

**ANNUAL REPORT – COMPLIANCE MONITORING OF CATTLE GRAZING  
IN WARNER BASIN SUCKER HABITAT ON THE  
FREMONT-WINEMA NATIONAL FORESTS  
IN 2003**

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### **Introduction**

This report addresses the 2003 grazing season use of allotments under consultation with the U.S. Fish and Wildlife Service for Warner Suckers on the Lakeview Ranger District of the Fremont-Winema National Forest in southeastern Oregon. Within the Warner Basin there are 12 allotments (Barley Camp, Crane Mtn., Crane/Kelly, Rogger Peak, Horse Prairie, Sage, Squaw Butte, Little Cove, Porcupine, McDowell, Whitepine, Honey Creek). These allotments are in the headwaters of Honey, Deep, and Twentymile Creeks which drain the Warner watershed. This is the seventh year of consultation covered by the Fremont Grazing Programmatic Biological Opinion #1-10-97-F-017 and #1-7-97-F-147 issued by the U.S. Fish and Wildlife Service May 22, 1997.

All of the non-compliance issues, except one, reported in the 2002 monitoring report were corrected and in compliance. A single incidence of non-compliance was reported this year, out of 26 monitored in the Warner Basin. The non-compliance was on a site that was identified as inappropriate for monitoring in 2002. The site will be re-evaluated in 2004.

### **2003 Grazing Season**

**Weather Influences:** Precipitation by turn-on was 80% of the yearly average (NRCS water quantity prediction, April 1, 2003 for Lake County, Goose Lake Basin) with April 1 snow pack at 49% of average. A warm wet spring and quick green up in late May resulted in range conditions being ready for grazing early in the season. Summer precipitation remained below average. A significant storm near the beginning of August softened some of the dried forage. Temperatures dipped below freezing on October 8, then temperatures warmed again. Early November moisture while the ground was still warm allowed for germination of annuals and continued re-growth late into the fall at lower elevations.

### **Reasonable and Prudent Measures**

The U.S. Fish and Wildlife Service indicates in the Biological Opinion that the following reasonable and prudent measures are necessary and appropriate to minimize incidental take authorized by this biological opinion:

The Forest Service shall minimize adverse impacts of grazing activities to riparian habitats that contribute to or provide for essential physical and biological components necessary for the conservation of the Shortnose, Lost River and Warner sucker.

To implement the Reasonable and Prudent measure, the following terms and conditions shall be adhered to:

- a. Strict adherence to pasture use guidelines such as maximum utilization levels, stubble height, prescribed grazing systems, or others, as stipulated in the biological opinion.

- b. Monitor all pastures for unauthorized and excess livestock use as often as necessary to ensure the above reasonable and prudent measure is met when cattle are in adjacent public or private pastures. Excess use must not result in more than a five percent noticeable use level, nor can it result in a failure to meet end of growing season utilization and/or stubble heights. Unauthorized livestock use will be reported to law enforcement for appropriate action.

**Results of Monitoring**

End of season stubble height measurements were conducted on 11 of the 12 allotments. Monitoring took place on 26 pastures. Twenty-five pastures successfully met grazing standards; one pasture exceeded minimum stubble height. The results are summarized in Table 1.

**Table 1. Results of Monitoring.**

<b>Allotment</b>	<b>Monitoring</b>	<b>Results of Monitoring</b>
<i>Pasture—Determination--System</i>		
<b>Barley Camp Allotment</b>		
<i>Barley Camp—LAA—Deferred Rotation, Cat 1</i>	Annual	Met Standard at 4-inch
<i>Deep/Mosquito—LAA--Deferred Rotation, Cat 1</i>	Annual	Met Standard at 4-inch
<i>Spray – LAA—Deferred Rotation, Cat 1</i>	Annual	Met Standard at 5-inch, measured 7.7 inch
<i>Dismal RIP—LAA—High Intensity, Cat 1</i>	Annual	Rested – Met Standard 6-inch, measured >12-inch
<i>Deep Creek RIP -- NLAA—High Intensity, Cat 1</i>	20% Pasture Pick	Rested – Met Standard at 6-inch, measured >12-inch
<b>Crane Mountain Allotment</b>		
<i>Crane Mtn.—LAA—Deferred Rotation, Cat 1</i>	Annual	Met Standard at 4-inch
<i>Burn—LAA—Deferred Rotation, Cat 1</i>	Annual	Met Standard at 4-inch
<b>Crane/Kelley Allotment</b>		
<i>Burnt Creek—LAA—Rest Rotation, Cat 1</i>	Annual	Met Standard at 5-inch
<i>Willow Creek—LAA—Rest, Cat 1</i>	Annual	Met Standard at 7-inch, measured 7.3 inch
<i>Willow Creek RIP—NE—High Intensity, Cat 1</i>	20% Pasture Pick	Met Standard at 5-inch
<i>Burnt Creek RIP—NE—Rest, Cat 1</i>	Annual	Met Standard at 5-inch, measured 5.7 inch
<b>Sage Allotment</b>		
<i>Lower Camas RIP—LAA—Rest, Cat 1</i>	Annual	Rested – Met Standard at 7-inch, measured >12-inch
<i>Hickey---LAA—Rest, Cat 1</i>	Annual	Rested – Met Standard at inch, measured > 12-inch

