

TESTIMONY for MN House AG Policy & Finance Committee February 14 2022

My name is Mary Jo Forbord. My husband Luverne and I are lifelong Minnesota farmers. We farm the land where Luverne grew up in Langhei Township of Pope County, and I grew up on a farm 20 miles away in Swift County.

I am submitting testimony today because another round of avian flu is starting to make the news, and the Board of Animal Health is asking for money for diagnostic equipment. My testimony provides evidence that the Board of Animal Health has not enforced standards and statutes for which they have authority, and that diagnostics must be paired with preventing potential disease vectors and pollution, thereby protecting human health.

Our farm is 6 miles from the original outbreak of avian flu in 2015. In the late winter of 2016, rotting turkey carcasses were piled in a field next to our farm. The pile was visited by raptors, dogs, coyotes and perhaps many more species, dragging the partially decomposed carcasses onto our certified organic land. The wind blew insecticide bags that had been discarded with the carcasses across our land, and the stench was horrid.

Because the same farmer who piled the non-composted carcasses also sprayed a pesticide in conditions that violate "the label is the law" rule, I filed a complaint with the Minnesota Department of Agriculture (see pages 1-4). When MDA sent inspectors out, they stepped over many turkey carcasses and body parts on our land, but that it was not within their authority to do anything about it. Steve Lawrence agreed to communicate with Board of Animal Health representatives about the issue, as it is the Board's responsibility to assure that animal mortalities are composted properly to prevent disease and pollution (see pages 5-12).

I view the BAH's response to these important issues as woefully inadequate to enforce Minnesota's composting law, and unfortunately, Board of Animal Health still seems to be turning a blind eye to enforcement on the ground, as evidenced by the 2021 picture of decomposing turkey carcasses piled on frozen ground next to a wetland in Langhei Township (see page 13). The water flows from this wetland to the Chippewa River, to the Minnesota River, and to the Mississippi, affecting water quality for Minneapolis/St. Paul and all points in between and beyond. This is not just our problem way out somewhere in Western Minnesota--this affects all of us.

So I ask, what are we going to do to address this lack of oversight and enforcement that is delegated by the legislature to the Board of Animal Health? Diagnostics are important. I have a whole ream of medical diagnostics, tests and documentation and I still have a rotting turkey carcass in storage if new diagnostic equipment will help us solve the puzzle of what made Luverne so sick in 2016. Prevention is the key.

Thank you for your time and for your consideration of my testimony.


Mary Jo Forbord, managing partner
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Pesticide and Fertilizer Management Division



Telephone/Complaint Record (Minn. Stat. 13.06)

CALL IS: To Complainant From Other
(Check all that apply)

This record is subject to the provisions of the Minnesota Government Data Practices Act regarding data privacy:

- Minn. Stat. 13.44 classifies as confidential the identities of individuals who register complaints with state agencies or political subdivisions concerning violations of state laws or local ordinances concerning the use of real property.
- Minn. Stat. 13.41, subd. 2 classifies as private the identities of individuals who register complaints with state agencies or political subdivisions concerning licensees or applicants for license.

NAME OF CALLER: Mary Joe Forbord		PHONE: 320-239-4054	
ADDRESS: 29731 302nd St	CITY: Starbuck	STATE: Minnesota	ZIP: 56381
CALLER'S RELATION TO THE SITUATION (e.g. neighbor, passerby): Complainant			
<p>5/9/2016 9:36 a.m.</p> <p>Forbord called the MDA Complaint Line to report an alleged pesticide drift onto her property. The application took place on 5-7-2016 at approximately 1:00 p.m. The application was made to field corn adjacent to Forbord's property. Forbord approached the applicator and ask that the application cease due to the strong NE (perhaps Forbord meant SW) winds blowing from the corn field towards Forbord's property. Forbord asked the applicator about the product being applied and determined that it was SureStart Herbicide.</p> <p>Forbord owns 480 acres that span section 14, 15 and 22. The application occurred directly west of Forbord's property in section 14.</p> <p>Forbord stated that the farmer/owner of the property is ██████████ but that it was not ██████████ making the application.</p> <p>Forbord produces Organic Certified fruit and vegetables and pasture for their grass-fed cattle. I informed Forbord of the potential for a FFCO.</p> <p>Forbord also had a concern regarding turkey litter that was applied as fertilizer to the field in question, stating that it contained skeletal remains (avian) and that an empty pesticide bag had blown onto her property after the litter was applied.</p>			
RECORDED BY: Paul Haiker	TITLE: Advisor	DATE: 5/9/2016	TIME: 12:30 p.m.

