Tutorial 5: Distributing Manure – Manure Transfers
VIII: Manure Management Planning in MMP

A. Manure transfers and manure storages.
B. Manure applications
C. Fertilizer applications
VIII-A: Manure transfers and manure storages.

- Transfers of manure from one storage to another.
  - Poultry house to stack house.
  - Stack house to mortality composter

- Importing manure.
Transfers of manure from one storage to another.

- Transfer cake manure to stack house after each flock
  - Transfer 4 tons from building (2 tons per house) to stack house every 2 months.
Managing manure transfers

Manage manure transfers here
Managing manure transfers

Transferring cake manure from the poultry house to the stack house.

Double-click on Nov. cell on the “poultry house” line

<table>
<thead>
<tr>
<th>Plan Month</th>
<th>Oct 2004</th>
<th>Nov 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry houses</td>
<td>1936</td>
<td>3336</td>
</tr>
<tr>
<td>Stackhouse</td>
<td>1326</td>
<td>1326</td>
</tr>
</tbody>
</table>

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Managing manure transfers
Transferring cake manure from the poultry house to the stack house.

The “Manure Transfer Editor” page

We want to make a “New” transfer

Double-click on “New” cell
Managing manure transfers
Transferring cake manure from the poultry house to the stack house.

Select the type of transfer from the **three** choices.

Select internal transfer
Click “OK”
Managing manure transfers

Transferring cake manure from the poultry house to the stack house.

1. Transfer 4 tons as cake manure
2. Select “Stackhouse from list
3. Add note

Click “Close” when done.
Managing manure transfers

Transferring cake manure from the poultry house to the stack house.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry houses</td>
<td>18.5</td>
<td>29.0</td>
<td>45.5</td>
<td>62.0</td>
<td>76.5</td>
<td>95.0</td>
<td>111.5</td>
</tr>
<tr>
<td>Stackhouse</td>
<td>180.0</td>
<td>184.0</td>
<td>184.0</td>
<td>184.0</td>
<td>184.0</td>
<td>184.0</td>
<td>184.0</td>
</tr>
<tr>
<td>Compost</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Note that stack house manure increases by 4 tons
Managing manure transfers

Transferring cake manure from the poultry house to the stack house.

The value in November is in italicized indicating a transfer in that month

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry houses</td>
<td>16.5</td>
<td>29.0</td>
<td>45.5</td>
<td>62.0</td>
<td>78.5</td>
<td>95.0</td>
<td>111.5</td>
</tr>
<tr>
<td>Stackhouse</td>
<td>180.0</td>
<td>184.0</td>
<td>186.0</td>
<td>184.0</td>
<td>184.0</td>
<td>184.0</td>
<td>184.0</td>
</tr>
<tr>
<td>Compost</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Double-click the italicized cell
Managing manure transfers

Transferring cake manure from the poultry house to the stack house.

Click “New” if you want another transfer in Nov. 2004

Click “Delete” if you want to delete the highlighted transfer

Click “Close” to finish managing transfers in Nov. 2004
Managing manure transfers

Transferring cake manure from the poultry house to the stack house.

- Repeat these steps again for Jan, Mar, May, and July crust removal.
Managing manure transfers

• Do a full cleanout (178 tons) in September by transferring the manure to the stack house.
Managing manure transfers

- Sept. transfer drops poultry house level to zero.

- Stack house value rises and turn red because we exceed storage capacity.
  - Don’t worry, we will deal with this later!
Managing manure transfers

- Repeat September cleanout for the next four years.
  - To save time on this exercise skip the crust transfers.
Managing manure transfers

- Last transfer is Sept. 2009.
- Total in Stackhouse should be between 1170 to 1178 tons.
Right-click on slide bar and select “Left edge” to navigate to start of plan
Managing manure transfers

• Use the same process to:
  – Transfer manure from the poultry houses or stack house to the mortality composter.
  – Export manure off farm (external operation).

• Importing manure can be more complicated (see Appendix).
## Managing manure transfers

### Appendix: Importing manure

**Importing Manure: Start on the “Storage Page”**

<table>
<thead>
<tr>
<th>Storage ID</th>
<th>Storage Type</th>
<th>Storage Info</th>
<th>Units</th>
<th>Pounds or Cubic Capacity</th>
<th>Manure On Hand At Start Of Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry litter</td>
<td>Poultry litter</td>
<td>Ton</td>
<td>300</td>
<td>0</td>
<td>Two buildings</td>
</tr>
<tr>
<td>Stackhouse</td>
<td>Poultry litter</td>
<td>Ton</td>
<td>225</td>
<td>100</td>
<td>Buildings cleaned in Sept.</td>
</tr>
<tr>
<td>Compost</td>
<td>Poultry litter</td>
<td>Ton</td>
<td>24</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Imported manure</td>
<td>Poultry litter</td>
<td>Ton</td>
<td></td>
<td>Set up for imported manure</td>
<td></td>
</tr>
</tbody>
</table>

Set up a dummy storage called “Imported Manure”

Do not provide any capacity or manure on hand.
Managing manure transfers

Appendix: Importing manure

Importing Manure: Move to the “Analysis Page”

<table>
<thead>
<tr>
<th>Storage ID</th>
<th>Production Units</th>
<th>Measured Value</th>
<th>Measured Value</th>
<th>Measured Value</th>
<th>Measured Value</th>
<th>Measured Value</th>
<th>Measured Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry manure</td>
<td>Ton/Year</td>
<td>46</td>
<td>3</td>
<td>61</td>
<td>48</td>
<td>61</td>
<td>48</td>
</tr>
<tr>
<td>Compost</td>
<td>Ton/Year</td>
<td>35</td>
<td>4</td>
<td>78</td>
<td>65</td>
<td>78</td>
<td>65</td>
</tr>
<tr>
<td>Imported manure</td>
<td>Ton/Year</td>
<td>61</td>
<td>6</td>
<td>72</td>
<td>56</td>
<td>72</td>
<td>56</td>
</tr>
<tr>
<td>Source Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enter manure test values

Set “Measured Manure Production” to zero.
Managing manure transfers

Appendix: Importing manure

Importing Manure: Now move to the “Nutrient Management” page.

Double click on the “Imported Manure” cell in the month you want to import manure
Managing manure transfers

Appendix: Importing manure

Importing Manure: Select “New” from the manure transfer screen.

For imported manure select “Import manure from External Operation”
Managing manure transfers

Importing Manure: Enter data in the “Manure Transfer Editor”.

1. Import 100 tons of manure
2. Enter information about the manure source.
3. Select animal type

Click “Close” when done.
Managing manure transfers

Appendix: Importing manure

Importing Manure: Now move to the “Nutrient Management” page.

Land apply this manure during March since there is no storage capacity.

Note that you can import manure directly into existing storage without these steps. This approach will not allow a unique manure analysis for the imported manure.
Congratulations
You finished the Tutorial 5! Please be sure to save your work.