

Interview with Paul Davidson – Black Bear Conservation Coalition

Hi; my name is Kelly K. Mensah, American Recovery and Reinvestment Act Media Specialist for the U.S. Fish and Wildlife Service. My guest today is Paul Davidson, Executive Director of the Black Bear Conservation Coalition. We're going to talk today about a series of reforestation projects taking place primarily in East Texas, and in Western Louisiana to benefit the Louisiana Black Bear.

Can you explain how partner's projects work a little bit, in general?

Well, the Partners for Fish and Wildlife program is a program administered by the U.S. Fish and Wildlife Service to provide financial incentives and professional expertise to private landowners to encourage them to engage in activities on their land that benefit fish and wildlife resources. So it's a cost-share program with the Service providing typically 90% of the cost of the activity, and landowners providing 10%. That 10% can be in-kind like site preparation, stuff like that when you are planting trees or doing food plots or something like that.

And what exactly does the Black Bear Conservation Coalition do?

Well, the organization as a whole for the last 20 years has sort of been the umbrella organization associated with the recovery of the Louisiana Black Bear sub-species. In fact, the BBCC actually serves in lieu of a recovery team for the bear working closely with USFWS and our activities in East Texas stem from the fact that we operate in the entire historic range of the Louisiana Black Bear subspecies, which includes a large part of East Texas so that's why this partner's project is focused on mostly NE Texas.

It's East Texas and also a part of Western Louisiana?

It's all of Louisiana, the southern two-thirds of Mississippi, extremely southern Arkansas, and like I said a fairly good sized chunk of East Texas. And what we do in East Texas actually goes beyond the what was historic range of the Louisiana bear and goes all the way of the Oklahoma border, because we have a lot of evidence of bears that are crossing the Red River out of Oklahoma into NE Texas now so a lot of the habitat restorations we are looking at are a little north of what has been the range historically of the Louisiana Black Bear.

What are the issues the Black Bear faces?

Well historically it was just, it even happened in the 1700's and 1800's is that the bulk of the Black Bears were killed. The trappers were the first white people that down here and I think over the decades the bears were only left in the thickest, most dense wooded habitat in the region and I think by the early 1900s, most of those bears got killed. Bears all over had been treated as vermin since white men moved in, but in 1992 the Louisiana Black Bear was listed as threatened citing habitat loss as the primary cause of this problem. Illegal kills were certainly a factor and could have been a factor in its recovery. Habitat with respect to most endangered-threatened species is the key to turning things around, and with respect to East Texas we're looking at a lot of corridor development, a lot of the work that we do in Louisiana and East Texas is to try to establish wooded corridors between the forested fragments such that black bears can move from one area to the rest. Birds can fly from one area to the next but bears can't.

So I'm taking it that Black Bears don't have a lot of natural predators.

Right; Automobiles and people are the biggest threat to bears. When you start getting a lot of bears, you'll start getting a little bit of cub mortality associated with adult males who want to breed with females, but we've never really seen that as a big issue here because the population density doesn't warrant that.

Do you have reliable numbers as to how many Louisiana Black Bears there are right now?

No, we really don't. We never did, but we do have three different hair-snare projects going on in Louisiana to try to come up with some numbers. I know we've captured over 500 adult bears in 20 years. I know some of them have passed away since then but then I also know we didn't catch all of them so I think we usually use the number 700-800, something like that, and I think that's conservative. I think that there are probably 1000-1200 because a lot of things have changed in recent years, one being that that a lot of hunting clubs and ranchers put out their remote cameras, and we get pictures and reports of bears in areas where we didn't know we had them including females with cubs which is giving us some pretty good evidence of the geographic expansion of the breeding pair population.

What exactly is a "hair-snare" project?

Rather than go out and capture bears like we did for many years, and they had 20 years ago when they wanted to determine what a population was; they did a capture/recapture study where they'd actually physically capture and mark bears and they would continue to capture them over a period of time and plug that into a formula with what bears got recaptured and the like or the bears got captured the second time around, but weren't captured the first time. Now rather than physically capturing the bears, with the technology that we have with DNA, you physically build a barbed wire enclosure, typically one every square mile throughout the area that you are sampling and you bait the inside of essentially a barbed-wire fence, and when the bears go in to eat they leave hair on the barb and we have graduate students to collect these hairs, and then we have the hairs analyzed and DNA extracted and we can determine how many bears came to that snare set. It's typically operated for a week and left alone for a month. Then you go back a month later and replicate that and you see how many of the same hairs you caught, how many new have been caught. There's a formula you can use for the capture/recapture technique to get an estimate of how many you have in that area.

Modern technology is amazing, isn't it?

Yeah, well a lot has changed just in the 20 years I've been doing it, a whole lot has changed.

Going back to the actual program itself, what are the qualifications of someone who will be made a partner and receive the funds?

