

**EVERYTHING YOU WANTED TO KNOW ABOUT SPIT, BUT
WERE AFRAID TO ASK**

ATHENAEUM SOCIETY

March 1, 2007

By Bob Cope

It's a record at 15.56 meters; a different record at 32 feet, and one half inch; and still another record at 100 feet, 4 inches. There are many more records. The 15.56 meter record is for the Kudu dung spitting distance set by Shaun van Rensburg in 2006. The 32 feet and one half inch record is for the cricket spitting distance set by Dan Capps, from Madison, WI, and was set in June of 1998 in front of a live television audience.

Unofficial records of over 38 feet have been noted at competitions. The 100 feet, 4 inches record is for the cherry pit spitting distance set by "Young Gun" Krause, the son of the prior record holder, "Pellet Gun" Krause.

On November 14, 1960 George Craft, a Mississippi tobacco farmer, worked up a good cut and sent a brown stream 19', 6 inches into a crosswind to win his seventh National Tobacco Spitting title in Raleigh, Mississippi. Said he of his skill, "You can't acquire it. You got it or you ain't."

On August 2, 1993 Ernest Corpus surpassed all expections to win the youth (nine-and-under) division at the World Championship Watermelon Seed Spitting Contest, in Luling, Texas. He defeated 20 other competitors by launching his seed 18 feet, 8 inches.

The common denominator to all of this nonsense is "spit". And the title of my paper is "Everything You Wanted to Know About Spit, But Were Afraid to Ask."

Spit. Drool. Slobber. As body fluids go, writes Irwin Mandrel of Columbia University, “Saliva is not one of the popular bodily fluids. It lacks the drama of blood, the sincerity of sweat, and the emotional appeal of tears.”

But stand back and watch saliva enter its golden era. Scientists now argue that saliva is an elaborate substance that defends us against many hostile organisms. As a diagnostic tool, it appears to have breathtaking potential.

Mandrel started his pioneering research on saliva in the late 1950’s. Back then, most of what people knew about saliva was that it moistens food and contains enzymes that begin to digest it. Now scientists have charted many more components of saliva. Some proteins inhibit the transmission of the AIDS virus; others are critical in allowing friendly bacteria to adhere to teeth and gums, preventing severe infections.

The National Institutes of Health, meanwhile, is exploring the many ways saliva can be searched for warning signs of disease. The basic idea is, why draw blood when a patient can simply spit in a cup? Scientists can study saliva for stress-causing hormones and indicators associated with heart disease, HIV/AIDS, and osteoporosis. And since saliva contains DNA from cheek cells that are constantly being shed, analysts can potentially solve whodunits by examining saliva remnants on licked envelopes or stamps.

Next up, says Lawrence Tabak, head of the National Institute of Dental and Craniofacial Research is “a miniature laboratory on a chip small enough to be inserted in the mouth.” Maybe it’ll be mounted on a tooth. It’ll monitor your saliva and transmit a radio signal about your health. (You can just imagine what else: “She hasn’t been flossing.”)

Saliva does a lot of work for other animals too. In some species of bats, saliva can neutralize the poisons on the skins of frogs. Ticks, leaches, vampire bats, mosquitoes—and any of the other bloodsuckers known to science as hematophages—use saliva as an anticoagulant as they feed on blood. Experiments show that when certain salivary glands are removed from mice, their wounds don't heal as quickly after they lick them. This is apparently because a key component of their saliva is nerve growth factor, which stimulates nerves to close a wound.

And, of course, saliva is a communication tool. We're not talking about the human tendency to connote contempt through flamboyant spitting. In pigs, saliva contains chemicals that signal sexual availability. If you're a swine, drooling can be sexy.

Saliva does all these interesting things even though it's 99 percent water. There's no reason to think it's gross. For gosh sakes, you swallow almost a quart a day.

Saliva is the watery and usually somewhat frothy substance produced in the mouths of humans and some animals. Produced in and secreted from the salivary glands, in addition to water it contains many important substances, including electrolytes, mucus, antibacterial compounds and various enzymes. The presence of these enzymes causes saliva to sometimes have a fowl odor.

The digestive functions of saliva include moistening food, and helping to create a food bolus, so it can be swallowed easily. Saliva contains the enzyme amylase that breaks some starches down into maltose and dextrin. Thus, digestion of food occurs within the mouth, even before food reaches the stomach.

