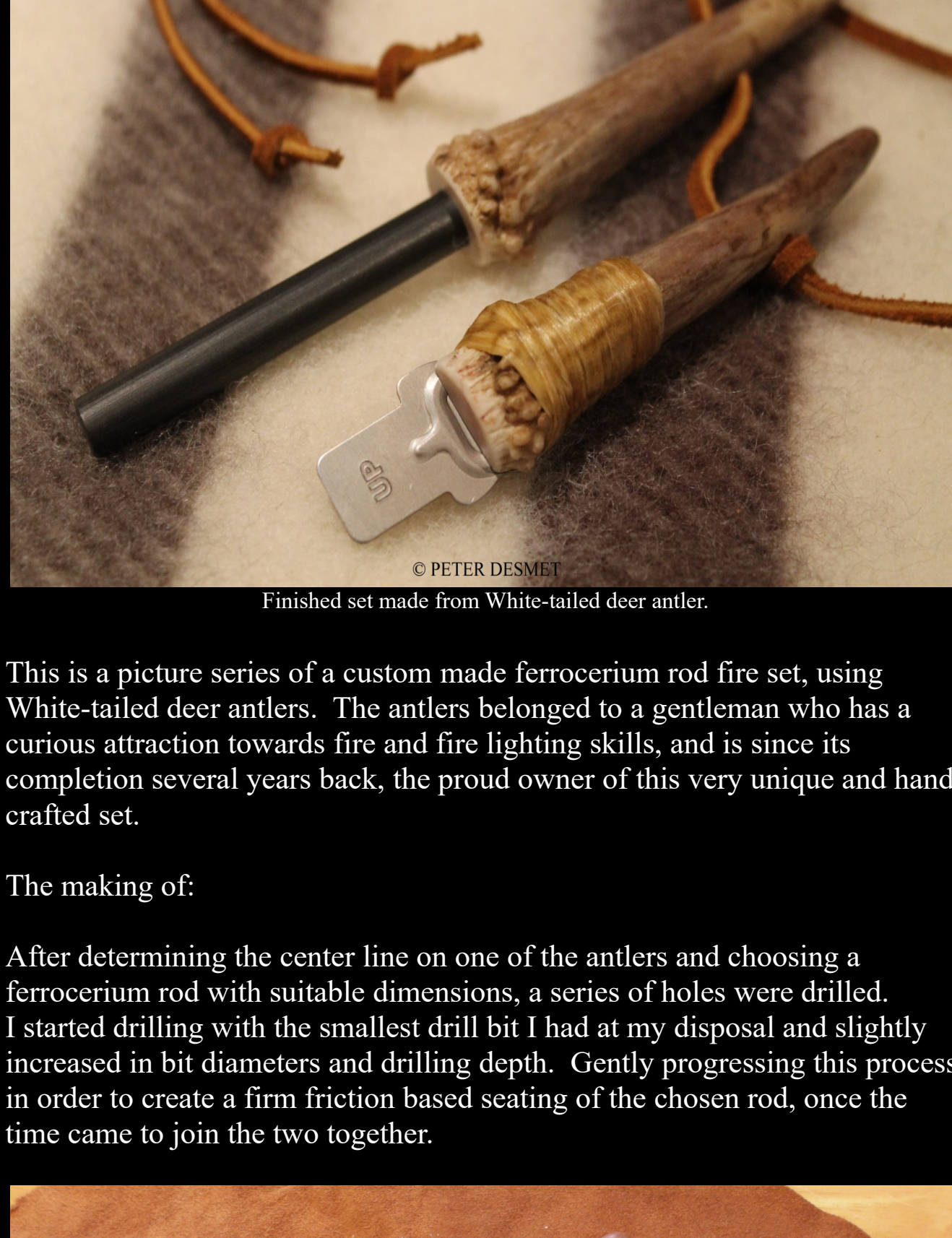


Custom Made Fire Steel Set



Finished set made from White-tailed deer antler.

This is a picture series of a custom made ferrocerium rod fire set, using White-tailed deer antlers. The antlers belonged to a gentleman who has a curious attraction towards fire and fire lighting skills, and is since its completion several years back, the proud owner of this very unique and hand crafted set.

