

pairs that lay eggs every year. There is much variation in the number of nests that are active every year vs. the number that are successful. How does the variation compare and what factors affect each? What determines whether or not eggs are laid?

(6) Determining clutch size for many nests is difficult because nest climbs disturb incubating eagles. Climbs made during our research averaged only 25 minutes (from the time we approached the nest from a boat to the time we motored away). Nevertheless, more data are needed on the annual variation of clutch size, the factors that determine the number of eggs laid and fledging success in different circumstances (for example, nests that fledge 1 young on average have a much different interpretation if the clutch size was 2 vs. 1, a difference of 50% in fledging success).

(7) It would be interesting to compare certain aspects of behavior of pairs that successfully breed vs. those that fail in a given year, including the frequency of switching during incubation, nest attentiveness (how long eggs are exposed), length of pair bond and foraging success of pairs during incubation. These clues may provide a clearer picture as to why most nests fail during incubation.

(8) More research is needed on the physiological costs of incubation for eagles once the clutch is completed. How much does basal metabolic rate increase as a result of heating and reheating eggs? This, in conjunction with foraging success and weight changes during incubation (See #6), may provide insight as to the threshold at which eagles may abandon the current nesting attempt.

(9) It would be interesting to see the daily weight fluctuation of eagles during incubation. Monitoring weight changes year round would also provide insight to physiological stress experienced by eagles during the different seasons.

(10) Despite evidence that food is limiting during incubation, it is curious that nesting pairs will not take supplemental food during this period. A series of supplemental feeding experiments using different prey sizes could resolve whether or not prey size is a limiting factor.

(11) The wide diversity of prey available to nesting eagles may be a reason that breeding dynamics, including the density of active nests and nesting success, are higher, on average, along saltwater shores vs. freshwater shores (e.g., the Chilkat River Valley). Studying the natural history of prey species taken by nesting eagles in both habitats would aid in understanding not only eagle biology but productivity of coastal vs freshwater habitats.