WILDLIFE AT RISK
From
NEW "NO-GENETICS" POLICY IN THE SOUTHWEST U.S.

On January 27, 2005, Dale Hall, the Director of the Southwest Region of the US Fish & Wildlife Service, issued a memo outlining a genetics policy that would severely setback conservation and recovery of endangered species. The policy prohibits FWS biologists from establishing population recovery goals for genetically unique populations, or from concluding development or other projects jeopardize endangered wildlife based on their impacts on unique populations.

Likely consequences in the Southwest include weakened recovery planning and decreased protections for mammals, birds, fishes, and other wildlife on the brink of extinction. Some southwestern wildlife species negatively affected by Hall's policy play umbrella and keystone roles in their ecosystems:

- The Gunnison's Prairie Dog, a keystone species in the Colorado Plateau, is at risk if genetics research is disregarded post-listing. This species has been eliminated from 90% of its historic area and was petitioned for listing in 2004. There may be two separate subspecies of Gunnison's Prairie Dog – gunnisoni and zuniensis – but research on this issue has not been concluded. Under Hall's policy, if genetics research subsequent to listing finds that the gunnisoni subspecies is valid, it would be more critically imperiled than the full species. The failure to manage for this subspecies in consultation and recovery planning could therefore result in its extinction. The more than 100 species associated with prairie dog towns would likewise be harmed.

- There will also be consequences for the Lesser Prairie-chicken, a candidate for listing since 1998, and an umbrella species in Southern Plains shinnery oak and sand sage ecosystems. Preliminary research indicates that prairie-chickens in New Mexico are genetically distinct from individuals in other parts of their five-state range, having several unique haplotypes. Yet, the New Mexico population is in danger of extirpation, as the core remaining populations occupy only 16% of the former range, in an area increasingly targeted for oil and gas drilling. Listing will result in more genetic research on lesser prairie-chickens, the findings of should be used to guide recovery of the New Mexico and rangewide populations. Under Hall's policy, such findings would be ignored by fiat.

- The Gila Trout recovery plan, revised on September 10, 2003 places a heavy emphasis of preserving distinct population lineages. The recovery plan places a heavy emphasis on the value of genetic information, noting that "genetic variability must be preserved and restored, to the extent possible, to ensure persistence of the species." Further, the recovery plan requires that four remnant unique lineages be fully conserved prior to the species de-listing under the Endangered Species Act.

- Similarly the current draft recovery plan for the Apache Trout relies on genetics as a means of ensuring population viability and long-term recovery. In fact, the recovery team for the Apache Trout had developed a May 2004 Draft Revised Recovery Plan for the species, when Dale Hale announced the new policy banning genetic information. The recovery plans emphasis on preserving genetic lineages made it an obvious target of the new policy. Nonetheless, the Arizona Game & Fish Department's website makes its clear that de-listing can only "be considered when all of the 13 known historic lineages of Apache trout stocks are replicated into protected, secured streams. The replications are necessary to preserve all genetic variability for the species and to ensure that natural or human-induced disasters do not extirpate unique lineages."

- Genetic variability of the threatened Loach Minnow and Spikedace, two non-game native southwestern fish species, has been recognized to be vital for the species recovery. Though the 1991 recovery plans for both species do not place a heavy emphasis on genetic lineages, the more recent final designation of critical habitat in 2004 recognizes the important role of conserving genetic diversity to the long term recovery of the species. That critical habitat designation, though since withdrawn, designated critical habitat based on the fact that species could only be conserved if each of the handful of remnant unique genetic lineages were fully protected.

- The recovery plans for both the Mexican Spotted Owl and the Southwest Willow Flycatcher rely on bio-regionally based recovery objectives, requiring populations within these geographically bounded areas to be healthy in order for the entire species to be considered for goals. In the same way that watershed or river based recovery goals would be undermined by this new genetics policy so too would recovery goals based on ecological zones.

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