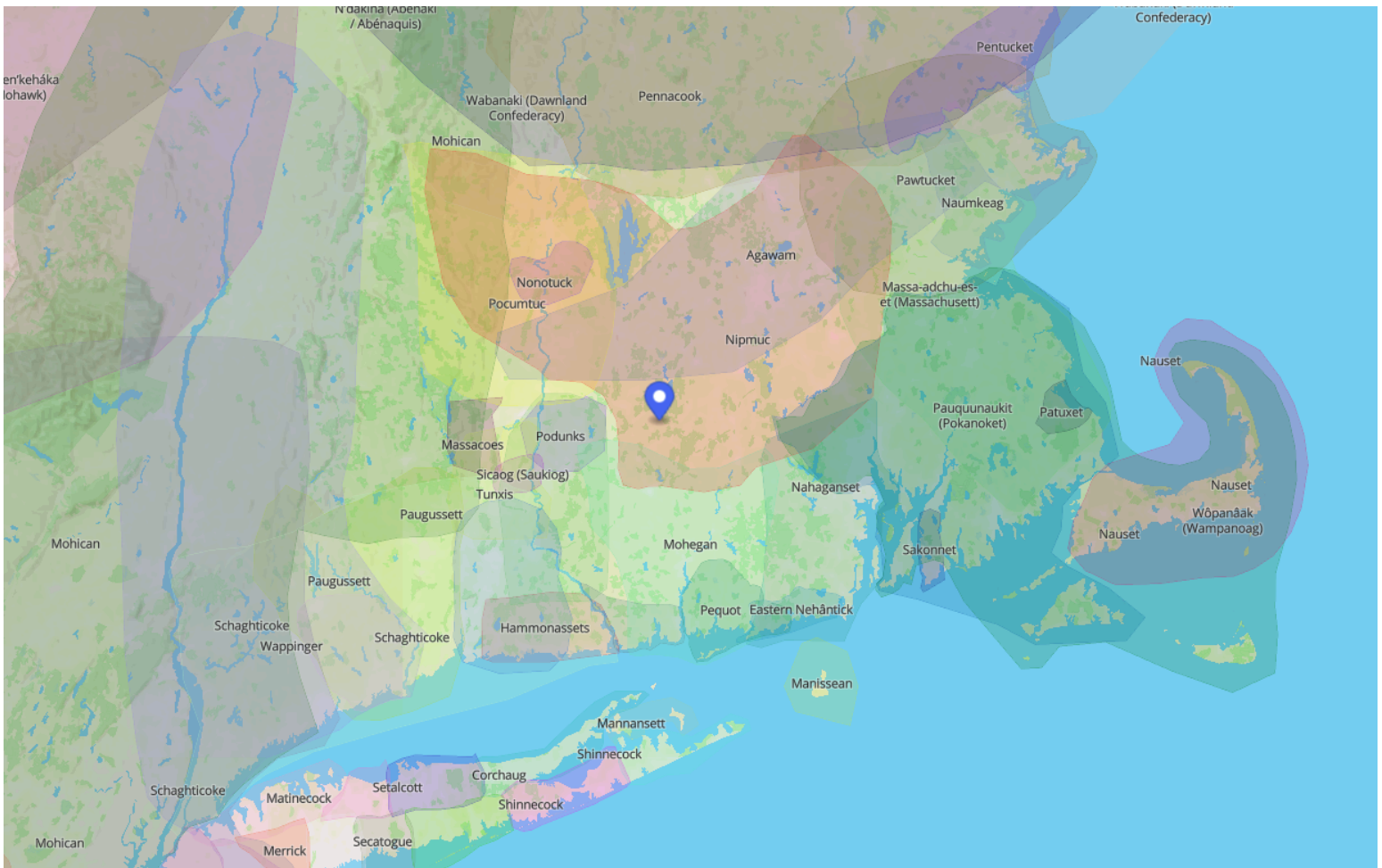




# BOTL Farm

Operations, Management, and Health Plan



<https://native-land.ca/>

# General information

## Document purpose

Although the original purpose of the document was to meet A Green World's (AGW) Animal Welfare Approved (AWA) and Grass Fed certifications, it has blossomed into a larger collection of information about our farm and how we operate. We have chosen to share it publicly because we believe in full transparency not only to our customers, but to support dialogue with and the development of similar farms and as a resource to like-minded farmers. This is not a full business plan, it is an animal health and management plan. The document contains farming jargon that may not be common vernacular to non-farmers but defining all the terms would make the document unreadably long. Note that the public version of the document has had contact information redacted for privacy.

## Executive Summary

As idealistic, first-generation farmers, we strive to make the world a better place by showing that if animals are raised in certain ways, meat and eggs can be an ethical, humane, and sustainable (not to mention truly delicious) part of our diets. Our foundational commitment as a burgeoning farm and business was to prioritize full-circle sustainability over profit and build accordingly. We have developed a pasture-based, intensively-managed rotational grazing farm where we raise

- grass fed goats
- corn-free, soy-free, non-GMO, and organically-fed pigs
- corn-free, soy-free, non-GMO, and organically-fed laying hens
- bees!

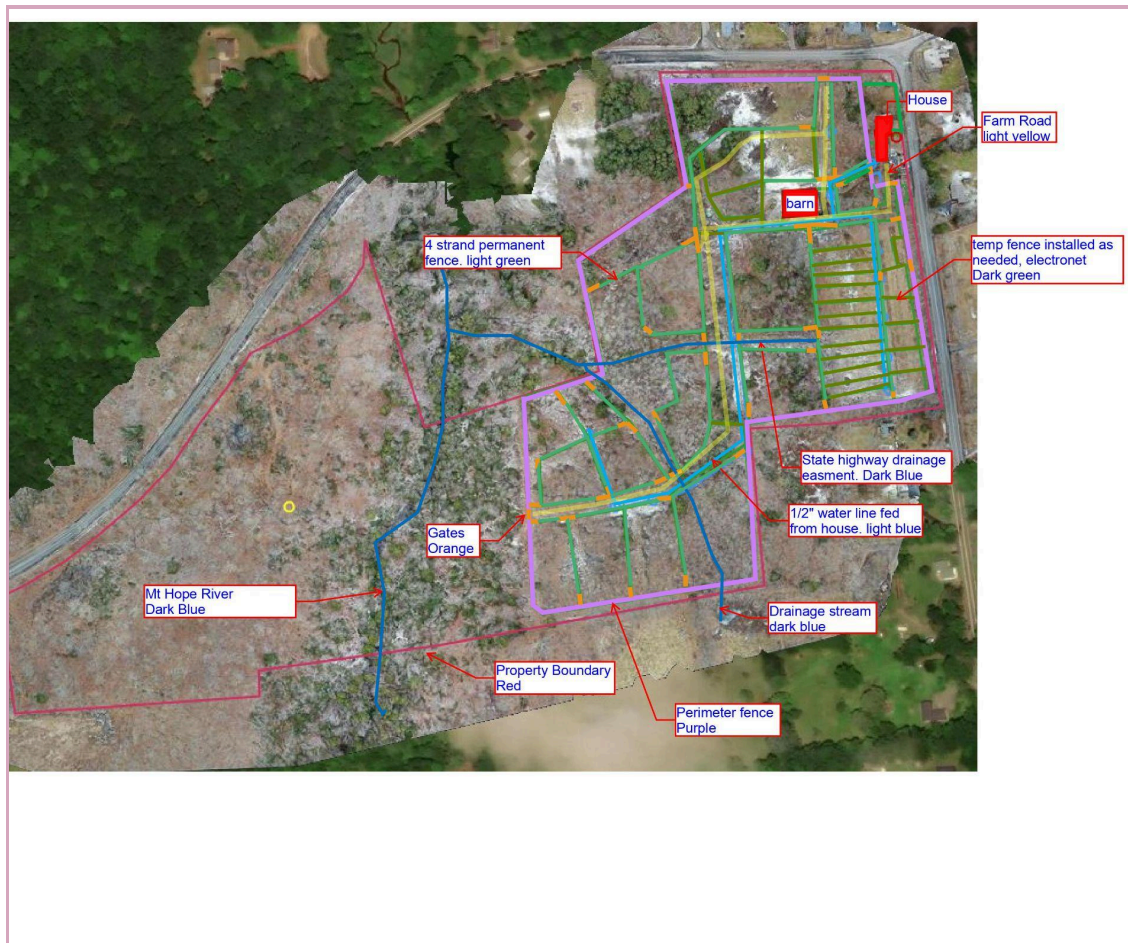


Our animals (okay, not the bees) live on pasture all year long and are never confined (not that we confine bees); they graze and forage as long as each season permits then move to winter paddocks. The animals move between dozens paddocks inside of our perimeter fence that encloses 20 acres of pasture and transitional silvopasture.

