

CRIMINAL



Episode 78: The Botanist **Air date: November 3, 2017**

Copyright © 2017 Criminal Productions. All rights reserved. This text may not be published online or distributed without written permission. Transcripts are generated using a combination of speech recognition software and human transcribers, and may contain errors. Please check the corresponding audio before quoting in print.

Phoebe Judge: This episode contains descriptions of violence and post-mortem forensic examinations. It might not be appropriate for everyone. Please use discretion.

Dave Norris: She really enjoyed getting married a lot. She'd been married 11 times to nine different men. You can do the math on that one. She sometimes was a little careless about whether one marriage was over before she began another one.

Phoebe Judge: Jill Coit got married for the first time before she was 20. That first marriage didn't last long. She soon married her second husband, and then her third. Almost three weeks after she filed for divorce from husband number three, he was dead. His name was William Clark Coit, and he'd been shot in his home by someone who'd come through an unlocked back door. Police suspected that his wife was involved in his death, but she checked herself into a psychiatric facility and somehow avoided further questioning.

From there, she somehow convinced a wealthy elderly man to adopt her. He passed away a year later and she received a large portion of his estate. She then married a Marine Corps major. They divorced. Her fifth husband was her lawyer. She actually married him twice.

Husband number seven told the LA Times, "If you were to meet her and talk to her, you'd think she's just the greatest person you ever met."

In 1991, she married a man named Gerald Boggs in Steamboat Springs, Colorado. When Gerald Boggs learned that she was also married to someone else, he hired a private investigator to look into her past. He annulled the marriage and had all of her assets frozen. In response she sued him for a hundred thousand dollars. About two weeks before the trial was set to begin, in October of 1993, Gerald Boggs seemed to be trying to go back to his normal life.

Dave Norris: He had come into work, as he always did. He ran the hardware store in town.

Phoebe Judge: We're hearing the story from Dave Norris. He spent more than 40 years as a professor of integrative physiology at the University of Colorado.

Dave Norris: And he would come in in the morning and he would open up the shop. And his brother, who ran the store with him, would come in later and take over. And then he would go to the restaurant just down the street called The Shack, and there he would have his usual breakfast. In fact, it was so standard that when they saw him coming down the street, the waitress would even tell the cook to go ahead and prepare his breakfast, which was always hash browns, eggs, and toast.

Phoebe Judge: On this particular day, Gerald Boggs wasn't feeling well. He went home from the hardware store early. The next morning, when his brother got to the store, he found it was still closed.

Dave Norris: And so he opened it up and called his brother, but he got no answer. And he tried several times during the day to contact his brother and got no answer. So at the end of the day, he closed up the store and went to his brother's home, where he found him. He had been burned with a stun gun, he'd been hit on the head with a shovel, and he'd been shot three times. Needless to say, he was dead.

Phoebe Judge: His wife, Jill Coit, was the primary suspect. But, she had an alibi for that evening. She was on a camping trip with her new boyfriend, more than 150 miles away. Investigators went around and around, trying to piece together what happened hour by hour on the day he was killed. All they knew for sure was that he'd been seen at The Shack having his usual eggs, toast, and hash browns.

Dave Norris: And so the question was: had he had another meal before he was killed? And in this particular case, we were asked to look at the stomach contents.

Phoebe Judge: The 'we' he's referring to is himself and a botanist named Jane Bock. They were colleagues at the University of Colorado. And when they looked at the contents of Gerald Boggs' stomach, they found two things: potatoes and onions.

Dave Norris: Now it turns out that The Shack claimed that they never put onions in their hash browns. So that could have suggested a later meal that also had potatoes in it.

Phoebe Judge: Which would mean he was killed in the evening, the time when his wife had her camping alibi.

Dave Norris: However, we asked them to go and get us a sample of the hash browns from The Shack. And so the investigator went there and he had them cook him up some hash browns, and he watched the chef prepare them. And on one side of the grill, he was cooking onions, and on the other side, he was doing hash brown potatoes. And then he took a spatula and he turned the potatoes. He took the same spatula and turned the onions. And then again, he turned the potatoes. And when we got the sample, of course, it contained potatoes and onions.

Phoebe Judge: Which meant his last meal was what he'd eaten at The Shack, and that he was likely killed during the day, a time when his wife had no alibi. This was sufficient evidence to get a search warrant for her property, where investigators found a stun gun and charged her with murder. Jill Coit was found guilty, and is currently serving a life sentence without the possibility of parole. Incidentally, about three years into her sentence, she put out a personal ad to see if anyone else wanted to get married.

[Music.]

Jane Bock: Dave tells me we've done probably a hundred cases, but I would guess it's 60 to 70 of them were stomach contents.

Phoebe Judge: Jane Bock.

Does digestion stop when you die?

Jane Bock: Yes. It's interesting, because there's a valve that leads from the stomach to the small intestine. And that valve snaps shut at death.

