker box and the First Aid kit.
10. Appropriate personal protective equipment is required. Safety glasses must be worn at all times. Covered footwear is mandatory. Hearing protection, and respirators should be used depending on the equipment. Gloves and loose clothing should never be worn when operating power tools.
11. *Per fire regulations, compressed gasses (propane tanks) cannot be stored in the Shop.*
12. *Members must attend a minimum of 2 meetings per year to remain in good standing. This is meant to keep members informed about changes in shop operations.*
13. *The Forge is secured at all times. The Shop combination will be changed periodically. The new combination will be given at regularly scheduled meetings or directly from board members.*
14. *The visiting public is required to wear safety glasses in the Forge. Visitors will be kept at a relative safe distance from the members working at the forge; blocked by tables, ropes, markers or screens.*

## PROTOCOL

1. Members who are on prescription medications or have physical limitations are requested not to overtax themselves or to participate in activities that are not compatible with their condition and doctors' recommendations.
2. Be aware of your surroundings - who is in the shop and what are they doing. When walking with hot metal call out "hot iron" and don't carry the metal at face level.
3. Keep your workspace clear.
4. Do not forge weld if the Forge is crowded, while visitors are present, or at public demonstrations. While welding, be aware of people around you and flammable material.
5. Clothing should be made of cotton, wool or other natural fibers and should cover as much of the skin as possible. Nylon and polyester should not be worn as they easily melt and burn.
6. Gloves may be useful in other operations but also carry a risk. Thick leather and kevlar gloves provide protection against cuts and moderate levels of heat, but allow dangerous slippage if worn on the hammer hand. Once heat penetrates a glove, it rapidly moves from warm to unbearable. Wet gloves offer no insulation and can cause steam burns. Tight fitting gloves are difficult to remove in a hurry. Despite all this, very thin leather or latex gloves on the hammer hand may improve the grip and prevent blisters.
7. Do not heat galvanized metal, as it will give off toxic fumes. Be wary of non-ferrous metals for the same reason.
8. Take hardy tools out of the hole once you're finished to avoid cutting your fingers.
9. Dress the edges of a mushroomed chisel so that fragments don't break off. Any tools needing repairs should be placed in the repair tool basket. Be sure your hammerhead is firmly wedged in the handle.
10. Cool hot tools and metal before setting them down: if they can't be quenched, place them out of the way on the floor underneath the forge or anvil. Remember even black metal is hot!
11. Bring your own material for personal projects. Stock in the shop is meant primarily for demonstrations and practice purposes. If you are making multiple items, items

for sale, or using significant amounts of material, you should bring your own stock or replace what you use.

## 12. Don't use the parking lot when there is a function at the Nature Center

### Demonstrations

1. Guild is dedicated to the advancement of forging and blacksmithing. Other metal techniques such as casting should only be performed as guild sanctioned demonstrations
2. Forge welding is not allowed at demonstrations where visitors or the general public are present.
3. The general public may be permitted to have some limited practical hands-on experience with blacksmithing only after receiving practical safety instruction, having signed a waiver, being properly dressed (besides Mandatory SAFETY GLASSES, additional safety equipment such as gloves and apron may be required) and only under direct supervision from a BGOP member. Individuals under the age of 18 may only work in the shop when a parent or guardian is present and has co-signed a liability waiver.

### Shop Equipment and Tool Use

#### Coal Forge

- Before starting a fire, clean out the fire box,
- Turn clinker breaker in tuyere and dump ash gate.
- Roll newspaper into a donut, tight ball or mushroom shape.
- Place paper and wood scraps in firebox and position coke around the fire pot.
- Light the paper and crank the blower gently until the wood kindling catches.
- Cover the burning paper and wood with coke and mound green coal around the burning fire. If fire does not light, stop air supply - remove all coal (coke) from fire box- and start over.
- Shutting down the fire
  - Stop the air supply and push back all coal from fire.
  - Remove coke from firebox and set at the side of the forge for the next user.
  - Remove clinker and push to far side to cool.
  - Empty the firepot and dump ash gate in order to minimize corrosion.

#### Gas Forge

- Bring your own tank and take it home with you when you leave: **there will be no storage of propane tanks in the shop.**
- Open the gas forge door.

- Ensure that the gas valve on the top of the forge is closed.
- Open the tank valve.
- Open the valve on the forge until you can hear gas hissing, then quickly press sparker on top of forge several times until gas ignites.
- Close forge door slowly.
- Turn up gas slowly using the regulator to the proper setting for your work (generally between 5 and 15 psi).
- CAUTION: Heat comes from every orifice in the forge.

#### **Belt Grinder**

When using the grinder, wear safety glasses. Check the condition of the belts before every operation. If there are any visible signs of damage it should be replaced immediately. Keep metal cool by quenching it in water at intervals. Always clean up the area after you finish grinding or sanding.

#### **Angle Grinder**

Check the condition of the grinding wheel or disk every time: if there are any visible signs of damage it should be replaced immediately. Be aware of sparks generated by the grinder and be sure they're not directed at anyone or anything that could be damaged.

#### **Drill Press**

Properly secure your work before you start. Use cutting fluid when drilling metal to extend the life of the drill bits. When finished clean up your metal filings.

#### **Arc Welding**

*Only members checked out on the arc welder are permitted to use it. Welding masks and gloves are mandatory. Ensure there is adequate safe space, free from people and flammable material when welding. Sound off "Welding" when you are striking an arc.*

#### **When Leaving the Shop**

Dress all bars and put steel away.

Put away tools and lock tool cabinet.

Sweep floors, and clean up debris inside and immediately outside of the forge.

Empty the trash receptacle.

Close and bolt windows and shutters and lock side doors.

Turn off the lights.

Lock up and spin the wheels in the locks.

Carry trash bag out of the park by taking it home. Do not place Guild trash in the can at parking lot.

If anything is broken or in need of repair please contact Forge master or any board member.

Tools needing repair should be placed in the repair tool basket.

#### **VIOLATIONS**

Violations of Shop Rules or Protocol will be brought to the attention of the Shop Master, officers or board members. A board meeting will be called to determine the consequences of the violation.