



## FOR IMMEDIATE RELEASE

### SMITHSONIAN CHANNEL™ SPECIAL REVEALS AUTOPSY RESULTS OF 40,000 YEAR-OLD WOOLLY MAMMOTH AT THE HEART OF A MAJOR NEW CLONING PROJECT

**One-Hour Special, *HOW TO CLONE A WOOLLY MAMMOTH*  
Premieres Saturday, November 29 At 8 PM ET/PT**

**New York, November 16, 2014** - In May 2013, a team of international scientists unearthed the remains of a mammoth in the furthest reaches of northern Siberia. Three legs, most of the body, some of the head and even the trunk survived in extraordinary condition, which has quickened the pace of one of the most ambitious and controversial projects in science—the cloning of the woolly mammoth.

A new Smithsonian Channel special, *HOW TO CLONE A WOOLLY MAMMOTH*, will detail the autopsy results of the animal, nicknamed “Buttercup” by the team of scientists. The one-hour special premieres Saturday, November 29<sup>th</sup> at 8 p.m. ET/PT.

This mammoth is unlike any found before. When it was dug out of the permafrost, a dark red liquid oozed from the frozen body. Could the liquid be mammoth blood? And, controversially, does the freshness of the mammoth’s flesh mean that a clone is now achievable?

While the world’s top mammoth experts began their forensic autopsy, a team of scientists from the South Korean biotech company SOOAM collected samples they hope will provide enough genetic material to clone Buttercup. SOOAM has already perfected a cloning technique for dogs, cloning more than 400 dogs, but bringing back an extinct species would be a world first. *HOW TO CLONE A WOOLLY MAMMOTH* explains how it could be done, either by the South Korean team or through a separate approach by Harvard Medical School Professor George Church, whose method is to modify a modern elephant’s genome to create mammoth-like adaptations for cold-weather survival.

“As a paleontologist, you normally have to imagine the extinct animals you work on,” says Dr. Tori Herridge of London’s Natural History Museum, who was on the autopsy team. “So actually coming face-to-face with a mammoth in the flesh, and being up to my elbows in slippery, wet, and –frankly- rather smelly mammoth liver, counts as one of the most incredible experiences of my life. It’s up there with my wedding day. The information gleaned from Buttercup’s autopsy about her life and death, and the future discoveries that will come from analysis of her muscles and internal organs, will add to our understanding of these magnificent Ice Age beasts.”

Analysis of Buttercup's flesh, tusks and blood reveals her life story in forensic detail.

Among the findings:

- Carbon dating of the mammoth's flesh revealed that she walked the earth 40,000 years ago.
- The team's discovery of hemoglobin confirmed that the dark red liquid is definitely blood.
- The mammoth was female, and analysis of her tusks indicates approximately eight successful calving events and one lost calf.
- She met her end by becoming trapped in a peat bog and being eaten alive by predators from the rear end.
- From her teeth, scientists estimate that Buttercup was in her 50s when she died.
- Despite their reputation for being enormous, this mammoth was not much larger than an Asian elephant.

HOW TO CLONE A WOOLLY MAMMOTH, directed by Nick Clarke Powell, is a co-production of Renegade Pictures, Smithsonian Networks and Channel 4 in association with ARTE. Alan Hayling is the executive producer for Renegade Pictures. David Royle and Charles Poe serve as executive producers for Smithsonian Channel.

Smithsonian Channel™, owned by Showtime Networks Inc. and the Smithsonian Institution, is where curiosity lives, inspiration strikes and wonders never cease. This is the place for awe-inspiring stories, powerful documentaries and amazing entertainment across multiple platforms. Smithsonian Channel combines the storytelling prowess of SHOWTIME® with the unmatched resources and rich traditions of the Smithsonian, to create award-winning programming that shines new light on popular genres such as air and space, history, science, nature, and pop culture. Among the network's offerings are series including *Aerial America*, *L.A. Frock Stars*, *Secrets*, *Mighty Ships*, *Mighty Planes* and *Air Disasters*, as well as critically-acclaimed specials that include *Civil War 360*, *9/11: The Heartland Tapes*; *MLK: The Assassination Tapes* and *The Day Kennedy Died*. Find out more at [www.smithsonianchannel.com](http://www.smithsonianchannel.com).

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