## GNITN #838

# Dire Wolves, Designer Genes, and Divine Warnings

#### **Dire Times**

A lot of buzz in is the air about news of a once extinct animal now making a comeback as we read in an <u>article</u> from *Time.com*:

Romulus and Remus are doing what puppies do: chasing, tussling, nipping, nuzzling. But there's something very un-puppylike about the snowy white 6-month olds—their size, for starters. At their young age they already measure nearly 4 ft. long, tip the scales at 80 lb., and could grow to 6 ft. and 150 lb. Then there's their behavior: the angelic exuberance puppies exhibit in the presence of humans—trotting up for hugs, belly rubs, kisses—is completely absent. They keep their distance, retreating if a person approaches. Even one of the handlers who raised them from birth can get only so close before Romulus and Remus flinch and retreat. This isn't domestic canine behavior, this is wild lupine behavior: the pups are wolves. Not only that, they're dire wolves—which means they have cause to be lonely.

This species died out a long time ago, but the fact that they were very common in the United States actually helped:

The dire wolf once roamed an American range that extended as far south as Venezuela and as far north as Canada, but not a single one has been seen in over 10,000 years, when the species went extinct. Plenty of dire wolf remains have been discovered across the Americas, however, and that presented an opportunity for a company named Colossal Biosciences.

And then the scientists did their work which is amazing all by itself:

Relying on deft genetic engineering and ancient, preserved DNA, Colossal scientists deciphered the dire wolf genome, rewrote the genetic code of the common gray wolf to match it, and, using domestic dogs as surrogate mothers, brought Romulus, Remus, and their sister, 2-month-old Khaleesi, into the world during three separate births last fall and this winter—effectively for the first time de-extincting a line of beasts whose live gene pool long ago vanished. TIME met the males (Khaleesi was not present due to her young age) at a fenced field in a U.S. wildlife facility on March 24, on the condition that their location remain a secret to protect the animals from prying eyes.

#### **Aggressive Goals**

Colossal intends to try and bring back other extinct species now that they've had success with the dire wolves:

The dire wolf isn't the only animal that Colossal, which was founded in 2021 and currently employs 130 scientists, wants to bring back. Also on their de-extinction wish list is the woolly mammoth, the dodo, and the thylacine, or Tasmanian tiger. Already, in March, the company surprised the science community with the news that it had copied mammoth DNA to create a woolly mouse, a chimeric critter with the long, golden coat and the accelerated fat metabolism of the mammoth.

Bringing back long gone species isn't the only thing the company wants to do, though:

If all this seems to smack of a P.T. Barnum, the company has a reply. Colossal claims that the same techniques it uses to summon back species from the dead could prevent existing but endangered animals from slipping into extinction themselves. What they learn restoring the mammoth, they say, could help them engineer more robust elephants that can better survive the climatic ravages of a warming world. Bring back the thylacine and you might help preserve the related marsupial known as the quoll. Techniques learned restoring the dire wolf can similarly be used to support the endangered red wolf.

The company is bordering on arrogance in my opinion as attested to by these quotes:

"We are an evolutionary force at this point," says Beth Shapiro, Colossal's chief science officer, speaking of humanity as a whole. "We are deciding what the future of these species will be." The Center for Biological Diversity suggests that 30% of the planet's genetic diversity will be lost by 2050, and Shapiro and Colossal CEO Ben Lamm insist that genetic engineering is a vital tool to reverse this. Company executives often frame the technology not just as a moral good, but a moral imperative—a way for humans, who have driven so many species to the brink of extinction, to get square with nature. "If we want a future that is both bionumerous and filled with people," Shapiro says, "we should be giving ourselves the opportunity to see what our big brains can do to reverse some of the bad things that we've done to the world already." Yes, humans are always the major problem, I guess. And not everyone sees rainbows and smiles with these advances:

The woolly mouse, to a minor extent, and the dire wolves, to a scientifically seismic one, are first steps in that direction. But not everyone agrees. Scientific history is rife with examples of newly introduced species becoming invasive species—the doctrine of unintended consequences biting humans when we played too cute with other animals. An exotic pet escapes and multiplies, decimating native species. A toad brought in to kill off beetles ends up killing off the marsupials that eat the toads. And genetic engineering is still a nascent field. Nearly 30 years after Dolly the sheep was cloned, the technology still produces problems in cloned animals, such as large birth size, organ defects, premature aging, and immune-system problems. What's more, cloning can be hard on the surrogate mother that gestates the cloned embryo.

