

Jan 1st, 12:00 AM

# Whose Honey, Whose Hive: Rhetorical Agency in the Colony Collapse Disorder

W. Kurt Stavenhagen  
Syracuse University, [wkstaven@syr.edu](mailto:wkstaven@syr.edu)

Follow this and additional works at: <https://lib.dr.iastate.edu/sciencecommunication>



Part of the [Speech and Rhetorical Studies Commons](#)

---

Stavenhagen, W. Kurt (2016). Whose Honey, Whose Hive: Rhetorical Agency in the Colony Collapse Disorder. Jean Goodwin (Ed.), *Confronting the Challenges of Public Participation in Environmental, Planning, and Health Decision-Making*. <https://doi.org/10.31274/sciencecommunication-180809-17>

This Event is brought to you for free and open access by the Conferences and Symposia at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Summer Symposium on Science Communication by an authorized administrator of Iowa State University Digital Repository. For more information, please contact [digirep@iastate.edu](mailto:digirep@iastate.edu).

# Whose Honey, Whose Hive: Rhetorical Agency in the Colony Collapse Disorder

W. KURT STAVENHAGEN

*Environmental Writing & Rhetoric*

*State University of New York, Environmental Science and Forestry*

*1 Forestry Drive, Syracuse NY*

*wkstaven@syr.edu*

**ABSTRACT:** U.S. beekeepers used distinct, important narratives to define Colony Collapse Disorder, a crisis that continues to kill a third of U.S. honey bees each year and threatens \$15 billion of crops. My analysis of personal interviews with U.S. beekeepers including Dave Hackenberg, former president of the American Honey Producers Association, find beekeepers supply more pragmatic and emplaced narratives than those supplied by scientists and media: rather than define the crisis as pathogenic or a crime-narrative “whodunnit” with singular solutions, beekeepers define it in terms of economics and interactive “field” conditions such as pesticides, watersheds, bee genetics and foraging. Citing the work of Peterson, Lamberti and Schell, I advance the argument that defining “farmer’s narratives” helps better define food-related environmental crises.

**KEYWORDS:** agency, agricultural narratives, colony collapse disorder, honey bees, narrative analysis, rhetoric, rhetorical agency

## 1. INTRODUCTION

Since November 2006, we have lost over a third of our honey bees every year, most of them killed by a phenomenon called Colony Collapse Disorder or CCD for short. A hive is labeled collapsed when it has “no adult bees or dead bee bodies but only a live queen and and a few immature bees still present” (Benjamin and McCallum, 2009, p. 105). Though beekeepers keep restocking hives, their deaths by the billions continue. And though many blame pesticides, metabolites, and pathogens, a volley of studies published in the journals *Science*, *Nature* and *PLOS* still have not reached consensus on causes of the disorder.

Like the death of the canary in the mine, this disappearance of honey bees indicates a crisis with potentially serious economic and environmental consequences. Without their pollination services, over \$15 billion worth of crops are in jeopardy. California’s largest cash crop of almonds, alone valued at two billion dollars, is completely dependent on commercial beekeepers transporting 1.2 million hives to pollinate its groves, every year (Benjamin and McCallum, 2009, p. 4)

My scholarship is in environmental rhetoric and my field is composition and rhetorical studies. My current research examines the narratives and rhetorics surrounding this crisis. I come to it with bias: My father, brother and I cared for 120 beehives for fifteen years before the onset of CCD. My brother still works as a commercial beekeeper in Florida who at one point lost all but three hundred of his 1800 hives. His and other beekeepers’ woes put in bold relief the ties between CCD and the US industrial agricultural system and the ties between beekeepers’ livelihoods, the bees’ demise, and discourses of loss and blame. To earn a living, my brother and many beekeepers feel compelled to at least partly participate in a system that

Stavenhagen, W. Kurt. (2016). Whose Honey, Whose Hive: Rhetorical Agency in the Colony Collapse Disorder. In Jean Goodwin (Ed.), *Confronting the Challenges of Public Participation: Issues in Environmental, Planning and Health Decision-Making* (pp. 227-233). Charleston, SC: CreateSpace. Copyright © 2016 the author(s).

likely propagates the problem by migrating bees on flatbed trucks to pollinate monocrops. Beekeepers become part of a web of industrial agriculture, one in which culpability, like the cause, is hard to trace.

