

Why Guidance is not Enough: Regulatory Sideboards on Recovery

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Why are Recovery Regulations Needed?

“Our investigation revealed an enormous policy void...While the ESA affords the Secretary great discretion in several areas...the absence of policy in exercising that discretion has resulted in...a wholesale lack of consistency, a process built on guess-work, and decisions that could not pass legal muster. The dearth of policy and guidance seems less than coincidental. For many years, through several administrations, this appears to be an area of intentional failure to clarify, in order to maximize the agenda du jour. The Department owes the public a fair and consistent application of rules in making its ESA decisions.”

- Department of Interior Inspector General
Report of Investigation: The Endangered
Species Act and the Conflict Between
Science and Policy
December 15, 2008

What is Recovery?

Purpose of the Endangered Species Act:

“To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.”

Section 2, 16 U.S.C. § 1531(b)

Definition of “Conservation”

“All methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided by [the ESA] are no longer necessary.”

Section 3, 16 U.S.C. § 1532(3)

What is Recovery?

FWS Regulatory Definition of Recovery:

- “A species may be delisted on the basis of recovery only if the best scientific and commercial data available indicate that it is no longer endangered or threatened.”

50 C.F.R. § 424.11(d)(2)

FWS Recovery Guidance Definition:

- “Recovery is the process by which listed species and their ecosystems are restored and their future is safeguarded to the point that protections under the ESA are no longer needed.”

What is Recovery?

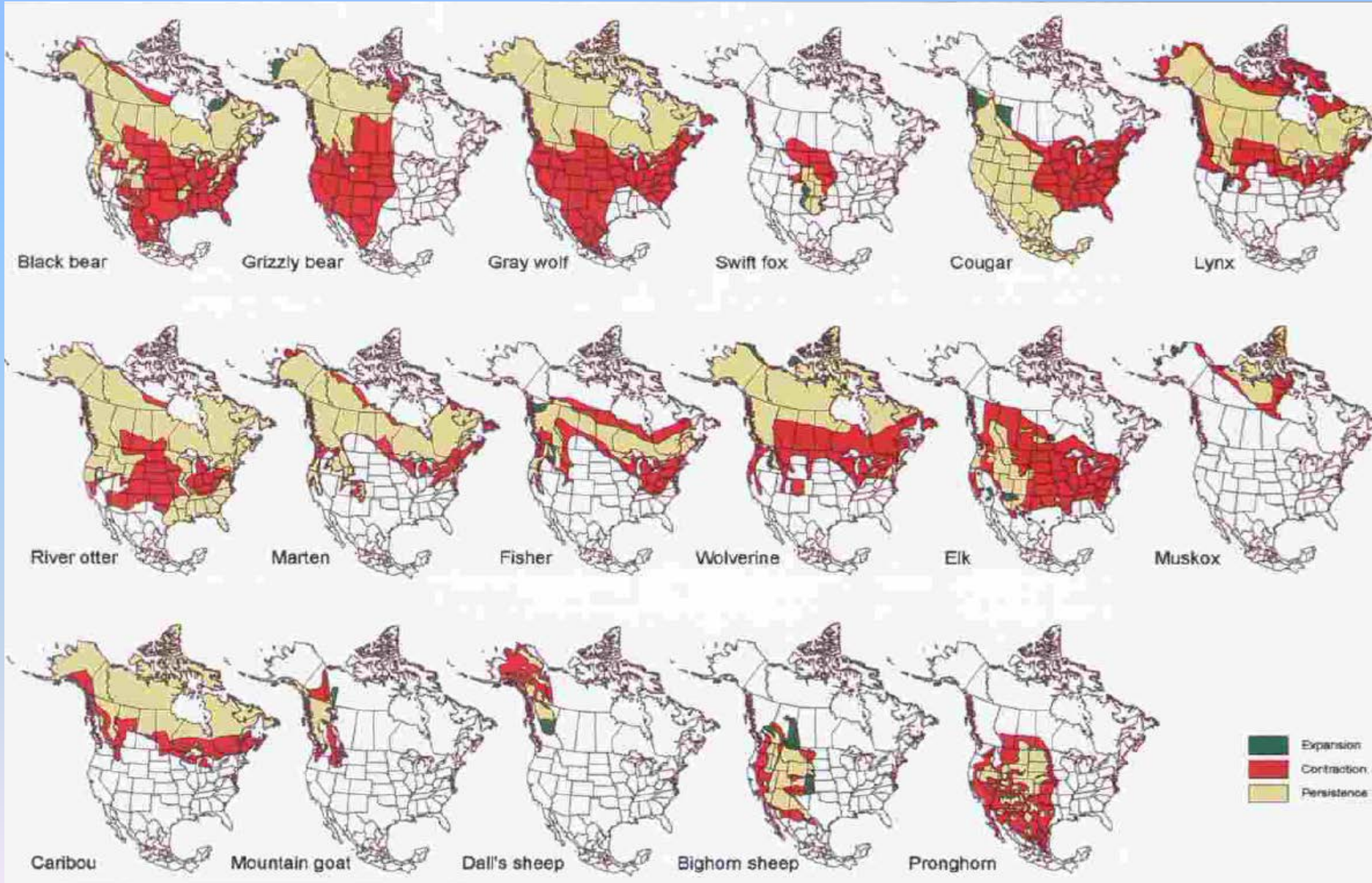
“Science is an important part of this decision, but really the key is the policy question of when is a species recovered.”



