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Over the last 20 years, strikes with vultures have accounted for 1/3 of the total damage to aircraft at MacDill AFB in Tampa, FL. Locally, vulture populations increase in the fall as flocks migrate south and winter in the Tampa Bay area. Aerial surveys as well as ground surveys were used to identify vulture roost locations and data on daily movement patterns were collected. Black and Turkey vultures were roosting within one-half mile of the runway in adjacent mangroves and on nearby large fuel tanks for two oil distributors for the Port of Tampa. The vultures caused frequent increases in the Bird Watch Conditions when they were leaving the roost for the day. The birds soared over the airfield gaining altitude using the thermals coming off the concrete on the way to food sources. Using tactics involving pyrotechnics, depredation and effigies the roosts were effectively harassed and most of the birds either moved closer to their food source on the east side of the bay or much further west along the peninsula. The roosts closest to the base became mostly dormant. Subsequently when the vultures reached the airfield during their daily movements they would quickly cross the airspace and not soar over the runway area because they had already reached their desired altitude. As a result, vultures stayed over the airfield for much shorter time periods when traveling to their food source. Many vultures diverted around the airfield entirely when several effigies were placed along the west perimeter fence line. This program utilizing harassment as well as restructured flying restrictions and increased pilot awareness decreased the amount of time spent in any BWC above low-alert by over 93%. The result was significantly increased training time with no increase in bird strike rates or any bird strikes involving vultures.