

## **Range Resources**

### **Introduction**

The Monongahela National Forest currently manages 48 grazing allotments comprising approximately 6,900 acres. The average size of an allotment is 140 acres; allotments range in size from 18 to 993 acres. Not all allotments are actively grazed every year. An allotment may intentionally be excluded from grazing due to resource concerns or ongoing repairs to facilities. All grazing on the Forest is seasonal, usually mid-May through mid-October.

National Forest allotments have many values. They provide local farmers with a place to graze their livestock during the summer months so that they may use their own lands to produce winter feed for their herds. Allotments provide larger, non-forested, herbaceous openings that provide habitat for many species of wildlife and plants that require such habitat. Allotments provide visual diversity and vistas in the primarily forested landscape of West Virginia. They provide places for the public to view both game and non-game wildlife, and they are popular hunting areas for some game species. Permittees pay to graze these public lands, which are income to the Federal Treasury. The allotments are offered under competitive bidding with the highest bidder receiving the grazing permit.

In FY06, the Range Program was restructured so that the Forest Soil Scientist is now also the Forest Range Program Manager, and the Assistant Forest Soil Scientist is also the Assistant Range Program Manager.

### **2006 Program Accomplishments**

The following Range Program activities were accomplished in 2006:

1. District biological/range technicians worked cooperatively with permittees and/or contractors to:
  - a. Develop and administer 8 fee credit agreements for a total dollar value of \$7284.00.
  - b. Advertise available allotments, award high bidders, prepare and process annual operating instructions for all operable allotments.
  - c. Conduct compliance checks on allotments.
2. The Forest Range Staff hosted a 3-day Range training, featuring Ross McElvain, who provided guidance to the Staff on how to implement the goals of the program with a very limited budget. The NEPA process and adaptive management were also addressed.
3. The Forest LT toured 4 North Zone range allotments to view existing conditions and to decide on how to comply with the 2010 Rescission Act requiring all range allotments to be under a NEPA decision that provides directions for site-specific management. We discussed Forest-wide approaches to NNIS control, grazing management, law enforcement of grazing issues such as trespasses and vandalism, and database entry.

4. Conducted program management activities in range, noxious weeds, and rangeland vegetation (work planning, budget tracking and input, accomplishment reporting, and the Forest Monitoring Report).
5. 100 percent of administration was completed on 2500 acres.
6. A partnership was formed with Ducks Unlimited to fence the riparian area in the Big Run Allotment. Fence construction was begun in the summer of 2006 (Cheat RD).
7. Hawthorne was removed on approximately 10 acres and one pond was restored on the Elk Mountain Allotment (Greenbrier RD). See Figures RA-1 through RA-4.
8. Archeological clearance was conducted on Beale-Hacking, McAllister, Day Run, and Mullenax Allotments (Marlinton RD).
9. The Forest hosted a field trip to the Ours Allotment with partners (permittee, Trout Unlimited, The Nature Conservancy, and NRCS) to consider riparian fencing along the South Branch of the Potomac and to adjust grazing practices (Potomac RD).
10. Mowing was completed on Shearer North and South, Beale-Hacking and Day Run allotments, for an estimated 270 acres of vegetation management (Marlinton RD).
11. The Forest NEPA Coordinator completed a Range File Review to determine which allotments had current NEPA documentation.
12. Soil samples were taken on 28 allotments on the Marlinton-White Sulphur Ranger District and 5 on the Cheat RD allotments.

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## **Monitoring and Evaluation**

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### **1986 FOREST PLAN MONITORING ITEMS FOR RANGE RESOURCES**

There are no monitoring items in the 1986 Forest Plan as amended that are specific to Range Resources. However, there are three required monitoring items applicable to Range Management that come from the Code of Federal Regulations, as follows:

1. Compare outputs/services with those projected in Forest Plan [from CFR 219.12(k)(1)]
2. Document measured prescriptions/effects, including significant changes in productivity of the land [from CFR 219.12.(k)(2)]
3. Document cost of actual management practices in relationship to estimated costs [from CFR 219.12(k)(3)]

Monitoring results for these items are reported below.

**Monitoring Item 1. Compare outputs/services with those projected in Forest Plan.**

The outputs/services projected in the 1986 Forest Plan are the goal and objectives/outputs stated for Range Resources. The only goal for Range Resources is Goal V on page 38:

*Maintain open areas of National Forest land for forage, wildlife, and visual purposes.*

The Range Program is currently meeting this goal on an estimated 6,900 acres in 48 allotments across the Forest. However, prior to the year 2000, allotment acreage had been on a downward trend for over 40 years. Over 6,000 acres of allotments were lost between 1956 and 1986, and close to 2,000 more acres were lost between 1986 and 2000. The primary reason for these losses was the combined inability of allotment permittees and the Forest Service to adequately maintain facilities and implement improvements.

