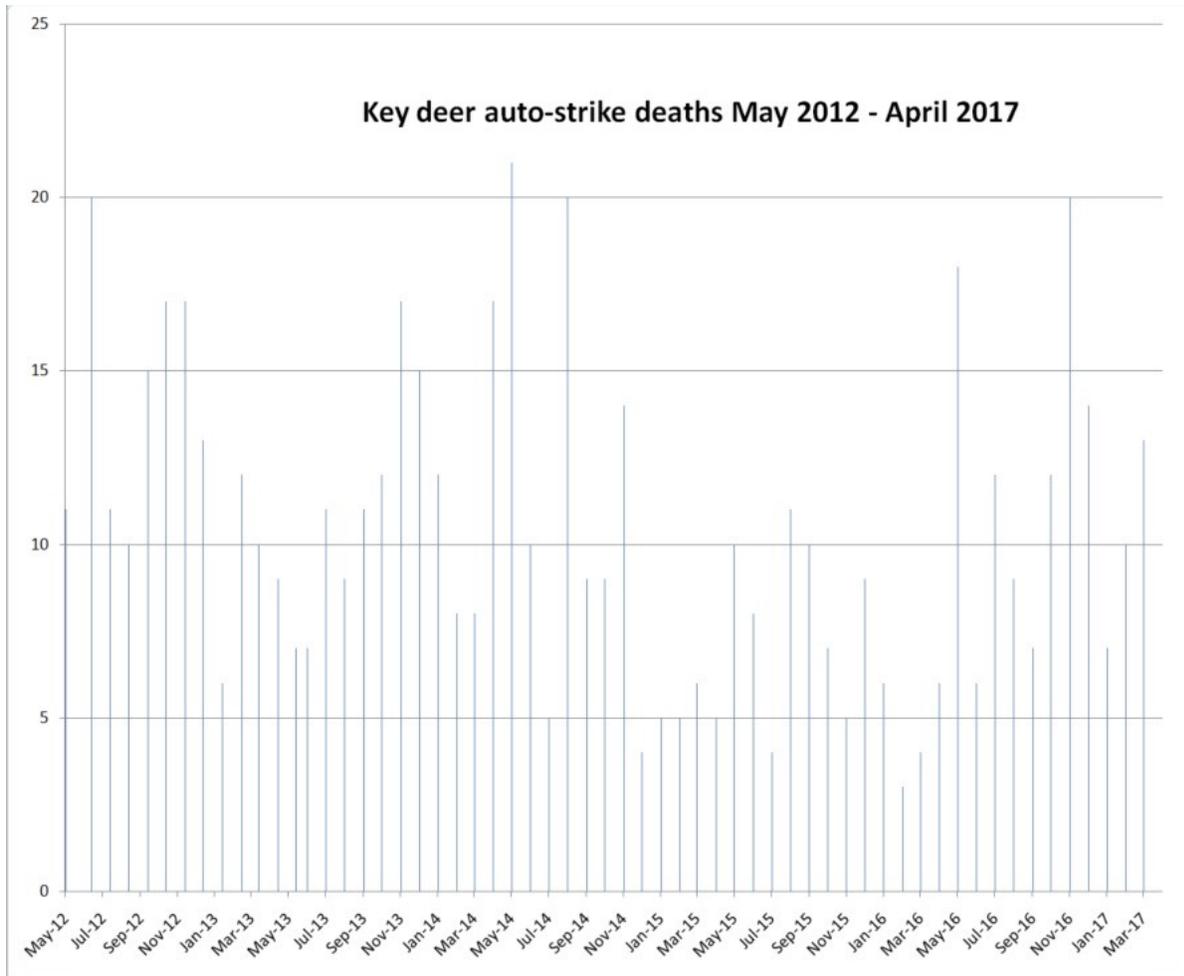


The recent spike in Key deer deaths due to car collisions has many people concerned. 17 deer that we know of have died in the past 3.5 weeks...and right during fawn season! A public statement was made recently – that the death numbers are actually normal and part of a seasonal trend. SOKD decided to look whether the data actually support or refute such a trend. We used the Refuge’s vehicle-collision mortality data log between 2012 and early 2017 – i.e. through the screwworm epidemic but pre-Irma, both of which caused very significant deer population losses:



The above graph shows monthly auto-strike Key deer death counts. The first thing to note is that the apparent low-death stretch in 2015 and early 2016 is not real but rather was due to, as per the Refuge’s notes, incomplete reporting due to staff shortages and changes. Taking that into account, the second observation from the data is that relatively few months had less than 8-10 known and recorded deaths – i.e. a deer got killed every 3 days or so. We are aware that even in years other than 2015, some fatal deer strikes were not reported to the Refuge, or were reported but do not show in the log. As for seasonal trends, there are none that are actually statistically significant. Many of the highest mortality months do encompass the rutting season, especially November – January. It has been suggested that since Key deer bucks’ daily movements are

nearly twice that of does, especially during the rut, they would run an increased risk of a vehicle collision during that time (Lopez et al. 2003). The overall annual vehicle-caused mortality numbers have been positively correlated with total Key Deer population estimates. During 2012 to pre-Screwworm 2016 such estimates (with traditionally very wide error margins) ranged from around 720 in 2012 to around 850 at the start of 2016 (Lopez 2016), then dropping by 150-200 through the screwworm epidemic. Our present post-Irma adult deer population is likely similar to the early-2017 numbers. So judging from the past record, 17 vehicle-killed deer at mid-month is quite high, even for a larger deer population, like we had in 2014 for example. Unfortunately, unless the pace continues through the rest of June, it is also not an all time record: In 2014, 41 Key Deer are known to have lost their lives to cars in just 2 months – May and August.

So please, slow down and be extra vigilant when driving on both US1 and all side roads!