

**TIM BEGUE**

**Salt Lake City, UT**

**An Interview by**

**Greg Smoak**

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**THIS IS AN INTERVIEW WITH TIM BEGUE ON APRIL 29, 2014. THE INTERVIEWER IS GREG SMOAK. THIS IS THE GREAT SALT LAKE ORAL HISTORY PROJECT, TAPE No. U-3255.**

**GS:** Good morning. It is Tuesday, April 29<sup>th</sup>, 2014. I'm Greg Smoak and we're at the offices of the American West Center and today I'm interviewing Tim Begue for the Great Salt Lake Oral History Project. Tim is one of the early brine shrimpers on the lake, and so we're going to talk a little bit about his experience on the lake, and specifically the brine shrimp industry. Good to have you with us today.

**TB:** Thank you very much.

**GS:** I'd like to start with a little bit of background so folks know where you're coming from. Then we'll go into your experience with the lake more specifically. So could you tell us a little bit about yourself: where you're from, family, education?

**TB:** Sure. Well I was born in Paris, France. My grandparents are French. And then I eventually, when I was four, moved to the United States, and then finally ended up in Salt Lake City when I was seventeen. My father got a job here in Salt Lake City, and so we moved out here as a family.

**GS:** What kind of work did he do?

**TB:** He worked for Abbott Laboratories. And Abbott Laboratories bought Sorenson Research, Jim Sorenson's company. He started Deseret Pharmaceutical with some other folks. So I basically stepped off the plane in Salt Lake City when I was seventeen. I ended up at Highland High School, and graduated there in '80. And then I went to Westminster College and did four and a half years there, got two degrees. And it was kind of during that time, while I was at Westminster that I started working on the river; I

was a river guide in Colorado, down Cataract Canyon, Desolation, Westwater, and then eventually Grand Canyon.

**GS:** What companies did you work for?

**TB:** Mostly I worked for Colorado River and Trail Expeditions, a little for Moki Mac, and a little for an outfit out of Kanab called Grand Canyon Expeditions. And it was really, Dave MacKay, who was the owner of Colorado River and Trail, he is the one that actually kind of got us started. I went over to his office one day for a totally different reason and he asked me if I'd ever been on the Great Salt Lake, and did I know anything about it, and this brine shrimp harvesting that was going on. And I said, "Well, I know a little about it but not much. I've sailed out there," 'cause my dad had a sailboat and so as teenagers we'd take the boat out and cruise out to Stansbury Island for the weekend and things like that.

**GS:** Let's talk a little more about that. Just to back up for a little information, what were your degrees you got at Westminster?

**TB:** Small business management and marketing. [laughs] So I guess they came into play when I started the business.

**GS:** So in sailing on the lake – I mean, that's a fascinating thing. We've done an interview with the commodore of the yacht club and the harbormaster out there as well. What was your very first experience, do you remember, with the lake? And what were your thoughts about it?

**TB:** Well it was the early '80s, so the lake was up quite high. And I had a good friend of mine, Curtis Doubek, and Curtis and I, we would just jump on – he had a little fourteen foot sailboat, and my dad had a, I think it was a nineteen foot – and we would

just throw in some food and water and we would just sail out to various islands. We could literally camp often on the beach, just throw an anchor and wade in. It was kind of crazy. I wouldn't do it now because I think back of all the scorpions and black widows and stuff that were crawling all over the beach in the summer.

**GS:** Did you ever encounter any big storms out there?

**TB:** Oh yeah. We cracked Curtis's mast one time coming back in a pretty strong gale. We had too much sail up and we could hear the snapping of wood. And luckily we just let the sheet go and were able to save the mast. But yeah, some big rollers. And of course during ten years of brine shrimping out there, we saw some big ones going through.

**GS:** And so, when you came out here when you were seventeen did you go out to the lake early on?

**TB:** Pretty early. My dad was a sailor, and he loved to sail. We weren't here very long before he went and bought a used boat, found it on a trailer and got it up, got a slip. We didn't transport the boat back and forth we just plopped it into the slip and left it there. I think we left it there for several years until '83, '84 when the lake came up so high it went over the breakwater and we had to go grab the boat and pull it out. That might've been the end of—I can't remember if we put it in after the marina got hammered. But it was a lot of fun. It's an amazing place because it's so close to so many people but there's no one out there.

**GS:** Because so many parts of the lake are so isolated and I guess sailing you get to see a lot of those places. So where were the main places you would go with those little boats? Antelope? Stansbury?

**TB:** Mostly Stansbury. And we went up the coast of Antelope a few times. I don't believe we ever camped there. But if you go all the way to the north tip of Stansbury, there's just some great little beaches and coves in there. And they're kind of exposed. It's not a perfect cove where you can weather all the storms. So you kind of have to go when the weather's good. But there's some great hiking. And we were kids just kicking around over there, having fun.

**GS:** So you worked as a river guide and then it was through that work that you got introduced to the brine shrimp industry. And that's something I think I've noticed in reading about it, is that more than one person came out of a seasonal type of employment – working on the river in summer and then going out and adding to it, because this is basically a fall and winter occupation.

**TB:** Exactly. And that's what Dave MacKay originally said, he said, "I have all this equipment that we use all summer long but it's sitting idle all winter and it would be perfect." So our original thought process with Dave was, he said, "Listen, I have a truck. I have a couple of boats. I'll provide the gear. You go out and find out what's going on out there and learn how to catch egg." And so that was great because I didn't have the wherewithal then to go buy all the stuff. And so basically we took out equipment that we use on the river, which are rubber inflatable surplus military craft, and with twenty horsepower merc engines. And it was ridiculous how underpowered we were, but that's what we had. And so we threw it together and we literally... The first winter we spent was on Carrington Island. It was actually an island back then. And we brought out a canvas hunting tent, like a Kirkham's.

**GS:** Yeah, the spring bar.

**TB:** Yeah, a standup tent. And it had a little stove and a little—so we were able to burn wood and keep the tent warm. And we literally slept out on Carrington Island. Every morning we would hike up to the top of the island with binoculars and look out across the lake and we could see streaks of egg. And so we would take a five-dollar compass, and we would take a compass reading from the top of the peak. We'd run down, get in the boats, and we'd come around, and then follow that heading out and find the egg [laughs]. It was just lucky that back then the slicks were so big that you could find them.