The importance of the salivary protective function can be demonstrated by considering a scenario where an individual is about to vomit. Vomit contains gastric substances which are extremely acidic and will erode teeth. A protective reflex occurs before the individual prepares to vomit. Signals are sent from the brain to the salivary glands via the involuntary nervous system to cause increased saliva secretion, even before vomiting occurs. Thus, when vomiting does occur, there is already saliva present in the mouth acting to minimize the acidity and thus prevent destruction of tooth structure.

In addition to this, saliva is responsible for depositing salivary pellicle that covers the entirety of the tooth surfaces. This thin film is believed to play a role in plaque formation, though there is evidence that it may also act as a protective barrier between acids and the tooth surface.

A common belief is that saliva contained in the mouth has natural disinfectants, which leads people to believe it is beneficial to "lick their wounds". Researchers at the University of Florida at Gainesville have discovered a protein called nerve growth factor (NGF) in the saliva of mice. Wounds doused with NGF healed twice as fast as untreated and unlicked wounds; therefore, saliva does have some curative powers in some species. NGF has not been found in human saliva; however, researchers find human saliva contains such antibacterial agents as secretory IgA, lactoferrin, and lactoperoxidase. It has not been shown that human licking of wounds disinfects them, but licking is likely to help clean the wound by removing larger contaminants such as dirt and may help to directly remove infective bodies by brushing them away. Hencefore, licking would be a way of washing, useful if purer water isn't available to the animal.

It must be remembered, however, that the mouth of animals is the habitat of many bacteria, some of which may be pathogenic. Animal (including human) bites are routinely treated with systemic antibiotics because of the risk of septicemia.

Spitting can also be deadly especially if you are in a spitting contest. On November 29, 2005 in Chicago, a 23-year-old man suffered fatal injuries when he fell from his Mt. Prospect balcony during a spitting contest with his friends.

Bartosz Drobek was participating in a "spitting contest" where he crouched down and sprung up to spit off of the balcony, and went over the railing, subsequently striking his head on the pavement two stories below. It was later determined that Drobek had been consuming alcohol prior to the fall.

Just like there are rules for fantasy sports, there are strict rules for the various spitting contests; but those for Kudu dung spitting are unique. Remember Shaun van Rensburg who set the distance record for Kudu dung spitting? This is a sport in some parts of Africa. In the competition, small, hard pellets of dung from the Kudu (a type of Antelope) are spat, with the furthest distance reached being the winner.

Kudu dung spitting is popular enough to have an annual world championship competition, with the formal sport beginning in 1994. It is unknown when the first informal game actually took place, but it is my guess that large quantities of alcohol were involved.

In an article by Paul Morrison, he noted that "it is generally accepted that the idea for this event came from the fact that the Kudu is a notoriously difficult animal to hunt. Most often, all the hunter ever finds is the small pile of dung pellets that the Kudu left in an almost mocking fashion. Due to some warped logic, it was then decided to use the dung

in a competition to show the Kudu exactly what the hunters thought of this 'gift'.

Somehow I think the Kudu is sitting in the bushes laughing even harder at these guys because of this.”

The rules are simple. The Kudu dung pellet spit furthest wins. Unlike many similar sports, the distance is measured from the marker to the place the dung pellet comes to rest, rather than where it initially hit the ground. The competitor is allowed to perform any style of run-up he chooses, the only restriction is that he must not step beyond the designated marker, usually a railway sleeper.

The preparation is unique. Pellet selection is taken very seriously. The piece of dung in question must have certain characteristics which identify it as a pellet worthy of winning the World Championships. The consistency must be firm, not crumbly; otherwise the pellet could break up in the mouth, resulting in a bad taste, and the ridicule of the other competitors. Moisture is another factor. Moisture content is directly proportional to how fresh the pellet is. Even the most die-hard of competitors is unwilling to put a fresh pellet in his mouth, as this is just plain disgusting.

There are many ways to spit the pellet, although all of them of course involve putting a piece of dung in your mouth. This is, unfortunately, unavoidable.

Some contestants like to soak their pellets in a liquid shortly before spitting, as this increases the weight of the pellet, and thus the momentum of the pellet will be increased when it is spat. This is where the moisture and consistency of the pellet are important, as one does not want the pellet to dissolve before delivery. Many liquids are used, all of

them alcoholic (understandably). Most say that this is to get rid of the dung taste, but I think that is to stop them thinking about what they are putting in their mouths.

The pellet can be spat from a stationary position, or from a run-up, depending on how drunk the competitor is. Each method has its own merits, but the style used by 1994 World Champion “Slinger” van der Merwe, is most effective: He removes his false teeth before competing. As the Champion himself explains, it is very embarrassing to spit one’s teeth further than the dung pellet.