Phoebe Judge: The valve is a band of smooth muscle, and when it snaps shut it creates a perfect little evidence locker — for those willing to look inside. I'm Phoebe Judge. This is Criminal.

[Music.]

The first time forensic botany was used in a courtroom in the United States was after Charles Lindbergh's infant son was kidnapped in 1932. He was taken from his nursery on the second floor of the Lindberghs' home. Someone had placed a homemade ladder under the window, and a ransom note for \$50,000 was found on the windowsill. The baby was found a little over two months later, buried on the side of the road. Police traced the ransom money back to a German man named Bruno Hauptmann. A plant anatomist named Arthur Koehler compared the wood on the homemade ladder to the wood in Hauptmann's attic, and it was a match. Koehler's testimony set a precedent for the admission of botanical evidence in trial. But Jane Bock and Dave Norris weren't trying to follow in Arthur Koehler's footsteps. They love teaching, love their students. They liked mystery novels, but had no interest in real detective work. Until 1982. Jane got a call from a coroner friend in Denver.

Jane Bock: He played a trick on me, kind of. He said, "I'm dealing with a homicide here, of a young woman. We want to know what her last meal was. Do you think you could look at her stomach contents and tell me what kind of plant food she ate at her last meal?" And I said, "No." And he said, "Why not?" And I said, "Because it'll look bad and smell bad. That's why I'm a botanist." And he said, "What if I just sent you slides?" And I said, "Oh, okay, sure. I love the microscope. I'll be glad to take a look." So I thought, since we don't really have that varied a diet in plant foods, maybe 75 species at most, I might be able to help him.

Phoebe Judge: She put the slides under her microscope, and while she didn't know exactly what she was looking for, something was familiar.

Jane Bock: We had just looked at some cabbage in one of my anatomy classes, and I said, "Gee, that's a ringer for cabbage." And the bean was so much intact that it just made sense that that's what it was. But that was strictly hunch and seat-of-the-pants stuff.

Phoebe Judge: She wanted to be sure, so she went to the store and picked up some cabbage and pinto beans and chewed them up herself. Then she made her own slides to compare.

Jane Bock: And very quickly I knew I was in over my head, because I have all these degrees in botany and I know absolutely nothing about the intricacies of human digestion.

Phoebe Judge: That's when she called her colleague, Dave Norris. She knew plants. He knew the body.

Dave Norris: My first thought was: this would be a very interesting way to help determine time of death. Because if you know the last known meal, and the stomach contents match that meal, you can fix time-of-death within two to four hours, or maybe less. On the other hand, if it doesn't match, you know that the person had at least one additional meal before they were killed. And in this particular case, the last known meal was with her boyfriend at McDonald's. And often the first suspect is going to be the male associate. And at that time, McDonald's was not a health food restaurant like it is today. And so he thought she must have eaten a different meal. And it turned out that, in fact, she had eaten a different meal.

Phoebe Judge: That placed her time of death in the evening.

Dave Norris: At which time, he was well alibied, and so he was no longer considered a suspect in the crime. It later turned out that she was killed by a serial killer, who several years later, confessed to the crime and indicated that her last meal had been at Wendy's, which in those days did have a salad bar.

Phoebe Judge: That was Dave and Jane's first case. And after that, the phone just kept ringing.

Dave Norris: We had sort of thought this was interesting and it's sort of a one-time deal, but it turned out not to be.

Phoebe Judge: With all of this, the world today, where DNA testing and toxicology and blood samples ... This is one of the simplest things you can do, looking for the plants, it seems.

Jane Bock: It's also one of the cheapest. And the irony is that there are no botanists on staff at the finest — I think it's the finest, although I have some doubts — FBI lab in Quantico, Virginia, where they can do all sorts of wonderful things. I keep encountering them in cases. But they don't have any botanists. And I see them do things where they have a serious lapse of the treating of a crime scene, or even of the victims, when they ignore botany.

[Music.]

Phoebe Judge: What's your favorite part of this work?

Jane Bock: Wondering what in the hell kind of ... Pardon me. Wondering what in the heck kind of plant that was in somebody's stomach contents and figuring it out.

Phoebe Judge: What if it was like a marshmallow, something that seems so fake.

Jane Bock: It's not a plant.

Phoebe Judge: So things like that — meat, marshmallow — you can't tell.

Jane Bock: No. Nobody could, I don't think. And the trick is with meat, you might say, "Oh, well, they had a big steak." Not if it's been in the stomach very long. It just turns to gush, because they don't have cell walls.

Phoebe Judge: Proteins break down, but the cell walls of plants remain visible under a microscope.

Jane Bock: They're just beautiful to look at. They're like little sculptures.

Dave Norris: There's nothing that's gross for a biologist. The only times that I'm aware of someone being grossed out were situations where we were having dinner at our house. And we had some guests there, and someone asked what I did, and we had someone have to leave the table. But other than that, usually people are not obviously grossed out.

