Interviewee

He is with René.

**With what René?**

With René Fernández. He's in the water right now.

**And what time does he return?**

I understand that they are already returning around 4:00 p.m.

**And they go every day?**

No.

**Well, we're recording.**

No, just him.

**Thank you. And today is October 9, 2024. We're in Culebra, Puerto Rico. Can you also tell me your age?**

Forty-nine years old.

**Forty-nine. Do you identify with any ethnic group, or how do you identify?**

I identify myself as a fisherman.

**Fisherman?**

Fisherman.

**Of course. And from where?**

Well, how about "From what place"?

**For example, how do you identify? Do you identify as Puerto Rican, Culebrense, or Cruzano? [ph]**

No, I'm Puerto Rican. I'm from Culebra. Born in Fajardo, Puerto Rico. And I'm coming back here two days later, because that's the process. My whole life here in Culebra.

**Lifetime.**

Resident.

**How many years have you been fishing?**

Forty-two years old. Forty-three.

**Oh, so when I was about six it started.**

At seven years old.

**Seven years. And can you tell me what your role in fishing is now?**

My role in fishing right now is that I'm a freediver. I don't use a tank or a bottle. I've been fishing at depths of up to 70 or 80 feet. Why this type of fishing more than others, like the trap, for example? Because it's more selective, and I can catch the catches people need, which is what they ask for in the market here. It's a way to maintain a balance in fishing. And at the same time, I can have sales year-round and not have to lower prices on certain products, like lobster. And I simply keep it at the same price because the fisherman still has the same expense. And they continue selling it for the same price.

**Tell me a little about this. About the seasons for fish. I mean, is there a time for lobster? For you.**

[00:02:58]

Yes, right now in the low season, it runs from September to mid-November. It's peak season for lobster. There's more volume, more fishing, but it's for sale in the low season. This leads to fishermen tending to sell lobster sometimes for up to $7 a pound to get rid of their product. And the hoarders simply keep it and get as much out of it as they can. In some places, I know the price is up to $15 in the Vega Baja and Vega Alta areas. Our price is $12. Right now, the most we sell it for is $12. I avoid having to fish—for example, if I have enough lobster, I'm not going to catch more lobster until I sell out of what I have there, which is $12. Not because I have or can go catch more, or because I'm going to go catch it and simply sell it for $8 or $9. No. That's something that should be respected, what the prices are for the fishermen. And there needs to be an arrangement, something better. Improving the system in terms of what buyers resell. Because not all of them are fishermen. They simply see a good business. It's a good opportunity. They work seasonally, and if they work in marketing, they'll realize they can force the fisherman to sell it to them at a lower price so they can maintain their price. And it's a small thing that needs to be corrected in the market.

**And when he tells me "they are not fishermen" –**

I'm talking about the people – many of them who work in sales, who buy from you. They're hoarders. They just saw the opportunity at one point, and they're –

**And they're people who live there? Sorry, here?**

Yes. No, here in Culebra, for example. Thank God, right now I've been serving as that agent since the pandemic began. And that's where the Fishing Association Project comes from, because I want to go fishing all the time. It already takes us quite a while to prepare the fish to deliver it to the Fishing Association. When it opens, that's going to be the model, a way to avoid having to have fish with guts or gills. And having losses in the freezers because they didn't want it or because the fisherman simply knows which product they can clean, which one is suitable. They deliver it according to the volume we need, and from there, the temperatures are managed properly. Everything. Vacuum packs, everything, and it's sold based on need. Well, we can do it because we're a small island, where we practically have control. The Big Island is a little more difficult, but it's possible if they take the model into account. Because maybe they'll learn to be fishermen. The same line that catches the octopus, that catches lobster, all that.

[00:06:48]

**Well, I want to talk a little more about that, about the fish market, and understand it a little more. But before that, I'd like to ask you a little more about your own fishing business. You started talking to me about lobster. When there's no lobster, what happens when there's no tourist season? Or is that what you're referring to?**

Since November. From the end of November to the end of June, except for May, when it gets slow before graduations. And after Easter, there are also two weeks when it gets slow. The fishing volume here is normal. People from Culebra eat a good amount of seafood. I mean, for example, there, the bags are prepared as 5-pound bags. Here, I can't prepare a 5-pound bag of fish. I have to prepare a 10-pound bag. You know? People take large quantities because they consume enough for two or three weeks. That's how they work. Well, that allows me to decide, for example, by looking at those numbers, plus the numbers for the two restaurants I personally serve, whether I need to go catch more large fish because I have to fillet them for them to make into tacos, because at Zaco's Tacos, the fillet here isn't soft or basa. No, here, Harspoon's and Zaco's Tacos use local products. Well, filleting it, or if I'm going to Humacao to Martín Soto and get some snook, he talks to three guys he has there and gets some snook. Why? Because ciguatoxin isn't common in snook. Here at Zaco's Tacos, they serve a lot of people. We're talking about 200 pounds of snook in a week and a half. That's like 100 pounds of fillets. And when they come to see what they're using, it's like six ounces. That's a lot. That's a lot. To avoid the risk of ciguatera cases, we use that. When the December season comes, already around the end of October, I start catching octopus. And I catch octopus until mid-January. After that, I don't catch octopus because there are very few octopuses on the shore. And they're small. And I have to look for octopus, then, deeper. Because they need colder water. This brings us to global warming. It's the cause of the tides and how hot they've been. In addition, the last hurricanes that passed have taken away a large amount of the earth's crust from the coastal zone. And it's not something that surprises me to say, "It's gone," you know. "No, it's taking it away." No, because when I was a kid, I would go catch octopus, and I would pass by a place where I would see it. But that was when I was young and I was a kid. And now, after the hurricanes, I started seeing it again. Do you understand? This is a motto. It's a way of thinking of mine that I've been telling Roberto Viqueira Cuenca. And you know that with the pandemic, we stopped—it was 40 days, right? Those 40 days we saw the results of what the world is like. How the world acts. If the world is left alone, and it's not altered further. We saw how the system, the ozone layer, everything improved. Everything that was in the hole was being corrected. It's become a system for how to attack global warming at the moment, if everyone comes together to say, "We have to stop it all over the world" or something. We have to find a way for what happened in the pandemic to happen. That would simply be the last move in the world. Because it's the only way, as I see it, to correct it like that? What's going on? Wait. I was overcome with emotion.

[00:12:23]

**He started telling me about the octopus that came back somewhere.**

Yes. No, the octopus was based on the fact that I catch it in the depths, if I'm going to work it. I mean, I'm going to catch the octopus in April. Well, I know I can't go walking to catch the octopus. I have to go deeper and catch it at the edge of the reef. But outside, in the whitewater. Here, I can't tell you, except what is [INAUDIBLE] for fishermen. In December, Aldo, already at the end of November, December, waiting for those first cold fronts to arrive that bring that cold water. Well, normally it brings you the tuna, it brings you the sierra, it brings you the wahoo. I already know that the wahoo arrived. That's worked during that time, in those months. Thank God, there are three or four fishermen here who are all kinds of fishermen, except traps. Because the trap was simply the fishing system in those days—this is mine.

**Oh, I thought this was here.**

No, that's my wife when we ended up [INAUDIBLE] in the meetings. That's what happened. [INAUDIBLE] No, no, that's my wife. Well, if you know, in the '40s and '50s, when fishing was at its peak here in Puerto Rico, it was at the time when the sugarcane harvest stopped. Those workers went to work in the process. From there came the change to what is the tank, the air bottles, [INAUDIBLE].

**In the 50s?**

Yes, '50s, '60s. And the trap disappears here. There are practically two trap fishermen here, and the bottle-fisherman comes in more. That's what's happening here. That change is seen in the village. But back then, the bottle-fisherman didn't sell you many fish in the association. He sold them outside. That's what was happening.

[00:15:15]

**Outside of Culebra?**

Not here. Here on the street, apart. But the pot and line fishermen would sell to you there at the Fishermen's Association. At the Fishermen's Association, when I was in the first one, that was very noticeable. There, the only one who sold was Isabel or Soto, who used a bottle. And from there, well, here in Culebra, it's different from a bus. If you look at the resident population, the residents who have stayed here their whole lives, I think 90% know how to fish with a line. With a yo-yo. That doesn't happen in Naguabo. In Naguabo, there's no such thing as that kind of fishing.

**When he says, "Naguabo" –**

**Naguabo is a municipality in the east of the island.**

**Another town.**

Naguabo. Many of the locals also fish from the shore. You won't find or see those statistics. Because it's simply their consumption at home. And many of them do it recreationally.

**And how important is this consumption for them? It's important for eating, but what about other ways too?**

For them, to eat.

**To eat?**

To eat. Because what they're guilty of eating and selling, they usually do it these days. And in terms of volume, as I told you, we're four fishermen who can do everything. Catch the product according to the season. The same goes for snails, lobster, conch. Normally, there aren't any conch fishermen here. Here in the statistics, it's very rare that you see someone from Culebra catching conch. That's not true. The conch is very deep, but it's not because the fisherman is careless. It's because the sedimentation controls—sedimentation is increasingly eradicating everything. As soon as sedimentation falls on the coral, they begin to die, algae begins to sprout, and the cotorro begins to come, not just to eat the algae. Because they're already a dead area. Every time they hit it with a chongo, how much sand does the cotorro produce? 70%.

**The cotorro refers to the parrot.**

**Laurel.**

The parrotfish.

**To their. Parrotfish.**

The parrotfish. That's a huge concern how to trade that thing. Why? Because my last trip to Florida –

[00:18:21]

**You can speak Spanish. There are fishing words –**

**There are words I know that aren't – for the interview. And if people aren't going to understand, and –**

The last time I visited Florida was in August. August 8, 1918. And I rented there in the keys and we went out. And yes, in all the places where I went, I would like you all to see how the midnight fish were, the [INAUDIBLE]. Tons of all sizes. But in the same place, do you know what there was? Thousands of hawkfish. Under the size, right? Because their size there has to be 14 inches when that's something that a one-pound-sized captain is already seeing—but you know, that's normal. Babies everywhere. And at the same time, you noticed it was like watching "Walking Dead." A lot of fish in a place where there's no life. Because the parrotfish, when they put them in the squid to eat, that's where you notice where there are large quantities. That's where you see the theory I'm explaining to you. That when they put that chon into the algae that's there, because sedimentation was created. Because that's it. The problem is sedimentation. It's the construction going on around the coast. Legally or illegally, and indiscriminately. You understand? Knowing that doesn't matter. It's very frustrating to see that, because I know there are regulations there based on size. But at the same time, I know that, like, they haven't given them follow-up to take into account what's happening, that maybe that 14-inch captain should be caught at least at 10 or 12 inches, you understand? Not waiting for 14 or doing something about regulations by area regarding what are parrotfish and all that. Because, for example, you have the Virgin Islands, where yes, their volume is lower, but that's because that's their diet. They can't eat other types of fish, except those kinds of fish that all have to do with impacting the coral.