**GS:** And what year was that, the very first year?

**TB:** '89. I think it was the winter of '89.

**GS:** Okay, so it was after the lake had risen and now it was starting to come back down a little bit.

**TB:** Yeah. And everything—Hat was still an island, Carrington was still an island. So yes it was on its way back down but it was still up pretty high. And we would just run across the biggest—we would find patches that were so big we couldn't even dent them. I mean, the amount of egg that we could carry and harvest at that time was so small we would literally put the boom in the water and go around the egg and we would be done booming in twenty, thirty minutes, we just had so much we couldn't carry it. And then in the old days, as the slicks of brine shrimp eggs got smaller and smaller and there was more competition we would have to spend more and more time. You could spend hours sometimes trying to get the egg.

**GS:** So who was out there? You mentioned competition. I know it's a highly competitive business today. Who were some of the other companies and other individuals who were out there when you arrived, who were already doing this type of work?

**TB:** Well probably the biggest company was Sanders out of Ogden. And of course, as you mentioned earlier, he started out in I think it was '54 or '55. And he was actually after adult brine shrimp.

**GS:** Yeah, he did, and froze them and sold them to aquarium enthusiasts.

**TB:** Exactly. And I think it was probably in the '80s when somebody finally realized that you could catch the egg and you could dry it and package it and then reconstitute it. So the people who were out there were, Sanders was big. Another company out of Snowville was Ocean Star International. And it was owned, and I think it's still owned by Simon Gao. I think he is from China. And they had a big operation. And so even when they – and I'll back up in just a minute – when Sanders and Simon Gao at Ocean Star started collecting egg, they all started collecting egg that blew in along the shore. So they weren't going out in boats early on to get it. So they would set up. And so they started leasing land. So the way they started doing it was they would lease the shoreline, and that was their spot. And then they would string boom from the shore and then drop an anchor, and try to make a little catch, a little basin where the egg would blow in. And of course back then it worked because there was so much egg, and when it did blow in it was ridiculous how much would arrive. And then they would just literally shovel it or do whatever they could to get it into bags and get it on the shore. And then, they started taking boats and started going out into the lake and catching egg before it went to shore. So the other players – so Sanders, Ocean Star – another big one was Golden West, that was owned by Mike Swenson of Salt Lake. Western Brine Shrimp, that was... Betty Bensley. And let's see, I'm trying to think of the others. The Tillys out of Kaysville.

Anyway, there was probably about seven companies when MacKay and I started reconnoitering the lake.

The first few exploits out there were very exploratory: How do you get on the lake? How do you move equipment on and off? It was very difficult because they basically tied up areas where you couldn't go in. So we ended up at strange places like Lakeside. We ended up at Strongs Knob and Lakeside, Rozel Point, up on Promontory, anywhere where they hadn't tied it up. And the marinas were not friendly to brine shrimpers back then because there was something about the marinas that they said there was no commercial activity allowed.

**GS:** So just recreational boats was all they wanted.

**TB:** Mm-hm. And so they were not kowtowing to us coming in with all these boats. Eventually we did use the marinas. Something changed there; I can't remember how or when but it finally changed.

**GS:** And Magcorp's marina, some people operated out of Magcorp, right?

**TB:** We had a really nice marina. Well we had to build our own. But yes, eventually, when we finally... So MacKay and I continued to work together, so that was '89 and '90, and then probably in '91 we split. And it was an amicable split, but I could see that there was a business here; he already had a really nice business.

**GS:** The river operation?

**TB:** The river operation. So he was more willing to just kind of let things go on. And so I sent out a letter to everybody who was involved with our little operation and I said, "I'm going to start a company. I'm going to incorporate, and if you have any interest in being part of this new company you need to show up at this time and this place." So two



people showed up, and they were my partners in the operation: Jim Strong and Joe Nangle of Salt Lake City. So we formed our company, which was Prime Artemia, and then we took off from there.

Originally, we worked out of—the first year we worked out of Rozel, in cooperation with a guy named [Keith] Tilly. And then we finally ended up at the South Marina, worked there for several seasons. And then we finally got a lease through Magcorp, which was quite expensive. I mean, they charged thousands and thousands each year. And then we had to drop money into building, dredging the channel into and then creating a little marina space. But we had a full camp there with a generator, a camp manager who cooked and took care of all the operations there, and we had food, and we fed probably sixteen people a day, something like that. It was kind of a big deal.

**GS:** Yeah, that sounds like it. To back up just a minute though, Rozel Point, up in the north arm, maybe could you talk a little bit about how—I know the fluctuation in salinity really effects whether or not there are shrimp and whether or not you're going to get the eggs. And so was it because of the high water years, because it was less saline that you could operate in the north arm? How long did that go on?

**TB:** I think in actuality the water was so high in the south arm that it was too low, so there wasn't great production. And so then, all the companies were up in the north at that point in time. And it's very difficult to get to the north because it's even more remote than the south and it's even more tied up in private leases. And so through Tilly we were able to get—he was able to get a right of way from a landowner, and we were able to snake down this little road, and all we had was beach access, there was no marina or anything. But there was a landing strip. So we had trailers set up. We were able to land a

small plane in there to go and spot for the egg. And the only way we could really keep our boats from washing ashore is we just made these giant cement moorings and then dropped the cement in the water and we would tie the boats to that.

**GS:** So how close is this to the actual Rozel Point, to the Spiral Jetty, and there's that oil jetty that is just to the east of Spiral Jetty? Is it in that exact location, or is it farther down Promontory?

**TB:** It is south of the Spiral Jetty.

**GS:** Yeah, and that map— [looking on a map of Great Salt Lake] the Jetty's right there and then the oil jetty's over here.

**TB:** And so we were right up here. And you think the Spiral Jetty's right here?

**GS:** Yeah, you can actually see right there, sticking out on the map.

**TB:** Okay, so we were just to the north of the Spiral Jetty.

**GS:** So that's where that Rozel Oil Field was out there too. They had some of the drilling in the '60s.

**TB:** Yeah. And that was scary at night when you were driving a rubber boat and there was metal things poking out. That was before we had radar and all that stuff, so we had to be really careful motoring around there. But the north end, we had some wild times up there. It was very cold that winter. It was often well below zero. We were operating these ridiculously slow boats. We were bringing in a lot of egg and we were able to catch a lot of egg. We actually caught so much egg that the guy who originally agreed to buy it, we just swamped him. He just said, "I can't deal with it anymore."

