## Juba Researches the Rains Down in Africa

By Penny Randell

Now about those rains down in Africa: However, it's the lack thereof that has threatened all life in vast areas of the continent, especially East Africa. Hey there, it's Juba and as most are familiar with our ties to Africa, it seems appropriate to recognize and ponder over a land filled with wildlife and people and no rainfall. Facts presented here are powerful and sad. Nonetheless, many have survived, for no one lacks faith and an abundance of hope. Let me begin.

We are taking a healthy look at East Africa, which includes lower countries such as Uganda, Kenya, and Tanzania, as well as northern states such as Ethiopia, Egypt, Somalia and North and South Sudan. Just now these droughts are taking place during the rainy season. This used to be a dependable and seriously wet time of the year when lives are saved and folks are afforded new beginnings. Water shortages are now part of everyday existence and a serious and basic fact of life. Here I list a few reasons why among a myriad of answers.

Of course, the main reason on the list is climate change, which is altering long-established weather patterns. As a result, rainfall is totally unpredictable. It is failed rainfall that pushes dry seasons into a bona fide drought that in turn causes rivers to dry up. Of interest: Beginning in 2009 hundreds of elephants have died from the effects of drought in Kenya. Lack of water eventually equals lack of food. When livestock illegally enters a controlled park, competition for food and water disturbs existing plant life, thus soil degradation occurs, making it harder for all plants to survive. Conflicts between such livestock and wildlife can have fatal consequences for both. Deforestation and illegal charcoal burning degrades soil, too, and speeds up desertification.

In Turcana, Northern Kenya villagers are praying for rain, but it just won't come. There have now been four seasons of failed precipitation. This is the worst drought East Africa has seen in decades. The village is home to 3600 families and is one of the areas hardest hit. Their livestock eat withered gray shrubs and people eat whatever they can find. Malnutrition is common and it is said that starvation is its latest companion. Within this area there are 20 million people at risk. Families have become desperate for food and water. In places like Somalia, 40% of the population is affected.

Causes of the crisis are complex and have no signs of ending. As mentioned, we see climate change as the chief reason for such. The United Nations names Africa as the continent most vulnerable to this phenomenon. This is especially sad when considering that Africa contributes only about 4% of global carbon emissions. In addition, continuing conflicts in Ethiopia and Somalia are only worsening the problem. Some villages share the little food they have with their neighbors as they try to protect their way of life. Even if international awareness rises, it seems impossible to bring sustained global attention to the tragedy. Those who are waiting may not be able to survive. Although the UN's Humanitarian Affairs Office places the situation first, the world is simply not paying attention to Africa.

This year's drought is leaving nothing behind. Some animals have always been lost in previous years, but people have always managed to find food and water. The current 18-month disaster was caused by El Niño and higher temperatures. Now, even more drought has caused a catastrophic

scenario in which crops continue to fail and cattle die at an even more alarming rate. The lack of clean water increases the threat of cholera and other diseases. Kenya, Somalia and Somaliland together equal 10.7 million starving folks, a number which has increased due to the fact that even the rainy season (April – June) did not produce rain. Droughts may not be new to the region, but indeed they are intensifying.

These droughts are slowly killing everything. Nomadic pastoralists are among the most unfortunate. Pastoralists live in harsher lands and receive little support from their governments. They also rely on livestock for their food and livelihood – and these animals have perished. Because droughts are so much more frequent, residents are no longer able to recover between, making them even more vulnerable to the next crisis. Ethiopia's drought is the worst in almost 50 years.

2016 was previously the driest year of the past 40. This drought also followed a significant El Niño with devastating effects, with Ethiopia, Somalia and Kenya receiving 40% less than average rainfall between August and October. The drought from 1983 and 1986 generated widespread humanitarian concern along with the music fundraiser Live Aid. It was particularly deadly due to its sustained nature – much like the current state of affairs. It has also been determined that the 1950s may have been almost as dry as 2016 in Ethiopia and Somalia. Prior to instrumental recording, studies show that the 1820s and 1830s may have experienced similar droughts, along with the 1880s and again around 1900.

The 1820s-1830s drought was probably the worst in 200 years, with lake levels in Kenya falling dramatically and one lake drying up completely. The drought of 1900 caused the "Iwaya" (crocodile) famine, which was named such because people had to resort to hunting crocodiles for food. By 1902, the colonial authorities were importing rice from India and distributing it, utilizing the newly constructed Lake Victoria railway.

Fortunately for our beloved continent, there is some good news for the future. Although droughts will always be a natural part of the climate of the area, their impacts upon vegetation and landscapes can be studied by scientists to determine what to expect for the future. Based upon these studies, excessive drying and food shortages may be anticipated in order to put emergency provisions in place to help mitigate the effects. Groups of experts, such as the Famine Early Warning Systems Network have been instrumental in this effort. In fact, the overall impact of the 2016 drought was shown to have been less severe than that of the early 1980s due to the measures taken to increase the resilience of the affected communities.

Here's hoping the lessons learned from the past can help our African brothers and sisters (both two- and four-legged) survive the latest onslaught on their existence by taking advantage of some of these predictions and warnings. Maybe forewarned can indeed be forearmed. Hopefully we can all "bless the rains down in Africa" before too long. Musing upon these things I for one would certainly welcome another Live Aid. Maybe Toto could be in attendance this time as well! I do have a special fondness for the doggie connotations of the name after all. Juba the Thinking Dog signing off for now. Enjoy our crisp, fall weather and please realize how lucky we are to have this experience in our ever-so-loved mountain communities.