Groups of animals move to new paddocks, along with their supporting waterers, feed bowls, mineral feeders, and shelters. The groups spend 1 - 10 days in a paddock depending on paddock size, season, pasture quality, group size, weather (past, current, and anticipated), and time.

- The goats prefer to browse (eat medium-height shrubby and woodier things with their heads held at the height of their bodies),
- while a pod of pigs will rampage through foraging and rooting (using their powerful snouts to unearth roots, grubs, nuts, and seeds)
- chickens follow to scratch and peck around, including disrupting the manure left by the previous groups and feasting on all the bugs, worms, ticks, parasites, and mice they can locate (chickens are definitely not vegetarians).
- Meanwhile, the bees are busy pollinating plants, trees, grasses, and the neighbors' plants (although honestly we're not sure they pollinate our fruit trees [but the natural population of carpenter bees takes care of it] but they make the whole chestnut tree buzz beautifully at the height of summer).

To support all this moving around, we permanently fenced 21 paddocks and use portable fencing to create the remainder.



We raise heritage breed animals who have the genetics and instincts to thrive on our pasture-based farm, plus have the hardiness and flexibility to adjust to our New England climate of hot summers and cold winters. Our animals breed according to their natural cycles and birth unassisted on pasture and, most adorably, they have the room to explore and interact with their surroundings (the best is each spring when the nanny goats teach the kids to climb). Raising animals in this way makes our farm sustainable compared to conventional farming practices -- the animals are improving the quality and fertility of the land.

## How to use this document

This is meant to be considered as a whole body, an interconnected and living document. Reading a single section or subsection will not provide an adequate view of how the farm operates. Sorry, but you have to read the whole thing!

## Contact information

1. BOTL Farm - 859 Westford Rd, Ashford CT, 06278
2. Owned and operated by - Danielle Larese and Nick Weinstock
3. AWA Farm ID - CT003078F
4. Phone numbers
  - a. 860-333-8810 - Farm
  - b. Redacted - Nick
  - c. Redacted - Danielle
5. Farmer email addresses
  - a. [nick@BOTLFarm.com](mailto:nick@BOTLFarm.com)
  - b. Redacted
6. Website [BOTLFarm.com](http://BOTLFarm.com)
7. Facebook [facebook.com/BOTLFarm](https://facebook.com/BOTLFarm)
8. Instagram [instragram.com/BOTLFarm](https://instragram.com/BOTLFarm)
9. @BOTLFarm on just about everything



## Sites

1. BOTL Farm
  - a. 41 total acres
  - b. Utilizing 20 acres (as of spring 2026, we are starting to fence in the other 20 acres of our land and hope it to be in use by our next audit)
2. No outlying sites or other locations or leased/borrowed land at another location or subsidiary farms
  - a. Note that our farmOS database has the hay fields we buy from marked on the map, although we do not own or lease them, we just buy hay from the nice hay farmers

## Personnel

1. Nick is the primary farmer and he works full time on the farm
2. Danielle assists as necessary but works full time off-farm
3. There are no employees or additional help

## Pasture Management

### Pasture access

1. All animals have access to pasture
  - a. Goats and pigs are born on pasture and have continual access their entire lives
  - b. When new chicks are placed, they have immediate access to forage but are restricted from ranging until they are 3 - 4 weeks old except when climatic conditions would hamper the welfare of the birds (i.e. we're brooding in the winter and it's too cold for young birds to be ranging)
2. Our paddock sizes vary by location. We use a mix of permanent pasture fencing (each paddock is approx 1/2 acre) and portable electric netting (electronet) which can be set up to make temporary paddocks of various sizes and shapes
3. Goat and pig stocking density is variable depending on which paddock they're in. In our quickest rotations and tightest paddocks we are at 400 square feet (sq ft)/animal and our largest area is 22,000 sq ft/animal

4. New chicks are restricted to forage areas with stocking density of 1.5 sq ft/chick. After 3 - 4 weeks of age and having access to range, stocking density decreases (but depends on where their roost is and how much electronet range area has been fenced out for them), with each bird having at least 5 sq ft but up to 110 sq ft

## Land Management

1. Average rainfall is 45" annual long-term mean according to UConn. This is becoming more variable, generally higher. In 2023 we received 63", in 2024 we received 61", and in 2025 we received 46".
2. Soil type, according to NRCS, mix of:
  - a. Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony
  - b. Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony
3. We test our soils, supplemental hay, and pasture forages at least once every three years, but typically more frequently
4. Our paddocks are both pasture and transitional silvopasture (transitioning from new-growth woods). There is a wide variety of grasses, legumes and sedges, with predominant orchard grass, red clover, and natives
5. The only soil amendments we add are lime and seed
6. We do minimal frost seeding of red clover, orchard grass, timothy grass, and birdsfoot trefoil. As we convert wooded paddocks to silvopasture, we seed the same mix
7. Our farm runs on an intensively managed rotational grazing system. Rotations are based on forage quality and parasite control
8. Manure is naturally spread during the rotations between paddocks. During winter we deep-bed the heavily manured areas with waste hay and let it compost in place over summer

## Animal Management

### Goat Management

#### General

1. Our goats are purebred Kiko, which we like for several reasons
  - a. Big, meaty breed
  - b. Known for self-sufficiency and hardiness to disease
  - c. High kidding rate
2. We keep 1 breeding buck on farm
  - a. During the 2021-2022 season, we bought in 1 replacement buck
  - b. We generally run a closed herd but we built our current breeding female herd from the same genetic male and it was time to replace him for genetic diversity
3. We keep 10 does
  - a. Increased from 7 does in 2024-2025 season
  - b. Increased from 4 does in 2020-2021 season and 6 does in the 2023-2024
  - c. We generally make replacements from our own breeding stock
    - i. 2021-2022 when we bought in new male buck, we brought in one new doeling as well to diversify current genetics
    - ii. Sadly in 2025, the breeder we were buying breedstock from is no longer in business, so we'll need to find another source for breedstock
4. Average age of our herd is 4 years old
  - a. We retire and cull not based on age but based on performance, general health, genetics, worm resistance, birthing ability, and temperament

- b. In spring 2022 we culled our breeding buck. 50% of our proven does did not kid at all in spring 2022, so we suspected the issue was with the buck. He was also aggressive with humans
  - c. In fall 2024 we culled our Icelandic sheep flock to focus on goats
  - d. In spring 2025 we culled two does who had repeated difficulty mothering
5. Goats are ear tagged around birth time or at first health check following birth
6. Production
- a. We target for does on average to meet Kiko standard of 2.75 kids. We understand this is an ideal number and not always achievable

<b>Year</b>	<b>Average number of kids per doe</b>
2019	2.0
2020	1.5
2021	1.5
2022	0.8
2023	0.5
2024	1.8
2025	1.8
2026	2.0

- b. Finishing time target is 7 - 8 months. Since kids are born in February, this timeline coincides nicely with the natural end of our grass growing season in September - October
- c. Finishing weight target is 80 lbs live weight
- d. We do not sell live goats for any reason

## Shelters



1. Depending on what paddock they are in, goats have a variety of shade trees, woody shrubs, and/or we supply portable shelter(s)
2. Our portable shelters are designed to be moved with our tractor and are universal to our goats and pigs (and sometimes chickens when they end up in the right spot at the right time)
3. Each shelter is approximately 7' deep x 8' wide x 4' high with an A-frame shape and partially closed in ends
4. Goats can climb the outside of the shelters and sit/stand on the roof
5. Shelters are designed to be abutted end-to-end to form larger sheltered spaces when required
6. During rain, goats have access to shelter
7. Hay is added to shelters during winter for deep bedding

## Water

1. In 2022 we installed a dedicated farm well. Distributed from the barn, there is a permanent 1" above ground waterline running the length of the farm road for operation during temperate months. There is a frost-free buried 1" line feeding the length of the upper field (see map above)
2. Water is offered in 15 gallon rubber bowls
3. Bowls are checked minimum twice daily and filled using the nearest hose spigot as necessary
4. Sinking water heaters are added to the rubber buckets in cold months to keep them defrosted
5. Water distribution is done by 275 gallon tote during cold months when the above ground line is not usable

## Food and Minerals

1. During grass season the goats forage on grasses and other vegetation
2. When grass isn't available they are open fed hay
3. Fermented alfalfa silage (Alfahay) is fed as a ration daily in winter months and as a treat in summer months. Quantity does not exceed 1 lb/day/animal
4. They are occasionally fed alfalfa and lespedeza pellets as treats or as incentive to follow a farmer
5. A loose mineral supplement is put in small rubber bowl(s) once daily or in bulk bull mineral feeders