And we had a guy, an old college friend of mine, who was our pilot. And it was lucky we had a landing strip there because he would go find the egg and then he would

get us on it, and then he was able to just land the plane right on the strip there, go have coffee or whatnot in the trailer. And then we would call him back out later. It worked out. It was interesting.

And then the following year I'm pretty sure we went right back down to the south and were operating out of the South Marina, down by Kennebecott.

**GS:** And so, you first were using basically what you would've used on the river?

**TB:** Mm-hm.

**GS:** But you were also using, I assume, oil slick booms to control oil spills. That's the kind of thing you'd use to corral the eggs. What other kind of equipment did you use to actually get the eggs out of the water? Did you use siphons, conveyors?

**TB:** Well there was a lot of different operations, and everybody had their own idea of how to get it out. There were skimmers; there were pumps; there were vacuum items; conveyor belts. We've seen it all. And everybody tried to patent a lot of these things. So as we got further involved in the industry you had to be careful of what you used, because somebody might try to sue you for patent infringement.

But our basic concept was to use two boats with approximately eight hundred to a thousand feet of oil containment boom in between, get the slick of brine shrimp eggs to gradually move into the boom, and then close the boom. And then at that point, when you have a thousand feet out and you're closing it, the egg is only a sixteenth of an inch thick, it's just a film. And then you slowly start to pull the boom tighter and tighter and tighter. And you can't do it too fast because you'll push the egg out the bottom, so you really have to be gingerly with the closing of the boom. And then finally you'll get the egg to about, oh, six, eight, ten inches thick depending on what you have. And what it appears to

look like is wet sand. If you took your hands in it and just dug in it would be like digging in wet sand at the beach. And at that point in time you kind of have it stabilized, you pull along side of a pump boat. And so what we would have is either a diaphragm pump or an impeller pump, people would often call 'em trash pumps. And you would take a funnel, a hose on the intake and you'd run the hose down into the egg and you'd have a funnel that was maybe a foot square attached to the handle, and you'd stick that down in the egg. And then on the discharge end of the pump it would go up to some kind of manifold setup where you would have valves that were over the top of various bags, so you could then control the flow into the bags. And so once you start the pump, then the egg is so dried out now you actually have to reconstitute it, so you'd just take literally a rake or some type of implement, and take the egg and just slowly jostle it in the water and it would bring the water up. And you would want it about the consistency of frozen yogurt, ideally. You don't want to pump too much water.

**GS:** But you also want it to be able to flow.

**TB:** It has to flow. So we would call it a slurry. We would try to get that slurry just at the optimum. That way when you're filling up the bags, you can fill them up once and they drain out and they're pretty much done. If you have too much water then you have to fill the bag up, let it drain, fill it up again. And so we would literally have, I think on our boat we had four to six valves set up, and then we'd have to move it. So you'd be working on four bags, shut it down, pick it up and move it over to another four bags. Everybody was different. We saw some really interesting—

**GS:** How did your setup change over the years? I'm sure you moved away from surplus river rafts towards probably better boats, better gear.

**TB:** Better and faster, yeah. So originally the rubber boats were great, because the rubber boats were made by the military, and their original application was bridge replacement. And so these rubber boats had the capacity to hold a lot of weight. And wet brine shrimp bags weigh a lot. But, the rubber boats just don't go very fast. So after we got done using the rubber boats we switched to aluminum hulled boats that were typically built out of California or Washington. So our particular company, we had a theory that we would run three boats per permit. One boat was a speedboat that was capable of going fifty miles an hour. The next boat was a boom boat, which really looks more—it's like a houseboat without a house, a flat deck boat, so you could stack up, pull in the boom. And then the third boat was a monohull, and it was the cargo boat. And that one was typically a very stout aluminum boat. All our boats had four to five hundred horsepower per boat.

**GS:** That's quite a bit more than those twenty horsepower outboards.

**TB:** Yeah. So typically in the morning, or whenever your plane was up looking for egg, the scout boats would go out, they had radar, they had GPS. The pilot would radio down to the scout boat, "Here's your longitude, here's your latitude." You'd plug it in, boom, boom. And then now you have a way point and you go there as quick as you can. Then once you got there then the other boats would be following because they'd plug the same coordinates in. And when you first got there with a scout boat, the first thing you want to do is scout around obviously, make sure no competition's coming in to try to take one end of the patch. So you typically have the pilot tell you where the meat of the patch is. You want to know where the best possible start is. And if no one's around you could go to the peripheral and work back towards that. And then the boom boat would show up about the time you got done scouting out the patch. And at that point in time you'd

determine which way you want to move, which way the current's going, which way the wind's going. And so then you'd lay out all your boom. And then at that point in time, on our rigs we would switch from the big two-hundred and fifty horsepower engines, we would have a ten horsepower trolling motor, so we would use the trolling motor to move in and around the patch and to make our closings and all that, just so we didn't pull the boom too quickly, because if you pulled the boom too quickly or did anything funny the egg would just go underneath the skirt, even though it was twenty-five inches deep.

**GS:** And so the purpose of the speedboat – and I was kind of shocked, I was reading about this and saw that people were using boats that did fifty miles an hour and I thought, oh, it's to get there and to basically stake a claim because of the permit system, the certificates of registration. And you stake a claim for a three-hundred yard radius around that buoy?

**TB:** Exactly. And you didn't necessarily have to drop the buoy. The buoy was set up so you could drop it. It had a float and a flasher and all this stuff on it, but typically you would just keep it on your boat in a very visible spot, up in the radar arch or something like that. And so yes, the patches came in all shapes and sizes, and so you'd go for the heart. You'd want to sit right there. And then as a predator would approach from the other side or want to try to get in close to you, you would use your radar, some people had rangefinders like you use on a golf course now to find out how many yards. So there was all sorts of different ways to determine. And after a while you just had an eye, you could just look and say, "That guy's way too close."

