



National Park Service
U.S. Department of the Interior

Pinnacles
National Monument

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Topic: California Fish and Game Commission Adopts New Regulations Requiring Non-lead Ammunition in California Condor Range

Background: The California legislature passed a bill (AB 821) that was signed by Governor Schwarzenegger in October, 2007 that mandated non-lead centerfire ammunition be used for big game hunting and nongame hunting for coyotes in areas where California condors are found. This bill was passed in recognition of the consensus of the scientific community that inadvertent ingestion of spent lead ammunition is a significant source of mortality in California condors and an obstacle to condor reintroduction. The task of the California Fish and Game Commission was to develop regulations to implement the language specified in AB 821.

On Friday December 7, 2007, the California Fish and Game Commission met in Sacramento to discuss AB 821, review the final environmental document, receive public comment, and adopt proposed regulations to implement AB 821. The Commission concluded that lead in the environment is a serious environmental concern for wildlife in general. As a result, in a 3-1 vote, the Commission adopted language from AB 821 to eliminate the use of lead ammunition within the existing range of the California condor, understanding that the condor range will be revisited periodically. The Commission also felt that more action was needed to reduce the availability of lead to condors, and therefore removed language that would have exempted .22 caliber and smaller rimfire ammunition from the lead ban.

Issue:

Will these changes be enough to help condors get off the Endangered Species list?

That will depend on the degree to which citizens comply with the new laws and how successfully the California Department of Fish and Game, USFWS, NPS and other organizations are able to educate the public. Hunters, ranchers, and farmers have a long tradition of wildlife conservation, and if the public adopts non-lead ammunition, then it is felt that the reduced amount of lead-contaminated carcasses will represent an increased, safer food supply for condors and other scavengers. Condors ultimately stand to gain from hunting activities, because they are obligate, opportunistic scavengers. The issue has always been eliminating carcasses found by condors which contain lead fragments from bullets.

What scientific evidence exists that lead bullets can kill condors?

A growing number of peer-reviewed studies and carefully documented behavioral observations of condors have shown that lead bullets are found in carcasses that condors feed on and that these lead remains result in increases in lead values for condor blood, tissue, and feathers following their feeding on the carcasses. Further, high blood lead levels have caused condors to die after capture and attempted treatment have begun.



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Two incidents in San Benito County have involved condors feeding on squirrel carcasses and a dead pig that were shot with .22 caliber bullets. Both examples included lead bullet remains being retrieved from the carcasses and condor blood lead levels rising significantly following the feeding observations. In addition, condor blood and feather lead isotopes matched those found in the lead bullet fragments recovered from the pig carcass demonstrating a link between the lead contaminated pig carcass and the condors feeding upon it. A total of 12 condors have been confirmed to have died from lead poisoning in California and many others are suspected. In addition, scientific studies have shown that large numbers of bald and golden eagles suffer from high blood lead levels and also succumb to lead poisoning, so this measure should also benefit many species other than condors.

What are people supposed to use for hunting small mammals (e.g., rodents, wild pigs) if they can't use .22 caliber rimfire anymore?

In passing the lead ammunition restrictions, the Commission felt that if a demand for .22 caliber rimfire non-lead ammunition were created, manufacturers would respond with products to fill this need.

Until that time, options include the centerfire Barnes "Varmint Grenade" which is made in a .224 caliber/36 grain and a .243 caliber/62 grain bullet. A box of 100 bullets costs about \$15. Additionally, ammunition manufacturers sell products loaded with varmint grenade bullets.

Does Pinnacles National Monument support these lead ammunition restrictions?

It is the position of the NPS that elimination of lead from our environment is a good idea. Our society has found it beneficial to remove lead from paint, water pipes, gasoline, and children's toys, and it follows that reducing the lead pathway into wildlife by using non-lead ammunition is a step in an established direction. The NPS found it compelling enough that in Fiscal Year 2008, NPS Law Enforcement Officers have been required to use non-lead ammunition during practice and qualifications. Pinnacles rangers carry non-lead ammunition for use when injured wildlife needs to be dispatched. In addition, as part of Pinnacles Environmental Assessment to remove exotic pigs, the monument requires using non-lead ammunition to remove wild pigs from inside the pig exclusion fence that surrounds the core of the park.

What position did Pinnacles National Monument take at the Fish and Game Commission Hearings?

Pinnacles asked the Commission to consider extending the requirement for non-lead centerfire ammunition specified in AB 821 for big game hunting to also include depredation permits for wild pig control. The Commission replied that the Department of Fish and Game now requires holders of pig depredation permits to use non-lead centerfire ammunition as a stipulation of the permit.



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Studies of Pinnacles condors have shown that wild pigs are a frequently encountered wild food source. If permittees with depredation permits for wild pigs are required to use centerfire non-lead ammunition, condors should find increased numbers of “safe” pig carcasses that should improve their food supply.

Regarding the proposed language for an exemption for .22 caliber and smaller rimfire ammunition, Pinnacles asked the Commission to include additional language for re-evaluating the .22 caliber exemption when non-lead alternatives become available. The Commission decided that rimfire ammunition represented a documented risk to condors and was an additional source of lead in the environment. Therefore the Commission did not support the proposed exemption for .22 caliber and smaller rimfire ammunition, suggesting instead that if a demand for .22 caliber rimfire non-lead ammunition were created, then manufacturers would respond with products to fill this need.