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Dewey Livingston:	This is an oral history interview with five members of what is known as the Sacto Team, a group of divers who joined with Cordell Expeditions on many of the historic dives on Cordell Bank in the early 1980s. It is June 5 th , 2010, and this interview is taking place at Point Reyes National Seashore. As lead interviewer, I am Dewey Livingston on contract with Cordell Bank National Marine Sanctuary.
Jennifer Stock:	This is Jennifer Stock, and I'm the education and outreach coordinator with Cordell Bank National Marine Sanctuary.
Dan Howard:	I'm Dan Howard, the superintendent of Cordell Bank National Marine Sanctuary.
Dewey Livingston:	All right, thank you. So one by one, would you please state your name and spell it, your current hometown, your current or recent occupation, and your diving experience prior to diving on Cordell Bank?
John Walton:	My name's John Walton, W-A-L-T-O-N. I live in Shingle Springs, California, and my occupation is construction inspection supervisor with Sacramento County. My diving experience prior to Cordell Bank, I was an open water scuba instructor/divemaster. I started diving at age 15. At the time of the Cordell Bank, I was working at the Cassotta Diving, Incorporated, in Rocklin, California, and was teaching classes. And had some specialties in deep diving, marine science ID, and research diving.
Dewey Livingston:	For instance, where had you dived before, some notable places?
John Walton:	Most of the diving was from Monterey to Fort Bragg, California. I was certified in Monterey. We taught most of our classes in Fort Bragg-Mendocino area. So the majority of my diving was in northern California, before the time of Cordell Bank.
Dewey Livingston:	Thank you.
Steve Williamson:	Steve Williamson, W-I-L-L-I-A-M-S-O-N. I live in Roseville, California. I'm a retired fire chief, Groveland Community Services District. Spent 30 years in the fire service; now currently work part time for the California Conservation Corps.
	I began diving in about 1975. Took classes at Keane's Aqua Shop in Sacramento and got into your advanced courses. In 1977, I

attended Coastal School of Deep Sea Diving in Oakland,		
California, where I learned how to work on oil rigs, blowout		
preventers, and underwater welding, things of that nature, and		
hard-hat diving. Dove the Navy Mark V helmets that you would		
see in Men of Honor and those type of things.		

1978, I took some advanced courses at the Cassotta Dive Shop. Equipment specialist. Ended up being a divemaster through that shop, and did a lot of diving basically from Monterey north to Fort Bragg area. Did some diving down at Santa Barbara Channel Islands, all sport diving. Did some commercial work in the Delta Bay Area for a while, freelance.

- *Jerry Seawell:* Jerry Seawell. That's S-E-A-W-E-L-L. I currently live in Roseville, California. My current occupation is a police officer for the city of Rocklin. My dive history: I started diving when I was in high school, 16 years old, 1969. In 1974, I went to Commercial Dive Center in Wilmington, California, where I learned to be a commercial hard-hat diver. Following graduation there, I worked for Oceanary International in Louisiana. Worked on oil rigs. Came back and did some harbor construction in Long Beach/L.A. Harbor area. When I came back to Placer County, I hooked up with Dave Cassotta at his dive shop and became a photo instructor, teaching photography there prior to Cordell.
- *Dewey Livingston:* That was underwater photography.
- *Jerry Seawell:* Yes, underwater photography, yes.
- *Dave Walls:* I'm Dave Walls, W-A-L-L-S, and currently I'm an educational consultant for Professional Association of Diving Instructors, PADI. I live in Lake Forest, California, by the way. Began diving around 1976, [5:00] and by 1978 I had worked my way up to become an instructor and, like the rest, went into Cassotta Diving and went to work with Dave, teaching classes there. And in general, my diving experience runs up and down the coast, from northern California, southern California, with some excursions into Mexico as well.
- Dave Cassotta: I'm Dave Cassotta, C-A-S-S-O-T-T-A. I live in Rocklin, California. My current profession is, I'm a guitar maker. I have a guitar company in Rocklin. I began diving when I was 13, and then I guess I was probably, what, 19 or 20; John Walton and I took an open-water dive class, got certified again. And later on, in '74, I attended PDIC, the Professional Diving Instructors College, in Monterey. And from there I took a job in Long Beach and was a

	manager of a dive shop down there. And later on, in '77, opened up my own dive shop with my wife, and that's how I met members of the Sacto Team, except for John Walton. We've been best friends since high school, so he's a good friend of mine.
	And so we all met and started working together in this business that we had. And Dave Walls walked in to our shop, became one of our open-water instructors, and Jerry was our photography instructor. Steve was one of our divemasters, and John was our head open-water instructor. And that's mostly what we did before Cordell. We would run Caribbean trips, and so some of us have been able to dive in the Cayman Islands and the Bahamas and so on.
	But most of our diving was the California coast, from southern California all the way up to Eureka, and we did a lot of inland diving as well as Lake Tahoe and some of the lakes and rivers. John Walton and I had formed a small little company called Subaquatic Technologies, where mostly what we did is we brought up sunken boats. So guys would go out and sink their jet boats in the lake, and we'd go find them and bring 'em up.
	And there was some real neat experiences there, which is a lot of stories that don't pertain Cordell Bank. A lot of that, of what all of us had done really helped us out in diving Cordell Bank.
Dewey Livingston:	Okay, thanks for those introductions. To start with talking about Cordell Bank, but prior to getting into details about diving, I'd like to ask, how did you learn about Cordell Bank and these expeditions, about what year that was?
Dave Walls:	Back at the time, I was married to a nurse – ex-wife – and she came home from the hospital one day and mentioned that she had a doctor friend that mentioned that he was friends with Bob Schmieder, head of the expedition, and that Bob was looking for some people, especially with some sort of deep training or experience, and ideally, if they had some medical background at all would be helpful.
	So immediately, I thought of some of us. I know that I had gone through EMT training. I'd done deep instructor training. And I knew John was an EMT also, a volunteer on the fire department, and a similar background in diving. And then Steve, fireman, EMT, and John, background in commercial diving, and Dave Cassotta as well with all that strong background and all of that. So

brought it to all of us, to all of them, and that was it. We got back with Bob Schmieder and were on.

Dewey Livingston:	Had you heard of Cordell Bank? Did you know anything about it?	
Dave Walls:	I had no idea. I thought you saved money there maybe.	
Dewey Livingston:	Anybody else have comments on that?	
Dave Cassotta:	I remember we were working in the dive shop, and John and I were working in $-$ I guess it was probably in September, [10:00] maybe '79 or '80. And Jerry Seawell came in, and he was telling us about this expedition to Cordell Bank. Well, neither one of us had ever heard of Cordell Bank, and so Jerry showed us on a map, and we were kinda concerned 'cause Jerry wanted to go. And we thought it was in the Red Triangle, and that's a place that we don't normally dive.	
	And so we were teasing him about being great white shark bait, and we actually created a file in the dive shop called the Great White Shark Bait Expedition, and that's where we put all of our documents regarding the Cordell Bank dives. And we said, "Well, if you survive this dive, come back and show us the pictures."	
	So he did survive and came back with the pictures, and we had a classroom there at the shop, and he was showing us the slides. And I remember John and I looked at each other; it's like, "We have to go there. We have to become part of this."	
	And then Dave just had heard about it. Dave Walls had heard about it from his wife, and he got some information, so we all got together and filled out the forms and hoped that we'd be good enough for Schmieder to include us.	
Dewey Livingston:	Is there any reason that you can think of – as you all had experience diving the California coast – that you didn't know about Cordell Bank? Was it just too far off the radar? Why didn't you know about it?	
Dave Cassotta:	Well, for me, I had never heard of it. I'd been on fishing trips to the Farallones before, and my very first dive instructor was a man named Leroy French, who dove with Bob Hollis and Al Giddings out at the Farallones and got bit out there. So I'd never had any desire to dive the Farallones, although I knew people who did. But I had never heard of Cordell Bank.	

Dewey Livingston:	Were there other popular dive areas in the vicinity of it in the Farallones? I don't hear about people diving off Point Reyes or
Dave Walls:	Yeah, I think that was the point, that for us in the recreational dive industry, Cordell Bank was off the map. No one dove there, so there was no talking about it. Nobody was really familiar with it.
Dewey Livingston:	Any other comments on this early part?
John Walton:	I remember when Jerry came in talking about Cordell Bank. We thought he was crazy. It's too deep and too many sharks, and it's too far out there. We're talking 20 miles off the coast. So at first it was like, this is not realistic, and thinking that maybe Schmieder was a little bit nuts.
	But after he came back and showed us the pictures and we saw how jazzed he was, we all had to go. And so we drove down to Walnut Creek and introduced ourselves to Mr. Schmieder and had to prove ourselves to him, and then from there we were out the next fall, in 1980, diving.
Dewey Livingston:	You were quite early, then, in the dives.
John Walton:	Yes.
Jerry Seawell:	Yeah, when I first heard about Cordell, I didn't know anything about it. I figured the water would be just like off San Francisco: green, cold, limited visibility. But I was kinda antsy to go, the excitement, the adventure. I knew I had my training behind me.
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Jerry Seawell:	about it. I figured the water would be just like off San Francisco: green, cold, limited visibility. But I was kinda antsy to go, the excitement, the adventure. I knew I had my training behind me. So when I contacted Schmieder, he goes – kinda told me what's involved. I'd have to have double tanks, which I didn't have, so that's the way I contacted Dave. I said, "Dave, I gotta have some doubles." I just kept singles, so Dave hooked up and got me a
Jerry Seawell: Dewey Livingston:	 about it. I figured the water would be just like off San Francisco: green, cold, limited visibility. But I was kinda antsy to go, the excitement, the adventure. I knew I had my training behind me. So when I contacted Schmieder, he goes – kinda told me what's involved. I'd have to have double tanks, which I didn't have, so that's the way I contacted Dave. I said, "Dave, I gotta have some doubles." I just kept singles, so Dave hooked up and got me a manifold and everything, got me set. Went on the expedition, and the seas were pretty good that day, and I went diving. Had a 35-millimeter camera I took down there, and the fish and the visibility and everything, I mean, it was just like paradise to me. So when I came back to the dive shop and told these guys about it, I was so jazzed, says, "You guys have got to

