U.S. Fish & Wildlife Service Lacey Act Evaluation Criteria

Introduction

The attached criteria are provided as a guide to evaluate whether a species does or does not qualify as injurious under the Lacey Act, 18 USC 42. The analysis developed using the criteria will serve as a basis for the Service's regulatory decision regarding injurious wildlife species listings and as part of the administrative record. Biologists within the Service who are knowledgeable about the species being evaluated will participate in the evaluations.

Please provide a written summary for each of the items under the "Background Information" section and a written analysis for each of the criteria under the "Basis for Determination" section. Analyses should be based on the best available scientific information. If information is not available for the species being evaluated, please indicate by writing "not applicable".

As defined in the Lacey Act, *wildlife* and *wildlife resources* "include those resources that comprise wild mammals, wild birds, fish (including mollusks and crustacea), and all other classes of wild creatures whatsoever, and all types of aquatic and land vegetation upon which such wildlife resources are dependent."

Threatened and Endangered species and designated critical habitat refer to species listed and habitat designated as critical pursuant to the Endangered Species Act of 1973, as amended, 16 USC 1531.

BACKGROUND INFORMATION

A Taxonomy, Synonomy, and Common Names:
B Description and Distinguishing Characteristics (including similarity to other species):
C Native Distribution (including habitat preferences):
D Biology and Natural History:(including, but not limited to, reproductive potential, habitat tolerances, life span, feeding habits, food base)
E Associated Diseases and Parasites:
F History of introduction (not restricted to the U.S.) including pathways and stage of establishment, if applicable:
G Uses:
H Potential Range:
I Any additional background/descriptive information not included above:
J References:

BASIS FOR DETERMINATION Please provide a written justification/summary for the criteria listed below. Several criteria will receive a High/Low ranking. A separate ranking spreadsheet is attached. If the criteria does not apply to the species being evaluated, please indicate by writing not applicable.

Factors that contribute to injuriousness

A. Likelihood and magnitude of release or escape, including pathway(s):

B. Likelihood and magnitude of survival and establishment (with or without reproduction) if released or escaped, including "acceptable" thresholds):

C. Likelihood and magnitude of spread:

D. Likelihood and magnitude of adverse impacts on native wildlife, wildlife resources, ecosystem balance, including what native species other than ESA listed species are or are likely to be affected?
   a. Potential for hybridizing or inter-breeding
   b. Competition for food and habitats
   c. Potential to cause habitat degradation and/or destruction
   d. Predation of native wildlife
   e. Potential to transfer pathogens
   f. Additional adverse impacts on native wildlife, wildlife resources, and ecosystem balance.

E. Likelihood and magnitude of effect on:
   a. Threatened and Endangered species. Please provide number of species.
   b. Designated critical habitats of Threatened or Endangered species
   c. Candidate species

F. Likelihood that one or more species may be placed in danger of extinction or endangered within the foreseeable future as a result of introduction/establishment:

G. Likelihood and magnitude of ancillary wildlife resource damage~~s~~ due to control measures (including, but not limited to, damage from equipment/chemicals used, increased risk of reinvasion due to ineffective treatment, or disturbance caused by removal):

H. Likelihood and magnitude of impact on *(high/low ranking not required)*:
   a. Human beings
   b. Agriculture
   c. Horticulture
   d. Forestry

I. Additional considerations that contribute or are likely to contribute to injuriousness:

Measures that reduce or remove injuriousness

J. Ability and effectiveness to: (*high responses indicate a low risk*)
   a. Prevent escape and establishment, including crisis management/rapid response
   b. Eradicate
   c. Manage established populations
   d. Control spread to new locations
   e. Prevent and control the spread of pathogens
   f. Rehabilitate and recover ecosystems disturbed by the species

K. Potential ecological benefits for introduction: *(high/low ranking not required)*

L. Are there additional measures (i.e., triploidy, sterility) that reduce or remove or are likely to reduce or remove injuriousness? *(high/low ranking not required)*

Letter	Criteria	Low	High
A	Likelihood and magnitude of release or escape		
B	Likelihood and magnitude of survival and establishment (with or without reproduction) if released or escaped		
C	Likelihood and magnitude of spread		
D(a)	Potential for hybridizing or inter-breeding		
D(b)	Competition for food and habitats		
D(c)	Potential to cause habitat degradation and/or destruction		
D(d)	Predation of native species		
D(e)	Potential to transfer pathogens		
E(a)	Likelihood and magnitude of effect on Threatened and Endangered species		
E(b)	Likelihood and magnitude of effect on designated critical habitats of Threatened or Endangered species		
E(c)	Likelihood and magnitude of effect on candidate species		
F	Likelihood that a species may be placed in danger of extinction or endangered within the foreseeable as a result of introduction/establishment		
G	Likelihood and magnitude of ancillary wildlife resource damages due to control measures		
	For criteria listed below, high responses indicate low risk		
J(a)	Ability to prevent escape and establishment		
J(b)	Ability to eradicate		
J(c)	Ability to manage established population		
J(d)	Ability to control spread to new locations		
J(e)	Ability to prevent and control the spread of pathogens		
J(f)	Ability to rehabilitate and recover ecosystems disturbed by the species		

Revised March 23, 2001