



**UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES PROGRAM**

TELEPHONIC INTERVIEW Time (8:28)

PALOS VERDES BLUE BUTTERFLY (HOST – SARAH LEON WITH JANA JOHNSON FROM MOORPARK COLLEGE)

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

P R O C E E D I N G S

(Music plays.)

It's an incredible story about second chances. For years, the Palos Verdes blue butterfly was thought to be extinct, until a small population of these beautiful butterflies was discovered on a Navy Fuel Depot in San Pedro, California. Now, one college professor and her students are seizing this extraordinary opportunity to help this rare species towards recovery.

MS. LEON: Hello there. This is Sarah Leon for the US Fish and Wildlife Service, and I'm on the phone today with Jana Johnson, professor at Moorpark College and lead biologist for captive rearing for the Urban Wildlands Group. Hi Jana, how are you today?

MS. JOHNSON: I'm great, thanks. How are you doing?

MS. LEON: I'm doing well, thanks.

I've heard nothing but great things about this captive rearing program going on at Moorpark College. I was hoping you could tell our listeners about this interesting program you've got going on there.

MS. JOHNSON: Absolutely. The butterfly project at Moorpark College is a cooperative effort between the Urban Wildlands Group and Moorpark College. We are housed at Moorpark College. They have a teaching through there, only one of two in the nation. So it has 24/7 security, and it has wonderful faculty and staff who understand everything about captive rearing and how it's a 24/7 job. And there's a whole bunch of dedicated students who provide hours and hours of endless labor.

On the Urban Wildlands Group side, they help out with contracts and with integrating into the team because we are just one piece of the puzzle to solve the problem of the presumed extinction for eleven years, and now recovering Palos Verdes blue butterfly. We are just one piece of a really great team.

MS. LEON: Okay, and this is just a truly extraordinary story with the Palos Verdes blue butterfly. Like you said, it was presumed extinct for over a decade, and then we found it on a Navy Fuel Depot of all places near Los Angeles.

MS. JOHNSON: (laughs) Ya.

MS. LEON: So, can you tell us: Why captive rearing? I mean, we thought this species was extinct. Why are we trying to save it now?

MS. JOHNSON: Well, so it did wink out and it winked out because of us. Well, presumed winked out. They looked all over the Palos Verdes Peninsula and knew that the last population of 7,000 had been bulldozed while people protested it. And they tried to prosecute, but at the time, ESA law said "person or persons" not municipalities. And so the argument was made that because it was a city that wiped it out that, therefore, they couldn't be prosecuted. This actually happened—there was not a day of jail time or a dollar of fines paid. But, this teeny tiny blue butterfly closed the loophole in the in the Endangered Species Act. Now no one can argue that because they are a city or because they are a company they are above the law. So that's pretty exciting.

It's also well established that it was wiped out by us. So it is our job to undo the wrongs of the past, and as we're doing that we are increasing biodiversity. We are recovering the habitat. We are allowing undergraduate students to work—with permits from U.S. Fish and Wildlife Service—on endangered species. And they're learning what it takes to go from 65, the estimated population when it was found again, to reproduce over 10,000 a year. So that is an incredible rebound and it feeds the soul and the students are getting that inspiration. They're getting that hands-on experience and they're building their CV and learning. It's just very exciting.

MS. LEON: Alright, now I want to talk about the kinds of students involved in this effort. Are these all students that are coming from one program like biology? Or are these students that come from all different types of disciplines?

MS. JOHNSON: They actually come from all walks. They come from all various majors. I'd have to say the majority of people who work on butterflies are actually

biology majors from natural sciences. But we've also had English majors, we've had history majors. You name it and we've probably had it up there.

The wonderful thing is that it's set up as an internship to really encourage undergraduates to take advantage of internships. And they get to do objectives and they get to do projects. Their project really expressed them. We had some art students, and their project were making these huge wings that children can stand in front of and get their picture taken with Palos Verdes blue butterfly wings on their back. And then we have the bio majors who are crunching data and working on getting publications on their record. So, it's quit the gambit. And everyone is working together, which is very exciting.

MS. LEON: Well it's really great that we're getting all of these different students from different backgrounds actively engaged in recovery efforts to help this species. And what's really encouraging is that, from what I understand, this program has been extremely successful. Can you give us an update—how many butterflies have you and your students reared?

MS. JOHNSON: We started, well actually my predecessor started when the population was rediscovered with the 65. And then it was around 200 in captivity and then 200 in the wild for a decade. It took a while to figure out what we call the recipe—what is it that you need to do in order for these individuals to be happy in captivity and breed in captivity and lay eggs in captivity and then have the larva survive throughout the period of their captivity. So that was pretty challenging.

Once we figured that out, it jumped in one season from 186 to 720. And that's when I was able to actually open it up to students, because we had enough that we could maintain our primary site down in San Pedro, and open a secondary site up at the zoo.

Now with the additional labor from the students, and this is where it's so key and so positive for the species, we went from 720 in one season to 4,513. That's when we started having enough overages to release into the wild and start trying to recover the species in the wild, which is really the point. It's exciting a lot in captivity, but it's even more exciting to watch them fly free. So that's where it's at, and we have released thousands of larva and hundreds of adults. We have multiple sites within the historic range.

MS. LEON: Alright, so what are the next steps? What are the program's goals for next year?

MS. JOHNSON: Next year, we hope to have additional sites in line for releasing. The more sites we can release to, the closer we get to being able to "downlist" or "delist," which is the ultimate goal. The Endangered Species Act was not meant for a species to step on and stay on. It was meant as a Band-Aid™. You're supposed to have it step on, get some extra special attention, recover it, and then be able to "downlist" and eventually "delist." And I really do have hope for that. Not in the immediate future. It's

not going to be next year; it's not going to be the year after that. But we're making really good progress in that direction.

Because we're part of a team—I mean there's U.S. Fish and Wildlife, there's the Department of Defense, there's the Urban Wildlands Group, there's Palos Verdes Peninsula Land Conservancy. And there are all of these academics—Moorpark College, UCLA, Texas State, Washington State—working together on this one species. And because of that, as I'm busy in the lab with the students, PVPLC is out there recovering the land for us to release onto. And that is how you get to the next step. The next step is everyone working together so that it works out in the wild.

So that's the next step, but it's a long-term goal. It's not next year, it's a few years down. But we're gonna do it!

MS. LEON: Well, it sounds like it's not a question of whether this species will recover, but when it will recover.

MS. JOHNSON: (laughs)

MS. LEON: Which, even that is something to look forward to, definitely.

MS. JOHNSON: Absolutely.

MS. LEON: Well, thank you so much, Jana, for taking the time out of your day to tell us a little bit more about this awesome program you've got going on at Moorpark College. It was a pleasure having you on.

MS. JOHNSON: Thanks Sarah, have a great one.

MS. LEON: For the U.S. Fish and Wildlife Service, this is Sarah Leon. Thanks for listening.