Steve, anything about learning about Cordell Bank, your first – not Dewey Livingston: first dive, but your first impression – Steve Williamson: I think I was the last one to learn about it, and [15:00] Dave and John and Jerry and Dave also told me. They knew I had deepdiving background and was a working EMT firefighter, so I had a pretty good medical background in trauma and things like that. So like the rest of 'em, I applied and sent a letter of request to Bob Schmieder and got approved, and that was the beginning. Were there many formalities about joining up with Cordell Dewey Livingston: Expeditions? Did you feel like you were joining this legal entity in a sense, or was it more informal? To me it was informal. We just showed up with our gear and put it Steve Williamson: under the deck of the boat and went out and waited for our dive time, or whenever we were gonna go in the water, and the tasks that we were assigned. The first trip, we brought our dive gear and things like that, and then we weren't sure what we were really gonna do, except for Jerry, who was the photographer. And then the trips afterwards, when we went down, if we were gonna collect samples, we knew what tools to bring and the specialized tools as well, jackhammers, core pounder for the holes that the Navy put in, didn't like us pounding on 'em, and things like that. As the expedition progressed it got a little more formal, a little more organized, but at the beginning, from my perspective, it was informal. Is there a meeting before the dive where everybody got together, or Dewey Livingston: did you just show up? Steve Williamson: Is that prior to going out? Dewev Livingston: Mm-hmm. Steve Williamson: I didn't recall any meetings. I know that when we did a little brainstorming once we all got down there and on the way out – we had quite a while to get out there, and the boat that they were using was a converted shrimp boat, so with single engines. It didn't go very fast at all. So we had a lot of time to get prepared and sort out what we're gonna do and our sequence of events for diving and things like that. John Walton: I remember going to Bob Schmieder's house and meeting him, and he wanted to know our deep-diving experience. And he required

	us to do a deep dive before we went out, and he wanted a long deep dive to 150 feet. So we did our best to go find deep water and did a deep dive before we went down. I remember going to his – did anybody else – I remember meeting him at his house and talking to him and kind of getting to know Bob. I think about it, Jerry and I – it's only been 30 years ago. <i>[Laughter]</i> But yeah, he did require practice dives before he let us go out.
Dewey Livingston:	Down around Monterey?
John Walton:	We went to Lake Tahoe. We went to Folsom Lake. We went to San Jose Beach, Carmel. We did a dive, practiced out there, so there were numerous places we did our dives. Wherever we could find deep water.
Dewey Livingston:	Was there a setup of communicating amongst the team? Did Schmieder call everybody and say, "Here's what we're doing"? How did you communicate?
Dave Walls:	All I was gonna say was, of course, we communicated with each other 'cause we were all friends and worked together, all of that. I don't remember how Schmieder was communicating with us personally, by phone call, or – yeah.
Dewey Livingston:	It sounds pretty informal –
Dave Walls:	Yeah, it was.
Dave Cassotta:	He would call the shop from time to time, and he knew that if he called the dive shop, that all of our team would be aware, so that was pretty easy for him to just call one place and let everybody know. But he was really good about sending out letters. We'd always get a Cordell – seemed like every week or so, there'd be something from him regarding the upcoming dives, plans for dives, some of the goals hoped to accomplish in that year's expedition, when he was having a barbecue, and things of that nature, trying to keep everybody together, because a year would go by before we'd see the rest of the dive teams and even see him.
	John probably out of all of us had the most education and experience in marine biology, [20:00] and so he was really fascinated by what we were finding down there. So his relationship with Schmieder was probably much closer in that respect as far as the science was concerned, where the rest of us were just hired-hand divers, really – volunteer divers; we weren't hired. But we were – it was cool to see all the marine life, but I

	couldn't tell this sponge from that sponge, but John would be all jazzed over "Hey, look at this." "Yeah, that's cool, John." <i>[Laughter]</i>
John Walton:	We had to pay to go on these expeditions. In the beginning I think it was, what, \$60 a weekend or something. So he wanted to collect his money before we went too, so he made sure that we – he had to finance his boat trips, and we all gave the money willingly. It was definitely well worth it.
Dewey Livingston:	Now, did you always go as a team, or when you got there onto the boat, did you just become part of the crew, or were you always the Sacto Team?
John Walton:	We would dive in dive teams of two to three, usually in the Sacto Team. Because of our jobs, we wouldn't all go on the same weekends. Sometimes we were all there together; other times we weren't. But all the dives that I went on were with either Jerry, Dave, Dave, or Steve, and we didn't mix out of the Sacto team.
Dewey Livingston:	Do you have an idea of about how many dives you completed as a group?
John Walton:	I can remember eight distinct dives, but I know that I was on at least 14 or 15. Being it was 30 years ago, they all run together. Mr. Schmieder has all the logs of the dives. I would love to read the logs and refresh my memory. But as a team, I don't know how many. I know I was in the teens.
Dewey Livingston:	Steve, did you have an idea of how many dives you –
Steve Williamson:	Yes, I'm tallying them up now.
Dewey Livingston:	I notice you have dive logs that you kept.
Dave Walls:	Like all good divers should do.
Dewey Livingston:	Yeah. You're the only one? [Laughter]
Dave Cassotta:	I think so. I think we might've all started, like, the first couple
Dave Walls:	Yeah, my dog ate mine.
Dewey Livingston:	Just a general idea, now I get a sense of this.

Steve Williamson:	Unofficial total that I have, our actual dives on the bank is 10 where we were as a group. There might've been a couple that I didn't add in here just for reasons unknown to me, but I usually keep pretty good diaries and logs and things of that nature. And listed in all these are all five of our names, and some of us we paired as a group of two, three – we did make, I believe, at least two dives where we all five go together at once, which isn't normal practice for the most part; we're on the buddy system. But it worked for us.	
Jennifer Stock:	What time of year were most of these dives?	
John Walton:	They were all in the fall, starting, what, September, October. No further than October. I know that the currents die down. Early September into October, the Davidson Current takes over the coastal current. So there was just about a two-month period of each year that we could dive out there. Two and a half months or so.	
Steve Williamson:	I can confirm that with my dive logs. The last one, in 1981, was on October 25^{th} .	
Dewey Livingston:	Since you have a list there, could you list the dates? If there were ten dives, say, as a $-$	
Steve Williamson:	Sure.	
Dewey Livingston:	Unless they're all spread out.	
Steve Williamson:	No. First dive I have in 1981 was on October 10 th , and I have – listed is John Walton, Dave Cassotta. We were used to collect samples. Dove on a pinnacle approximately 400 square feet, with drop-offs on each side. [25:00] Basically, it was a quick dive. We decompressed at four – for four minutes at ten feet.	
Dewey Livingston:	There was – we'll go into the individual dives, so just the –	
Steve Williamson:	Oh, the dates.	
Dewey Livingston:	– the sense of the dates, in the range that you were diving.	
Steve Williamson:	Okay. 10/24, Cordell Bank, north end, 140 feet; 10/25, Cordell Bank, north end, 120 feet.	
Dewey Livingston:	This is all 1981?	

Steve Williamson:	Yes. That's what I have for 1981.
Dewey Livingston:	So multiple dives during –
Steve Williamson:	Yes, on a weekend we would dive once each day, usually.
Dewey Livingston:	Schmieder referred to you in his oral history as – and I quote – "the real strong divers." And would you like to address how you saw your role, the Sacto Team, in contributing to Schmieder's Cordell Expeditions? Anybody wanna start with that?
Dave Cassotta:	Well, as a team, we were able to meet and work with some of the best divers that we've ever experienced before, 'cause normally we dealt with students. So being around other divers that were good divers and experienced was really a joy for us.
	As a team and working together in the diving industry, it was second nature to us to dive. It was just what we did every day. And we weren't just weekend divers. I mean, we were in the water almost as much as we were not in the water: doing dive classes, being in the pool, being at the lake. We operated a dive barge at Folsom Lake, where we taught people how to dive. John and I would bring up boats. Jerry would join us sometimes and photograph the CF numbers on the boats that were on the bottom, for insurance companies.
	So we worked together a lot, and we knew each other really well. And John was probably the person I dove with the most, and we could just look at each other and know what the other guy was gonna do or what he was thinking. Or I could tell if we were getting near the decompression time, or I could tell if his air supply was getting low just by the way he was behaving, and we kinda developed that as a team. So I could see why people who just maybe dove on weekends or something might've thought we were strong divers, because we knew each other so well. That was the big part of it.
	And then I think after our very first dive at Cordell Bank, when we got back to shore, we met with Bob Schmieder and [Tom] Santilena and [Bill] Kruse, and we were all having a beer in the bar. And so our attitude was, "Okay, guys, so how'd we do? What'd you think?" And they made some flattering comments and were glad that they were around divers that they could trust and not have to worry about. And I think in the back of their mind is, "Here's a group that we can get to do just about anything, especially the things that we don't wanna do." <i>[Laughter]</i> So

anyway, it worked out really well, and we were glad that they had respect for us.

Dewey Livingston: Comments on your role in the group?

Dave Walls: Yeah, following Dave Cassotta's statements, yeah, I think that the fact was that we had a lot of experience together and knew from personal experience, so we were competent divers. So we were pretty, I think, confident and able to go down and do the typical tasks that Schmieder would assign: bring up sponges this time, typically fist-sized, that sorta thing. But I think Dave and John Walton at the shop contributed a lot more towards achieving their goals at Cordell Bank, with some of the really, really interesting technology that developed. They'd built the dredges and figured out a way to rig triple 80s, with one upside down [30:00] to power the dredge, and on and on and on. And all through the expedition was we're coming up with these great innovations to help us meet the goal.

- *Dewey Livingston:* Anyone else want to comment on...?
- *Jerry Seawell:* I think Dave took some of the thunder out of what I was gonna say. But I think besides the diving part, that Schmieder considered us a strong team 'cause whenever he assigned a task, we completed it and went overboard – like Dave was talking about the dredges and things like that. It was our team that – basically Schmieder gave us the task to design and come up with a concept, and we followed through and were successful. So I think that's why he considered us a strong team in this organization.
- John Walton: I remember that the first dives we did, and we were all a little nervous to get in the water 'cause it's a pretty intimidating place, but we were given our project to go down and collect specimens, and we came back up, and "What's next?" I mean, "Let's go. Let's go again."

And they were really impressed that a group of divers could come out, have their stuff together enough to get in the water, go down to 150, 180 feet, do what they need to do, come up, get out, and "Let's go again." So I think that kind of impressed them, especially that first day, and we became the special projects team. So whenever they needed sediment or rocks or anything special, they'd assign it to us, which was fun.

Steve Williamson: Just to add on to that a little bit, what the other guys were saying is, our job didn't stop when we came out of the water. I know that all

	of us spent many hours doing the rigging for the transect lines, the anchoring, doing basic maintenance on the boat, storing equipment, getting the other divers ready. I think we all can agree that some of the other divers were there just because they thought they were cool. And once their dive was over, they disappeared. We never disappeared. We worked around the clock until we were on our way in, and then we played.
Dewey Livingston:	So you touched on something that I was gonna ask next, which is – were you involved in the transport, the boats, the equipment? It sounds like you took roles in that, taking care of the boat, etc.
Steve Williamson:	We did whatever the captain asked us to do. For example, there was a hydraulic leak under the deck, and unfortunately it leaked all over my gear. So we went down and took care of that, and things of that nature. Usually, if there was some issue, the captain would ask one of us to take care of it, and all of us were of the mindset "If you don't know how to do something, then you just tell them." So we did a lot of extra stuff, and it was fun.
John Walton:	Yeah, in the first years we-used a boat called the <i>Pisces</i> out of Alameda, and Breck Greene was the skipper and the owner. And he was pretty – how should we say? Breck was difficult to deal with sometimes. But it was his boat, and he took care of the boat mainly, but we did do a lot of the hookups of the strobes and getting the gear ready. We had to fill tanks, set up transect lines, descent lines, attach the buoys, get the inflatables ready. So you're working all the way out to the dive spot.
Dave Cassotta:	Mr. Schmieder relied a lot on us, and the fact that I owned a dive shop was a valuable resource to him. And so I would get phone calls: "Hey, Dave, can you bring an extra ten tanks down?" or "We need some backup regulators," or "Do you have any inflatable buoys?" and things of that nature that – or "Can you get some?"
	And of course, as John Walton had mentioned earlier, we had to pay for everything. "Can you get some" meant, "Can you buy some and bring 'em?" And of course, we did, because we were part of something that we really wanted to do, so it wasn't a problem. So we would bring a lot of the gear that other divers would need.
	And then, of course, [35:00] you have to keep in mind that many others were on board with us that were not divers. The marine mammal folks and the bird people and a number of guests that

were on board that were divers but were more like a weekend diver, and they wanted to actually see what was down there, like [John] McCosker and some of these other individuals that were guests on board. But they had no clue how to hook up a set of doubles.