The making of:

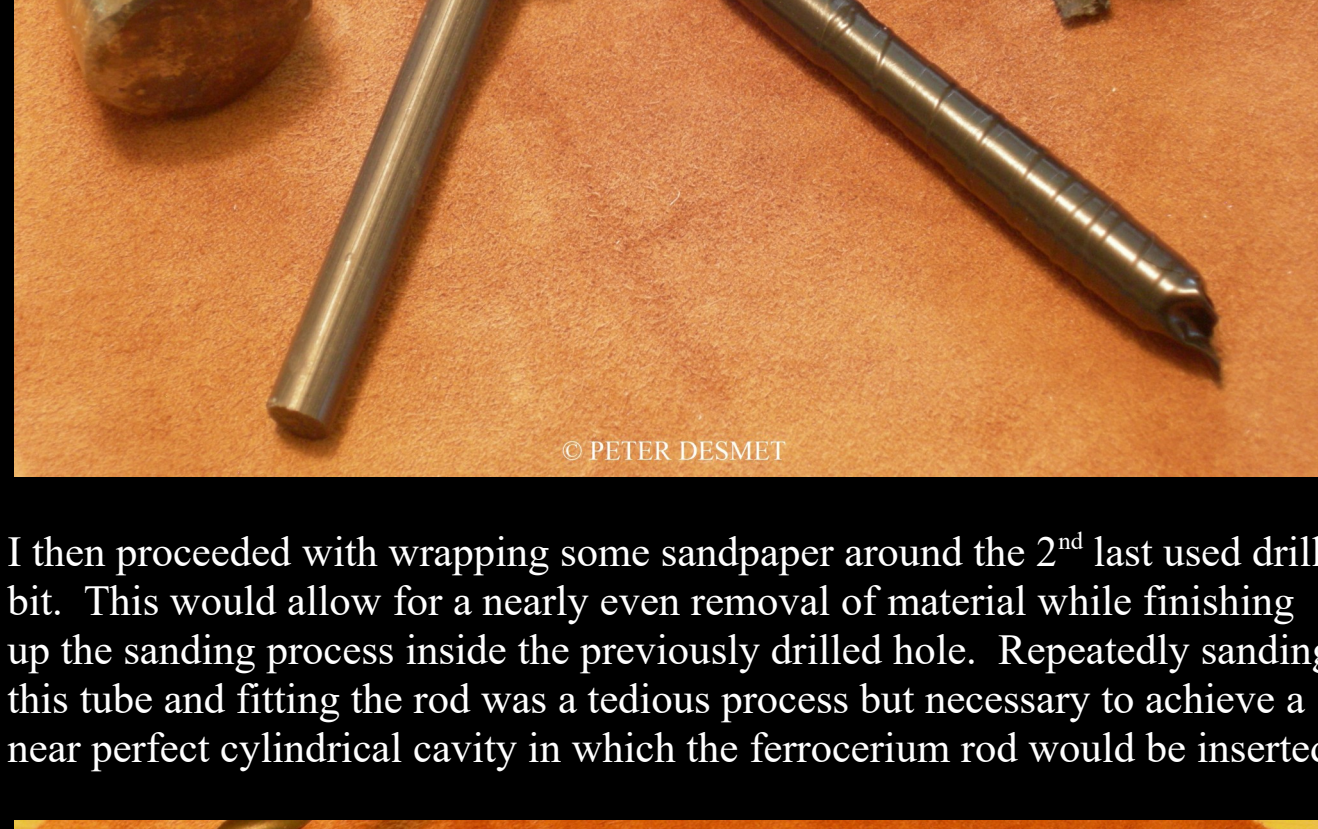
After determining the center line on one of the antlers and choosing a ferrocerium rod with suitable dimensions, a series of holes were drilled. I started drilling with the smallest drill bit I had at my disposal and slightly increased in bit diameters and drilling depth. Gently progressing this process in order to create a firm friction based seating of the chosen rod, once the time came to join the two together.



After finishing the first stages of the drilling, it was time to clean off the antler around the base and remove little bits of dirt and the small patches of fur that were attached to it.



With increasingly finer grits, the base of the antler was sanded down to a semi-polished surface and made perpendicular to the center line of the antler. This way the ferrocerium rod would come out relatively straight when seated. A fine file was used to break the edges of the base after sanding and then polished.



Using a bit of electrical tape to prevent any scratching on its surface, an existing fire rod grip was taken off with a couple of hammer blows to the handle itself.