6. Mineral mix is 2 parts kelp : 3 parts Fertrell Goat Nutribalancer : 2 parts Redmond Salt : 0.25 part Selplex 2000 (selenium) : 0.1 part Vitamin E 50%
7. Selenium/Vitamin E paste, copper oxide bolus, cobalt bolus, and mineral drench (apple cider vinegar, molasses, garlic extract, and Red Cell) are given as needed at health checks
8. Livers are tested occasionally and mineral compositions adjusted appropriately
  - a. When we first got small ruminants, we tested livers yearly to dial in mineral supplementation faster
  - b. As test results stabilized within ideal ranges, we switched to testing every two(ish) years for maintenance

## Population Dynamics

1. In general our goat herd lives together year-round
2. Before breeding begins in the fall, we separate kids from breeders for weaning. The kids stay in a group until slaughter
3. We often remove the buck during kidding so he doesn't interfere. The buck is put in his own paddock, but he has nose-to-nose access to the female group across the fence line. We remove him a few days up to one week before kidding starts and usually keep him separate for about four weeks
4. On the rare occasion that we overwinter kids for spring slaughter, we appropriately separate by sex to control breeding
5. In 2024, we had a violation of goat standard 4.3.3, Ewes/Does must not lamb/kid before the age of 12 months. We have an approved Corrective Action Plan as follows:
  - a. To ensure early breeding does not take place again, we first note that our 'normal' schedule of breeding, where does kid in February then all kids go to slaughter in early October, does not allow for doelings to kid before age of 12 months. The time from birth -> fertility -> harvest is not long enough for them to kid. Additionally, high summer is out of season for their typical breeding cycle. In the case we have kids on an 'abnormal' schedule, (like the doeling in question, who was born on August 14th, 2023) we will remove buck access to doelings by four months of age.

## Breeding and Birthing

1. We do not use artificial insemination (AI) for goats, all breeding is done naturally on pasture with no assistance in the fall
2. Birthing season is late winter and takes place on pasture
3. Farmers are around to assist as necessary, however assistance has never been needed for goats
  - a. In 2026, we noticed that a goat had a full-breach kid and did help pull, but the goat was not in distress and probably could have done it on her own, we were just being polite. She ended up having a full second breach twin unassisted later that day
4. Breed selection, general management practices, and culling problem animals are used to keep birth assistance to a goal of 0%
5. We do not castrate any males

## Pig Management

### General

1. Our pigs are a mix of heritage breeds
  - a. Our ideal market pigs are 50% Large Black, ~25% Mangalitsa, and ~25% Berkshire (or similar)
  - b. As of 2026, we have 5 sows and 3 gilts
    - i. 4 sows and 3 gilts are F1 crosses of Mangalitsa and Berkshire

- ii. We suspect 1 sow is ~75% Berkshire and ~25% Mangalitsa but aren't sure on percentages
- c. We do not keep any boars. We AI our sows and gilts using semen appropriate to achieve our ideal market breed mix
- d. Advantages of specific heritage breeds
  - i. Mangalitsa
    - 1. Extreme cold hardiness, hairy winter coat
    - 2. Ease of birth/good mothering
    - 3. Delicious fat
  - ii. Large Black
    - 1. Large size
    - 2. Docile temperament
    - 3. Efficiency on pasture and other forages
    - 4. Fun, floppy, sun-shade ears
  - iii. Berkshire
    - 1. Fast growth
    - 2. Large size
    - 3. Large litters
- 2. Between 2020 and fall 2023, we bred all our market pigs and not bought in feeders.
  - a. In winter 2023 we bought in feeders from another AWA farm because we were having issues breeding our sows
  - b. After working with our vet, we resolved our breeding issues and have never again bought in feeders
- 3. We target 1.5 farrowings per year
  - a. This gives us a 2 year cycle with 3 farrowings in it
- 4. Replacement sows will be bought in as gilts as necessary. Sadly in 2025 the breeder we were buying gilts from is no longer in business, so we'll need to find another source for gilt piglets or breed our own replacement sows
- 5. The average age of our sows is 5 years old
  - a. We retire and cull not based on age but on performance, general health, genetics, worm resistance, birthing ability, and temperament
  - b. As of 2026 we have culled 4 sows
    - i. We culled a sow in spring 2021. She successfully farrowed once, then had only twins, then aborted twice
    - ii. We culled a sow in fall 2021. During her first farrowing, she successfully birthed 12 live piglets but refused to mother them and 11 died
    - iii. We culled a sow in summer 2024. She successfully farrowed once but never had strong heat cycles and we couldn't reliably impregnate her
    - iv. We culled a sow in winter 2025. She had farrowed three times but her heat was difficult to detect and we didn't like her personality
- 6. Individuals requiring medical or special attention are ear tagged at that point, we do not routinely ear tag non-breeders
- 7. Production

Year	Number of pigs finished
2020	18
2021	33
2022	36
2023	52

2024	38
2025	40
2026 (so far, as of 2026-03-05)	6

- a. Finishing time target is 8-9 months
- b. Finishing weight target is 200-250 lbs live
- c. We used to target 12 weaned piglets per sow, but this was unrealistic based on years of data. We now target 8 weaned piglets per sow

<b>Year</b>	<b>Average weaned piglets per sow</b>
2020	9.75
2021	8.0
2022	8.3
2023	6.5
2024	6.2
2025	7.8

- d. In general we do not ever sell any live animals



## Shelters

1. In 2021 and 2023 we built additional shelters so that we'd have enough for our pigs. They will be given the appropriate number of portable shelters as per AWA pig standard 8.1 when the air temp is below 59F for seven consecutive days
2. During farrowing, our sows are provided our typical portable shelter setup
  - a. This is placed in their paddock prior to farrowing. They typically farrow on a one acre paddock
  - b. Recently we have found it useful to isolate each sow, using portable electronet fencing, around a shelter hours prior to farrowing. We started this practice after having some "walking" births where first-time sows would walk with their sister sows around one-acre paddocks, depositing piglets in various locations as they go
  - c. Having one sow with her piglets in a shelter also makes it easier to catch male piglets for castration around 2-4 days of age

3. We supply hay to the pigs for entertainment, eating, and bedding

## Water

1. We use 15 gallon rubber bowls for water
2. The bowls are filled using the nearest spigot/hose on the irrigation system
3. Water levels are checked twice a day at a minimum
4. For larger pods of pigs, we provide multiple 15 gallon rubber bowls for water
5. During the winter months sinking water heaters are used to keep them from freezing, if the pigs are in paddocks that are close enough to power that we can use water heaters
6. As of winter 2024-2025 in an effort to rotate sacrifice paddocks, we started overwintering small groups of pigs in paddocks that are too remote to have power. They have 15 gallon rubber bowls of water that are filled twice a day but don't have water heaters

## Food and Minerals

1. We feed a corn-free, soy-free, non-GMO, certified organic, and complete ration swine feed
2. Pigs are open fed (twice daily) until they eat (on average) 6 lbs/pig/day, then we limit feed
3. The pigs are always outdoors and have access to forage
4. Our sows are open fed the weeks leading up to farrowing and after farrowing
5. Piglets are fed a 16% protein grower feed until they start putting on more fat than muscle, then they are switched to a 12% protein maintenance feed

## Population Dynamics

1. Because we try to breed, farrow, and wean groups of two to three sows at the same time, we hope our sows have magically synced estrus cycles
2. Sows farrow together in shared paddocks
3. Depending on which farrowing cycle the sows are on, piglets from sows are separated for one of two reasons
  - a. Piglets are force weaned and split into a 'market' group separate from the 'sow' group
  - b. Piglets are naturally weaned and then continue to live with sows until harvest time

## Breeding and Birthing

1. We do artificial insemination (AI) using fresh boar semen shipped from International Boar Semen in Iowa
2. We time standing heat by noting it on the calendar for at least one cycle. From this, we can closely estimate when the sows will be back in estrus and a few days prior we order semen to be shipped overnight
3. We store the semen until the sows are in full standing heat and then semen is applied while sitting on the sow's back to simulate boar weight and the other person uses the applicator to apply semen
  - a. If both of us is available during standing heat, one of us sits on the sow's back
  - b. As we get more sows and do AI more often, we have also found that sows prefer different types of contact during AI, so sometimes we rub bellies or heads, too
  - c. Sows are not confined during AI, we do it out on pasture
4. We repeat this process 2-3 total times
5. Farrowing season can vary but we avoid farrowing at the coldest parts of the year
6. Sows who are close to farrowing are checked every 12 hours. Once farrowing begins they are monitored as appropriate but the majority of farrowing happens overnight unassisted
7. We have not needed to assist with any farrowing sow

