Like a lot of extended families like mine, we have already had our family Christmas so that our children (adults now) can have their own. Now our grandkids are to the stage that they have the Santa Claus figured out and have likely ascertained that more likely Santa is really a female – at least in our case. But one thing that is nice, and most important in my mind, is that they know the reason for this season, and are well grounded in the traditional Christmas, even though they are growing up in an environment that is more “politically correct” as I eluded to in last week’s edition of this column. Even though I no longer wonder about their belief in a big jolly elf, they do love having Santa bringing those presents and at least pretend they do! However, I would venture to say that, if pressed, they may divulge that they at the very least even the youngest grandchild question Santa and probably the means by which Santa delivers the goodies – the remarkable reindeer!

I have been asked by several people to re-run an article I did several years ago on reindeer and since those that have email will get this before Christmas Eve, and for others who read this in local papers Santa and his reindeer will likely be on their way back to the North Pole, I think it appropriate to do just that. For you that are new to this, I hope you enjoy it and to those that remember this piece I encourage you to share it with others as I think it is pretty good...So here we go!

To give some background on the reindeer subject, we need to go back a few years ago when I read an article by Glenn Selk, Oklahoma State University Extension Cattle Reproduction Specialist (and former Nebraskan) on reindeer. I felt in light of the season and especially for my grandkids that it would be fun to revisit that article. The piece was named – ”Just How Do Santa's Reindeer Get the Job Done?” I thank Dr. Selk for his work. The content is as follows:

“Have you ever wondered how Santa's reindeer can make that monumental journey on Christmas Eve?” Let's look into some key facts about reindeer that may help us understand how they get Ole St. Nick on his appointed rounds over the world. First of all, historians report that reindeer have been domesticated by humans for over 5000 years. Since Santa himself is no spring chicken, we can assume that they have worked together for quite a while. They should not have any trouble finding their way around. There is no need to worry about them getting lost.

We do know that reindeer are ruminants. They are like cattle in this regard. They have four compartments to their stomach. Of course Santa gets them full up with hay before he leaves the North Pole, so they should have plenty of feed stored in the four compartments to make it all around the globe. Also, cattle nutritionists have known for years that hay digests more slowly than grain, therefore the big meal that the reindeer eat before the journey should last even longer. Or just like your mom says "It'll stick to their ribs!"

As for drinking water that should be no problem whatsoever. In their homeland the water is all frozen so they are used to getting the moisture they need by eating snow. So as the sleigh is parked on snowy rooftops in cold weather cities, the reindeer can take on the moisture they need if they get thirsty.

How do they keep warm while flying around on Christmas Eve? The fur that they have is very thick and can hold a lot of air. The "blanket" of insulation combining fur and air helps keep them warm in even the coldest of climates. Plus flying around Christmas night in many areas of the world that are warmer than they have at home should not be a problem.

How do they fly? Well that’s a tougher question, and we really do not have that one completely answered. However, let’s look at what we do know about them. Reindeer are amazingly fast runners on the ground. A newborn baby reindeer at one day of age can out run the fastest person on earth. By the time that they are fully grown it is hard to tell what speeds they could reach.

Next remember those huge antlers. Antlers of adult male reindeer can be as much as 4 feet long! Just think about it. Each reindeer has 2 sets; that’s 8 feet of antlers and with eight reindeer (or nine if we count Rudolph on foggy nights) that is 64 to 72 feet of total antler span. A typical small airplane only has about 20 - 30 feet of wingspan. Certainly it seems feasible that those eight reindeer, running that fast, with all that antler span, could indeed get off the ground.

There are a couple of myths about reindeer that we should clear up. You have probably heard the poem that says that they have tiny reindeer feet. Actually they have a very wide large hoof that they use at home to dig through the snow to find grass and moss to eat. You’ve got to think that those wide hooves would c

The preceding information comes from the research and personal observations of the writer which may or may not reflect the views of UNL or Nebraska Extension. For more further information on these or other topics contact D. A. Lienemann, Nebraska Extension Educator for Webster County in Red Cloud, (402) 746-3417 or email to: dlienemann2@unl.edu or go to the website at: http://www.webster.unl.edu