[00:21:24]

**So, explain a little more. I'm not a biologist. And for those listening, I don't know if I clearly understood the role of the parrotfish, here or in general, in the ecosystem.**

The role of the parrotfish in the entire Caribbean ecosystem is to maintain the corals by eating the algae in the dead coral areas. And that, in turn, produces a lot of sand that is carried to sites visited by many tourists. It was a huge mistake, really, when you look at it that way. But at the same time, there has to be a way for you to educate society. Because this is something that has been passed on through communications and decisions made by United States laws. That parrotfish can be eaten in some areas. That in all areas, they shouldn't take them into account and conduct studies so that in all areas, they can have different laws like they do in Florida. They have the quadrants, and they tell you, "No fishing here. Here, yes. Here you can." They have to do something, but they can't continue allowing what's happening in Florida to happen, which I saw personally, and which doesn't happen here in Culebra. Here in Culebra, the parrotfish we eat will be eaten by the cubera. The cubera snapper or it will be eaten by someone who asked us for it. It's not because we normally choose it. Yes, we understand its function. But we also understand and respect that there are elderly people here, that that's their diet. And it's not illegal at all. And if you see it, you really have to catch it. Because if not, you'll go like Culebrita to here, where now that's—Daddy, that's a parrot, one of those blue parrotfish. The one with the big teeth. No, as if it were—

**It gets to be quite big.**

Yes, the blue one that grows big like this, as if it were the [INAUDIBLE]. As if it were the parrot. But it's blue, and that's a lot. We have to look at this from different areas to be able to come up with a strategic plan. But it all depends on the time it will take to conduct the study. Because today, we know that in Puerto Rico we have to do and start what are the recurring studies every year for conch. Why? Because that's the market. One of the largest markets in the Caribbean. And the reality is that they've made some decisions that are both valid and invalid. Because it's simply because the cartridges are on deeper platforms than the studies they did at 60 feet. And there are no conch fishermen here. Today, conch fishermen catch conch at 60 feet, except out west. But here in all this singing, in all this, that's 80, 90, up to 120. And when you look at the drop there, for example, from Culebrita down, you see them down there. It's the boys explaining. Look at them down there where they are. At 130, 150. Well, what do they have to wait for? Wait days to go jump and make sure they've risen. And bite quickly, if they're up there. Because if not, they'll bite them and catch them quickly, a mile away. But that walks for miles. Haven't you seen a buggy walking? You have to—that's it. When I'm telling you that—they're not stupid. They see danger, and they go up and down. That's right.

[00:25:55]

**A means of protection for them. And when he mentions Culebrita, Culebrita is a small island next to Culebra.**

**What are the most important fish for the culture of Culebra Island?**

The culture?

**Of course. When there are traditions and culture. I think 90% of the people here.**

That's why. I'm going to start with the elderly. The elderly are going to eat your angelfish, the chopa. They're going to eat your cotorro. They're going to eat your important grouper because they're going to make the fish broth.

**What do you call "cherna"?**

To the goat.

**No, no. Like red hind.**

Red hind.

**Yes, I know that –**

Here in Culebra, the red hind is called "cherna." So, the one that's like the red hind, but with a black color, we call it the rock hind. I call it the stone cherna. Stone grouper. And that one is very tough. It's very tough. They use it for that. For broth. Important in Culebra's diet is the hogfish. The triggerfish. That's essential. The normal restaurant and work diet: colirubia. All the snappers. All the deep-sea snappers. Queen snapper. The deep-sea moniama. At the restaurant, what are we introducing new? The restaurant now sells hogfish, grouper, pluma. Usually everything that's "catch of the day." Elsewhere, in areas of Puerto Rico, what people know you for is the snapper. Snapper. Snapper. Here we introduce all kinds of fish. Peje pelagic, sierra dorado, wahoo, tuna, all kinds of—those types of pelagic fish. Lobster and conch salad are what they do here. They don't normally work with fritters, unless a restaurant has a special or something like that. Conch is usually boiled and served with salad. And bulletproof glass. Octopus, likewise, is served with salad. Not grilled. What else?

[00:29:06]

**The Burgess.**

The shark. The burgado? Yes, the burgado. When they buy a burgado, they buy five or ten pounds. Because they know it's difficult to find good weather. Well, they buy those quantities. But yes, all the locals eat seafood. But those first four I mentioned are what the locals, those with the weather, normally eat. The doctor uses groundfish or Floridian red snapper for fish broth when they're sick. I mean, Floridian snapper. What do they call it there? The –

**El groundfish es –**

Boquicolorao.

**Boquicolorao.**

**Cachicata too.**

Boquicolorao. Exactly. We call it, like that white sama, that it's the cachicata.

[00:30:04]

**They call him white Sama?**

Yes. The cachicata is good for filleting. You remove the fillet and the skin. The problem with the cachicata is the skin, just like with groundfish, which is a rubbery skin. If you don't fry it well, and when you fry it well, the meat becomes tough. Equivalently, no. Those types of fish are for making broth. But nevertheless, fried boquicolorao, you understood, right? But the cachicata has more skin, even though it's of the same kind.

**But he told me that it is used – he used the word "doctor", that –**

The doctor.

**Around this –**

The doctor for fish broths.

**What does that mean?**

**The doctor is another fish.**

**The doctor is another kind of fish.**

**Ah, I thought it was used as medicine.**

**That's it. That's what I thought.**

That's right. Maybe because it contains a high amount of fat in its body. And it's a broth that's very greasy. It's not that it has a very strong flavor. It's that the amount of fat in the fish, I don't know if it's—I can't say it's Omega 3. I know that the fish with the highest amount of Omega 3 is this moniama from the shore. Yes, they're white. The moniama or the mojarra. You know? Those two are fish that are very high in Omega. Here I can't put them in quantities because I don't have a river, well, at the mouth. Because the only thing I have is Punta de Soldados. And that type of fishing that I know is necessary, well, I don't do it because they're simply small areas. You know? Maybe I'll go and catch three mojarras, three of those moniamas, because they're sick or Mommy is sick, or whatever.

**So, it's like instead of chicken soup.**

That's right. That's right.

**Because it's so soft, it makes you feel good.**

Yeah.

**That would be something traditionally cultural for you Culebrenses. Using the doctor.**

Yeah.

**And those other species. The mojarra.**

Also.

**The lamp.**

Same thing. Look, just like the shark I'm playing. Now, soon I have to go out and find a tiger so I can make its oil.

**A tiger shark.**

[00:32:54]

But I haven't worked with sharks for five or four years. But you know why? Because of the communication that existed in the United States and the laws. It's just that there are no sharks. That comes from God, from the mentality of—that comes from there, from going here, and it's no sharks. And this has caused fishermen in the United States to have competition from sharks, plus the multitude of fishermen they have. You understand? And the reality is that in Culebra, lemon sharks were consumed a lot. Tiger sharks were consumed, but out of necessity because I use them for oil. But it's not like it's the best meat. Tiger shark meat is the best shark meat there is. You have lemon sharks or reef sharks, which are very thick. And then, when you cut the steaks and the lines, you notice that the amount of blood in the areas where they normally are isn't the same as a tiger shark. And there you notice that—I know they haven't done that study, perhaps. How much sulfur does a tiger actually have versus a reef shark or a lemon?

**How much sulfur?**

Yes, because that's what they measure. They measure.

**OK, but do you detect the amount of that?**

Because every shark has sulfur content.

**And mercury.**

Look. Do you understand? That's what I mean. If you were to look there, you might notice a difference between one and the other. Because simply having fewer areas running in the parts tells you that. It's a clean cut, with very little blood left. That was the best, but now it hasn't been sold for the past five years. Because that was practically the message that came here. All the tourists came. Tourists come from the United States, from all over the world. "No, no. You eat shark here? No." So, I would catch a shark to sell, because I couldn't put it on the nets anymore. Because that was a fight between tourists, between everyone. And then, that led to two restaurants stopping buying from us. You understand? That, well, a kind of displacement. The same. Displacement from something else. But that was because of the wave. But three years ago here, right, they changed the HMS thing about the permits. That helps us with one thing. Now we have to see how it can help us let people know that sharks are safe to eat. That it's safe. That consumption, not in large quantities, of course, as in daily consumption, is safe. Things like that need to be studied before—but that put us behind on that. Now for us, nothing. It's very rare. It's very rare for a fisherman here to bring in a shark. I'll bring it in if someone asks me. If someone asks. If there's an activity that I know of that we're going to use for ourselves—

[00:36:44]

**And do you know where to find them?**

Yes. Around your Culebra, we are fishermen. We get them daily. As a freediver, I throw at least one into the water—I catch a billfish. I cut it in the water so that, in that area where there's nothing, where you don't see the fish, that you don't—because of the current. When there's a current. The smell spreads and what has to arrive arrives quickly. So I fish. The first ones to arrive were sharks.

**Thomas, I wanted to ask you a question. He says you're catching tiger sharks for oil through orders.**

Yeah.

**What is the oil used for?**

The oil. From what I've been able to interpret from my ancestors, from everything I've learned, and from myself. I've been catching sharks all my life, since I was 14. Since '89. I started with my brother. I can attest to that. That's how it is. I can attest to that from knowing children who are ahead of their time, I think of growth, because they are delayed in the area where asthma occurs. So, when you get asthma, that stops your asthma to the point where it doesn't happen again. But the child. Are you understanding? It's the age when they are growing—

**The shark oil group?**

Yeah.

**And how do you use it? Ingested?**

Yes, one spoonful three times a week. That's what I always do—for two weeks straight. I know people who have been sick for a long time, seven or eight months with phlegm, with a cough, smokers, criminals. They take that, and what it does is loosen everything up, and it goes away. Well, the dark phlegm in the lungs from when you're a smoker, all that comes out. It's incredible. And it's a really interesting thing, because I use coconut oil to get more oil out of the liver.

[00:39:16]

**From the shark's liver?**

From the shark's liver.

**As?**

What I used to use was vegetable oil, because the Cuban realized that one oil and the other would expel it. It's like they didn't mix at the same time. You know what I mean? Being oil, they didn't mix. And you notice that when I take the coconut oil and pour it on the second day. Because I started doing it with coconut oil because it was healthier than vegetable oil. And if I said how it's to expel, which was his theory, well, I did it, indeed. The same thing happened. And when you look at the bottle, which the bottle is at a certain temperature in my house, the coconut oil stays at the bottom. It gets hard. And the shark oil stays at the top. You understand? And I believe that when you ingest it, it's the same thing that happens in the system. It takes all those fats, everything that is [INAUDIBLE] and it completely detaches you.

**And you prepare that oil?**

No, that oil comes out.

**But who do you- then, get it?**

**It all brings. It brings all that.**

Yes. Yes.

**What's the process? Could you please tell us?**

**Can you? Can you tell us?**

Yes, yes. No, I can tell you the process. And the safe process to do it. You take the liver, preferably from a tiger shark. Because the tiger shark contains—a third of its weight is liver. When you open it, you realize that a third of the shark's weight is liver. It's a giant liver. You take it, and disconnect it from the—those are two livers like this. You disconnect them from the top. You take the area where the bile is stuck there. You cut it from the liver without breaking the bile. You remove it. You take those main veins where they were connected, and you come and dismember them. You remove them. The point is that when you cut the back part, you can put water in there, and you'll notice that it comes out the other exit. Or simply that when you cut the liver, you have to cut it into little pieces like this. Square like three-by-three, two by two, two and a half. Or two and a half like that. You cut them. After cutting them, he rinses them with salt water to remove the blood it produces. And in that same container, he can use the ones he currently has with yellow lids sold at Costco.

[00:42:19]

**Tupperware for –**

That's right.

**Yes, for storage, they are made of plastic.**

That's right. Because the lid isn't hermetically sealed, and air gets in anyway. Which is important. It can't be hermetically sealed. Well, I come. I pour it in. But at the same time I'm pouring them in, I'm adding salt to each one—

**To the oil?**

To each piece.

**To each piece of liver.**

**Ah, liver.**

He adds salt to each piece of liver, and then tosses it in. He tosses everything in there with salt. On the liver of an 11-foot, 12-foot, or tiger shark. I use four jars of salt.

