# **More About Combat Touring Boots:**

## Deeper info for Nerds and Others who (for whatever reasons) have to know.

CTB's are deliberately 'old school'. That means they are simply constructed, and use as few separately sewn parts as possible. They are also fully leather lined, are made from stiff thick leather, and are resolable.

This means that if you begin with a good CTB fit (a CTB foot bed length that's correct from toe to heel, and a volume-reducing sizing insole if needed), then after they are broken in and have been treated with a leather dressing, they will give your feet solid support, all-day comfort and strong protection which should last you a very long time.

Questions about the CTB's various design features and compromises include:

# - No Gore Tex (or any other) waterproof/breathable technology?

We wanted an old-fashioned full leather lining, which is soft, comfortable and durable. This feature is incompatible with the Gore-Tex (and other) boot and shoe waterproofing techniques. All of those types use a thin sock-like membrane, separate from the boot, inserted between some kind of fabric lining and the outer boot during the manufacturing process. Companies making breathable/waterproof inserts feel they don't work well in between leather linings and outer boots.

To us, leather linings feel much better than fabric linings, and they last a lot longer, too. Our priorities are foot comfort, durability and breathability. With modern boots (and athletic shoes) it's fairly common for the knit (or nonwoven) fabric lining to wear out long before the outer does. In addition, leather linings definitely are much easier to slide one's feet into, and out of. And for walking, there's less hotspots due to sock friction, too.

What about waterproofness and breathability? First, no brand or version of this type of heavy leather boot actually 'breaths' very well, despite many marketing claims to the contrary. What happens when one's foot sweats inside a boot like this is moisture vapor is absorbed into the lining, where it becomes a liquid. Then it moves through the leather toward the outside of the boot and evaporates as it reaches the outer surface...If it's not raining, anyway.

The main difference between a leather lining and a fabric lining is how quickly the boot dries out after one takes the boots off at the end of the day. Leather lined boots dry slower. For me (...and most other riders) this means my CTB's are still always completely dry by morning, if I take them off just before falling asleep. But if you have feet that sweat a lot more than average feet, fabric lined boots might be better.

Waterproofness is a different story. Everywhere there is a needle stitched hole, water can get inside. Lots of boots these days feature complex designs made of many separate types of leather and other materials. But because CTB's use so few separate pieces of leather, there are not too many needle holes in the first place. Those that remain are not located in particularly vulnerable locations, either. And if one does want to hand seam seal the stitches anyway, we sell a nice kit for doing that.

The CTB's leather itself is quite waterproof, even when brand new. The unique tanning process for this leather includes a step that infuses **Polyurethane**, an organic polymer chain, into the hides to help them better resist structural degradation and wear. This also provides tremendous water-resistance, especially compared to all traditional oil-tanned leathers. If you occasionally treat your CTB's leather with a dressing (Sno Seal, Pettards, etc.), especially on the fold creases, you end up with a tough, protective leather around your feet, flexible where needed and lined with soft comfortable leather that will provide good service for a long, long time.

## - Type of sole?

All CTB's use an old-school stitched on welt. There's a couple of rows of heavy stitching around the entire perimeter of the sole, which means this boot can be resoled many times. It also means the boot is stiffer, more difficult to manufacture and takes slightly longer to break in. Molded-on soles are now a lot more common because they are so much easier and less costly to manufacture, and require a little less break in effort. We wanted a boot that would last a long time and which could be resoled as needed. Molded soles cannot be replaced. When they wear out, you have to throw your boots away.

# - No shin pad?

Serious off-road competition boots include an armored hard plastic shin guard, to protect your shins from rocks being roosted by other bikes close in front of you. Larger sized roosted rocks really hurt without such added protection. A long time ago these guards were actually made of metal.

General-purpose and 'adventure touring' riders are seldom so close or directly behind (...and trying to pass) other bikes being aggressively ridden, so hard shin armor is not needed. It just adds a bunch of extra bulk, weight and complication. Looks scary and gnarly, but is basically useless unless you are racing.

The first prototype pair of CTB's did have a foam shin impact pad behind the opening flap gusset, but it was a little bulky, so it was deleted for the production CTB's.