Pesticide Misuse Complaint filed by Mary Jo Forbord on May 9, 2016

Because the MDA Complaint Form was inoperable on the MDA website, I was advised to file a verbal complaint. I asked if I could have a copy of the written form of my verbal complaint. I was denied a copy, so I submit the following as my written complaint:

Just before 1 pm on Saturday, May 7, 2016, I saw a sprayer arriving to the field directly adjacent to our certified organic farm. I checked the wind speed and found it blowing from the northeast at 14 mph and gusting. Combined with powdery dry conditions, I knew that there was a high probability that spray would drift toward our orchard and the people gathering for our annual celebration there. I went to the field and told the sprayer operator and the owner that people would soon be gathering in the downwind orchard, and that the wind speed, direction and powdery dry conditions made it unsafe to spray. The owner asked me if I had ever had any issues with anything since they began to farm the land adjacent to ours. We have, so I began with "we may have some dead apple trees". He replied in a mocking tone, "Oh, you have some dead apples". That made me angry as since it was already a very difficult day for me--the birthday of our son who died from cancer at age 22, and just before our annual gathering in our son's memorial orchard. I knew that the owner was aware of the situation, since I'd sent him a letter in 2014 after he purchased the land to explain our certified organic farm and the very special orchard just across the fenceline from his land. I asked them if they knew which way the wind was blowing, what speed was, and which direction was northeast. I asked him what he was spraying and what the label says about allowed spraying conditions. The applicator and owner went over to their semi truck where the chemical was stored to look at the labels. I followed them into the truck because I wanted to know which chemical they intended to spray. I saw the label DOW Sure Start on one of the large containers before the owner loudly ordered me out of his truck. I said to them just before I left, "You can't spray today".

I drove to our farm building site told my husband Luverne what had happened. He went out to tend water lines in our pasture, and saw that spraying was in progress. He tried to signal the applicator by throwing some grass in the air to demonstrate the wind speed and direction. The applicator stopped, and Luverne reiterated that we were having a special gathering in our orchard and that the gusty northeast wind and that drifting pesticides and blowing soil threatened people gathering, our cattle that graze on pasture, and our organic certification. The applicator told my husband that he was very experienced in pesticide application and good at it. He said he had the spray nozzles as low to the ground as possible, and that he did not intend to spray the entire field. We also found a used poultry insecticide bag that had blown unto our certified organic land from the owner's fertilizer application.

***Fertilizer Misuse Complaint**

The owner piled and then applied a substance containing bones connected to one another and partially decomposed poultry carcasses. We picked up decomposed poultry parts from our certified organic land. We have these poultry parts in plastic bags. It appears that they have not been properly or fully composted. We wonder if the poultry died during the avian flu epidemic, what pathogens are present, and what risk those pathogens pose to human and animal health.