<b>Horse Prairie Allotment</b>		
<i>Horse Prairie</i> —LAA—Deferred Rotation, Cat 1	Annual	Met Standard at 4-inch, measured 4-inch
<i>Twin Springs</i> —LAA—Deferred Rotation, Cat 2	Annual	Met Standard at 5-inch, measured 5-inch
<b>Rogger Peak Allotment</b>		
<i>Rogger Peak</i> —LAA—Deferred Rotation, Cat 1	Annual	Met Standard at 5-inch, measured 5.3 inch
<i>Summit Prairie</i> —LAA—Deferred Rotation, Cat 1	Annual	Met Standard at 5-inch
<b>Squaw Butte Allotment</b>		
<i>Upper Squaw</i> —LAA – Season Long (on/off), Cat 1	Annual	<b>Did not meet Standards at 5-inch / Measured 4-inch</b>
<i>Lower Squaw</i> —LAA—Season Long (on/off), Cat 1	Annual	Met Standard at 5-inch, measured 9.0 inch
<b>Little Cove Allotment</b>		
<i>Little Cove</i> ---NLAA---Deferred Rotation, Cat 1	20% pick	Met Standard at 4-inch, measured 9.4 inch
<b>Porcupine Allotment</b>		
<i>Porcupine</i> —LAA—Deferred Rotation, Cat 2	Annual	Met Standard at 4-inch, measured 7.0 inch
<b>Honey Creek Allotment</b>		
<i>Big Honey</i> —LAA—Deferred Rotation, Cat 1	Annual	Met Standard at 4-inch, measured 4 inch.
<i>Burn</i> ---NLAA---Deferred Rotation, Cat 1	20% pick	Met Standard at 4-inch, measured 8.4 inch.
<i>Blue Springs RIP</i> —LAA—High Intensity, Cat 2	Annual	Met Standard at 4-inch, measured 10.7 inch
<b>Whitepine Allotment</b>		
<i>White Pine</i> —LAA—Deferred Rotation, Cat 2	Annual	Met Standard at 5-inch measured 8.6 inch
<i>Sherman Valley</i> —LAA—Deferred Rotation, Cat 1	Annual	Met Standard at 4-inch, measured 5.0 inch

**Upper Squaw Butte Pasture**

There was one incidence of use exceeding the stubble height standards. The site is over 25 miles upstream of occupied, designated critical Warner sucker habitat.

<b>Allotment</b>	<b>Pasture</b>	<b>Stream</b>	<b>Allowable (S&amp;G)</b>	<b>Actual Use</b>
Squaw Butte	Upper Squaw Butte	none, watershed tributary to Mud Creek	5” stubble min	4” remaining

This is the second year that measured utilization at this site has exceeded standards. Upon closer examination, this specific monitoring site is a poor indicator of grazing use and is not representative of wet meadow conditions within the Upper Squaw Butte pasture. In 2001, the range specialist recommended a re-evaluation of the monitoring site because vegetation is dominated by skunk cabbage and not representative of wet meadow conditions. Mike Nevill and Karen Zamudio reviewed the monitoring site and recommended that a different site be established in the SW quarter of Section 15, upstream of the FS Road 3516-018 and associated impoundment, in a drainage tributary to Bull Prairie.

