



| Data Type                                                                                                                                                                                                                                                                                                                          | Site | Treatment | Transect or Replicate | Date |       |       | Initials | Deep Tube | Probe Number | Tube Number | Shield Count | 15 or 180 | 30 or 210 | 45 or 240 | 60 or 270 | 75 or 300 | 90    | 120   | 150        | Count  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|-----------------------|------|-------|-------|----------|-----------|--------------|-------------|--------------|-----------|-----------|-----------|-----------|-----------|-------|-------|------------|--------|
|                                                                                                                                                                                                                                                                                                                                    |      |           |                       | Day  | Month | Year  |          |           |              |             |              | cm        | cm        | cm        | cm        | cm        | cm    | cm    | Time (min) |        |
| 1-2                                                                                                                                                                                                                                                                                                                                | 3-4  | 5         | 6                     | 7-8  | 9-10  | 11-12 | 13-15    | 16        | 17-18        | 19-20       | 21-25        | 26-30     | 31-35     | 36-40     | 41-45     | 46-50     | 51-55 | 56-60 | 61-65      | 66-70  |
| 53                                                                                                                                                                                                                                                                                                                                 | 11   | 4         | 6                     | 2    | 02    | 84    | Roy      |           | 48           | 3           | 42718        | 09013     | 20224     | 16249     | 14689     | 15414     | 16770 | VJET  |            | 1 P/in |
|                                                                                                                                                                                                                                                                                                                                    |      |           |                       |      |       |       |          |           |              | 4           | 41701        | 06117     | 22956     | 20430     | 16190     | 16819     | 17296 | VJET  |            | 1      |
|                                                                                                                                                                                                                                                                                                                                    |      |           |                       |      |       |       |          |           |              | 5           | 42966        | 02070     | 17777     | 31241     | 32115     | 32661     | 27375 | VJET  |            | 1      |
|                                                                                                                                                                                                                                                                                                                                    |      |           |                       |      |       |       |          |           |              | 6           | 43017        | 02109     | 15987     | 28049     | 30234     | 34825     | 28131 | VJET  |            | 1      |
| <p><u>Data Type</u></p> <p>53 Neutron probe soil water</p>                                                                                                                                                                                                                                                                         |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |            |        |
| <p><u>Site</u></p> <p>11 Pawnee</p>                                                                                                                                                                                                                                                                                                |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |            |        |
| <p><u>Treatment</u></p> <p>1 Ungrazed</p> <p>2 Lightly grazed</p> <p>3 Moderately grazed</p> <p>4 Heavily grazed</p> <p>5 Grazed 69, Ungrazed 70</p> <p>A Diet light</p> <p>B Diet moderate</p> <p>C Diet heavy</p> <p>D ESA - O</p> <p>E ESA - W</p> <p>F ESA - N</p> <p>G ESA - WN</p> <p>H Lynn Lake</p> <p>J Winter grazed</p> |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |            |        |
| <p><u>Deep Tube Code</u></p> <p>0 Regular tube</p> <p>1 Deep tube</p>                                                                                                                                                                                                                                                              |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |            |        |
| <p>No probing in January</p> <p>Too much snow cover</p>                                                                                                                                                                                                                                                                            |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |            |        |



