



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

TELEPHONIC INTERVIEW TIME (6:28)

**RESTORING THE LONGLEAF PINE ECOSYSTEM (HOST – SARAH LEON WITH
ERIC PALOLA AND EJ WILLIAMS)**

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.)

SARAH LEON: The longleaf pine forest once stretched across more than 90 million acres from southern Virginia to Florida, and as far west as Texas. But today only pockets of the vast forest are left, totaling less than four percent of its historic range. According to Eric Palola, the Senior Director of Forests for the National Wildlife Federation, the longleaf pine forest began to dwindle in the 17 and 1800s as a result of overexploitation.

ERIC PALOLA: The longleaf pine ecosystem has a storied history in the development of the southeast. It was really the native pine of the region. It was used in all kinds of residential and commercial structures, and it provided a variety of other economic products like turpentine and pine straw.

Unfortunately, over the last couple hundred years, over cutting and replacement by shorter rotation pine species and agriculture has diminished the extent of this really remarkable forest that once covered over 90 million acres across eight states. Some people say it represented as much as a quarter of the forest landscape in the continental U.S.

SARAH LEON: The longleaf pine ecosystem is one of the most ecologically diverse in the world. But as the forest dwindled, so did species dependent on the longleaf ecosystem.

ERIC PALOLA: You know a number of factors contributed to its decline, and of course, all the species—birds, mammals, reptiles—that are associated with longleaf systems have declined along with it. There are a number of species that are federally listed. People often point to the red-cockaded woodpecker, which makes its nest in cavities high up in the longleaf; and the gopher tortoise, which is a really pretty interesting critter that creates huge burrows in the ground, which actually serves as habitat for a number of other species like snakes, rodents and others; and the indigo snake, another sort of iconic species of the longleaf system.

SARAH LEON: Species recovery is the prime motivator for the U.S. Fish and Wildlife Service's involvement in the America's Longleaf Restoration Initiative, which aims to extend the longleaf pine forest from about 3.5 million acres today to 8 million acres by 2024. According to EJ Williams, species recovery is just one reason to restore the longleaf pine forest.

EJ WILLIAMS: The longleaf is a very important part of our history, and not just the history of the southeast. It's an important part of the history of our country. At one point, exports from the longleaf pine ecosystem were one of the chief products and chief economic drivers for the whole country. So we've got this long legacy of an ecosystem that's really not been treated well. We've relied on it and taken a tremendous amount of economic income and products from that forest and now it's time to give back.

SARAH LEON: Williams is the executive director of the Longleaf Alliance, a nonprofit organization established in 1995 to restore longleaf across its range. According to Williams, restoring the longleaf pine forest is a big effort that will require a number of people and organizations all pulling in the same direction.

EJ WILLIAMS: We'll really need to bring together restoration and management efforts on public lands, both state and federal. And our private lands across the southeast will be absolutely essential. The majority of lands that were once longleaf pine and that will be available for restoring and maintaining longleaf are mostly in the hands of our private landowners. Fortunately, the interest in those private landowners is tremendous. And of course there is a great commitment from the public lands towards longleaf pine, so I think the stage is set to bring everything together and really make things work. But it will take a lot of work, and it will take a lot of different kinds of people like biologists and land managers.

It will also take some of our cooperate partners like the nurseries. We rely on those people to produce millions of longleaf seedlings each year to make those available to our landowners. We'll rely on them to develop the techniques to grow just a host of understory plants. You know the longleaf ecosystem is one of the most diverse in the world, and that diversity is in large part tied up in an array of grasses and little flowering plants that make up the groundcover in the longleaf forest. In many places, that groundcover is gone or diminished, and so we've got to regrow that important component.

SARAH LEON: According to Palola, the tree may not just be attractive from a species recovery standpoint, but a climate adaptive standpoint as well.

ERIC PALOLA: We know that the south is going to experience many impacts from global warming in the years ahead—sea level rise, growing intensity of storms, prolonged drought and wildfire, invasive species.

About a year and a half ago we did a fairly major report that looked at the trends that are affecting the south that are attributable to climate change and sort of what role longleaf can play. The good news is that we believe that longleaf pine is really one of the best tools available to help the south ride out the storm, if you will, to climate change.

As the native pine of the southern coastal plain, longleaf is naturally more resilient to climate extremes, particularly in relation to other pine species due to its ability to stand up in severe wind storms, its ability to resist pests, it tolerates wildfire and drought better, and it can also be a source of carbon sequestration. It's got very strong sequestration rates due not only to the fact that it's a long-lived species, relative to others, and it can grow up to 300 to 400 years old. It also has a very extensive root system, so a lot of carbon is captured in the below-ground biomass. So those are some of the things that really make longleaf attractive from a climate adaptation standpoint.

SARAH LEON: For the U.S. Fish and Wildlife Service, this is Sarah Leon.