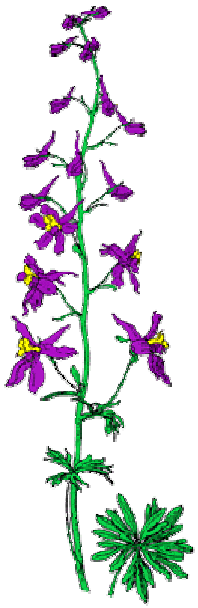
Old Growth at a Crossroads:

U.S. Forest Service Northern Region National Forests noncompliance with diversity provisions of their Forest Plans and the National Forest Management Act Regulations

EXECUTIVE SUMMARY

August, 2003



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The Ecology Center is a citizen conservation organization founded in 1988, dedicated to protecting the remaining wildlands and wildlife of the Northern Rockies region.˚ The Ecology Center works to enforce environmental laws and ensure that stewardship of our public lands is based on sound science and sustainable practices.˚

Introduction

The purpose of this report is to highlight the United States Forest Service s level of compliance with federal regulations that implement the National Forest Management Act, more specifically the regulations dealing with old-growth forests and the wildlife species that depend upon them. This information is especially timely and important as the national forests of the Northern Region complete the legally-mandated forest plan revision process in the next few years.

The National Forest Management Act: Old Growth and Old-Growth Species in the Forest Planning Process.

The 1976 National Forest Management Act (NFMA) provides guiding principles for the management of our national forests. NFMA regulations (36 CFR⁄219 *et seq.*) require the Forest Service to develop **forest plans** for all national forests, which in turn control all permitted activities, such as timber sales. After the Forest Plan is approved, the effects of its implementation are to be continuously monitored and evaluated.

Table 1. Sections of 36 CFR 219 (NFMA regulations) relating to old-growth forests.

Require-ments	Definitions	Relevant Clauses of NFMA Regulations
Inventory		Each Forest Supervisor shall obtain and keep current inventory data appropriate for planning and managing the resources under his or her administrative jurisdiction. [219.12 (d)]
Diversity	The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan. (219.3)	Forest planning shall provide for diversity of plant and animal communities. ...Inventories shall include quantitative data making possible the evaluation of diversity in terms of its prior and present condition. (219.26)
Viable Population	Having the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. (219.19)	Provide for adequate fish and wildlife habitat to maintain viable populations of existing native vertebrate species. [219.27(a)(6)]
Management Indicator Species (MIS)	The species selected because their population changes are believed to indicate the effects of management activities. [219.19 (a)(1)]	Identify and select MIS [219.19 (a)(1)]. Establish objectives for the maintenance and improvement of habitat for MIS [219.19 (a)]. Planning alternatives shall be evaluated in terms of both amount and quality of habitat and of animal population trends of the MIS [219.19 (a)(2)].
Monitoring and Evaluation	A program that considers the effects of management on land, resources, and communities adjacent to or near the National Forest [219.7(f)].	Monitoring shall provide a quantitative estimate [219.12(k)]. Population trends of MIS will be monitored and relationships to habitat changes determined [219.19(a)(6)].

The regulations address old-growth in provisions calling for the protection of biodiversity and maintaining enough habitat to support viable populations of all plant, fish and animal species. And without exception, the Forest Plans of the national forests of the Northern Region, all adopted in the late 1980s, recognize old-growth forests as a component of biological diversity necessary for sustaining many wildlife species.

The definitions of old-growth regardless of the location or setting generally include old, live trees in varying stages of decay, large snags, large downed logs, multiple canopy layers, and patchy horizontal canopy cover. **Essentially, old-growth forests are a surrogate, or proxy, for measuring biological diversity in the national forests.** Each National Forest in the Northern Region has selected at least one **Management Indicator Species (MIS)** explicitly because it is thought to depend on old-growth habitat. The Forest Service must monitor and evaluate the effects of implementing forest plans on the amount and quality of habitat available for MIS populations and also MIS population trends.

Old-Growth Inventories of the Northern Region National Forests

In 1992, a team of Forest Service Northern Region specialists released a report (Green et al., 1992) to serve as the tool for inventorying old growth on each National Forest. While Green sets forth Northern Region definitions for old-growth habitat by forest type (e.g., wet vs. dry), there is wide variation among the National Forests as to how their Forest Plans treat the issue of old-growth inventories, and old-growth species protection. Although individuals of most species may not use an area as large as an entire national forest, it is recognized that sustaining populations is an issue that must be dealt with in the larger landscape context.