## GRASSLAND BIOME

U.S. INTERNATIONAL BIOLOGICAL PROGRAM

FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

Check  
Probe  
Number  
48

| Data Type                   | Site | Treatment | Transect or Replicate | Date |       |       | Initials | Deep Tube | Probe Number | Tube Number | Shield Count | 15 or 180 | 30 or 210 | 45 or 240 | 60 or 270 | 75 or 300 | 90    | 120   | 150   | Count Time (min) |
|-----------------------------|------|-----------|-----------------------|------|-------|-------|----------|-----------|--------------|-------------|--------------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|------------------|
|                             |      |           |                       | Day  | Month | Year  |          |           |              |             |              | cm        | cm        | cm        | cm        | cm        | cm    | cm    | cm    |                  |
| 1-2                         | 3-4  | 5         | 6                     | 7-8  | 9-10  | 11-12 | 13-15    | 16        | 17-18        | 19-20       | 21-25        | 26-30     | 31-35     | 36-40     | 41-45     | 46-50     | 51-55 | 56-60 | 61-65 | 66-70            |
| 53                          | 11   | Nys       | Gcc                   | 1    | 3     | 1984  | Rry      |           | 48           | 3           | 43224        | 07557     | 22262     | 16960     | 15063     | 15720     | 16235 | WET   |       | 12 min           |
|                             |      |           |                       |      |       |       |          |           | 1            | 4           | 43720        | 04460     | 21506     | 24950     | 18852     | 17098     | 17556 | WET   |       |                  |
|                             |      |           |                       |      |       |       |          |           |              | 5           | 43037        | 02153     | 16138     | 31031     | 32059     | 31260     | 27289 | WET   |       |                  |
|                             |      |           |                       |      |       |       |          |           |              | 6           | 43613        | 02210     | 15941     | 28122     | 30016     | 32221     | 29049 | WET   |       |                  |
| Data Type                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 53 Neutron probe soil water |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| Site                        |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 11 Pawnee                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| Treatment                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 1 Ungrazed                  |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 2 Lightly grazed            |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 3 Moderately grazed         |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 4 Heavily grazed            |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 5 Grazed 69, Ungrazed 70    |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| A Diet light                |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| B Diet moderate             |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| C Diet heavy                |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| D ESA - 0                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| E ESA - W                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| F ESA - N                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| G ESA - WN                  |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| H Lynn Lake                 |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| J Winter grazed             |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| Deep Tube Code              |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 0 Regular tube              |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 1 Deep tube                 |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |

## FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

| Data Type                                                                                                                                                                                                                                                                  | Site | Treatment | Transect or Replicate | Date |       | Initials | Deep Tube | Probe Number | Tube Number | Shield Count | 15 or 180<br>cm | 30 or 210<br>cm | 45 or 240<br>cm | 60 or 270<br>cm | 75 or 300<br>cm | 90<br>cm | 120<br>cm | 150<br>cm | Count<br>Time<br>(min) |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|-----------------------|------|-------|----------|-----------|--------------|-------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|-----------|-----------|------------------------|-------|
|                                                                                                                                                                                                                                                                            |      |           |                       | Day  | Month |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        | Year  |
| 1-2                                                                                                                                                                                                                                                                        | 3-4  | 5         | 6                     | 7-8  | 9-10  | 11-12    | 13-15     | 16           | 17-18       | 19-20        | 21-25           | 26-30           | 31-35           | 36-40           | 41-45           | 46-50    | 51-55     | 56-60     | 61-65                  | 66-70 |
| 53                                                                                                                                                                                                                                                                         | 11   | 1         | 2                     | 7    | 8     | 1985     | 1985      | 1            | 1           | 1            | 1               | 1               | 1               | 1               | 1               | 1        | 1         | 1         | 1                      | 1     |
| Data Type<br>53 Neutron probe soil water                                                                                                                                                                                                                                   |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Site<br>11 Pawnee                                                                                                                                                                                                                                                          |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Treatment<br>1 Ungrazed<br>2 Lightly grazed<br>3 Moderately grazed<br>4 Heavily grazed<br>5 Grazed 59, Ungrazed 70<br>A Diet light<br>B Diet moderate<br>C Diet heavy<br>D E55 - 0<br>E E55 - W<br>F E55 - N<br>G E55 - M<br>H E55 - 100<br>I E55 - 200<br>J Winter grazed |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Date<br>11-12-85                                                                                                                                                                                                                                                           |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Initials<br>J. H.                                                                                                                                                                                                                                                          |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Deep Tube<br>1                                                                                                                                                                                                                                                             |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Probe Number<br>1                                                                                                                                                                                                                                                          |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Tube Number<br>1                                                                                                                                                                                                                                                           |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Shield Count<br>42753                                                                                                                                                                                                                                                      |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 15 or 180 cm<br>10000                                                                                                                                                                                                                                                      |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 30 or 210 cm<br>23813                                                                                                                                                                                                                                                      |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 45 or 240 cm<br>28000                                                                                                                                                                                                                                                      |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 60 or 270 cm<br>27630                                                                                                                                                                                                                                                      |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 75 or 300 cm<br>31000                                                                                                                                                                                                                                                      |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 90 cm<br>32487                                                                                                                                                                                                                                                             |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 120 cm<br>32487                                                                                                                                                                                                                                                            |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| 150 cm<br>32487                                                                                                                                                                                                                                                            |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |
| Count Time (min)<br>1                                                                                                                                                                                                                                                      |      |           |                       |      |       |          |           |              |             |              |                 |                 |                 |                 |                 |          |           |           |                        |       |