As I examined a corpus of over 100 newspaper articles, four full length nonfiction works, four documentaries and ten personal interviews, I began to see the need to examine narratives. They emerged as dominant rhetorical frames. Not only was the crisis reduced by media to a pathogenic crime mystery, worthy of an Agatha Christie novel, it oversimplified the consideration of certain stakeholders, often consigning them roles as hero detective (scientist) or poor victim (beekeeper).

I seek to first establish the reason agricultural narratives are important, then share narratives researchers have identified, and finally to briefly share and analyze two of the three narratives I discovered through my interviews with beekeepers. As I'll argue, the core narrative is beekeeper's sense of abandonment by science that correlates with their displacement from raising bees only in one region. Responding to the conference call to find "better" ways to define public "expertise," in this paper I define beekeepers' expertise as not only of foraging and the health of bees but the value of emplacement. I share a qualitative analysis of my interviews with ten beekeepers that ranged from 45 minutes to four hours each and also my recording a NY state meeting of beekeepers. Though this research set is limited, it can serve as a launching point to consider the dichotomy between scientists teleological focus and U.S. beekeepers' lore knowledge; between knowledge that breaks the whole into parts or knowledge that assembles the parts into a whole is rooted in contrasting epistemologies of falsification versus emplacement.

## 2. ANALYSIS

Lamberti, Peterson, Horton and Schell establish that agricultural narratives are legitimate forms to research. Lamberti states for those in agriculture, experience is "storied and knowledge-making is a narrative endeavor" wherein context and community shape meaning (Lamberti 2007; cf. Perkins and Blyler, 1999). Peterson and Horton (1998) strongly point to the power of narrative to help in collaborative-decision making. They identify functional metaphors used by the ranchers and claim their analysis help "sanction[s] proposals and counterproposals" to solve environmental issues (p. 174). Schell adds one needs to define rhetorics in play to counter "myth information" of farms and farmers. To better represent the farmers and ranchers they interviewed, Lamberti and Peterson also identify particular narrative constructs they used. Lamberti found that farmers' narratives emphasize 1) a suspicion of "outsiders," 2) a valorization of personal experience as authority, and 3) an emphasis on first-hand observation. Peterson and Horton found Texas ranchers' self-identify as "stewards, or protectors of the land, and [they] identify the essential dimensions of stewardship as common sense, independence, and a unique human-land dimension" (p. 174).

My analysis of U.S. beekeepers' discourse qualifies and confirms these findings. I found three dominant narratives two of which this paper takes up. As in some of Peterson's sub-analysis of narratives, beekeepers claimed independence relative to market forces. Dave Hackenberg, former president of the American Honey Producer's Association invoked a phrase that "somebody has to pay the bill" when describing how mergers between corporations forced him out of the honey and honey packing business and into migratory pollination service. This narrative was repeated in different forms by all the beekeepers: that their ability to be self-

employed was relative to whether they just pursued the sale of honey or put bees on flatbeds and pollinated monocrops. Two other narratives emerged as well, both of which we'll explore today: how beekeepers felt abandoned by scientists & agencies (scientists as "talkers not doers") and that stewardship dependent on good soil ("honey on the flow").

A few illustrative and representative excerpts serve as productive exemplars for defining these constructs beginning with the narrative that scientists had abandoned them. At a conference of the Empire State Honey Producers Association (2011) that I attended, I recorded a question and answer session after Penn State scientist Mary Ann Frazier ended her presentation on the levels of pesticides found in wax samples. The first question was offered by beekeeper Judy Doan who wondered aloud with Frazier, how "we can convince the federal government about what is going on with our beehives if science and beekeepers don't consistently single out a culprit." Doan emphasized pragmatism: she surmised that the U.S. government would not respond until there was a focal point. Any focal point would do. Frazier replied, knowing Doan was hinting that pesticides were a potential posterchild for the crisis, that she didn't think "anyone doubts that there are a lot of pesticides in the hive or that the data we collected is real. The problem is whether this is what is killing the bees."