- USFWS Director Ashe
Regarding the 2013 proposed
delisting of the gray wolf.

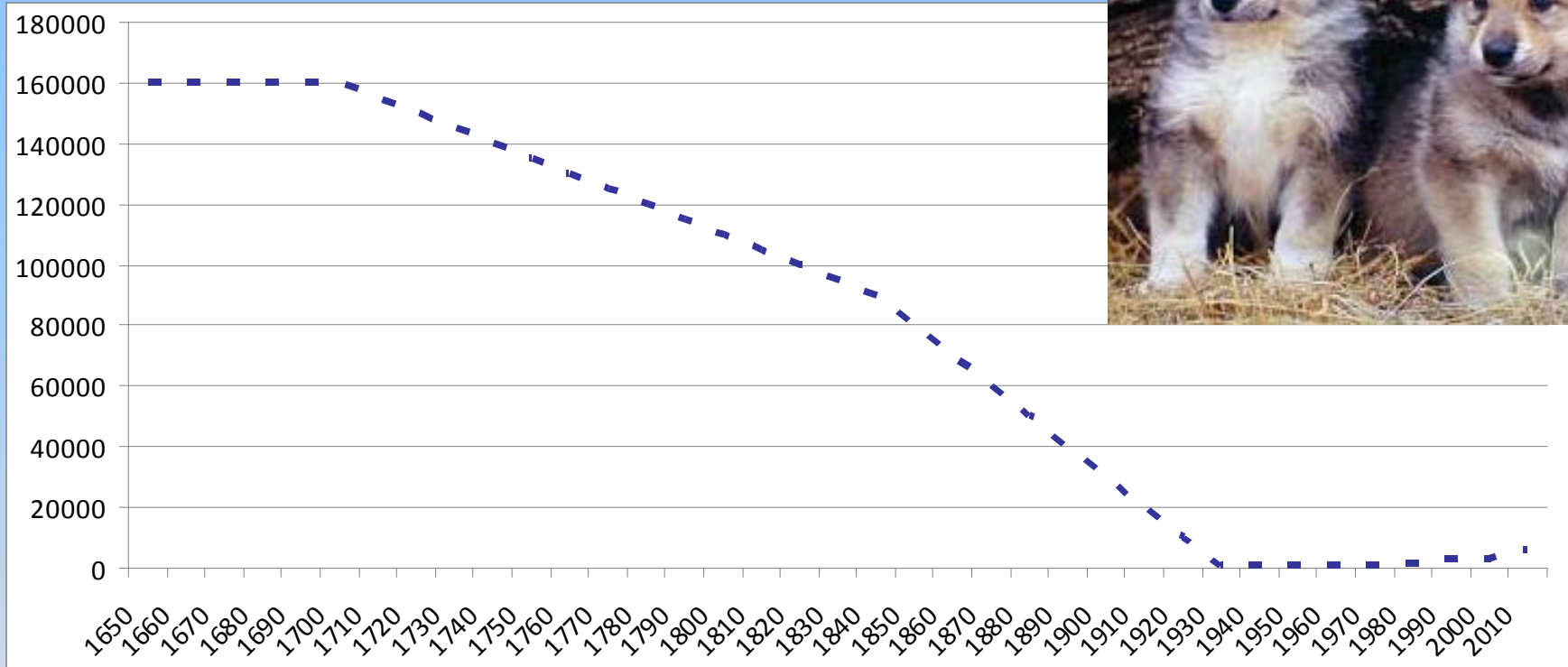
Associated Press June 7, 2013

Geographic Scope of Recovery



Defining Recovery

Gray Wolf Population in the lower 48 States and Mexico

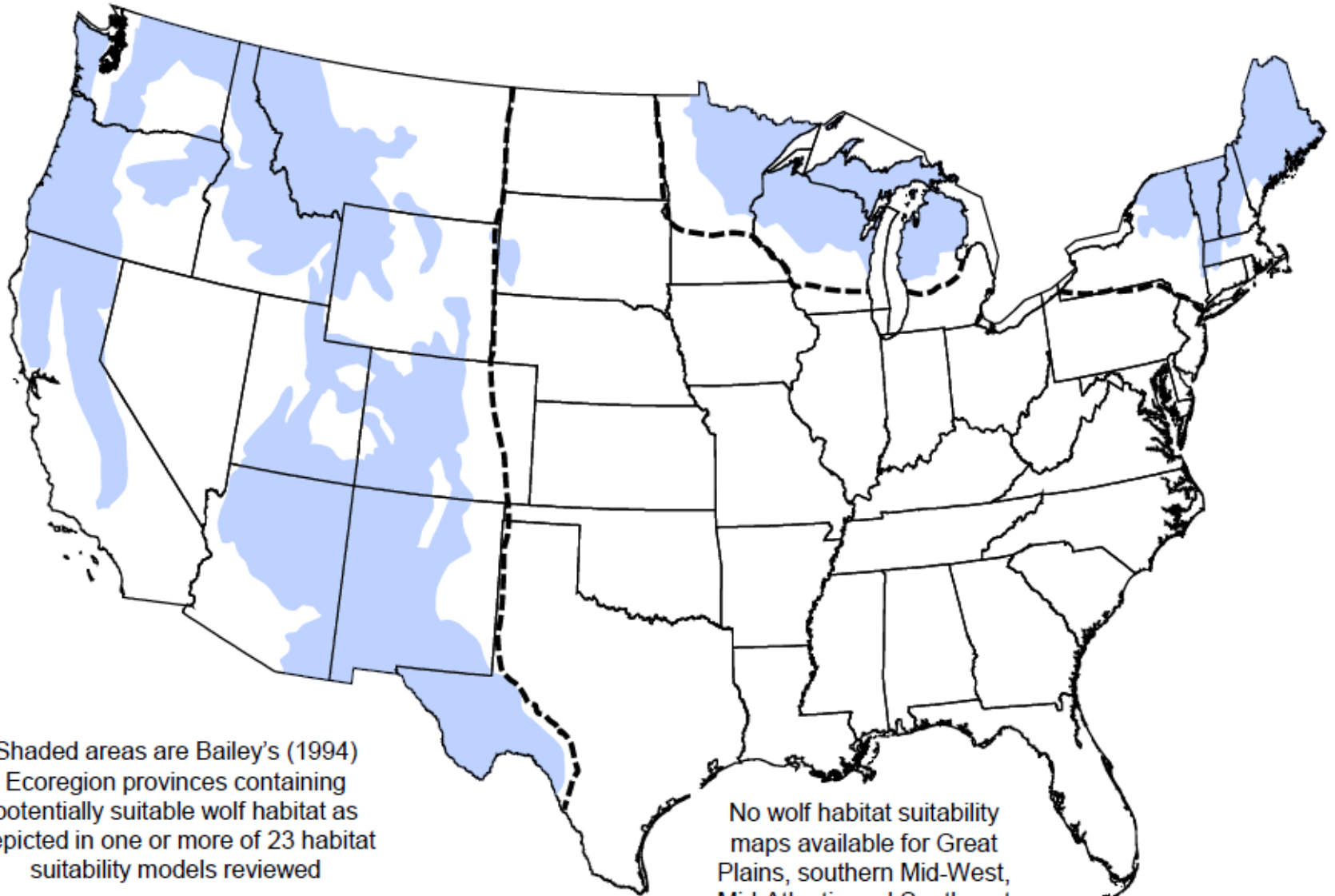


Source: Leonard et al. *Legacy lost: genetic variability and population