

Pathogen Analysis of NYSDOT Road-killed Deer Carcass Compost Facilities Pile Building - Research Piles

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- 20 road killed deer were provided by DOT
- 12 deer were opened and the spiral colon and blind sac were removed. 11 of the 12 were > 1 year old, and 1 was approximately 1 year old.
- The removed intestinal parts were cut into pieces approximately 1" x 1" and mixed on poo-poo platters. Colons and sacs were kept separate.
- Manure from Johnes lab was mixed in a bucket.
- 45 pouches (nylon mesh sentinel bags) were filled with approx 3 tsp of Johnes manure and placed inside wiffle balls.

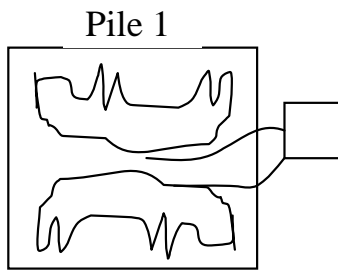


- Nine samples of manure were taken at random (determined by a random numbers table) and put in fecal cups to be sent to the Johnes lab for analysis of *Mycobacterium paratuberculosis* (MAP) at day 0.
- 31 pouches and balls were filled with 3 tsp (approx) of colons and 3 tsp (approx) of sacs and weighed between 95-105 grams wet wgt.
- Concern about running out of deer goo led us to fill 14 pouches with smaller samples (40-45 grams – keeping the ratio of spiral colon to blind sac the same). These were marked for pulling early in the sampling schedule.
- Five samples of deer intestinal contents (as above) were taken at random and put into plastic bags to be sent to Woods End Research Lab for analysis of pathogens at day 0.
- Twine attached to intestine balls was tied at the end. The 14 smaller intestinal sample balls had a white cord tied to the end of the twine.
- The 31 other intestinal sample balls had red yarn tied to the end of the

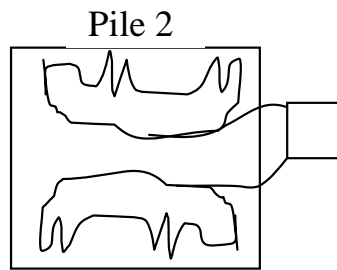


- 3 piles were started with 24" of wood chips obtained from Tompkins Co Public Works. 2 gutted deer were placed back to back on top of the wood chip bed.
- Deer were split further open more so balls could be inserted.

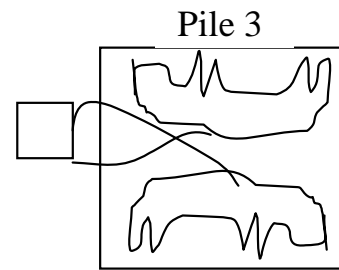
➤ Bottom Layer



1 female
1 male
Probes 1 and 2 in bottom layer
Data logger SN:912859

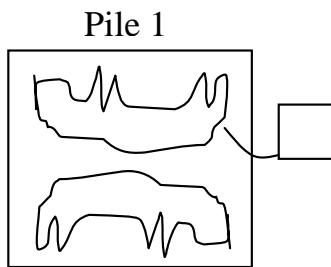


2 males
Probes 1 and 2 in bottom layer
Data logger SN:912861

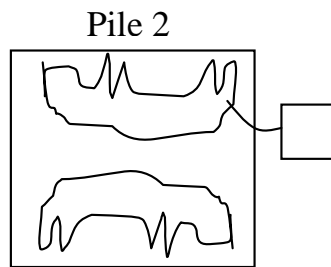


1 female
1 male
Probes 1 and 2 in bottom layer
Data logger SN:912860

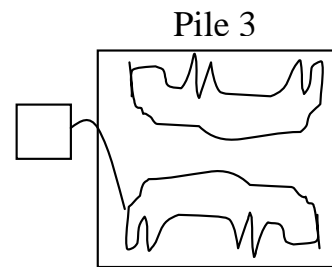
➤ Top Layer



2 males
Probe 3 under leg
Probe 4 ambient



2 females
Probe 3 under leg
Probe 4 ambient



1 male
1 female
Probe 3 under leg
Probe 4 ambient

- Seven gut samples and seven MAP samples were placed in the deer on the bottom of the piles. 3 MAP and 4 gut in one deer, and 4 gut and 3 MAP in the other deer.
- Temperature probes were placed – probe 1 under the bottom deer and probe 2 is between the two bottom deer.
- 12” of wood chips were spread on top of the bottom deer, and 2 more deer were placed on top.



- 8 gut samples and 8 MAP samples were placed in each deer in the top layer of the pile. 4 MAP and 4 gut in one deer, and 4 MAP and 4 gut in the other deer.
- In the top layer of deer, temperature probe 3 is under the leg and probe 4 is ambient.
- Piles were covered with 24” of wood chips.

- Pile 1 has 5 white early pulls on the up hill side (E) and 1 on the bottom side – early pulls are those with less gut sample in these bags.
- Pile 2 has 2 white early pulls on each side.
- Pile 3 has 3 white early pulls on the uphill side and 1 on the bottom side.