## Castration

1. We tried to not castrate in the past as we feel castration is inhumane
  - a. We did end up with a bit of boar taint during this experiment
  - b. It was mild enough that it was acceptable to sell but it's too risky to not protect against boar taint in the future
2. Since then, our veterinarians trained us on humane-as-it-gets castration
  - a. It requires 1 person to hold the piglet and 1 to medicate and castrate
  - b. We castrate using local lidocaine anesthetic along with an oral long-term pain control/anti-inflammatory agent (under veterinary discretion and dosage, typically Metacam) before 7 days of age.
  - c. We've found 2 to 4 days of age to be ideal
3. Moving forward we are very interested in using the product Improvest as an alternative to castration
  - a. Even though Improvest is widely used around the world and FDA-approved for use in the US, Zoetis (the manufacturer) carefully restricts its use
  - b. We have worked hard with our veterinarians to convince Zoetis that we are the perfect small farm candidate to use Improvest
  - c. We hope in the future Zoetis Improvest or similar will be recognized by AGW as a humane alternative to castration

## Chicken Management

### General

1. We keep chickens as egg layers. We do not breed or raise meat birds
2. We keep a variety of heavy brown-egg breeds with Ameraucanas/Easter Eggers for variety
  - a. We use breeds who are sturdy foragers and more likely to pay attention/respond appropriately to the presence of aerial predators
  - b. We need large and hardy breeds because of our cold winters
  - c. We used to use only 'heritage' breeds of layers but we got consistently poor egg production from them. We started introducing small numbers of sex links because they are more reliable layers, but we weren't sure if they would do well on pasture and in winter. They did fine, so we've been ramping up the number of sex links we have in our flocks. As of the group of chicks we got in 2025, they were all sex links except for the Easter Eggers.
  - d. From the Moyer's (Hoover) Hatchery catalog on their website, these breeds lay between 240 and 280 eggs per year so we are compliant with AWA layer recommendation 2.2.3
  - e. Our current flock is a mix of breeds
    - i. Rhode Island Red (RIR)
    - ii. Ameraucana/Easter Egger (I don't understand the difference or if there is a difference)
    - iii. Red Sex Links
    - iv. Gold Sex Links
    - v. Brown Sex Links
    - vi. Black Sex Links
3. Daily bird inspection schedule and times of day
  - a. Birds are checked a minimum of twice daily
  - b. The times they are checked change with the season, but feed is supplied twice a day and waterers are continuously available and checked twice daily
4. Production
  - a. Total number of birds on farm at any one time: 100-260
  - b. Max laying flock size is 200 birds

- c. Ratio of female layers to male birds: about 200 layers with 3 roosters works best for us, so about 67 females to 1 male
  - i. So far, we have had good luck with keeping a small number of roosters. We appreciate their diligence at watching the perimeter of the flock and alerting for aerial predators
  - ii. We haven't had an issue with them being overly aggressive to each other or to humans
- d. Average age of birds at slaughter is 2.5 years
- e. Average live weight of birds at slaughter is ~7 lbs
- f. We do not sell live birds for any reason
- g. We do not sell hatching eggs
- h.

Year	Approximate number of table eggs produced for sale
2020	16,000
2021	23,638
2022	34,000
2023	23,760
2024	31,065
2025	29,415



## Shelter and Roost

1. We utilize old RV trailers as mobile roosts. They are typically 28' long and 8-10' wide. The trailers are initially gutted (except for a small room excluded from chickens to store feed and equipment) then roosts, nest boxes, feeders, and waterers are installed. Automatic doors are cut into the side of the coop with precisely controlled opening and closing times [note that as 2024, we typically leave doors open on the roosts overnight]

- a. See [github.com/botfarm/coop\\_controller](https://github.com/botfarm/coop_controller) for details on our custom software and hardware controllers
2. Our flocks are 200 birds and each flock has one roost, so each roost accommodates 200 birds
3. These mobile trailers are moved around paddocks using our tractor
4. The roost provides thermal comfort to birds year round using controllable vents within the coop during hot summers and cold winters
5. Only during times of exceptional predation are the birds shut into the roost at night when their auto-door closes, usually 30 min after sunset and the program adjusts as sunset times change
6. Similarly, we can adjust what time the auto-door opens in the morning and the opening time automatically adjusts relative to sunrise. For mature flocks, the auto-door opens at sunrise. For younger flocks, we've had issues with aerial predation right at sunrise, so their auto-door opens 30 minutes after sunrise. We continue to adjust this based on conditions
7. The roost has two doors
  - a. One chicken door (the auto-door) which is approximately 63 inches wide by 26 inches tall
  - b. One human-sized door which is open
8. We do not provide any mobile or stationary shelters that are not used as roosts
9. Perches, with at least 10 inches per adult bird size, are provided for all flocks. The perches are provided within the first week of life and are made of wood. They are arranged in a vertical ladder configuration 3 by 3
10. The roost flooring is plywood
11. For litter/bedding, we use hemp bedding
12. To keep litter/bedding dry and friable, we have made it ridiculously easy to clean out the roost. The side doors of the roost (which, in its previous life as an RV would have been called the "slides") can be opened to make sweeping out old bedding easy. New bedding is added after clean outs. We use a deep-bedding system all year, but it gets a bit deeper during winter months
13. Raised areas
  - a. We do not find a clear definition of raised areas in the laying hens standards or in the definitions page, but we assume it is the same as discussed in the meat birds standards
    - i. Birds have access to perches all day
    - ii. Birds have access to nest box bars all day
    - iii. Birds have access to the axles of the RV they live in all day
14. Nest boxes
  - a. The birds have communal nest boxes. There are 5 total nest boxes with inside area of 891 sq inches each, totaling 22.25 sq inches per bird (assuming 200 bird flock)
  - b. The nest boxes have a rail perch in front of the box entrance
  - c. Litter/bedding in nest boxes
    - i. Yes, we use box liners
    - ii. We use an astroturf type liner
    - iii. We add small amounts of hay on top of the astroturf nest box liners so the birds have manipulable, friable material
15. Lighting
  - a. We do have a lighting program we use when necessary to support continued laying
  - b. Artificial light is started during fall and the lighting is controlled by a computer program (see door program above). Additional light is added before sunrise to a maximum of 15 hours total light (artificial and natural)
16. Laying cycles
  - a. The number of laying cycles the flock goes through before flock retirement has changed over our years of farming
    - i. At first, we tried to push through 3 cycles and attempt a 4th but we had very poor laying performance during the 3rd and 4th cycles
    - ii. Up to 2022, we did 3 but still had poor laying during the 3rd

- iii. Starting in 2023, we moved to 2 cycles for our flocks
  - b. We do sell the meat of retired laying flocks and their average ages are 2.5 years
  - c. We sell the meat of culled layers as AWA-approved stew hens
17. Physical alteration
- a. We do not perform physical alterations on our birds. Here are some examples of things we don't do:
    - i. beak tipping
    - ii. pinioning
    - iii. de-clawing
    - iv. wattle or comb removal
18. Identification
- a. We sometimes but not always make individual birds visually identifiable
  - b. Generally this is done to mark problem birds (roosting in nest boxes, eating eggs, flying over fences, etc.) with colored plastic leg bands
  - c. When we combine two smaller flocks, especially when the flocks are different ages, we leg band one of the flocks to identify in the future

## Water

1. We use a combination of watering methods
  - a. Young birds are trained to 1 quart chick founts
  - b. Once they are on pasture they are trained to use 5-7 gallon founts
  - c. We also occasionally use 3 gallon rubber bowls for our production flock
2. The smaller watering systems are filled using hoses from the nearest spigot on the irrigation system
3. Waterers are checked a minimum of twice per day
4. When individual fount waterers are dirty, they are emptied out and scrubbed out using PBW cleaner then rinsed before being refilled
5. During winter fount waterers are put on heated bases and in a pinch the 3 gallon bowls can be put on heated bases as well

## Food and Minerals

1. The birds are open-fed through all stages of life, i.e. their feeders are checked minimum daily and if the feeder is low or empty it is refilled. We generally try to limit our production flock to 2.75 lb of feed/bird/week, or 0.4 lb feed/bird/day, but this is adjusted according to weather and other conditions
2. We use complete-ration organic chicken feeds and do not provide separate mineral mixes
3. Feed life stages
  - a. Starter
    - i. Starter feed is open fed until 4-5 weeks old
    - ii. Starter size granite grit is also open fed
  - b. Grower/Pullet
    - i. Grower feed is open fed until 16-18 weeks old
    - ii. Grower size granite grit is open fed and layer granite grit is offered as the birds get older. Oyster shell is offered as the flock approaches end of pullet phase
  - c. Layer
    - i. Layer feed is open fed. When the weather isn't too cold, we like to soak the layer feed with water for 12 to 48 hours before feeding, as we find this increases the birds uptake of 'fines'
    - ii. A mix of grower and layer granite grit is offered. We mix the two sizes because one of our flocks ignored the grit when it was layer-only size
    - iii. Oyster shell is offered separately from grit

