

Scorpion Venom Archery

Have you ever wondered what makes a bowstring wear out? Or a set of cables? Or even just what makes your strings fray?



The answer is friction. Any bow puts tremendous stress on a bowstring. Compound bows put enormous stress on bowstrings and cables, both of which are made up of multiple strands of space-age synthetic fibers. In a sense, each strand, and even each fiber, is a moving part. The strands and fibers in your strings rub together as your bow is drawn and shot, and that results in friction, which leads to wear.

For generations, archers have fought string friction with wax. Bowstring wax became a lubricant and a protective coating. But for as long as it's been used, conventional bowstring wax also created problems. Wax was difficult and messy to apply. In fact, the only way to work it into the strands was to heat it, usually by rubbing the wax and the string to create friction. That friction liquefied the wax but wasn't necessarily good for the string. Conventional bowstring wax also didn't stick particularly well to the string's many strands, didn't coat well, hardened in cold weather, melted in hot weather and attracted and held dirt and grime.

"It can get very cold during the bowhunting season in New York," says both John Dreher and John Logalbo, partners in Scorpion Venom Archery.

"We noticed that the conventional bowstring wax on our strings and cables became almost brittle under such conditions. It flaked off our strings, changing bow

John Dreher & John Logalbo

Mad Scientists of Archery Lubrication

performance and even peep-sight rotation. That, to us, was unacceptable.”

Dreher and Logalbo, who are both analytical chemists by profession, decided to do something about it.

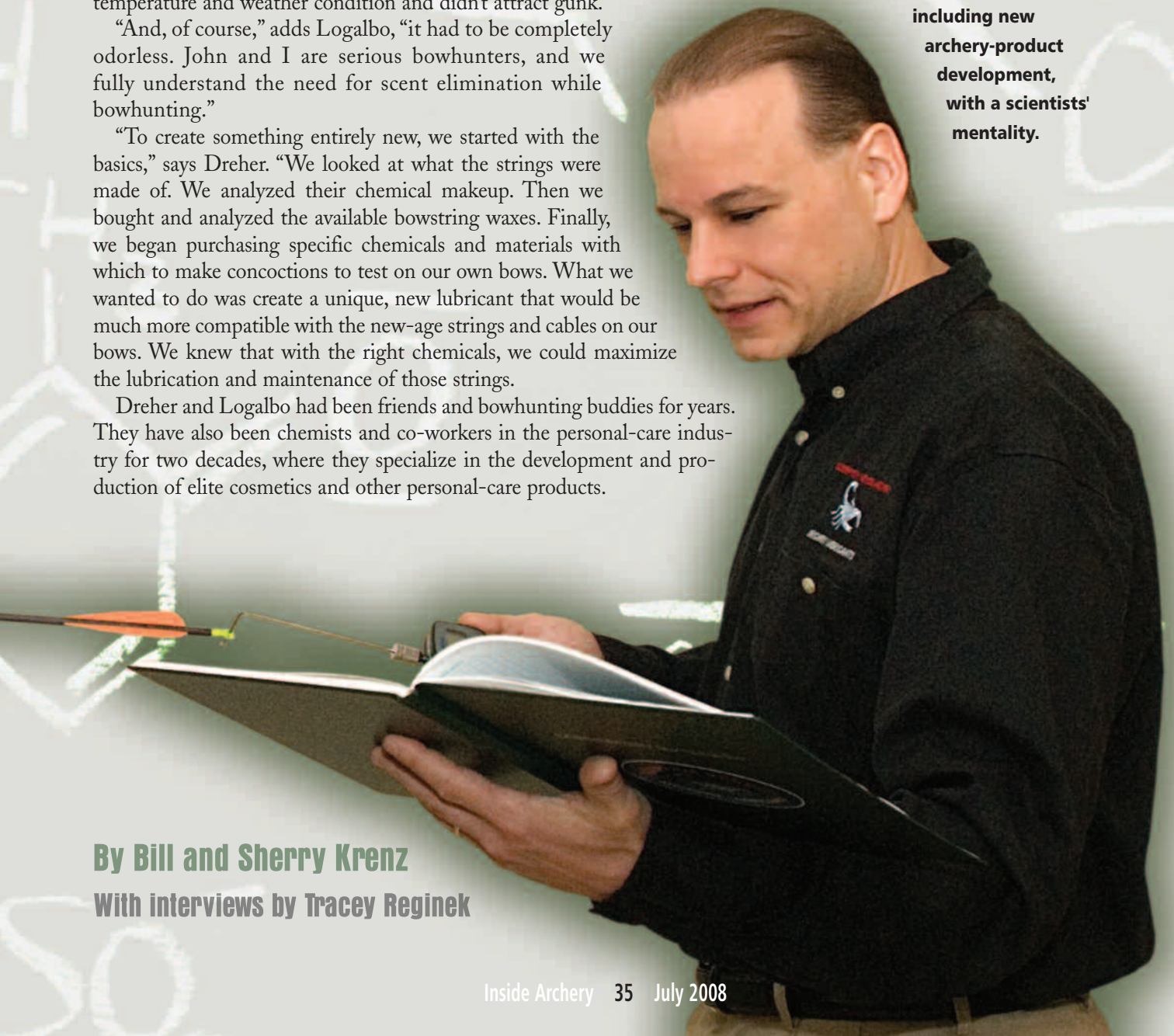
“Sometime in 2003, we simply decided to apply our training and experience to creating a better string lubricant for our own use,” recalls Dreher. “We wanted something that would be easier to apply, penetrated the strand bundle better, coated and stayed in place better, lubricated well at every conceivable temperature and weather condition and didn’t attract gunk.”

