

SHORT COMMUNICATIONS

LIFETIME REPRODUCTIVE SUCCESS OF BALD EAGLES IN NORTHERN CALIFORNIA

J. MARK JENKINS<sup>1,3</sup> AND RONALD E. JACKMAN<sup>2</sup>

<sup>1</sup>*Environmental Services, Pacific Gas and Electric Company, 3400 Crow Canyon Road, San Ramon, CA 94583*

<sup>2</sup>*Garcia and Associates, P.O. Box 776, Fall River Mills, CA 96028*

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<sup>3</sup> E-mail: [jmj3@pge.com](mailto:jmj3@pge.com)

*Abstract.* We studied the breeding success of resident Bald Eagles (*Haliaeetus leucocephalus*) over a 20-year period along the Pit River drainage in northern California. In 258 nesting attempts at 10 intensively studied nesting territories, 0.31 to 1.65 young were produced per year per occupied territory (mean = 0.97), with average nesting success of 62%. Nineteen individually banded breeding adult Bald Eagles produced from zero to 36 young during their lifetimes, and birds remained on their territories for 1–16 years following capture as adults. We calculated a 90% annual survival rate for breeding adults from our sample of 19 birds, with longevity of one banded eagle at 22 years. Eagles that bred on a territory for a greater number of years did not produce a greater number of young annually on average than other breeding birds. Larger males, as evidenced by body mass at capture, produced significantly more young over their lifetimes than smaller males. This same relationship did not hold for females, however. Seven banded pairs of adults remained together on their territories for 3–15 years. Reproduction decreased significantly following replacement of a breeding adult on a territory, and this effect continued for 2–3 years following replacement.

*Key words:* Bald Eagle, *Haliaeetus leucocephalus*, lifetime reproductive success, longevity, mate fidelity, reproductive ecology, survival.