**GS:** So what was the enforcement mechanism when somebody came in too close? Could you call the state? Did you photograph it? Did you file a complaint with someone? Or did you just yell at them?

**TB:** All of the above. Rarely did we call, because nobody was in the area, so nobody was going to come out to help you. The first thing I would do is just drive the boat over to this person and say, “Hey, you guys are way closer, you need to move off a hundred yards that way.” And if they wouldn’t do that then basically whoever’s boom boat got there. So then I would use the boom. So if I was sitting there and he came in and he’s only two hundred yards out, I’d just go take the boom right up to his boat and just scooped it and tried to take what you can. But it’s very difficult because you think you’re right, they think they’re right. And oftentimes you have two guys in two different planes – their plane, your plane – and they’re watching the whole thing from above. And so you can yell, you can scream, and we did all those. There was lawsuits over things like this. I mean, people’d say, “Oh you’ve obviously infringed and we’re gonna sue you.”

**GS:** So how often did this happen? Was it an everyday occurrence, once a week during the season? I guess the season’s short so I guess this could happen a lot with this competition.

**TB:** Well the season could be four months, that’s what it ended up—in the late ’80s it was actually, I think it was... it could’ve been five months. And I think what really caused most of the problems is the original system was on a sunrise, sunset. So they would only let you fish in daylight hours, so every morning it was a rat race to get out there. And then they finally went twenty-four hours, and that just ended a lot of the conflicts, because people didn’t—early on I remember times we were coming out of the

marina, we would leave the marina at 4:30 am, go out waiting for sunrise, there was eighty boats, fifteen airplanes, dark, everyone driving fast. I mean, it was crazy. You had to really watch yourself, there was boats just everywhere. And then pilots would be yelling, as soon as daylight would come they'd be yelling, "Oh, there's a big streak over here!" People would come out [laughs] it was crazy.

**GS:** So how did it work at night then, if you don't have a plane obviously, they're going by visual. They don't really have any kind of high tech sensors for streaks, so you have to have visual. At night would you just continued to work something that had been seen during the day that you had identified?

**TB:** Early on, yeah. So there was tricks: You could drive your speedboat with a spotlight pointing out the side of the boat. And you could literally drive it and as you hit egg there would be a color change. So once in a while we'd stumble on patches that way. But it was about that time when we started going to twenty-four hours that several of us came up with night vision. And there was an argument over who actually was the first. And all I can say is I'm sure our company was in the top three as far as the first that came up with it. And I think that was the '95 season. And it was our best year. We just killed it. And I was looking at a West Marine catalog, and they had a little night vision scope that was a thousand bucks. And I was like, "I wonder if this thing'll work." So I bought one, took it up in a plane. It wasn't the most sophisticated one because it was just a monocular, whereas they had really nice ones with hoods and everything, the military versions. But we quickly found out it was completely adequate. You could see the patches at night. They stuck out like a sore thumb. And so that first year we were going out and we were just, oh man, we would have forty, fifty bags of egg in the boom and



people would be driving by first light just going, “How the heck did you guys get this? How did you find this?” And it didn’t take people long. It might’ve been three weeks, it might’ve been a month or two. Eventually the word got out. There was two companies – a good friend of mine owns Great Lake Artemia, and then our company, Prime – and I have a feeling, I’m pretty sure we were the first two to have it out there. And it was a great year.

**GS:** And so, you mentioned aircraft, and that also, in my bit of background research on the industry, that did come in in the mid-’80s. So aircraft was already there when you started. So did you use spotters from planes from the beginning, or I guess at first not, and went around Carrington Island probably.

**TB:** At Carrington we did not. It was up at Rozel. And I had a good friend, Chuck Collins, who went to Westminster College with me. And we literally would drive out to number two airport, we would rent a 172 for whatever the hourly charges were, and we’d get in the plane and he’d fly out there. And he would spot egg. And then he would land at Rozel. And then he would go out in the afternoon and give us one more spot and then he would take off. And that’s how we started. And that was all daylight. But those patches were so big, all he really had to do was just get us in the vicinity of it. And oftentimes he would say, “Just leave Rozel Point and go 190 [degrees] for fifteen miles.” And we didn’t even have a ship’s compass. We didn’t even have a structure over the—we were literally driving these boats, back then, with a tiller. And so we would just run into the patch. And then it got more and more sophisticated. We ended up hiring another good friend of mine, Andy Wallace, who had a 1956 Supercub with a cloth wing, the yellow plane, tail dragger. And that plane was perfect because we could land anywhere: Antelope Island,

Stansbury Island, Fremont Island, Promontory. Any road, any strip, he could put it down. And that reduces, obviously, flight time, which reduces cost, but it also reduces stress on the pilot.

And then it got to the point where it got so busy we had to hire another person who was the spotter. So you'd have one guy flying and another guy communicating with the boats.

**GS:** Was this to avoid collisions?

**TB:** Yes. Because early on there weren't that many planes and people were spread out. But as it got ramped up, I would say about '95, it was just crazy. And so the pilot had to be just focused on who was out in front or below or above. And it was just too much for the pilot to do.

We actually got to the point where Clover, who controls all the F-16s out on the bombing range, got involved with stacking us. They would stack the planes as they went out by Magcorp and they got really close to the Clover airspace, or into Clover airspace, there was a guy in the West Desert who would just start stacking. He would just say, "Alright, you're at six thousand, you're at sixty-five, you're at seven," and he would keep us—it was actually a godsend because—

**GS:** This was military that was doing this?

**TB:** The military was doing it to keep a bunch of brine shrimpers from crashing over—because, I can't remember exactly where the military range is.

**GS:** Well Lakeside West. And I know it extends over the lake a ways.

**TB:** And we were fishing in this area [looking at a map]. And they would be controlling us here and up into there. As soon as we went past Carrington Island they would stack us up. So that was nice to have that. At least somebody was kind of

watching. And then I think people actually, some of the pilots actually had collision avoidance stuff in their airplane, TCAS I think they call it. It sends off an alarm that there's—

**GS:** Did collisions occur? Were there any crashes?

**TB:** I don't remember any planes—there were some close calls. I remember some pilots really mad. And there was a few, I think what they would call a “rogue pilot,” just somebody who didn't really care what the rules were, they'd fly wherever they wanted. There was boat collisions, but most of those were on purpose; it was a confrontation on a patch of egg. I never had one, but I've heard of guys, they would just get so frustrated. They're like, “What are you doing?” And they would come over and just put their boat on this guy and just try to ram 'em out of the way. And so there was broken engines and a lot of mad people [laughs].

