

[from Spring '09]

DELMARVA FOX SQUIRREL UPDATE

By Joelle Buffa

Biology staff, with the aid of many volunteers, monitored the Delmarva Fox Squirrel (DFS) population on the Refuge during October and November 2008. The last issue of *Piping Plover* described the methods used to conduct this biannual study, so this is meant to be a short update on the results.

Within the three areas studied (Lighthouse Ridge, White Hills, and Woodland Trail), a total of 58 unique, individual squirrels were captured. Of these, fifteen squirrels had been captured and tagged during previous studies, one as long as eight years ago! New "unmarked" squirrels received Passive Integrated Transponders (PIT) tags, which identifies each squirrel as a unique individual.

By consulting a mathematical model which uses the ratio of "marked" to "unmarked" squirrels and capture probabilities, we can come up with a population estimate. The 2008 population estimate of Delmarva Fox Squirrels in the three areas sampled was 155. This compares to population estimates of 148, 107, and 144 in years 2004, 2003, and 2001, respectively. The total population for the entire Refuge is estimated at 200. We therefore conclude that this endangered species continues to do well forty years after they were transplanted to the island.

Beginning in spring, visitors to the Refuge are often treated to good views of DFS as they find tempting truffle treats (underground fungi that grows on tree roots) along the roadsides. Enjoy these views, but please SLOW DOWN, especially in the short drive between the fee booths and the Bateman Center. Sadly, a number of squirrels are killed each year by cars.

CORRECTION: The Winter 2008 Piping Plover article on Delmarva Fox Squirrels was written by Frances Toledo Rodriguez, not Joe/le Buffa