The only output/objectives projected for Range Resources are the grazing use numbers expressed as Animal Unit Months (AUMs) on page 41. The 1986 Plan stated that there were 9,400 AUMs in 1984, with projected annual average outputs of 10,200 AUMs from 1986 to 1990, and 10,900 AUMs from 1991 to 2000. The projections do not go beyond the year 2000. Table RA-1 shows the measured AUMs that occurred between 2000 and 2006, along with other important Range Management information.

**Table RA-1. Grazing Summary, 2000-2004 and 2006\***

Indicator	2000	2001	2002	2003	2004	2006
Animal Unit Months Grazed <sup>1</sup>	5,304	5,454	5,858	5,727	6,185	5,405
Head Months Grazed <sup>2</sup>	4,420	4,494	4,783	4,721	5,267	4,341
Permittees	37	37	44	42	41	37
Cattle Grazed	764	777	829	864	861	817
Horses Grazed	20	17	28	22	33	28
Sheep Grazed	56	56	56	56	56	30
Total Animals Grazed	840	850	913	942	950	875
Active Allotments	39	47	48	47	46	48

\* Data from 2005 is not available.

<sup>1</sup> An animal unit month is the amount of forage required by a 1,000-pound cow, or the equivalent, for one month. For example, a bull eats more than a cow. A mature cow eats more than a yearling.

<sup>2</sup> A head month is the time in months that livestock spend on National Forest land. This is the measurement used for billing purposes.

**Monitoring Item 1. Evaluation, Conclusions, and Recommendations**

The 5,405 AUMs in 2006 (Table RA-1) are well below the 10,900 AUMs projected for 1991-2000, or the 9,400 AUMs that existed in 1984, and are at a five-year low (though this is not a significantly low number). Again, this decline is due primarily to the inability of permittees and the Forest Service to adequately maintain facilities and implement improvements, which leads over time to forest and weed encroachment, reduced grazing capacity, reduced financial return, and eventually, allotment vacancy or abandonment.

Because livestock grazing numbers have been lower than predicted, it is reasonable to assume that the environmental effects from grazing have been lower than originally predicted as well.

**Recommendation:**

Work to meet Range Resources desired conditions in the new Forest Plan, including the goal of well-maintained and operated allotments and properly functioning ecosystems.

**Monitoring Item 2. Document measured effects, including significant changes in productivity of the land.**

This item is primarily monitored through on-site allotment visits or inspections. Each year selected allotments are visited/inspected by the technicians. In most instances these visits are specifically done to inspect the allotment and are referred to as compliance checks. Examples of what inspectors typically look for during compliance checks include:

- Have range improvements/facilities such as fences, watering facilities, gates, mineral feeders, corrals, etc. been maintained by the permittee, and are they functioning properly?
- Has there been vandalism to improvements/facilities?
- Have any livestock escaped the allotment?
- Is the permittee complying with his permit and annual operating instructions concerning number and kind of livestock permitted and season of use (put on and take off dates)?
- In allotments that call for rotational grazing, are livestock being properly rotated?
- Is the area being overgrazed?
- Are erosion, slides and slumps occurring?
- Are riparian areas being damaged?
- Is tree or brush encroachment or non-native invasive species a problem on the allotment?

Observations are usually recorded in field notes or in inspection reports. Problems observed needing immediate action are reported to the District Ranger. Depending on the type of problem reported, phone calls may be made, or letters may be sent to the permittee requesting that some follow-up action be taken for correction. Problems that require repair to facilities are placed on a list of future improvement work to be accomplished. Depending on such factors as the time of year when observed, available funding, and personnel availability, repair work may be scheduled and accomplished that fiscal year, or placed in future year work plans for accomplishment. Some of this work may be done by the permittee through fee credit agreements, or by the Forest Service through contracts or Forest employees.

At other times, allotments are visited in conjunction with other duties. For example, while Forest Service personnel are on an allotment inspecting a contractor's eradication of non-native brush, they also look at other aspects of the allotment. The entire allotment may not get inspected as it would under a compliance check, but portions of the allotment and its facilities are observed and problems are noted and reported if needed.

Due to other duties and lack of range funds, not every allotment is visited or inspected every year. Allotments may be visited more than once in a particular year. Most visits to allotments are done during the grazing season, but some occur before or after the grazing season. In 2006, most of the 48 allotments were inspected (an exact number is not known at this time).

**Monitoring Item 2. Evaluation, Conclusions, and Recommendations****Recommendations:**

- Continue allotment visits/inspections to document conditions of concern and needed repairs as a basis for future work project priorities.
- Continue to control noxious weeds/non-native invasives (which have been noted as a problem on many allotments) and brush on allotments through cutting until approval to use other more effective and longer lasting control measures, such as herbicides are approved through the environmental analysis process.
- Follow-up on Ours Allotment resource concerns. It will not be included in the 2008 North Zone NEPA and will be handled separately some time in the future, possibly in 2009.