**GS:** So I read a lot about competition but as I understand you were part of forming a coalition of brine shrimpers, an organization? Was there association that went on?

**TB:** There was definitely a—early on we started a brine shrimp association. And that was kind of like putting a whole bunch of cowboys in a room. Early on it was tough to get any agreement on anything: the rules of the road, how the boats operate, who does what, permits, start and stop times. But we would meet. And we had a guy who would moderate the meeting, his name was Don Leonard, and he's a consultant here in town. And so he would help get the meeting together.

But in reality the biggest thing that we ever did as an organization was to close the industry. I mean, that was really key. And a lot of people will tell you they did it because of biological reasons, we thought we were going to overfish the lake and all this, but it

was really mostly about limiting competition, because if you could take an industry like this and close the doors to entrance, all of a sudden your value as a company would go through the roof.

**GS:** And this was in the mid-1990s with the moratorium that was placed on the number of certificates of registration?

**TB:** Yeah. And that was spearheaded by us. I mean, I'm proud but I'm not proud. Because in essence we had to do it on biological reasons, the state was not going to close it because we wanted it to be our own little playground where we could all make money and no one else could. So we had to come up with a reason, and the reason was biological. And I believe in the long run if you had just left the doors wide open, it would've been fished out. You could easily fish this lake out. It seems like a really big lake but when you have a boat that goes fifty miles an hour and all this equipment showing up, you can just clean it up. You can just mop it up. So in hindsight, looking back, it was a good thing they did close it. But it was definitely a benefit to the companies that were involved. Now you have more value if you want to sell your company.

**GS:** So can you talk a little bit about the regulation in more detail, the certificates of registration. I know that an individual company could own more than one, right? So how many did you own at a time?

**TB:** Three. When it all was said and done it was locked up and there were no more permits allowed, we had three. I think the biggest company was... I think it was Sanders that had nine, and Ocean Star might've had nine.

**GS:** Does that mean you had three independent operations, three sets of boats, to hit all those areas?

**TB:** Mm-hm. So you could either put all three in one location, or you could do three separate operations. The way we would like to do it was we had three boats associated with every permit, so that it was more mobile, more flexible. Like Ocean Star, they had nine permits: They would run two on the lake and they would run the rest on shore. And they just owned, they just ruled on the beach. They had all these guys with four wheelers and they would shovel egg. They would blow in and they would go out there and you could see it from an airplane as well, you could see fresh—after a big blow it would pile up. So everybody had their forte, as far as what they were good at.

I think what really led to the downfall of a lot of the bigger companies is that they didn't adapt quick enough. The Ocean Stars and the Sanders, eventually they were king when we got in. And they didn't change quick enough. They were set in their ways. I think that really led to the downfall of the whole operation. Ocean Star's still a viable company. I think they're either the only company or one of two that are not involved in the co-op, as of today. Most all the companies are in the co-op, but I don't think Ocean Star has joined.

**GS:** And when was the co-op formed? Was that after your time?

**TB:** Yeah, there was talk about it. I don't know the date. It's been going on—I think the co-op's been in operation for seven years now, at least... six, seven years. And that was different from what we had formed.

**GS:** Well to go back to that association and closing the industry, do you have more detail on it? How did that come about? Did you send representatives to talk with DNR? Did you have studies done? How did you get this through?

**TB:** Well, the Brine Shrimp Association kind of had an idea that this is the direction we wanted to go. The state was kind of going along with it but they had to go with the biological angle. And so yes, there were studies being done. The state did several studies. And on our part, as an organization, we had hired Don Leonard. And he basically is a consultant but a lobbyist. So he started lobbying for us to all these people. So the DWR needed to be convinced that this was the way to go, and so there was all the public meetings. And so we would just continue to go to these public meetings and we would either have Don speak or actually the company owners would speak. And we would have to go to different locations – some in Salt Lake City, some down south. So you'd have to convince a cattle farmer who was on the board of the DWR down in Moab what you were doing. So just a lot of convincing and talking, and then finally the DWR decided that it was a sound idea to preserve the brine shrimp population. And so they did it.

There were some heated meetings, I remember. And at that same point in time the doors are closing, more and more people are seeing that the doors are closing and they're trying to get in. And so there was a big push to limit that. People, again, hired lobbyists and lawyers and filed last minute appeals. And so there was definitely, I can think of five small companies that got in with one permit, but they got in.

**GS:** And it remains at seventy-nine permits today?

**TB:** Seventy-nine, yeah. So if you take the seventy-nine minus Ocean Star and then maybe one or two others, the majority are in the new co-op. And I think they're doing well.

**GS:** And so they are basically small operators that pool their permits and then they split the proceeds, they split the catch.

**TB:** Yes. I'm not privy to all the details. But the way I understand it is, yeah, so let's say there's seventy permits, what they've done is reduced all the number of boats and planes and processing equipment and consolidated that all into one operation. So now you can actually own three CORs on the Great Salt Lake today, and never have to fish, never have to process, never have to market, the co-op does all that and they just send you a check. So the people that are in, I'm sure, some years have gone really well. I heard this year's harvest wasn't great.

And it's a marketing device as well too because when I was involved in selling brine shrimp egg it was very volatile. You could sell a pound of brine shrimp eggs one year for five dollars a pound, six dollars a pound, and then ten months later you could be selling it for twenty-five dollars a pound. So it would just go up and down according to supply and demand. And I think one of the benefits to the co-op, and to their customers, is that they can take out those highs and lows, and just have a consistent price that makes the co-op money but doesn't squeeze shrimp hatchery owners out of business.

**GS:** And maybe you can talk a bit more about the marketing, I want to talk about that, but also processing. How did the processing take place when you were involved? I know that it's shifted some, but I know that there were also – the same as with harvesting – there were different approaches to processing.