[illegible]

139A



139A

U.S. INTERNATIONAL BIOLOGICAL PROGRAM

FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

Number

423

[illegible]

1  
138A JULY

2

138A JULY



## GRASSLAND BIOME

U.S. INTERNATIONAL BIOLOGICAL PROGRAM

## FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

Check  
Probe  
Number

48

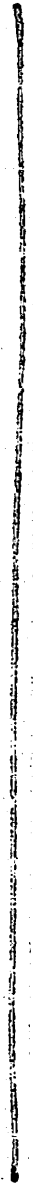
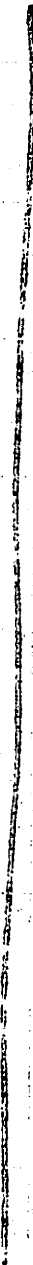
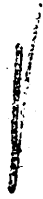
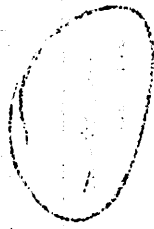
| Data Type                   | Site | Treatment | Transect or Replicate | Date |       |       | Initials | Deep Tube | Probe Number | Tube Number | Shield Count | 15 or 180 | 30 or 210 | 45 or 240 | 60 or 270 | 75 or 300 | 90    | 120   | 150   | Count Time (min) |  |
|-----------------------------|------|-----------|-----------------------|------|-------|-------|----------|-----------|--------------|-------------|--------------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|------------------|--|
|                             |      |           |                       | Day  | Month | Year  |          |           |              |             |              | cm        | cm        | cm        | cm        | cm        | cm    | cm    |       |                  |  |
| 1-2                         | 3-4  | 5         | 6                     | 7-8  | 9-10  | 11-12 | 13-15    | 16        | 17-18        | 19-20       | 21-25        | 26-30     | 31-35     | 36-40     | 41-45     | 46-50     | 51-55 | 56-60 | 61-65 | 66-70            |  |
| 53                          | 11   | hys       | 61c                   | 31   | 12    | 1984  | Rey      |           | 48           | 3           | 42120        | 05420     | 22315     | 27896     | 28058     | 34235     | 33805 | WET   |       | 1040             |  |
|                             |      |           |                       |      |       |       |          |           |              | 4           | 42572        | 02978     | 18155     | 25734     | 26888     | 29320     | 30978 | WET   |       |                  |  |
|                             |      |           |                       |      |       |       |          |           |              | 5           | 42831        | 02482     | 18767     | 31319     | 32651     | 32039     | 29070 | WET   |       |                  |  |
|                             |      |           |                       |      |       |       |          |           |              | 6           | 42371        | 02301     | 16564     | 29109     | 31061     | 33431     | 32260 | WET   |       |                  |  |
| Data Type                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 53 Neutron probe soil water |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| Site                        |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 11 Pownee                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| Treatment                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 1 Ungrazed                  |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 2 Lightly grazed            |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 3 Moderately grazed         |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 4 Heavily grazed            |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 5 Grazed 69, Ungrazed 70    |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| A Diet light                |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| B Diet moderate             |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| C Diet heavy                |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| D ESA - 0                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| E ESA - W                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| F ESA - N                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| G ESA - S                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| H ESA - E                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| J Winter grazed             |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| Data Code                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 0 Regular tube              |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| 1 Deep tube                 |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |

1954  
KIN



1954  
KIN







| Data Type                                                                                                                                                                                                                                        | Site              | Treatment/Replicate | Date      |             |              | Initials        | Deep Tube      | Probe Number       | Tube Number      | Shield Count | 15 or 180 | 30 or 210 | 45 or 240 | 60 or 270 | 75 or 300 | 90    | 120   | 150   | Count Time (min) |   |       |       |       |       |       |       |       |       |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------|-----------|-------------|--------------|-----------------|----------------|--------------------|------------------|--------------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                                                                                                                                                                                                                  |                   |                     | Day       | Month       | Year         |                 |                |                    |                  |              | cm        | cm        | cm        | cm        | cm        | cm    | cm    |       |                  |   |       |       |       |       |       |       |       |       |       |
| 1-2                                                                                                                                                                                                                                              | 3-4               | 6                   | 7-8       | 9-10        | 11-12        | 13-15           | 16             | 17-18              | 19-20            | 21-25        | 26-30     | 31-35     | 36-40     | 41-45     | 46-50     | 51-55 | 56-60 | 61-65 | 66-70            |   |       |       |       |       |       |       |       |       |       |
| 53                                                                                                                                                                                                                                               | 11 W              | 2                   | 67        | 11          | 1967         | Ray             | 0              | 48                 | 3                | 41856        | 04608     | 20639     | 28106     | 28367     | 30628     | 33942 | Wet   |       | 17 min           |   |       |       |       |       |       |       |       |       |       |
| Data Type<br>53 Neutron probe soil water                                                                                                                                                                                                         | Site<br>11 Pawnee | Treatment<br>ESA-II | Day<br>67 | Month<br>11 | Year<br>1967 | Initials<br>Ray | Deep Tube<br>0 | Probe Number<br>48 | Tube Number<br>4 | 42697        | 02665     | 15755     | 25027     | 26669     | 29687     | 31211 | Wet   |       |                  |   |       |       |       |       |       |       |       |       |       |
|                                                                                                                                                                                                                                                  |                   |                     |           |             |              |                 |                |                    |                  | 5            | 42387     | 02428     | 17967     | 31844     | 33114     | 32115 | 29150 | Wet   |                  |   |       |       |       |       |       |       |       |       |       |
|                                                                                                                                                                                                                                                  |                   |                     |           |             |              |                 |                |                    |                  | 6            | 42083     | 02337     | 17050     | 29823     | 31324     | 33162 | 31618 | Wet   |                  |   |       |       |       |       |       |       |       |       |       |
| 1 Ungrazed<br>2 Lightly grazed<br>3 Moderately grazed<br>4 Heavily grazed<br>5 Grazed 69, Ungrazed 70<br>A Diet light<br>B Diet moderate<br>C Diet heavy<br>D ESA - 0<br>E ESA - W<br>F ESA - N<br>G ESA - III<br>H Lynn Lake<br>J Winter grazed | ESA-II            | VII                 | 1         | 41015       | 02518        | 14151           | 23156          | 21850              | 19370            | 16271        | 16103     | 20431     |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |
|                                                                                                                                                                                                                                                  |                   |                     |           |             |              |                 |                |                    |                  |              |           |           |           |           |           |       |       |       |                  | 2 | 42271 | 03067 | 10947 | 16261 | 15196 | 14192 | 12504 | 11650 | 16540 |
|                                                                                                                                                                                                                                                  |                   |                     |           |             |              |                 |                |                    |                  |              |           |           |           |           |           |       |       |       |                  | 3 | 42472 | 02505 | 10707 | 19484 | 26267 | 23175 | 16855 | 19836 | 18152 |

REL-53 NATURAL RESOURCE ECOLOGY LABORATORY - COLORADO STATE UNIVERSITY - PHONE (303) 491-5642 - FORT COLLINS, COLORADO 80523

