

GOLDEN EAGLE MANAGEMENT ISSUES AND CONCERNS

*Raised by Working Group July 29, 2004
Answers by Charles S. Todd*

1. Why can't we reintroduce golden eagles?
 - A. *We cannot deny the potential for such an effort but must acknowledge it as a marginal endeavor under present insights: marginal habitat suitability, likely lingering contaminant influences, inordinate costs, and lack of regional coordination. The successful effort undertaken for peregrines entailed reintroductions of >150 birds during 1984-1996; operational costs > \$500,000 offset largely by federal aid; and was bolstered by comparable efforts in the region, across the U.S., and throughout Canada. Eagle life history, atypical habitats in Maine, and solo efforts by Maine would translate into a much more ambitious effort to re-establish golden eagles.*

2. What was the habitat like in Maine when golden eagles were here?
 - A. *Foraging habitats appear to be most limiting. Open terrestrial lands (e.g., farmland and wildfires) were more prevalent 100 years ago and may have locally improved some areas for golden eagles. However, timber harvesting alone does not seem to enhance foraging habitat for the species. Golden eagle ecology in Maine is somewhat unique because a forested landscape is a poor fit.*

3. Golden eagle populations in eastern Canada appear to be increasing.
 - A. *Yes, according to indices of migrants tallied along the Appalachian corridor. Breeding occurs in nearby portions of southern Quebec, although low density there hinders recruitment from this logical source population.*

4. Did pesticides used to treat the spruce budworm outbreak affect golden eagle survival in Maine?
 - A. *Actual data is lacking, but DDE residues (a by-product of the insecticide DDT) as well as other contaminants like PCBs, dieldrin, and mercury all were present at harmful levels in addled eggs collected in Maine during 1996. These data are the only direct evidence of*

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impaired reproduction among golden eagles in eastern North America. Impacts on eagle survivorship are unknown.

5. Can we fold golden eagle nest sites into the Landowner Incentive Program (LIP)?
 - A. *Possibly, although our assumptions that prey availability / scarcity of foraging areas are the immediate “bottleneck” and not readily remedied with landowner incentives unless extensive terrestrial openings result!*

6. Why the secrecy surrounding golden eagle nest sites?
 - A. *Traditional concern for the vulnerability of only a few golden eagle eyries spans more than 60 years. Egg collectors and photographers have both targeted one site, despite attempted secrecy.*

7. Maybe we should do nothing for the golden eagle.
 - A. *We have not sought legal interpretations from the Maine Endangered Species Act. The law dictates that MDIFW perpetuate the state’s wildlife diversity, but assuring suitable habitat seems to be the first step on behalf of golden eagles.*

8. USFWS is trapping hundreds of golden eagles in the west; what are they doing with them? Could those birds be used for a golden eagle reintroduction in Maine?
 - A. *We have turned down offers of golden eagles taken during animal damage control programs in Wyoming. Concerns include depredation tendencies of those individuals, inappropriate age for reintroductions, and uncertainties about genetics / disease vectors / fitness of golden eagles from the West. Reintroduction programs prefer nestling / fledgling ages so that the birds may imprint to the area of such transplants.*

9. Is there a genetic difference between eastern golden eagles and western golden eagles?
 - A. *This has never been tested, and now the only reference population known in the East is in Quebec or Labrador. USFWS twice refused to*

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list golden eagles in the East, but the “distinct population segment” standard did not exist under previous status reviews.

10. Is it feasible to establish golden eagle management zones and manage the habitat to encourage golden eagles to nest in Maine?
 - A. *All historic nests were cliffs in mountainous regions / a forested landscape. Experts such as Dr. Spofford and Dr. Palmer thought coastal headlands and tree-nesting options of central Maine might even be more attractive to the species because of improved food availability. Our historical insights might be more limiting than habitat availability in Maine!*

11. It may not be feasible to get landowners to manage their lands to attract golden eagles.
 - A. *We certainly had one negative experience with a normally cooperative forest landowner when potential virtues of a site for golden eagles (last used in the 1890s) were discussed. Maintaining traditional nests / associated habitats seems prudent but may not result in species re-establishment.*

12. Have we exhausted identifying existing habitat that is attractive to golden eagles?
 - A. *Cliff habitats are thoroughly scrutinized in past inventory efforts for golden eagles and ongoing surveys for peregrines that also utilize that niche. We do not have a clear search image for golden eagle nests in trees, but have not encountered any during > 4,000 hours of aerial surveys for bald eagle nests. Insights on sites frequented by migrant golden eagles could be revealing – Penobscot River in Howland, Androscoggin River in Rumford, and Isle au Haut in coastal Hancock Co.*

13. Golden eagles in Maine may forage up to 15 miles from their nest site.
 - A. *Or more – home range estimates often mention a 25-mile foraging radius!*

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14. What is the smallest grassland that a golden eagle would utilize?
- A. *A golden eagle in Maine was documented hunting in a 500-acre grassland. Another was seen "couraging" a smaller 100-acre agricultural field but it was contiguous with an open stretch of river. We lack insights from wetlands / shorelines to acquire wading birds typical of their diet in Maine.*
15. Why hasn't the golden eagle taken advantage of the blueberry barrens?
- A. *The absence of local cliffs and suitable trees might be a limitation. There are no definitive breeding records of golden eagles from coastal Maine or interior Washington County where blueberry barrens are most prevalent.*
16. Not many people are able to identify golden eagles, which may hinder MDIFW from receiving more information about golden eagle sightings in Maine.
- A. *True! A few individuals well acquainted with golden eagles in the West have contributed sightings while visiting Maine.*
17. Maybe we do not know how well golden eagles could fare in Maine? Wild turkeys have expanded in Maine far beyond earlier expectations.
18. What were the food habitats of the last nesting pair of golden eagles during the era when there was a large salvage cut in the area?
- A. *Food remains in this nest were 90% great blue herons plus a few cormorants, mergansers, and muskrat. Only one snowshoe hare was identified there.*
19. The best we can do practically is to monitor the golden eagle population.
- A. *If suitable habitat is as limiting as we think, some attention to traditional sites is advisable – at least on a cooperative basis.*

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20. There are people who observe things we should know about, but the info never gets to IF&W.
- A. *Past publicity solicited sightings, but there has been no sustained effort given the meager results achieved.*
21. MDIFW could tap into the hawk watches.
- A. *Counts of migrant raptors are indeed useful to help bolster species awareness, identification skills, and a surrogate indicator of overall trends in the flyway.*
22. Could we issue logbooks or have people log info onto website like fisheries?
- A. *Yes, although traditional misidentification of immature bald eagles is likely especially on the presumed relative abundance of 1000:1 of bald eagle numbers to golden eagle numbers.*
23. Use Maine Audubon to help collect sightings of golden eagles.
- A. *They have referred sightings to MDIFW. All insights on golden eagles in Maine are welcomed, but the most useful (observations in breeding season) are the most difficult to obtain. Detectability should improve if successful nesting occurred.*
24. Could use edited Spofford video as an outreach tool.
- A. *Yes, but may need technical assistance to improve old 8 mm movie film footage.*