**TB:** Yeah, definitely. Like I mentioned earlier, there was six, seven different methods of harvesting, and I'm sure there was equally as many in the processing. But the processing, for us, and for most people, was fairly similar. You would harvest egg from the Great Salt Lake, and in that bag of egg you would have foreign matter: shrimp, algae, sticks, weeds, ducks, you name it. There's crap in the egg. So the first and most important

thing to do is remove all the foreign matter. And so most people either did it by floating and sifting or screening. You'd have these power, kind of like mining pieces of equipment, that had multiple layers of screens and so you could start at a coarser and then work your way down. And the idea was to remove all the foreign matter, to wash the egg thoroughly in nice salty water. And so by removing the foreign matter you would stop the deterioration of the egg. And then by salting the egg really well you would preserve the egg. And so what you want to do is dehydrate the egg. You wouldn't want a brine shrimp egg that's totally spherical, you want it dented, almost like a basketball that's underinflated that you pushed your first into. So if you saw that little dimple under a microscope you knew the egg was dehydrated; a totally round one was hydrated. So the idea was to remove the foreign matter, dehydrate the egg. And then a lot of people—some people would air dry it, some people would freeze it. We would freeze it at Prime Artemia. And by doing that you would just slow the whole process down and it would be—

**GS:** What kind of freezers could you use? How did you do that?

**TB:** Big ones.

[both laugh]

**GS:** I bet. So you put a whole bag in at once?

**TB:** Yeah. So the bag that was actually brought off the lake would then be pre-processed. So you would take that, you would dump it out, you would remove the foreign matter, you would dehydrate it, and then you'd put it back into a bag. The big bags that we used were a cubic meter, approximately. And they would typically be about sixteen to eighteen hundred pounds, somewhere in there. And so once it's clean we would put 'em



in a fresh sack, we'd put a fresh tag on it, the catch date, the date it was pre-processed, the weight, and then we'd put it on a pallet and we would ship them off to, there were big freezer facilities around Salt Lake. And we would often occupy twelve-hundred pallet spaces. We'd have hundreds and hundreds of bags in this place. And so at that point in time you could just sit on it. You could sit on that product. It was going to be okay. And then as you needed the product to process to send to your customers, you'd go in and you'd get a truckload of frozen egg, you'd bring it to your processing facility, you'd let it thaw out. And now what you're gonna try to do is separate good egg from bad. So the first thing would be to run it again through a Sweco, a screening machine. And then as it comes out you would add potassium permanganate, which is a disinfectant, it would just take some of the stuff off the—disinfect the shell of the egg. And then at that point in time you'd put fresh water in it and you'd juke it up in a, literally in a six gallon plastic bucket. And then you'd slide it off to the side and you'd hit a timer, and you'd just keep repeating this process. Well now that it's in freshwater, the dense heavy egg is going to sink to the bottom, that's your good egg. The shell and the not so good egg is going to float. And so now you've got to manually go in there and scoop the bad egg off the top, and then you dump your good egg into a sack, let it drain. And then most people would put it into, like an industrial spin cycle washer, like a centrifuge. And now, boom, you want to get rid of all the excess water, because that fresh water's going to make the egg hydrate, 'cause it's like a sponge. And so you only have so much time by the time you start processing. You can't leave egg for hours and hours. So now you've spun the water out and then now it's gonna go into a dryer. And there are several different kinds of dryers, but probably the most popular dryer used by most all the brine shrimpers was a

[Red Ball 56:07], which is a tumble dryer, about four feet in diameter, and twelve to fourteen feet deep, long. And it basically was a long drum that was on wheels that could spin either in forward or reverse. And so you'd open up the hatch on the front, you'd literally throw in the wet egg, and on the inside of the drum was a real fine mesh screen, so the egg couldn't get out. After you loaded up – I can't remember exactly how much you put in – four hundred, five hundred pounds of egg in there – you'd load it in, you'd lock the lid on the front. And so now it would start to tumble. It had little fins, little pieces of steel that stick out to actually lift the egg up, just like your dryer at home, and then it would drop it. On the back end of the dryer would be a heater, a blower. And so now it's blowing hot air in there, and then the moisture in the air going through the fine screen and then out into the warehouse.

**GS:** Was this something that was built for commercial laundries, or was it something that was built specifically for the brine shrimp industry?

**TB:** There was a guy in Ogden Redball Welding, I believe it was Simon Gao, had the original idea, and he started building. And he built a bunch for Simon, and he must've—I don't know how many he built. We had three or four of them. But almost every company I knew had several of them.

**GS:** So you would use commercial storage facilities in terms of the freezing, but your processing facility was your own?

**TB:** Yeah.

**GS:** And was that pretty standard in the industry?

**TB:** Mm-hm. Yeah, there wasn't much cooperation early on. So everybody had their own processing place, their own packaging place. There wasn't much sharing going on

[laughs]. People thought they had secrets or a special way to do things. And I'm sure even today you could get a dozen brine shrimp owners to say, "Oh no, our egg was better than the next guy's because we did this."

**GS:** So when it comes out of the dryer then how is it packaged and then shipped?

**TB:** So when it comes out of the dryer it is, let's see, it's like dry seeds, very fine, fine seeds. And so we would again sift it to get any clumps out. And then most people had one pound cans, so like a small coffee can size, was the most popular for the end users. They liked it. And these were vacuum sealed cans, most of them would have a dessicant in it. And so as the dry egg came out we would put it in barrels. And oftentimes we'd have to store those to get enough to make an order. And then you got into blending and testing. So you'd have a bunch of dry egg that was ninety percent, and then you had a bunch that was seventy-five, but your order was for eighty-five so you'd end up doing these blends or mixes. And then most everybody had a fairly automated canning line. Early on we had a single can at a time and a vacuum sealer, and then we finally got to the point where it was an automated line, boom, it was all—the scale was built right in there, it would come on down out of the hopper. And then it's vacuum sealed and then it would go down the line. And you'd put twelve cans into a case, it would be taped up and then in pallets of cases. And then you could fill containers.

**GS:** So the end users, by the time you're in the business, are essentially commercial fish farmers, right, around the world even, growing shrimp mainly. And so they preferred a one pound can over—it seems counterintuitive. It seems like they would want large quantities to feed a commercial farm.