**And what is the purpose of doing so?**

The salt is what's going to prevent it from rotting. The salt will prepare it just like the fish when you take it out and dry it. Only then, you'll notice that the next day. Then, you put it in a cool place, like a breeze, but where it doesn't get wet. But at the same time, you can pull it out so it gets some sun for an hour in the morning to heat up that oil. Because as soon as the liver heats up, the pot starts to come out more. And when you look at all those liver chunks that were there, on the second day you can see like two or three gallons of oil. From a liver that size, I get ten. Before, I got seven and a half to eight. And when I switched to coconut oil, I get ten.

**And how much is this product sold?**

A liter costs $90. I sell one of those eight-ounce cans for $15.

**And the shark fin, too–**

I used to take the fin to the Chinese here for them to use.

**In what way?**

They eat it the way they–

**The Chinese man makes soup for him.**

Yes. But it was simply the shark he would catch and take away. But no, I've been doing it for five years now. Four. The walking sticks, from the bones of the tiger shark. I make them. The rosaries from the –

[00:45:08]

**How do you prepare it? Do you carve it?**

No, the little bones.

**Ah, the one.**

Yes, it simply perforates the bones. You work all that with chlorine. Water and chlorine. First, salt water. They usually leave it there until the things rise. And you prepare everything with water and chlorine to clean it. What are the bones or teeth?

**Does it whiten them?**

Yes, the white area looks good. Everything is clean, and the smell goes away. And you put it out to dry. And I have them. For example, I have some boxes full of shark teeth. Tiger teeth only. Of different sizes.

**And what do you use them for?**

To make the necklaces, which I sell for $25 or $30. The same goes for the bone for the canes, as I told you. The bones for the necklaces too. And the oil and the meat, which you don't normally see with meat.

**Where did you learn all this?**

From my entire family. From my relatives. From my grandfather, my grandmother, my mother. We've been in business since '81.

**What business?**

The Batey.

**¿Restaurant?**

Restaurant El Batey, from '81 to 2015.

**No, I'm asking mostly about the oil.**

The oil.

**Is this the oil recipe?**

I learned the oil recipe from the Cuban. Amado –

**Someone from Cuba taught you. It's not something that runs in your family.**

Yes, my uncle already did it. But what I learned from the Cuban technique was to extract, to make the oil in the liver come out faster by using another oil to expel it. And he realized that, but the way I did it with coconut oil is even more so. It's very—

**So the coconut oil thing was your idea to –**

Yes, I decided. I knew his theory was—because he told me, "Olive oil works, but it's not the best. You have to use vegetable oil." You know? Well, based on oil. I was talking about oil. Well, one day, since my wife worked making cakes, we used coconut oil for the normal cake bases. Well, I took one of the half-gallons, which is what I've always done for a liver that big, half a gallon of another oil, so I added coconut oil. And then, well, we got one pan and two gallons. We got two full pans of oil. That's what I learned there and what I learned the trick of the trade.

[00:48:23]

**The oil used like that to treat chest problems, right? Chest infections and things like that. Is that something your family has been doing for a long time, or where did it come from?**

That's generation after generation of Culebra residents. Here in Culebra.

**It's something that almost everyone who lives here knows.**

Yes. It's quite strange that science hasn't yet studied shark oil in terms of its healing properties. Because it's been something that when you study and read and see where different cultures come from and what their diet or uses have been. Go back to the Vikings, and from there you'll see that their way was the shark house. The house of everything that had to do with the top, because they weren't divers. They didn't have a tank. Here there are many things that have to go away in order to study. And that's how it is. And that's what it comes down to. And here in Culebra, my whole life—my uncle worked with the late Quique Suárez [ph]. Both are dead. And they worked for the Navy, on the Shark Tank, which is Flamenco. El Muellecito. That's what it's called the Shark Tank. They were in charge of going, catching the sharks and taking them there, alive, and leaving them there on that dock. And they did studies on what the chemical was so they wouldn't stick to you. And there the thing that worked the most was a black bag.

**A black bag?**

Yes, a black bag.

**In that way?**

It's an area. The shark doesn't attack around the area. You're in a complete black bag. It's not a seal. It's just—it's an area. And they didn't attack there. The shark here doesn't have a seal.

**When it says, "a black bag"?**

**A garbage bag?**

A garbage bag.

**But what's the logic of the stock market? I'm trying to understand it.**

To the area to the bag where they did not throw it.

**But it's funny, because then, are seals black?**

That's what I'm telling you. But we're here in the Caribbean, and there are no seals here. There are no seals. Here, they can recognize you as a turtle, and there can be attacks on surfers or whoever else because they recognized you as a turtle. In the United States, there can be attacks. Why? Because they're looking for what they want. They need food. And this is the shore. That's why there are attacks. They enter the margin area. You can see a shore that has you right on the shore here. This is the shore. The swell is breaking here. And you notice, there's a channel here. It's breaking here. Gosh. The swell is breaking here too, but there's a channel here. Look at the shores over there. Normally, they're like this. The shark will pass through this channel. Where it breaks here and where it just broke. And it will pass you there in the morning, in the afternoon.

[00:51:51]

**He already has the area under control.**

You won't see an attack at noon there. Look for attacks. Almost everything, look for it.

**In the afternoon?**

In the afternoon or in the morning. But that's a shark's system. And they're looking for their food.

**And one more thing, Thomas. How much does a pound of shark sell for here?**

**¿**Here? $6 a pound.

However, on the Big Island, many fishermen comment that they don't catch sharks because they have to sell them for pesos per pound.

Because the marketing system, what it's been doing from the beginning, the hoarders, and that's what they've done. Not giving the product its full value, whether it's the maximum, you know. As in our case, the Fishing Association, where our study was done. We did a feasibility and marketing study, right? We have it. And these studies provide the basis for what I'm telling you about the price. Regarding the fisherman charging the maximum he should charge, you know. What should be charged for the fish. And with a fisherman charging you what he owes, it's already fine. But the maximum is a clean fish that he gives to a blonde-collared fish for six pesos. When on the island, you deliver them, and they're paying you 4.50 or 5 pesos. Here it's six pesos. What happened? We have the break to be able to sell it for 9, 9.50, which is the suggested price for everyone. Because people here in Culebra are so clear that we were selling the fish to them. $1.50 and $2 below the actual price. When you get down to it—that's why I'm telling you, we pay what we should. We charge what we should. The study even provides a basis for working to lower prices by 10% and 8% for seniors and other residents. It all goes. Everything—

[00:54:06]

**That's almost like a privilege that doesn't exist in other areas.**

No.

**It's an incentive.**

And another thing. The regulations for fishing villages or associations used to tell you that you had to give them 100% of your product there. And that's simply the first lie. Because you don't have a break or take anything home. We're complying with a system that's based on statistics. If we talk about statistics or whatever, we have to write down what is. If we want to correct what's there, then we have to do what is. Because you can't tell me that I have to give you 100%. I mean, that's the first thing. The other thing is that you talk about 50/50, and you give me the break to say, "Oh, gee, I have to give them 50% of the fishing revenue, nothing more. So, 50% refers to the same 100 pounds. But if I were fishing more, I could catch 250 or 300." Because 50% is nothing more than the 100 pounds plus the 150 pounds here. Plus 150 pounds I can leave out. In the fisherman's mindset, it's about going back out or being able to spend more time or staying to supply the market or supplying himself based on his need to sell a little more for any problem that arises. But when you work with a direct fishing association, and they ask you for 100% directly, you're going to work for what they need on the day. You're not going to go above and beyond because not every day is good. But when the boom comes, everyone takes it. And the fishery came and blocked you. "No, we can't bring in more product." Do you understand? In life, we're going to take 50%, and you sell the other 50 on the sidelines. What's supposed to happen?

**Your fishing village isn't operating right now, right?**

No.

**Where do your fishermen's fish go?**

There it is.

**They keep it there? But it's not being sold.**

Yes, we are selling it.

**From the fishing village?**

We, as fishermen, are doing our part, selling from there. Each one individually. There's product from three people there right now.

**How many fishermen?**

From Ángel, Ángel's son, Pedro's, and myself right now. In my product, there may be product from three or four other people. Pedro's product and Ángel's product. They're all there in two freezers, which have nothing to do with funds that belong to—they're the freezers they gave us during the Bluetide incident.

**I've seen that on social media, you put.**

When I go to the corner.

**When you go to the corner to sell.**

When I go to the corner and when there's a lot of volume, and it's a lot, I have to find a way to get out as quickly as possible. We go to the corner, and there I advertise and sell whatever I can. I prepare everything I sell there.

[00:57:15]

**Could you tell me a little more about your personal history? You told me that fishing was part of your family's business. It was both recreational and also business-related. And then, how did you get started and how did you become the president of the association?**

All my life, I've been a fisherman. Unfortunately, since I was 16 or 17, the fishing village fish market system was collapsing. And I got used to being able to catch my catch and sell it directly to homes. I went directly to the person. To the elderly person here, and I took the product they asked for. I carried a notebook. I wrote down what So-and-so told me in the notebook, I kept track. I looked at the notebook for the day and said, "I can do this, and this, and this, and this." I went and grabbed that, and took it. I had my way of selling. That's why, when the pandemic hit, I took charge of being able to start selling all the rest of the kids' things. Because they didn't know how to sell on the street. An opportunity arose with World Central Kitchen. I had the opportunity for a motor, which is what I needed for the boat. But I decided not to ask for the engine, and I decided to ask for the freezer and start organizing ourselves to sell and to set up what is today the Fishermen's Association, which is already there. And it was thanks to that initiative of theirs. What I did at that time was that I used the technique of my sales to the society. I began to mix other types of fish for what was the restaurant, but I began to explain how it had to be done. I would arrive, "I brought you [INAUDIBLE] porkfish, the linear ones, both, or grouper, so that it doesn't get like that. Simply do it with a cross, the cuts in X. And those types of techniques worked, and they realized that yes, they are going to sell that fish and that people want it and need it. It's a system.

**How many fishermen are there in the association now?**

[01:00:00]

Well, there must be 11 of us now between us all.

**Before the association –**

Three.

**Oh, sorry.**

Three.

**Three what?**

Three fishermen.

**Before the association.**

**Before the Association.**

And the most surprising thing is that, in the papers I have from studies that were done in 1975 or '76, they reveal that in '75 and '76 there were three fishermen.

**Also.**

Legally, three fishermen in those reports. Before that, there was the boom of the "narco" fishermen. That's what I'm saying, that many fishermen stayed in Culebra; yes, there were many fishermen because they were bottle-fish fishermen. And they were Jorgito, Neto, all those people who were my brother today, all those people.

**What do you mean by "bottle"?**

Of tank.

**Ah, tank. OK, the scuba tank.**

Yes, diving. Well, you didn't see –

**Among the fishermen here in Culebra, what fishing methods are most commonly used?**

Online.

**Online?**

A Culebra fisherman is a line fisherman. A Culebra fisherman is a line fisherman, a tank fisherman. Adán, Pedro, it's tank work. Nacho. There are two. Three. Néstor. Oh, and Aldo. Four. I got a license, but no, my thing is freediving.

**At what age did you start fishing?**

At seven years old.