She further explained that because the cause of CCD was most likely sublethal and because CCD deaths occurred over time, a culprit was hard to single out. She gave a lengthy answer that alluded to the scientific process of falsification—that one had to falsify findings or information in order to eventually come up with a solution to the crisis. Acknowledging the current gaps in research, she empathetically stated, "It has been a frustration, a frustration. We see pesticides at such high levels . . . [but] trying to understand that tipping point has been difficult with pesticides" (Empire State Honey Producers Association Fall Meeting, 2011).

Though her answer was factual and acknowledged Doan's frustration, it also showed two different bases for justified action to counter CCD. The stasis was different. Stasis is an ancient method of invention used by the Romans to determine the nature of the problem for court cases. One asks question of facts, definition, expediency or quality of action, and jurisdiction to then determine the main arena of disagreement. Often the basis of a conflict is two parties not defining the core problem or stasis as the same. Here the issue seems to be that beekeepers define the stasis as expediency while scientists define it as conclusive findings.

Scientists could afford to study a situation outside the exigency of an economic crisis. Not so for beekeepers. Beekeepers were frustrated with scientists because they needed a timely, practical outcome; their livelihood depended on it. Scientists, on the other hand, pursued solutions to CCD through lengthy comparative analysis of data sets, relative to consistent funding. Both beekeepers and scientists agreed funding was a root problem, but beekeepers further expressed that they couldn't wait for science to have the answer. Most beekeepers I interviewed respected Frazier's work and recognized the complexity of scientific funding, but nonetheless faulted scientists and the university system for not defining a probable main cause of CCD that could be pursued politically and garner the U.S. government's attention, policies and funds. U.S. beekeepers saw scientists as the appointed saviors of the crisis who did not clearly explain CCD in larger systemic terms or offer solutions for it. As a result, notwithstanding a few exceptions like Frazier, they often labeled scientists as self-serving and inept: "talkers" rather than "doers."

This conflict could be labeled as simply one of lore knowledge versus scientific knowledge. Yet the issue is ultimately one of jurisdiction: that is whose knowledge counts

where and for what end. Beekeepers expressed not just a protest or represented a simple dichotomy between science and the practice of agriculture. Rather they expressed a sense of abandonment rooted in a belief that each individual beekeeper must solve their own problems and that they are displaced from the land and from resources to help them solve the crisis.

The sense of abandonment is more than just the lack of what beekeepers deem as salient information from scientists. The divide was deemed as personal. In my interviews, beekeepers mentioned they did not believe most scientists understood or cared about their predicament. They doubted whether scientists had enough incentives to find a solution. An excerpt here from the interviews is telling. John Gibbs, a 55 year-old commercial migratory beekeeper keeps 3000 hives in western NY and met with me and four other beekeepers in his honey storage barn. Here, he emphasizes his isolation as a byproduct of scientists' neglect:

You can have the state or Cornell [Cooperative Extension] do research and then you wake up one morning and realize then they're saying, "Hey, you're on your own sucker." You have to get your own microscope. That's called being on your own. All these places get all this research money and I don't know what they do with it. You would think that if they [the scientists] didn't produce, they [agencies] would say screw you; we're not going to give you the research money because you didn't step up to the plate. But I don't know how they go about it.

You can write this down, this is one of my pet peeves: scientists will always talk about and discover the problem but they will not come in with a solution. Scientists, all they do are study things. Solutions? If I gave you the solution, I wouldn't have a job, would I? . . . I have to say it the way it really is. That's the way it is. (2011).

For Gibbs, Cornell [cooperative extension] had not just absconded their duty but left beekeepers all on their own, and not pursuing solutions to maintain their jobs, a sentiment echoed in Gibb's barn by semi-retired 71-year-old commercial beekeeper and former state bee inspector, Art Gerber (2011). While all other beekeepers I interviewed did not go so far as to suspect that scientists purposefully avoided finding solutions, they did express disappointment with the lack of government help (none had been directly contacted by mail or otherwise), and most expressed a sense of abandonment by government entities. 50 year-old Gary Pilatek, a non-migratory organic beekeeper with 300 hives, said he understood there could be viable "disagreement among the scientists" about CCD's cause but that "working with Cornell Cooperative Extension has been very dissatisfying" (2011). Though different in the size of their operations and somewhat in their methods, Gibbs, Gerber and Pilatek express that NY state government sponsored cooperative extensions and scientists were not in touch with them, and when representatives from these groups were asked questions by beekeepers, they were not forthcoming with helpful information.

