## Footbeds, What Should We Expect?

## Tech Articles

This information on boot design "The raised heel puts your knees forward so you can sit back without losing your balance," leads beautifully in a not very obvious way, into the next article which is on footbeds, or if you like foot orthotics. This article should at least be as contentious as anything I have written on binding position, so it can probably substitute for your morning coffee to wake you up.

Why the mysterious lead-in? Because it shows beautifully how perceptions over years, can be altered by rationalization. Certainly rationalization can be a powerful ally, especially in the hands of a presumed expert.

Is the statement concerning heel elevation correct? I'm not certain, but can say with certainty that most people would consider the statement's author to have enough knowledge to be worth paying attention to.

The quote is about what we now call ramp angle. Extra ramp angle is thought to help skiers, especially women, stayforward according to many manufacturers. The idea seems diametrically opposed to the earlier statement. If ramp angle really is meant to hold you up when you lean back, how did we get to the current point-of-view?

I suggest two things are possible. First, the ski industry has done research to show that elevating the heel, helps people stay forward. Or, that the real purpose has been lost over the years and the new idea is simply a matter of marketing and rationalization. In my search, I've been unable to find evidence of existing research by ski companies.

The same kind of progression seems to have taken place around footbeds. There are those that would have us believe, "Footbeds are essential to good skiing!" I remember an article published last season on a local ski website. The author, a freerider from Whistler/Blackcomb had just received footbeds from a Whistler shop. He went on to rave about how he had never experienced a more awesome day on skis. Immediate ski response, superb boot feel and all wrapped in a little package made by someone in a ski shop trained by the footbed manufacturer. If it sounds like a little magic pill, I'm right there with you. And I sell and make custom footbeds.

To understand reasonable expectations you should remember that footbeds were designed and re-

searched as treatment for a variety of medical maladies (plantar fasciitis, ilio-tibial band syndrome, shin splints, etc.). that were thought to be caused or related to abnormal foot movement (most often excess pronation) during gait. I have been unable to find any evidence they alter foot position in boots. As a matter of fact, I was able to find only one published study and it found theyhad no effect. But most importantly, there is no evidence that an altered foot position is necessary for most people.

Reasonable expectations are that you will be more comfortable. From years of living in shoes we have become accustomed to feeling some support in our arch. This isn't necessarily the way the foot was meant to function, but it is what we expect. So a good pair of orthotics may make you more comfortable, and if properly made may not interfere with foot function. Improperly made (too much arch support or rigid arch support for example) may actually hinder skiing.

However, on a limited budget if the goal is too ski better, easier and more balanced, then money could be better spent elsewhere. Boots are often to close in the ankle for the foot to move properly when turning. Locked feet inhibit balance. Have it fixed! Very inexpensive. Too much ramp angle may cause you to sit back all the time, or at the very least force you to fight to get forward. The fix is more involved than ankle punches, but a good boot fitting shop can easily handle it. Probably also less expensive than footbeds. Cuff alignment is very important, and most skiers never have it properly set. Find someone to do it properly. In my opinion the best way is in boots, on a digital pressure mat. Adjust the cuff so under boot pressure is similar in each boot and you go along way to correcting right/left turn differences. Finally, get binding position correct for you, not for the factory and you will actually be able to relax on those ski me aggressively forward or die skis. Any of the above for the average skier are probably more important than footbeds.

<sup>1 /</sup> Lou's Tech Articles / Footbeds, What Should We Expect / www.lous.ca