**At seven years old? But you went to school?**

Yes, I have my education. I'm an electrician. A high-voltage pole guard. I'm a craftsman. Well, that's the kid's first base. Five years old. Five years old. Seven years old, I started at the commercial fishing level, in other words, getting on a commercial boat with my brother. Going with Jorgito, Lourdes, throwing myself in. They threw me in a bottle, in Culebrita, snorkeling. All of that at seven years old. At seven years old, I started my first business with a donut machine. Donuts. Mini donuts. I did this until I was nine, getting up early at 5:00 in the morning, making three donut mixtures. At 7:30, I went home, but in the afternoon, I went fishing at the Coral pier or the pier in front of the Batey or under the bridge. Every summer of my life until—no, of my life. At least until I was 12, 13, I spent with my grandfather. Every summer, I fished with him. That was fishing. That was summer. It was all about fishing. I studied at industrial arts schools. I was fortunate enough to be able to take it for four years, and every year they gave me something different. I didn't have to take home economics because I had the Batey business. And it was normal for me to cook there normally. Well, the directors worked on that. They prepared me. I took electricity. I took carpentry at school. I continued working in crafts. I was Young Craftsman of the Year for two years. In one of those years, Luis Bermúdez Vidal, the other recognized by the State. After that, I went to study electricity. I studied electricity. I was a municipal legislator. I ran as an independent in '96. I missed out by five votes. And then, in 2000, I won as an independent legislator. One of the first independents to run in Aibonito, when the young, independent mayor won, for that same group, I already recognized what was happening to society and the people. Here in Culebra, people were already drifting away. They didn't want to know what politics was anymore. They were already focused on their town, on those connections. And after that, I studied. I mean, I studied electricity. I studied high voltage, and all the other experiences, apart from welding. Everything.

[01:05:19]

**Aside from the episode of meeting the mayor about politics. How long? Like, four years? Did you have any other work?**

Are they?

**It's handmade, right?**

Yes, I am –

**So, your preparation?**

Yes, yes, yes. No, my training as an electrician has been the basis for every hurricane that's hit Culebra, the people of Culebra have had electricity quickly. Not because we've fixed the meter, but, for example, with Hurricane María. The old people in town were disconnected. I didn't work for the authority anymore, but they'd already been disconnected for a week. And due to a lack of resources, there weren't enough to send them here, but since we know the system, well, Alex, my cousin, and I simply went and backed up the entire system.

[01:06:18]

**No. Tell me a little more about that. How did that happen?**

Well, easy. Simply because the supervisor of Electric Power at the time, Carlos Torres, I had worked with them and with the company in 2005, 2006. And well, he knows the degree. And what I did was, I went to the top of the mayor's office where the telephone tower is. That's where the lines that were crossed and [INAUDIBLE] all that were. As they taught me in the authority, with a screwdriver and pliers, I dismantled all the fittings. All the lines. I put my spurs on with a screwdriver and pliers. That's what they use because the nuts are square. And when you have a nut that won't come loose, you just take the screwdriver. You put it in one of the corners with a rock. When you hit it, it takes it away. That's how it is. Well, we did it, and by the afternoon, they had electricity.

**How long was that? Forgive me.**

That was for the hurricane. That was it.

**How long did it take you to put the light in here?**

What? They didn't have electricity. When they gave it to me, it took me about an hour and a half, two hours to do that whole project. [CROSSTALK] No, and again–

**That same day?**

Yeah.

**For the island?**

No. The town section. The old people, the modules, the hospital. All of that.

**That is, the damage that Hurricane Maria did here was that it knocked down poles, it knocked down–**

Yes. No, it did a lot of damage here. But in the sense of jobs like this, for example, I've solved with the knowledge I have. Well, that one. Another time a pole fell in Datiles. That's the 38,000 transmission pole. Well, by the time a tow truck driver arrives between the condominiums and all that, work couldn't be done. By the time the tow truck driver arrived, it was 8:30 at night, the tow truck driver arrives. By the time the tow truck driver arrives, they start dismantling the boat. It was 5:00 in the afternoon the other day. Well, it happened at night. Well, I went early in the morning with a friend of mine who worked as an [INAUDIBLE] at the municipality. I did the same procedure. I told Carlos. I dismantled everything. I even prepared the platform so the crane could then make the hole higher up and be able to accommodate the pole higher. Because the poles we had were shorter, and we had to put them higher up to transmit. Well, things like that.

**And was it a live line?**

No, that's killed. But–

[01:09:02]

**That's why. You unplug it. There's no live electricity there.**

If there's an emergency in Culebra. If there's an emergency in Culebra, besides calling LUMA now, that's what you have to call. LUMA. Believe me, we have two people here who know everything.

**For reports of–**

Yes. We know all the areas and everything, and the responsibility that entails. And when there are hurricanes, if there's one important thing in Culebra, it's that everyone—you see, Culebra is like a fishing village. The Fishing Association is the same theme. We're a mangrove of professionals. Did you understand? In Culebra, we're an island that doesn't have a university. We don't have a pharmacy. We don't have a lot of things, and we have to deal with what we have. We have to repair with what we have. So, this is the university of life. So, you have to know how to do everything. And that's what helps us as an island: if a hurricane hits, we're back on our feet in three days. In three days, you're going to come and see the municipality, who's going to say this is the municipality's response. "Hey, guys, stop cleaning up, we have to do things," you know. "There has to be one"—yes. Because if there's no proof, they won't cut your funds. Did you understand me? It's the system. The last two hurricanes, that's stopped. But everyone's catching up. Everyone together. We keep going.

**No, that's very, very, very important. Thanks for sharing. Okay, let's go back a bit. You told me about fishing, which is important here for the people who live here, right? And also for tourists. You gave me the list. Is there a change in the type of fish, in the sense of what kind of fish, or maybe the abundance? If we compare what you—I don't know how to say "target" now.**

The only thing that my brother noticed—the change started in 2015, right? 2015, with the first wave of sargassum we received. A big one. From then on, we didn't just receive the wave of sargassum. There was a drought that lasted four and a half months straight in Culebra.

**Doesn't Culebra have an aquifer?**

No. With the sargassum, as for the fish, let me quickly tell you about the fish that have decreased before I tell you about the sargassum. The only thing that's changed is the octopus. The octopus. Everything else has stayed the same. The moons, only many of them have shifted during the day, and fishing has become difficult for us.

[01:12:23]

**How has it changed? In terms of abundance, or location, or what?**

No, the octopus. I imagine abundance and space because the shore is so warm, they stay deeper. Regarding the normal process, that's the only thing that's changed. The other thing was the sargassum, 2015, 2016. The fact that all the sargassum rots. I don't know if you—that's it. I have photos here. Angelo's wife, the one who fishes with me there in the Croabas. And with the statistics girl. With the girl who's on the statistics page of—

**¿Kayshla? [ph]**

Ask Kayshla what happened to her jewelry.

**What happened to him?**

In no time, in one hour, all of her and Angelo's wife's jewelry turned black. Let her tell you. Herself.

**For the sargassum?**

That's what happens in my house. If I take you to my house and show you my wife's jewelry store, you'll be amazed. If you look at the woodwork, they're green.

**But that's when the sargassum flow comes?**

When it accumulates, it rots. Those [INAUDIBLE] generate that. And they take the copper solder. The solder, whether it's brass, copper, or silver. And they rot it to the point that, if it's something made of bronze, look, I'd say half a millimeter that it flakes off completely. It's incredible what the sargassum is doing. San Tomas. The government has worked on a couple of proposals of that nature. I found out, but here in Puerto Rico, they haven't taken into consideration what's happening. And it's happening to me because I'm there, in front of Dakiti, and it accumulates right there. Maybe it could happen in front of Batey or on the corner of—

**Show on the map where it happens. On the chart. And the other thing I want you to think about is if that's a new phenomenon, that the sargassum isn't so–**

[01:15:01]

No, that's what I mean. With the real climate change that's affecting us, that's the point. That point affects many things. The entire entrance to the tourism sector. What do we say there, when things start to rot? Decomposition of materials –

**Organic.**

Do you understand? Materials. We're talking about the port, about what materials are in the port. Even you have something to do with it. It's in the style. What does Ignacio's boat have to do with it? When he was there, he said, "But what happened to my boat? It's rotting. What is this?" And it was that all the grass had turned black. It's black. It's a really crazy thing. I say, "That does that damage to the metallic materials." I don't want to imagine anyone breathing it. Something must be happening today, that we need to do a test, something beyond that, because that's what's happening.

**And as for the fish, how do you think that –**

The fish are dying. The mortality on the shores. The mangroves. In our case in Culebra, we have nursery areas around all of Culebra, except for the north. But everything in Ensenada Honda, the entire coast, the reserve. Because it's the only one there and it's solid, but the rest are mangroves. It's a nursery area.

**And those mangroves, are their roots covered in sargassum?**

Yes, everything.

**And has there been mortality in the mangroves as a result?**

Yes. You look. I couldn't tell you that. I have to look carefully here at what Dakiti is. [INAUDIBLE] the water and that curve. Because that curve has a lagoon before it. And yes, we noticed that that time they had died. But it was too concentrated there. It's done something. Look.

**There are studies that have shown that when sargassum accumulates in mangroves, it eliminates oxygen.**

That's why. That's what I carry. It carries everything. It eliminates all oxygen. That's why it kills everything. That kills everything.

**Do you think he could do that? In your opinion, could he do that?**

Yes, that kills everyone. Yes. Most of what our coast has to do with. We have two problems with climate change. The number of hurricanes that are passing through. Because of the number of hurricanes that are passing through, they're going to be hitting the coast more, and the coasts are going to deteriorate. But that's going to happen now. That's now. But the time will come when that's supposed to stop happening. Or maybe some time will pass and the coast will recover again. Because you're going right now. You look from Zoni there, and you look at Culebrita. And you see that the corner of Culebrita now has a corner, a criminal beach. And you go to Zoni, and look. And at the end, you see that the beach has already receded, and the beach is already being built up again. But if you have a strong atmospheric phenomenon that eliminates part of that, you have to wait a while for all those trees that I saw grow back. Because I've walked right past it, all those trees, before I used to walk along the beach. Now I don't remember what it's like to walk along the beach.

[01:18:53]

**Lost the shore?**

It's not that I've lost. Well, I've lost it because before [CROSSTALK] Both. It's both. Both. Nature never stops growing for evil. Are you understanding? That's what I want to explain to you. That nature keeps growing out to the ocean. At the same time, if you don't press – That's the only thing that keeps it going in this case, it's the phenomena. In the case of that. In the case of the street and our houses, we keep it going

**Safe.**

You understand? That's it. If they keep growing, they'll get inside our house.

**And hasn't anyone here thought of asking for help to clean that sargassum and be able to make some kind of product with it?**

That's a huge project. The most logical thing I saw as possible was to create retention areas, fish it out, and leave it in retained areas. Because as long as it's in the water, it keeps growing, and that doesn't move. And that's the way to be able to use it constantly. But it's going to be difficult to get here in Culebra. It's somewhat difficult. Where you're going to plug it in, that's where I'm talking about, this corner. This is where they go in and the bay inside, which are the real ones. And the other thing is Flamenco, where they have the cleaning machine. But where it's killing the most is on this edge here. That's what the bay and the long beach at the end are.

**You said this phenomenon began in 2015. And you believe it's due to climate change. Since 2015, has it continued year after year or has it been cyclical? Does it occur once a year?**

Two years in a row. No, it continues year after year, but these last few years it's decreased. Yes. Because back home, what came in was just once. A little. This year, it's decreased. No, I don't know if it's in quantity from there to here, but at least what's come in here to Culebra has been less.

[01:21:22]

**How long does sargassum last when it arrives? What month is it?**

Until January. From now on.

**Could you repeat it, please?**

From now to January.

**Is that the season?**

The whole hurricane thing. Yeah, hurricane season, practically. And then, with the cold fronts that just stirred it up, and then, when you see it, it's swirling around in the ocean.

**When do you think the highest peak is here in Culebra?**

Here? In July. Late July. I'm almost sure.

