



Much less famous were the Salem ski trials.

## DROPPING THE GLOVES

# MYSTICISM VS. METEOROLOGY: DO PRAY-FOR-SNOW RITUALS WORK?

A discussion between a believer and a scientist.

### YOU BETTER PRAY

BY ALEX HEARD

For years I've been involved in a preseason snowmaking ritual called Mosnowbra. Its aim is to encourage snowfall in the sometimes parched ski mountains of northern New Mexico. It relies on a heady mix of alcohol, chanting, worshipping a creepy little snowman statuette, and an uphill hike in frigid darkness. The hike is crucial because it weeds out the anal-retentives who think events like this are a waste of time.

That's about all I can tell you about Mosnowbra—except that it may or may not involve shooting Estes rockets into the sky from a secret 11,000-foot location near the Santa Fe ski area. This launch, a literal and symbolic form of cloud seeding, is referred to as “Tickling the Toes of the Snow Gods.”

Skeptics sometimes ask me: Yeah, but is there any scientific evidence that this ritual works?

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### FOLLOW THE FORMULA

BY CASEY FLYNN

As a professional field technician for a weather-observation program, I can tell you that, come winter, forecasting storms is far from easy. The jet stream sinks in over the mountains and starts messing with the weather. Large-scale pressure systems toss air masses around like rubber duckies on rough seas, and it seems as if the will of the gods determines which range will get the first big dump.

I know there are schools of thought out there that believe bonfires, naked dancing, and drunken sacrifice are all it takes to bring Olympus's white Christmas down to us. Keep dreaming, hippies. Why not skip the pretense and just throw a party in the woods?

To be fair, most pray-for-snow types treat their ritual as a mixture of the social and ironic. But to those who actually

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I ask back: Is there any scientific evidence that it doesn't? No. Thus, given the data-fog that surrounds the matter, the thinking man is forced to look at the evidence available to him and gravitate toward belief.

Chaos theory teaches us that a frog sighing in Brazil can set off etheric trembling that eventually causes a blizzard in the Alps. Given that, how unreasonable is it to assume that exploding a rocket amid swollen high-altitude clouds will trigger the magic chain reaction of particles-to-condensation-to-dump? Twice it has started snowing *while* we were Mosnowbra-ing. And once it hardly snowed at all the entire season. But that was the fault of the worshippers, not of the ritual itself. The Mosnowbra Solid-Pow

Dancers got too drunk that year, so they were lazy with their jazz hands during the Sacred Dance of the Licking Flames.

My other pro-Mosnowbra argument is a matter of spirit, not science. Without some public demonstration of faith and folly, ski season just doesn't feel like ski season. The exertion, the booze, the cold, and the, uh, booze...they combine in a magic way that gets me psyched to click 'em on. Which is why we need to ignore meteorology and whatever The Weather Channel says. This month, as chilly winds start to rattle drying alpine leaves, invest faith in the irrational, load a pack with your favorite stimulants, head into the mountains...and make some noise.

*Alex Heard lives in Santa Fe, New Mexico, where it snows when the chakras are properly aligned.*

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think it may work, let us consider communing with the gods in a more reliable, scientific way. As Mark Williams, a professor at Colorado's Institute of Arctic and Alpine Research, has told me many times, three conditions must exist for snowfall: an air temperature of zero degrees Celsius or less, 100 percent relative humidity or greater, and the presence of ice-condensation nuclei. These last little guys can be dust or decaying organic matter upon which ice crystals form in the atmosphere, growing larger until they drop from the clouds as snowflakes. Remove any of these three and all your praying is for naught.

But with the "snow-fecta" in place, look for big frontal systems to haul towering

cumulus clouds your way. Then watch the barometer drop. The oh-so-trustworthy *Handbook of Snow* says widespread precipitation occurs where fronts and low-pressure areas collide. Translation? Get to Alta in mid-February.

So while others march out into the frigid November night to burn skis and make idle sacrifices to the snow gods, I recommend that you and your buddies grab a dark brew, check the weather (The Weather Channel isn't always right—but it's not a bad place to start), and put wax to skis. If the snow-fecta is in town tonight, you're not hoping it's going to snow. You *know* it is.

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