"There's a risk of death. There's a risk of side effects that are severe," says Robert Klitzman, professor of psychiatry and director of the bioethics master's program at Columbia University. "There's a lot of suffering involved in that. There are going to be miscarriages."

The process is made to seem simple:

It takes surprisingly few genetic changes to spell the difference between a living species and an extinct one. Like other canids, a wolf has about 19,000 genes. (Humans and mice have about 30,000.) Creating the dire wolves called for making just 20 edits in 14 genes in the common gray wolf, but those tweaks gave rise to a host of differences, including Romulus' and Remus' white coat, larger size, more powerful shoulders, wider head, larger teeth and jaws, more-muscular legs, and characteristic vocalizations, especially howling and whining.

Messing with genes should make us pause even if everyone is so happy for these dire wolves. And bringing back long extinct species also carries with it unpredictable side effects. The dire wolf died out mainly because it targeted large animals like the aforementioned wooly mammoths which died out leaving the wolves to also perish because they lost their food supply. So who will

these wolves hunt now? But for us who believe we are living in the end times, this could also point to something else.

### All Flesh Was Corrupted

And God looked upon the earth, and, behold, it was corrupt; for all flesh had corrupted his way upon the earth. (Gen 6:12, KJV)

Other translations show this to point to just humans, but could there have been cross breeding between species before the flood that also was seen as a perversion by God? Well some believe this as we see in an <u>article</u> about this:

But if there was one sin above another which called for the destruction of the race by the flood, it was the base crime of amalgamation of man and beast which defaced the image of God, and caused confusion everywhere.—Spiritual Gifts, vol. 3, p. 64.

Every species of animal which God had created were preserved in the ark. The confused species which God did not create, which were the result of amalgamation, were destroyed by the flood. Since the flood there has been amalgamation of man and beast, as may be seen in the almost endless varieties of species of animals, and in certain races of men.—Ibid., p. 75.

The author of those quotes in one Ellen White and she wrote these quotes in 1864. Her contention is that the pre-flood men and women were very intelligent and very well could have created hybrids of even men and animals. And she wasn't the only people who talked about it happening:

Ellen G. White's writings are by no means the only source that suggests that some sort of genetic engineering and mixing of species took place in the distant past. Egyptian, Assyrian, Greek, and Roman myths and architecture abound with creatures that are a cross between humans and horses, goats, fish, snakes, bulls, lions, and hawks. All these amalgamated creatures are evidence of either overactive imaginations, or genetic engineering conducted by ancient peoples. Whatever you might believe, Moses warned the Israelites to not intermix species:

Ye shall keep my statutes. Thou shalt not let thy cattle gender with a diverse kind: thou shalt not sow thy field with mingled seed. (Lev. 19:19, KJV)

Thou shalt not sow thy vineyard with divers seeds: lest the fruit of thy seed which thou hast sown, and the fruit of thy vineyard, be defiled. (Deut. 22:9, KJV)

#### **Just A Little Concerned**

The article ends with this tidbit of information since I know that some will say that bringing back the dire wolf isn't technically what White is talking about. But genetic engineering is happening: There are a lot of people today that are skittish about genetic engineering. They worry about the potential hazards if something goes awry, for example. Now if it be true that Ellen White wrote about genetic engineering more than a century before it was scientifically possible, and if God got upset at the antediluvian race for tinkering with the genetic code, then there may be more hazards to genetic engineering than what most people think.

We should also consider the possibility that Ellen White was describing other technologies as well, such as the adding of cells of one species to the embryos of another species. What this procedure does is produce composite creatures called chimeras that have parts of both species. The author then lets us know that what he just described isn't coming from a questionable source:

No, we didn't get the following from The National Enquirer. We got it from a January 25, 2005 article on NationalGeographic.com:

Chinese scientists at the Shanghai Second Medical University in 2003 successfully fused human cells with rabbit eggs. The embryos were reportedly the first human-animal chimeras successfully created. . . .

In Minnesota last year researchers at the Mayo Clinic created pigs with human blood flowing through their bodies. . . .

What's caused the uproar is the mixing of human stem cells with embryonic animals to create new species. . . .

Weissman has already created mice with brains that are about one percent human.

Later this year he may conduct another experiment where the mice have 100 percent human brains. This would be done, he said, by injecting human neurons into the brains of embryonic mice.—"Animal-Human Hybrids Spark Controversy."

Jesus did say that things would be just like things were in the days of Noah:

When the Son of Man comes, it will be the same as when Noah lived. (Matt 24:37, NLV) The article ends like this:

Weird, huh? You'd think the world was coming to an end. . . . Well, maybe it is. Yes, it might just be.