



Waste Not, Want Not

“I just want a chicken that can run around and be happy.”

VANN BENNETT

Vann Bennett aims to raise pigs on his 30-acre property near Hillsborough, North Carolina. But first he's got to convince a county commissioner to go along with the idea—not because zoning is an issue but because the commissioner happens to be his wife, and Bernadette Pelissier isn't convinced that pigs are a good idea.

“She doesn't want to be a pig-sitter when I'm off giving seminars,” says the part-time farmer and full-time scientist, who is an HHMI investigator at Duke University Medical Center.

If Bennett can find an alternate caretaker, the pigs will live in a post-and-beam pig pen—near the chicken coop—and dine on organic leftovers, including vegetables from Bennett's four-acre garden.

“I try to live sustainably,” he says, “to grow as much of my own food as I can.”

Bennett, who studies membrane proteins called ankyrins, takes issue with the country's current model of food production and does everything he can to raise his own food. “Profit is the overall guiding principle, and that means the way we treat animals is appalling,” he says. “If you knew how

the hens were treated, you'd never buy eggs in a grocery store.”

He gets his eggs from his own hens—a dozen chickens from three heritage breeds: Jersey Giant, Araucana, and Dark Cornish. These older varieties have more genetic diversity than newer, more highly selected breeds of chickens used by commercial producers to supply most grocery chains. These so-called “monoculture” chickens can lay more than 300 eggs a year. Bennett's hens lay fewer eggs, but with much more variety—from the standard brown egg to the lovely blue-green eggs of the Araucanas.

Monoculture chickens raised for meat are highly selected for certain traits, such as thighs so muscular the birds can barely walk, Bennett says. “I just want a chicken that can run around and be happy.”

Bennett traces his love of nature and preference for sustainability to his childhood in Hawaii, where his father, a surgeon, raised chickens.

“We ate a few of our chickens when I was a kid, but my father would always get depressed afterwards,” he remembers. “Still, if you had to kill your own chicken, you'd savor it and use it all; you

Jeffrey McCullough



wouldn't waste so much." Bennett can't bring himself to kill any of his chickens; he trades some eggs to a neighbor for locally raised chicken meat.

Reducing waste is another reason for Bennett's food choices. He feeds his chickens vegetable tops and other cast-offs from his garden or from local grocery stores. Then he uses the chicken manure as fertilizer for his extensive vegetable garden, which he's been tending for 15 years. What his family doesn't grow, they buy locally, if possible.

As he thinks about adding pigs to his resources, Bennett plans to offer fenced plots for neighbors who don't have a good gardening area on their own property. He'd also like to get others involved in harvesting the garden. Many of his plans and philosophies are about building community.

"No one depends on anyone anymore, so we're disconnected."
—Nancy Volkers



WEB EXTRA: Visit the *Bulletin* online for more photos of Bennett and his farm.

FOR MORE INFORMATION: To learn about Bennett's latest research, see "Tag-Team Proteins" on page 50.

Who's Who?

When asked about their careers, many scientists talk about mentors, but few bring up mistaken identity. Not so the Sean Carrolls: a cosmologist at California Institute of Technology, who explores conditions in the universe before the Big Bang, and an HHMI investigator at the University of Wisconsin-Madison, who studies how animals develop and evolve.

Caltech's Sean M. Carroll has had several brushes with fame, courtesy of the muddled monikers. "When I was a postdoc in 1994, there was an issue of *Time* magazine with a cover story about 50 leaders in America under age 40. As a joke, I said, 'I must be in there,' and I was. Sort of." Inside was his name—tied to the biologist's work. "Clearly they had made a mistake," he jokes. "They picked the wrong Sean Carroll."

Years later he was invited to a conference at a villa in the Tuscan hills. "Only after I accepted did the organizer come back, very embarrassed, to tell me I was not the right Sean Carroll."

Both cosmologists and evolutionary biologists can get dragged into arguments with those who try to explain natural phenomena with supernatural explanations, says HHMI's Carroll. "In the blog or Web world, because we both deal at times with anti-science forces, people have contacted us to get clarification about something the other has said."

The two subject areas have another parallel, since both address issues of origins, says the Caltech Carroll. "The two most interesting things are life and the universe, and we are both trying to figure out how they came to be what they are."

Both Carrolls are prolific writers; the Caltech Carroll is a frequent blogger on astronomy and physics and has even blogged, with humor, about his experience as "the other" Sean Carroll.

But the two have crossed paths only in cyberspace. "I would love to meet him," says the cosmologist of the biologist. "I am furiously typing away at my first popular book, and he has written a couple of books that I've enjoyed." They may just meet up one day on the book tour circuit, he says.

HHMI's Carroll is game: "I'd love to meet Sean. My hunch is that we have similar senses of humor." —David J. Tenenbaum

