

## User manual of NM-Manure Model

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### 1. Prepare Excel security settings.

- Open Microsoft Office Excel (a blank new file)
- Go to Tools, Macro, Security...
- In the “Security Level” tab, select “Medium” and press OK.
- Close Excel program

### 2. Download application (NM-Manure.xls [511 Kb]) from <http://dairy.nmsu.edu>, Tools.

- Right click on [NM-Manure](#) and select “Save Target As...”
- Save file in known place in your local machine

### 3. Open NM-Manure application

- Find the NM-Manure.xls file saved in step 2 and open it.
- A Security Warning will appear requesting to “Enable Macros”
- When you hit “Enable Macros” the following screen will appear

Cows		Heifers	Pregnant	Milking	Calving	Total Milk	RHA	Manure
(head)	(head)	(head)	(head)	(head)	(head)	(lbs)	(lbs/cow/year)	(lbs)
JANUARY	2,257	1,676	1,714	1,917	120	3,969,023	22,172	7,229,232
FEBRUARY	2,235	1,711	1,742	1,945	109	3,740,869	22,157	6,658,516
MARCH	2,211	1,735	1,823	1,990	98	4,306,402	22,179	7,576,648
APRIL	2,191	1,741	1,907	2,028	86	4,233,123	22,179	7,488,149
MAY	2,180	1,731	1,999	2,042	69	4,470,493	22,153	7,850,191
JUNE	2,182	1,709	2,075	2,041	64	4,298,254	22,172	7,616,929
JULY	2,197	1,681	2,115	2,037	68	4,385,491	22,172	7,862,619
AUGUST	2,226	1,650	2,092	2,021	77	4,263,429	22,178	7,776,328
SEPTEMBER	2,256	1,624	2,038	1,974	85	3,960,663	22,162	7,321,469
OCTOBER	2,277	1,610	1,957	1,917	99	3,976,298	22,162	7,327,768
NOVEMBER	2,283	1,615	1,859	1,888	116	3,722,352	22,187	6,925,118
DECEMBER	2,278	1,641	1,759	1,899	127	3,897,191	22,173	7,171,643

#### 4. Explore the file:

- There is an icon to open a pdf file with documentation about the model
- Before running the model, two pieces of information should be entered in the yellow cells: the total number of adult cows and the milk productivity of the dairy farm to be simulated
- The model will run by hitting the blue button and will display results in the table and figures underneath

#### 5. Explore your results:

- The table has eight columns with self explanatory headings. The last heading, Manure (lbs), shows the prediction of wet manure excreted in a monthly basis.
- The six figures represent visually most of the data in the table
- There is a button below the figures that allows print all the results in one letter page