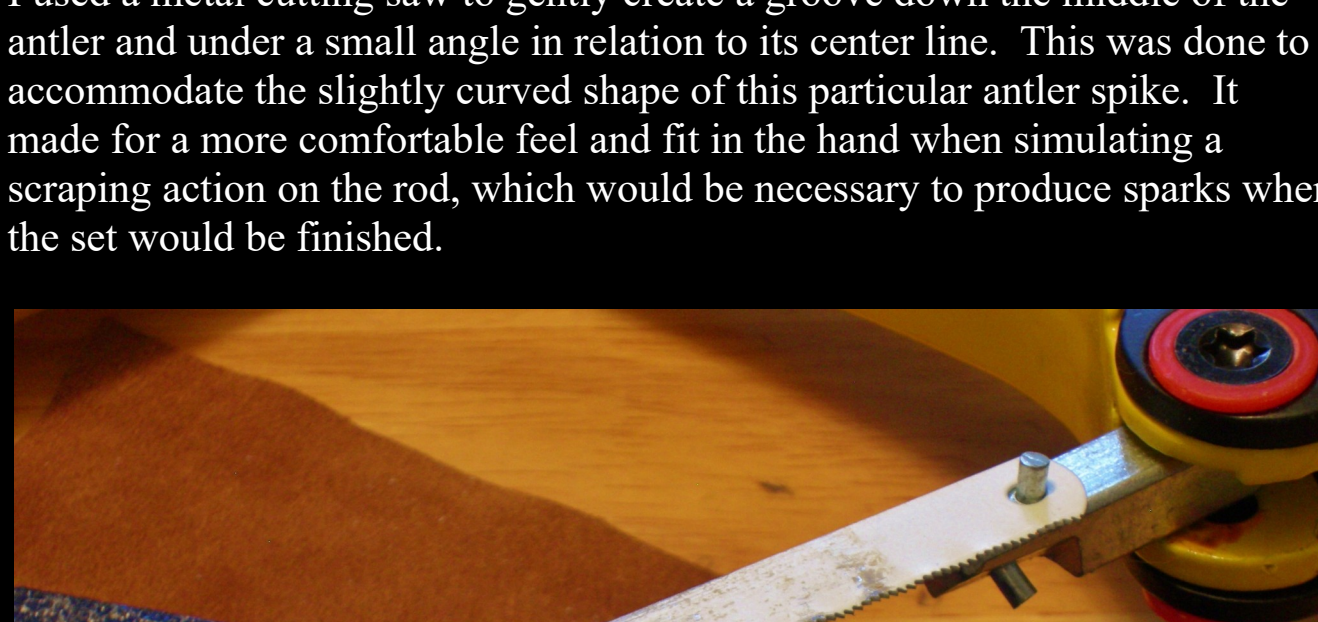
I then proceeded with wrapping some sandpaper around the 2nd last used drill bit. This would allow for a nearly even removal of material while finishing up the sanding process inside the previously drilled hole. Repeatedly sanding this tube and fitting the rod was a tedious process but necessary to achieve a near perfect cylindrical cavity in which the ferrocerium rod would be inserted.



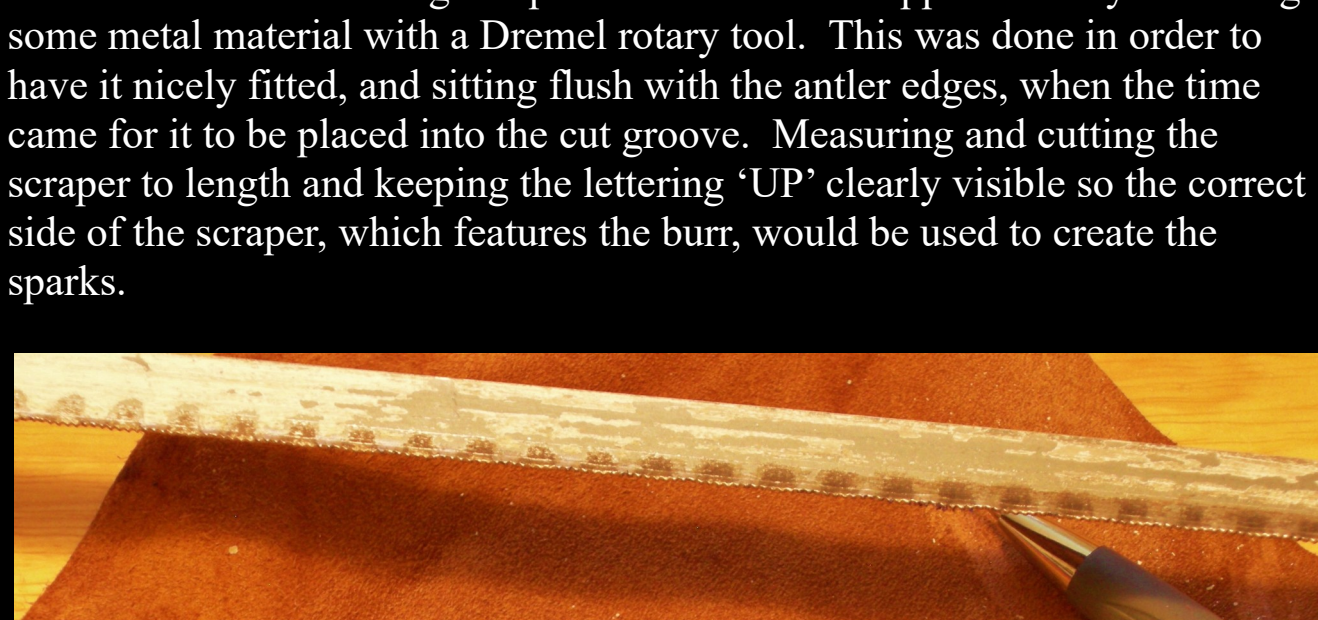
Once the desired friction between rod and antler was achieved, the rod was tapped into place without using tools so it would not get damaged. The end result of this process meant the ferrocerium rod would be held in place by pressure and friction. This would make it easier to replace the rod at the end of its lifespan, in comparison to being glued in place. One would have the ability to pull it out of the cavity using a pair of pliers or, in the event of a break, drill it out.