**He doesn't feel that killing fish affects him in any other way, but –**

It kills the fish. We can't fish by trolling. We have that phenomenon, and we have the phenomenon of a little bit of algae that's underwater. It's not a flowing one. It's like an algae. Take the trap and catch everything. It covers everything. It covers the caves. It covers everything.

**What is the name of that piece?**

I don't know the name of that little thing that passed by.

**Could it be red algae?**

Red algae. That's the last one. One thing is good –

**A red algae is not similar to what is seen in –**

**No.**

It looks like fur, right? It looks like fur.

**It's not the same.**

It looks like a little hair like this, right? A hair like this.

But it's an invasive species that's being seen on the coasts of Puerto Rico by fishermen, especially those using traps. When the trap is raised, it's crawling with this type of algae.

**And that's also a newer phenomenon.**

Yes, that's it with this.

**With the sargassum.**

Yes, with the sargassum, with the global warming, with whatever's happening.

**And the water temperature, how has it changed here?**

It was hot. It stayed normal, hot, but longer. Longer.

**How much hotter? How much hotter?**

About a month and a half.

**Additional. And have you noticed that when the water warms, marine life is affected, or do you see no change at all?**

Yes, change comes to octopuses. The rest of life is normal.

**What's up with octopuses?**

They need cold water to be able to stay on the shore.

[01:24:04]

**But then, if the water is warm at the shore, where do the octopuses go?**

Deeper. On the deepest reef.

**So, they can't catch them there.**

It is more difficult there because the octopus is caught with a gaff.

**And you have to break –**

Break the thing.

**The gaff is a fishing gear used for octopus fishing and for bringing a species onto the boat.**

**If you could show me on the map, which are the most important fishing areas for the community? For you and for the community.**

In Culebra?

**In Culebra.**

Dude, everything.

**All?**

Yes. No, in Culebra that's everything.

¿**Fishermen are leaving everywhere?**

Yes. No, Culebra is everything. Not just Culebra. It's not just for us, but for all these people. Look, from the eastern area, all these people from the eastern area. All of this.

**It's Puerto Rico, right?**

Yes. They fish all of that here. And tons of freediving fishermen, which is what fishing is all about here. You know, they use these areas. Vieques, the South, or all the deep channels, including the entire mountain range. This is the most important fishing area in Puerto Rico. This here. Aside from Cabo Rojo with Las Monjas [ph] and that.

**Can you tell me if there are any important areas where fishing can continue? In other words, areas where fish thrive.**

In the reserve.

**Is there a reservation here?**

**Yeah.**

That's the most important one. That's the one we have to work on. Why? Because mating processes happen in many areas. The red hind itself passes through up there, and there's already a reserve, the San Thomas reserve. When the grouper matings come—wait. The zone, right? What do you want? For it to mark the zone?

**Yes, you can circle it or–**

Look. All this singing here. All that singing, and that's important for what grouper is. White grouper, guajil grouper, grouper—you understand? That's important. There, when they come before the grouper ban begins, usually two weeks before, three, I always see large numbers. We normally go up there to catch them.

**They begin to add up.**

[01:27:01]

Yes, they're starting to add up. I know they're adding up here.

**Can I move it?**

They're added up here. I'm sure it's up here. There are some funds of 125. But it makes sense because look here, you have the medialuna. You have the Seco Hondo there. It's the famous place where the people of Vieques collect the saber-toothed grouper. The famous saber-toothed grouper that they would take to the dump and throw away in piles. Because they collected too much because—you don't know?

**It's the tiger grouper.**

Sí. Pero cuando you see the line, one go with the other.

**The reserve. She asked you where the reserve was.**

Ah, reserve here. Here's a Cayo Luis Peña, and the reserve, this edge here.

**So, do you really agree that the reservation remains in effect at this time? You've never set a reservation.**

How is?

**Do you agree that the reservation is very important when –**

Yes. We, the sinners, created it.

**You created it. Can you tell me a little about it?**

We, the fishermen, created it. That was in '99, right? 2000. '99 or 2000. Yes. A group of fishermen who remained decided that this was the best area. It was known that there had to be a reserve, and they agreed. And so it was done. In our commitment as a fishing association, one of our roles is to create the reserve from Punta Molino to Playa Blanca in Flamenco. Adding another reserve area to our island. Because the 1976 agreement between the United States government, the Secretary of the Interior, and the Governor of Puerto Rico stipulates that our economy is based on our flora and fauna. That's what it says, in other words, that they left us Playa Larga, Flamenco, and Punta de Soldado so we could develop areas for public use and utilize them as our economy. So, that's our—

**To leave more safely.**

**On June 11, 1999, the –**

And there it was that –

**The entire Marine Reserve.**

**In Luis Peña.**

It was in Luis Peña. It's where it's created. We've worked for many years as best we could. One of the problems the Marine Reserve has today is that it doesn't have—it does have a working head like those who work on a board.

[01:30:16]

**A board or a –**

Exactly. But it's not properly in the law regarding having [INAUDIBLE]. Having the 501s. Being a group. Do you understand? Now one of the ideas we have is to move that group from the board to being part, a part of the Culebra Fishermen's Association tentacle. So that way, they can begin to bring and obtain the funds and channel what we need to do there and be able to carry it out. At the same time, we're working on a proposal that we've already been given, which is for a boat, which will be providing surveillance of the reserve there. In addition, we're going to be bringing biologists, doing the commercial work that we did as fishermen. For example, for the tank for the aqueducts. Instead of us going in our boats and those boats, and having the funds allocated for all that go to the same program and maintenance of the association. There are many things at the moment.

**And now the meeting you told me about, which is about the protective area,**¿**Are you citizens of Culebra?**

They're people from Culebra and biologists who've been here for many years. Yes. I can say that it's always been protected. They've sought to protect the best interests of the reserve. And so do we and the town, that this is our economy. People know, and people come here. They go to Flamenco, to Culebrita, or to the reserve.

**And the fishermen respect the reserve? None of them is –**

Culebra's fishermen don't just respect the reserve. Culebra's fishermen respect the closed seasons, which is something of the most important thing. You have to respect the closed seasons. If you're a fisherman and don't respect the closed seasons, you're not a good friend of mine.

**Because?**

Because that's what gives us the certainty that we'll have more later. That's the process. That's the moment they appear. With the conure, for example, I know what I was telling you about the recurring studies. The conure has that time, and we respect it. But with the conure, the studies have to be done properly, because we're noticing that they're reproducing all year long. Why are they reproducing all year long? They're reproducing perhaps because they're being eradicated from one area, and there's less of it, and they feel more comfortable elsewhere. And that's when they arrived and said, "Now we're going to have the babies." Because Raimundo does a lot of studies, and he's realizing that. But I have to think like a conure. Do you understand me?

[01:33:23]

**He mentions Raimundo Espinoza. He's the president of a region in the Caribbean.**

And he has the conch breeding project. And he's realized that conch are breeding all year round, which is something very important. Because, for example, I visited the Bahamas last year, and I realized that yes, they have 9 to 12 reserves, something like that. They have a lot of reserves. But when I went to talk to the fishermen, I realized that all their cartridges were this size.

**Who is your mom?**

There aren't four kinds of cartridges. There's only one. The thing is—wait. This size, the wing cartridges. That's exactly what they were.

**Speaking not of the snail, but the –**

No, I'm talking to you about the snail.

**The snail.**

So thick because their regulation, I think, is five millimeters thick. A five-millimeter conch. The lip thickness is a 25-year-old conch. It's a completely old conch. It's a conch that's been through so many times, that it's mixed with its own family, that it's degenerated and they get smaller. Or between humans, that doesn't happen, like, between a human and a brother and sister, there are problems. Well, it happens between animals because we know it. That's why this line of cow is eliminated, and we have to bring this one in. When a calf arrives, we have to—this is the same thing. And they don't see it in that sense; they have high populations of conch because that's what they're tough on in the Bahamas, right? The conch. But when you observe, what you get from their conchs are little conchs, so small. You have to remove the thick skin around them and crush it to be able to eat it. Because that's the process they know. And if it's that small when you put it in the pressure cooker, you need at least an hour and a half for it to soften. Not 50 minutes like the normal one.

**And you need large quantities of them, don't you? To –**

The thing. Well, that's what's happening. They – say.

**Who are "they" when you say "they"?**

Bahamas.

**Fishermen of the Bahamas.**

Fishermen of the Bahamas.

[01:36:00]

**Thank you.**

In the case of the Bahamas, well, you have that situation. And you have a situation where they're trying to impose a ban now, using the regulations as if they were three-month bans, right? According to what they were talking about. But if I were going to impose a ban there, just like here in Puerto Rico, knowing that they're reproducing year-round, I would divide the ban into three times a year. Because that's one of the main products with the most marketing. Instead of taking those three months and halting production, which you have a lot of fishermen who still love and continue because they need their money, and they're the ones who fish. Well, I would divide it three times a year for a month. Why? Because in the last two weeks before the ban comes into effect, that fisherman can go and catch 300 pounds and go to the boat, or go out a couple of times to fish for another product. And simply once he arrives, he can continue for a month, following his system. And that can be done because in the Keys, you know that normally on the Gulf side, you have so many weeks to catch red snapper or lobster or so many days to catch them. And on this side, you have so many days. But they're not always at the same time. They're different. Those things can be achieved. And that would lessen the impact on the conch fisherman's pocketbook, which is important in that industry. Because they're simply going to be there for that month, and in that month, I know they can find the option of doing two or three more fishing trips that are different. And it's much more. That was in the Bahamas. We continue.

**You can keep talking.**

No, no, go ahead.

**We're all ears here.**

**Well, he told me a little bit about sargassum climate change.**

Climate change, let's say. It's affected sargassum, octopus, traps, and what I told you about red algae. Pelagic fishing.

**He didn't tell me about that.**

Vast amounts of sargassum, difficult for trolling. Fishing with a rod is not allowed. Pelagic fishing.

**The route.**

[01:39:00]

Yes. No, it affects the areas where there's usually a lot of it, and it's difficult. It's not possible.

**Is it difficult to navigate through that?**

Sailing, no, because those are patches there. They're not giant patches. There are many detached ones, and they're always tangled. The line is always tangled. Pelagic fishermen, to counteract the sargassum, have to use live bait. So, there, the bait, the line simply carries it down. And it tries to swim where there's no bait, and the fish throws itself at it. On the coast, I can't say it's because of climate change. I can say that two hurricanes passed, and I can say yes, that temperatures are higher and there are more hurricanes. But I can also say that in six or seven years, everything could be colder. Because it's been—you understand? You have to look at that.

**Like everything.**

Yeah.

**What do you think would happen here? Do you need help, or what do you think would have to happen for the effects of climate change to return here in Culebra?**

Here in Culebra, well, the effects are education. We need to provide strong education about sedimentation and controls. Because that's what's messing everything up. You know it. When it rains excessively, you know it. In the rivers, you notice it. Here in Culebra, you notice it as soon as it's released. Because where they cleared, where you see dirt, forget that there's going to be dirt down there in the water.

**Sediment.**

Sediment. That's how it is. That's the most important thing. Attacking that. Attacking what's happening in the—where they put people in jail the other two days for everything they did. That has to start now with the justice systems.

**Sorry, when you're talking about "with what they did."**

Well, the other day, three weeks ago –

**Here in Culebra?**

No, in Lajas. From the jumble of houses, from the pile of houses.

**In Lajas or in Salinas?**

Excuse me, what's your name?