Given this sense of abandonment, as Gibbs mentioned, some beekeepers felt compelled to even pursue their own science. As Schell notes in her analysis of impinging narratives on farmers, beekeepers respond to a belief that they as individuals should be able to solve their economic plight. An incident at the same meeting shows how beekeepers took it upon themselves to examine bees under a microscope.

Doan: We as beekeepers can't spend our day in a lab.

2nd Beekeeper: You can't afford not to. I had 600 colony operations in Virginia. I have my own HPLC-MS (high performance chromatography-mass spectrometry microscope). It was used, it was old, but it was mine. And I don't know of another beekeeper in the country that has his own HPLC-MS. Let me tell you that thing has answered a lot of questions for me. People that aren't willing to capitalize, learn the technology, you're living in the eighteenth century.

Mary Ann Frazier (Entomologist, University of Pennsylvania): That's unreasonable.

2nd Beekeeper: No [cutting Mary Ann off], it's not unreasonable.  
Attendee 1: I don't know even what you just said. [laughter from the crowd].  
2nd Beekeeper: Well, we should, goddammit. Get with it.  
Attendee 1: Well what's an HPLC-MS?  
2nd Beekeeper: It's a high performance liquid chromatography microscope. It finds things in things.  
Attendee 2: Personally I use a magic 8-ball.  
Attendee 3: Did you have a lot of losses?  
2nd Beekeeper: Oh no, I did a whole lot of stuff with that.  
Attendee 3: But did you have losses?  
2nd Beekeeper: Well, of course I still had some losses.  
Attendee 3: So why have all that information?! (Empire State Honey Producers Association Fall Meeting, 2011).

This bizarre attempt at science and berating of fellow beekeepers for their lack of technological prowess seems to connect with Gibbs's expression of beekeepers being "abandoned" by science and indicates likely the felt sense of abandonment and the public rhetorics of technology as pushing beekeepers to adopt self reliance as their only solution. Here technology becomes a bulwark, a protection mechanism, a means to save oneself from CCD. Schell (2007) notes the public rhetorics of "smart diversification" insist that farmers "can pull themselves out of poverty and ruin" through innovative practices, marketing and precision. The narrative structure is one of "Yankee ingenuity" and the "quintessential American narrative of the underdog or bootstrapper" (p. 96). While such rhetoric can be constructively wed to a discourse of sustainable agriculture, too often it is used outside such context, lauding the lone warrior and his Yankee ingenuity. The "narrative" does not entertain or "question the systemic forces" (p. 97) of government and industry. In this case it fails to even bring up the question of the economic and political forces that inform CCD. Instead every beekeeper was to now be his or her own scientist.

To assemble and sequence: beekeepers don't get practical answers on how to combat CCD from scientists; they feel abandoned by scientists and agencies and they then pursue their own science. Here an implicit claim surfaces: in this brave new world of bees and pathogen and pesticide loads, being a beekeeper alone isn't good enough; one has to be a scientist. Sociologists Sainath Suryanarayanan and Daniel Lee Kleinman analyzed interviews with U.S. commercial beekeepers and the history of U.S toxicology and did find that, "researchers in academia, agro-industry, and federal agencies reject or, at best, equivocate on the beekeeper's knowledge, citing the lack of conclusive evidence from scores of public field experiments by academic and agrochemical industry toxicologists" (e.g., Bayer CropScience, 2010; Ratnieks and Carreck, 2010) (p. 17). Connected to this is how, "since the mid-1980s, the EPA has moved to a non-precautionary 'sound science' approach toward pesticide regulation" wherein the EPA permits chemicals on the market "in the absence of definitive evidence" of harm to human or environmental health (p. 17). Suryanarayanan and Kleinman explain that regulatory officials "privilege the toxicologists knowledge to justify the continued commercialization of the concerned insecticides" (p. 4). The social structures of epistemic domination dictate not only the knowledge but "who can produce this knowledge" (pp. 4, 5). Beekeepers' expertise is dismissed because knowledge necessary to solve the crisis has already been deemed outside their area of expertise.