## Breeding and Hatching

1. We choose not to own or manage parent/breeder birds, so our chicks, when necessary, are bought in
  - a. In the past, we have tried a few things
    - i. We have bought in chicks as day-olds from Myers Poultry 966 Ragers Hill Road, South Fork, PA 15956 which are shipped through USPS
    - ii. We have tried to hatch our own replacement flocks in the past, but we lack the specialized equipment to really make this work
      1. We also had anti-hybrid vigor issues since it was a mixed flock but had all RIR roosters
  - b. We now buy in day-old chicks from Burr Farm 16 Depot Street, Danielson, CT 06239 which they pick up from Moyer's Chicks 266 E Paletown Rd, Quakertown, PA 18951
2. Hatching and brooding
  - a. We do not encourage or purposefully attempt any natural brooding
  - b. We do brood bought-in day-old chicks when we need to replace flocks
    - i. For brooding, we put heat lamps under a large (4'x4') raised box-style (Ohio-style) brooder. The brooder is placed within a larger roost area so the chicks can choose to stay under or outside of the brooder as necessary
    - ii. There is a temperature monitor inside the box which logs temperature
    - iii. We adjust the on-time of the heat lamps and number of heat lamps based on the temperature monitor
    - iv. We have a backup power source for the brooder (a generator) and have had to use it during previous power failures when we were brooding

## Removal of Animals from Farm

1. We do not remove animals from the farm for the purposes of showing, breeding, grazing, stock sales, etc.
2. The only removal from farm is for slaughter
3. Our veterinarian operates a mobile practice, so the doctors come to the farm and animals don't need to move off-farm for medical care

## Exclusion from Pasture

### General Information

1. Animals do not have access to growing green vegetation all year round because in our climatic area, grass and green vegetation does not grow year round. Mountain laurel is an exception to this general rule but is wildly toxic to goats
2. Our animals move to sacrifice pastures when one of two triggers are triggered: when pasture regrowth cannot keep up with consumption or when continued grazing will stunt fall growth of pasture potentially harming spring growth the following year. This typically happens in November
3. Animals are allowed back on pasture when pasture health can sustain continuous grazing. This is a complex evaluation including temperature, rainfall, pasture height, and anticipated pasture growth rate. The sacrifice pasture in which they spend much of the winter is large enough with low enough stocking density that there is some forage available through much of the winter. When forage is not available, we supply hay
4. We typically start animals grazing grass and green vegetation for short periods in mid-April with a full return to 100% pasture by April-May

## Snow-covered pastures and sacrifice pastures

1. In our climactic area, animals remain out on pasture year round but pastures have the potential to be snow covered such that animals cannot access any vegetation for more than 28 days OR animals remain out on pastures but vegetative cover cannot be maintained. This time of year is roughly January to March
2. Although it is unusual for this area to maintain continuous snow pack for 28 or more days, we routinely get storms that bring 1 to 10 inches of snowfall. The winter of 2025-2026 was exceptionally snowy, with several feet of snow pack that lasted for two months
3. Animals are generally on sacrifice pasture from November to April-May each year
4. Wind breaks are provided on sacrifice pastures as follows
  - a. Goats and pigs: natural vegetation including trees and shrubs are located throughout the pasture. Portable shelters are provided as supplemental shelter
  - b. Chickens: their sacrifice pastures generally have few, if any, trees because of their propensity to abandon their roost in favor of trees and because of our previous experience with tree-dependent predator pressure (primarily Cooper hawks). Wind break is provided by their 28' mobile roost, outside feeders, and outside watering systems. Some years their sacrifice pasture has been directly north of our storage barn, which provides an additional wind break
5. For chickens, small areas of snow are scraped or covered with hay. The birds typically don't like coming out of the roost if there is snow on the ground. We clear or cover a large enough area for them to get out and get under the trailer. We bring them hay and they spread it around the area to forage
6. Sacrifice pasture sizes (sizes are approximate)
  - a. Goats: the size of the sacrifice pasture varies depending on which pasture we use, but the pastures we typically use are approximately 8,000 sq ft
  - b. Pigs: typical sacrifice pasture is 43,560 sq ft (1 acre)
  - c. Chickens: typical sacrifice pasture is 6,500 sq ft



## Animal Health

We work with a large-animal, farm-specialized veterinary practice who provides mobile services and farm visits as standard of care. To support animal health, we try to have our vets visit the farm at least yearly, even in the absence of

issues, to keep them up-to-date on farm operations and help identify risk factors. We also have regular communication through email and text with them and they have reviewed this plan.

## Temporary Close Confinement

### Goats

1. Temporary close confinement is used only when our animals go through health checks using our humane handling system. The holding pen is outside our barn under cover and chutes lead inside the barn for actual handling. They are not tied during this process but there is use of a head lock for our larger animals. We do routine health checks, hoof trimming, weighing, FAMACHA scoring, and any other routine maintenance that may come up throughout the year in the system
2. We also use this system if a health issue arises. If the animal is too hard to catch on pasture we can bring them back to the humane handling system to evaluate and administer treatment as necessary
3. Finally we use this system for herd separation at weaning time, breeding time, and general group changes

### Pigs

1. Temporary close confinement is used during castration of piglets. The piglets are put into plastic crates and removed to the barn (out of sight and hearing range of sows) for the surgical procedure. Once it is completed the piglets are promptly returned to the pasture with the sows. Total confinement time for piglets is less than one hour. Sows are not confined during this process and we leave female piglets with the sows to help keep everyone calm

### Chickens

1. We have not had reason to put any birds into temporary close confinement
2. When we cull spent layers or excess roosters, they are put in clean, fit-for-purpose chicken crates for a few hours maximum

### Hospital Pen

1. If an animal becomes so sick or requires such care that they must be isolated from the rest of the animals, we place the animal in a hospital pen
2. Options for hospital pens
  - a. Transport trailer: since the trailer is mobile, the animal can be kept within sight and hearing range of the rest of the flock, if appropriate
  - b. Barn: we have room in the barn and panels on hand that can be quickly used to construct a hospital pen if complete isolation of the sick animal is necessary. This option also provides increased protection from weather/thermal comfort support
  - c. Storage trailer: in the unlikely situation where multiple groups of animals need to be kept isolated from each other and in hospital pens, we can isolate one group in a storage trailer we have near the barn
3. We occasionally place an injured laying hen in temporary single-housing inside a crate that met the space requirements of 5.8 sq ft until she is sufficiently recovered to return to the flock

### Antibiotics

1. For all species, the only time we give antibiotics is under veterinary direction. Reasons for antibiotic administration are, for example, a wound that is or could potentially be infected

2. If an animal being treated with antibiotics does not already have an ear tag ID, we will add one at the time of treatment for unique identification.

## Fertility, Reproductive Disorders, Lameness, and Mastitis

### Goats

1. Fertility issue
  - a. Issue: lack of breeding performance in 2022-2023, including both abortions and unsuccessful breeding. Tested for leptospirosis, gonorrhea, chlamydia.
  - b. Treatment: Ongoing attempts with vets to understand root issue(s). Eventually decided that buck was not successfully breeding the does and in that absence our ram was breeding goats
  - c. Prevention: Got rid of ram, got a new buck
2. Mastitis
  - a. Issue: none, we've never had mastitis
  - b. Treatment: none
  - c. Prevention: continue breeding for good mothering ability
3. Twin lamb disease
  - a. Issue: none, we've never seen twin lamb disease
  - b. Treatment: anticipated treatment of glucose drench with propylene glycol every 6-12 hours. After 12 hours, consult our vet
  - c. Prevention: keep high-quality forage available at all times
4. Staggers
  - a. Issue: none
  - b. Treatment: consult our vet
  - c. Prevention: We have a high amount of legumes containing magnesium in our pastures. We also limit fresh grass when moving from hay to pasture in the spring
5. Bloat
  - a. Issue: none
  - b. Treatment: baking soda drench
  - c. Prevention: carefully reintroducing fresh grass and legume forage in spring time
6. Lameness
  - a. Hoof scald
    - i. Issue: Occasional hoof scald seen in goats during winter or very wet weather
    - ii. Treatment: Dr. Naylor's Hoof N Heel was applied to the area until it improved
    - iii. Prevention: regular hoof maintenance, access to dry areas
  - b. Hoof rot
    - i. Issue: none
    - ii. Treatment: never encountered
    - iii. Prevention: regular hoof maintenance, access to dry areas
  - c. Hoof delamination
    - i. Issue: we've had a few goats have slight delamination of their hooves. We've noted it during health checks and trimming, but it's not been severe enough to cause limping
    - ii. Treatment: trim hoof thoroughly and neatly, tell the animal in a serious voice to keep that hoof dry
    - iii. Prevention: adjusting loose mineral composition to increase copper. If it gets severe, trim more often
    - iv. Follow up: since 2022, we have not seen any hoof delamination