So we would put their doubles together, make sure they were okay before they got in the water. Once they were in the water, they were fine, but it was just the specialized gear that we had to wear that they weren't that familiar with. They were used to diving the Bahamas or southern California, places that weren't quite as difficult.

- *Dewey Livingston:* Did that cause you much concern that there were did you feel like at least they were qualified to make the dives, or did you have some concerns about some of them?
- *Dave Cassotta:* Yeah, we had a number of concerns, especially with some of the gear that they would show up with. They would show up with stuff that first off, what you're using is 40 years old, and secondly, it's not for this environment. I mean, if you were in Hawaii, maybe, but not here.

We had a few incidents. There was one with kind of a famed underwater photographer, Lee Tepley joined us on a dive, and he was not wearing the right gear, and we were concerned about him when he got out there, but when he did the dive, he blew it. And I honestly believe if it wasn't for Steve Williamson, he'd be dead – either dead or would've embolized or had serious decompression issues, 'cause he came shooting up from the bottom, broke the surface, just panicked, and it was a big deal out there.

And fortunately – it was really kinda ironic – about the week before this dive – there was John Walton, Steve Williamson, another – there was other people that helped the Sacto team that really didn't dive there that much. That was Doug Niessen, Steve McCormick. And these guys were really good in the emergency field. And so we actually did a mock rescue there in Alameda in the water, where John and Steve and Steve McCormick and Doug Niessen all participated in a rescue, and it was ironic that the following week out there, Lee Tepley got into a situation. And you really should get Steve Williamson's take on this, because he was in the water with him. I'm just telling you what I could see from the boat. And it all turned out good, but it was kinda scary at the time.

<i>Dewey Livingston:</i> Should we tell that story now? If you d like	at story now? If you'd like.	ton: Should w	Dewey Livingston:
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Steve Williamson: Yes, we were out at Cordell, and Lee Tepley had shot to the surface and was in sheer terror, panic, didn't know what to do. And so geared up real quick and got in the water with him and put a weight belt on him, took him down to I think it was about the first – about 30 feet, and we were decompressing. Really wasn't sure how he was gonna do, and he started to panic and started ripping my mask – got my mask, pulled it off at one time, and was choking me. And I got him up to 20 feet, and he still hadn't settled down, and I got my mask back on. He pulled it off again, so I slugged him in the stomach, and that kinda settled him down for a while.

> Then we were probably at 20 feet for at least ten minutes, and then at 10 feet we finally got him to the T-bar, and he started calming down and getting a little flaccid on me – too relaxed. And so I held him on the bar and gave him another little punch just to kinda keep his attention. He needed to breathe and things like that. And I think we were in the water a good hour or so, just hanging on a T-bar, and that kinda made me nervous because there are critters out there that – we are in the food chain. [40:00] But eventually got him into the inflatable, got him back on board, put him on some oxygen, and yeah, he's still kicking around, I guess. But it was an experience that I don't forget.

- *Dewey Livingston:* Do many others of you have any comments on your relationship with the rest of the divers?
- Steve Williamson: Like David has said and everybody else here is that you could tell the green divers, the rookies, or the ones that didn't have a lot of experience. But for the most part, after the first year, going into the second, I felt real comfortable around the core divers that were there, and then the guests. We would just have to look after them and make sure they're okay.
- John Walton: The new divers would show up every now and then with the group. It would make us a little nervous. You have to realize, when you're going down on the bank, that if you get off the transect line and can't find the ascent line, you're out there in the middle of the ocean, 20 miles out offshore, with currents, and if there's any swell, if you surface off the line, you can't see the divers.

So that was the biggest thing was making sure – watching the bubbles, make sure they follow the same tracks, and they came back to the line. We had safety divers in the water, below the

ascent line, to make sure, to help 'em when they got up, to guide 'em up and get 'em on the line and get decompression on the line. But it seemed like there was a group – a larger group of divers started to show up the next few years after, what, '82, '83. We started to see more and more people show up.

Dewey Livingston: Which was more to manage.

John Walton: Yeah, Steve and I were kind of in charge of the boat safety. We were both EMTs in the fire department, so Bob kinda looked at us to take care of that aspect of the diving.

Dave Cassotta: I think it was our second dive that we ever made there, the second one. I was wearing a Poseidon Unisuit, which is a dry suit, and I just had jeans and a T-shirt on underneath. And we were diving, and we came up. We were down a little bit longer. A lot of guys would go down, and they would just do what they had to do but only stay long enough where they had to stop at 10 feet. We stayed a little bit longer, and we stopped at 20 feet and did our stop there, and then we had a longer decompression period at 10 feet.

> And so we were on the T-bar, and as John Walton mentioned, we had safety divers that would come, and they would take all our stuff from us. They'd take the tools and the bags and all of the paraphernalia that we had brought down there, so all we had to do is just relax and decompress.

And it was kind of a bumpy day on the ocean that day, and so I was kinda concerned about us breaking the surface at the 10-foot mark. And so I also, in addition to wearing the Unisuit, which also has buoyancy control, I was also wearing a buoyancy compensator. So I dumped all the air outta my suit, thinking that I'll just use the compensator to remain a little bit negative so I don't float up.

Well, I was enough negative where I was holding on to the bar with my right hand, and any air that was in my suit flowed up and filled up my right arm with air. And of course, I had a little suit squeeze going on in the rest of my body.

Well, it was cold. My hands were numb, and it was just a cold thing, and we were there probably 15 minutes, and then it was time to go up. And I was responsible for the decompression time for my team, which was Steve and John. And so I said, "Okay, it's time for us to go up," and started going up. When I hit about 5 feet, it felt like my left arm got about five times its normal size. I thought, "Oh, this isn't good." And so we got on the inflatable, and they took us back to the *Pisces*, and the first question that Bob would ask any of us after a dive is "Do you have any symptoms?" And I had to say yes, and [45:00] so we sat around talking about it: "Well, okay, what do we do?" And Santilena wanted to call the helicopter, have it come get me and bring me to a recompression chamber, but we discussed that, and I thought, "Oh, that's great. Second dive. We're trying to get notoriety for Cordell Bank in a positive way, and a guy gets bent out there." And also, here I was – my livelihood was teaching people how to dive, and it was like, "Oh, great, dive instructor gets bends at Cordell Bank. That would've been really good headline."

So we thought, well, you know, are there any other symptoms? So Santilena and Kruse and the five of us sat around talking about it, and being that none of us had experienced that, we thought, "Well, maybe you just strained your arm. We were banging away on the rocks down there. Maybe you did something." And so we thought, "Well, if it's a pressure problem, if you go back down, it'll go away. If it's not a pressure problem, it'll still hurt."

So I geared up again and went back into the water, went down to 40 feet, and it went away. And I thought, "Oh, no." And so I stayed there till that tank was almost done, and then the guys brought me another tank, and I went to 20 feet, and I was there about 40 minutes, and we figured maybe I could soak it out. And Santilena brought me a bottle of pure oxygen and stuck the hose in my mouth alongside the regulator. That froze my tooth and popped out a filling, and it's very dry. I wanted someone to – they kept bringing me notes, jokes. I'd be down there, and they'd be – Santilena would draw a picture of a naked lady or something. You know, just trying to keep it light.

So then we came up to 10 feet, and I decompressed. When I got back up to the surface, it didn't feel like it did before. So we thought, "Well, maybe we nipped it in the bud." So I got on board, took some aspirin to thin my blood, had a couple beers on the way back to port – it was like an eight-hour ride back. By the time I got back, I was fine, so it was just – I lucked out. We called it, what, niggles or something, or some kinda weird form of decompression sickness, but only one arm got bent. The rest was fine, so it worked out.

Dewey Livingston: Your reputation was intact.

Dave Cassotta:	Yeah, no one had to know, and we swore we would never talk about this again. <i>[Laughter]</i>
Jennifer Stock:	Until today.
Dave Cassotta:	Until today.
John Walton:	We did pretty much everything you're not supposed to do when you have symptoms of the bends. Back then they had what's called a soak-out where if you missed your decompression stops and showed no symptoms, you could get back in the water, take a tank down, breathe out at 30 feet, and then make your stops. But he was showing symptoms, and we still put him back in the water. It was something we shouldn't have done, but it worked.
Dave Walls:	Continuing on with the story about the decompression sickness, as John said, we had a lot of folk remedies going on then, because we weren't that advanced, really, in this kind of diving. But obviously, the thing that really saved the day is we had that common knowledge that beer –
Dave Cassotta:	Yeah, beer.
Dave Walls:	Yeah, it kinda overtakes the nitrogen bubbles. Common knowledge.
Dewey Livingston:	Hey, we are learning something today. <i>[Laughter]</i> Okay, we were talking about more generalities and getting involved with the expeditions and what your roles are. Is there anything else that comes to mind before you move on to specific dives that you might have a story about? I guess one of the questions here was, did you experience many dives that were cancelled because of weather? Was that a problem?
John Walton:	We would leave Alameda and go out to the Gate and head up to Drakes Bay and dock at Drakes Bay and then go from there out to the bank. And we always had a bet going that – how many times Breck Greene would turn the boat around and Bob Schmieder would run up to the cab. The boat would turn back around and head back out to Cordell for about five minutes, turn around and come back. Bob would run back up to the thing and get Breck to turn it around. And so we would have a bet, how many times are they gonna turn around this trip? There were many trips where the seas were really rough, and we'd get out [50:00] about halfway, turn around, and come back, and then spend the night at Drakes Bay and try to get in the morning.