Remember Dan Capps and his record cricket spitting distance? He also had to abide by all of the rules.

Cricket Spitting is a sport wherein contestants place a dead cricket in their mouth, and then spit it as far as they can. The contestant who can spit the cricket the furthest is declared the winner.

Cricket Spitting was developed in 1996 by entomologist Tom Turpin at Purdue University in West Lafayette, IN as a competition for their annual Bug Bowl event, which brings over 30,000 people per year to their campus for a series of insect-related events and competitions. Since its creation, other universities have begun their own competitions, such as Pennsylvania State University who have hosted their own 'spit-off' since 1998.

The rule set is not fixed, and is subject to change or modification by organizations hosting their own competitions.

- The crickets are to be Brown House crickets weighing between 45 and 55 milligrams.
- Crickets should be previously frozen, then thawed for the record attempt.
- Contestants must spit within 20 seconds of placing the cricket in their mouth.
- The distance will be measured from the center of the edge of the spitting circle, to where the cricket comes to rest, using a measuring tape.
- Contestants must not step outside of the red circle they stand in.
- The cricket must be fully intact, and held fully in the mouth before the contestant may enter the spitting circle.
- The cricket must remain intact, and an official must check the spat cricket for six legs, four wings, and two antenna before the spit can be counted.

Biologically, spitting serves a single purpose: the removal of excess mucus and saliva from the body. Socially, it serves many different purposes:

As a Sign of Disgust

To spit at someone is a sure sign of disgust in almost all cultures. Tennessee Titans “Pacman”, or is it “Spitman” Jones has a history of leaving his saliva on someone else. In February 2007 General Sessions Judge John Aaron Holt dismissed a simple assault charge from a woman who claimed “Pacman” spit on her at a nightclub in the early hours of October 26. The Judge ruled that there were too many inconsistencies from the woman in the case. The Assistant District Attorney, Wesley King had asked the judge to send Jones a message that spitting on women is not tolerated.

“Pacman” is not the only player to play the spit card. Cowboys receiver Terrell Owens

spat in the face of Falcons cornerback DeAngelo Hall in December 2006 in a Saturday night game won by the Cowboys 38-28. "I got frustrated, and I apologize for that," Owens, who was fined \$35,000, told the NFL Network.

However, among the Fremen of Arrakis, spitting is a gesture of great reverence, due to the scarcity of water.

Spitting in the Media

- In the film Titanic, the Kate Winslett/Leonardo DiCaprio version, Leo teaches Kate to spit.
- On one of the Monkey Island computer games, you have to cheat in order to win a spitting contest with some pirates.
- How about Hollywood where an unadoring fan of Tom Cruise spat on him because of his religious beliefs.

Spitting in Society

Tobacco chewers find opportunity to take part in 'Spitting Contests' at county fairs in America. In these competitions, chewers spit tobacco juice and are judged on distance and accuracy. For distance, spitters line up and spit with all their might. For accuracy, a target is painted on a metal coal stove. The spitter who hits the stove will be rewarded with a satisfying 'hiss' of spit on hot metal. Of course, the closest to the center of the target is the winner.

Children get into imitating these contests with 'Tootsie Roll Spitting Contests', the object of which is not to spit out a Tootsie Roll, but rather to suck on it until the mouth fills with

chocolate and then to spit out the juice for distance and accuracy much like tobacco spitting contests.

Baseball players are notorious for their spitting. Invariably, when watching a baseball game, you'll see someone spit. Many chew tobacco and spit out the juice. Others chew sunflower seeds and spit out the shell husks.

Strength and Virility

Among the great legends of piracy upon the high seas are those related to spitting, for pirates were renowned for their skill with spittoons and spitting contests. Children also enjoy the social activity of spitting, especially over water. Bridges are ideal for this sport.

Classifying Spit

Classifying the different types of spit is important when playing competitively.

- **Glob or Gob** - The standard spit, a globule of pure saliva.
- **Orbiter** - Two globs of spit attached by a thin wire of spit. This is difficult to achieve.
- **Stringer** - A watery spit with some mucus. This is not fully released from the mouth as it stretches outwards thus reducing distance. This method is sometimes frowned upon in spitting circles. However, should a stringer reach an abnormally long way down, these are often very well received.
- **Froth/Cappucino** - The froth is caused by aerating the saliva before firing. A certain amount of mucus is helpful to keep it together, and looks very impressive when landing on a watery surface. The Cappucino is the poetic name for this spit.

