# Common Manure Composting Problems and Their Solutions

This chart is to be used as a supplement to NDSU Extension publication NM1478 (Keena, 2022).

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotten egg smell</td>
<td>Not enough oxygen due to compaction</td>
<td>Turn and mix pile to create air pockets. If particle size is too small (&lt;1/8 inch), add bulkier particles such as woodchips about 2 inches in size.</td>
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<td></td>
<td>Excessive moisture (water drips from squeeze test)</td>
<td>Turn and mix pile to aid drying. If particle size is too small (&lt;1/8 inch), add bulkier particles such as woodchips about 2 inches in size.</td>
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<td>Ammonia smell</td>
<td>Excess nitrogen</td>
<td>Add more carbon sources (straw, leaves, etc.).</td>
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<td>Pile does not heat up</td>
<td>Pile is too small.</td>
<td>Increase pile size to at least 5 ft high x 5 ft wide x 5 ft deep.</td>
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<td></td>
<td>Pile is too dry. - most common problem (manure/compost crumbles with squeeze test)</td>
<td>While turning and mixing pile, add water with a hose or bucket. Let pile rest for several hours, then retest with the squeeze test. Add more water if necessary.</td>
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<tr>
<td></td>
<td>Not enough nitrogen</td>
<td>Add nitrogen sources (grass clippings, hay, etc.).</td>
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<tr>
<td></td>
<td>Not enough oxygen</td>
<td>Turn and mix pile to introduce oxygen. If particles are too small, add bulkier items such as woodchips.</td>
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<td>Cold/winter weather</td>
<td>Make sure the pile is large enough (at least 5 ft x 5 ft x 5 ft). Turn and mix pile less frequently in warm weather.</td>
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<td>Composting is complete.</td>
<td>Compost is complete when it resembles soil and is crumbly.</td>
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<td>Attracts insects, millipedes, slugs, etc.</td>
<td>This is normal.</td>
<td>To minimize insect problems, keep at the proper moisture level (40-65%). Make sure the pile is heating to high enough temperatures to kill insect eggs (&gt;104°F) (Nielsen et al., 2007).</td>
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</tbody>
</table>

## References:


More information is available at ndsu.edu/agriculture/ag-hub.