# - No buckles on upper boot shaft?

CTB's are held to your foot by a buckle across the instep and a short speed lace system that goes up the front of the shin, just behind the front outer boot. This speed lace system is fast, lightweight, reliable, simple and easy to use. Since the outer front part of the boot is only there to protect from weather, minor impacts and abrasions...and doesn't hold the boot in place on your foot, why use heavy, bulky, complex buckles there? The speed laces beneath the outer flap provide a better fit with less weight, complexity and bulk. And the non-buckle festooned boots also wear better and easier beneath pants, too.

# - Hook and loop durability?

Hook and loop is lightweight and more durable than some would admit. It's been engineered for tens of thousands of closures and peels. Since it's so light, low-profile, doesn't carry a load (see speed laces, above) and if ever needed is easily and inexpensively replaced by any cobbler, it's the perfect closure solution for this application.

Experientially, we've seen hundreds of old and well-worn CTB's but only a very few of these have shown any evidence of functionally worn-out hook and loop. The hook and loop durability 'problem' is a lot more theoretical than actual, thanks to a few otherwise well-meaning internet forum and journalistic 'experts'.

## - Fuzzy speed lace cord?

Yes, the inner speed lace cord does get fuzzy and catch on the hook that is located on the backside of the CTB's upper front flap. Especially if one doesn't tuck in the extra cord away after cinching the laces with the cord lock. Still, it takes a long time before this cord becomes fuzzed up to the point it needs to be replaced for functional reasons.

All sizes of CTB's come with the same length inner cord. This means if one wears a smaller size there can be a lot of extra cord to deal with. I wear about a size 9.5 and remove (cut off and melt the ends) about a fourth of this cord. Then I knot the two ends together. Still gets fuzzy, but otherwise is much better now.

#### - Difficult break in?

Yeah, yeah, Ok, ok ok. This is a simple consequence of having a stitched welt and thick water resistant PU (polyurethane) impregnated leather...and so few separate pieces of leather. There are no flex gussets of thin pleated leather or fau-leather anywhere. So uh, respectfully, suck it up, cupcake. I hate breaking in a new pair for myself, too.

Break in procedures are discussed elsewhere, but basically you want to wet or otherwise lubricate the leather in the areas of the boot that flex as your ankle articulates, then walk around for a while until natural folds develop in these areas. Then, after the boot dries fully, apply a leather dressing to these areas to provide continuing lubrication. As you wear the boots they will get better and better.

#### - Weight?

Another ugh. Yeah, they are comparatively heavy, but the CTB Lights are a bit lighter. And you do get used to the weight after a few days of wear. Who needs stronger leg muscles? You do. Modern boots with thinner leather, molded soles and lots of delicate detailing are all a little lighter. It's your choice.

### - Fit?

CTB's are lasted for European men. They have a comparatively small toe box, and a wide-ish, roomy heel. Maybe about a 'd' or an 'e', width-wise. It's critical to have enough foot bed length so your big toe doesn't bump into the front of he boot at each step. If that's ok, the rest can almost always be adjusted with sizing insoles.

I wear about a 9.5 B in a men's shoe, and have a relatively low-volume foot. 'Girl-feet' you could say. To adjust for this I use a medium thickness sizing insole on top of the original CTB removable insole. This takes up most of the un-needed volume and give me a nice arch and rounded heel cup for my 'B' width. The rest of my fit is done with the adjustable instep buckle and speed lace system. So my CTB's feel custom-made, even though they didn't start that way.

Others use sizing insoles in place of the standard CTB insole, not on top of it. And there are two different thicknesses of sizing insole to experiment with. One CTB wearer went even farther, cutting away the front third of the standard CTB insole and covering it with one of the thinner sizing insoles, to make a bit more room in the toe-box area for the ball and front of his foot. Lastly, everyone is either right or left 'footed' just as we all are right or left handed. If one is are right footed, that foot will usually be slightly larger than the left. A few layers of duct tape or any not-very-compressible absorbent material can be placed in areas beneath only one of the insoles to create a truly superior side-to-side custom fit. Now you know.