

Odor elimination methods using zeolite-containing liquid sprays and detergent

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ABSTRACT

A regimen for hunting includes using a number of zeolite-containing personal items in connection with a hunter's apparel and body to reduce the hunter's scent for improved hunting. The personal items include mouthwash, deodorant/anti-perspirant, body and boot powder, bar and liquid soap for cleansing the body and hair, laundry detergent and dryer sheets. Each of the personal items includes an effective amount of zeolite, so that use of the personal items reduces the available scent to be detected by animals in the wild. The regimen can also include the use of a seat cushion that is covered with an activated carbon-containing fabric for odor control and/or elimination.

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How does scent-control technology really work?

BYLINE: By, Darren Warner, 9/24/2012

If you're like a lot of other hunters, you're breaking out your hunting clothing or buying new duds in preparation for archery deer season. This year we witnessed an explosion in the technologies used in scent-control clothing. **Manufacturers are putting everything from revamped carbon to synthetic zeolites into fabrics to trap human odors and prevent them from reaching game.** The biggest question I get is whether the scent-control clothing works. **Recently a court decision came down in favor of Scent-Lok Technologies, a leader in scent-control hunting clothing.** A group of Minnesota hunters had sued Scent-Lok over claims made by the company on the efficacy of its clothing. I'll cover this topic in a future column. But suffice it to say that, yes, scent-control clothing goes a long way towards preventing hunters from being winded. The next question I get is, "How does the technology work?" If you're curious, here's how.

Zeolite Technology

Zeolites are naturally minerals formed when volcanic ash reacts with alkaline groundwater. **Ancient Greeks and Romans used zeolite to purify water and treat excrement streams, and North American Indians used it to extend the shelf life of bison meat.**

Zeolite is highly porous, enabling it to capture and hold odors. Today zeolite is used in laundry detergents, to clean aquariums and to treat nuclear waste. In its new Scent Control clothing, Under Armour (www.underarmour.com) chemically engineered synthetic zeolite to target human odors. Encased in each Zeolite molecule is silver antimicrobial technology that stops bacteria - the cause of many human odors - from growing. Silver antimicrobials have no effect on odors. They penetrate the cells walls of bacteria and prevent reproduction. "The result is a one-two punch against human odors," said Eddie Stevenson, owner of Driftwood Media, Under Armour's marketing partner. **"The zeolite traps and holds human odor molecules, and silver prevents human odors from forming."**

Activated Carbon Technology

As far back as 2000 BC, Egyptians used activated charcoal to purify air and water. Today carbon is used for industrial clean-ups, sewage treatment and even to treat poisonings and drug overdoses. **Twenty years ago, Scent-Lok Technologies (www.scentlok.com) changed the face of hunting with its carbon-based scent-control clothing.** This year the company released Carbon Alloy, a technologically-advanced trifecta of odor busting science. **Carbon Alloy starts with activated carbon derived from coconut shells.** Through a process called adsorption, odor molecules bond to carbon particles found in hunting clothing.

"The adsorbing molecules do not change the physical properties of the odor molecules, they just bind them to the carbon," explained Scent-Lok president Greg Sesselmann. Zeolite is then used as a polisher to adsorb ammonia compounds found in human odors. Finally, the carbon is treated with a sodium hydroxide wash that captures sulfur compounds commonly found in human odors emanating from feet and underarms.

The result is super-charged carbon that traps a broad spectrum of human odors.

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