“And, of course,” adds Logalbo, “it had to be completely odorless. John and I are serious bowhunters, and we fully understand the need for scent elimination while bowhunting.”

“To create something entirely new, we started with the basics,” says Dreher. “We looked at what the strings were made of. We analyzed their chemical makeup. Then we bought and analyzed the available bowstring waxes. Finally, we began purchasing specific chemicals and materials with which to make concoctions to test on our own bows. What we wanted to do was create a unique, new lubricant that would be much more compatible with the new-age strings and cables on our bows. We knew that with the right chemicals, we could maximize the lubrication and maintenance of those strings.

Dreher and Logalbo had been friends and bowhunting buddies for years. They have also been chemists and co-workers in the personal-care industry for two decades, where they specialize in the development and production of elite cosmetics and other personal-care products.

John Dreher (left) and John Logalbo (right) are bowhunting friends who also happen to be scientists who work in the field of chemistry. They tend to approach everything, including new archery-product development, with a scientists' mentality.



By Bill and Sherry Krenz

With interviews by Tracey Reginek



Scorpion Venom Archery



Top: Co-founder of Scorpion Venom Archery, John Dreher, is a chemist who also happens to be a serious bowhunter. His chemical expertise, along with that of his partner, has enabled the pair to develop a host of revolutionary new archery lubricants.

Bottom: Scorpion Venom Archery co-founder John Logalbo is a chemist and bowhunter who oversees all of the company's purchasing of raw materials, the actual compounding of the Scorpion Venom formulas and the manufacturing of its products.

"Chemistry is chemistry," Logalbo articulates. "The same sort of thinking that goes into, say, a skin moisturizer goes into a string lubricant. The chemicals are different, but the notion is the same. The right chemicals must be combined to achieve very specific effects."

By early 2004, Dreher and Logalbo had developed a revolutionary new string lubricant.

"We looked at the situation from every angle," says Dreher. "And in the end, we developed a liquid bowstring and cable lubricant we called Polymeric Bowstring Fluid. It was completely outside of the conventional archery lubricant box. As a liquid, it was applied to the strings with a foam applicator. Being liquid, it flowed and coated every strand. It also contained an agent that caused it to quickly dry, leaving behind a flexible polymeric coating. We engineered that coating to be waterproof, temperature resistant, odor free and a superb strand lubricant. In addition, the fluid actually enhanced the vibrancy of the colors in multi-color bowstrings and cables, making those strings visually pop. Polymeric Bowstring Fluid did everything better and represented a huge breakthrough. We were very proud to be the first-to-market with this revolutionary product."

In the beginning, the two chemist bowhunters had simply sought a better string lubricant for their own use. But as family members, friends and acquaintances tried and raved about the new concoction, the pair began to think about commercializing the product.

"By April of 2004," Logalbo says, "we had come to the realization that others would want this product, and that we had best start our own company to provide it. In June of that year, we officially formed Scorpion Venom Archery."

"We wrestled over the name a bit. But in the end, we decided that we wanted something memorable with a chemical nature to it. Venom is rather chemical, and a scorpion is wicked. So scorpion venom is a wicked chemical. Fortunately, the name seems to have stuck. Today, archers walk into shops asking for some of that Scorpion Venom stuff!"

"One of the other realizations we came to, based on our years of experience with start-up companies in the personal-care industry, was that to properly position our new enterprise in the archery market, we needed to have more than just a single product," Dreher adds. "With but a single opening product, people would naturally wonder what else we were going to do. We wanted, instead, to enter the archery market as leaders in new-age archery lubricants. We wanted to jump in with a splash and a bang. And to do that, we felt we needed a full line of revolutionary archery lubricants."