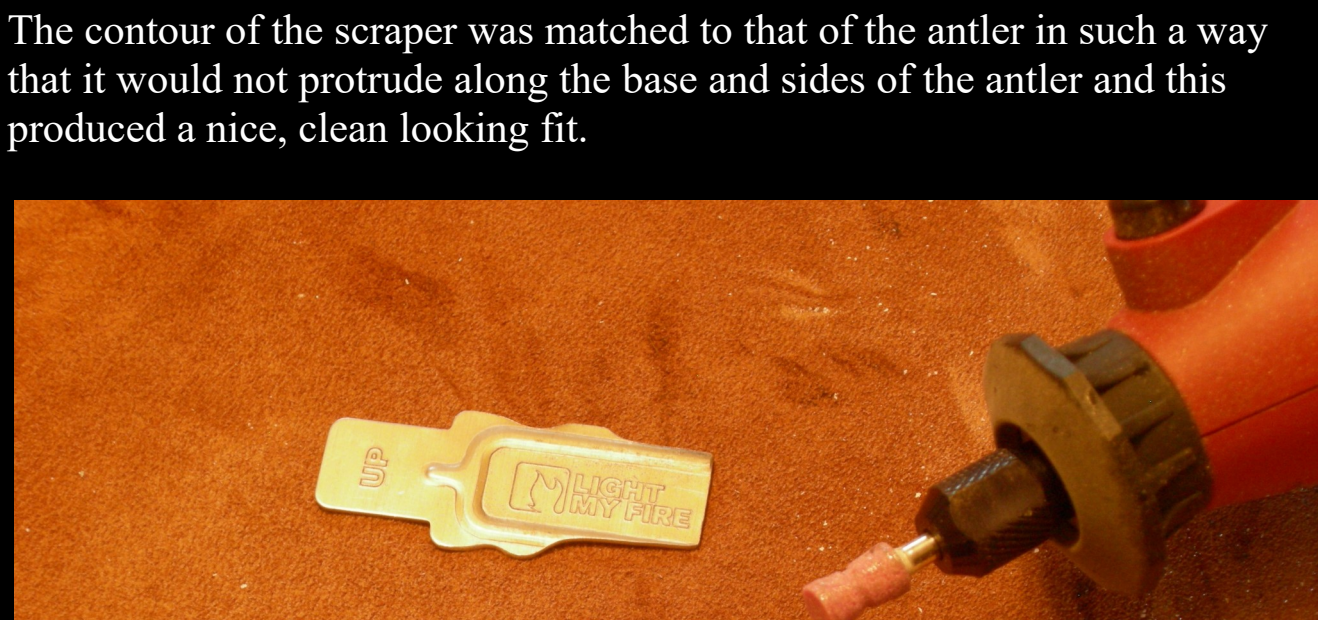
Having completed the ferrocerium rod part of this matching antler set, the other antler spike got cleaned up, prepared and sanded like the first one.