Mary Jo Forbord

Filed May 9, 2016

**To: Steve Lawrence, Agricultural Specialist, Pesticide & Fertilizer Management,
Minnesota Department of Agriculture, and
Greg Cremers, Inspection Unit Supervisor, Pesticide & Fertilizer Management Division,
Minnesota Department of Agriculture**

From: Mary Jo and Luverne Forbord

Re: Pesticide and Fertilizer Misuse Complaint filed May 9, 2016

Dear Mr. Lawrence and Mr. Cremers,

Thank you for your May 12 inspection and sampling at our farm subsequent to the Pesticide and Fertilizer Misuse Complaint we filed with the Minnesota Department of Agriculture on May 9, 2016. At inspection, you were primarily sampling for a herbicide sprayed by the adjacent landowner on May 7, 2016 after we had told him that weather conditions and people gathering downwind made it unsafe to do so. We await the results of your investigation concerning this herbicide application.

You may recall that Luverne was scheduled to see a doctor the day of your inspection. He is continuing to experience health problems, with the onset of symptoms coinciding with the piling, turning and spreading of a putrid mix of material containing partially decomposed turkey carcasses and body parts, manure and litter used as fertilizer by the landowner on the same field adjacent to the field you sampled. The material contained at least one insecticide, based on the used insecticide bag you saw at inspection that had blown onto our certified organic land. The label states that the insecticide is used to kill beetles in turkey growout houses. The label also states: "If treated poultry litter is to be land applied (e.g. agronomic, horticultural, compost, or other purposes), this product must be used in accordance with a comprehensive nutrient plan (CNMP) or within state or local requirements. Do not apply treated poultry litter to forest lands. Use this product only as specified on the label." The insecticide compound is marketed under the brand name ZetaGard LBT, and contains

Zetacypermethrin (2S),	0.375%
Piperonyl Butoxide	0.750%
(butylcarbityl)(6-propylpiperonyl) ether and related compounds	

The Safety Data Sheet states that both of the listed ingredients are hazardous, with a GHS Classification of Category 4 for Acute Toxicity (Inhalation) and Category 4 for Chronic Toxicity.

At inspection, we pointed out visible portions of the material on our certified organic land. Overspreading onto our land and very windy and dry conditions over many days caused soil and other materials to blow unto our farm, and on Luverne as he works every day on our farm.

The chemicals and processes used on this material before it is brought to the field is unknown to us, yet we are exposed and affected. Active ingredients in pesticides may not be neutralized during composting, and there is less of a chance that they will be neutralized in uncomposted, or improperly or incompletely composted material. Since the material on our field contained the insecticide ZetaGard LBT, we allege that this constitutes pesticide misuse and ask you to investigate it further.

Regarding our fertilizer complaint, as we told you at inspection, we are very concerned about turkey carcasses, body parts and soft tissue rotting in the adjacent field and overspread or carried by scavengers unto and across our fields. We saw eagles, hawks and vultures scavenging the field. The stench was prolonged through piling and re-piling, spreading and incorporation, indicating improper mortality composting, which poses dangers to us, our animals, our land, water and community. Carcasses may contain viruses, bacteria, protozoa, parasites, prions, toxins and drug residues. Disease transmission can and does occur from improperly composted mortalities that did not reach the required temperature to destroy harmful bacteria and viruses associated with livestock, including avian influenza, Newcastle disease, pseudorabies, Salmonella enteritidis, Pasteurella multocida, Erysipelas rhusiopathiae and Salmonella choleraesuis. (Information from Composting Animal Mortalities on the MN Department of Agriculture website).

Spore-forming bacteria and prion agents may not be completely eliminated even with proper composting, but with improper composting, the risk of dangerous pathogens affecting human health increases greatly. Since the material was applied by the adjacent landowner to supply nutrients to enhance the growth of plants, its intended purpose is to act as fertilizer. Therefore, and we ask that you further investigate our Fertilizer Misuse complaint.

Thank you.