Jennifer Stock:	I have one more question. Dave, you mentioned earlier – Tom Santilena and Bill Kruse, were they the two other main lead planners for these dives besides Bob Schmieder, or was there anyone else that was kinda like a core leader in that sense?
Dave Cassotta:	You know, I'm not really sure, but Santilena and Kruse, they were the two other divers that – I would figure maybe there was 18 total divers that dove off and on. But of the entire group, other than our little close-knit group, those two guys were the ones that I respected the most. They always made the first dive on the bank. They went down. They laid the line out. They came up with the report as to what the conditions were.
	So everything we did kinda depended on what they had to say and their success in their first dive, and they were always successful. So they commanded a great deal of respect, but they didn't expect it. So they were humble guys, but very good divers.
	Amongst most of the divers, though, most of the people were very science oriented. They were either scientists or students, very much in science, and were not very mechanical people. And our little group was very mechanical oriented. Most of us were blue- collar-type workers, and as I said earlier, John Walton probably had the most education in the marine sciences, so we're able to do a little bit of everything.
Jennifer Stock:	You also mentioned there were some people on board that were there to observe marine mammals and sea birds. Do you remember who they were associated with and what types of observations they were making?
Dave Cassotta:	We kinda made fun of them a lot. [Laughter]
	They were kind of nerdy and they didn't fit in with the dive group, you know what I'm saying? And they were usually on the upper deck. We would be down below, and we'd see 'em: "Oh, look. There's a –"
Dave Walls:	"Harbor porpoise." [he pronounces it, "haw-buh poh-puss"]
Dave Cassotta:	Yeah. Yeah. "There's a harbor porpoise. Oh, there's a Dall's porpoise," and they'd throw out the Latin name for it and get all excited, and we'd just kinda shake our heads and laugh a little bit, say, okay, well, what they're doing is important too. Kinda lame, but important. <i>[Laughter]</i>

And so yeah, I don't remember any specific observations, although	
there were times – there was a time when we saw what we thought	
was a school of orcas out there, and we kinda thought that's what	
they were, because they looked like 'em. But we relied on the	
marine mammal people to tell us that they were a false orca or –	

- Dave Walls: Pseudo.
- *Dave Cassotta:* a pseudo orca or anti-orca. I don't know. It was some other kinda thing, marine mammal. But it was fun having 'em there, 'cause they were a source of entertainment.
- *Jennifer Stock:* I hadn't heard about this aspect of the expedition till today.
- Dave Cassotta: Oh, really?
- *Jennifer Stock:* No. I don't remember that.
- *Dave Cassotta:* Well, there was the bird people too, you know.
- *Dave Walls:* Marine Mammal Institute [sic: Center] was out there.
- Dave Cassotta: Yeah.
- Dewey Livingston: And these are non-divers –
- Dave Cassotta: Right. They were observing. Yeah. They were out to count how many of the you know, we'd see a whole pod of elephant seals out there, and I didn't know they went out that far. And they'd all be in a little pod, which made us nervous because when they're all tied together like that, it was like, "What else is out here making them get together like that?" So we were concerned about sharks, of course. Although we did see some, but we never saw 'em when we were in the water.
- John Walton: The marine mammal people I believe there's a Marine Mammal Institute [Center] in Marin County. And he could tell the type of whale by the spout, by the spray, and he would sit up top, and all kinds of humpback whales. We saw blue whales, the pseudo orca, and all the Dall's and harbor porpoise. But I remember – never forget him being able to tell by the shape of the spray what kinda whale it was.

[End of Audio file 1, time 55:17 total]

[Begin Audio file 2]

Dave Cassotta:	I was thinking about Jerry's first trip, and when Jerry Seawell went and dove with the Cordell Bank Expedition the first time, before he had introduced it to us, he was diving with people he had never dove with before, and he was our dive shop's underwater photography instructor, so we knew he was gonna get some good pictures. And he had told the expedition that he was an underwater photography instructor and that he could take good pictures, but they already had people like Don Dvorak and Kruse and some others who were taking some fantastic pictures down there.
	So they were wondering how good Jerry's pictures really were gonna be, and I remember when we met them, they kept talking about what a great diver Jerry was and that he was the only one to get 36 out of 36 perfect pictures. And so I never forgot that. I thought, "Well, I'm sure glad he works with us." <i>[Laughter]</i>
Dewey Livingston:	Since we're talking about that, Jerry, how did you approach photography? Did you have any idea of what you were gonna be facing? How did you deal with that?
Jerry Seawell:	In preparation for the first dive, I had no idea what the Cordell Bank even looked like. So I had a 35-millimeter camera, and I said, "Probably the best thing to do is just take a wide-angle lens and just take wide-angle shots, just to get an overview of the thing." And I took the strobe with me, and – because it was a new environment, because of the depth, with narcosis – on the back of the camera housing, I had to put on a piece of duct tape my settings for different feets, angles, things like that, so I didn't have to think too hard about it once I was down there, and that helped me out.
	So I was lucky the first dive came out with every – every shot came out. And my first dive was with Bob Schmieder. I guess he was probably, like, checking me out. We were the last team to go in, and when he came up, he says, "Got no problems with you." I says, "Well, I think I have some other people that might be interested." So he was happy with the photos.
Dave Walls:	Further on that with Jerry – Jerry, you had some <i>National Geographic</i> experience before that as well, and one shot for <i>Hustler</i> magazine, right? <i>[Laughter]</i>
Jerry Seawell:	That's correct. <i>[Laughter]</i> Yeah, I've had some photos that were published in magazines prior to this, and Dave brings that <i>Hustler</i> magazine one up. <i>[Laughter]</i> I won't talk about that, but it was

that Lake Tahoe picture. *[Laughter]* But yeah, I had some experience prior.

- John Walton: Yeah, Jerry built his own housing for his Bolex 16-millimeter, and it was heavy Plexiglas. He was always adding braces and supports and fixing this and that. And I remember on a few dives going down there at about 150 feet, hearing "bang, crack, boom," and he's looking at his – one of his supports would break in his housing, and he'd be looking. But it never flooded, but every dive he was adding new supports or a brace or gluing something in there to make it work, so it worked.
- Dewey Livingston: How did you wind the Bolex?
- *Jerry Seawell:* I wanted to shoot some movies down there. That was the day before video was popular. One of the divers had a Super-8, but I wasn't really happy with the quality, so I bought an old, beat-up camera. I found it in San Francisco. I don't know, maybe bought at a pawnshop. I don't know, but it seemed to work.

I built a Plexiglas housing, and one of our test dives, deep training dives we did at Tahoe, I took it down there to test it. We got down about 90 feet, and the sides of the housing were just bowed in, and I figured, oh, another 10, 20 feet, it'll just implode. So after that little test, I went home and started putting braces and things on it, and then next time we went up to Cordell, I took it down, just biting my fingernails, and it survived. So that's what I used after that.

There was one little incident where I believe a film crew came out, local – was it Channel 7? ABC. And Bob Hollis made this big aluminum housing for their big \$10,000 camera. They got down 10 feet, and that thing was flooding. So I went down with my \$50 Plexiglas housing and even got down to 200 feet with it, or 210, the deepest it went, and it functioned perfectly. So I was very happy with that.

[End of Audio file 2, time 5:42 total]

[Begin Audio file 3]

Jennifer Stock:	So we're gonna move into the diving experiences a little bit on this part, and so I'd like each of you to describe the dives that you did on Cordell Bank. If you can remember specific dives and specific events that happened, that would be great, and then you have a list here of things to refer to, but certainly add anything you'd like.
	And I guess we'll start over with Steve with his dive log.

Steve Williamson:The first log that I have written here, and I believe it's accurate,
would be the first dive we made other than Jerry on Cordell Bank
was on October 10th, 1981, north end of Cordell Bank. And I have
here the depth the first dive, the top of the pinnacle is 145 feet, and
we were down 15 minutes, water visibility 60 to 70 feet. And
name of partners was John Walton and Dave Cassotta, which
meant that Dave Walls and Jerry were probably diving together as
partners. And I believe that John and I were just basically used to
collect marine samples off the bottom, and Dave was – I don't
know if Dave was using his camera at that time. I believe so, and
go from there.

That was the first dive on Cordell Bank, as I remember, and for me it was an awe-inspiring event that was incredible. You're going down, floating down the descent line. What I noticed was that we were staggered as we're going down, and you can actually see each other 10, 15 feet apart. And as we reached the bottom, you could see the bottom coming up at you, and it was more of a kind of a greenish haze at first, and as you got closer, then some of the colors started coming out, and then the marine life and the abundance of juvenile rockfish and the hydrocoral is what caught my eye.

- *Jennifer Stock:* How about Jerry? Since you dove there first and reported back to everybody, why don't you talk about your first dive?
- *Jerry Seawell:* My first dive was at first I was a little, of course, nervous, apprehensive, 'cause I wanted to fit in with the group that was there and prove that I was worthy of my skills. And I remember jumping off basically being pushed off the boat. That's what they did, 'cause you had to sit on the edge of the boat, and they'd hold on to your yoke, your tanks, so you didn't fall in too soon. And as the boat would cruise by the buoy, then they'd tap you or push you.

So I went in, and I went with Bob Schmieder. Got in. The Zodiac – the safety crew handed me my camera from the Zodiac boat.

Bob gave me the thumbs-up, ready to go, and I told him, "Sure," and we went down. There was a current, a pretty good current, and I had to pull myself down at least 30, 40 feet. And at that distance, 40 feet away I could see the top of the peak, just the outline of it. I was going, "Holy cow, I can see it from here."

And as I got closer, I noticed the current decreased. It was pretty just awe-inspiring, and then the amount of fish. The first thing, I saw stuff moving, just like amoebae. Didn't know what it was, and then as it got clearer and clearer, I saw all these rockfish, and literally had to push 'em outta the way, swim outta the way. And then once you got through them, I saw the bottom and the hydrocoral, and I just – it would just inspire. I had to sit there for a minute, just take it all in before I – "Oh, I'm supposed to take pictures." So I mean, there was a good minute or so I was just looking around and forgot what I was supposed to. But I was just so impressed.

And then we timed a 15-minute dive. We get the thumbs up. We both checked in our watches. I started coming up, and I just said, "Man, I have to leave already? It just seems like I just got here." And I didn't wanna leave. I just wanted to stay down there. But I said, "Well, there's another day to come back." So yeah, it was probably the most impressive dive of my life.

- *Dewey Livingston:* And were you on the second dive, then, that Steve just described, that same year?
- Jerry Seawell: Yeah.

Steve Williamson: They dove that – Dave Walls and Jerry probably were dive partners. But they would do – [5:00] a lot of times we would go in in groups of five, but we would be in pairs of three or two, with separate tasks or at separate times.

Dewey Livingston: Since you have the mic, do you have something to say about that?

Jerry Seawell: Yeah, I think the first year or two that we dove as the five of us, I believe we dove in two-man teams, and so John and Dave would go down and collect specimens, and then the next team would go down, get some more specimens. And I'd be hooked up with Dave and later on with Lew Stark, and then I would take photos while the other one collected samples. And it was kinda like collecting samples was, like, ad hoc, I mean, at first. They just use a goodie bag. You just start scooping. And then as you're coming up, you see stuff trailing out. The small sediment would trail outta the

bags, but at the time, that was what they were using, and then we had to find a different way to do it. So basically, that's...

Dewey Livingston: First dive?

John Walton: Boy, and I remember being really nervous sitting on the side of the boat, 'cause you're 20 miles out to sea and there's usually a fog bank. You can't see shore, so it's pretty intimidating looking down.

I remember Bob giving us the – getting prepared for the dive, getting your gear hooked up. He would give us a little rundown of what he wanted. He wanted us to collect as much as we could, typically fist-sized, pieces of hydrocoral or tunicates or any of the sponges, anything that we saw, and to try to cover the whole transect line.

The first dive I don't have a lot of memory of. I do remember I was really impressed with the dropping down through the gloom and then seeing the bank kinda pop up at you, and the fish. I remember diving down through olive rockfish and literally having to push 'em out of the way. They were just all around you, just like all over you. And once you broke through 'em, you could see the bottom and get down on the substrate.

I have more recollection of other dives that I did later on. I don't know if you wanna go into that now or wanna just continue – I do remember sitting on the rail, waiting to go on one particular dive, and I think Jerry and I were there, and a couple blue sharks swam by underneath us. Bob was holding us up on the boat, on the rail. We watched – getting ready to – buoy's approaching. We're getting ready to jump, and here come these sharks, and Bob taps us on the shoulders: "How do you feel about diving today?" *[Laughter]* "Let's go." So we hit the water and did our dive, and it's just another spectacular dive. But there were times on the bank where you could see over 100 feet and other times where the visibility was terrible.

One particular dive – can't remember what we were gonna do that dive, but the currents were so strong that we came down the descent line, and we actually – the currents were pulling us off the pinnacle. We came in on the pinnacle, below the pinnacle, so the line had actually sank down, and we were coming up to the pinnacle, so the currents were so strong it pulled the line straight out. Other dives – I don't know if you want me to go into all the rock dive and all that stuff.