size of extirpated US grey wolves*. *Molecular Ecology*, Vol. 14 (2005).

Tear, T.H. et al. 2005 *How much is enough? The recurrent problem of setting measurable objectives in conservation*. *BioScience* 55:835-849

Wilhere, G.F. 2008. *The how-much-is-enough myth*. *Conservation Biology* 22:514-517.

Potential Wolf Habitat in the Coterminous U.S.?



Shaded areas are Bailey's (1994) Ecoregion provinces containing potentially suitable wolf habitat as depicted in one or more of 23 habitat suitability models reviewed

No wolf habitat suitability maps available for Great Plains, southern Mid-West, Mid-Atlantic and Southeast regions

Defining Recovery

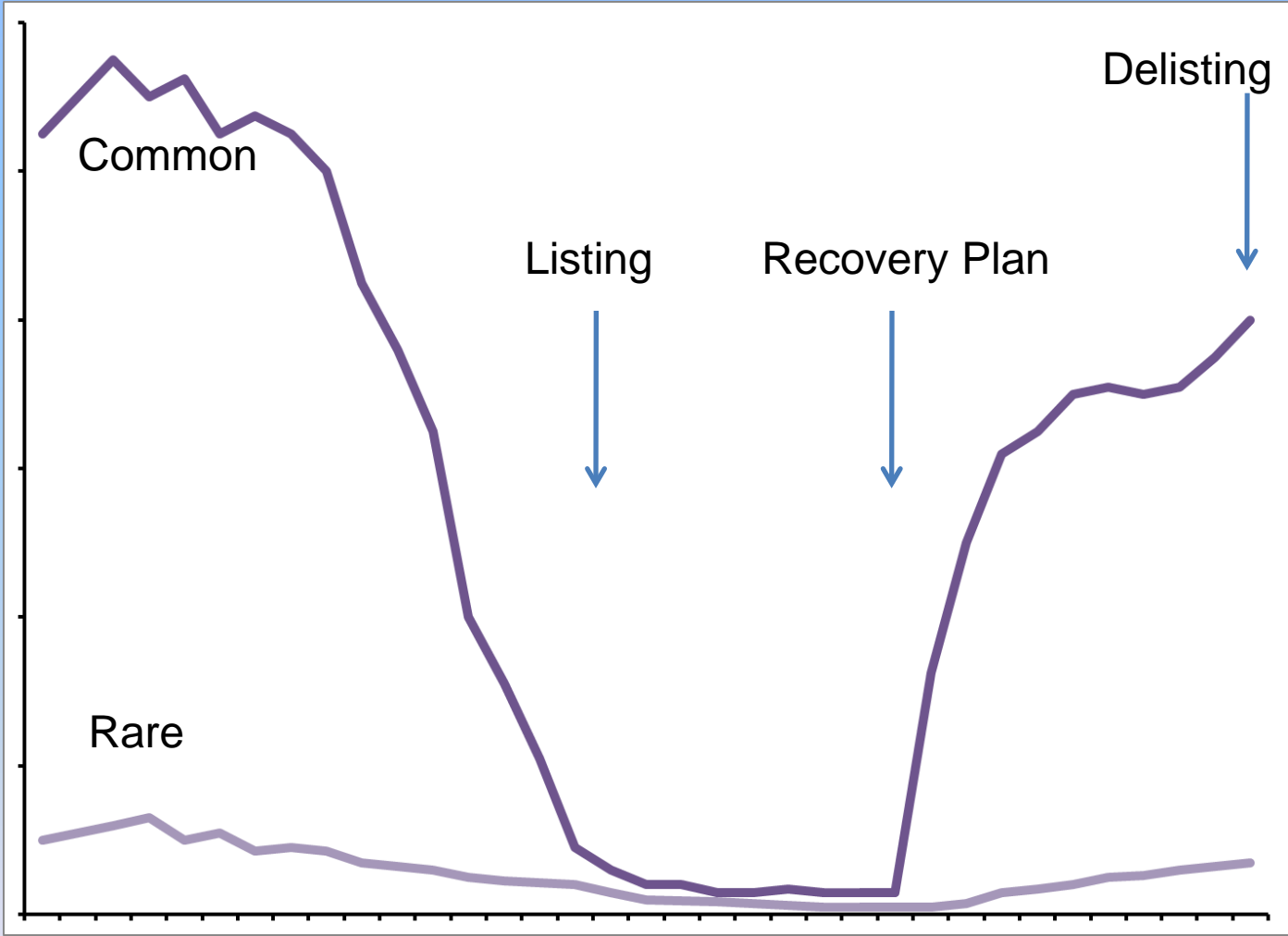
A review of 1174 recovery plans found:

