ASHLEY KIJOWSKI

Hooper, UT

An Interview by

Becky B. Lloyd

11 December 2014

EVERETT L. COOLEY COLLECTION

Great Salt Lake Oral History Project

U-3282

American West Center and J. Willard Marriott Library Special Collections Department University of Utah

Salt Lake City, Utah

THIS IS AN INTERVIEW WITH ASHLEY KIJOWSKI ON DECEMBER 11, 2014. THE INTERVIEWER IS BECKY B. LLOYD. THIS IS THE GREAT SALT LAKE ORAL HISTORY PROJECT. TAPE No. u-3282.

BBL: This is an interview with Ashley Kijowski. We are in Hooper, Utah. Today's date is December 11, 2014. This is part of the Great Salt Lake Oral History Project. My name is Becky Lloyd.

So, Ashley, let's start with when and where you were born.

AK: I was born in 1987 in the suburbs of Chicago, Illinois.

BBL: What was your family doing in Illinois? Had you been there forever?

AK: Yeah. My dad and my mom were both born there. And my dad lived on the south side of Chicago and my mother lived in St. Charles, Illinois. I was born in St. Charles, Illinois.

BBL: And you lived there through all of your growing up years?

AK: Yeah. Until I was eighteen, then I went down to central Illinois at Illinois State University for my undergrad in biology.

BBL: Where was it?

AK: Bloomington-Normal, Illinois.

BBL: And what was the name of your college?

AK: Illinois State University.

BBL: Oh, okay. And what was your major?

AK: Biology and minored in environmental science.

BBL: With biology, did you specialize in a certain area or go on a certain track, or it was just general biology?

AK: General biology. I didn't know I wanted to do that until I was a junior.

BBL: Oh, what did you think you wanted to do?

AK: Physics. I was a physics major for most of it.

BBL: Really. What were you thinking you would do with physics?

AK: That's the thing, I went to a career expo and realized it probably wasn't for me, because none of the jobs looked as exciting as what I was looking for. They were more like computer-type, engineering jobs. So then I started to look at other things that interested me, and that's how I found biology.

BBL: And what about biology intrigued you?

AK: Well, I guess I first thought I might have wanted to be a vet, because I love animals, and then I talked to a few vets and went to another career expo and I didn't want to do that either. So I guess I was just kind of trying to figure out what excited me the most. So I took a few ecology classes and stream ecology was the one that made me realize I wanted to do it. I guess it would be more because I really like being out in nature and I've always, I grew up fishing and hiking in northern Wisconsin during the summers and it just kind of drew me to that.

BBL: Interesting. So you finished your degree there, and then what happened?

AK: Then I got an internship through the University of South Dakota, studying an endangered dragonfly. The dragonfly lives up in northern Wisconsin so that's where the fieldwork was. I worked there for a summer and really liked it and decided to go move out to South Dakota and work at University of South Dakota as the lab coordinator for the dragonfly lab. Then when I was there, I decided to go to grad school and went to grad school for my master's in aquatic ecology at University of South Dakota.

BBL: What was the draw to aquatics, then...oh, because you were interested in the stream ecology.

AK: Yeah, and wetlands.

BBL: Yeah, okay.

AK: Anything aquatic I was really into at the time.

BBL: So you completed your master's degree there?

AK: Yes. So I lived in southeastern South Dakota for three years doing [unclear] dragonfly work and my master's.

BBL: Do dragonflies have an aquatic connection?

AK: They do. They live as larvae for one to up to five years in streams and then when they're ready they come out and emerge as dragonflies and then fly around.

BBL: I see. So I just totally exposed my ignorance of dragonflies (laughs). I may take this out of the transcript!

AK: A lot of people don't know, though, a lot of people don't know that.

BBL: That's good. So I see how that all ties together for you and makes a lot of sense. So you finished that up, then what happened?