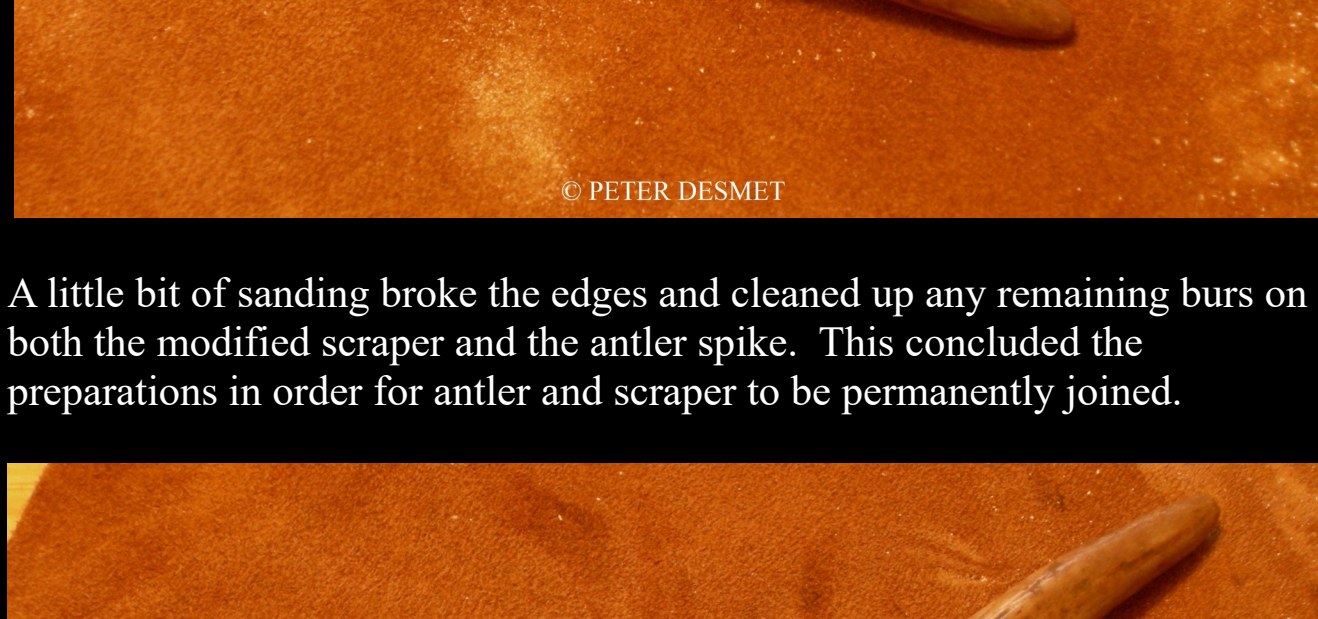
I used a metal cutting saw to gently create a groove down the middle of the antler and under a small angle in relation to its center line. This was done to accommodate a more comfortably curved shape of this particular antler spike. It made for a more comfortable feel and fit in the hand when simulating a scraping action on the rod, which would be necessary to produce sparks when the set would be finished.



I then selected an existing scraper and modified its appearance by removing some material with a Dremel rotary tool. This was done in order to have it nicely fitted, and sitting flush with the antler edges, when the time came for it to be placed into the cut groove. Measuring and cutting the scraper to length and keeping the lettering 'UP' clearly visible so the correct side of the scraper, which features the burr, would be used to create the sparks.



The contour of the scraper was matched to that of the antler in such a way that it would not protrude along the base and sides of the antler and this produced a nice, clean looking fit.



A little bit of sanding broke the edges and cleaned up any remaining burrs on both the modified scraper and the antler spike. This concluded the preparations in order for antler and scraper to be permanently joined.



Because of the forces applied upon ferrocerium rod scrapers while in the process of crating sparks to ignite tinder materials, I chose to glue this modified scraper in place. This gave it some extra strength and stability, helping to prevent the scraper from ever being forced sideways or coming out of the groove all together.



I finished the scraper part of the fire set by wrapping artificial sinew around the antler from just above the base towards the tip, covering up most of the cut groove and providing additional support to keep the metal piece in place.



With the scraper now securely in place, two lanyard holes were drilled into the ends of both antlers. A leather string was pulled through both tips which created enough length to comfortably scrape the ferrocerium rod for sparks, while keeping both tools together.



A final picture of the finished set, taken a couple days before it changed hands. The gentleman was pleasantly surprised and delighted with his custom made fire set. I hope this gift has served him well over the years and that the sparks created with it started many warming fires on chilly evenings, providing him and his companions with precious memories of their times spend in the outdoors.