

12: Communication and Completing the Job

Session Objectives

- Identify all major components of creating an adaptive management monitoring study.
- Critique an existing monitoring plan.

Session Outline

Identifying major steps for creating a successful monitoring study
Discuss components of a monitoring plan and a monitoring report
As a group, critique an existing monitoring program
Workshop close

In this section of the binder

12.1 All Together Now
12.3 Checklist for Assessing the Results of a Pilot Study
12.5 Elements of a Monitoring Plan
12.7 Elements of a Monitoring Report

Related Technical Reference chapters and appendices

Chapter 10: Communication and Monitoring Plans
Chapter 13: Completing Monitoring and Reporting Results
Appendix 1: Common Monitoring Problems

All Together Now

1. **Formulate**

2. **Design**

3. **Choose**

3a.

3b.

3c.

4. Complete

5. Implement

6. Analyze

7. Communicate

Checklist for Assessing the Results of a Pilot Study

A. Can the program be implemented as planned? Y N

B. Can the program be implemented within cost constraints? Y N

C. Are the assumptions of the ecological model still valid? Y N

D. Can the design meet the sampling objectives? Y N

If the answer to any of these questions is “NO” then:

1. Get more resources

2. Reassess the scale

3. Redesign

4. Accept lower precision

5. Accept higher error risk

6. Start over

Elements of a Monitoring Plan

I. Introduction

- Species or community description
- Location
- Need for the study
- Management conflicts

II. Description of Ecological Model

- Known biology or ecology of the species or community
- Conjectural relationships and functions
- Sources of information for the model

The purpose of this section is to help identify the sensitive attribute(s) to measure and to describe relationships between the biology/ecology and management actions. This section forms the biological/ecological basis for the development of objectives.

III. Management Objective

- Formal six-part management objective
- Rationale for the choice of attribute to measure
- Rationale for the choice of quantitative thresholds and time frames

IV. Monitoring Design

A. Sampling Objective (if sampling)

- Formal sampling objective
- Rationale for choice of precision and power levels

B. Sampling Design (if sampling)

- What size is the sampling unit?
- How are the sampling units placed in the field?
- How many sampling units?

C. Field Measurement Protocols

- What is the unit counted (for density)?
- How are irregular outlines and gaps of vegetation treated (for line intercepts)?
- How are observers trained to ensure consistency (particularly for ocular estimates)?
- How are plots monumented (if permanent)?
- Note any rules established for field measurements (e.g., avoiding stepping in plot, how to run tape measures around obstacles)

Include all information needed for someone else to implement or continue the monitoring in your absence. This cannot be too detailed.

IV. Monitoring Design (continued)

D. Timing of Monitoring

- What time of year, both calendar and phenologically?
- How often?

E. Monitoring Location

- Clear written directions
- Coordinates of permanent monuments
- Maps
- Aerial photographs
- Describe the study location and the location of individual sampling units

F. Intended Data Analysis and Archiving Approach

- What type of statistical analysis will be used?
- What software was used to analyze pilot data?
- Where will data and reports be stored?
- What software, if any, will be used to compile and store data?
- Where will the results be disseminated?

V. Data Sheet

- Example of a blank and filled-in datasheet
- Instructions for filling-in the datasheet
- Explanation of codes used in the datasheet

VI. Authors and Reviewers (update as needed)

- Responsible party or parties and their roles
- List of people who contributed to the creation of the plan
- List of people/entities who should receive the final report or report summary

VII. Funding and Budget

VIII. Management Implications of Potential Results

- Outline decision tree: if outcome A, then consider management action X ; if outcome B, then consider management action Y .
- Discuss any meetings, planning documents, or conversations that considered and conceptually approved management actions X and Y.
- Discuss potential constraints to management options discussed at the planning meetings.
- Discuss any management options considered but rejected.

Elements of a Monitoring Report

- I. Introduction
- II. Description of Ecological Model
- III. Management Objective(s)
- IV. Monitoring Design
- V. Data Sheet Example
- VI. Authors and Reviewers
- VII. Funding and Budget
- VIII. Management Implications of Potential Results

(above: from Monitoring Plan)

(below: unique to Monitoring Report)

- IX. Summary of Results
- X. Interpretation of Results
- XI. Assessment of Monitoring Project
- XII. Management Recommendations