- Delisting objectives for abundance remain on the lower end of the continuum of viability with 68%-91% falling below published thresholds for minimum numbers of individuals.
- Numbers of populations yield even less optimistic IUCN rankings, with 81% of species being *vulnerable, endangered, or critically endangered*.

- Neel et al. (2012) *By the numbers: How is recovery defined by the U.S. Endangered Species Act?* BioScience 62: 646-657

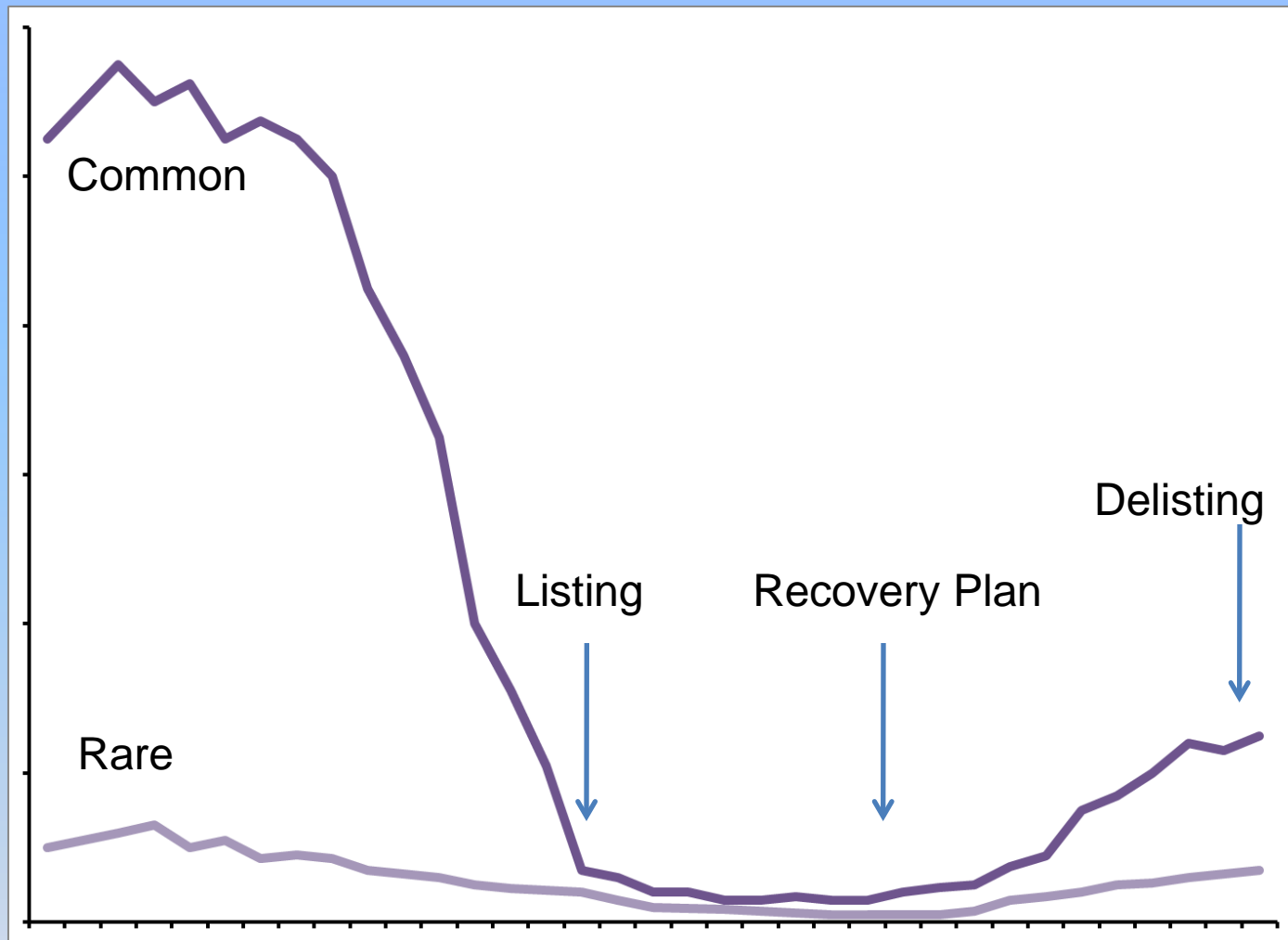


Abundance



Time →





Time →



Defining Recovery – SCB Petition

Recovery means the improvement in the status of a listed species such that—

1. the species' is of sufficient abundance, measured by numbers of individuals, numbers of populations, range extent, and habitat availability, that it possesses the necessary representation, redundancy, and resiliency to ensure the species' long-term persistence, and to ensure that the species continues to perform its ecological role in each significant portion of its range; and
2. the species is no longer at risk of becoming endangered within the foreseeable future in any significant portion of its range due to (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

Downlisting and Delisting Criteria

- Threatened species means “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”
- Endangered species means “any species which is in danger of extinction throughout all or a significant portion of its range.”

SCB Petition: Downlisting Criteria