**TB:** Exactly. Well, brine shrimp eggs are so small they go a long way. So a one pound can has a lot of feed in it. In one gram of dried eggs there could be two-hundred and fifty to two-hundred and eighty-thousand cysts per gram, and there's four-hundred and fifty-four grams in a pound. So there was a lot of feed in that little can. But I think they did it because they had a perception that that can was stout, it was vacuum sealed. And they don't have refrigeration in Thailand and a lot of these places, so they're literally just storing them in the shade in a room. And so they want the packaging that's gonna last and be the best for them.

And you're right, a lot of it was for fish, but the majority of our customers were shrimp hatchery owners. And so there's a distinction between the hatchery and the farm. So, when you go to Thailand and you travel down along the coast there, there could be multiple hatcheries, and most hatcheries would then sell their product to the shrimp farm. On occasion you'd find somebody that had a hatchery and a farm all to themselves, but oftentimes the hatchery was just kind of a separate business. So we would sell, typically, to a distributor in Thailand or Ecuador or the Philippines or wherever, and that distributor would then distribute the product out. And so the guy who's running a hatchery has to use brine shrimp; it's a key ingredient to his success. So what he's doing is he has a male and a female shrimp and he's getting seed, he's trying to get them to reproduce. And so he gets them to reproduce and the next thing you know you have a big tank of warm seawater and it's just full of millions of baby shrimp, the ones you and I are gonna eat. And when they get up to about – I can't remember exactly – the larval stage, it's a couple weeks old, they're going to introduce brine shrimp. And so in a separate tank, you take that one pound can of brine shrimp eggs, you dump it into the warm seawater, and

eighteen to twenty-four hours later it hatches. Now you have what's called nauplii, little baby brine shrimp, and now you're going to harvest all those little baby brine shrimp and you're going to dump 'em in with the other shrimp, and they're predators, and they're just gonna eat all those brine shrimp. And if you're a hatchery owner and you're not using brine shrimp, you're not going to be very successful. It's really hard to do. They've tried to replace it with artificial feeds, tofu, rice bran, all these things, but it just doesn't work. The key to brine shrimp, the reason it's so good: It's high in protein, it's high in omega-3s, so it's a good food source, and it's alive. So it's in the water column, it gets consumed in the water column, whereas particle feeds or man-made feeds tend to fall to the bottom, it creates ammonia, now you have water quality issues, whereas the brine shrimp, the water quality issues are not as important. It doesn't impact it in quite the same way. It's the perfect feed.

**GS:** I know you weren't in this business, but once the shrimp get past that hatchery stage, is brine shrimp ever used in that farming phase, or they're just using—they're just basically keeping them in tanks and what flows through they eat.

**TB:** Exactly. So I'm gonna guess in a hatchery you're gonna use brine shrimp for about fourteen days. So there's kind of this critical period to get them through a larval stage into the next stage. And then once those little shrimp, fry, are big enough, they're gonna be sold and put into big ponds. Then after that it's all artificial feed. It's either guys literally throwing it out of the bag or sometimes you can see automated feeders which just shoot the feed out over the pond, and stuff like that. It's a very short window. But like I said, using brine shrimp, it's the key to success.

**GS:** Now what about the marketing? You sold to Thailand, to the Philippines, to Ecuador. Did those industries—I guess as the industry developed here they approached people in Utah. Or were there middlemen, brokers, people that you worked through? Did you direct market to those distributors in those countries?

**TB:** We did do some direct. Early on, when we first were able to get our product to where we thought it was a good product and it's stable and we knew it was testing out well. And then we got into packaging. Then we started going to a couple trade shows. And our first trade show was in the south of Spain. And in Europe they don't do so much shrimp but they do fish: sea [breem 1:06:30], sea bass, things of that nature. And when they have small fish, fry, they'll feed them brine shrimp. Now it's not the biggest industry, but it was a pretty good market there. So that's where we started dabbling around.

And then... I'm trying to remember. It was years ago. Our biggest break for our company, personally, is when we ended up getting—we found a guy in Ecuador. And Ecuador was booming in shrimp production. And they had a lot of shrimp hatcheries. And somehow we ended up meeting this guy named Heinz Grunauer. And Heinz's father was big into shrimp and he had big freezing facilities and he was moving seafood. So Heinz decided he wanted to get involved in the business. And he flew up here and we struck a deal. And we started sending him [laughs] container load after container load. And eventually, we were probably, I don't know, Heinz was probably in the top three as far as selling our product all through Ecuador. And that was where we got our main break. It was a big deal. And that price was really low. I remember back then, the price, I

just remember, was, I don't know, six, seven dollars a pound, and he was just selling it out [laughs].

**GS:** So what was the highest price you ever saw?

**TB:** Oh, in just small quantities to Japan, once in a while, thirty-seven, thirty-eight dollars a pound. I'm sure it went higher. And I'm sure people would contend but I want to say upper thirties. And they would usually buy like one ton at a time. Whereas Heinz was doing a forty foot container. And he would do a forty foot container every sixty days. So for us, as a small company trying to gear up and package, we were struggling to keep up with demand. But it was great.

**GS:** How many employees did you have max?

**TB:** I'm gonna say we had max in 1995. Probably about twelve to thirteen, fourteen people for the whole season, and then we would bring on another fifteen for the harvest. So we'd bring on guys that could drive boats and people that could fly airplanes and people that would do pre-processing out at Magcorp. So it was a big deal.

**GS:** And how long did the processing season extend beyond the harvest season? Was it a year round kind of thing?

**TB:** We would process year round, yeah. Yeah, once you got enough inventory—well let's put it this way, we caught enough egg in '95 that when I sold the company in 2000, we still had some '95 inventory that was on the books, that we sold. Because we had, I don't know, it was a lot of egg. We were moving semis out of that Magcorp plant nonstop, all season long.

**GS:** So what got you out of the business? What made you decide, *I've had enough of brine shrimp and I'm ready to move on?*

**TB:** That's a tough one. Well, it was a lot of hard work, first off. There was a lot of energy that went into it. In '95, '96 it started getting more and more competitive. It got to the point where, as an operator going out on the lake, it was not fun anymore. In the old days, '88, '89, '90, '91, you could actually drive by somebody and wave to 'em and stop and talk to 'em, and it was enjoyable. And then it just got so cutthroat that everybody was just doing the one finger salute to everyone else. And it just got old.