We work with private land biologists with the state agency and with USFWS and they really are the ones that identify good candidates and if we have a particular parcel of land that we think is important for bears, then we would contact the landowner and see if they would be interested in participating in that program; or sometimes land owners might contact us when they hear that we are promoting this program. Essentially what we're doing with this particular project is, we are taking agricultural land and putting it back into hardwood tree species. A lot of what we are getting in East Texas is actually cattle grazing land and it may not be that we are completely planting all of someone's grazing land, we might be widening forested corridors, doing a variety of different things. We're enhancing some projects where we're converting back what had been converted to pine plantations into hardwoods, that sort of thing. It varies with the particular site.

What are the responses as far as the ranchers and the farmers and these sorts of people? Do you get a high positive response rate?

Well everything is positive if they are interested in re-forestation. A lot of people, their livelihood depend on that agricultural land use so I wouldn't say that people who are still interested in grazing cattle are interested in planting trees, but we certainly have a lot of people who are interested in planting trees. What we've seen in the last 20 years is a lot of people who have done well in business have bought rural land for recreational purposes, primarily hunting and fishing, and who we deal with a lot in most states is these land owners who are looking at agricultural land and they are not farmers, they're businessmen. They have retired and they're looking at recreational properties so they welcome any and all opportunities to cost-share those practices to put agricultural land back into some sort of wildlife habitat.

How would you rate the success of the program so far?

Oh, I think it's been very successful, I think the USFWS partnership opportunities have been really successful and popular all along which is probably the reason it continues to be funded. In this part of the world in Texas and Louisiana, 90-95% of all the land is privately owned, whereas in New Mexico, Colorado, Arizona, parts of the Rocky Mountain West, 80% of the real estate is under public ownership. So here in the south, without incentive programs that do cost sharing on private land, we would not be making near the strides that we've been making to benefit fish and wildlife resources. This also benefits water resources. There have also been water wars in the Rocky Mountain west for a long, long time. People have been fighting over water; these battles are now coming to the south. As we have more human development and demands on water resources, we're having conflicts now; whose water that kind of thing. One of the benefits of planting trees is the benefit in ground water resources; that you slow down the runoff and enhance your groundwater supplies which benefits everybody down the road with respect to conservation. When you plant trees you don't have fertilizer and nutrient runoff from livestock and that sort of thing, and even carbon deforestation which is not part of the project, but it is certainly one thing that a lot of energy companies are looking at throughout the world, trying to reduce our carbon footprint. We can do that by planting trees in the ground because plants and trees take carbon dioxide out of the air and release oxygen whereas humans release carbon dioxide so the more trees you have, the better for taking CO² out of the atmosphere and hopefully in the long term that will slow down our climate change.

What types of trees are being planted for the program?

They're all hardwoods, a lot of Oaks, Pecans, it depends on the site, if you have a wetter area. They might put in Cypress and Tupelo, and that sort of thing, but the hydrology of

the soil and the site determines what type of species would be planted. They are all hardwood species, typically 10-12 species per site, not only Oak trees, Pecans, Hickory that sort of thing, but some small, seed-producing trees like Sweetgum that would benefit birds. Also smaller trees like Persimmon and Mayhaw and that sort of thing. Not only the trees that produce the large, tall canopies, but also tree species that benefit the mid-story, the understory. We're looking at plants that produce some sort of food for wildlife for the better part of the year.

Certainly these plants all grow at different rates, but how long would you say before a lot of the new growth begins to benefit the Black Bear?

Well, certainly we've seen, within five years, bears building dens within these thick growth areas, but they certainly use it for travel corridors within a year. I mean, it doesn't take long, especially when you are getting a lot of rainfall. The stuff grows up pretty fast and bears don't really like to walk across big, open areas. As long as you've got something 2-3 feet tall, they'll walk through that even in daylight.

Aside from Black Bears, are there other species that might benefit from the increased canopy?

In Louisiana, there are 250 migratory bird species that use, at some point in the year, these forestlands; the birds that migrate, the birds that are residents, the birds that breed here, so there's a lot of birds that benefit. This is part of the reason that we looked at bears, bears require pretty expansive areas of habitat; if you can address the needs of a bear, pretty much everything else that requires less habitat is going to benefit. Your Whitetail Deer, your turkeys, your small game, rabbits, and squirrels, pretty much everything benefits. If you can look at the large-scale landscape, restoration efforts done in the name of the bears pretty much help everything is going to benefit.

Final question: you've worked with it for a little while now, what are your feelings about the Recovery Act and its benefits to the local area, your community and what you do?

I think these conservation incentives programs, and I mean all of them that are administered by the U.S. Fish and Wildlife Service have had a tremendous impact on private lands in this region. Like I said, this region is different in that over 90% of our land is privately owned, so without incentives private landowners are not going to do anything most of the time because they cannot afford to. Incentives are the key so this Recovery Act program has had a tremendous impact and has had long-term implications

for not only FWS resources but ecological factors; water quality, air quality, all these things factor in, so I cannot say enough about all of these programs.

My guest today was Paul Davidson, Executive Director of the Black Bear Conservation Coalition. I appreciate the time; I learned a lot and keep up the good work.

Thank you.

Alright, and thank you sir.