5  
1  
2  
1

1

1  
1  
1

1  
1  
1



---





## GRASSLAND BIOME

U.S. INTERNATIONAL BIOLOGICAL PROGRAM

FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

Check

Probe

Number

4/8

| Data Type                   | Site | Treatment | Transect or Replicate | Date |       |       | Initials | Deep Tube | Probe Number | Tube Number | Shield Count | 15 or 180 | 30 or 210 | 45 or 240 | 60 or 270 | 75 or 300 | 90    | 120   | 150   | Count Time (min) |
|-----------------------------|------|-----------|-----------------------|------|-------|-------|----------|-----------|--------------|-------------|--------------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|------------------|
|                             |      |           |                       | Day  | Month | Year  |          |           |              |             |              | cm        | cm        | cm        | cm        | cm        | cm    | cm    | cm    |                  |
| 1-2                         | 3-4  | 5         | 6                     | 7-8  | 9-10  | 11-12 | 13-15    | 16        | 17-18        | 19-20       | 21-25        | 26-30     | 31-35     | 36-40     | 41-45     | 46-50     | 51-55 | 56-60 | 61-65 | 66-70            |
| 53                          | 11   | Kys       | Core                  | 13   | Sept  | 1984  | Ray      |           | 48           | 3           | 115170       | 05662     | 14707     | 18975     | 26316     | 29001     | 32002 |       |       | 1/min            |
|                             |      |           |                       |      |       |       |          |           |              | 4           | 113587       | 05655     | 15170     | 20175     | 26371     | 29072     | 32002 |       |       |                  |
|                             |      |           |                       |      |       |       |          |           |              | 5           | 114404       | 02404     | 20152     | 31538     | 32855     | 31544     | 27552 |       |       |                  |
|                             |      |           |                       |      |       |       |          |           |              | 6           | 112723       | 01844     | 15466     | 27612     | 30015     | 32291     | 30007 |       |       |                  |
| Data Type                   |      |           |                       |      |       |       |          |           |              |             | X/11 Area    |           |           |           |           |           |       |       |       |                  |
| 53 Neutron probe soil water |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| Site                        |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 11 Pawnee                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| Treatment                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 1 Ungrazed                  |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 2 Lightly grazed            |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 3 Moderately grazed         |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 4 Heavily grazed            |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 5 Grazed 69, Ungrazed 70    |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| A Diet light                |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| B Diet moderate             |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| C Diet heavy                |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| D ESA - 0                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| E ESA - W                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| F ESA - N                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| G ESA - M                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| H Long Lake                 |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| J Winter grazed             |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| Data Code                   |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 0 Regular tube              |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |
| 1 Deep tube                 |      |           |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |



# GRASSLAND BIOME

U.S. INTERNATIONAL BIOLOGICAL PROGRAM

FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

*Shaded 2" 1/2" right*

Check

Probe

Number

*25*

| Data Type | Site                   | Treatment                | Transect or Replicate | Date |       |       | Initials | Deep Tube | Probe Number | Tube Number | Shield Count | 15 or 180 | 30 or 210 | 45 or 240 | 60 or 270 | 75 or 300 | 90    | 120   | 150   | Count Time (min) |   |       |       |       |       |       |       |       |       |       |       |  |
|-----------|------------------------|--------------------------|-----------------------|------|-------|-------|----------|-----------|--------------|-------------|--------------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           |                        |                          |                       | Day  | Month | Year  |          |           |              |             |              | cm        | cm        | cm        | cm        | cm        | cm    | cm    | cm    |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| 1-2       | 3-4                    | 5                        | 6                     | 7-8  | 9-10  | 11-12 | 13-15    | 16        | 17-18        | 19-20       | 21-25        | 26-30     | 31-35     | 36-40     | 41-45     | 46-50     | 51-55 | 56-60 | 61-65 | 66-70            |   |       |       |       |       |       |       |       |       |       |       |  |
| 53        | 11                     | 45                       | hrc                   | 25   | Sept  | 1984  | Ray      |           | 48           | 3           | 41911        | 05550     | 15773     | 18372     | 21664     | 28235     | 30735 |       |       | 1.00             |   |       |       |       |       |       |       |       |       |       |       |  |
| Data Type | 53                     | Neutron probe soil water | K911/hrc              |      |       |       |          |           |              | 4           | 43125        | 09024     | 17208     | 21287     | 24188     | 28550     | 32901 |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
|           |                        |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  | 5 | 41202 | 02276 | 22558 | 31670 | 32510 | 31530 | 37700 |       |       |       |  |
|           |                        |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  | 6 | 42592 | 02133 | 17157 | 27900 | 29162 | 32020 | 32000 |       |       |       |  |
| Site      | 11                     | Pawnee                   |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| Treatment | 1                      | Ungrazed                 |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
|           |                        |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  | 2 | 40056 | 05228 | 17420 | 21114 | 24188 | 28550 | 32901 | 37700 | 42000 |       |  |
|           |                        |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  | 3 | 43229 | 06180 | 24688 | 31670 | 32510 | 31530 | 37700 | 42000 | 47000 | 17436 |  |
| 2         | Lightly grazed         |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| 3         | Moderately grazed      |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| 4         | Heavily grazed         |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| 5         | Grazed 69, Ungrazed 70 |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| A         | Diet light             |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| B         | Diet moderate          |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| C         | Diet heavy             |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| D         | ESA - 0                |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| E         | ESA - W                |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| F         | ESA - N                |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| G         | ESA - M                |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| H         | Open Lake              |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| J         | Winter grazed          |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| 0         | Regular tube           |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |
| 1         | Deep tube              |                          |                       |      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |   |       |       |       |       |       |       |       |       |       |       |  |



