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EFFECTS OF A HIGHWAY IMPROVEMENT PROJECT ON FLORIDA KEY DEER

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Abstract

With an absence of predators, deer-vehicle collisions (DVCs) are the primary source of mortality for the endangered Florida Key deer (*Odocoileus virginianus clavium*). Of these collisions, >50% occur on United States Highway 1 (US 1), the primary inter-island roadway in the Florida Keys. DVCs on the 5.6-km section of US 1 on Big Pine Key (BPK) are responsible for approximately 26% of annual mortality. In 2002, a continuous 2.6-km system of 2.4-m fencing, 2 underpasses, and 4 experimental deer guards was completed on US 1 on BPK. Our objective for this project was to evaluate the effectiveness of this system in reducing DVCs. Deer heavily used the underpasses built in the fenced area all 3 post-project years (2003–2005). The fencing successfully prevented Key deer from entering the exclusion area. In spite of increasing deer population numbers, the US 1 improvement project prevented an increase in DVCs on US 1.

Biographical Sketch: Israel Parker is currently a Ph.D. student in the Department of Wildlife and Fisheries Sciences at Texas A&M University working on central Texas water quality issues. He received his M.S. in the Department of Wildlife and Fisheries Sciences at TAMU in 2006 focusing on Florida Key deer.