The two camo-clad mad scientists went back to the lab.

"Among the many things we had going for us," says Dreher, "were the facts that bows and arrows had become so advanced and that archery lubricants clearly hadn't kept up with the evolution. We decided to remedy that in a big way."

Over the next 16 months, Dreher and Logalbo poured themselves

into the development of additional new lubricants for a broad range of archery applicants.

“In addition to the **Polymeric Bowstring Fluid** we had already developed,” says Logalbo, “we believed that we could dramatically improve upon conventional bowstring waxes, and eventually developed **Scorpion Venom Polymeric Bowstring Wax**. Conventional bowstring waxes used natural beeswax in their mixtures, and the very nature of beeswax meant that it had tremendous variations in its composition and properties. A polymer is a synthetic compound with repeating structural units connected by uniform chemical bonds. Polymers are consistent and predictable. By using such polymers, we were able to formulate a unique new bowstring wax product that was much easier to apply, coated better and was waterproof, temperature resistant and odor free. And, of course, it lubricated archery bowstrings and cables much better. We also worked in conditioning oils of kokum, shea and mango to prevent premature aging and oxidation of the product in tough conditions. **Scorpion Venom Polymeric Bowstring Wax** goes on easier, lasts longer and lubricates better than any other known archery wax product.

“At the same time, we also created a new archery wax formulated specifically for the bowstrings on today’s best hunting recurves and longbows. We devised **Scorpion Venom Traditional Bowstring Wax** to be particularly hardy and tenacious, meaning it works better to hold all the strands together on traditional bowstrings and particularly the Flemish-splice bowstrings that are so popular with today’s traditional bowhunters. It contains no natural beeswax, so it’s much more consistent in its properties and benefits. It’s also a superior string lubricant.”

Logalbo and Dreher had other ideas, as well.

“With use and time, all bowstrings get a bit dirty,” remarks Dreher. “In some extreme bowhunting situations, they can get very dirty. In fact, bowstrings and cables can pick up a surprising amount of dirt and grime, and those substances can become like sandpaper between the strands, substantially reducing string life.

“It took some time, but we eventually developed **Anti-Venom Bowstring Cleaner**. Anti-Venom Cleaner is especially easy to use. Simply apply it to any old or dirty bowstring or cable, and then wipe with a suitable cloth to completely remove old wax (of any sort), lubricants, dirt and grime. Allow the string to dry completely before applying new lubricants. **Scorpion Anti-Venom Cleaner** can transform an old string to like-new condition and in doing so extend the life of that string dramatically.

“We also tackled two other archery areas where lubrication was needed: the cam area on compound bows and the nagging problem of carbon arrows proving difficult to pull from foam targets. We developed **Scorpion Venom Cam and Serving Lube** to be used in a unique way. It’s an archery lubricant designed to be used on any portion of a bowstring or cable serving that comes in contact with the bow’s cams or idler wheel during the draw cycle. Gunky waxes can build up in these

Family is paramount in the life balance struck by both John Dreher and John Logalbo.

Top: John Logalbo is shown with wife Nancy and daughters Caroline and Holly.

Bottom: John Dreher is shown with wife Karen, daughters Madeleine and Paige and son Aiden.





Scorpion Venom Archery



areas and in cam grooves, which can adversely effect bow performance and alter peep-sight rotation. This amazingly slippery and dense lubricant is ideal as a serving lubricant in those crucial areas. It will not build up in any way, and it will not attract dirt or grime. Cam and Serving Lube is also ideal on cables where they pass through cable slides. And it's the perfect new-age archery lubricant for eccentric axles."

"We can send a man to the moon, but we can't seem to develop a carbon arrow finish that doesn't stick tight in a dense foam target," says Logalbo. "So we developed Scorpion Venom **Arrow Release Fluid**. It's a very advanced lubricant for carbon arrows designed to facilitate arrow removal from targets. The finish on most carbon arrows is relatively rough when compared to, say, an aluminum arrow. When that rough carbon arrow penetrates a foam target at high speed, an amazing amount of friction is created, and that friction creates heat. That heat actually melts a tiny bit of the foam and essentially bonds the arrow into the target. Arrow removal, then, can be quite difficult.