So the narrative is not just one of dichotomies based on different stasis definitions of the crisis--one primarily defined by beekeepers as economic and needing a quick solution versus the scientific paradigm of falsification. It is rooted in a sense of abandonment and

beekeepers not being valued for their expertise, an expertise not just of forage and soil but rooted in an epistemology of emplacement. They don't have jurisdiction.

In my interviews with U.S. beekeepers, most began and concluded the interviews with a narrative of stewardship that pointed to their knowledge of bee forage. Beekeeper John Gibbs summarized CCD as “all go[ing] back to contamination of the soil. Insecticides, pesticides, fungicides and GMOs. Every corn plant out there will kill seven different things that attack it. It will kill them. GMOS. They're in the melons, they're in the squashes, they're in the cucumbers, they're in the pumpkin they're in every one of them all the way down through.” For Gibbs and four other beekeepers present, soil is deemed the foundational building block of the environment that in turn ties to the forage and nectar flows. Indeed the first item of discussion among the beekeepers I met together was the current crop of goldenrod honey, their love for the taste of basswood honey, and the diverse “uncontaminated” source of pollen from the hardwoods. Gibbs then turned and looked at me and said, “you can write this down, the hardwoods are one of the last places you can get untainted pollen because it's one of the last places in the United States with uncontaminated soil.”

Hackenberg (2011) was just as direct. He said,

We've ruined our bee forage. Round-up is causing bad soil conditions and in the bee business it's wiped out our bee pasture. The bee business is going from being a honey production/pollination/whatever business to a year-round pollination business because of California. If you take California out of the picture, the bees business would go away tomorrow, other than a bunch of hobbyist beekeepers. That's what's driving the economy.

The honey prices in this country are good but the problem of it is the production numbers aren't good enough. It's going downhill. The reason it's going downhill is because we don't have enough pasture and corn is taking over everywhere . . . The bees are telling us this out on the field. They are the barometers of the environment.

### 3. CONCLUSION

Lamberti (2007) notes that many working in U.S. agriculture “privilege an ideology where the demands of the land prevail, and the people accommodate” (p. 10). They claim a “pragmatic awareness” and pride in their “physical locatedness—and separateness” (p. 10). Beekeepers too claim an ethic of accommodation to the land and often an ideology of pragmatism but add knowledge about foraging and a testimony of agricultural displacement. Without consultation of their knowledge, we lose an intuition of the land, of forage and a collection of possible correlating variables—a sense of the whole, not just the parts. We also miss the complexity of interwoven social, economic bases for knowledge challenged now by migratory beekeeping and beekeepers' general sense of neglect by other agricultural stakeholders. If bees indicate the environmental health of an ecosystem, then their caretakers' narratives of abandonment and knowledge needs to be taken seriously. CCD points to a need to listen and integrate this epistemology in the CCD process. As 71-year-old beekeeper Art Gerber intoned, “you take care of the bees, they take care of you.”

ACKNOWLEDGEMENTS: My special thanks to the beekeepers I interviewed for their generous allotment of time.

REFERENCES

- Benjamin, A. and McCallum, B. (2009). *A world without bees*. New York: Pegasus.
- Empire State Honey Producers Association Fall Meeting (2011, November 19). "Nancy Frazier Question and Answer Session." Syracuse, New York. Digital Recording.
- Hackenberg, D. (2011, November 29). Personal interview.
- Haller, C. R. (2013). "Conjuring the farm: constructing agricultural places in U.S. schools." In *Environmental rhetoric and ecologies of place*. P. N. Goggin (Ed.). New York, NY: Routledge.
- Gerber, A. (2011, November 9). Personal interview.
- Gibbs, J. (2011, November 9). Personal interview.
- Lamberti, A. P. (2007). *Talking the talk: revolution in agricultural communication*. New York, NY: Nova Science.
- Pilatek, G. (2011, November 9). Personal interview.
- Schell, E. (2007). "The Rhetorics of the Farm Crisis: Toward Alternative Agrarian Literacies in a Globalized World." In *Rural Literacies*. K. Donehower, C. Hogg, & E. Schell, (Eds.). Carbondale, IL: Southern Illinois UP.
- Suryanarayanan, S., & Kleinman, D. L. (2013). Be (e) coming experts: The controversy over insecticides in the honey bee colony collapse disorder. *Social Studies of Science*, 43(2), 215-240.