## Pigs

1. Although we aren't sure this is a reproductive disorder, but ...
  - a. Issue: one of our sows once only gave birth to two piglets. Further, the birth was slow but there were no stillborns or mummies. Afterbirth looked normal
  - b. Treatment: Due to the slowness of the birth, our vet prescribed a single dose of oxytocin
  - c. Prevention: Ensure optimal health, nutrition, and body condition before AI.
  - d. Follow up: we bred this sow again and she aborted twice. She was culled
2. Lameness
  - a. Issue: One of our sows developed a limp with swollen right front knee
  - b. Treatment: We consulted vets and they weren't sure if the source of swelling and limp is chronic/genetic issue or acute injury. We treated as acute injury and it appeared to go away
  - c. Prevention: not sure? Maintain healthy animals?

## Chickens

1. Lameness
  - a. Issue: none, we've never had lameness
  - b. Treatments: we're not familiar with lameness in chickens, so not sure. When we're not sure, we'd call our vet. Although, for example, if a bird had a broken leg we would probably just cull it at the time, as it's not reasonable to attempt to set the leg or and we wouldn't have the means of controlling pain during the process
  - c. Prevention: maintain flock health through good nutrition and pasture access. We also don't use any Salatin-style or drag-behind cages which in our experience are notorious for breaking chicken legs!

## Disease Status of Flock

### Goats

1. We have not seen evidence of the following diseases in our flocks
  - a. Pulpy Kidney
  - b. Lamb Dysentery
  - c. Blackleg
  - d. Braxy
  - e. Black disease
  - f. Tetanus
  - g. Pneumonia
  - h. Campylobacter
  - i. Sore mouth (orf)
  - j. Scrapie
  - k. Johne's disease
  - l. Caprine Arthritis Encephalitis
2. We have not seen evidence of the following diseases that cause abortion in our flocks
  - a. Enzootic abortion
  - b. Toxoplasmosis
  - c. Salmonellosis
  - d. Vibriosis
  - e. Brucella
  - f. Ovine progressive pneumonia (Maedi-Visna)
  - g. Leptospirosis

## Pigs

1. We have not seen evidence of the following diseases in our pigs
  - a. Mastitis
  - b. Metabolic and other disorders
2. We have not seen evidence of the following contagious diseases in our pigs
  - a. Meningitis
  - b. Pneumonia
  - c. PRRS (Blue Ear)
  - d. PMWS/PDNS
  - e. Scours

## Vaccination Policy

### Goats

1. We do not currently vaccinate our goats for anything, including we do not vaccinate for
  - a. Clostridial diseases
2. Although we do not currently vaccinate for anything, we would vaccinate if disease pressure exists and our vet directs us to do so

### Pigs

1. We do not currently vaccinate our pigs for anything, including we do not vaccinate for
  - a. Erysipelas
  - b. Parvo
  - c. Neonatal scours
2. Although we do not currently vaccinate for anything, we would vaccinate if disease pressure exists and our vet directs us to do so

### Chickens

1. All of our chickens are vaccinated for Mareks disease. We do not vaccinate the birds ourselves, we pay for the hatchery we work with to give the vaccine so we don't have details on the exact products used, lot numbers, etc.
2. We do not vaccinate our chickens for the following
  - a. Newcastle Disease
  - b. Infectious bronchitis
  - c. Salmonella
  - d. Mycoplasma
  - e. Egg drop syndrome
  - f. Avian Rhinotracheitis
  - g. Gumboro
  - h. Riemerella Anatipestifer
  - i. Duck virus enteritis
  - j. Duck virus hepatitis
  - k. Coccidiosis
3. As for all our animals, we would give vaccines to our chickens if disease pressure exists and our vet directs us to do so

# Parasites

## Goats

1. FAMACHA scoring
  - a. We perform FAMACHA scoring
  - b. Nick has been trained and certified to perform FAMACHA scoring. We have and maintain a reference scoring color card
  - c. FAMACHA testing is performed every health check
2. Fecal testing
  - a. We started fecal testing in 2020 and purchased a microscope and supplies to perform it regularly using the modified McMaster technique
  - b. Nick's FAMACHA certification included training on fecal sampling
  - c. We test individual animals as needed, based on poor body condition, scours, lethargy, or other issues
3. Ectoparasites (e.g. lice, mange, scab, flies)
  - a. Issue: none
  - b. Treatment: Catron IV then consult vet
  - c. Prevention: pasture rotation, maintaining a closed herd, seasonally using salt with garlic, spraying Permethrin on fur
4. Fly strike
  - a. Issue: none, we've never had this on our farm
  - b. Treatment: never encountered
  - c. Prevention: keep hides clean, maintain low stocking density
5. Internal parasites (e.g. roundworm, fluke, lungworm, barberpole)
  - a. Issue: haemonchus contortus
    - i. Treatment: fenbendazole or Cydectin at the direction of our veterinarian are administered orally if necessary, as determined by low FAMACHA scores and reinforced by lethargy and low body condition scores
    - ii. Prevention: Biggest preventive measure is pasture management. We don't graze short, we rotate often. Long rest periods (aim for 45 days minimum). Also preventative garlic drench and copper oxide rod. We also cull repeat offenders
  - b. Issue: suspected but not confirmed meningeal worm infection in goat in 2020
    - i. Treatment: large doses of fenbendazole
    - ii. Prevention: restrict grazing when pastures are very wet or consistently wet, try to minimize deer access to farm
    - iii. Follow up: our dog has helped out with deer and we haven't seen a deer inside our perimeter fence in years
6. Coccidiosis
  - a. Issue: none
  - b. Treatment: never encountered
  - c. Prevention: keep animals rotating on pasture frequently. In winter keep a deep bed pack thick with fresh waste hay so animals are not laying or eating in their own manure



## Pigs

1. Fecal testing
  - a. We perform fecal testing to monitor parasite load in our pigs
  - b. We perform the testing when the presence of parasites is suspected
2. Ectoparasites (e.g. lice, mange, scab, flies)
  - a. Issue: we have not detected these parasites in our pigs or had symptoms that indicate they are present in injurious quantities
  - b. Treatment: none
  - c. Prevention: pasture rotation
3. Internal parasites (e.g. roundworm, fluke, lungworm)
  - a. Issue: we have had ascaris suum in quantities detectable through fecal flotation assays along with condemned livers at slaughter
  - b. Treatment: in consultation with our veterinarian, dosed at 10-12 weeks of fenbendazole pellets in the piglet ration
  - c. Prevention: pasture rotation, monitoring, blanket deworming and hoping that the parasites don't develop resistance to given drug. Now that we've used fenbendazole for a few years, we consulted with our vets to see if appropriate to switch to other API and they said no, just keeping fenbendazole
  - d. Follow up: Since we've started deworming piglets, we've had no piglet mortality associated with internal parasites. We've also started getting livers back from slaughter (however, the original spate of condemned livers may be attributable to USDA inspectors and slaughterhouse workflows. As we're working more closely with the slaughterhouse, we recognized that condemned livers may be a more general issue and not a parasite issue with our animals)
4. Coccidiosis
  - a. Issue: none
  - b. Treatment: none
  - c. Prevention: pasture rotation, especially moving sows to new paddock relatively close to expected farrowing date to decrease piglet exposure

## Chickens

1. Fecal testing
  - a. We've never done fecal testing for our chickens before, but we have the supplies and training and do test other species. If we have an issue we could certainly start doing fecal testing for the birds
2. Ectoparasites (e.g. lice, red mites, flies)
  - a. Issue: we have not detected these parasites in our chickens or had symptoms that indicate they are present in injurious quantities
  - b. Treatment: none
  - c. Prevention: always allowing birds the chance to dust bath
3. Internal parasites (e.g. roundworm, fluke, lungworm)
  - a. Issue: none
  - b. Treatment: consult vet
  - c. Prevention: pasture rotation
4. Coccidiosis
  - a. Issue: back when we were young and foolish (our first expansion of our flock), we brooded chicks in the same mobile roost as we housed our mature layer flock. Coccidiosis was a big issue in the chicks
  - b. Treatment: sulfa antibiotic for chicks as prescribed by our vet
  - c. Prevention: keep young birds rotating on pasture and clean bedding in the roost. Strenuously avoid interactions between mature birds and young birds

- d. Follow up: We have a separate brooding roost that we use to raise day-old chicks until they're ready to lay. Near beginning of lay, we combine the new flock with our existing flock by crating the new flock after dark and introducing them to the production environment. With this new method, we've not had any issues with coccidiosis

## Injury

We record injuries, medical interventions, and other issues in our record-keeping software database farmOS. Please refer to that location for records of injuries.