- *Jennifer Stock:* Sure, go ahead and describe what's coming to mind for you in terms of diving overall.
- John Walton:The biggest thing was the marine life, I mean, just foot-thick
marine life everywhere you looked, especially on top of the
pinnacles. And later on in the expedition, Bob gave us the project
of getting sediment. So Jerry and I would drop down into the
channels between the pinnacles and get sediment, and Jerry would
take the pictures while I'm doing the sediment. I remember a lot
of narcosis. We'd go down I think our deepest dive was 210.
And just to concentrate on filling the bag, fill the bag and breathe,
and then hook the lift bag up and send it up.

But one particular dive, Jerry and I came up out of sand, collecting sediment, and we had a little plan to – Dave Walls had stayed up on top of the pinnacle, and so we got up, came up out of the crevice and up to the top, Jerry pulled out his knife, and we did a little fake knife fight. *[Laughter]* I know Dave was rather shocked to see what – *[Laughter]* I'll go ahead and pass to Dave. *[Laughter]*

[10:00]
 Dave Walls: Further into what John was talking, as we were doing a – our task for the day was to actually measure and map a crevasse that we'd come across. And as John says, the top of the crevasse was about 170, I think, feet, and down at the bottom was 210.

And I was at the surface drawing the map and measuring out distances across all of that and I think, like everyone else, would deny that we ever got narc, narcosis, and was drawing and then saw these two figures raising up from above the abyss over the edge of the cliff and literally struggling with each other, knife fighting, like they're knife fighting. And I started laughing so hard I dropped my regulator, I swear. It was just amazing. Yeah.

John Walton: We like to keep it light.

Dave Walls: Yeah. Yeah.

Jennifer Stock: How did you report that to Bob?

Dave Walls: I didn't. I didn't. I might've mentioned – well, in talking about narcosis, it occurred to me while I was talking that one other experience that brought it to life for me with narcosis was we had

	discovered some holes that were manmade you may know about. They were drilled into it. Well, on one of the dives early on, after finding the holes, I was tasked to go down into one of the holes. It was perhaps seven or eight feet deep, maybe five feet wide. And the idea was for me to collect sediment, thinking about things that died and fell into this hole. But with the narcosis, I can remember digging into that sediment, thinking to myself, "I'm gonna get one more scoop, and there's gonna be a brass door there with a porthole and somebody looking out at me." <i>[Laughter]</i>
Dan Howard:	I'm just curious, did you guys have a set amount of air that was, like, the drop-dead, like you have 1,000, 1,200 pounds or something? Did you establish something like that, or was it strictly a time thing on when the dive was done?
John Walton:	We knew a relative depth we're going to. I believe it was 1,000 psi we would return. With twin 80s, that's quite a bit of air. The average dive was, what, 15 to 20 minutes depending on our depth, with sometimes a three-stop dive, 30, 20, 10, for decompression. But we definitely had a dive time. We used the Navy tables, and we had a planned time or air, and it was 1,000 psi to leave the bottom.
Dave Cassotta:	Because of the tasks that had to be done, and dealing with nitrogen narcosis, I know when John Walton and Steve Williamson and I dove together, their task was far more involved than mine. They had to collect samples, and many times the request was for – especially later on in the expedition – for specific samples, which means they had to look for a particular species and collect it, or sediment or whatever. So they were very busy trying to get as much done in a short period of time as they could, so I only had three and a half minutes of film. And so my film, I would try to be careful with it and not use it all up on one item, but it would go very quickly.
	And so the rest of the time, my task was to help monitor our air supply, keep track of the time, so that – I mean, they took care of their own responsibilities as far as time and air, but having someone else looking at it, too, helped beat the narcosis effects and made sure that we had safe dives that way. And so we all kinda looked out after each other, and it just worked out real well.
Dave Walls:	I just wanted to say, following on what Dave Cassotta said, that I remember one of my first impressions diving out at Cordell Bank was, I was really impressed with the group of divers, how well

they handled really some fairly complex tasks, given the narcosis that had to be going on at that.

John Walton: One of the biggest things that helped me with the narcosis were the strobes on the ascent line. A lot of times when we dropped down in these crevices, into the sediment fields, under heavy narcosis, I mean, just getting down and digging for a few minutes [15:00] and then looking up, you're lost. You don't know where you came down from, which direction. Was it this side, that side of the pinnacle? And to look up and see that strobe flashing was like, whew, boy, it really felt good to know where you were going. So the strobes were an absolute must for diving out there.

And I remember one dive, Bob sent Jerry and Lew down to set the strobes, and so I believe I was following 'em down. I knew what was going on. And so they got down. We would set them, I think, halfway down and then a quarter way down and then right at the anchor. And so Jerry and Lew duct-taped some Stroh's beer cans on the ascent line. And they go through dives and come back up, and Bob said, "Well, did you set the strobes?" "Strobes? I thought you said set the Stroh's." So they had taped beer cans to the ascent line. *[Laughter]* So we liked to do that kinda fun stuff. *[Laughter]*

Jerry Seawell: Yeah, to keep things light, we always had pranks on each other. Lew and I, we had gotten a case of Stroh's Light. And of course, we had some empty cans from the day before. When Bob asked us to put the strobe lights on, that's when we came up with this idea, Stroh's Lights, and so we taped 'em on. We had, like, three cans or so. And so when the dive team – we didn't tell any dive team after us about it. They'd come up and they go, "What the...?" [*Laughter*] And so yeah, we told Bob Schmieder, we said, "Yeah, we thought you said Stroh's Lights." So that was one of our little gags. Every trip, we had to have a gag.

There was one dive where I was diving with Lew Stark, and it was getting near Halloween. And so we went and bought some rubber masks, and we hid 'em in our gear and we did our dive. And then we're on the – come up to the decompression T, took our masks off and put these rubber masks on. Mine was like a gorilla, and Lew had some kinda, like, a green monster. And then the safety team would come down, and they'd just look at us like, "What the...?" *[Laughter]* And then when we surfaced, everybody on the boat was like – they'd look over at us like, "What...?" *[Laughter]* So yeah, every trip we had to have some kinda gag to outdo the next one.

John Walton:	I believe it's probably still there. There's a banner down there that says "Welcome to Cordell Bank, courtesy of the Sacto Team." That was rolled out in one dive and laid on top of the pinnacle. So kind of "Welcome to Cordell Bank."
Dewey Livingston:	A technical question. Maybe this is a stupid question, but the strobes, I'm assuming, were battery-powered strobes that would just be hooked onto the line. And one of you had mentioned your bag of sediment being pulled up. How did you communicate? How did that work?
John Walton:	We would drop down – we started out mainly just collecting biological samples, and then as time went on, Bob wanted granite rock, and so we worked on granite rock with a chisel and a hammer, and it didn't work very well. So the following dive or year – I can't remember; it's kind of all blended together – we did a dive with a pneumatic hammer and went down and we were able to chip off a bagful of granite rock.
	The sediment was down in the channels. Later on in the dives, he wanted more sediment because of all the micro-gastropods and all the stuff in the sediment; they were finding new species. So he really wanted to concentrate on the sediment, so we would drop down in these deep channels. At first we used air lifts, and we came up with three air lifts with bags tied to the end, and we would use an upside-down 80 on the back of our triple set of tanks, hooked the air up to the air lifts, and used the air lift to fill this bag. We'd get down deep in the sediment. Turned out to be probably more trouble than it was worth. But it worked. We got a lot of samples.
	And Later on, we just used goodie bags and would just go down and scoop the bag up. We had an extra tank with a lift bag, and I would clip the lift bag onto the sediment and just fill it and send it up, and then the safety divers would collect the bag at the surface and pull it on the boat.
Dewey Livingston: [20:00] John Walton:	The bag wasn't tethered to anything, so it would show up wherever the current took it.
	Yeah, we were on the transect line. We were within a given area. But you could tell. You could see the bubbles, and they knew where it was gonna come up.

Dave Walls:	I mentioned, while we were diving out, usually we would have a boat that was fixed at the descent line at the surface and then have a live boat that was rotating, staying, in case one of us popped up or to retrieve the lift bag.
Jennifer Stock:	So did anyone want to talk a little bit more about any of their diving experiences in terms of marine life and ascent/descent and currents?
Dave Walls:	I mentioned a little earlier that one of my favorite experiences with the whole Cordell Bank – with the first few times, certainly, of making the dives – was the descents. The experience, especially given the amount of time it took to get to the bottom, of just getting into a skydiving position and literally flying down, perhaps rotating around the descent line. And I remember in my first experiences – I don't know if it was the first dive; probably – that I had the sensation that I was looking virtually into the abyss. It just went dark blue, and there was nothing below. And then as others have described, would faintly see something down there. And then as you got really close, just the explosion of color, just color everywhere, which was a total shock given the depths that we were going to. Really loved that. Didn't like the ascents too much because it took forever, obviously, and worried me at points, where is the surface.
Dave Cassotta:	I think the descent, especially my first one, was probably the most exciting because you had no idea what to expect. We've seen the photographs. We've talked. We've heard all of the briefings and what to expect, what the task was supposed to be. You're trying to visualize what to expect as you're going down the descent line, and as you're passing the strobes on the way down, you can feel the pressure increasing. I mean, you have to equalize, but you actually feel some suit squeeze and so on on the way down, so you know you're getting deep. And it's dark. Generally, it's getting pretty dark.
	And you go through the first group of marine life and species that are on the surface, like jellyfish and so on, and you pass through the layer of that, and then you get down a little further and there's nothing. And then you see this real dark outline, and okay, there's the bottom. And so you go to land on the bottom, but there's no place to land without crushing something, because it is just covered with hydrocoral and sponges and a variety of other marine life and, as was mentioned earlier, all of the fish, the schools of rockfish, and some of 'em huge, that we don't normally catch

when we're out rockfish fishing or so on. Some really big fish. And lots of juveniles too, a lot of juvenile fish.

	I think one of the coolest things is being a cinematographer and having a movie light. You only have about five minutes of light and then the battery goes dead. So you're conserving light, and so you get near the bottom, and everything looks kinda dark. You can make out some colors, like Dave was saying, which was surprising that you could see color at that depth. But then when you turn the movie light on, which is much brighter than your average underwater flashlight, and it just lights up. Just the color was phenomenal and was like nothing I had ever seen before.
	And as I said, as a group we dove all over California and in the tropics and other places, and we thought we'd seen everything in California. I mean, how many times can you dive Monterey and see the same thing, or Fort Bragg, over and over? But to get out there and see stuff that we had never seen before was just unbelievable.
	And as Jerry was saying, you didn't want to have to end the dive. You wish you could just hang out there a little longer, that it was a safer environment or that there was a place like that you could go up on land where you could see stuff like that. But you still – being the creatures we are, we had to head back to the surface.
Jennifer Stock:	That brings up a good question I had in terms of the similarities and differences between other sites that you've dove in California. Cordell Bank sounds completely unique. Was there any other dive sites along the coast that were sort of similar or had some similar species? And maybe you can describe those.
[25:00] Dave Cassotta:	I think probably the closest to just having some of that would be some of the pinnacles off of Carmel down in Monterey. We used to run recreational dives to a place we called the Pinnacles, and in some of the deeper parts of that area, there was some hydrocoral, although very small in comparison to Cordell Bank. And also, it's a well-dove area, so it's been looted, as you might say. But that would probably be the closest that I had seen in California to what you might expect at Cordell Bank.
John Walton:	Similar place – I didn't really get to dive deep – was Arena Rock. Seemed quite similar, but it's a much shallower deal. The other place was, I was fortunate to dive with Dr. Schmieder on Schmieder Bank down at Point Sur, and the pinnacle, Jerry and I went on that. The first dive was pretty amazing, very similar to

Cordell Bank. Huge hydrocorals, huge fans, sponges. Similar depth, similar visibility. Not the life of rockfish and juveniles, but just the invertebrate life was amazing. Very similar to Cordell Bank.