AK: Then I got an eight-month-long job at University of Wisconsin Stout, which is in Menomonie, Wisconsin. I worked on a NSF grant as a crew leader there. So I went out and we studied sixty different ponds, part of the Chippewa Moraine area. They're working on a meta-community theory, which is like looking at ponds that are next to each other and then ponds that are far away from each other and seeing if communities can move throughout it. So I did that for eight months and applied to a bunch of jobs while I

was there, knowing that it was going to end, and ended up getting an interview here. So that's how I ended up here.

BBL: I see. So you had put your application out at a lot of places, and this was the one that was pay dirt for you.

AK: Yeah.

BBL: Had you been to Great Salt Lake before, or even Utah?

AK: No, not even Utah. I knew that I wanted to move towards the mountains to help my hiking addiction, so I was mostly planning in places out west. The first time that I had ever been to Utah was the day I moved in.

BBL: When you interviewed, you didn't even interview out here?

AK: No. I did a phone interview.

BBL: That's interesting. What did you know about the Great Salt Lake before you came here?

AK: Not much, actually. It's never mentioned in my aquatic classes, never talked about in grad school. So I had to learn all about it before my interview. Then I was intrigued because it's really cool and if you don't know about it, I think, and you're not from here it's even cooler in a way because it's just so different. I really wanted the job after I read about it.

BBL: So it did line up with your aquatic interests.

AK: Yes, because of the brine shrimp.

BBL: So you've been here, you said, about a year?

AK: Yes. Last week was my year.

BBL: Do you live around this area?

AK: I did. For the first year I lived here, I lived in Ogden. A couple of weeks ago I moved to Salt Lake City.

BBL: So you just extended your commute (laughs).

AK: Yeah (laughs).

BBL: What is your job title here?

AK: Through the Division, I'm just a wildlife biologist II, but here I would be called the Aquatics Research Scientist, I guess. My role is coming up with research questions, devising the actual project, and then completing the project and reporting the data. So researching anything and everything that has to do with brine shrimp or brine flies and the Lake.

BBL: So I understand that you go out as well on the boat.

AK: Yes.

BBL: That's about once a week, sometimes more.

AK: Yeah, in the summertime we were going out three, maybe even every day, four days a week, doing bird research, helping Maureen Frank, who's up at Utah State, with her PhD. She's studying the diet and behavior of phalaropes on the Lake, trying to figure out if they eat mostly brine shrimp or brine flies or both and what sustains them in their behavior. So we help her in the summertime a lot. Then in the wintertime, during the brine shrimp harvest season, we go out once a week.

BBL: Tell me about those trips.

AK: Well, we go to seventeen different random sites on the Lake, sample for brine shrimp. Our whole goal is to, from the seventeen sites, figure out how many cysts are left on average lake-wide to report to the industry so we can manage how much they harvest

and make sure it doesn't reach below a certain amount of cysts per liter or the population might hurt the next spring. Those trips are fun, except in the dead of winter when the Lake, since it's so salty it doesn't freeze, like when it touches your hands it's painful, it's so cold, and it's just like ridiculously cold on the Lake. So I'm not the biggest fan of going out in the winter, but it's still very beautiful.

BBL: So lots of layers.

AK: Yeah.

BBL: Also the way I understand it is that the three of you who are on the boat—that's usually how many people go—take turns with responsibilities, such as driving the boat or dropping anchor or doing various testing once you get to the site. Had you had much experience boating before you came here?

AK: No. It was my first time on a boat doing science work. I had been on little Jon boats, like taking samples from a lake, but I had never been on anything with two huge motors like that.

BBL: Did you know you'd be doing that when you got the job?

AK: No.

BBL: So that wasn't explicitly in the job description.

AK: No, the job description for me was just the research part of it, so I didn't know about it. I'm happy that there's fieldwork, because I am not one to be inside every day.

BBL: How's that been on the boat, I mean learning to drive a boat?

