Understanding Snipe

Well after dark, go into the woods with a big burlap bag and wait...

Understanding why thickness planers often cut too deeply at the beginning and end of a board probably isn't as much fun as sending a young'un out on an old fashioned snipe hunt, but it might be more satisfying in the long run because there really is such a thing as planer snipe (trust me!) and you really can get it under control.

Snipe occurs mostly at the infeed end of a planed board and (usually) to a lesser extent at the outfeed end. The board is cut too deeply for the first few inches, then abruptly ramps up to nominal thickness and stays there until the last few inches. Now, this might sound too obvious to be worth mentioning, but stick with me: the planer's cutterhead isn't somehow moving itself perversely closer to the bed at each end of a board because it wants to torment you. Instead, the wood must be moving itself closer to the cutterhead in order to get cut too deeply. You've probably noticed that snipe always stops after a few inches when the planer's second feed roller comes to bear on the wood, pushing it down firmly onto the bed to maintain consistent thickness. Controlling snipe, then, requires nothing more complicated than keeping the stock firmly on the planer bed at the beginning and end of the cut. (A couple of marketing departments out there want you to believe that a cutterhead height lock will prevent snipe, but they're just whistling in the dark. Such a claim makes the bizarre assumption that the cutterhead would flop around randomly unless locked—an unusual design feature, to say the least.)

Why would wood lift itself into the cutterhead whenever only one feed roller is holding it down? No, the wood doesn't want to torment you any more than the cutterhead does. Simple leverage accounts for the phenomenon at least as well as the malevolence of the inanimate. If you do not fully support a board moving into or out of your planer, the free end drops, lifting the other end as it passes beneath the cutterhead. This lifting force is compounded by the action of the planer knives. As they sweep through a cut they contact wood only through the forward part of their arc, imparting back pressure and lift. Thus passive horizontal board support may not suffice; you need actively to counter the cutterhead's lifting force as well.

There's an old saying for this situation: fight leverage with leverage. As you start a pass through the planer, lift the trailing end of the board with a few pounds more force than its weight while pressing the leading end firmly onto the planer bed. Force the wood to stay flat and firm on the bed until the second feed roller takes over the hold-down job, and then continue to support the board's weight until it's close to balanced. Move to the outfeed side and repeat the process to complete the pass: apply just a little positive lift under the lead end and press the trailing end flat as it rolls out from under the infeed roller.

With a little practice, you can reduce snipe to a mere burnish mark that can be scraped or sanded out in a few seconds, with no need to sacrifice valuable board footage. Perhaps a planer with two infeed rollers, two outfeed rollers and eight foot in and outfeed tables could eliminate snipe for you. Until somebody builds such a thing, and until you're ready to pay for it, try controlling the wood yourself. It works—trust me!