Also, on the ascent in Cordell Bank, I was really amazed with the life in the -I guess you'd call it pelagic life, the salps and the ctenophores and the jellyfish, cnidarians, that would come floating by you when you're on the line. Just amazing, beautiful, like creatures from another planet. The ctenophores with the colors, and the salp that would be 20, 30 feet long, these huge chains would float by you. Just beautiful.

One of the dives I really remember was one of the deeper dives – Jerry and I dropped down to the sediment. When I hit the bottom, the bottom was crawling, and it was – brittle stars were just – I mean, the bottom was alive. And when you're narced, at that depth, to see that, it's kinda hard to get a grasp of what you're looking at. Thousands of little arms sticking up outta holes in the bottom. That was really something. I'll never forget that.

Jerry Seawell: Like John was saying, when we were decompressing on the T-bar, like he said, you'd see all this marine life drift by, and so it was giving you something to look at and do while you're waiting for your time to come up. So it helped pass the time.

Other times, we saw sunfish out there swimming in the distance. And one time particularly, a dive where Dave Walls and I were decompressing, we had about a five- or six-foot blue shark swim around us, and he kept circling us. And you could see his eye going up and down, left and right, and I think he was checking Dave out there. He's looking at him like a stuffed turkey with little ends on the feet there. But like John was saying, the marine life you would see drift by was worth the dive itself. Helped pass the time.

Dave Walls: Yeah, it was kinda interesting. I know the first few times that I saw sunfish out in the distance, I was absolutely sure it was a shark, judging from the distance. But it was interesting, on the dive that Jerry and I did, when we spotted this shark swimming around us – or he said, yeah, the neat thing about the blue with the white around the eye, you could see the eye moving up and down. I actually thought to myself, "Well, he's gonna think that he's not that hungry," when he was watching me.

- *Dewey Livingston:* Was there a real danger with sharks, with the blue shark, for instance?
- Dave Walls: I don't know. I never had a feeling that I was in danger. They seemed curious, but I never sensed that they were aggressive. I don't know that I was ever really fearful when we were under.
- *Dave Cassotta:* I would agree with Dave Walls. I think for most of us, we'd all grown up with the Jacques Cousteau series [30:00] on television and seen them with a variety of different sharks. And then our experience as divers, the blue sharks were really not man-eaters or known for shark attacks.

And in fact, when John was talking about the time when he was sitting on the gunwale, waiting to go in, and the blue sharks went by, well, he asked John and I think it was Jerry, "Are you up to diving today?" But then he said – someone else said, "Oh, there's sharks in the water." And then Steve and I and Dave were getting our gear ready for our turn, and we said, "Well, what species?" And they said, "Blues." "Oh, okay. No problem." So we weren't worried about that, and when we got in the water, on that particular day, they went away. But yeah, when they're around, they really weren't that interested, but it was the other specie that we were really concerned about.

Dewey Livingston: Any sighting?

Dave Cassotta: We saw great whites on a – was that a survey? Yeah, John was there, and a friend of ours was there, too, taking pictures. He got some really good pictures, so you should talk to John about that one.

Jennifer Stock: That was at Cordell Bank?

Dave Cassotta: Yeah. I don't know if it was at the bank or on the way out. Here, I'll pass it over to John.

John Walton:I don't remember the year, but we had done a survey trip out of
Bodega Bay, and Bob had chartered a boat, a fishing boat, to go
out and do – back then it was Loran C, but we didn't have satellite.

So we went out and did the survey, and on the way back we saw a very large triangular fin. We were probably halfway back from the bank to Bodega. A big three-foot fin sticking up outta the water. So we swung over the boat to it, and it was about a 15-foot white shark that was basking. I don't know if he'd just eaten, but he was just underneath the surface and really didn't care much about our boat. We got right up to it. The boat actually bumped it, and he kinda gave a big swish with his tail and moved off. But it was a very intimidating fish. It was a big fish.

I was lucky enough to see a white shark eating a dead gray whale in Monterey Bay in '87. It was a different – with Greg Remick. And we saw this shark come up and eat this whale. This is not the Cordell Bank, but I wish I had had a video camera. We watched it for about an hour, eating this whale.

We called the Coast Guard because it was floating in to the Cannery Row area. They came out and grapple-hooked it, and when they got there, there were two sharks: one 15- and one 20foot shark eating this whale. It was pretty spectacular – I have a picture at home. Not Cordell Bank. Different story. *[Laughter]* But we did see one on the way back from Cordell.

- *Jerry Seawell:* There's a couple dives where we saw multiple sightings of blues, but they were smaller, juvenile size. And I know some of the safety divers were a little apprehensive to go in and retrieve some of the gear. They had their – voiced their concerns. But we reassured 'em that those are just blues, don't worry about it. But they were a little worried.
- *Dewey Livingston:* So tell us about the safety divers. I don't recall that Bob or anybody really mentioned them, but it sounds like they just stayed shallow. Tell me how that worked.
- *Jerry Seawell:* Well, the safety divers would have one person would operate the Zodiac. Then you have one diver, a safety diver on board, fully geared up, and their job was to before we'd go in, we'd hand our gear to them, and then they would stage it in the boat. And then once you jumped off the dive boat, you swim over to the buoy, and they'd have your gear handed to you, and you would make your dive. When you came up, they would they could look you in, and they see the ascent coming up. They would go down the safety diver would go down and grab any gear you had, so your hands would be free during the decompression. And basically,

they're in the water, in and out all day long. And I think they would rotate the diver and the Zodiac operator.

Dewey Livingston: Okay, so they'd still be the same divers who would do the deep dives too. Just rotate?

Jerry Seawell: No. Because he was diving in and out, it would mess up the decompression if they did it. There was times that we would rotate and operate the Zodiac ourselves. But once your dive was done, you were done for the day as far as diving.

John Walton: There were a group of divers for a few years that didn't wanna do the deep dives – [35:00] Doug Niessen and a couple of the other people. I can't remember their names, but they had no interest in diving down. They stayed up at the boat in the buoy on the safety dives. And I think the last year we were out there, they finally got down there. There was a group of the safety divers that decided to go – it was one of those El Niño years, and it was just beautiful, flat, 100-foot-plus visibility. So everybody got a bottom dive at Cordell Bank that year.

> I have one recollection of Dave Walls on a dive. We were down about 150, 160 feet on top of the pinnacle, and we had come down, we'd just settled down on the bottom. I think Jerry and I were gonna go, I don't know, do something, take pictures or do a knife fight or something somewhere. But Dave came up to me, and his eyes must've been as big as saucers, and he showed me his air gauge. And every breath he took, it went from 3,000 to zero, boom, and then slowly came back up, 3,000 to zero, and you could tell he was really nervous. And so he gave me the up sign, and we were close enough to the ascent line where he – okay, he's gonna go up, so he immediately went up, and we're hoping Dave's okay, but he might have a different perspective on that one.

Dave Walls:Yes, yes, I remember that dive very well, and I was really caught
off guard. We hadn't been down that long to have burnt up that
much air, but as John says, checked my gauge and noticed that I'm
way down low and actually moving the gauge with each breath.
And again, with narcosis, after signaling John, I immediately
started up but caught myself going up way too fast, hand over
hand, but only about ten feet. And then it occurred to me – I'd
read somewhere that sometimes with narcosis, every once in a
while you just get this moment of terror for no particular reason
and that the recommendation at that time was to stop whatever
you're doing and just hug yourself for a while.

So I did that. I stopped on the line and hugged myself, and it actually passed. I realized what was going on, and made it up to the decompression stop at the right rate of ascent, did my stop and got out of the water with 200 pounds. Now, John, you looked at my gear and found that -

John Walton: The filter in the first stage – it's called a cinder filter – he didn't properly clean his gear, and he had a dirty filter *[Laughter]* that, with the density of air at that depth, the deeper he went, the thicker the air got and the less air went through the filter. So he was actually drawing the air out of his intermediate hose to zero, and it was coming back up as he was exhaling. Not something you wanna do at 150 feet. Pretty nerve-wracking.

[End of Audio file 3. Time 38:01 total]

[Begin Audio file 4]	
Dewey Livingston:	We're back for an afternoon session with the Sacto Team. And if we could first clarify the dates that you were diving, we talked about '79 and had read from the log in '80, and maybe Steve, could you give us sort of another rundown on dates?
Steve Williamson:	John Walton brought to my attention that in 1980, I believe, we made two dives in the fall that year and missed the rest of the dives due to weather. In 1981 we started – our first dive was October 10^{th} , 1981, and dove that year, and then in 1982, according to my log, our first dive was October 9^{th} , 1982.
Dewey Livingston:	And you did continue diving up until the mid-'80s, or '86 or '87, or is this it?
Steve Williamson:	I had one dive in '83.
Dewey Livingston:	And how about the rest of you?
John Walton:	I believe my last dive with the expedition was in '87 at Point Sur, but we had dives on Cordell Bank in '84 and '85, I believe. I think my last dive was in 1985 on Cordell Bank.
Dewey Livingston:	Steve, do you have more that you can read out of the log?
Steve Williamson:	Yes. If you wanna start when we built the dredges to dredge up the sediment –
Dewey Livingston:	Sure, and if that fits –
Steve Williamson:	Yeah. The Sacto Team, we put together, I believe it was three dredges. I believe they were inch and three quarters diameter. And we used a basic airlift philosophy as to compress the air at the tube. As it rises, it would create a suction and pull the sediment up, and we collected 'em off a 90-degree elbow with a burlap sack. And we had one person running the dredge while the other tended the sack, and once the sack was full, they would lift it to the surface with an airlift.
Dewey Livingston:	Did you invent this – I mean, you came up with the design for this and tested it –
Steve Williamson:	Yes. We came up with the design, kind of a group effort. We knew about airlifts. I covered that in my commercial dive school that talked about airlifts. And we actually tested at the
John Walton:	Cassotta's pool.
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Steve Williamson:	Originally, and then we took it to D.L. Bliss in Tahoe.
John Walton:	Oh, that's right.
Steve Williamson:	And we tested it I think about 80 or 90 feet, and made some adjustments to it. And I believe we tested it as well in Folsom Lake once.
Dewey Livingston:	And the air supply with these is one of your standard tanks?
Steve Williamson:	It was a third 80-cubic-foot tank that was – I have a picture of what it looked like. You can see the third tank upside down there.
John Walton:	We had twin-tank manifold, and we took a third 80 and turned it upside down and strapped it on the back of the two tanks with the air hose coming around our waist, with a quick disconnect.
Steve Williamson:	The first dive that I have recorded is on October 10 th , 1982. I have a depth of 140 feet, downtime 16 minutes and – oh, correction. The correct date on that was October 23 rd , 1982. Depth 160 feet, 15 minutes downtime, and we used the two-inch dredges in a crevice approximately 40 feet across the transect line. We had to use the Scuba Pro Mark V First Stage. Worked better than the Poseidon, we determined.
	The crevice at canyon was 20 feet by 40 feet. The top of the ridge was 130 feet long. The crevice was 160 feet deep. And we dredged up sediment and sent it to the surface. And we saw five killer whales that day; they ended up being the false. Killer whales and a six-foot blue shark.
Dewey Livingston:	And when you say the crevice is that deep, that's below the pinnacle.
Steve Williamson:	Correct.
Dewey Livingston:	So you couldn't go to the bottom of the crevice, could you?
Steve Williamson:	We did go to the bottom. The top of the pinnacle was – what'd I say it was? Yeah, the ridge was 130 feet, and the crevice was 160 feet, so we descended another 30 feet [5:00] to the bottom of the crevice where we were dredging.