- Downlisting criteria shall insure that (1) the listing factors under Section 4(a)(1) are being substantially abated such that the species no longer qualifies as endangered in each significant portion of its range, (2) the species has sufficient representation, resiliency, and redundancy in each significant portion of its range to no longer qualified as endangered, (3) the risk of extirpation in each significant portion of its range is less than 10% over the next 100 years, and (4) the species' overall risk of extinction is less than 10% over the next 100 years.

SCB Petition: Delisting Criteria

- Delisting criteria means objective and measurable quantitative standards or qualitative standards, based on the best scientific and commercial data available that, when achieved: (1) indicate that a species is no longer in danger of becoming endangered within the foreseeable future based on any of the factors in Section 4(a)(1) of the Act, and (2) the species performs its ecological role throughout all significant portions of its range. Delisting criteria shall be achieved prior to the delisting of such species.

Quantifying Ecosystem Function

- CITES – Appendix II species must be maintained “throughout its range at a level consistent with its role in the ecosystems in which it occurs and well above the level at which the species might become eligible for inclusion in Appendix I.
- Soulé et al. (2005) – “A given species should receive special attention for recovery—beyond mere demographic viability—if its absence or unusual rarity causes cascading, dissipative transformations in ecosystems, including alterations or simplifications in ecological structure, function, or composition.



