

## Video Transcript - Biocube in Duck River, Tennessee

Amy: I've got two right now. Try that.

Charlie: Okay.

Liittschwager: We are just downstream from Lillard's Mill on the Duck River in Tennessee. And we're with Charlie and Amy, who are fish biologists for the Tennessee Valley Authority.

Amy: Big [inaudible 00:00:22].

Charlie: Could that be a male? [crosstalk 00:00:23]

Amy: Yeah. He's got the red ...

Liittschwager: I asked them to catch all [00:00:30] the species of fish that they knew would occur in the spot that we were about to choose. And I was amazed by the number of species of fish. (By using) Specificity, minute differences between very close related species of fish they could just pick out immediately.

Liittschwager: What are they?

Charlie: Hog chum. Should have known. Hog chum.

Amy: And a nice rock bass. [crosstalk 00:00:54]

Charlie: ... rock bass.

Amy: A nice rock bass, and a redhorse. No, a spot.

Charlie: Body checkered?

Charlie: Now, turn it around, look at the lips.

Amy: [00:01:00] Yeah, look at those lips. Those are awesome.

Amy: The one upside down is a longear. [crosstalk 00:01:10] The one on top is a longear. The center is a bluegill.

Amy: This is a greenside. That's just a rock bass.

Charlie: Got a face like Kermit the Frog.

Amy: There's a warmouth.

Amy: That right there is the blotched chub. He's got a rock on its ab, lower ab, but that's okay, I guess.

Charlie: It's a status symbol.

Charlie: Man, that is a huge o'malley.

Amy: We got boops.

Charlie: Boops. Okay. Boops is good.

Amy: It's a sawfin. He's just got [00:01:30] the first four outlined in pigment. We need any more of those?

Charlie: Yeah, the other one died.

Amy: Oh, then we do.

Liittschwager: We got a gar?

Charlie: We got the gar.

Liittschwager: Oh, nice.

Amy: They're real ... Oh, no. No.

Charlie: Oh, Amy, no.

Amy: I didn't do it. No. He ain't going to do that to me.

Amy: Look at that Hagens [00:01:58].

Charlie: Oh yeah, [00:02:00] a baby dragonhunter.

Liittschwager: Chad is a freshwater biologist and he uses surveys of aquatic animals to monitor the health of the river.

Chad: It's an Argia. He's a Damselfly. (Mumble). This a riffle beetle larvae right there. White clown larvae. I got a stonefly. That's a Caddisfly. Hydropsychidae. Hellgrammite. Corydalus. Lost him. There's a [00:02:30] mayfly.

Liittschwager: I tried to use an underwater camera [00:03:00] to photograph the cube in its place. But the water was just too murky. I couldn't see it. Didn't work. So, now we decided to try lifting the cube out of the river, and using clear water, by building an aquarium inside the cube.

Liittschwager: Once the cube was on the platform suspended above the river, we wanted [00:03:30] to lift up all the gravel, and mussels, and creatures directly below it and into the cube. And then we had to sort of wash off the sediment that we'd disturbed.

Liittschwager: Okay, let's siphon it down.

Liittschwager: Siphon down the river water. And then fill it up with clear water that we got from the grocery store.

Liittschwager: After two weeks of waiting [00:04:00] and trying several different things, we finally got something where we could see what was in the cube.