# Health Management

## Biosecurity

### Animals

1. In general we run a closed farm
  - a. No animals out except for transport to slaughter
  - b. All market animals are birthed and raised on farm except for exceptions listed above
  - c. When new stock is bought in, they are bought from farms with good management practices
    - i. New breeders are quarantined away from similar species for at least 30 days
    - ii. During this time they are trained to our fencing system and closely monitored for any issues

### Clean/Dirty Line

1. Our perimeter fence is our biosecurity clean/dirty line
2. We have separate footwear that we use on-farm and we do not use off-farm footwear on the farm unless they are sanitized
3. No vehicles regularly visit the property. All deliveries are by common carrier and are outside the farm gates
4. We discourage people from visiting the farm, but understand this may need to happen from time to time
5. Any farm visitors must wear disposable booties or use our soap water followed up with chlorhexidine glycol boot spray
6. All visitors are asked to wear non-farm clothes and boots
7. All visitors are asked what livestock they have been around recently and if they have any livestock of their own
8. We try to keep farm visitors on roadways and out of paddock areas
9. Customers requesting farm tours are almost exclusively given "driveway tours" which don't cross the clean/dirty line
10. Only under rare circumstances are visitors allowed to interact with animals directly
11. In 2023 we implemented a farm visitor/biosecurity log, including a form that people fill out online before they visit that helps us log visitors more formally

### Neighboring farms

1. Most of our neighbors are not farms
2. A few neighboring properties have small backyard flocks of chickens with a state road between them and our property
3. 1 neighboring farm has a livestock operation. Mostly cattle, a few pigs, and a few 'pet' goats
4. We keep a tree and distance buffer between our farms

5. The neighboring farm does not pasture pigs near our shared fence line, only the cows about the property line
6. When they have their cows on our shared fence line we move our animals to other paddocks
  - a. Since 2022, we have not seen their animals in any close-abutting paddocks

## Predator and Rodent Control

1. Our perimeter fence thus far has kept medium and large ground predators at bay, so we have never had issues with bear, coyote, fisher cat, bobcats, etc.
2. We have seasonal (late fall/winter/early spring) aerial predation on our chickens (cooper hawks, bald eagles, owls)
  - a. Our pet dogs patrol outside livestock areas and chase aerial predators during a normal farming day
  - b. We keep a few brave roosters with the hens to keep an eye out for the predators. They alert when danger is near and the hens move to shelter under the mobile roost
  - c. Our biggest issue is when the flock is near a wooded fence line and the trees block the view of oncoming hawks
  - d. We try to avoid this setup as much as possible
  - e. We find that the worst predation issues occur during extended periods of snow cover
3. We have field mice/voles/rats in barn
  - a. We use bait blocks and snap traps for rodent control
4. We had 1 instance of a weasel killing chickens in 2019
  - a. Live trap and relocate to the far side of the property (far outside the perimeter fence)
5. In 2024 we had a fox attack the chicken laying flock. We had been surprised that year when our chickens were respecting single-strand electric so we had relaxed having them fenced on all sides with electronet and a wily fox took advantage of the easier-to-cross fencing and attacked. It was hard to count how many chickens were killed, but it was probably about 10 based on the next time we did a full count of chickens a few months later. We went back to electronet fencing and it didn't happen again.
6. In 2025 we continued to have fox pressure (partly due to our lazy pet dogs) and we got trail cam footage of the fox repeated jumping up and over our 48 inch chicken electronet fence. After that, we started putting up a second electronet about 1 - 2 feet away from the first, which hopefully makes it more difficult to jump. This has worked to keep fox out. Fingers crossed

## Mortality

For records of specific instances of mortality and details therein, refer to our farm database in farmOS. Here we will provide general summaries of mortalities and lessons learned for each species.

### Goats

1. Mountain laurel
  - a. Issue: as we expanded into transitional silvopasture paddocks starting in 2019, there were undetected mountain laurel shrublings. Since mountain laurel is so explosively poisonous, we've seen sickening in several animals over the years and mortality in one case
  - b. Prevention: Meticulous removal of mountain laurel shrublings and spot-application of appropriate herbicide. We also have mapped the issue locations and carefully walk these areas before moving goats to these paddocks to confirm the absence of mountain laurel. Especially during fall when it will be one of the last green things available
  - c. Follow up: Since enacting these changes, we have not had mortality associated with mountain laurel
2. Parasite overload
  - a. Issue: during a particularly wet year, we had a male kid that got so overloaded with parasites that we ended up culling him. We treated him with dewormers and he was sickly for a while and never got better

- b. Prevention: continue to breed for parasite resistance
- c. Follow up: we have not had mortality issues in years due to parasite overload
- 3. Hypothermia in newborn kids
  - a. Issue: During kidding season in 2026, it was disastrously cold and we/does had trouble getting newborn kids dry fast enough so that they didn't get hypothermia
  - b. Prevention: Hope it isn't so unusually cold during kidding in future years. Provide more shelters and heat lamps during cold kidding seasons

## Pigs

- 1. Excessive litter size mortality
  - a. Issue: In 2022, we had two sows farrow together with excessively large litters (16 and 18 piglets).
    - i. With such large litter sizes, all the piglets were the size we would normally classify as runts. There was one stillborn
    - ii. Large mortality followed
  - b. Prevention: ?? Input appreciated
- 2. Occasional runt
  - a. Issue: occasionally there is a piglet in a new litter that doesn't compete as well for teats, is smaller than the rest, or isn't fast enough to avoid a rollover. Mortality generally occurs within 48 hours of birth
  - b. Prevention: we've modified the farrowing hut (which is one of our universal species shelters) to have rub rails for piglet escape
  - c. Follow up: we've noticed fewer rollover mortalities with this modified shelter design
- 3. Parasite load of ~10 week old piglets
  - a. Issue: ascaris suum infection likely resulted in the death of some ~10 week old piglets
  - b. Prevention: see above, we now deworm regularly
  - c. Follow up: see above parasite section

## Chickens

- 1. Mortality due to natural predation
  - a. Issue: every time we brood a new flock of layers, the young chicks are prey to aerial predation
  - b. Prevention: we provide step-in posts around their forage area. These seem to disrupt the ability of aerial predators to efficiently swoop and pick off chicks
  - c. Follow up: Our pet dogs have helped us meaningfully reduce the number of chicks we lose to aerial predation. One of them watches the sky and barks at just-the-right-and-none-of-the-wrong birds when she's on the farm. We also avoid placing our brooding roost close to treelines which provides shelter to cooper hawks
- 2. Coccidia, see above Parasites -> Chickens -> bullet 4

## On-farm Euthanasia

- 1. On-farm euthanasia is rare and is used only to stop suffering
- 2. We have not encountered a situation thus far when on-farm euthanasia was necessary for pigs. We do occasionally perform on-farm euthanasia for chickens and goats
- 3. A captive bolt gun stun would be used followed rapidly by exsanguination through jugular interruption with a sharp knife
  - a. We keep a small spring powered captive bolt gun large enough for our chickens on farm
  - b. In 2022 we purchased a Blitz-Kerner Captive Bolt Stunner capable of stunning all our animals larger than a chicken

- c. If the captive bolt gun is malfunctioning we would resort to a .22 caliber bullet shot for the stun, but this is a last resort because of the safety concerns of firing towards rocky ground
4. When necessary, we can have a vet out for an emergency visit and they can use medication to euthanize any of our animals

## Emergency Information

### Emergency Numbers

1. Farmers cell phone numbers
  - a. Redacted
2. Veterinarian Redacted
3. Fire
  - a. 911 emergency
  - b. Ashford Volunteer Fire Dept 860-429-9862
4. Electric utility company
  - a. Eversource
  - b. 800-286-2000
5. Gas company (propane)
  - a. Redacted
6. Feed companies
  - a. Redacted