# GRASSLAND BIUMIE

U.S. INTERNATIONAL BIOLOGICAL PROGRAM

FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

### Check

Probe

Number

[illegible]



Nov 15

GRASSLAND BIOME  
U.S. INTERNATIONAL BIOLOGICAL PROGRAMCheck  
Probe  
Number

## FIELD DATA SHEET--NEUTRON PROBE SOIL WATER

| Data Type      | Site | Treatment | Transect or Replicate | Date                     |       |       | Initials | Deep Tube | Probe Number | Tube Number | Shield Count | 15 or 180 | 30 or 210 | 45 or 240 | 60 or 270 | 75 or 300 | 90    | 120   | 150   | Count Time (min) |  |
|----------------|------|-----------|-----------------------|--------------------------|-------|-------|----------|-----------|--------------|-------------|--------------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|------------------|--|
|                |      |           |                       | Day                      | Month | Year  |          |           |              |             |              | cm        | cm        | cm        | cm        | cm        | cm    | cm    | cm    |                  |  |
| 1-2            | 3-4  | 5         | 6                     | 7-8                      | 9-10  | 11-12 | 13-15    | 16        | 17-18        | 19-20       | 21-25        | 26-30     | 31-35     | 36-40     | 41-45     | 46-50     | 51-55 | 56-60 | 61-65 | 66-70            |  |
| 53             | 11   | 11        | 11                    | 15                       | Nov   | 1984  | TR       |           | 48           | 3           | 43420        | 10619     | 26175     | 25813     | 26163     | 27813     | VJET  |       |       |                  |  |
|                |      |           |                       |                          |       |       |          |           |              | 4           | 43158        | 11229     | 24911     | 25173     | 27298     | 28056     | 29337 |       |       |                  |  |
|                |      |           |                       |                          |       |       |          |           |              | 5           | 41827        | 02418     | 20256     | 31703     | 32817     | 31957     | 28511 |       |       |                  |  |
|                |      |           |                       |                          |       |       |          |           |              | 6           | 42023        | 01935     | 15450     | 25392     | 30642     | 32777     | 20892 |       |       |                  |  |
| Data Type      |      |           |                       | Neutron probe soil water |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| Site           |      |           |                       | Pawnee                   |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| Treatment      |      |           |                       | 1 Ungrazed               |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | 2 Lightly grazed         |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | 3 Moderately grazed      |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | 4 Heavily grazed         |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | 5 Grazed 69, Ungrazed 70 |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | A Diet light             |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | B Diet moderate          |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | C Diet heavy             |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | D ESA - 0                |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | E ESA - W                |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | F ESA - N                |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | G ESA - H                |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | H Lym. Lake              |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | J Winter grazed          |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
| Deep Tube Code |      |           |                       | 0 Regular tube           |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |
|                |      |           |                       | 1 Deep tube              |       |       |          |           |              |             |              |           |           |           |           |           |       |       |       |                  |  |

NREL-53 NATURAL RESOURCE ECOLOGY LABORATORY - COLORADO STATE UNIVERSITY - PHONE (303) 491-5642 - FORT COLLINS, COLORADO 80523