Listen In: Pesticide Spray Drift on PFI Farms

by Liz Kolbe

In November 2012, horticulture farmers at the PFI Planning and Priority-Setting Meeting identified pesticide spray drift as the top concern and research priority. Many people whose farms are hit with spray drift feel powerless, alienated and unsure of the proper next steps. The farmers featured below agreed to share their spray drift experiences as part of our ongoing work on pesticide drift. All of the farmers featured in this article have reported an incident to the Iowa Department of Agriculture and Land Stewardship (IDALS), however, this list represents only a small sampling of PFI farmers who have been affected by spray drift, and many farms have been hit with drift more than once. These stories are offered to provide a glimpse of the experience, to increase understanding and open dialogue.

Anonymous Farmer in Iowa

This farm raised organic row crops and cattle on 900 acres in east-central Iowa. The farm is no longer certified organic, due in part to issues with pesticide drift.

e were listed on the Sensitive Crop Registry and the Bee List, had "no spray" signs and sent letters to our neighbors every year asking them to be mindful of our organic certification. When we were drifted on in 2008, no one called ahead to warn us of the spraying, which was required under the Bee Rule then. I called the farmer; he blamed the pilot. I then called Kubal's Aerial Spraying and never heard back from anyone. IDALS told me the pilot was from Texas but I never was able to contact anyone. We did not do any financial analysis of losses.

**Between the two seasons [of drift effects] we lost \$75,000 to \$100,000 in expected revenue with no compensation. After nearly a decade of market production, we went out of business. ** – ANONYMOUS We continue to have problems with drift. We now rent the crop land instead of farming it ourselves, and the trees in our yard have suffered. We had an orchard in the back of our homestead. Even in a protected place the orchard was hit and the trees were killed. I replaced the orchard twice before giving up.

This should be a concern for everybody, not just organic people. It takes years to grow trees, and rural landowners put a lot of money and care into their landscape. This is happening all over the state, but people are afraid to say anything that might alienate their neighbors. I just think they should have a little more respect for what we're trying to do too. I don't have time to grow another oak tree. You get to the point where you just give up; you can't have anything.

Jorðan Scheibel (Miððle Way Farm)

Jordan operates Middle Way Farm near Grinnell. 2013 was the farm's first year; Jordan had 15 CSA customers and sold at the Grinnell Farmers' Market. The text below is an email written to the PFI Horticulture discussion list after his farm was hit with pesticide spray drift.

ast night I found widespread evidence of herbicide drift across my half-acre market garden just north of Grinnell, including visible damage to zucchini, cucumber, squash, tomato, basil, pepper, basil, carrots and beans from the spraying that took place in the adjacent field on Tuesday evening. In addition, amaranth and other weeds throughout the area [that was] drifted on are showing damage, so I assume that adjacent crops that seem unaffected (kale, broccoli, cabbage...) have herbicide residue on them. The farthest I found damage was 130 feet from the field, which makes my 30-foot buffer strip look like a joke. I was present at the farm when the spraying took place. The operator informed me he was spraying Roundup and atrazine, and there was a breeze from the north and east (from field towards garden). When he made his pass by my garden, he drove slow with the boom low and pressure down. I don't know if the drift occurred during this pass or if it came from farther in the field where he was far less cautious in spraying.

I have already written an e-mail informing my CSA members what happened and letting them know that I would, out of caution, not be including certain crops in the [next] share delivered. Unfortunately, I sold several crops at farmers market yesterday, before I was aware of the drift, that may have had residue on them. I don't know what to do about this. I want customers to be informed of what happened but I don't want to cause unnecessary panic or spend a lot of time and energy trying to track people down. I



advertise myself as chemical-free and I feel I unwittingly misled customers, and I now have to be as up-front as possible about what happened, while at the same time not destroying my reputation and ability to continue to operate as a chemical-free producer in the Grinnell market.

I also have a lot of concerns about whether I will be able to market the crops that were sprayed and whether the ones showing damage will recover or need to be replaced. I don't know what concentration of herbicide is present on the plants and whether they are or will ever be safe to consume. At this point in the season I don't know if I can replace transplants that have been in the ground for a month or more.

I have contacted the IDALS pesticide division by phone (left a message) and e-mail. The landowner (who owns the land I lease and the conventional field) is aware of what has happened but is occupied all day. The land is custom-farmed, not rented, and we have talked about how to prevent drift from happening, apparently to no avail. I had a drift catcher from the Pesticide Action Network taking air samples since immediately after the spraying took place on Tuesday night and should have evidence of the drift, but the visible evidence is already overwhelming and I've taken numerous photos. I've been told that it seems unlikely Roundup and atrazine would drift in this way and that there may have been other herbicides in the tank, or that the tank was not cleaned thoroughly after having other herbicides in it.

Any and all advice you may have for me in this situation is welcome. I know a number of you have already gone through this. ⁴⁴When we were drifted on in 2008, no one called ahead to warn us of the spraying, which was required under the Bee Rule then We continue to have problems with drift. We now rent the crop land instead of farming it ourselves, and the trees in our yard have suffered.⁹⁹ – ANONYMOUS

Anonymous Farmer in Iowa

Prior to closing their farm business for reasons associated with drift, this farm family in northeast Iowa was a staple fruit and vegetable producer for area farmers markets.

didn't see them spraying; I heard from a neighbor. We had our hoop house fans running, so the chemical was sucked inside. A couple days later I noticed some issues with plants in the hoop houses and out in the field. I waited a couple more days, then called IDALS and the neighbor who owned the field. The neighbor told me what the co-op had sprayed and said, "That's why they have insurance; I guess you should call." The neighbors were helpful. I called the co-op. They said, "We'll come take a look at it, but we don't think it was windy the day we sprayed."

IDALS came and took samples. Three times I took samples to agronomists at Iowa State University, who told me it was herbicide damage. Another ISU agronomist came out and took pictures. Though we all thought it looked like herbicide damage, it didn't look like Corvus damage (bleaching, ALS-inhibiting); it looked like a growth-regulating herbicide. But because the co-op's records said they sprayed Corvus, IDALS only tested for Corvus active ingredients. Those tests were negative for the chemicals. No one else in the area had sprayed. The co-op even sent out an insurance investigator that did everything to convince me it was an environmental issue and not a pesticide issue.

I called three lawyers, but the folks at ISU seemed to change their tune, said it could

have been environmental damage and they couldn't tell from the photos I had. Other photos taken by the agronomist had been lost. No one wanted to work against the co-ops.

The next year we had residual problems in our hoop houses. The time required to safely plant vegetable crops after herbicides is often over a year – for Corvus it's 17 months. Between the two seasons we lost \$75,000 to \$100,000 in expected revenue with no compensation. After nearly a decade of market production, we went out of business. I was angry about this for a couple years. I was naïve to think the co-op would own up to its mistake. I should have looked for legal support earlier.

These stories (and others available on the Practical Farmers blog) serve as a companion to Summary of Public Record: IDALS Pesticide Bureau Case Files for Alleged Spray Drift to Organic, Fruits and Vegetables, and Horticulture 2008-2012, available on the PFI blog (www.practicalfarmers.org/blog/2014/ idals-case-file-summary-pesticidedrift-2008-2012). Practical Farmers also plans to publish a drift response protocol and organize Drift Catcher trainings with Pesticide Action Network.

To learn more about responding to drift events on your farm or property, and seeking compensation, watch the PFI farminar on Feb. 25, titled "Pesticide Drift: Response and Compensation."