Mary Jo and Luverne Forbord
320-239-4054
29731 302 Street
Starbuck MN 56381



Mary Jo Forbord <forbordmj2@gmail.com>

Pictures of insecticide bag and turkey carcass example

Barry Bouwman <Barry.Bouwman@co.pope.mn.us> Tue, May 17, 2016 at 10:48 AM
To: Mary Jo Forbord <forbordmj2@gmail.com>

Hi Mary Jo,

Thanks for keeping me posted on this and I am starting a file on poultry litter in regard to what it is and what happens from the time it accumulates in a barn till the time it is worked into the soil as fertilizer. I obviously am involved in that time period of removal from barns, temporary stockpiling in fields, and land application. On Thursday I will be in a meeting with some fellow Feedlot Officers from our area and several of them are very experienced at working with Poultry operations. I am looking to gain some info from them. Here in Pope County my exposure has been limited but we were the first County to break with Avian Influenza and I did work with stockpiling composted mortalities from in the County as well as coming in from other County's.

I read the info on Zeta Gard and it is typical of most insecticides in regard to inhalation hazard and toxicity in water. I will be checking into who is the licensed person that is applying it and how that all works. As of today I have never been involved in the process of treatment of poultry litter so this will be a new thing for me to have on the checklist. Dept of Ag and BAH take care of Pesticides and mortalities but I am still involved in the correspondence of info to them.

I was in the neighborhood yesterday and checked on the Fosso land west of you and down in sec 35. The sec 15 property appeared to have been incorporated well. It usually goes on at 3 to 4 tons per acre and mixes very well in the soil. It is a lot different to deal with than a 15 to 20 ton per acre application of livestock manure from a feeding lot where there is a lot of material to mix properly. The sec 35 field had a stockpile that is meeting setback requirements and I assumed would be applied and worked in with fall tillage.

I will do a follow up with you on this when I find out some more information and also look at the invasive weed situation in your area and plan to meet up out there with you to discuss it. We will set up time to treat leafy spurge spots. Jessica, from SWCD, and I will be out scouting and treating areas. We will set up a contact time with you. Talk soon. We are swamped in the coming week with projects and trying to beat the next round of rain.



Mary Jo Forbord <forbordmj2@gmail.com>

Pictures of insecticide bag and turkey carcass example

Mary Jo Forbord <forbordmj2@gmail.com>

Wed, May 18, 2016 at 3:46 AM

To: Barry Bouwman <Barry.Bouwman@co.pope.mn.us>

Thank you Barry, for your reply and especially for continuing to check into the process of spreading litter with carcasses and insecticides in farm fields, and assessing the environmental impacts while we continue to try to sort out potential health effects. Some people and agencies seem pretty unconcerned about this, but we and Luverne's doctor are quite concerned. We in the process of consulting with the National Farm Medicine Center to try to find the cause for Luverne's highly elevated immune system response and symptoms he continues to experience.

Wind and dry conditions seem to make this situation a whole lot worse, as we can see the soil and other materials blow and contaminate surrounding fields. The stench is quite prolonged when the pile sits for weeks, then piled and re-piling in the field, spread over days, and not incorporated for a couple more days. In our situation, the material was overspread unto our certified organic land. We see eagles, hawks and vultures scavenging the field, and partially decomposed carcasses are dragged unto our property, probably from coyotes or dogs.

When insecticides are added to the litter and carcasses, isn't the composting process going to be inhibited, due to the insecticide killing off the microbes necessary to break down the material and raise it to a temperature that would kill pathogens?

I'm also concerned that insecticides may be windblown and spread over a large area, causing harm that we are missing by not considering the entire process.

Barry, thank you for your work and initiative, and for working with others to put seamless processes and accountability in place to protect our health.

Mary Jo Forbord

Mary Jo Forbord
29731 302 Street
Starbuck, MN 56381



Y-TEX

ZetaGard™ LBT

(Litter Beetle Treatment)

Insecticide

Dust Treatment For Control of Darkling Beetles (Lesser Mealworm) in Poultry Litter in Chicken Broiler and Turkey Growout Houses.