### Potential Emergency Scenarios

1. Fire
  - a. Call 911
  - b. Other actions depend on fire location. Fire extinguishers are located in the barn, garage, and house
  - c. Animals can move quickly through paddocks or down the farm road for evacuation to safe areas of the farm
  - d. Our location does not typically have large-scale fires
    - i. Thanks to our rapidly changing climate, we had a first-ever wildfire scare in 2025. Wildfires were burning within our small town, so this is no longer a potential emergency situation we can discount
  - e. Don't tell the goats, but they are physically capable of jumping the interior fences and re-locating themselves as they feel necessary during a fire emergency
2. Power failure
  - a. Honestly, in our rural area power failures are a regular occurrence and therefore are routine. In 2020 we lost power about 10 separate times, with the longest outage being 7 days. Thus, we are well-equipped to deal with power failures
  - b. Call Eversource (utility company) to report
  - c. Backup generator is located in the garage. This connects to the house panel through an interlock and the barn panel through a second interlock. Both can be powered from the same generator. Any necessary electric power can be run once the generator is connected
  - d. Generator is sized so that it can maintain all of the water heaters the animals need during winter, the well, freezers we store the meat in, the egg fridge, and anything the humans may require in the house
3. Nor'easters, hurricanes, and other violent storms

- a. The main risks brought by violent storms in this area are extremely high winds (we've had 70+ mph wind gusts), torrential rain (we've had ~5 inches in 24 hours), and heavy snow or large hail or significant ice buildup
  - b. When these storms are forecasted, we provide additional shelters for the animals
  - c. We also evaluate their paddock locations to minimize danger due to falling trees, blowing equipment, etc.
  - d. Our barn is rated to 115 mph winds and we've cleared trees around it, so if animal paddocks or fencing becomes so compromised that the animals are unsafe or uncontained, we could potentially put them in the barn (although we've never done this, it is an option)
4. Tornados, flood, earthquake
    - a. The location of the farm renders the likelihood of these emergencies small
  5. Farmer injury/farmer temporarily unable to physically farm
    - a. If Nick is injured, Danielle can step in for short-term
    - b. Next replacement would be Eric (Danielle's brother) or Olly (family friend) to sub in. Both visit the farm more than once a year and are mostly familiar with farm functionality
    - c. Redacted is a local friend who is lightly employed and may be able to step in



## Slaughter

### Goats and Pigs

1. We use Meatworks - 287 State Rd, Westport, MA 02790
2. Stun methods
  - a. captive bolt for goats
  - b. electric stun for pigs
3. We are looking for a backup slaughterhouse option but currently do not have one

# Chickens

1. Because we only raise chickens as layers (we don't raise broilers), the only time we need to slaughter chickens is when we're retiring an old laying flock and replacing them with a new laying flock
  - a. Because we stagger the ages of our production flock, this means we slaughter chickens every year
2. We use Steadfast Poultry Farm - 32 Sunny Ridge Rd, Bethlehem, CT 06751
  - a. They use an electric stun
3. We catch and crate birds in the dark the night before slaughter. They are delivered to the slaughter plant before sunrise the next morning
  - a. We do not withhold feed or water prior to catching and crating

# Transport

## Goats and Pigs

1. The only times we transport animals
  - a. when they go to the slaughterhouse for slaughter
  - b. when we need to buy in new breeding stock (this only happens every few years)
  - c. that one time we bought feeders pigs in winter 2023
2. To reduce stress for both animals and farmers, we find it extremely useful to "trailer train" animals in preparation for slaughter
  - a. Starting 1 to 2 weeks before a slaughter date, we place the transport trailer in the animals' paddock
  - b. The trailer is left open so they can explore it and familiarize themselves with walking up and down the ramp or stepping in
  - c. A food bowl is put on the trailer to encourage exploration
    - i. Pigs: their normal feed ration is put in the bowl
    - ii. Goats: either hay, alfalfa pellets, or alfalfa silage is used
  - d. On the morning of slaughter transport, the animals load into the trailer after the feed is placed and when the correct number of animals are on the trailer, we close the gate behind them and they are locked in with food. Water is offered until transport begins
3. When animal transport is necessary, we drive our "farm truck" Toyota Sienna with our farm-owned transport trailer attached. We have not had anyone else or any trucking companies transport animals for us and we have no plans to do so
4. The trip to the slaughterhouse is ~67 miles and generally takes 1 hour and 20 - 30 minutes. The longest traffic delay so far stretched the trip to 2 hours
5. Procedures for breakdown or accident when transporting animals depends on the nature of the event
  - a. Easily repairable breakdown or accident (e.g. flat tire, very minor fender bender)
    - i. As quickly as possible, replace the tire
    - ii. Continue transport
  - b. Not easily repairable car breakdown or accident
    - i. If still close to farm, call neighboring farmers
      1. Redacted
      2. Redacted
      3. Redacted
      4. Redacted
    - ii. They can bring their vehicle, rescue the trailer, and continue with transport
    - iii. If they aren't available or if the breakdown is closer to the slaughterhouse, call the slaughterhouse to arrange alternative transportation

- iv. This list of farmers is good to call for any sort of farm emergency
- 6. Stocking density in trailer
  - a. Our current transport trailer is 6'x12' so 72 sq ft
  - b. Goats
    - i. By AWA stocking standards we could take up to 19 goats at once (assuming 100 lbs each)
  - c. Pigs
    - i. Typically we take 5-6 in one trip and they weigh 175 - 325 lbs
    - ii. By AWA stocking standards, we could take up to 15 pigs (assuming 201 - 300 lbs each)

## Chickens

### Slaughter

1. To reduce stress for both birds and farmers, we find it extremely useful to catch and crate chickens after dark the night before slaughter day
2. Stocking density
  - a. Birds are placed into standard plastic chicken crates, approx 6 sq ft
  - b. We put no more than 8 birds per crate
  - c. By AWA stocking standards, we could place up to 9 birds (assuming 6.6 to 11 lbs each)
3. We place the chicken crates on our transport trailer and drive them to the facility

### Day-old chicks (since 2021)

1. We are using Burr Farm 16 Depot Street, Danielson, CT 06239 (860) 774-3315
2. We place our order of chicks through Burr Farm, who operates as a transport company from Moyer's Chicks 266 E Paletown Rd, Quakertown, PA 18951. They put together many farms' orders, contact the hatchery, and go pick up chicks the day of hatch. Or the next day
3. The hatchery loads chicks into fit-for-purpose cardboard boxes with dividers
4. Burr Farm puts the cardboard boxes on their trailer and drives from PA to CT
5. We pick up the chicks from Burr Farm in Danielson, CT which is a 35 minute drive, the same day as the drive up from PA. We drive the peeping boxes directly back to our farm and place the birds in their prepared brooder
6. Some years Burr Farm drives the chicks directly to our farm instead of us picking up from them
7. Thus, we could be reasonably certain that the chicks were being placed less than 36 hours old

## Record Keeping

1. We use the open-source, made-for-farms, web-based database platform called farmOS to keep the majority of our farm records, including
  - a. Daily activities
  - b. Repairs, maintenance
  - c. Feed fed
  - d. Harvests collected, such as eggs laid and animals brought to slaughter
  - e. Health check information
  - f. Birthing/farrowing/mortality/euthanasia data
  - g. Medicines administered
  - h. Weather observations
  - i. Animal rotations through paddocks
2. farmOS Log-ins for auditors, veterinarians, and other stakeholders can be provided upon request

3. Records that are kept outside of farmOS
  - a. Sales: we use Odoo Point of Sale (POS) system to record sales, including at farmers markets
  - b. Inventory: We built a custom app for day to day inventory of meat packages but Odoo has a full input/output balance
  - c. Financial details: through FY23 we used QuickBooks, then switched to Odoo for FY24
  - d. Medical inventory: Google spreadsheet
  - e. Supplemental files, organizers, templates, flyers, lab test results, photos, etc. are stored online in Google Drive/Google Photos space

## Health Plan Information

- Document version number 3.01
- Completed date of current version: 2026-03-05
- Time of next review and version: pre-audit or 2027

Table tracking the version history, dates, and changes of this document:

Version number	Date complete	Changes
3.01	2026-03-05	Update with info from 2025 pre-audit for goats, pigs, chickens. Removed sheep, so major changes
2.74	2025-01-23	Update with info from 2024 pre-audit for all species. No major changes
2.73.01	2024-01-10	Updated with exact egg production for 2023
2.73	2024-01-04	Updated with info from 2023 pre-audit for all species. No major changes
2.72	2022-09-26	Updated with info from 2022 pre-audit for all species
2.11	2021-06-13	Updated with info from 2021 pre-audit for new laying hens and pigs and yearly audit for sheep/goats/grass fed
2.01	2020-12-19	<ul style="list-style-type: none"> <li>• Combined previously-separate health plans for four species</li> <li>• Streamlined format</li> <li>• Produced new template in Google Docs that is easier to maintain</li> </ul>
1.0	2020-11-03	New document

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