The other reason was we had several good years leading up to it. We were able to get a moratorium on permits, the value of the company went up. And then somebody came along and said, "Hey, we'll take the whole thing, lock, stock and barrel, give you one check. Here you go." So I'd kind of had enough.

**GS:** Do you miss it ever?

**TB:** Sure. Yeah. Yes, I do. I miss—sunrises on the Great Salt Lake were always beautiful, sunsets. And I miss the excitement of driving fast and doing that. But like I said it was just hard work. If you were on the lake and you were working hard you were trashed. And you'd work really hard for eight, ten days during high pressure and then a storm would come in and you'd just go home and collapse for a few days. And then high pressure would roll back in, and you're like, "Oh, back out. Let's go! Let's go!" Yeah, I definitely miss certain parts of it. But, ya know, one of the things I did when I sold the company is I made sure that I—I went and bought a little boat, so I still have a boat and I get to go boating around [laughs] not on the Great Salt Lake, but anyway.

**GS:** So what have you done since selling the company?



**TB:** Just dabbling really. I haven't started any big businesses. We've done garlic farming. We tried growing organic hops for two years; that didn't work out real well. I mean, the hops worked out well, just marketing them didn't.

**GS:** Where was the garlic farm located?

**TB:** Well it was a piece of property that I ended up with that—the company that bought our company didn't want any more real estate. They had bought up several pieces of real estate. So I ended up with a five and a half acre piece of land right out by the airport, and still have it today. It's one of my... IRA or whatever you want to call that. I'll sell it eventually. Maybe when land prices go back up [laughs].

**GS:** So, let's talk a little bit more about the lake itself. If you're working in any place you get to know that place pretty well. Are there things that particularly surprised you about the lake, that you learned about the lake in all that time out there?

**TB:** Well, surprising things on the lake. Well it's an extremely dynamic place—one of the things that would always interest people who hadn't been out there was how quickly the contours of the land change with water, with the lake level going up and down. It's amazing how quick that happens, and how much land shows up. There were times—when I first discovered—we were booming along one time and I discovered that up in the Rozel Bay area there was a whole bunch of underwater springs that just bubble up. There's actually places in the lake where you can take a cup and dip it right in there and it's fresh water, there's that much coming up. And we were booming along and we were trying to close the boom. And if you have freshwater in the boom you can't close it. You could get a car on either end and try to pull it together and it wouldn't do it. And we were trying to close it. And it was a great day, ya know, we were trying to figure out why we

can't close it. And you could see it bubbling up. And then one of the old-timers told me, "Oh yeah, there's springs all over."

On windy days up in the north end there'd be some times when it'd blow so hard it would blow free salt, piled up on the beaches it would be all white, completely salt.

And the bird life is amazing out there. Of course you have the pelican rookery up there.

**GS:** On Gunnison Island.

**TB:** Yeah. Like I said, it's one of those really neat places that not too many people venture out. You have all these people here and nobody goes out there. We have a few sailors. I mean, obviously there's several, maybe a hundred boats out at the marina there. And people do stuff around the lake, but I don't think people really venture that far out.

**GS:** No they don't. I don't think people get out on the water very much. And there's a limited number of places on the shore where you can actually get a good look at it. I think Antelope Island's where most people go to actually see the lake, and then Black Rock, and the State Park Marina at the south end. But beyond those two principle places, I don't think a lot of people get out there. And certainly not the north arm. It's really remote up there.

**TB:** One time my business partner Joe and I, we drove around the whole lake one day. We drove up to Lakeside and then up and around. And I can't remember, what's the old town?

**GS:** Kelton?

**TB:** Kelton. Yeah, the graveyard up at Kelton. Locomotive Springs. It took us all day [laughs].

**GS:** I did that last Pioneer Day. I've done it a couple of times. One time I did it and camped over by Crocodile Mountain over on the west side. But this last year we just did the lap in a day.

**TB:** Yeah, it's a big day.

**GS:** It is. And you don't see many people.

**TB:** No. I didn't see anybody.

**GS:** So what are some of your favorite places out there? Are there hidden gems? I know you mentioned the north end of Stansbury Island has got some neat locations. But are there places that really you'd like to return to just because of the place, not necessarily because it was good brine shrimping there?

**TB:** Ya know, it's been a while since I've even been out on the lake. I have a couple of friends that have sailboats and they keep telling me I've got to go sailing with 'em. Yeah, the north end of Stansbury, along there, there's some real pretty beaches. I enjoyed my time up on Carrington Island. I thought Carrington Island was really a neat island. And that had a kind of a... Ya know, they used to bomb it, so when we would walk around up there you could see the remnants of shells. And I remember on Carrington, when it was a true island, there was badger, there were badgers all over, big badgers. And so you had to be careful about them.

**GS:** I guess they got out there when it was on low water and just walked out there.

**TB:** Yeah. I'm sure they could walk back now. And Fremont was always neat. But, ya know, a lot of the time when you're brine shrimping out there you're just working, you get into this tunnel vision. Of course you get time off here and there to walk around a little bit. But most of the time when you're brine shrimping it's all work. You get up

early, typical day, three a.m., you get up and you're going to bed at ten and starting all over again. But yeah, I've gotta get back out there.

**GS:** There you go, yeah. Alright, well are there other things that you might want to add to the interview, things that I haven't covered or asked that you can think of that we should know about the lake or about the brine shrimp industry?

**TB:** No, just that it's a real diverse place. And I think the lake in general, over time, is gonna be somewhat threatened with man, with what's going on out there now, the mineral extractions. I mean, it seems like a place that's invincible, but I don't think it is. What Magcorp's doing and what they're extracting out up here. And the mere fact that the two lakes aren't mixing anymore, that's really—I wish they would open the causeways up and get that to mix. But there's a lot of powers that be—

**GS:** Yeah, they just closed one of the two culverts because of the way that it's subsiding.

**TB:** But, it's a neat place, dynamic, and fragile. And I enjoyed all my time out there.

**GS:** Well that's a nice place to end. And thanks so much for the interview today.

**TB:** You bet. I enjoyed it.

**END OF INTERVIEW**