AK: I like it. I like being out on a boat in general and taking turns, I like how we do that, too. It just seems to go smooth and everyone gets along. I think the scariest part is

probably driving the boat, because some areas where we launch are so shallow and I worry about breaking the motor and things like that.

BBL: So you've had kind of a steep learning curve, I guess, to be able to do that.

AK: I still wouldn't feel confident all on my own, like if it was just me that had to go do something.

BBL: Does that ever happen? Does one person ever just have to go out and do something alone real quick?

AK: I think Jim has to take people out on the Lake, UGS, and like other universities he'll take out on the boat, but he's got it down. I've never had to go by myself. I don't think they would ever make me do that until I was confident.

BBL: That's interesting. Have you had to drive in some pretty rough conditions?

AK: Yeah, with white caps on the Lake. Sometimes the forecast will change and unexpected winds come and I'm not a fan of that, either, especially since I get seasick.

BBL: Oh, do you. Did you know that before this?

AK: No. So I have to bring Dramamine if I go and the wind looks, if there's pretty much any wind I take it just in case so I can function.

BBL: Is that getting better over time, that you don't get as sick?

AK: Yes. A lot better.

BBL: That's good.

Have you had any real memorable trips on the boat, some that stick out in your mind?

AK: The trip to Gunnison Island, probably, for the pelican banding that we do every year. That was memorable. Then just like I take so many pictures when I'm out there. I

probably have thousands just from this year, because I'm not from here so I think mountains are still amazing and the Lake is amazing and people probably think it's crazy. Probably every day I go out there I take pictures. It's so beautiful.

BBL: It is a beautiful area and the vistas and all and what you see.

AK: Yeah, and just being on the Lake, you're surrounded by mountains from all directions, so it's just really pretty looking. The Lake has different colors different times of the year so if the brine shrimp aren't producing, it will build up a lot of algae and turn really green. Then when the brine shrimp population is doing really well and it's warm in the summertime, they'll eat all that algae down and the Lake is like super clear and very blue and you can see down to the bottom. So it's always different.

BBL: Do you have a favorite place on the Lake or a favorite spot that you particularly like?

AK: I don't think so. I'm still...I know where all our sampling sights are, but a lot of times I get turned around too. Everyone keeps telling me to use the mountains as a reference, but for me, I still think they kind of look the same. I wasn't brought up in the environment where I can recognize a peak yet. So I try to explain that to them and a lot of people that are from here have a hard time understanding that. For me, it's just like it all looks the same.

BBL: Right. I can understand that.

On the days when you're not out on the Lake, on the boat, what are your days like? What do you do?

AK: Right now I'm working on an experiment in the lab. So I made two cylindrical tanks and put Great Salt Lake water in there to mimic the water column and then I added

brine shrimp cysts and they're producing into adults. I have ten sampling, I guess, points on those tanks and try and figure out the brine shrimp cyst distribution within the tank. So I'll sample that one day and then the next day enter it and analyze it. Then I'm also taking random samples from the Lake and taking photographs of them using a microscope, putting the photographs on my computer and then using a program called ImageJ to measure their length and width and try and get the average length of a brine shrimp female, the average length of a female with cysts, female with eggs, male, nauplii and juvenile, just to get a good idea of their lifecycle and how big they are at each stage. Because we figured out that some professors at Utah State and the University of Utah, they're using the length values of shrimp that were measured in 1924 from ponds in California. It's not even the same species. So we need to get our own measurements and size.

BBL: Are you noticing there's a difference between their measurements and what we have here?

AK: I don't have enough sample sizes yet, because I'm just figuring out how to do all of it. But I am noticing a difference in size between females that are pregnant or have cysts and then females that aren't. The ones that have cysts are much bigger. I think after I get a few more months' worth and get a lot more samples I'll be able to see if it's the same as the paper that they have been using.

BBL: That will be interesting to know if there's much of a difference. But that's good information to know.