"While exploring this phenomenon, we tried all the usual remedies. We tried Ivory Soap on our arrows and Armor All and the variety of conventional products repackaged for archery. None worked to our satisfaction, so we created our own distinct arrow-release formula. Actually, that's a concept that we've adhered to with all of the Scorpion Venom products—we don't just outsource and repackage. We

instead create our own new and very unique formulas. In this case, we developed what is quite possibly the slickest, most tenacious arrow lube ever offered. Scorpion Venom Arrow Release Fluid is a polymeric blend that adheres amazingly well to carbon arrows so that you can get shot-after-shot arrow performance. And it delivers easy arrow removal."

With six brand-new and quite revolutionary archery lubricants in hand, Scorpion Venom Archery was ready to launch itself into the marketplace. It shouldn't surprise anyone that they took a unique approach.

Scorpion Venom began by selling their products on eBay. "That was a test of consumer acceptance," says Dreher. "It was a way to quickly get our products out there and talked about. Consumer acceptance was really quite good.

"The next step was designed to solicit archery-shop acceptance. We selected 500 archery shops scattered all across the country and sent each one of them a box containing samples of every one of our products, product literature and our price list. We packed up those boxes ourselves, and we made a lot of trips to the post office. Then we waited.

"After an appropriate amount of time, we began a campaign of follow-up calls. The results were encouraging. Those who took the time to try the products mostly loved them. The arrow lube really impressed them. Many dealers commented that it lasted longer on the arrows than anything they had ever tried. Others raved about the Anti-Venom Bowstring Cleaner or the polymeric bowstring lubricants. Dealer orders began pouring in."

In just a few short years, Scorpion Venom Archery has indeed made quite a splash. It's almost entirely re-invented archery lubricants, pushing the product category to all-new heights. The company has reams of testimonials from archers and bowhunters in dusty South Africa, frigid arctic Alaska and nearly everywhere in between. It has letters from troops in Afghanistan who swear by Scorpion Venom polymeric bowstring lubes for the bows they use for recreation during their off time. It has dealers all across America and Canada, and in Europe, Asia, Australia, Africa and South America. It's currently working with progressive bowstring manufacturers domestic and abroad.



Scorpion Venom Archery owners John Dreher (left) and John Logalbo (right) have been friends and bowhunting buddies for nearly two decades.

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Yet through it all, Scorpion Venom Archery has remained a small, efficient company owned and operated by two chemists from New York who love to bowhunt.

“We’re still leasing laboratory, manufacturing and warehouse space,” states Dreher, “although we’re close to investing in our own building. John and I oversee everything, and our families pitch in greatly. My wife Karen, who is also an analytical chemist, helps with raw materials, quality control and quality assurance. John’s wife Nancy is wonderful with creative design, invoicing, order packing and even shipping. Both wives have been very supportive and active in the company.

“The toughest thing, I suppose, has been striking a bal-



John Logalbo (left) and Sheldon Schiffman (right) inspect drums of raw chemicals. Schiffman is director of plant operations and manufacturing for Scorpion Venom Archery.

ance that includes our families, the jobs we still both maintain in the personal-care industry and Scorpion Venom Archery. We should probably also add bowhunting in there as well. After all, bowhunting was the reason we got into archery lubricants in the first place. It’s not always easy to keep all of those balls in the air, giving reasonable treatment to each.”

“One top of all that,” Logalbo adds, “we keep developing new products. In 2007, we developed Scorpion Venom Crossbow Rail Lube based on requests and input from various crossbow manufacturers. Crossbow strings typically create a tremendous amount of friction as

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they race down the bow's rail during the shot. Scorpion Venom Crossbow Rail Lube, when thinly applied to that flight rail, significantly enhances shot-to-shot consistency and dramatically increases string life.

"This year, we introduced a Scorpion Venom 3 Star String Maintenance Kit that makes it easier for dealers to stock and consumers to buy the most popular Scorpion Venom products. Included in the kit are Anti-Venom String Cleaner, Polymeric Bowstring Fluid and Cam and Serving Lube. Plenty of savvy archery dealers are already promoting the kit as a necessary add-on item with every new-bow sale, right along with a bow case and new arrows."

It's amazing to think that an archery company was born because of the friction between strands in a bowstring, but Scorpion Venom Archery is such a company. Its two owners, John Dreher and John Logalbo, are bowhunters who saw an opportunity to advance a neglected archery product category, and they used their chemical expertise, experience and creativity to jump on that category in a big way.

Both admit that for years they watched others start creative manufacturing companies, and thought, *Why can't we do that?* Now they have. For more information, Circle #164, log onto scorpionvenomarchery.com or call (531) 495-0806.



One of the things that set Scorpion Venom Archery apart is its expertise in chemical product development and manufacturing. Rather than simply outsource and repackage existing lubricants, Scorpion Venom formulates and then manufactures its own unique and quite revolutionary archery lubricants.