**In Salinas, in Jobos.**

In Jobos, sorry. In Jobos. The second case seen. But that hadn't happened. That hadn't happened. It happened with my uncle. My uncle had to tear down half the house and pay 25,000 pesos. And that was in Culebra in 1995. And the engineering corps took action. But after that, I haven't seen any more. And I'm telling you this because it was my uncle. Do you understand? But now also the cases that are happening in Jobos and all that, simply, well, the agencies are taking action regarding the federal level, because it was federal. That's why I'm telling you. Now not state level, they tried them both federally. Now things are different. They're going to use that case as a basis for another. And that one as a basis for another. It's supposed to happen again a couple more times soon. And people, well, you know, there are penalties. Here in Culebra, nobody does what they shouldn't do because they know we have rules, you understand? We know we can't cut down a mangrove. We know we have to prune branches that have grown too long to cover the street, or those that are too dry. Those are the things. But we know this, but not all of Puerto Rico.

[01:43:16]

**Is that awareness in all the –**

That's what we have to look for, but it's happening in Puerto Rico today because there are more cases on the beaches and all that. And people want and know that access is theirs. Nowadays, there's more awareness about that, yes. 100% more.

**How did it happen? Is there a story in the past that –**

There have been many stories.

**Can you tell me one?**

It's a lot. A lot of stories about beach access. It's simply the fact that beach access is public, and it should be public. That's all. There, even if you look at what happened the other days, there have been a lot. In these 30 years, many events have happened, many Tito Kayaks. Many people have been fighting for these systems. And yes, they are taking them properly. Those fights are being taken into consideration.

**What I'm asking is that one of the things you told me is that fishermen know they can't catch a certain type of fish. That's a very important reason, right? Or a season that's important to them. In the past, there were cases where, for example, a fisherman or a person from Culebra didn't respect that rule. And what happened then?**

No, that's usually – I'll tell you which case.

[01:45:03]

**Or you don't need to be a fisherman. Something else.**

No, not here. The mangroves. The mangroves. The simple construction of docks. The multitude of docks there are today. Yes, there are many more. But it was because after Maria, the owners of the lots they had started to build them. Right? How does a Culebra resident feel when they have a boat and don't have a place to put it? Well, all the Culebra residents gathered in the area of ​​the Pica highway, where the airport is at the end. They built the docks, but they were done well. Docks, well done. When you look at all the docks around Culebra, they're not docks made of four-by-four pipes—no, no. The docks around Culebra, everything—because the first ones who built them were the owners of the lots, or they had the money. And the others, however, did it well. But out of necessity. That's what they did. But now, what's next? Now it comes to the fact that we have, I don't know, like 140 springs maybe, right?

**Legal?**

No. Here I go. There are only two in the Corps of Legal Engineers. Did you understand? And the others—there must be 23 that are in the transfer from when the lands that appear on the list were on Navy land. But they're from those years that are considered legal in the sense of being old. Well, there would be about 25, but there are 142. But if you look from here to there, you see that there are five types. When you look around, there are five piers that only connect to the street. But their land is up there in the mountains. Didn't you understand? How can I defend those piers? The only way I'm going to defend them is to defend those I can, because there will only be two or three. Those that are for necessary use, for the use and enjoyment of recreational activities for the people of Culebra. I can't defend any more. I can defend that pier by removing its cleat.

**What is a bagpipe?**

To moor boats. I can defend those four or five docks if I say, "Look, they're going to be emergency docks so if someone had to come in to free someone, they came in." Or if they're going to use it for fishing. You understand? Or if they're going to use it for a sport, like kayaking, or windsurfing, or whatever. But that's my only form of defense I have right now. You understand? But they're necessary at the same time.

[01:48:00]

**The 140?**

No, that's where we're going. We don't need 140. We need 300 moorings right now. Those are necessary.

**¿300 moorings?**

You understand? That's necessary. In the studies and in everything we've thrown away, in the last few –

**What do you mean by "mooring"?**

Mooring. Mooring.

**No, the word. What do you mean by "mooring"?**

"Mooring," I mean that our economy is based on the protection of our resources. The people of Culebra. Therefore, when you look at the Fish and Wildlife plans, it determines that around Culebra is the Asia. This is necessary for the turtles. And we are an area that is at risk, which the federal government has established for years. All the beaches where boats normally go to enjoy it are practically either Fish and Wildlife keys or state areas. And our economy is based on who visits us. In other words, we are going to be implementing a mooring boat system, like on San Thomas Island, Virgin Gorda, and all that, where a fee will be charged for mooring. And that is what the Fisheries Association is creating right now in conjunction with the municipality.

**I understand now.**

This has been going on for years, many, many years, perhaps 30 years. And now, finally, for the first time, an agreement has been reached that natural resources, which are the ones who can do it, who can authorize the construction of this system. They're supporting us. That's what we're going for. That's what mooring is all about.

**I understand now.**

Why 300? Because the last weekend we did the count, we had over 450 boats in Culebra, spanning the entire beach, between Culebra, in Culebra. In Culebrita, there were 96. In Culebrita alone.

**And those are tourists and also fishermen?**

No. Many of them are residents of Puerto Rico. Not tourists. Residents of Puerto Rico who have their boats to go out and visit like any other resident. I mean, I can't call them "tourists" because they go out on their boats to enjoy Culebra like they enjoy Palomino. If they go to St. Thomas, they're tourists. But as long as they come here to Culebra, they're just enjoying the areas that belong to us.

**A question. Do your fishermen in the fishing village fish every day or do they have other jobs on the side?**

[01:51:05]

The only fishermen we can say are those who fish every day, aside from having our jobs, are those who fish every day, in terms of what comes to us, that has to do with the sea. That's the point. We're workers of evil. We can fish for you three or four days a week. I can fish for you depending on the volume, just like Jorgito, Aldo, Néstor. It all depends on the season and what they're asking for.

**And the rest of the time, I don't know, what do they do?**

The rest of the time, a boat rescue came, and we're there. A job came in, involving screwing in, preparing mooring, and all that, and we're there. Anything related to the sea or the projects—I can tell you because you asked me about the fishermen. And I can tell you that, at least with the projects we're carrying out in the association, all the fishermen are involved, many of them. Everything we have to do with other things. For example, the day before yesterday they were at the police station and the hospital, cleaning up the surrounding area. And there were four fishermen there and three from the pool. The pool there at the gas station. The ones sitting back there. And that was the day before yesterday. You understand? It's that system. They're getting involved in other things. What's happening in the village is giving them a foothold because last night—look at me. Last night I was struggling with the stilts. And Kayla arrived. The conversation came up, and I said, "Hey, Kayla. But girl, let me know. You didn't tell me to go and shake his hand." "No, man. No, man. You have a lot of work." Did you understand? "No, man. No, man, you have a lot of work." So there isn't that sense of delegation. And they're already doing that. Well, those things. That's why I'm telling you, all the fishermen have—yes, there are three of us who don't, whose jobs are fishing and the sea only. The others are additional work on the farm for Néstor, or separate merchants, or chefs. You have Jennifer, who's a chef, and Pedro, who's a bartender. They're a couple, but they both fish from the shore. But they catch 15 or 20-pound catches from the shore. And they're the ones they use for their business. You see? When they come to check, between one number and another, they're numbers.

[01:54:06]

**And do you have many young people?**

There are many young people who are getting into diving now because of the oyster thing. Because of the growth systems. They have that in mind.

**Tell me about the oyster project.**

Yes, we have an oyster project currently being run by Meghan and Nicolás. Nicolás is the secretary, and Meghan is his partner. We have the first permit based on oyster farming in the Caribbean. It was difficult at first because, at the beginning, we had—before the association happened, I was already preparing at home to have some growth systems. And my mentality, Don Pedro's, and ours, was focused on lobster farming. Because when Snapper Farm came about here in Culebra, which they have today in Panama and is one of the number one industries in the world, Don Pedro worked. Aldo. Nicolás, being a kid, worked with them. And they realized that the lobster grew very quickly in what was the bottom bowl of the cobia cages' mesh. A process that, when I did my studies at home with a pot and with lobsters of the right size and weights and everything, in a matter of a month and a half, eight out of ten lobsters shed their hulls. And six of them, because they were all females, and six of them got pregnant, you know? With a single laying of eggs by a male for three days.

¿**In the tank?**

**At NASA**.

At NASA.

You understood me, right? That's data that I, you know, gather. I realized that, at the rate we were going, that I fed her every three days, that was as long as the food lasted in one piece. Because I had to put on a meat show so they could keep eating. Even so, the little fish came in and ate. The little ones. But every three days, a lobster one year and two months old was supposed to weigh a pound and a half. A pound and a quarter of a pound and a half. And after a year, it grows an extra pound. But they told us no. They didn't approve our proposal because we didn't have experience. But since they couldn't prove that to us, we moved forward. We set up the association and set up the system, which was the oyster project. And we have experience now. Now for that, we have, thank God, yes, the experience. Because not only do we have the first permit, we have all the necessary permits required by law to be able to have the growth system and what we're doing.

[01:57:36]

**And they've been successful, haven't they? With him.**

Yes. Aside from the fact that there are tons of oysters growing there. Tons. Five of the pearl-growing oysters are growing, and they're growing quite quickly. Two of them are growing quite excessively, quite rapidly. So, that's part of what our industry is all about. Maybe we don't have the capacity to say, raising by the lot, for volume, for sale—but we can compete in two areas. Having a breeding for sale here, which is local, and not perhaps for export because it's very limited. But we can raise pearls in oysters. And another, the home system would be. I, as a fisherman, would be the lobster. And in the central areas of my pond, oyster farming. Let me show you here. Have you never been to my house, Wilson?

**No, I've never been.**

The system, the rearing areas are 30 feet by 5 feet. Double basins. And I've already started building it. But they're there. That's it. My house is that one over there. I'm close to—that's my house. It's already started, see? Yes, I already started there. Here goes the other one. Just like this one. Here it goes. Two single basins, which are the ones that receive. Those receive what is for the algae rearing system. But at this moment, we're going to ignore that. It won't be algae, and what it's going to do is more oysters. Why? Because what is needed to filter each oyster filters 400 gallons. What is needed to filter that one or whatever it is from the lobsters is enough for the oysters. So here, on this side here, I would have a tank that would have capacity for 2,500 gallons of already processed saltwater. If there are problems with one of the tanks, I could drain it and throw away the clean water. And from here, this is my old cement dock, where they used to store the Navy's coal from the Navy ships. And that was the dock. This is where the water for the entire process is extracted. And that's where I live. So, this is my dock. My facilities there. My little house.

[02:00:42]

**Your office is big.**

**A privileged location.**

I am one of the few locals who, thank God, has land.

**And one question. You mentioned the Navy.**

And.

**Don't forget.**

Look at my land from here, from that hill to here.

**How much is that?**

It's like 14 strings.

**But is half of it Punta Soldado?**

No. But yes, that's right there. Punta Soldado, that line. See straight ahead? That's all the Punta Soldado Hotel. I'm on the corner there.

**You've been privileged, haven't you?**

Yes, no, and I have sold.

**Where do you sell lobster there?**

I sell lobster at the Fishermen's Association, or in town, or in front of the school.

**Is everything you produce local?**

Everything we produce here stays local, except when I get a special order. They tell me, "I need 300 pounds of lobster, and I need them to be large, not small." Because they want to use them to make a salad or whatever. And I go and place that order. Before, I used to deliver to Maquito in Naguabo.

**What is a restaurant?**

And he delivered because he had the problem that they were taking the lobster from the pot. And the lobster from the pot, when you don't take good care of it, well, it comes out skinny. Or when you give it more time. Since I'm a lung fisherman, I normally catch lobster in caves. And in caves that I've already marked here, and I go straight there. It's not a lobster that's running around there, and I find it in such a place. That lobster is well fed. You catch it, and it's always fat. Well, that's why. And then, he paid me 12 pesos a pound. Yes. Yes.

