



**United States of America
Department of the Interior
Fish and Wildlife Service
Endangered Species Program**

Telephonic Interview Time (08:33)

Topic: California condor (Host – Brynn Walling with Mike Wallace)

This transcript was produced from audio provided by USFWS Endangered Species Program

BEGIN INTERVIEW

(Music plays.)

Brynn Walling: Hi this is Brynn for the US Fish and Wildlife service and today I have on the phone, Dr. Mike Wallace. How are you today Mike?

Dr. Mike Wallace: Doing great thank you.

Brynn Walling: Dr. Wallace is the Conservation Coordinator at the San Diego Zoo Global Institute for Conservation and Research and today he is going to talk to us about the California condor. Dr. Wallace, can you tell us a little bit about how the San Diego zoo is involved in conservation efforts for the condor?

Dr. Mike Wallace: Yes, the San Diego Zoo has been involved with California condor research and conservation efforts since the very beginning. In the 1980s, it was about the time when everything was coming together for understanding what needed to be done for the California condor and committees were put together by US Fish and Wildlife service, Audubon Society had recommended to the program that all of the birds back in 1980 should be caught and transmittered and in a way that we could better understand why they were going downhill so fast; what the mortality factors might be.

And in doing so, we realized that problem with the California condor was not because of lack of breeding in the wild, they were actually, those pairs that were able to get together were doing quite well, but it was a heavy dose of mortality and it turns out that in those early days we understood that a few of the birds that we were able to recover using those transmitters it indicated to us that lead poisoning might be a factor. And as it turns out even today with our releases of the birds to the wild we are able to verify that yes indeed lead poisoning not only was a factor in bringing the birds to the brink of extinction but also it was – it is a factor today.

But the San Diego zoo was involved early on along with the Los Angeles Zoo when all of the birds that were in the wild that could be trapped at the times – this was 1987 – 27 birds came into captivity and half of them went into the LA zoo and half of them went to the San Diego Zoo at the time. And by spreading our eggs out into different baskets, as you might say, they were able to ensure a little bit of security that if something should happen to one of our populations, then – then there was some ability to continue on. And to this day we use that same tactic when we are breeding birds in different zoos. We have 4 different entities that are breeding birds for the program at this time and as well when we started releasing the birds at time, we are spreading our release birds into different habitats and different areas; five different areas where we are doing the research.

So early on the San Diego Zoo was involved, we were able to breed the very first condor in 1988, here at the – at that time was a Wild Animal Park now it's a Safari Park. And then it occurred at the Los Angeles zoo the very next year and so on. So, between the two zoos we've been able to carry on the conservation program.

It also has been involved when all of these birds became available to breeding in captivity there was an exerted effort to understand what kind of genetic component we might have with our small population of 27 birds. So there was a genetic screening that was done here at the San Diego Zoo that allowed us to out breed that small population as efficiently as possible. So that was a great facet, very important facet to the early breeding program that we were able to efficiently out breed as we did and fortunately we have able to get between the various breeding programs, all of the early representations, genetic representations that came into captivity, involved in breeding so of the 27 birds we had in the beginning, they were 14 founding lines and each one of those lines are well represented in captivity at this point. As well as represented in our release populations in the wild.

Brynn Walling:

And you mentioned lead poisoning was one of the threats to the California condor. Could you tell us a little bit more about that?

Dr. Mike Wallace:

Lead poisoning has been a problem since the beginning of the program and by demyelinating the nerve endings lead in the system, in the blood, actually causes neurological damage to the birds and this damage can be so severe that the bird becomes ataxic, it stumbles around and actually dies with high doses of lead in their system.

Now we have been able to verify that lead is coming from – by using isotope analysis – lead is coming from bullets, ammunition that is spent shooting large game. As you know a condor is a scavenger and they eat dead things in the wild; they don't kill their own prey like birds of prey would do. And so they are waiting for things to die and by being a

specialist on large carcasses this bird can fly great distances as well as spent, well several days between feeding meals and finding large animals that might be dead in the wild so this would be deer, elks, it could be a domestic animals such as a cattle or sheep, goats and horses.

So these animals that die in the wild attract the attention of other scavengers and the condor flies very, very high in altitude. It can fly long distances and it is actually looking for this activity around the carcass in the landscape. So when they see turkey vultures, golden eagles, ravens and other scavengers gathering even coyotes, this draws their attention. They fly over, their movement in turn signals other condors that there may be some food available and so you get the proverbial circling of birds high up over the desert with animals that are dead or even dying. They are very astute and they know when an animal is in trouble so they might wait around for a while as well, just like in the old cowboy movies.

So these animals that are dead are very often have been shot and is the case where condors come in and they find the easiest opening to get into that large carcasses so the hide of a deer or an elk is very tough. So they might actually go into the wound channel where the animal had been shot either the entrance wound or the exit wound and this area, we have learned through our studies, studies at the Peregrine Fund, x-raying dead animals that as a bullet passes through – a bullet of lead – it sheds a lot of that material of that heavy metal along the wound channel and the birds actually go in and feed in areas of high concentration of lead or they could find it as a fragment in the carcass itself and always looking for calcium, chips of bone and things like that they might find that this hard item is something that they want to take in and bring to their nest and feed their young.

So, it's a very dangerous situation for the condor they are almost predisposed to seek out this lead which is pervasive in the environment and it is very toxic as it is to humans. Children of course, you know that we have removed lead paints from toys, lead paints from buildings, we have removed lead from gasoline and all of this is a wise thing because, we are, as Condors very susceptible to lead poisoning.

Brynn Walling: Thank you so much for talking with us today

Dr. Mike Wallace: Oh, you are very welcome. If you have any more questions. Don't hesitate to give me a call.

Brynn Walling: Great

(End of interview)

Duration: 8:33 minutes