SECONDARY AGING CRITERIA

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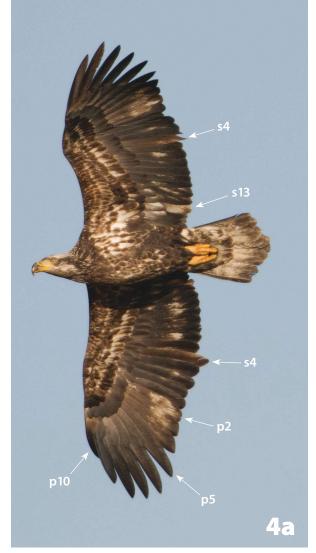
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Fig. 4. These third-cycle (Fig. 4a) and fourth-cycle (Fig. 4b) **Bald Eagles** show typical body plumages and molt patterns for these ages. Note in the third-cycle bird (Fig. 4a) that the only remaining juvenile feathers are the s4s on each wing. In raptors and especially in eagles, the juvenile secondaries are often longer than the basic secondaries, as evident here. Among the remainder of the remiges, it appears that p2–p4 and s13 are second-basic feathers and that p1, p5–p10, and the rest of the secondaries are third-basic feathers, indicating that p1–p4 and s13–s17 (of 17 secondaries) were replaced at the second prebasic molt, and that



p1 and s14–s17 were replaced again at the third prebasic molt; this pattern is typical of Staffelmauser ("stepwise") molt patterns (Pyle 2006, 2008a). On the right wing of the fourth-cycle bird (Fig. 4b), no juvenile remiges remain; p1, p5–p8, s2–s3, s6–s9, and s12 appear to be third-basic; and the rest of the feathers appear to be fourth-basic. A similar pattern would be expected after the subsequent molt of the third-cycle bird (Fig. 4a). Definitive plumage is not reached until the fifth or sixth cycles in Bald Eagles; in other large birds, definitive body plumage is reached at an earlier age, but third-cycle and fourth-cycle birds can be distinguished based on remigial molt patterns.

Davis County, Utah; February 2011 (Fig. 4a) and December 2009 (Fig. 4b). Photos by © Mia McPherson–OnTheWingPhotography.com.



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