And I believe we only made two dives. The second dive was the next day, October 24th, at Cordell Bank north end. Again, the depth I have is 160 feet. And John and I dredged up 25 pounds of sediment. The 25 pounds was in my mind. I don't know if it was that much. With the three-inch dredge. We had a two-inch and a three-inch.

John Walton:	They had names.
Steve Williamson:	Yeah. Marilyn, Linda, and I –
Dave Walls:	Yeah, yeah. [Laughter]
John Walton:	Deep Throat.
Steve Williamson:	Yeah. Marilyn, Linda, and Deep Throat?
Dave Cassotta:	Yeah.
Steve Williamson:	And 10 pounds with the red dredge, so we were working with – this is one of the dives where John Walton, Dave Cassotta, Dave Walls, Jerry Seawell, and I dove as a five-group team. We had two of us tending each dredge, and one was probably Jerry with the camera.
Dave Cassotta:	Mm-hmm. We had two cameras there.
Steve Williamson:	Yeah. We were on the same ridge on this dive as the Navy hole.
Dewey Livingston:	That was when they found the hole?
Steve Williamson:	No, we found them prior, but this was the ridge where one of the holes was located. And that's what I have basically for the dredges we made.
Dewey Livingston:	Does anybody else want to address that year, '82, and dredges, etc.?
Dave Cassotta:	With the dredges, my impression from Dr. Schmieder was that he wanted sediment. And up until this point, we hadn't really gone down into this area where all the sediment was, and so we were thinking he wanted sediment out of some of the cracks and crevices that existed in where all of the abundance of marine life was. And so Steve and John, when they made the dredges, they also had this little fitting that went even smaller to, like, get down into a small hole or crevice to suck whatever is in there out. But

	then when we realized that actually it was just as easy to go down into the big crevice and, with a big goodie bag, just scoop up the stuff and, like, shoveling it in, that we had definitely overbuilt the concept of collecting the sediment, so we abandoned the use of the dredges after that.
Dewey Livingston:	But it was made clear to you why you were collecting the sediment?
Dave Cassotta:	Mm-hmm.
Dewey Livingston:	Anything else about it?
John Walton:	Yeah. Most of the sediment deposits were at 160 down to 200 feet that we dove. Bob was real interested in the micro-gastropods that lived in the sediment and all the creatures that no one had ever gotten to. So the idea was to get deep down into the sediment and bring up these, as much finds as we could. And apparently, we found some new species in the sediment.
Dewey Livingston:	Anything else about those '82 dives that come to mind? Okay, do you have another entry?
Steve Williamson:	Well, we're actually into November – November 13 th , 1982, Cordell Bank, again north end. Maybe that's just where my mind was. They all seem to be on the north end. Let's see. Dave Cassotta, John Walton, Jerry Seawell, and then McCormick and Niessen were safety divers. And purpose of dive: take pictures and Super-8 movies. And that's all we did, I believe, on that. That's when I took down Steve McCormick's Nikonos 3 and shot some pictures. David has a Super-8; Jerry had a 16. Oh, and I have a note here: I wonder where Dave Walls – Dave Walls could not make the trip. That's all I have. I don't know why, but
Dave Walls:	Methadone clinic, you know. [Laughter]
Steve Williamson:	Then we had a dive the following day at Cordell Bank, depth 180 feet, downtime 15 minutes, then we decompressed three minutes at 20 feet, seven minutes at 10. And, again, when I was writing these, a lot of it was just off memory at the time. We went down, basically take pictures [10:00] and raise the hammer core for the holes that we took down. We covered those. So we raised those with some lift bags and then took still photos and movies with the 16 and the Super-8. Photoed area where we used the pneumatic hammer, see if anything had come back from the prior year. And I had noted here that the strawberry anemones were the first to grow

back on the bare spot. Then I have a continued – John and I dropped over the side of the ridge to a sediment deposit of 180 feet. John collected sediment, and I took pictures. And that was all I have for 1982.

John Walton: We found large holes in the tops of the pinnacles at Cordell Bank, and one of our projects was to measure the depth of the sediment in the hole so we could get an idea of how fast the sediment was collecting. So we developed a core sampler with a piece of inchand-a-half galvanized pipe with a flange that would catch the – as we drove it in, would catch the material and we could measure the depth in the hole.

> And So we went down to this hole and tried to drive this core sampler down in to collect sediment, and we left it there, and that's what Steve was referring to. In the previous year to this, we had gone down and collected rock samples in that area with a pneumatic hammer, and it cleared the area pretty well. And we knew where that was. It was right next to a hole. So we came back to the hole the following year and looked to see what had grown in the clear spots. And I don't recall exact – Steve says that Corynactis were the first ones to come back.

Dewey Livingston: So that's all the logs.

Steve Williamson: That's all my logs. Yeah.

- *Dewey Livingston:* Thinking of dives, anything else that comes to mind tell some stories, or should we go to the administrative first....
- *Jerry Seawell:* I don't know if I should tell this one on record. *[Laughter]* But the tequila dive.
- *Dave Walls:* Oh, I deny it all right now.
- *Jerry Seawell:* It was Saturday night, and we were in Lew Stark's camper doing tequila shots to about 2:00, 3:00 in the morning. And we got up at I think 6:00 and left, and we actually went diving, and we probably had a, I don't know, point-oh-something alcohol in our blood prior to the dive. *[Laughter]* We don't recommend to recreational divers. *[Laughter]* Kids, don't do this don't try this at home. But yeah, we went diving with I know I had a hangover, and actually, the deeper I got, the better I felt. *[Laughter]*

Dave Walls: Yeah. Yeah.

Dave Walls:	We didn't tell Bob.
Jerry Seawell:	No, Bob Schmieder doesn't know about this. <i>[Laughter]</i> Yeah, it was – we came up going, "We'll never do that again." But we survived. <i>[Laughter]</i>
Dewey Livingston:	Now, since you all knew each other, you probably were associated with each other professionally or recreationally. Did you get together with other members of the Cordell Expeditions outside of these dives? Did you hang around for anything?
Dave Walls:	No, I think that distance made it a little bit difficult. Most of the other divers were from the Bay Area, so that was a bit of a drive. So to get together socially would've been difficult.
Dewey Livingston:	But I asked earlier about planning meetings for the next year. You sound like that didn't happen.
Dave Walls:	No, I think Bob was really good about doing really thorough briefings, and that's how it happened. We wouldn't meet separately to discuss what the dives are gonna be about, or the goals, or whatever.
Dewey Livingston:	And I've seen the reports that Bob did. Did he distribute one of those to each of you, or how did you obtain those?
John Walton:	Yeah, he would send out a yearly summary, a little packet with all our drawings and pictures that we had done and specifics on the dive. [15:00] Bob used to have dinners and little get-togethers, and we'd go down every now and then to his house. I was fortunate enough to be able to work with Bob and Dan Gotshall in identifying species at the Academy of Sciences. I spent quite a few weekends down at the Academy of Sciences breaking out specimens and putting 'em in bottles, and that was a highlight of my experience also.
Dave Cassotta:	The opportunity was always open to us, 'cause we'd hear about "Bob was having a barbecue, and come on down." But like Dave Walls said, that the distance made it difficult sometimes. But John's interest in the marine sciences was his big motivation. He'd head down there, and getting that opportunity – because we used to sell some of Gotshall's books in our dive shop, and so for him to get to sit there and identify species with him was really a highlight.
	Really for the rest of us, I can't speak for the other guys, but I really didn't have the interest to go see what a tunicate was. My

	interest wasn't there. I was too busy trying to run my business and do that stuff, although the opportunity – we were all invited, and the opportunity was there. In fact, he even sent us all business cards. We all had our own little business card with what we did on there written in Crayola. No. <i>[Laughter]</i> And so it was pretty cool, yeah.
Jennifer Stock:	Did any of you ever see any manmade damage around the pinnacles that you dove, like fishing gear or fishing nets, beyond the manmade holes?
Dave Walls:	Yeah, I think that one of the first real shocks that I saw was the abundance of beer cans out there from the sports fishermen. I thought, here we are in this lush environment and we're at 170 feet or whatever, and here are all these beer cans laying around. Seemed so incongruous and out of place, you know?
Jennifer Stock:	And they weren't from your team.
Dave Walls:	Not from – none of 'em were from us.
[Crosstalk]	
Dave Cassotta:	Those weren't Stroh's. Wasn't our brand. [Laughter]
Dave Walls:	"Oh, my god, were we the ones that threw those out there?" <i>[Laughter]</i>
John Walton:	As far as any manmade stuff, we saw some salmon weights, large shotgun or the cannonball weights. I saw a few of those and some small boat anchors, but no nets or anything like that. I think some of our banners are still out there and a fish catcher that somebody made one year. Somebody had the idea of making a Plexiglas fish trap – I think it was Vic Ferrari – and set it down there for the weekend and didn't catch any fish. That's all I ever saw.
Dewey Livingston:	How about Lew Stark? He's not here with us today. Is there anything to tell about anything that he did or a little about him?
John Walton:	Well, we certified Lew. Lew was one of our students we certified, so we've known Lew since late '70s, early '80s. One of the big things that he contributed to was his artwork in Bob's book. He did some beautiful drawings of hydrocoral and some of the specimens that were brought up.

But Lew was a good diver. He did have a pretty serious event on the Point Sur dive, his last dive, where he had oxygen toxicity. The expedition was playing with nitrox, and he went too deep and stayed too long and had an oxygen hit. But he should probably tell that story. It was pretty serious.

Jennifer Stock: Well, let's move a little bit more into what Bob's main goal was for this entire mission. And at the time when you were on these dives, did you have any idea really what body of knowledge this was contributing towards in terms of where this was all gonna go eventually, versus just collecting stuff and collecting stuff? What were your thoughts on that, in terms of the purpose of the expedition?

Dave Walls: I kinda agree with Dave Cassotta that [20:00] certainly I, too, was first attracted just the sense of adventure. Just the word "expedition." For us guys that taught scuba, going off the beach in Monterey and kneeling on the bottom while students did skills got really frustrating, because we got into it because we love the ocean, love the marine life and all that.

I know that personally, after just a few dives, I began to understand what I was a part of, and that became the excitement too, that we're doing something meaningful, something that can make a difference. I don't know if I really appreciated that we were going into the direction of having it become a marine sanctuary till later. But yeah, I was glad to be part of it.

Dave Cassotta: I agree with Dave Walls. While we were doing the expedition, I didn't have any idea what it took to get an area designated as a national marine sanctuary. I wasn't so interested in protecting the area, except for protecting it from oil drilling. Once I saw what was there, I thought, "Oh, this would be a tragedy if this was contaminated by a major disaster."

