Quantifying Vulture Activity at Marine Corps Air Station, Beaufort, NC

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Vultures represent a serious hazard to military and civilian aircraft throughout much of the USA. According to the Breeding Bird Survey, populations of black vultures (Coragyps atratus) and turkey vultures (Cathartes aura) in South Carolina are growing exponentially. Safety concerns in light of burgeoning vulture populations prompted the initiation of a 2-year study of vulture movements and activities at the Marine Corps Air Station (MCAS) in Beaufort, SC. We trapped and outfitted turkey vultures and black vultures with solar powered GPS satellite transmitters. Each hour the location, altitude, and speed of each transmitted bird were recorded. We compiled and analyzed this information to determine daily and seasonal altitudinal patterns of each species, to identify major roost sites, and to assess potential hazards posed by vultures to air traffic at MCAS. Here, we report data from 8 black vultures followed for a mean of 12 months and 7 turkey vultures followed for a mean of almost 14 months. Throughout the year, turkey vultures were airborne consistently more often (83 observations/bird/mo) than were black vultures (32 observations/bird/mo). For individual black vultures the overall mean flight altitude ranged from 152 to 226 m, whereas the mean altitude for individual turkey vultures ranged from 76 to 148 m. Turkey vultures with transmitters traveled as far as south Florida (approximately 850 km) while we never recorded transmitted black vultures.
more than 30 km from Beaufort. We recorded consistent use by vultures of 8 roost sites and one major feeding area (landfill) within 20 km of MCAS. Development of a vulture management plan based on the information from this study is underway.