- **Cluster Bomb** - These have very little mucus indeed. They do not remain together, and scatter over the playing surface. The distance achieved is difficult to measure, thus a low score rating is accredited to this method.
- **Greeny/Greenie** - A spit with a large proportion of mucus. Named due to its colouration, greenies are notoriously slimy and remain together. They adhere strongly to surfaces. Greenies are highly rated in scoring.

Spitting in the Animal World

Many animals spit, most notably the llama and the camel. By all reports these two fellows can also be quite vicious if the mood takes them.

Spitting or **expectoration** is the act of forcibly ejecting saliva or other substances from the mouth. In some cultures it is seen as offensive to spit in public, whereas it is widely tolerated in others. In Europe and North America, the action of spitting has become popular and "cool" among many children and teenagers as a sign of contempt or frustration at society in general, or (more commonly) higher powers such as the law.

Spitting upon another person, especially onto their face, is a universal sign of anger, hatred or contempt. It is possible to transmit infectious diseases in this way.

In London, transport workers who deal with the public have recently been given equipment to collect saliva when they are spat upon by irate passengers. The police can then analyse the DNA of the offender.


In much of China, spitting in public has traditionally been widely tolerated, although attitudes are changing.

History of spitting in western Europe

Social attitudes towards spitting have changed greatly in western Europe since the Middle Ages. Then, frequent spitting was part of everyday life at all levels of society - indeed, it was thought ill-mannered to suck back saliva to avoid spitting. By the early 1700s, spitting had become seen as something which should be concealed, and by 1859 many viewed the spitting on the floor or street as vulgar, especially in mixed company. Spittoons were used openly during the nineteenth century to provide an acceptable outlet for spitters. Spittoons became far less common after the influenza epidemic of 1918, and their use has since virtually disappeared.

Spittoon

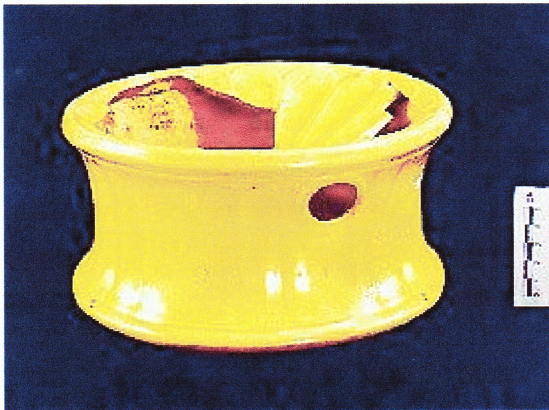


 A Chicago courtroom scene, mid 1910s. A spittoon is seen on the floor at bottom right.

A **spittoon** is an article of furniture made for spitting into, especially by users of chewing tobacco. It is also known as a **cuspidor**, although that term is also used for a type of spitting sink used in dentistry. Cuspidors are still manufactured today, and commonly seen in gymnasias adjacent to drinking fountains.

"Spittoon" can also be slang American English for any receptacle (such as a tin can) used to hold spit, although the term "spitter" is more common.

Similar receptacles for spitting had been used in Southwest Asia for centuries. Spittoons appeared both in the United States and the United Kingdom under the same name about 1840.



A simple 19th century U.S. made spittoon of yellow ware

Boy Scout troops organized campaigns to paint "DO NOT SPIT ON THE SIDEWALK" notices on city sidewalks. A mass produced sign seen in many saloons read:

If you expect to rate as a gentleman

Do not expectorate on the floor

While spittoons are still made, they are no longer commonly found in public places.

A rare profession which commonly uses spittoons is that of wine taster. A wine taster will sip samples of wine and then spit them into a spittoon in order to avoid intoxication. At

some wine tastings, you'll find spittoons for all tasters to use. Likewise for professional coffee tasters and tea tasters.

Oh yes, spit is everywhere... In the Bible, John 9, vs. 5 and 6, "As long as I am in the world, I am the light of the world. As he said this, he spat on the ground and made clay of the spittle and anointed the man's eyes with the clay...".

Spit is on the baseball mound where pitchers throw spitballs.

Spit is in the schools where kids pop each other with spitballs.

It is on the golf course where players clean their dirty golf balls with spit.

It is in the military where servicemen give their shoes a spit shine.

How about spitting on fish bait for good luck, or the phrases "he's spitting in the wind" or "spit it out", or "he's the spitting image of ..."? I could go on and on as there are as many topics on spit as there are Carter's Little Liver Pills. But if I did you would be spitting at me. After all, spit happens.

Sources:

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Yahoo
Wikipedia