**You're not taking fish to the Big Island.**

No, not anymore. Because right now, he does need—there are other fishermen who can leave him there, but it has to be what I explained to them, and he's going to pay him 12 pesos a pound. But the lobster has to be like that. Because the problem with lobster traps is that not everyone—well, you don't know who gave it more time or who didn't. Or if the trap was lost and they found it, and when they found it, they were skinny. He threw them away. And when he pulled out the tail, the tail was skinny like a shrimp. Have you seen that? Has it never happened to you?

**No.**

**I haven't seen it either, yes.**

Yeah.

**You mentioned –**

When you stay in – for a long time

**They leave the lobster in the pot for a long time.**

Yes. Although in the pot they eat each other, if a lobster dies, the lobster will eat everything. OK? That's a cockroach. It eats everything. I can fit 100 pounds of lobster in two of my boxes. And why is it in a pot? Because I know it's in a pot. And I come to that lobster, and I put 20 pounds of food in it. Ten and ten on each side. Then, automatically, in three days, I have 112, 113 pounds of lobster. Do you understand? I put food in it for only three days, and in those three days of 100 pounds, I have 112 to 100 pounds of lobster. Imagine if that eats. That's a sea cockroach. That eats all the time. Yes, that eats all the time and it gets fat quickly. That's liquid. I don't know how the hell, but that gets fat [INAUDIBLE].

[02:04:27]

**You just mentioned that there are several things that impact fishing here. You mentioned climate change and sargassum.**

Tourism.

**Tourism.**

**But you mentioned the Navy just now. What effect did the Navy's presence have on marine ecosystems here in your fishing areas?**

Well, I can tell you –

**Were bombs exploding here?**

Mira.

**What was the presence like?**

Analyze this. According to what I told you about sedimentation. Just imagine if that bomb were operating in Flamenco, in all the areas there. Destroying the land. The land, the land, the land. Yes, there were bombings on the shores so, so, so many that there are holes and all that. But just think about the fact that it's on the land, and that when it rained, all the sedimentation ran there. And when you look, it's all the same process. It's the same. Look at that reef killed by sedimentation, because you see the dirt or you see the slime that is sediment. And that's it. And imagine when the Navy was bombing. It was more dirt. More dirt.

**Where is there mortality?**

More dirt. Mira.

**About what?**

**Of mortality. The reefs have died.**

All this. This whole green area. When you look at the entire area facing Flamenco, that entire point facing Flamenco, if you analyze it and look at it closely, you'll see that it's a bottom. At least where the bombs reached, it was a dead bottom in the sense that it's broken, but it's dead. Because when you look at the mountain, you say, "Ah, all this dirt came down here all the time." Boom, boom. They bombed. Boom, boom. And the dirt came down from there, everywhere, around that area. Because if you look at the other areas and in Culebrita, the same thing will happen to you. But it's not because the Navy bombed. It's because the kids ate so much, so much that it accelerated the process and the dirt came down there.

[02:06:50]

**The kids–**

The goats.

**They eat everything, and leave the ground smooth. And then –**

En Culebrita. That happened with the dirt, too, in the –

**There is a lot of erosion on the land.**

Erosion, yes.

**A case.**

And all the calluses they bombed were just dirt. When it rains, it turns into dirt. It's the same thing.

**And there is no agriculture here?**

No. Agriculture used to be very prosperous here. Super-prosperous. The entire northern area, like Arenales, Brava, Resaca, all of that. They grew that. The entire north was grown. And what came out of here was cattle and sweet potatoes, cassava, all of that stuff. That's what they brought down there.

**And what happened to agriculture?**

In the United States, we have 85% of the income, and with the Jones Act, we export and import everything. I mean, we import everything. That's the truth. As long as that's in place. And if they take away the percentage that strangles us to pay less and all that, then more will happen. We have to find a way for us to start growing, but at the same time, the law happens. And they take that away, and more will happen. Because then, there's more free exports. You can bring in more imports, you understand? It's really difficult.

**Is there no consumption for personal consumption? Is there no growth?**

To get food here on the farm, we already grow. At home, I grow for myself—normally, the people here do. But if there's something good to grow here, it has to be fish. We have to achieve our goals. Seeing that cage that can generate fish. Seeing the fishermen of Naguabo tending three or four of those cages. Because conch season just arrived, and in this season of these three months, you have to put in the work or alternate. But that's it. And why us? Because it's this platform. The platform is ours. The other thing is profound. We are here or nothing else. Tell me. Tell me.

[02:09:18]

**He started telling me that there are a lot of young people interested in raising fish these days. Was it always like this, is it new?**

No, it's because of the education they're getting. Yes, some have asked me how to learn it or how to fix a harpoon for them. But it's more about having a job that suits their taste, that generates what it should generate for them. That's what I see. Because they like the sea. They like the sea. Three of them right now, the young ones, as far as I know, are working with H2O Water Taxi, leading tours to Culebrita. You know? Not as captain. Just as main, giving—they're young people who like that.

**And he told me quite a bit, but I want to know more about what happens after a disaster like Hurricane Maria. I don't know if there are other similar things, but he told me. What could it be?**

There you have Puerto Rico, right? Yeah. That's Puerto Rico. That's our area. It's the only place you can work on a growth project that has clean water coming in and out. It doesn't have rivers. It's in Culebra. It's on these coasts, you understand? It's in this center. It's in this area.

**Between Culebra and Vieques?**

Yes, here between Culebra and Vieques. Why? You look at the rest of Puerto Rico, and look at the little platform there that only has one, like I told you. They have water there, so maybe they could handle it. You see? They can handle what's Nagua or Humacao. And the other thing, when you come to see, there are plenty of fishermen who could help you, like the Cabo Rojo platforms and those areas here. Because here now, I mean, even though the tremors and all that stuff have subsided, you see, the flat areas are more—they don't have as many reefs as here.

**I understand now.**

That's it.

**Should I charge your phone?**

Dale.

**Sorry.**

**Well, tell me a little about the role—you told me about the role of the community. After a disaster, the community comes together. You told me that many of them are fishermen. Is there a role for other people in the community? For example, women. What is their role? After a disaster like Maria, what happens?**

[02:12:20]

There's no difference between women and men here. You don't have a difference between saying women and men here.

**Tell me a little more about that.**

The thing is, jobs here have forced women to know how to do everything, too. And maybe young girls or young women don't know how. But when you've been here a long time, you have to know.

**You have to know what?**

To do everything.

**Fishing. And what else?**

No, not just fishing. No, but cooking, cleaning, all of that. Here, the first thing is to get together and start using the existing centers to handle emergencies. Thank God, we have the island women's center. Now, next to the Old Town Hall, we have what used to be the community center. There's also another non-profit foundation that's working with the community. Bringing resources like technical resources or things needed for their work in the regular community, right? Like training. We get a lot of help in that regard. And nothing, a phenomenon is happening here; the aid will reach us anyway. When the aid arrives, aside from cleaning, whatever, we simply organize the areas and everyone starts driving around, collecting the aid at the distribution centers. Or, for example, like last weekend, Saturday, we went and delivered it to all the people of Culebra, 600 families. We started buying for them. And now, in December, we'll come back and do it before the turkey. A specific moment, like with a date, we do that.

**Who puts up the money for that?**

We, with the intelligence to call the foundations and the sites to –

**Money is collected.**

If not, we, as a people, or we as the Fisherwomen's Association, or the Foundation for a Better Puerto Rico, which is where Dennis Rivera came from, or Proyecto Seva, or the Community Council. This time it was us. The Community Council. United, we are stronger. There are nine of us. Nine people who, during the hurricane, gathered and brought stoves and refrigerators to 200 families in Puerto Rico. We helped 200 families.

[02:15:14]

**From Culebra, did you go to Isla Grande to bring help?**

Yes. We have a group, the Community Board, which includes Nervadiris, Susana Villanueva, Tata, my cousin, and my cousin Alexander. And Don Dennis. We have the ability to reach out to different people simply to seek help. Well, they lend a hand, and we get the pieces. We make the purchase legally and as required. We give them, the foundation, or whoever the receipts are, for how the work was done. And we go and do it, but we know who we have to give it to.

**Where did this idea come from in the first place? Do you remember?**

No, this is coming—there are many. Look, in 1900—sorry, what 1900? 2017, 2018, 2018, 2010—was the hurricane in 2017? 2017, we're without power. First of all, back in 2006, I started my life outside of politics in 2006, 2007, and I decided to get involved in community problems and solve the problem that was holding us back from our economy. That was it. But in 2017, when the hurricane hit, we didn't have the power plant. Because the government had simply done some things wrong, and there were some adjustments to the cost. And there wasn't the money to finish a plant, and we had it sitting there for two years. And the hurricane hit, and we didn't have the plant, and it was there. Well, we made the arrangements through Don Dennis Rivera, Foundation for a Better Puerto Rico. And we got help from senators and people from New York. And we got the money to finish that plant. And the arrangements were made, and the plant was finished. After that, we moved on to the hospital, and Culebra has the best hospital in the Caribbean today, with all the facilities for childbirth. For everything.

**So Culebrenses are born here.**

They can be born Culebrense. What we don't have is someone who makes the plates. We have the excuse of saying "plate," but we still haven't managed to train anyone from here who can stay here or anyone who wants to come.

**Do they have rooms in the hospital now? This is a question, so –**

[02:18:06]

Yes, three people.

From that foundation?

No, not yet. Not yet. The thing is, in our case, we have San Thomas right next door, and we have the Piedras River, you know? And maybe it would be better to put it in Vieques here, where it's more necessary. And you have a bus right next door, and everyone from that corner, you know? Maybe.

**For the record, Susana, the decompression chamber in hospitals is used to treat ulcer wounds. They're mainly used by those, but also by divers with tanks to remove bubbles in the vents. Well, when they get vents, they take them to those decompression chambers.**

**Excuse me. I have to correct you. Divers don't go to hyperbaric chambers in hospitals. They have to be taken directly to Río Piedras. That's near San Juan. Because these chambers don't have the capacity for this. There are several around the island. They're only used, as Wilson said, for wound care, for diabetics, for example, for scars, things like that. But when a diver from here, from the Virgin Islands, from Cabo Rojo, from Ponce, from Vieques, from Culebra, they have to cross by helicopter along the coast.**

Very low.

**As low as possible to avoid creating more pressure on the diver and transporting him to San Juan. And we only have one hyperbaric chamber of that nature, with all the doctors and medical care needed to assist him.**

**How soon does it happen that they need to do that?**

Well, I can tell you that three months ago, I handled two consecutive cases. But that was only here in Culebra. That's what happens normally there. That's a number you can get in Río Piedras, because they'll give it to you.

**And how deep were they?**

They're usually cutting conch. You know that's 90, 100, and something, yes.

**Yes, and the largest number of tanks. They use more tanks.**

**And one thing that has been found is that, since Hurricane Maria, there are now more serious van accidents.**

**Because now, since the fishing isn't close to the shore, they have to go deeper and deeper. And so, that situation arises.**

That's what it's doing. Perhaps one way to correct that would be to start training people in nitro and change the systems that cause 70% fewer problems. But they can fish deeper and do their job. But that's one of the serious problems there.

[02:21:12]

**But I also have to add that the program continues. They have a project that started recently, where they're recruiting at least 15 fishermen from different areas to teach the course.**

The training. Yes.

**And they certify it and they are given regulators at the end of the course, with their watches and everything, so they can –**

That's right, we've already got 14, and we have 18 enrolled. But these 18 are young people and young adults, but they're all on the same page. Because they don't work with the SAM or don't work on projects because they don't have the licenses. And because they don't even have the projects. The SAM is now doing it. It's taken on the task of training personnel to have the programs when they work with so many volunteers. Do you understand?