**Monitoring Item 3. Document cost of actual management practices in relationship to estimated costs.**

Although there is poor or lacking documentation of 1986 cost estimates, it is believed that the cost of management practices are higher than those estimated during the development of the 1986 Forest Plan for several reasons. First, inflation in the generally economy has increased materials, labor, and transportation costs more than what was likely predicted. Second, the time and personnel and funding to do NEPA planning and implementation are much greater now than it was 20 years ago. Third, planners in 1986 likely underestimated the amount of range-related work that would need to be done with new, vacant, or acquired allotments. Most grazing areas were obtained when the private tracts they resided on were purchased by the government. After acquisition by the Forest Service, many of these private pastures were converted to NF grazing allotments by using existing facilities as much as possible. Since private landowners knew in advance they would be selling their land, their fence replacement and maintenance efforts declined several years in advance of the sale. These fences and other facilities were often in poor condition when acquired.

**Monitoring Item 3. Evaluation, Conclusions, and Recommendations**

Significant improvements to range structural and non-structural improvements/facilities have been made on Forest grazing allotments over the past several years through small contracts, fee credit agreements with permittees, or by work done by Forest Service employees. However, there is still quite a large backlog of range work yet to be accomplished.

There is a large backlog of range improvements/facilities that need replacement. Inventories indicate that there is an estimated 132 miles of exterior/boundary and interior fences on Forest grazing allotments. Many of these fences need major maintenance or replacement, as do the corrals. There are 26 corrals, so just over half of the allotments have corrals/loading chutes. Many livestock watering facilities, such as ponds or spring developments, are also in need of work. New or additional watering facilities are needed on some allotments but must first be approved through the NEPA process.

Although fence conditions vary by allotment, and new sections of fence have been built on some allotments in the past, each year the old fences on allotments continue to age and weather. Every facility has a life expectancy. The life expectancy of a typical 4-strand barbed wire fence with wooden posts in this part of the country is estimated at 25 years. Many allotment fences are currently well over this age. There comes a time when a fence can no longer be repaired. The wire gets so old and rusted it breaks when touched by a person, an animal, or a falling tree branch, or it can no longer be spliced or tightened. Wooden fence posts and braces rot and can no longer support the fence wire and the necessary wire tension to adequately hold livestock. Near this time the fence must be completely replaced/reconstructed. Annual replacement of aging facilities on allotments over the years has not kept up with the need to do so. Many allotments are at or near the point where the entire fence will need replacement at the same time, the funding will not be available to do so, and the allotment will need to be shut down because livestock can no longer be contained. This will happen simultaneously on many allotments over a very short time interval. Not only will this affect the permittee, his livestock operation, and his livelihood, but the use of grazing as a management tool to help maintain these allotments in a primarily herbaceous state as habitat for selected wildlife species will no longer be an option. Unless managed in some other way--such as regular mowing, prescribed burning, herbicide treatment, etc.--these non-forested areas will be lost through forest succession and woody vegetation encroachment. Habitat for those species of wildlife that require larger tracts of non-forest/early successional habitat will continue to decline. Thousands of acres of allotments have already been lost on the Forest over the years, and continued loss of allotments would not meet the current Forest Plan goal.

**Recommendations:**

- Continue to prepare environmental analyses for grazing allotments to allow for additional improvements to be made and to comply with the Rescissions Act of 1995.
- Continue to use fee credit agreements as well as Forest Service range funds to replace, repair, and/or upgrade range improvements.
- More emphasis should be placed on using fee credit agreements to replace segments of old fence with new fence, or to upgrade other failing range facilities. The district technicians should continue to encourage, develop, and administer fee credit agreements each year with permittees on their units.
- Since allotments provide important habitat for various wildlife species, are important areas for hunting, and provide visual diversity, vistas, and wildlife viewing opportunities, fence replacement on allotments should be multi-financed. Wildlife and recreation funds, in addition to range funds, should be used to fund fence replacement on allotments.
- The Forest should request additional funding in range through the out-year budget process and through Congressional requests.
- The Forest should request from the Regional Office that deferred maintenance funding be provided for range work, in addition to deferred maintenance funding for roads.

**Figure RA-1. Elk Mountain Allotment Pond Site, Prior to Excavation**



**Figure RA-2. Elk Mountain Allotment Pond, After Excavation**





**Figure RA-3. Elk Mountain Allotment, with Hawthorn Encroachment**



**Figure RA-4. Elk Mountain Allotment, after Hawthorn Treatment**

