

Outdoors

Vertical wind will give you away

Currently Outdoors



John Wootters

any hunters who snipe their deer from elevated stands seem to believe that elevation alone makes worrying about wind superfluous. (Those who don't know enough to worry about wind direction and force anywhere, anytime, may stop reading right here, because what follows will probably only confuse them.)

"Wind" means air flow, and at first glance would seem to refer to the familiar horizontal air movements caused by — well, whatever causes wind ... "frontal passages" and "highs," "lows" and other such mysterious weather-guy lingo.

There is, however, another and entirely different component to air movement: up and down. It's especially important that high-stand hunters be aware of this vertical movement.

How often have you heard a puzzled hunter declare that the "big buck was coming straight to me when all of a sudden he threw his head up and ran like the devil, just like he'd smelled me ... but he couldn't have; there wasn't any wind at all. It was flat calm!"

The devil he couldn't! The frustrated hunter was probably betrayed by vertical air movements, correctly called "thermals." A timely thermal has prolonged the life of many a whitetail buck — including several that I was trying to kill at the time.

The word "thermal" refers to heat, of course, and heat — or the absence of it — is what drives vertical air currents. In a nutshell, hot air is less dense, lighter, and rises; cold air is denser, heavier, and sinks.

Trick question: At sunrise on a cold, dead-calm morning, in which direction is a



Photo by John Wootters

Climbing into an elevated seat may offer a better view and reduce, somewhat, the likelihood of nearby deer noticing or scenting the hunter, but elevation alone cannot protect him from detection by scent ... especially when there is little or no wind! See text for an explanation.

deer most likely to smell you? Answer: Southeast, no matter where in the country you're hunting. Explanation: As the rising sun's rays advance across the landscape, they warm the air they touch. The warm air rises and the adjacent, un-warmed, air at ground level flows in to replace the rising warmer air, resulting in an almost imperceptible but measurable drift of air towards the rising sun in the southeast. This is why it always seems to get colder just before the sun rises. The effect only lasts for a few minutes but there's another factor to consider.

For maybe an hour you've been sitting there on your perch, getting cold, waiting for the sun. During that time,

the cold air in which you're shivering has been steadily sinking, carrying your scent with it. If the morning was truly dead calm as specified above, your scent will have pooled at ground level directly below you. The longer you've been sitting there, the larger and deeper this invisible scent pool will be. The slightest movement of air — such as that thermal southeasterly drift just as the sun arrives — can cause the scent pool to flow in that direction, perhaps carrying it to the sensitive nostrils of a buck.

At the first kiss of the sun's rays, however, thermal movement reverses and the now-warming air about you begins to rise, carrying your scent upward and away. At sun-

down on a cold, still day, the thermal reverses again, and the air around you begins to sink and bear your scent toward the earth, where it will pool, etc., etc.

There's more. In our hilly local terrain, scent pooling beneath a stand can actually flow downhill and pool again in a low spot at some distance ... or even flow downhill around a corner to warn deer you can't even see! Fortunately, these things can only happen in flat calm conditions, but dawn and sunset are usually the calmest periods of the day and also when game is most likely to be moving.

It's useful to imagine your scent as moving as a coherent, fluid body, wherever wind, thermal action, and/or gravity may take it. That's actually a radically over-simplified model of scent dispersal, but it gives a hunter a quick-and-dirty way to guess, at least, how wind may affect his immediate chances.

John Wootters is a semi-retired outdoors writer with more than 30 years experience. He was editor of Petersen's Hunting magazine and author of the monthly column "Buck Sense" and has written the all-time best selling book on deer hunting, "Hunting Trophy Deer." He has served on the Board of Directors of the National Rifle Association, and written for Shooting Times, Rifle, Handloader, Guns & Ammo and Petersen's Hunting magazines.