

**INSTRUCTIONS—FORAGE, ROUGHAGE AND LIVESTOCK BALANCE WORKSHEET****SECTION A: Present Forage Availability and Grazing Needs****Table 1 – Present Grazing and Harvested Roughage Available:**

This table records what the **current** situation is for the producer. The left side of the table records forage sources, acres, and AUMs; and represent amounts taken from the Grazing Land Forage Inventory Summary Sheet, MT-CPA-18A (total of Column K).

The right side of the table records harvested roughage type, acres, and AUMs; and are usually obtained from producer records/interviews. Any hay/silage to be sold should be recorded, as well as any excess hay/silage that will be set aside for emergency reserve.

Total the AUMs from grazing (1) and roughage (2).

**Table 2 – Present Forage and Harvested Roughage Balance:**

The AUMs from forage and roughage transfer down from Table 1, and are totaled together (3). This amount represents the total AUMs presently available to the producer.

The total AUMs (3) are divided by 12 months, and the resulting number represents Animal Units (AUs) (4) available each month.

**Months Available from Forage:** The AUMs from Forage (1) are divided by the Total AUs present (4). The resulting number represents how many months of grazing are available from the forage sources.

**Months Available from Roughage:** The AUMS from Roughage (2) are divided by the Total AUs present (4). The resulting number represents how many months of grazing are available from the roughage sources.

**Table 3 – Grazing Needs Inventory:**

In the Number column, enter the current number of livestock and wildlife present on the operation.

The Animal Units (AUs) figure is found by multiplying the number of livestock/wildlife type by the AUE figure. Instructions for cows, calves, yearlings, and heifers are found below the table.

Total AUMs are found by multiplying AUs by the number of months that class of animal is in the operation. For example, if a producer had ten yearlings weighing 950 pounds, the AUE would be .95, and  $.95 \text{ AUE} \times 10 = 9.5 \text{ AUs}$ . If the yearlings are only kept for 9 months, then  $9.5 \text{ AUs} \times 9 \text{ mo} = 85.5 \text{ AUMs}$ .

AUs / MONTH are found by taking the AUs of each animal class and placing that number in each month column that the animal is in the operation. In the yearling example above, the yearlings are kept from April through December (9 months), so 9.5 would be entered in the April through December month columns, in the yearling row. Follow this procedure for all classes of livestock/wildlife present on the operation, and total the AUs for each month at the bottom. The numbers may vary, depending on whether different animal classes are retained in the operation for the whole year or not.

**Table 4 – Production vs. Needs:**

This table compares how much forage is available versus how much is needed. In the Total AUs Available row, enter the figure from Table 2, AUs Present (4).

In the Total AUs Needed row, enter the monthly figures from the bottom of Table 3.

The last row will be the difference between AUs Available and AUs Needed. Subtract row two (Needed) from row 1 (Available). If the resulting number is positive, then forage availability vs. needs is potentially balanced\*. If the resulting number is negative, then forage available does not meet forage needs. The possibility exists for the entire year to be out of balance, or just a few months.

\*Caution should be taken when looking at overall AUs available and AUs needed. Table 4 may show a balance between production and needs, but are the AUs available *when needed*? In the example Table 4 shows production *exceeding* needs, but a closer look at *when* these AUs are available reveals that needs may not be met. Calculations

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in Table 2 show 8.5 months are available for grazing, but only 3.5 months are available from harvested roughage. Since most winters are like pro football season – they seem to last forever – 3.5 months of hay are not enough, and this would indicate a potential improvement area.

**Table 5 – Wildlife Use Information:** This table provides documentation space for wildlife species present and habitat availability for each species. Enter field number(s) and acres containing the different key areas, and also document when the use occurs.

**SECTION B: Planned Forage Availability and Grazing Needs****Table 6 – Planned Grazing and Harvested Roughage Available After Conservation Practices:**

Table 6 is filled out in the same manner as Table 1 in Section A, but reflects forage amounts available after conservation practices are installed. In the example, grazing acres and AUMs stayed the same, but 75 acres were improved for a larger hay base. The producer improved 40 acres more of irrigated hay and 35 acres of dryland hay, and projected yields were 2 ton/acre and 1.5 ton/acre, respectively. Total AUMs for forage (6) and roughage (7) are totaled at the bottom.

**Table 7 – Planned Forage and Harvested Roughage Balance After Conservation Practices:**

The AUMs from forage and roughage transfer down from Table 6, and are totaled together (8). This figure represents the total planned AUMs available to the producer after conservation practices are installed.

The total AUMs (8) are divided by 12 months, and the resulting number represents planned Animal Units (AUs) (9) available each month.

**Months Available from Forage:** The AUMs from Forage (6) are divided by the Total AUs planned (9). The resulting number represents how many months of grazing will be available from the forage sources.

**Months Available from Roughage:** The AUMS from Roughage (7) are divided by the Total AUs planned (9). The resulting number represents how many months of grazing will be available from the roughage sources.

**Table 8 – Planned Stocking Rates to Balance Livestock with Forage Resources by Month:**

This table is filled out the same as Table 3, but reflects adjustments of animal numbers to balance with forage resources. Depending on planned conservation practices, numbers in this table may stay the same as the existing numbers, or may increase or decrease to balance with the forage supply. Follow the same procedure for filling out this table as for Table 3 in Section A.

**Table 9 – Production vs. Needs:**

This table compares how much planned forage will be available versus how much is needed. In the Total AUs Available row, enter the figure from Table 7, AUs Present (9).

In the Total AUs Needed row, enter the monthly figures from the bottom of Table 8.

The last row will be the difference between AUs Available and AUs Needed. Subtract row two (Needed) from row 1 (Available). If the resulting number is positive, then forage availability vs. needs is potentially balanced\*. If the resulting number is negative, then forage available does not meet forage needs. The possibility exists for the entire year to be out of balance, or just a few months.

\*Even though conservation practices are installed with the intent to balance forage availability and needs, the planner still needs to check back to Table 7 and see if the AUs are available during the various forage seasons. In the example, the improved hay acres increased the hay base to 5 months, which is better than the 3.5 months available before improvement. Five months may still not be enough for some winters, so both planner and producer would need to be aware that the possibility of buying hay still exists.

**Table 10 – Wildlife Use Information:** This table provides documentation space for wildlife species present and habitat availability for each species. Enter field number(s) and acres containing the different key areas, and also document when the use occurs. Enter any changes reflecting improvements due to planned conservation practices.