Table 2. Summary of Northern Region National Forests old growth requirements*

National Forest	Forest Plan requirements for old-growth
Beaverhead	Maintain at least 10% of the Douglas-fir and spruce component of each timber compartment as old growth. (Timber compartments are roughly 10,000 acres)
Bitterroot	Maintain either 3% or 8% of the suitable timber in each major drainage as old growth, depending on Management Area.
Clearwater	Maintain at least 10% of the Forest in old growth habitat, selecting at least 5% of each timber compartment to manage as old growth habitat.
Custer	No quantitative requirements; Meet the habitat requirements for a minimum viable population of old growth dependent species.
Deerlodge	5% of each timber compartment will be managed for old growth.
Flathead	Minimize management actions within existing old growth to those actions necessary to restore or maintain old growth composition and structure consistent with historical succession and disturbance regimes.

Gallatin	Maintain at least 10% of each timber compartment containing suitable timber in old growth condition.
Helena	Manage 5% of each third order drainage for old growth.
Idaho Panhandle	Maintain at least 10% of forested land as old growth, reflecting approximately the same habitat type series distribution as found on the Forest. In timber compartments that have old growth as 5% of the forested portion, maintain at least 5% as old growth.
Kootenai	Maintain at least 10% of the Forest land below 5,500 feet in elevation as old growth, and 10% of each major drainage on the forest as old growth, distributed among the various major habitat types.
Lewis & Clark	Retain 5% of commercial forest land within each timber compartment as old growth.
Lolo	No quantitative standard
Nez Perce	Maintain 10% of the total forested acres as old growth, maintaining no less than 5% within each prescription watershed or combination of watersheds totaling 5,000 to 10,000 acres.

**Note: some of the requirements displayed are simplifications of what is written in the Forest Plan.*

Summary of National Forest old-growth inventories

The Forest Service has stated that there is no inventory of old growth for the Beaverhead National Forest.

The Bitterroot National Forest has stated that the old growth inventory is almost complete, and has provided numbers for areas that had been at least partially surveyed for old growth. But as the old-growth inventory information stands, it is not possible to adequately determine compliance with the quantitative Forest Plan standards.

The Clearwater National Forest has stated that they have estimated 152,685 acres of old-growth in the non-Wilderness portion of the Forest, and estimate there are 37,000 acres of old-growth in the Selway-Bitterroot Wilderness. These figures total 189,685 acres, which is 10.3% of the Forest. However, the field verification process reveals that the Forest has significantly overestimated the amount of old growth thought to be in the forest.

The Custer National Forest includes as old growth stands of trees that are much smaller than currently accepted (i.e., Green et al., 1992) criteria, thus the old growth inventory s accuracy is highly questionable. It is impossible to tell how much of the Forest is old-growth or if it is well-distributed across the Forest, as required by NFMA regulations.

The Forest Service has stated that there is no inventory of old growth for the Deerlodge National Forest.

The Forest Plan for the Flathead National Forest, written in 1986, does not contain quantitative standards for protecting old growth. When asked for its complete

old-growth inventory, the Forest Service referred to copies of landscape assessments rather than providing specific locations of old growth stands or specific amounts reflecting the current inventory.

The Forest Service has indicated that there is no forestwide old-growth inventory for the Gallatin National Forest.

The Forest Service has indicated that they do not have a forestwide old growth inventory for the Helena National Forest.

For the Idaho Panhandle National Forest, Forest Service information showed that 78 of the forest s 164 total old growth management units (47.6%) lacked 5% allocated old growth. More recently the Forest Service stated it does not have information on the amount of old growth in the old growth management units. A federal court found that the IPNF database has been found to overstate old growth by 32-56%.

The Kootenai National Forest claims it has identified 10.3% of the forest land below 5,500 feet as old-growth. The U.S. District Court rejected the figures as tentative and suspect, as they are contained in a confidential litigation document, stating Whether it turns out that the Forest Service is factually right is a matter for the agency to reconsider in light of its full inventory of the forest and the opportunity for public comment.

No forest-wide data exists for the Lolo National Forest and the Lewis & Clark National Forest, as old-growth allocations are completed on a project-by-project basis, when timber sales are prepared for specific geographic areas.

Based on a response to a recent information request, the Nez Perce National Forest also does not have a single, comprehensive forest wide old-growth inventory. As with many other forests in the region, old growth inventories are completed during assessments prepared for timber sales. Hence, the old growth inventory is incomplete.

Old Growth Management Indicator Species (MIS) by National Forest

Table 3. Management Indicator Species of the Northern Region National Forests

National Forest	Old Growth MIS
Beaverhead	northern goshawk (Douglas-fir forests), pine marten (spruce-fir forests)
Bitterroot	pine marten, pileated woodpecker
Clearwater	northern goshawk & pileated woodpecker; also pine marten (mid- to high-elevation mature forests)
Custer	northern goshawk
Deerlodge	pileated woodpecker (Deerlodge & Philipsburg Ranger Districts), northern goshawk, and northern three-toed woodpecker
Flathead	Canada lynx, northern goshawk, wolverine, fisher, flammulated owl, black-backed woodpecker

Gallatin	pine marten (moist Spruce sites); northern goshawk (dry Douglas-fir sites)
Helena	pileated woodpecker and northern goshawk; also pine marten for mature tree and hairy woodpecker for snag dependent species
Idaho Panhandle	northern goshawk, pileated woodpecker, pine marten
Kootenai	pileated woodpecker (for both old growth and cavity nesting habitat)
Lewis and Clark	northern goshawk; also northern three-toed woodpecker for tree cavity-conifer
Lolo	pileated woodpecker, northern goshawk
Nez Perce	pileated woodpecker, northern goshawk, pine marten, and fisher

Analysis of old growth MIS monitoring from Northern Region national forest Monitoring and Evaluation Reports.

