An Act of Deception

The Endangered Species Act purposely oversteps its bounds. By Matthew A. Cronin, Ph.D.

I'm sure that many of you have asked yourself: Why is the Endangered Species Act (ESA) used for things that are not species? How can they list the grizzly, wolf, and lynx in the northern Rockies when there are thousands of them in Canada and Alaska? How can they list salmon in the Columbia and other Pacific Northwest rivers when there are millions of them around the Pacific Ocean? Why did they list the northern spotted owl as a species when there are also California spotted owls and Mexican spotted owls?

It is because the ESA defines species as "species, subspecies, and distinct population segments." It's the Endangered Species Act, but they made it into the Endangered Species, Subspecies, and Population Act. It is particularly troublesome because the terms subspecies and distinct population segments are not well-defined. The federal biologists and environmental groups use these terms to put inappropriate groups on the ESA list. This is a

major issue. By my count, 70 percent of the ESA's listings of mammals in the United States are subspecies or populations. Below are a few examples of how the ESA is being misused.

Please note that although I am critical of federal biologists, there are also many good ones. For example, biologists with the USDA provided good scientific information⁽¹⁾ that helped keep the black-tailed

There are gray areas between some species (some rodents, fish, insects, etc.), but in general we can identify species. Subspecies are a different story. Those of you who hunt and consider trophy classes know about subspecies such as Rocky Mountain bighorn sheep and desert bighorn sheep, or black-tailed deer and mule deer. Subspecies are designated by scientists to describe groups that differ in various characteristics. Subspecies are like domestic breeds (for example, Angus and Hereford cattle), except they are not as well-defined. Modern scientists know that most subspecies are subjective and that it's hard to define them. Consider the following statements from scientists about

prairie dog off the ESA list.

The first point relevant to the ESA is that

it was intended to save species from extinc-

tion. We can identify species fairly well, espe-

cially of the larger animals. Species are

generally defined as groups that can inter-

breed, identified with a Latin name. For

example, a cow is a cow (Bos taurus), even

though there are different breeds and lines.

The subspecies concept has been criticized or rejected outright by several authors⁽³⁾...and the subspecies concept is so arbitrary a concept that it should be abandoned.⁽⁴⁾

subspecies(2):

Present applications of the subspecies concept are uneven, frequently undocumented, and lead to no improvement of either evolutionary theory or practical taxonomy.⁽⁵⁾

There is so much variation among populations of most species that some combination of characters will distinguish each population from others and consequently there is no clear limit to the number of sub-



Gray wolf howling, Rocky Mountains. RIGHT: Alaskan grizzly enjoys chum salmon during migration.



species that can be recognized.(6)

Widespread species thus can be divided into any number of different sets of 'subspecies' simply by selecting different characteristics on which to base them...and use of the subspecies (or race) concept has essentially disappeared from the mainstream evolutionary literature.⁽⁷⁾

The point is that mainstream scientists acknowledge that many subspecies are scientifically subjective and arbitrary. The ESA is clearly not using the "best available science," as required, when listing subspecies. Consider that the northern spotted owl subspecies has been found to be genetically similar to the California spotted owl subspecies. (8) Also consider the recent case of the Preble's meadow jumping mouse. This mouse was listed under the ESA as a subspecies in Colorado, but then it was found to be genetically similar to other mice that occur over a wide range in large numbers. (9)

It's equally important to note that Distinct Population Segments (DPS, or simply populations) can be listed as "species" under the ESA. Many of you are probably aware that the grizzly, wolf, and lynx have been listed as populations under the ESA in the western states, but not in Canada or Alaska. These species are not endangered. It is certain local populations that are small in numbers. The ESA has been used by the federal government to take over local management of these wildlife populations. It's gone so far that the National Marine Fisheries Service has invented a new term that means the same as popu-

Examples, not critical for ESA

The following list includes examples of subspecies and populations that have been listed under the Endangered Species Act but are arbitrarily defined. None of these is critical to the survival of the entire species, and in my opinion should not have been considered under the ESA.

POPULATIONS (DPS)

- (a) Grizzly bear in the lower 48 states
- (b) Wolf in the lower 48 states
- (c) Lynx in the lower 48 states
- (d) Salmon and Steelhead stocks on the Pacific Coast
- (e) Eastern stock of Steller's sea lions
- (f) Southwest Alaska stock of sea otters

SUBSPECIES

- (a) Northern spotted owl
- (b) Coastal California gnatcatcher
- (c) Mexican wolf
- (d) Woodland caribou in Idaho/Washington
- (e) Preble's meadow jumping mouse
- (f) Sonoran pronghorn antelope

lation, but lets them list local stocks of salmon and steelhead to control land and water. They call a population of salmon they want to list an "evolutionarily significant unit," or ESU. The ESU is defined as "a population or group of populations that are substantially reproductively isolated, and represent an important component of the evolutionary legacy of the species." So an ESU is a population and there is no good reason why a new term had to be invented. (2) In fact, many biologists question

the meaning of the term. (10) Despite the subjectivity of the terms "substantially" and "important" in the definition, several salmon ESUs have been listed as threatened or endangered in Washington, Idaho, Oregon, and California.

The unpleasant fact is that the federal government defined species to include just about anything, and our well-intentioned congressmen have been too busy to figure out that there is little scientific basis to it. We should conserve and manage populations of fish and wildlife locally, but it just isn't the job of the federal government.

I think that Congress, state legislators, governors and the public should be informed that the ESA is being misused because subspecies and populations are included. I believe that an effective way to fix the problem is to restrict the Endangered Species Act to entire species, as originally intended. Subspecies and populations should be managed by the states. I am not the first one to suggest this commonsense proposal. (11) Subspecies, populations (distinct population segments in the current ESA), and Evolutionarily Significant Units are subjectively determined and beyond the jurisdiction of the Endangered Species Act and the federal government. This proposal to limit the ESA is justified because the states traditionally have jurisdiction to manage fish and wildlife.

I feel the past 30 years of ESA implementation with subjectively defined subspecies and populations have been deceptive, and allowed the federal agency biologists, work-

ing in collaboration with environmental groups, to use the ESA to control private and public land, water, and other resources. However, this can change because the ESA is up for reauthorization this year. Perhaps a new ESA could be limited to entire species. It is clear that the environmental groups and federal agencies know that the ability to list subspecies and populations gives the ESA most of its power. This means that anyone proposing to change the ESA, as I am, will be accused of wanting to "gut" the ESA. Our elected representatives need support in standing up to such accusations. Hopefully, exposure of the science behind the issues as I described will help in this regard. ■

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- (10) DeWeerdt, S., K. Crandall, C. Moritz, E. Sinclair, R. Waples, R. Wayne, and A. Clark. 2002. What really is an Evolutionarily Significant Unit? Conservation Biology in Practice 3:1-17.
- (11) Randy Simmons, Ray Arnett, Charles Kay, Robert Taylor, Jim Beers, and others have courageously noted the inappropriateness of listing subspecies and populations under the ESA in their work.