**But isn't it the SAM? Marine Environment Society.**

I'm talking about the SAM.

**CESAM. CESAM.**

Why does this come about? Because then I have young people, or those they already know, who have wanted to work with them, but can't. One, because they're not divers or because it's a volunteer project. But they come across a project like the others, and they come across projects like the ones running separately, Claudia and those people, who pay a fisherman, a diving worker, what they should be. And you've given them this one. So, I also come from a background where I worked with the Navy on bomb extraction. What they teach us is that divers and sea workers earn so much. Many of these young people have been there. They see that, and what drives them to that, drives them to want to be there. Where they feel like they're at sea, where they live, where they can wear flip-flops, where they can get wet every day, looking for a job that's nothing more than being a bartender or a waiter all day. You know what I mean? Those options. And that's the reality. Those of us who remain here are all at sea, all of us involved. From the hospital project, we started and had the pharmacy. First, a pharmacy in Culebra. After that, we created Flamenco. Then came Flamenco. From the Flamenco project, we got the project from the Association. We now have the Cayo Pirata project, which is the leader island in the middle. We are working together with the NOAA. With all the relevant agencies. EPA. They have provided us with technical assistance from engineers, architects, everything necessary for that project, what we are working on and for the moorings. We have worked as a community. We have achieved more by working directly with the community than the municipality. And I think it's the best way, because for us, the community, they were the ones who gave us—30 years ago or more, they gave us the how-to. What do we have to protect? What not? How should we take action? We have led the fights. How could we not lead them? It's a good way of looking at projects, and it's showing. They are working. For the past few years, we've had that vision, and it's worked.

[02:25:17]

**Can we say that the hurricane was a good thing in the end?**

The hurricane? The hurricane brought us closer together, and we went out more—now there really are a lot of us. Not "a lot," but a lot of foundations, but those that are doing their work properly. And so, more people. More people want to get involved. In the case of Culebra, it's that people want to get involved in something useful. You don't want to go to a place where you put forward an idea, and they simply reject it, or don't—you know? Or they listen to you and nothing else. No, you want to be in a place where you contribute, and you feel good about contributing, and you see the results because you live there and can continue to feel it. Well, that's what one seeks as an island. Like me, at least, as a fisherman and as a resident, I seek that. I seek to feel good, to be comfortable in my environment, to be able to continue working, going to the same fishing spots. After 42 years. I mean, 42 years, I keep going to the same places. You understand? I keep going to the same places to fish. I keep fishing. I've noticed what I told you. But it's all about controlling that diet. That's what we have to attack the most. Everything. Sargassum, because it's attacking us here. And the land is attacking us here. This kills oxygen. This kills. This eliminates oxygenation in any area. This one here covers up all the coral, and it kills you. You can't get out. Everything.

[02:27:03]

**And in terms of endangered species, do you have a lot of them around?**

It's normal. What I can tell you is that the grouper is growing. The red grouper is increasing [INAUDIBLE]. That last five years, red grouper is being caught everywhere. Don't tell me that—you know, because normally the guys—

**I'm talking about endangered species. For example, manatees.**

No. In that regard, the increase in manatees has been more here. And when the pandemic hit, a lot of them came here. That was crazy. And right now, there's a population here that you normally see. But since the pandemic, so crazy how many manatees are here. It's the first time.

**So you say the groupers are fine.**

Yes, they are growing.

**There are good populations.**

And you see that every day. When we go fishing, you see white grouper every day. And if we go to areas like Luis Peña, which is normally where you'll see them.

**Are there specific areas for grouper and the other?**

There are areas that –

**Specific.**

Normally, yes, at Luis Peña. The back of Luis Peña.

**Marked?**

**Marked?**

It's just that you can't see it here.

**Is it too small?**

Little.

**It's not the same.**

The West Side of Luis Peña. Right there. West Side. Luis Peña. El Oeste.

**Are there many groupers in that area?**

Yes, the grouper from the farm, that's the one that appears.

**Luis Peña.**

**Well, I'm going to end the interview with a question. If you could say anything to the upcoming generation, meaning the generation of young people here in Culebra or Puerto Rico or in general, what would you—**

Yes. The message is very clear. They should always remember that they're going to the sea to collect. They're not taking anything to leave there. You understand, right? We have to be very conscious of what we're going to collect. It's necessary. And we have to start thinking about what we're going to bring. What are we going to contribute to help our resource grow? You understand? That's it. Because while they always think, the fishermen think, "I got on the boat. I went and just extracted. The more, the better." It goes a long way. But that doesn't guarantee that next week you'll have your bite to eat. You have to take that into account. And we have to start making plans that address how we're going to help production. How are we going to produce fish? How are we going to work more effectively to correct the problem in these areas and not repair them? You understand? I don't believe in that. I wrote a report and made a proposal about a month and a half ago. And in the proposal, I told him, "I really believe in Protectores de Cuencas." I believe in them because they've done—why? Because Protectores de Cuencas comes from professionals in Culebra. They started doing the work here, and they ran into Alex, my cousin, Omar Villanueva, myself, Alexis Ojeda. Five of them trained us on how to do the work on the levees. They started doing all the work here, and today Cuencas is Cuencas. Do you understand?

[02:31:24]

**And the Watershed Protectors have a lot of prestige. It's an organization.**

I told them it was time they stopped repairing and started correcting the problems. Because just because you realign the road on dirt, and straighten it, and put the drains in the right place, that doesn't prevent the control. You know? It's a control, but that doesn't prevent them from continuing to arrive. We have to fix the problems so they don't arrive. That's so that sedimentation doesn't reach the water. That's what I'm talking about. That's my message to them in that way. And what I told them is, we are going to address those young people so they know they have to protect and contribute something. Because we collect. We don't take anything. Isn't that right?

**Thank you.**

At your service.

Well, I have a question. It's also related to the interview, but maybe it's related. I see the necklace you're wearing.

**I saw it too.**

**What does it mean? Or is it something special? Or I have a bit of it.**

**You did that well.**

**Is it unique?**

Yes. I have many unique necklaces, but I don't use gold. No. There are many beads that are mine. I make beads. This was made by Silva. [ph] It's in Guayacán and jade.

**It is a very hard tree.**

Exactly, it's the Taino coquí. But all my pieces have something directly to do with the natives, with our ancestors. And they're either made of jade, or [INAUDIBLE], or in different pieces that are valuable in terms of the pieces and originals. This one was made by him, but the rest I have, many of them are originals.

[02:33:23]

**Originals. Tell me a little about the ancestor, if you please.**

Originals from different areas here in Culebra that have already been researched. Many of our pieces are in the museum. You can go there and see them.

**Are there any important archaeological sites here?**

Yeah.

**In the sea too or on land?**

In the sea, there might be one, but it's land. Yes, in the sea, I know of only one, but I'm not going to mention it because it's something—

**Just to prove it?**

No. Not that one, because it's something several of us are discussing. And after Hurricane Maria, I found three bottles at the same time in the area. And all of the bottles had their necks open. There must be a subsidence there or a—

**A boat?**

Yes, because the bottles can't be found. When you normally find a bottle, you'll find it without the neck cut, because they hit it with a sword, and they cut off its neck for the wine. But they were all intact. And there's a fold of wood that runs about 40 feet. And it goes into the sand, and it sticks out. But now I have to wait. If one goes there, I have to wait until April for the sand to recede to see that. Yes, but it's something that I mentally know is there because I've seen it. But the other things are indigenous finds, and they're all in the museum. You can see them there. Our names are there.

**Have they found them and gotten them out?**

Yes, yes. It's normal. The thing about the jar. When we're clearing the forest, when we're peeling, you can see the trunks. Where the logs of the huts were, where there was a fire.

**And they don't protect those areas?**

Yes, they're areas that already—no, there are houses and all that, but that's from us who found them. And well, I collected the accounts, all that, in the downtown area, because you could tell it was just a shack.

**Are there any indigenous archaeological pieces that have been carved in relation to the sea, fishing, or anything related to the sea that you've found? From all over the island, from their ancestors, from when they were fishermen.**

Well, when you go—try to go to the museum if you have a break, when it's open. And you'll notice that many of the carved pieces are coral. Unlike other places. The ones here are coral. The cemíes are made of coral. This white coral that you notice, this one. I took a piece like this, about this big, a rock from—you know, when the sand hardens on the shore. There are melons. There's that kind of—

[02:36:43]

**On promotion?**

Yes. So, for Hurricane Maria—it wasn't for Hurricane Maria or this other one. It was before that. My mom found a Nordic compass that has it. A compass. Do you know what a Nordic compass is?

**No.**

Compass rose. Look it up on the Internet.

**Ah, compass rose.**

A Nordic compass. A wind rose. That's Viking. That's from that era.

**He mentioned the Vikings to me before.**

And she found it there. And I found that piece. Exactly. But it's a compass. Exactly. I started tattooing it on this side. I haven't finished it. But she found that compass, and I found it right there for that same hurricane. I found a piece of stone. You know, from the shore of the molten sand with three inscriptions on it, which is also there –

**Is it in the museum?**

Yes, it's there in the museum. There are a couple of pieces, and I found the most important one. Some ancestral pieces, but small, complete, as if it were an Indian, as if it were the figure of a real man. A lot.

**The connection to the sea. You mentioned, then, that it's the worst thing I've ever done in coral.**

That.

**Coral. And with sand hardened like stone.**

Exactly. That's what connects here. Other pieces I have, I have pieces in jade.

**But jade is not produced in Puerto Rico.**

That's where we come from. That's where we come from. No, no, they're master craftsmen. I have one of the condors that was found in Hueca, one of the 11 condors from Hueca in Vieques. I have one of the originals. Because one of the ones I was working on, Luis the Fisherman, died. He gave it to me. And that comes from the Maya of Central America. Jade comes from there, and the condor comes from there. That master craftsman, well, he came to Vieques. It's not that there was a lot, but yes, there are many things. Many beautiful things.

[02:39:19]

**Thomas, can you give me your mailing address?**

Yeah.

**Okay, let me stop this.**

Yes, I can.

**Now.**

When they were cleaning the bombs, they checked between Tamarindo Chiquito and Carlos Rosario, which is that point. And they found two cannonballs, about this small. One like this and a tiny one. The thing was that in the area where they found them, when they told me where it was from, I said, "Oh, but that's the area where the Indians were," which you usually find, and it was the little mound. Well, Luis and I took it, and we went up there about two weeks later to the area they had already cleaned. Well, we took some from that patch. I told him, "Luis, then let's clean it up a little higher, because look at the patch here. And if I were living there, I would be living here. Well, check higher up." And we found two balls, but they were wooden. I have them at home. I haven't given them to the museum. It's just a mess from the other days. So for me, the way I was thinking, all I could think was, "Who were the pirates, using wooden balls to bomb?" You know, "Or what?" But no. They were just playing ball, and what they were using were wooden balls. You understand? But I have them at home.

**Do you have them?**

Yes. I'll show them to you. Come on. I'll go get him and show them to you.

**Come on, come on.**

That.

[02:41:00]

**Can we come to your house?**

Yeah.

Going up to your house, the path is downhill, right?

Nothing.

No, I'll look for them. I'll look for them, and I'll bring them back quickly.

**What if you can bring some necklaces?**

So that I can see?

**Yes. I'd love to see it. And if you have any handcrafted work we could photograph, that would be fantastic.**

Of course.

**Can I take a picture of you and Susana together?**

**This is enough.**

**I'm going to leave it to her.**

**Do we have to say anything?**