In 2002, the new range specialist also noted the monitoring site was an inappropriate key area and assessed the grazing by a visual estimate of 65%. As suggested in the 2002 monitoring report, an additional monitoring site should have been established in a more representative wet meadow location in the unit. In 2003, due to a change in range personnel, the monitoring site was not moved and the end-of-season stubble height measurements were again recorded at the old site. In 2003, the remaining stubble height was measured at 4" (standard was 5") and the percent utilization was not measured. The Squaw Butte Allotment was not fully assessed in 2003 due to personnel changes. A full assessment by the Level 1 team is recommended for 2005. No permit action has been taken at this time, due to the appropriateness of the monitoring site described above.

### **Little Cove Allotment**

A one-year temporary permit, subject to renewal, was issued to a permittee on the Little Cove allotment. The permittee voluntarily reduced numbers by 50 AUMs (150 to 100) and delayed turn out until July 15 and grazed until September 15. The old grazing period was from June 15 to August 15. The grazing strategy remained deferred rotation.

This allotment was visited during the late season field review by USFWS and FS personnel. Mesic graminoid plant communities adjacent to the streams and springs were used more heavily than the *Deschampsia/Carex* communities that cure out earlier in the season. Some small amount of trampling was noted in and around the springs. Turn on earlier in the season and off earlier in the season would improve forage palatability, availability and livestock distribution with fewer impacts to the stream channels. The allotment met standards.

### **IIT Field Review**

The PACFISH/INFISH Interagency Implementation Team held a review of the Fremont-Winema National Forest programs October 7 – 9, 2003. Some of the findings from the Team included:

- The Fremont/Winema Forest demonstrates understanding of the standards and guidelines for grazing under INFISH and ESA Biological Opinions. The Forest appears to be using and applying standards and guidelines in conjunction with other management processes, such as watershed assessment, in order to learn more about ecosystem function and how that interrelates with the local aquatic population.
- The Fremont/Winema Forest has a good working relationship with its permittees. The tour had good interaction with two permit holders. Permittees contribute ideas, resources, and range

experience in the resolution of changing old practices or application of new techniques and management direction. There is very good collaboration in achieving needed year end monitoring.

### **2002 Grazing Season Follow-up**

As a follow-up to noncompliance to permit term and conditions, reported in the 2002 grazing season, the following actions were taken during the 2003 season:

#### **Barley Camp Allotment**

##### **Barley Camp Pasture**

In 2002 utilization on the key area (# 167 dry meadow) exceeded the standard, but stubble height met standards. The permittees were notified of monitoring results in an end of season warning letter (11/18/02) and standards were reemphasized in the 2003 AOI. A field visit of the allotment was conducted by Bill Stover, Mike Nevill, Allen Munhall, Leonard LeCaptain and Alan Mauer on September 15, 2003. On September 16<sup>th</sup> Shelly Leehman, range technician, measured residual stubble height at 4" (meeting the 4 inch standard).

The range rider for the permittee reported that he was aware of some cattle from an adjoining pasture entering the Barley Camp Unit after the grazing season. A year-end range monitoring/inspection "warning" letter documenting the incident and detailing previous on again/off again greenline compliance issues was mailed to the permittees on November 4, 2003. The pasture was re-measured by Mike Nevill and the permittees. The compliance status had not changed, but discussions concluded that the BO utilization standard for Barley Camp may be set higher than what the plant community can produce in a season.

##### **Spray Pasture**

The Spray Pasture was measured at 7.7 inches, in compliance with the 5 inch standard.

##### **Deep Creek RIP and Dismal RIP**

Both pastures were rested. Both were measured at greater than 12 inches stubble height, well above the 6 inch standard.

#### **Crane/Kelley Allotment**

Three pastures (Burnt Creek, Burnt Creek RIP, and Willow Creek RIP) that were supposed to have been rested in 2002, received significant grazing pressure in 2002. The use was attributed to cattle from neighboring allotments and private lands. Access was gained because fences damaged by the South Warner fire in 2001 had not been repaired. A non-compliance letter was issued for 2002 (10/16/02). Fence repair/reconstruction was mandated to be in place and functional prior to turn out in 2003. The fence issues were corrected.

Willow Creek and Burnt Creek RIP were scheduled for rest in 2003 and both met stubble height standards.