Phoebe Judge: But maybe they don't want to hear about it over their dinner.

Dave Norris: Right. In fact, we had a case of a person who robbed the poor box in the Catholic church in the town where he lived. And he also suffered from a disorder known as Crohn's disease, which means when you get very excited, you can't necessarily control your bowel movements. And he had a bout of diarrhea and he left behind some fecal material in the church, which we were able to match to the fecal material that was associated with the pair of blue jeans that he threw into a dumpster. When he was presented with the similarity, he confessed. That was kind of a memorable case. We prefer the cases where there are confessions, so we don't have to go to court.

Phoebe Judge: By 1995, Jane and Dave had been working on forensic botany for 13 years. And they were often frustrated that law enforcement and attorneys didn't see its potential.

Jane Bock: And it makes me so cross. There was one very famous case, and Dave and I were actually going to call up and volunteer our services. It was a TV case. The entire case was on TV, ad nauseum.

Phoebe Judge: Is this the OJ Simpson case?

Jane Bock: Yes it is. And we called to say, "Could we please see the stomach contents of the two victims that resulted from their autopsies?" Because we thought, maybe, we could add a little something to the narrowing down of the time of death. And they weren't eligible. They weren't available, because they were gone.

Dave Norris: There's no reason ever to throw out the stomach contents. It might've been one more piece of evidence that at least the jury could understand. They put a DNA expert in there who totally bored the jury to extreme. They made it too complex for them to interpret. We thought that some stomach content data would have pinned down better the time of death.

Jane Bock: It didn't matter that much to us which side we were looking at his stomach contents for. We just wanted to see what was there and what it might tell about the case.

Phoebe Judge: You're on the side of the stomach. That's the most important thing.

Jane Bock: Absolutely.

Phoebe Judge: They have worked on a number of other high profile homicides. JonBenét Ramsey, Casey Anthony. And in 2016, they published a book called *Forensic Plant Science*, where they describe many of the cases they've worked on over the last 30 years.

One of the cases they write about that really shows how specialized their work is, happened in 2002, in California. A 15-month-old was found dead in a creek. The toddler's mother told police that she'd been in a park near a fountain when a man came, grabbed the toddler, and ran off. She told police she chased after the man until her sides hurt. The forensic pathologist on the case thought there was something odd about the body. There wasn't as much water in the stomach as you might normally see. He described it as looking like a "gentle drowning."

He asked for advice on a medical examiners' listserv, and someone gave him Jane's number. She examined the water in the toddler's stomach and found micro-algae that matched the water in the creek where the toddler was found. But she also found micro-algae from the fountain in the park. When investigators confronted the mother with evidence that the baby had ingested water from both the creek and the fountain, she confessed that she had killed her child and made up the abduction story. She pled guilty to first degree murder.

Jane says the story still haunts her. But when she's in the lab, she just tries to focus on the work.

Jane Bock: I'm not thinking about some poor soul. But if you go in the courtroom, you have to. You just have to. Because there're all these people involved in the case — maybe the mother of the victim or the dad or the children of the victim, and then the people that love the suspect and

believe in her or him. Oh, that makes it very, very hard. It makes it as serious as it should be, of course, no matter which side you're working for.

[Music.]

Phoebe Judge: She retired from teaching in 2000 and devoted herself to forensic work. She splits her time between Colorado and the Florida Keys. At some point, Jane and Dave stopped chewing up food to make their slides. They got graduate students to do it for them.

Jane Bock: We had a grad student that got very bullish about chewing up ... What is that stuff that's in gumbo?

Phoebe Judge: Okra?

Jane Bock: Okra. But we put the pressure on him, because we were paying him by the hour. And he finally went along with it.

Phoebe Judge: He didn't like okra.

Jane Bock: No. I like it.

Phoebe Judge: I like it too.

Jane Bock: I should have chewed it up for him. [Laughs.]

Phoebe Judge: Well, this has been such a nice talk with you, and I thank you for taking all this time to talk with us. It was really interesting.

Jane Bock: Good.

Phoebe Judge: We will put this recording together to make it sound like you and I are kind of in the same room.

Jane Bock: I wish we were, Phoebe. I'd love to know you.

Phoebe Judge: I would like to know you. I mean, this is so ... I would like to be chewing up food for you. [Jane laughs.]

[Music.]

Criminal is produced by Lauren Spohrer, Nadia Wilson and me. Audio mix by Rob Byers. Our intern is Mathilde Urfalino. Julianne Alexander makes original illustrations for each episode of Criminal. You can see them at thisiscriminal.com. We're on Facebook and Twitter, @CriminalShow.

Criminal is recorded in the studios of North Carolina Public Radio, WUNC. We're a proud member of Radiotopia from PRX, a collection of the best podcasts around. Special thanks to Adzerk for providing their ad-serving platform to Radiotopia.

I'm Phoebe Judge. This is Criminal

Jingle: Radiotopia. From PRX.