

## Predation & Predator Control [DRAFT]

The Sagebrush Ecosystem Council (SEC) understands the federal land management agencies have decided that, since predator control is “outside the scope of the plan amendment” (see Executive Summary, p. xvii and Chapter 1, p. 18), it would not be addressed in the DEIS. However, consulting the BLM Handbook H1790-1 (NEPA Handbook), this issue seems to fall readily “within scope” under the two bullets on page 41. That language is displayed below, verbatim in *Tahoma font and italicized*:

### *6.4.1 Identifying Issues for Analysis*

*Preliminary issues are frequently identified during the development of the proposed action through internal and external scoping. Additionally, supplemental authorities that provide procedural or substantive responsibilities relevant to the NEPA process may help identify issues for analysis. See Appendix 1, Supplemental Authorities to Be Considered, for a list of some common supplemental authorities. There is no need to make negative declarations regarding resources described in supplemental authorities that are not relevant to your proposal at hand.*

*While many issues may arise during scoping, not all of the issues raised warrant analysis in an EA or EIS. Analyze issues raised through scoping if:*

- Analysis of the issue is necessary to make a reasoned choice between alternatives. That is, does it relate to how the proposed action or alternatives respond to the purpose and need? (See section 6.6, Alternatives Development).*
- The issue is significant (an issue associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of impacts).*

*When identifying issues to be analyzed, it is helpful to ask, “Is there disagreement about the best way to use a resource, or resolve an unwanted resource condition, or potentially significant effects of a proposed action or alternative?” If the answer is “yes,” you may benefit from subjecting the issue to analysis.*

It can be demonstrably argued that predation, previously identified as a USFWS-identified threat (see Chapter 2, Table 2.1, p. 11) is a significant issue (see following paragraphs and that analysis of this issue is necessary to make a reasoned choice between alternatives (bullet 1 above), especially since the State’s Alternative (Alternative E) includes scientifically-based predator control. Predation and predator control are arguably considered by many to be significant issues (bullet 2 above), i.e., issues associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of impacts. **Therefore, based on guidelines of the BLM NEPA Handbook, it seems that the BLM has at least the option if not the obligation/requirement to analyze predation even though ravens (a primary GRSG predator) are under the authority of the USFWS and most other**

**predators are managed by NDOW. The SEC also maintains that omission of predator control from the analysis would be viewed as a liability in the court of public opinion, and as such would detract from the credibility of the EIS document.**

Based on a literature review by Manier et al. (2013), the impacts of predation on GRSG are variable. However, there seems to be general agreement in the scientific literature that anthropogenic subsidies have resulted in an increase in the numbers of some predators, especially red fox and ravens. As an example, Coates and Delahante (2010) indicated that raven numbers in the West have increased up to 1500% since the 1960s and that ravens are a primary nest predator. High predator numbers can negatively affect GRSG productivity in other ways than just direct mortality, with harassment reducing the time female grouse would otherwise devote to incubation (Coates 2007). In areas that are fragmented and/or have inadequate herbaceous cover, predation impacts are likely to be higher.

The literature also shows that predation may be limiting in some situations (Connelly et al. 2004; Coates et al. 2008), and that indeed predation is the primary cause of mortality in some areas, accounting for 90% of all mortality during a multi-year study in central Nevada (Blomberg et al. 2014). Although predator control can be effective (Baxter et al. 2007), predator numbers can rebound quickly without continual control (Coates 2007; Hagen 2011). Nevertheless, Manier et al. (2013, p.115) concluded that predator control (removal) “may be warranted in areas with low habitat quality (that is, heavily fragmented areas of high anthropogenic disturbance) supporting inflated numbers of synanthropic predators...” Similarly, the COT report (USFWS 2013, p. 11) states that predator management has been effective on local scales for short periods, but its efficacy over broad ranges or over long time spans has not been demonstrated (Hagen 2011). **In areas of compromised habitats and high populations of synanthropic predators, predator control may be effective to ensure GSRG persistence until habitat conditions improve (USFWS 2013).**

The SEC recommends that, since restoration of sagebrush habitat is such a slow process, with disturbed areas requiring 25 – 100 years to rebound (Baker 2011), scientifically-based predator control should be considered especially in areas of critical GSRG habitat. Predator control may be considered a tourniquet that is applied concurrently while habitat restoration or enhancement is in progress. **Predator control implemented concurrently with habitat restoration seems wise since the SEC has been asked repeatedly by the USFWS to recommend actions that would “stop the bleeding” (i.e., the decline of both GSRG population numbers and habitat).**

The EIS emphasizes reduction of anthropogenic subsidies that provide artificial nest sites, hunting perches, and food sources. The SEC is fully supportive of these measures, but time is of the essence. It defies both scientific logic and common sense that we would not implement at least site-specific control for ravens concurrently with attempts to restore GSRG habitat and mitigate man-caused subsidies for ravens. The SEC is also keenly aware of the challenge to implement meaningful raven control because of the protection this species receives under the Migratory Bird Treaty Act. However, permits to “take” ravens can and are being issued, so this challenge can be addressed.