Active Ingredients

Zetacypermethrin (2S)	
1-S-Cyano (3-phenoxyphenyl) methyl (±) cis/trans 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate	0.375%
Piperonyl Butoxide (butylcarbityl) (6-propylpiperonyl) ether and related compounds	0.750%
Other ingredients	87.5%
Total	100%

*Cis/trans ratio Max. 95% (±) cis and Min. 25% (±) trans

EPA Reg. No. 99039-20

EPA Reg. No. 395787-1

KEEP OUT OF REACH OF CHILDREN

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or the toilet. Wear long sleeved shirt and long pants, socks, shoes and gloves.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

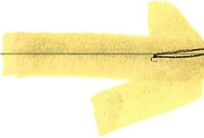
Chicken Broiler Houses and Turkey Growout Houses:

There is a maximum use rate of 50 pounds of product that can be applied in "broiler," and turkey growout houses per flock of birds. The application can be split into two 25 pound applications, or one single 50 pound application per flock. These applications should be applied to the litter at the 25 lb rate at the 25 lb rate at the 25 lb rate.



ANIMAL INSECT CONTROL

Animal	Pest Problem	Insecticide Formulation	Method and Rate	Restrictions/Remarks
POULTRY	Litter Treatments for Fleas, Lice and Mites (including northern fowl mites)	Sprays Rabon 50% WP (tetrachlorvinphos)	For floor management/roost paint, make 1% solution (1/2 lb Rabon 50% per 3 gal water). Spray finished solution into cracks and crevices at rate of 1 pt solution per 100 ft.	No withholding period from last application to slaughter. Read label directions carefully.
		Ravap EC (23% tetrachlorvinphos and 5.3% dichlorvos)	Mix 1 gal of Ravap in 50 gal water. Use 1-2 gal of finished spray per 1,000 sq ft. Spray evenly for penetration to litter surface. Spray walls, roosts, cracks, crevices and interiors thoroughly. Spray birds lightly. Mix EC with water as directed on label.	
	Litter Beetles (Darkling beetles, black bugs, lesser mealworms)	Dusts Rabon Beetle Shield (3% tetrachlorvinphos)	For roost paint, mix 1 lb of Rabon Beetle Shield with 1 pt of water to make a slurry (will treat 100 ft).	Check label. No waiting period between application and slaughter.
		Rabon 50% WP (tetrachlorvinphos)	Mix evenly throughout top layer of box using 2.5 oz per 50 birds.	No waiting period between application and slaughter.
		A litter beetle treatment/monitoring program should be maintained year-round to reduce litter beetle populations and damage caused by this pest. Frequent removal of litter and replacement with fresh shavings in poultry houses can help reduce beetle populations. Litter beetle populations at outbreak levels are difficult to control. Loss of insecticide susceptibility has been observed in some parts of the country; therefore, periodic rotation of insecticides from different insecticide classes should be considered. The life cycle from egg to an adult darkling beetle ranges from about 40 to 100 days, indicating that classes should be rotated every 2-3 flocks (in broiler production) depending upon growout duration.		
		Pyrethroid Insecticides ZetaGard LBT (0.375% zeta-cypermethrin (2S), 0.750% piperonyl butoxide)	Apply from 25 to 50 pounds per broiler or turkey growout house (see remarks to the right). Applications should be made with a drop-type dust/granular spreader in bands under feed lines and along walls. See product label for more details.	For use in chicken broiler houses and turkey growout houses. DO NOT apply with power duster equipment. DO NOT enter or allow others to enter until dusts have settled. The maximum use rate is 50 pounds of product per broiler or turkey growout house. The application can be split into two 25-pound applications, or one single 50-pound application, per flock. These applications can occur as one application at the 50-pound rate prior to the flock being placed in the broiler house, or as one application at the 25-pound rate prior to the flock being placed in the broiler house and a second 25-pound application occurring not later than three weeks prior to shipping the birds for slaughter. If one single application is made at the maximum rate of 50 pounds, slaughter cannot occur sooner than six weeks after application.
		Tempo 20 WP (cyfluthrin) 9.5-gram packet or 50-gram powerpack OR Tempo SC Ultra (11.8% beta-cyfluthrin)	Two 9.5-gram packets (19 grams) or two Tempo scoopfuls of 20 WP in a water-based spray per 1,000 sq ft. Four level teaspoonfuls also equals 9.5 grams. Mix 15 mL per gallon of water. Apply as a general spray or to cracks and crevices.	DO NOT apply while birds are in house. DO NOT make application to feeding or watering equipment. When applications are made with existing manure and litter on the floor, allow that accumulation to dry enough to form a crust before applications are made. DO NOT apply when birds are present. DO NOT contaminate feed, water or feeding and watering equipment with spray.
		Grenade ER, OxyFly, Cyonara 9.7 (9.7% lambda-cyhalothrin)	Mix 0.8 oz (24 mL) per gallon of water. Apply to walls and floors following cleanout.	Also helps in fly control if applied to fly resting areas. Apply only when birds are NOT present. DO NOT contaminate feed, water or feeding and watering equipment with spray.
		StandGuard (5.9% gamma-cyhalothrin)	Mix according to label. Apply to walls and floor following cleanout or after growout.	Follow label directions. Apply only when birds are NOT present. DO NOT contaminate feed, water or feeding and watering equipment with spray.