AK: Uh-huh. I also plan on using the tanks that I have right now—I'm making more as well—and then seeing what the effects of a lowering lake level are on shrimp and warmer

temperatures. I think those are my main things now, because everyone's worried—oh, increased salinity—because as the lake level drops, the salinity will increase and the temperature will probably increase since it will be shallow. So those are the main concerns with the brine shrimp population if that happens. So those are the questions I'm going to try to answer in the next year or two.

BBL: Interesting. What else have you got? Other projects you're working on?

AK: Those are my two main ones. I also want to look at temperature and cyst production because right now it's unusually warm and they're still, the brine shrimp are still producing live birth, so they're giving birth to nauplii, which usually they only do in the summertime when conditions are perfect, like warm enough temperatures and enough food. But right now there's enough food and it's warm enough, so they haven't started their cyst production. So I want to take shrimp that are producing live birth in my tanks and put them in separate tanks and lower the temperature in a controlled chamber and see when they start producing cysts so that we can say, "Well, maybe they're not this week, but when the temperatures get to this point they will." Just have a general idea of when they start changing that.

Those are basically my three main projects right now.

BBL: That's a lot. And then going on the Lake as often as you have to go, that's a lot of work.

AK: Yeah. So for the next four tanks, we have to go out and get all the water for it and I have to set it up and write everything out to make sure I do it right. So today I was just reading about brine shrimp and if there's any single point on their bodies that doesn't change as they grow to use as a reference point for their growth rate. But a lot of the

literature's still old and there's not very good pictures like there would be now days if you could take one with a microscope and explain it on there. So it's just hard going through literature that's old and you don't even know if it's relevant, because not that much has been done at the Salt Lake, I think, in the past twenty years. It's kind of weird. Like published information and books. It's hard to find articles. That's kind of a challenge.

BBL: But that's great for you because it opens up some opportunities.

AK: It's true. It does. That's what I'm hoping.

BBL: I'm sure it will. Do you plan to get a PhD, or do you have everything you need to get where you want to be?

AK: Right now, yeah. I haven't thought about a PhD too much because I just got out of school and I'm enjoying not being in school (laughs) and not being super poor.

BBL: (laughs) No kidding.

AK: But I might. I just don't know what it would be in. For now I'm good.

BBL: That's really great. Is there something that I should be asking you that I haven't?

AK: I would say people should know that the perspective of the Great Salt Lake is either you don't know about it if you're not from here, or when you come here, people tell you it's gross, it smells, it's dead. I had a friend of a friend who was in town and texted me like, "I heard the Lake's not even worth going to. Should I?" I was like, "Who did you hear that from?" And it was the people at her hotel. So I just feel like people from Utah think that it's dumb, but it's beautiful and awesome and it kind of frustrates me that that's like its reputation.

BBL: Definitely. Did your friend end up going?

AK: No. Didn't have time.

BBL: Have you found that when you have spare time when you're not working, are you recreating at the Lake?

AK: I have. I've hiked on Antelope Island a few times. But every time, like my mom came to visit and my dad came to visit, I went and showed them the Lake. So anytime someone comes, I bring them hiking there. But we're out there so much, I don't feel like I need to go recreate there, except I definitely, I haven't kayaked or canoed, so I want to do that.

BBL: That would be fun to do that. What else. Anything else you want to add that I haven't asked you?

AK: I don't know. It's hard to think on the spot (laughs). I think that's probably my main thing is just its reputation. It's too negative and it needs to get positive so people care, because it's one of the largest migratory bird refuges in the world, in North America—it's a big deal. If it just disappeared, it would not be good.

BBL: Right. I think you're right, there really is just a lack of awareness about how important the Lake is and that it is alive. It's a live thing, not a dead thing, which is what I think people think.

AK: Yeah. And there's a lake effect, like it gives us the snow that brings tourism and everyone loves snowboarding and skiing. That's a reason, I think, we could push on people we meet.

BBL: Thank you so much for your time. I really appreciate it. I'll go ahead and turn this off then.

END OF INTERVIEW