

Extra ramp angle could help a woman lean forward, I recently read. Of course, this article was perfectly timed to solve the mystery, reported on UPI, concerning the spate of women on flat soled sandals unexplainably falling over backwards everywhere around the world. Timing is everything and the articles author certainly deserves credit. One has to wonder though, why evolution and natural selection haven't just given us a whole flotilla of women with naturally occurring elevated heels. Since everyone I know lacks this built-in solution, maybe we should take a look at ramp angle function.

Probably, some ramp angle forces us to assume a slightly bent knee, ready athletic position. The tensed muscles necessary to maintain this position are more quickly able to respond to changes in balance and terrain. But, since we have a fairly small range-of-motion in which we feel balanced when standing, too much ramp angle may force us to move our upper body backwards to counteract the forward thrust of our lower legs. With the increased ramp angle automatically built into short boots and the angle built into many bindings, it is possible to have eight degrees or more of total angle. Currently, we don't really know the most desirable range, because there hasn't been any published research by the ski industry.

What I do know is this; David MacPhail of Whistler has found that 3-4 degrees is the correct amount for most skiers, male or female. For those of you that don't know David, he worked on boot fitting with several national team members in the early '80s. He has designed a boot and more than anyone I know, can speak scientifically about the parameters of ski boot design and their effects on human balance and function.

This past season I experimented on several customers and myself. Included were several local jr. competitors, a female ex-national team member, an instructor and a few recreational skiers. I reduced ramp angle by either grinding the heel of the boot board, using a fore

foot shim or a combination of the two. With the exception of one instructor, all preferred skiing with the ramp angle reduced.

Typically, they said they could stand more upright and relaxed, and could get pressure to the ball of their foot sooner. So, while ramp angle may not be the only tool needed to solve a skiers balance problem. Changing it may be part of the solution. The problem with this system is immediately obvious.