

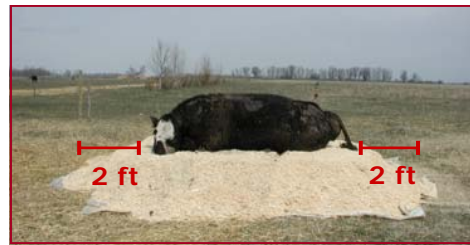
The Bare Bones of Carcass Composting

1



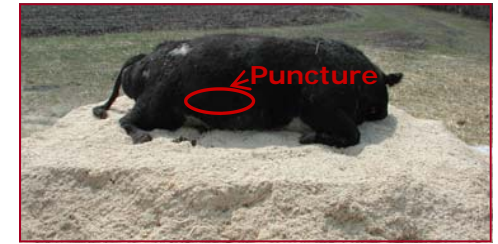
- Place a 2 ft (60 cm) layer of bulky, absorbent organic material such as straw, sawdust, or wood chips on the ground. This 2 ft base acts as a sponge to absorb fluids.
- Ensure that when the carcass is placed on top of the base there is still 2 ft of material below the carcass. The base should also be large enough to allow for a 2 ft

2



- Lay the carcass on the centre of the base on its back or side, again, ensuring that there is 2 ft of bulky, absorbent organic material surrounding the entire carcass.
- For more than one mortality, layer the carcasses with approximately 2 ft of bulky, absorbent organic

3



- For ruminants greater than 300 lbs (136 kg), puncture the rumen to prevent possible explosion of the intestinal cavities. For non-ruminant animals, no lacerations are required.

4



- Cover the entire carcass with at least 2 ft of bulky, absorbent organic material. The 2 ft cover will act as a biofilter to reduce any unwanted odours.
- Uncovered parts may attract scavengers.
- The temperatures inside the pile should increase to 40-65°C (104-149°F) within two weeks.

5



- When the temperatures within the pile have dropped for 10-14 consecutive days, it is time to turn the pile (usually 2-3 months after construction).
- At this time, large bones, hair, and minimal flesh may be present.
- After the pile is turned, the temperatures inside the pile should rise again to 40-65°C (104-149°F).
- Piles should be regularly turned once a week from this point on.

6



- Compost is finished when temperatures drop to the outside air temperature and do not rise again when turned.
- Compost will appear dark and soil-like.
- There may be some large bones left, which can be sieved out and used to inoculate a new compost pile.

Diseased animals should be reported to your local veterinarian and disposed of accordingly.

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KEYS TO COMPOST SUCCESS

Carbon to nitrogen balance

- too much nitrogen = nitrogen loss as ammonia
- too much carbon = breakdown will be very slow

Moisture content

- too wet = pile will not “breathe” properly, will become anaerobic and begin to smell. May not heat at all.
- too dry = breakdown of material will slow or stop

Oxygen

- too little oxygen = anaerobic environment = bad odours!
- Oxygen can be introduced through: pile construction (so it can “breathe”), forced air, or turning to re-establish pile structure

Particle Size

- too large = too long to break down, may dry out; too small = material will compact, won't be able to “breathe”
- a layer of rough material underneath an unturned (static) pile will help it draw in air (“chimney effect”)

Temperature

- for effective pathogen and weed seed kill, all material must be exposed to high temperatures:
 - **turned windrow:** must reach at least 55°C for 15 consecutive days, with turning
 - **in-vessel or insulated aerated static pile:** must reach at least 55°C for 3 consecutive days

Troubleshooting Guide

Symptom	Possible cause	Remedy
Odour like rotten eggs (H ₂ S)	Anaerobic (no oxygen) condition due to excess moisture	Add dry material (eg. bedding, sawdust)
	Anaerobic condition due to compaction	Turn to fluff; if required, add bulking material to maintain porosity
Ammonia odour	C:N too low: nitrogen escaping	Add carbon source like wood chips, leaves, straw and turn
Pile does not heat	Material too dry	Add water or moist ingredients and turn
	C:N too high: lack of nitrogen	Mix in nitrogen: manure, fresh grass, fertilizer
	Cold weather	Increase pile size or insulate with straw or mature compost; or stockpile until warmer weather
Temperature too high (above 65°C)	Insufficient air flow	Turn pile or increase aeration
	Pile too large	Reduce pile size
Material is damp, has no bad odour, but will not heat up	Lack of nitrogen	Mix in high nitrogen materials like fresh manure or urea fertilizer
	Compost is finished	Transfer to curing area
Insects/flies, rodents, coyotes	Unattended piles	Maintain active turning and composting--heat and moisture discourage pests
	Uncovered raw material	Bury fresh waste in pile; can cover with a "blanket" layer of finished compost




Compost Infoline
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