And being a conservationist and not a prohibitionist, I could see that, as a resource, as a fishery, it was very valuable – it was full of juvenile rockfish – and that I knew there were charter boats going there to fish, and I thought, "Well, I don't want that to stop, but I do believe it needs to be regulated to preserve this." So I started getting more into the idea of what we were really doing.

But really, to be honest, after a while of year after year of doing this, and as was mentioned earlier, we had to pay for it all ourselves. And owning a dive shop and being called upon a lot, after a while I felt like the Sacto Team was being used. I just kinda felt like, okay, this is the Bob Schmieder expedition; it's not going anywhere. Because I was on the dive side, collecting, taking pictures, but as far as what's being done with that, I didn't really know.

It wasn't till he published the book that I realized "Wow, we really did something, and this could really happen. This could really become a national marine sanctuary." And it wasn't till then that the real reality of it hit me.

Steve Williamson: I echo what Dave Cassotta and Dave Walls said. I don't need to add any more to that. I agree that once the book was published, it began to set in that, okay, this was really for something.

Where it hit me the most – and this was 29 years later, 27 years later – Dave Cassotta and I were at the Fisherman's Festival, Bodega, year before last. And we were walking around having our token beer and corndog or whatever it was, looking at the festivities, and we looked over, and there was a Cordell Bank Marine Sanctuary booth set up. And of course, we were drawn right to it and walked over there and started looking at all these things and the posters that they had and what they've accomplished. And Dave looked at me and goes, "This is what we did this for," and that's when it set in with me personally is that "Wow."

Then the lady that was there – Dave talks more than I do; told her we were divers, and then hence we – at least I gave my first autograph. But that's where it kinda accumulated for me is – or it came up as the – what it was there for. Like everybody else, though, I started off for the adventure and then bought into the reason and the quest for the sanctuary, like everybody else.

John Walton: Again, I did it for the adventure. I mean, how often do you get to go to places that have never been dived in the world and have the opportunity to be the first people to see it? In the beginning national marine sanctuary wasn't even in the picture. We didn't even talk about it. [25:00] We were out there to dive in a really neat place, and as far as biologically, it was a marine biologist heaven. And that's what really interested me was the fact that they started to find new species and range extensions and depth extensions, and it was just an amazing place.

> And as time went on in the late '80s, when it was finally given that sanctuary status, no one really knew about us. I mean, we were just divers on an expedition, but you felt proud because you could

look out and say, "I was out there, and I saw that, and we did that." So I always felt good about it. No recognition.

	But the part that was really fun was the October dinner where we were invited down and given recognition. I was proud of us all, and we did something that was a highlight of my life. And when I pass, that's where I wanna go. I wanna be dumped out on Cordell Bank. So it's a special place.
Jerry Seawell:	When I first started in the expedition, in my wildest dreams I would've never thought it'd end up the way it is. I just thought it was a bunch of wild and crazy guys getting together by a leader who had some visions, but I thought maybe this would just end up being a scientific paper, something like that; it wouldn't go any further. Like I said, I would have never dreamed it'd have been a national sanctuary.
	And at the time, it was like – these other teammates here, just an adventure. Fun adventure, see somewhere, and then I felt a little selfish that I've been someplace that the majority of divers and people that have never seen this world, and I've been there and they haven't. So it was a bit of selfishness on my part there.
	But once I heard it became a sanctuary, said, "Hey, I contributed something." And like John said, it's a pat-yourself-on-the-back kind of moment. But I never dreamed it was as big as when we came back in October for the get-together, and just the reception we got. I said, "Holy cow. I can't believe this." But yeah, it's something I'll never forget.
Jennifer Stock:	When you were in the years of diving and returning home back to Sacramento, what were some of the things that you told your friends and everybody else back home about diving at Cordell Bank and what it was like? Or maybe even today, what do you tell people about Cordell Bank?
Dave Walls:	Thinking back, I don't think that I talked about it a lot, because it seemed a little fantastic. "Yeah, we were at 170 feet and saw sharks and blah, blah, blah." Yeah, right. You know? I think that, if at all, we talked to each other a lot. I didn't talk to a lot of other people about it.
Dewey Livingston:	Any publicity?
Dave Cassotta:	I was always trying to promote our dive shop. So using whatever any of the guys did, whether it was John and I who went out to

Folsom Lake and brought up a boat for a guy, man, that hit the paper. Or if we had an underwater pumpkin-carving contest, that was in the paper.

And so this we did a press release on as well, and it was published in a variety of newsletters within the industry. PADI published it in their paperwork, and some other magazines and so on published that there was a group of California divers doing this thing. So that was really the only publicity that I was familiar with. And then when KGO joined us on a dive, that was kinda fun to see that. 'Bout it.

Dewey Livingston: But personally did you rave about it? You came home and told your friends?

Dave Cassotta: The thing was, you have to keep in mind that we were all young, and all of us were married. Now, Dave was going through a divorce, but we had little children. And I remember going out there right after my wife gave birth to – it was like two months after my daughter was born, and then being out there after my son was born. [30:00] John had two kids. Steve had two kids.

And so for our wives, Cordell Bank was a bad word. Going on these expeditions was something that they were not fond of because they were worried about us, for one, because they knew it was dangerous. And two, being divers anyway took away from family life. You know, we were gone on the weekends. We taught classes at night. So having something that we didn't have to do that we were volunteering for and having to pay for out of our own pockets, they were not happy about that.

So oftentimes we didn't talk about it at home much. We just said, "Yeah, it was cool," or "This guy was there" or "That guy was there. We had a good time," and back to life. And then friends and family outside of our group, they couldn't relate. They had no way of relating what diving to 180 feet would be like or what narcosis felt like or the excitement of seeing a Corynactis anemone growing back on a spot that we had cleared off the year before. They just couldn't relate, so we didn't talk about it much.

John Walton: Yeah, I second that. It was hard to relate to other people when you try to describe what you've seen, and it doesn't work. They have to see it in real life to believe it. And so you could just say, "Oh, you should see the marine life. It's three feet thick...." "Oh, yeah, yeah, sure." And half the time you tell 'em you went to Cordell

Bank, they didn't believe you, 'cause it's 20 miles out. Or they didn't know where it was, and so what.

So there wasn't a lot of recognition then. We all knew amongst ourselves it was special. And it probably wasn't until we had a Cal Academy of Sciences – we were all invited down where Bob put on a show, and he had a video and a slideshow. It kinda set in that, boy, this must be pretty special because here we are at the Cal Academy of Sciences, and all these people came to see this show. And there were a couple of KGO specials and news articles. But as far as recognition, there was just amongst ourselves.

- *Jennifer Stock:* So based on your experiences at Cordell Bank and this general region overall and what you hear now in the media about environmental concerns and ocean conservation concerns, what are your biggest concerns for Cordell Bank in terms of the future?
- Steve Williamson: I'll go along with Dave Cassotta in saying that I wouldn't like to see any type of oil drilling or exploration out there for that. And as far as divers go, I know there was some concern mentioned earlier about sport divers going out there, and I believe that there could be some legislation passed that has a moratorium on only with a license or permitted diving only that would eliminate the sport divers, 'cause it is too hazardous. As far as the fishing goes, I believe that we should have some fishing there, with restrictions and regulations. And as far as anything else goes, I think it should be here for the next gazillion years.
- *John Walton:* I would be concerned about the big commercial fisheries going out there and gillnetting or doing the seine netting over the reef and taking all the juveniles. One of the amazing things about the bank was the number of juvenile fish. It was like being in a giant aquarium. There were millions of 'em.

And obviously, oil drilling shouldn't be done. There's plenty of places to drill oil, not at Cordell Bank. I don't think it could ever become a sport diving place. It's too difficult to find, too difficult to hit the pinnacle, too deep. Diving's out there only during the fall, during a couple months. I mean, you can't stop people from diving, but I think there should be some restrictions, like Steve said, or special permitting by the sanctuary. It should be protected in that respect.

Dave Walls: We've really pretty much covered what I recall.

[35:00]

Steve Williamson?:	Yeah, I think I would just be restating what was stated by somebody else. Everybody complemented each other really well on the stories and gave some validation, confirmation –
Dave Cassotta:	We've had a lot of life experience, done a lot of things. You take the five of us here, I mean, we could fill volumes of our life experiences of what we've done, and we've all lived fairly adventurous lives. But for me Cordell Bank was the highlight of it all. And really, it's not just the place; it was the expedition and the people involved, because without people, what's the point? So it was these four guys that I've known all my adult life that we share this experience, the closest thing I would have to a wartime companion or being in a foxhole with somebody in an intense situation. This was a great deal of adrenaline and excitement, and these are the four most talented and bravest guys I know.
	And I often think of some of the things we did, even not at Cordell Bank, some of the dives we made – one dive in particular, Jerry and I were diving on this boat that had gone down. And he went down head first, and the water was black. I mean, the lights wouldn't work. And he went down head first. It was freezing cold, and I thought, "Oh, god, he's brave. I've gotta follow him now."
	So I followed him down. He's down there taking pictures. I could see the flashes of his strobe going off before I got there, so he was already there. And in the years I dove with John where we could just look at each other and know "We better get outta here" or "Hey, this is awesome" or whatever experience we were experiencing. And with Steve and Jerry and Dave Walls, it was the same way. And I couldn't have ever dove with such a great group of people. And then the other divers on the expedition, too. I had a great deal of respect for Santilena and Kruse and Sue Estey. I mean, what an incredible woman, the stuff that she did. And so yeah, it was really the highlight of an adventurous life.
Dave Walls:	I never really cared for any of ya. [Laughter]
Dave Cassotta:	Yeah. You sucker. [Laughter]
John Walton:	I just wanna say, Robert Schmieder's a pretty – he's a different kinda guy. And I wanna thank him for giving me the opportunity – us the opportunity to dive on something that was fantastic, and it was a highlight – like Dave said, a highlight. How more high- adventure could you get than diving at Cordell Bank, first people in the world to see it? And thank you, Mr. Schmieder, for that.

Dewey Livingston:	Well, I get the sense that he did consider you a special crew because he talked in his interview about – he was interested in getting serious divers who weren't there for the adventure but who believed in what he was doing. And you guys seem to have been in it largely for the adventure, admittedly, and that he saw that "Hey, there is something that I need or that is gonna contribute here." It's that sense of adventure.
John Walton:	I think the Sacto Team also added a lot of topside fun, those shenanigans, and it broke the tension, because when you're going out there 20 miles off shore and you think about dropping down 200 feet into the water, your heart races. And it's fun to come back up and relax and break loose with everybody and talk about it and vent. So I think the Sacto Team helped a lot in that respect.
Dave Walls: [40:00]	Yeah, John just sparked a memory for me too. One of the really, I thought, interesting things that I first noticed on the expedition was, during one of the first, or probably my first dive there certainly, the preparation part to where we would be talking and laughing and all of that, and then the word would be this "All right, start getting your gear ready." It would go dead silent. Nobody talked. Right up to the time you're stepping off the ledge. Everybody was rehearsing every move of the dive. That's the only we could do it on the bottom with the narcosis. You've gone through step by step every single moment. And one of the things, too, I was thinking about while John was talking was one of the things that I took home with me that I appreciated most is the rest of these guys. I know for a fact that we have taken care of each other in Cordell Bank, kept each other out of serious trouble at least a couple times each. I can remember specific times.
Jennifer Stock:	Wow.
Dewey Livingston:	Well, let's call that quits for the day. Thank you very much.
Jennifer Stock:	Thank you.
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