



## Sudan the Rhino - RIP<sup>12</sup>

The conservation success of the Southern White Rhino contrasts with the “shocking and dire fate”<sup>14</sup> of the Northern White Rhino. The species was once fairly numerous but is now recognised as Critically Endangered on the IUCN Red List. Recent research has proposed that lineages of the African White Rhino could have diverged as recently as 200,000 years ago. Based on morphological and genetic differences it was proposed that the Northern White Rhino (*Cleroteriumsimum ssp.Cottoni*) be considered a separate species.<sup>13 14</sup>

“The northern white rhino has been all but destroyed by uncontrolled hunting in the colonial era, and more recently [by] poaching for their horns.”<sup>15</sup>

The Northern White Rhino once ranged across southern Chad, the Central African Republic, southwest Sudan, northwest Uganda and north Democratic Republic of the Congo.<sup>4</sup> As recently as 1960 there were an estimated 2360 individuals but by 2003 it was estimated that only 30 individuals survived.<sup>4</sup> The last confirmed population of the subspecies was in the Garamba National Park in the northeast of the Democratic Republic of the Congo. But these last remnants were lost there when the park became a conflict zone.<sup>9</sup> There have been no reported sightings since 2006.<sup>13</sup>

“By 2008 the northern white rhino was considered by most experts to be extinct in the wild.”<sup>15</sup>

In 2009, four fertile northern white rhinos, two males and two females, were moved from Dvur Kralove Zoo in the Czech Republic to Ol Pejeta Reserve in Kenya. It was hoped that the climate and rich grasslands would provide more favourable breeding conditions - but there were no successful pregnancies.<sup>16</sup> By 2015 the total world population had shrunk to just four individuals. Then in November 2015 Nola died in San Diego Zoo and in March 2018 Sudan died in Kenya.<sup>9</sup>

“It is with great sadness that Ol Pejeta Conservancy ... announce that Sudan, the world’s last male northern white rhino, aged 45, died...on March 19<sup>th</sup> 2018.”<sup>16</sup>



The demise of Sudan, the last male of the subspecies, leaves only two female northern white rhinos on the planet - his daughter Najin and her daughter Fath.<sup>16</sup> In the absence of finding any additional Northern White Rhino in the wild this subspecies is highly unlikely to be viable in the longer term.<sup>13</sup>

**“The Northern White [Rhino] which once roamed Africa in its thousands is in effect extinct.”<sup>9</sup>**

Scientists from US, Italy, Germany and Japan are proposing artificial reproductive techniques (ART's) including in-vitro fertilisation (IVF) treatment at estimated cost of \$9 million to try and bring the species back from the brink of extinction.<sup>16</sup>

They plan to remove eggs from the last two females and use ART's and IVF to create Northern White Rhino embryos that could be carried by surrogate rhino mothers.<sup>9</sup> Another proposal is to take cells from frozen rhino tissue which would be reprogrammed into stem cells that could then be turned into sperm and eggs to then create embryos.<sup>16</sup>

**“There are no guarantees that this may be successful and it is likely to take some time and be very expensive.”<sup>2</sup>**

ART's may provide hope for future reproduction of the northern white rhino.<sup>16</sup> But the problem is that even if the procedures are successful the result will be

a small population of inter-related animals exhibiting signs of interbreeding that would be unlikely to be able to form a viable population.<sup>13</sup> Thus the sad reality is that this subspecies has a very slim chance of survival. One has to question the use of expensive high technologies to rescue the species. Why should humanity invest so much time and money to restore it if the structural causes of its extinction are still in place?

**“The idea that hi-tech saves species may detract from support for species such as law enforcement, biological management and monitoring on the ground. Field conservation efforts – need our support”<sup>18</sup>**

There is a real danger that such hi-tech solutions will lull humanity into thinking that science will always be able to step in and save the day. There is a danger of being deluded into thinking that humanity can allow a species to the very brink of extinction - or beyond - and modern technology can bring them back.

**“There is no easy answer regarding the Northern White Rhino. It is now functionally extinct...the best lesson we can learn from that is to never let that happen again with any other species.”<sup>18</sup>**

*Don*

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