Telephone Note

I spoke with Allison Rosnow (MDA) on May 30, 2016 (2:36pm) about whether ~~_____~~ Farms needed an MDA license to apply compost on fields. ~~_____~~ Farms does collect compost (poultry) from area operations, however, they do not collect any fee for this. Fact is, they usually pay for this natural fertilizer. That said, ~~_____~~ Farms does not need an MDA license for* manure (compost) application.

Steven Lawrence, ACT

* Rosnow says compost does meet the definition of manure and/or animal waste.

Telephone Note

On June 1, 2016 (1:39 pm), I spoke with Brian Ziemer who works as an Ag Advisor for the MN Board of Animal Health (BAH). Ziemer knows the ~~farm~~ ^{redacted} operation and validated that they use (often buy) turkey compost for their personal farm fields. Ziemer also tried to explain why some of the compost "probably" wasn't completely broken down. Sometimes the haulers take compost from all the windrows, when they should only take it from the rows that have had enough time to break down. Ziemer said he spoke with Mary Jo Forbord about this. Ziemer did not believe there was any violation of BAH rules. Barry Bowman, Feedlot Officer for Pope and Swift County also feels no local ordinances were violated.

Steven Lawrence, ACI

1721.0740 COMPOSTING ANIMAL CARCASSES.

Subpart 1. **Composting process.** Unless otherwise authorized by the board, all of the following criteria must be met for the disposal of animal carcasses by the composting process:

- A. carcasses must be covered with litter at all times;
- B. the ratio of carbon to nitrogen in each compost pile must be between 15:1 and 35:1;
- C. each pile must be turned completely at least once every 21 days to add essential oxygen to the composting material;
- D. the composting material must be kept moist to ensure proper bacterial growth; and
- E. the compost pile temperature must reach a minimum of 130 degrees Fahrenheit during each of two heating cycles during the composting process.

Subp. 2. **Pest control.** Flies, rodents, and other vermin must be controlled around composting facilities.

Subp. 3. **Finished product.** The finished product resulting from the composting of animal carcasses must not contain visible pieces of soft tissue.

Subp. 4. **Inspection.** The board may inspect composting facilities to determine if the composting process meets all of the requirements of this part.

Statutory Authority: *MS s 35.03*

History: *37 SR 1396*

Published Electronically: *April 4, 2013*

Illegal by MN Statute, Board of Animal Health jurisdiction.

