## GOS FALL MEETING WITH THE FOURTH COLONIAL COAST BIRDING AND NATURE FESTIVAL POSTER ABSTRACT 13-15 October 2006

IMPORTANT USE AREAS OF MIGRATORY SUB-ABULT FLORIDA BALD EAGLES IN GEORGIA. *Elizabeth K. Mojica<sup>1,5</sup>, J. Michael Meyers*<sup>2</sup>, *Brian A. Millsap*<sup>3</sup>, *Katherin Haley*<sup>4</sup>

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Abstract: During migrations and summers of 1998-2003, we tracked Florida sub-adult Bald Eagles (*Haliaeetus leucocephalus*) using satellite telemetry to determine important use areas (IUAs) of eagles. We defined IUAs as locations used by two or more eagles or one eagle in multiple years within a 25-km radius. We mapped and described IUAs in Georgia for 14 of 69 migratory Florida sub-adult eagles. When they were nestlings, each of the 14 sub-adult eagles had been fitted with a 5-yr satellite transmitter. Nearest-neighbor clustering (CrimeStat III) analysis identified five IUAs in Georgia from daytime satellite locations (≤1-km accuracy). These areas were located in eastern Georgia on the Ogeechee River, Sapelo River, J. Strom Thurmond (Clark Hill) Lake, Turnpike Creek, and Alabaha

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River. Size of IUAs ranged from  $126 \text{ km}^2$  to  $1,340 \text{ km}^2$  ( $\overline{x} = 759 \text{ km}^2$ , 95% CI: 371–1,146 km²). We believe that repeated use of these five IUAs indicated that they may be important for recruitment of the 14 sub-adult eagles (to breeding eagles). Conservation of IUAs in Georgia may benefit the future Florida breeding population as well as resident adult and sub-adult eagles of Georgia.