Quantifying Ecosystem Function



Griffiths C.J. et al. 2011.
Resurrecting Extinct
Interactions with Extant
Substitutes, *Current Biology*
21:762-65



Nihoa Millerbird

Recovery Planning

- “A typical recovery team consisted of experts in the particular species; however, in the case of the [Northern Spotted Owl Recovery Plan] Deputy Secretary MacDonald ultimately dictated who would be on the recovery team, which did not contain any scientists who were ‘owl experts.’”



U.S. Dept. of Interior Inspector General.
*Report of Investigation: The Endangered
Species Act and the Conflict between
Science and Policy.*

SCB Petition: Recovery Teams

- Recovery teams shall include scientific experts on the species, for which the recovery plan is being developed. For multi-species recovery plans, the Secretary shall include scientific experts with relevant expertise on a representative group of the species included within the multi-species recovery planning team. Recovery teams may include other stakeholders, including representatives from state, local, and tribal governments, other federal management agencies, and affected stakeholder groups

SCB Petition: Recovery Teams

- Where the Service decides to constitute a recovery team to develop or revise a recovery plan, it shall do so within 120 days of the publication of the Notice of Intent. The recovery team shall provide a draft recovery plan to the Secretary for public comment within 18 months of the assembly of the recovery team. The Secretary shall publish a final recovery plan for the species within 9 months following the closing of the public comment period for such species.



SCB Petition: 5-Year Status Reviews

Section 4(c)(2)

“The Secretary shall conduct, at least once every five years, a review of all species included [under the ESA] and determine on the basis of such review whether any such species should—(i) be removed from such list (ii) be changed in status from an endangered species to a threatened species; or (iii) be changed in status from a threatened species to an endangered species.”



Friends of Blackwater v. Salazar, No. 1:09-cv-02122 (D.C. Cir. Aug. 17, 2012).

SCB Petition: 5-Year Status Reviews

For those threatened and endangered species that have approved recovery outlines or recovery plans, the status review shall contain the following:

- (1) A discussion of the recovery tasks that have been implemented since the previous status review of the species, the costs of implementing those recovery tasks, and where practicable, an evaluation of the effectiveness of those recovery tasks.
- (2) A review of the downlisting criteria and recovery criteria contained in the recovery plan or recovery outline for the species, and where applicable, recommended changes to those criteria in light of additional scientific or commercial data or other scientific information indicating that any criteria should be updated.
- (3) A review of the recovery goal in the recovery plan or recovery outline for the species, and where applicable, recommended changes to those recovery goals in light of additional scientific or commercial data or other scientific information indicating that any recovery criteria should be updated.
- (d) Critical Habitat. The status review shall summarize the habitat requirements of the species, and where applicable, make recommendations on additions or deletions to the designated critical habitat for such species.

Recovery Process: Hawaiian Hawk



'io 1984 Recovery Plan Goal: “To ‘ensure a self-sustaining 'io population in the range of 1,500 to 2,500 adult birds in the wild, as distributed in 1983.”

2007: First 5-year status review for species initiated, despite being listed for 40 years.

2008 Delisting Proposal:

Delisting proposal based on one summer of surveys in 2007.

“No explanation for the recovery goal...was provided, but...were presumably based on [1983] preliminary population estimate...Although the plan did not include specific delisting criteria, the population and distribution targets have been met.”

2014: Delisting may be finalized. No new status review has occurred in intervening 7 years.

Recovery Process: California Least Tern



1985: Recovery Plan published with recovery goal of 1200 breeding pairs distributed in at least 20 of 23 coastal management areas with 20 pairs in each area.

2006: First 5-year status review conducted. Least tern population is current 6X the numeric recovery criteria. However, recovery criteria do not account for:

- New modeling efforts regarding population viability analyses.
- New predators and the effectiveness of predator control efforts
- Increased human populations along the California coastline and their impacts upon tern habitat.

Status review does not provide revised recovery criteria. No information regarding whether or when a revised recovery plan/recovery criteria will be developed.