Monitoring reports for the Beaverhead NF provide no indication of population trends of old growth MIS.

For the Bitterroot NF, monitoring reports provide no indication of population trends of pine martens, and did not indicate any clear trend in pileated woodpecker populations.

In the Clearwater NF, monitoring reports for fiscal years 1997-2001 provide no indication of population trends of old growth MIS.

The Custer National Forest has not issued any Forest Plan Monitoring and Evaluation Reports in the last five fiscal years.

No indication of population trends of old growth MIS can be found in Deerlodge NF Monitoring Reports.

Flathead NF monitoring reports provide no indication of population or habitat trends of any old growth MIS.

The Gallatin National Forest has only issued monitoring and evaluation reports twice in the past six years, those being for fiscal years 1996 and 1997. There was no old growth MIS information in the two most recent reports**.**

For the Helena NF, monitoring reports for fiscal years 2000 and 2001 provide no indication of population trends of old growth, mature forest, or snag-dependent MIS.

For the Idaho Panhandle NF, monitoring reports for fiscal years 1997-2001 provide no indication of population trends of old growth MIS.

The Lewis & Clark National Forest has only issued two reports since 1994, one for FY 1999 and one for 2000-2001. Because of the variability of monitoring efforts, population trends are not clear.

For the Lolo NF, no information on population trends of old growth MIS is presented in monitoring reports.

The Nez Perce FY 2001 Monitoring and Evaluation Report stated that surveys were undertaken for pileated woodpeckers in only one year since 1992, and that no formal surveys were undertaken for pine marten and fisher. Monitoring reports from the past five years provide no indication of population trends of any of the old growth MIS.

Summary

From our review of all existing Forest Plan Monitoring and Evaluation Reports issued by Northern Region national forests from at least the past five years, none of them present data sufficient to reveal population trends of their management indicator species.

Conclusions

This report investigated how Forest Plans and Forest Service management have complied with NFMA regulations in regards to old-growth forests and the wildlife species that depend upon old-growth habitat. All of the forest plans for Northern Region national forests have been implemented for at least 15 years, which was their maximum lifespan as intended by NFMA. The results of this report are rather striking, in that it appears that many of the promises made for protection of biological diversity have not been kept.

Perhaps most striking is the failure of all Northern Region national forests to properly track population trends of old-growth management indicator species (MIS) during the life of the forest plans. This means that the Forest Service lacks the data to be able to understand how old-growth MIS populations change in response to management-induced or other changes to their habitats. The Northern Region national forests have not complied with the NFMA regulations requirement: Population trends of the management indicator species will be monitored and relationships to habitat changes determined. [36 CFR⁄219.19(a)(6).]

Another striking finding is that the accuracy of national forest old-growth inventories is highly questionable. Four of the national forests have forest plans that require a certain amount of old growth be maintained forest-wide. Three of those forests (Clearwater, Idaho Panhandle, and Kootenai) have been involved in litigation that challenged the accuracy of their forest-wide old-growth inventories. In each case, a federal court ruled the inventory was not accurate enough to insure that the total amount of old-growth habitat required by the forest plans was actually being maintained. The fourth, the Nez Perce National Forest, does not currently have a comprehensive forest-wide old-growth inventory.

Of the other nine national forests of the Northern Region, none have forest plans that explicitly require keeping forest-wide old-growth inventories, although some contain implications in that direction. Of those nine, only the Bitterroot represents itself as having an essentially complete forest-wide inventory. However, not even the Bitterroot s inventory is satisfactorily in harmony with forest plan allocation requirements.

In sum, none of the national forests in the U.S. Forest Service Northern Region have complied with the biological diversity requirements of the National Forest Management Act as applied to old-growth forests and the wildlife species that depend upon them. The amount of old growth that currently exists on these forests is apparently

unknown. As the Forest Service enters the revision phase for new forest plans, none of the national forests has collected the data that would allow them to understand how their management under the original forest plans has affected population trends of these wildlife species. This is not what Congress envisioned when NFMA was passed into law.

Reference:

Green, P., J. Joy, D. Sirucek, W. Hann, A. Zack, and B. Naumann, 1992. Old-growth forest types of the northern region. Northern Region, R-1 SES 4/92. Missoula, MT.

To download or view a copy of this reference, go to:
http://outerlimits.wildrockies.org/Ecosystem_Defense/Science_Documents/Green_et_al_1992.pdf