

ESC America's Top 10

General Information		Please Use this Column to Provide the Requested Information	
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Report Questions			
Do you have photos that can be used in the report?	Yes		
Will you want printed reports?	No		
If your species is selected, will you use the opportunity to organize around the species and/or publicize its plight?	Yes		
The Species & Its Status Questions			
Common name, genus & species		Peninsular Bighorn Sheep (<i>Ovis canadensis nelsoni</i>)	
Conservation Status		Endangered	
Current population size		981 as of 2010	
Has the species been delisted? If yes, when? Was the recovery on time? (Skip questions 17+18.)	No		
If no, does the species have a recovery plan?	Yes		
If it does have a recovery plan, what is the projected downlisting and/or delisting date?			
Background Questions (for the report profile)			
Geographic range		CA	

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Habitat	Habitat is limited to east-facing, lower elevation slopes (typically below 4,600 feet) of the Peninsular Ranges along the northwest edge of the Sonoran Desert in southern California.
Primary diet (if applicable)	The bighorn sheep browses on grasses, clover and sedges in warm months. In colder months, it eats woody plants like willow and sage. Bighorn sheep in desert areas often eat brushy plants like holly and cactus.
Public Engagement Questions (Please explain why the species is interesting, why it matters, why decision-makers + the public should care.)	
Interesting facts about the species	Peninsular bighorn sheep can get water from cacti, splitting the spiny barrel cactus with their horns and eating its watery insides.
Additional background information to complete the species profile in the report.	Up to 2 million bighorns roamed North America at the turn of the 20th century, but now only 70,000 remain. Peninsular bighorns, a so-called “distinct population segment” of these, number only in the hundreds.
What are the most important messages that should be communicated about this success story?	Since its habitat frequently is threatened by housing development, and the FWS has already shown (in 2005, responding to a tribal lawsuit) that it is willing to settle with local organizations and citizens to drastically reduce the critical habitat range for the sheep, it is essential that the ESA remains strong, allowing citizen action to keep the federal government doing its job (ex: 2007 and 2009 lawsuits to prevent cutting habitat by more than 50%).
Outline and describe the existing threats that might impede its recovery, e.g., new threats to its habitat, etc. Include any potential political threats, e.g., a Congressional delisting before its time. Cite any substantiating scientific studies.	Threats include its habitat being developed for housing and agriculture, car collisions, predation by mountain lions, diseases contracted from domestic sheep, disturbance by humans and dogs, fire suppression, and spread of exotic plants such as tamarisk [1].
Criteria-Specific Questions	
Detail the ecological and scientific importance of the species. Note if it is a keystone species. Describe its role in the biodiversity of its environment. Cite any substantiating scientific studies.	Bighorn sheep are important predators of grasses and shrubs in their native landscapes, they are also important sources of prey for large predators. Mountain lions, wolves, bobcats, coyotes and golden eagles are predators of bighorn sheep. Eagles have been known to prey upon lambs, but they are unable to kill adult bighorn.

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Provide information on any additional benefits the species provides, such as economic, medicinal, or ecosystem services.

According Animal Diversity Web: "Native Americans and early settlers prized bighorn meat as the most palatable of American big-game species. Native Americans also used the horns to fashion large ceremonial spoons and handles for utensils. The horns have also been popular for many centuries as trophies. Bighorn sheep may serve as an attraction for ecotourism ventures in parts of western North America. (Festa-Bianchet, 1999)"

Judge's score for importance of species.

What recovery actions have been taken for the species?

Approximately 100 peninsular bighorn are captive bred and used to augment the wild population. Various measures have helped abate habitat loss and degradation since listing in parts of the sheep's range. No threats have been completely ameliorated, and protection as an endangered species is essential to keep measures in place to mitigate ongoing threats.

Why were those recovery actions successful?

Regulatory protection under the Act has moderated habitat loss and allowed the bighorn's population to grow.

If there are or have been multi-agency and/or public/private collaboration to protect the species, please describe.

Please detail the species' recovery. What increases have there been in the size of the population and in the number of populations?

The historic population size is unknown, but the species was considered "rare" in 1971 when it was estimated at 971 animals [1]. The species highest recent population was 1,171 in 1974 and 1979. It plummeted to 276 in 1996 and increased to 705 in 2004 [1, 2]. A rash of deaths, apparently from disease, struck the species in 2005. As of September 2005, the magnitude of the impact is unknown.

If there is political support for the conservation of the species, please explain.

There are political challenges to protecting the species due to the development pressures.

Are there actions that need to be taken by government officials and/or NGOs to continue the recovery?

CBD is advocating for protection of Peninsular bighorn in the central and southern parts of their range, including challenging off-road vehicle use in the Desert Cahuilla/Truckhaven area and fighting the expansion of a large gypsum mine, both in critical sheep habitat. We're working to curb off-road vehicle impacts in the Yuha Desert and other border areas that provide a link to bighorns in Mexico.

Are there additional actions that individuals can take to continue the species' recovery?

Individuals can advocate for habitat protections for the bighorn by becoming involved in submitting comments on projects that would harm the sheep's habitat.

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Judge's score for recovery.

Final Judge's Score

0

Please submit to Nancy Welch at nwelch@endangered.org by July 3, 2013. Thank you for participating in the 2013 Top Ten Report.