### **Sage Allotment**

The Sage Allotment was not grazed and did not experience any unauthorized use in 2003. The permit remains temporary. Utilization was 5% on the floodplain and 5% on dry meadow for each pasture. Stubble height was measured at 12 inches in each of the two pastures.

### **Squaw Butte Allotment**

Upper Squaw Butte Key Area does not represent the pasture. The key area is in a *Veratrum californicum* patch. An interdisciplinary team needs to be commissioned to work with the permittee and approve a new monitoring site.

### **Honey Creek Allotment**

#### **Blue Springs RIP**

In 2001 the 4-inch stubble height standard was not met (3.5 inches measured). No stubble height or utilization measurements were taken in 2002. Key area #9 is undersized and needs to be relocated. Both the Blue Springs RIP and the Burn pasture have active beaver and flooding activity has partially covered the transect lines. Transect relocation was not accomplished in 2003 and measurements were made adjacent to the transect line beyond the standing water line. Stubble height was 10.7 inches compared to the 4-inch standard. Utilization was at 45%.

### **2003 Range Improvement Projects**

No range improvement work outside of permittee fence repair occurred in 2003.

### **2004 Proposed Grazing Changes and Improvement Projects**

- The Dismal Creek Riparian Pasture fence in the Barley Camp allotment will be maintained prior to turning into either the Spray or Deep/Mosquito pastures.
- Relocate the monitoring site in the Upper Squaw Butte Pasture.
- Re-establish the key area site away from the fence line, relocate utilization cage, reassess the key area site, and re-evaluate grazing schedule for the Deep/Mosquito pasture.

### **Effects of Non-compliance on the Environmental Baseline for Warner Suckers.**

Non-compliance of stubble height by one inch on the Upper Squaw Butte Pasture will not adversely affect short-term or long-term sucker habitat conditions off-Forest and will not change the environmental baseline.

#### **Temperature**

A 4-inch stubble height versus a 5-inch height will result in no measurable stream temperature changes 25 miles downstream, in the occupied, designated critical Warner sucker habitat. The non-compliance pasture has overland surface flow moving through the draw system, but is well shaded by willows and aspens.

### Sediment

Field notes from past monitoring suggest that the monitoring site and the pasture draw bottom do not have a trampling problem. The side drainage appears to be 90% or more stable. Some road-related fine sediments are evident above the top spring source off the 3615-119 road. Current sedge height, organic layer build-up, willow and aspen root mass, and rock armor of the stream banks prevent and/or filter out floodplain sediment movement. This draw system is functioning properly under its Desired Future Condition objective.

The difference in effect between a 4-inch versus a 5-inch stubble height is difficult to measure and quantify. Most literature speaks to a desired stubble height of 4-6 inches for proper functioning condition. The Infish Implementation Monitoring Module uses this guideline (USDI-BLM 1996). Other stubble height guidelines are in Clary, W.P., and WC. Leininger (2000) and Hall, F.C., and L. Bryant (1995). The non-compliance did not result in changes in stream channel morphology (i.e. bank trampling) or ecologically impact riparian plant species composition, structure, or plant physiology. The 2003 use did not create any large-scale bank erosion. Stream dimension, pattern, and/or profile did not change as a result of the non-compliance. Field observations led to the determination that the non-compliance had no direct or indirect effects on the environmental baseline.

### **In Summary**

Instances of non-compliance over stubble height, has not led to any adverse affects on Mud Creek, its water quality status, or on any downstream habitat loss for listed fish species. Warner suckers remain at least 16-miles away and do not come up onto the Forest or into the Mud Creek drainage. Their Critical Habitat Designation does not come up onto the Forest or into Bull Prairie. Non-compliance in the Upper Squaw Butte pasture has had no direct or indirect effect on any Listed or Sensitive species present in the Deep Creek watershed, based on field observations. Monitoring reports indicate no compliance issues for 1999, 2000, or 2001. In 2002, there was the utilization of 65% DM versus the 50% DM standard. Stubble height was not measured. In 2003, only stubble height was measured. In conclusion, we did not change direct, indirect, or cumulative effects for this LAA determination.

### **References**

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- Hall.FC., and L. Bryant, 1995. Herbaceous stubble height as a warning of impending cattle grazing damage to riparian areas. PNW-GTR-362. USDA-Forest service, PNWS.
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