

Inventorying & Monitoring Small Forestlands

A Guidebook for Forest Stewardship Council
Certified Small Forest Landowners

July, 2007

Exclusively For members of
Northwest Certified Forestry



Conservation

Conservation is a state of harmony between men and land. By land is meant all of the things on, over, or in the earth. Harmony with land is like harmony with a friend; you cannot cherish his right hand and chop off his left. That is to say, you cannot love game and hate predators; you cannot conserve the waters and waste the ranges; you cannot build the forest and mine the farm. The land is one organism. Its parts, like our own parts, compete with each other and co-operate with each other. The competitions are as much a part of the inner workings as the co-operations. You can regulate them—cautiously—but not abolish them.

The outstanding scientific discovery of the twentieth century is not television, or radio, but rather the complexity of the land organism. Only those who know the most about it can appreciate how little we know about it. The last word in ignorance is the man who says of an animal or plant: "What good is it?" If the land mechanism as a whole is good, then every part is good, whether we understand it or not. If the biota, in the course of aeons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering.

Aldo Leopold

TABLE OF CONTENTS

INTRODUCTION	1
STRUCTURE OF GUIDEBOOK	1
REQUIRED SKILLS	2
OVERVIEW OF FSC INVENTORY AND MONITORING GUIDELINES	2
OVERVIEW OF NCF MONITORING GUIDELINES	3
MONITORING INTENSITY:	5
CREATING A MONITORING SYSTEM	5
EQUIPMENT LIST	7
COMPONENT 1: INVENTORYING FOREST RESOURCES	8
1.1 TECHNIQUES	8
1.2 OFFICE PREPARATION	9
1.3. FIELD INSTRUCTIONS	13
1.4 OFFICE ANALYSIS	19
COMPONENT 2: ASSESSING FOREST ECOSYSTEMS	22
2.1 STAND ASSESSMENT INSTRUCTIONS	22
2.2 ROAD ASSESSMENT INSTRUCTIONS	27
2.3 STREAM ASSESSMENT INSTRUCTIONS	29
2.4 WETLAND ASSESSMENT INSTRUCTIONS	32
COMPONENT 3: SITE SPECIFIC MONITORING	35
3.1 OVERVIEW & GUIDELINES	35
3.2 MANAGEMENT ACTIVITY MONITORING INSTRUCTIONS	35
COMPONENT 4: ORGANIZATION & SUMMARIES	38

Introduction

Pacific Northwest forests are a study in contrasts. Peering through their overt beauty one finds a covert mystery that only reveals itself through studied observation. Understanding this mystery leads to a more intimate participation with the forest, and allows forest managers to make better decisions about desired future conditions. Monitoring forest ecosystems has many valid applications, ranging from simple ocular assessments to more complex systematic statistical sampling of ecosystem attributes. This guidebook weaves together a range of monitoring options that allows forest managers to develop a monitoring program that is appropriate for their interest and skill level and meets the management objectives of their forest.

For forest managers who are managing to the standards of the Forest Stewardship Council (FSC), a monitoring program is required and is one of the ten principles of the FSC certification standards. Principle 8: Monitoring and Assessment in the Revised Final Pacific Coast Regional Forest Stewardship Standard states that “The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.”

The goal of this guidebook is to provide a practical, simple inventory and monitoring system for landowners who own less than 2,500 acres. By using these guidelines, landowners will collect information that can be used to improve forest management and meet FSC certification requirements. Instructions for various monitoring strategies, datasheets to record field information and other tools are provided here to assist a landowner with developing a site specific monitoring plan. The methods suggested in this guidebook are but one approach for collecting inventory and monitoring data. They are not a rigid set of requirements, but instead a set of guidelines and tools that landowners can adapt to their specific ownership, skill sets, and management approach. Landowners with no existing monitoring system may choose to adopt this system as-is, while others who have existing systems will likely use it as a reference to ensure they are meeting FSC requirements.

This guidebook is designed for landowners who possess only basic forestry skills. It assumes that a landowner has a forest stewardship plan that includes maps, outlines primary management objectives, and is capable of being updated as new information becomes available. Landowners should find that the datasheets offered in this guidebook can be easily integrated into their existing forest management plan. Most important, this guidebook should provide landowners with a simple system to collect, organize, and interpret key information to help them steward their forestland.