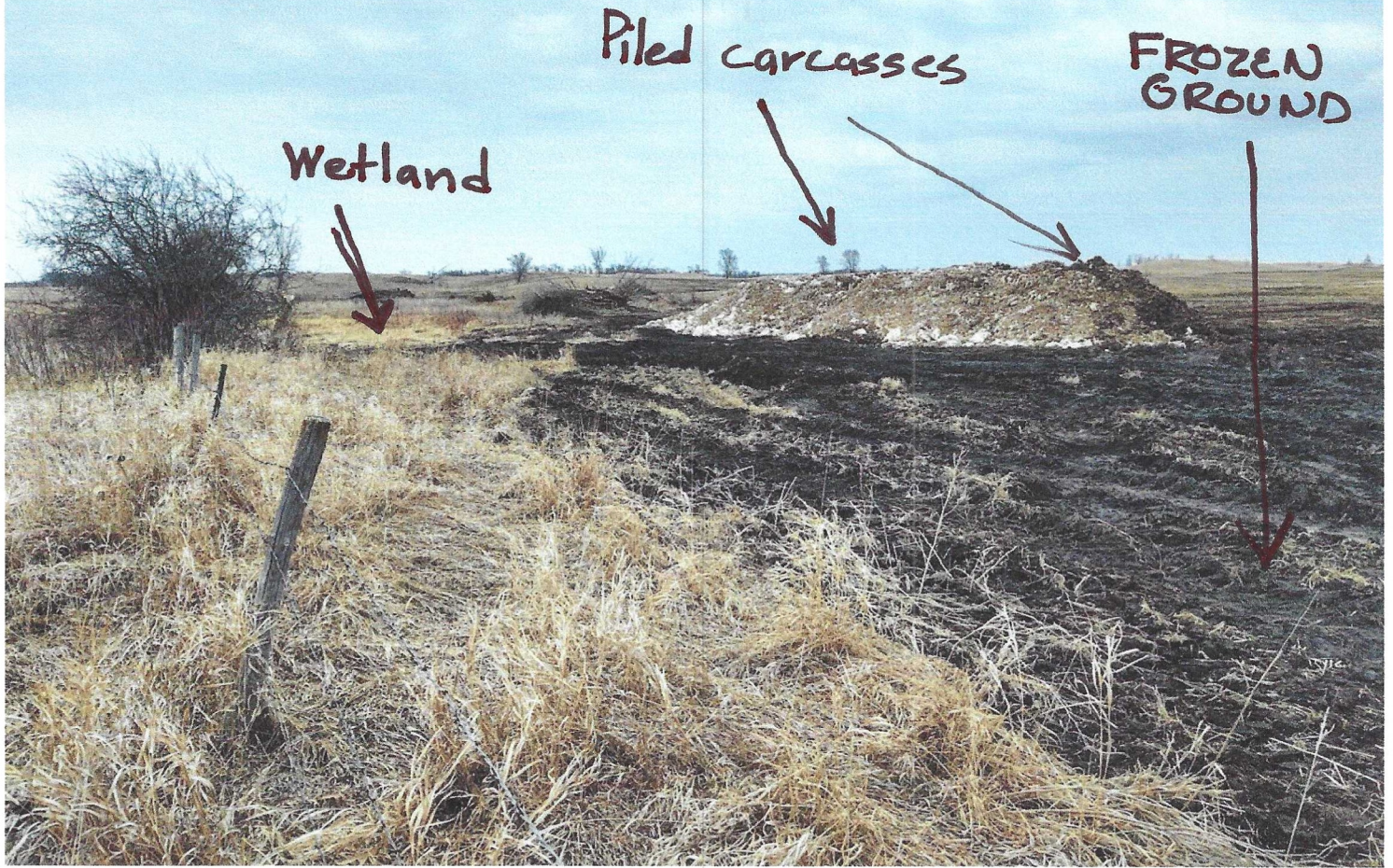


Photo taken March 21, 2021 Langhei Township, Pope Co, MN
Showing decomposing turkey carcasses. The
white color at the base of the pile is
not snow - it's turkey feathers attached
to carcasses. Nancy J. Ford 2-11-22