

# Coastal Montane Biodiversity Project

## Project Goal

Sustaining Biodiversity in Coastal Montane Ecosystems

## Adaptive Management

Adaptive management is a systematic, rigorous approach for learning from management actions. Results from adaptive management tests of the Forest Practices Code in coastal montane ecosystems contribute to sustaining biodiversity. Adaptive management is driven by research, although results from adaptive management may also assist in developing and refining research questions.

## Research Priorities and Initiatives

Research priorities are driven by the results of biodiversity inventory, and by concerns about meeting the objectives of the Forest Practices Code. Research is facilitated through partnership with universities, the forest industry, and local communities. Important objectives for research are; to address the needs of sensitive species, to recommend alternative methods for maintaining biodiversity, to determine appropriate variables to monitor changes in biodiversity, and to modify the Forest Practices Code and component guidebooks where necessary to ensure applicability in coastal montane ecosystems.

Current research initiatives in coastal montane ecosystems include:

### Ecology of Coastal Montane Cavity-Nesting Birds

- ◆ Population Dynamics
- ◆ Movements
- ◆ Nest Structure Characteristics
- ◆ Nest Site Characteristics

### Ecology of Coastal Montane Arthropods

- ◆ Forest Pest Flight Patterns and Relationships to Corridors
- ◆ Role of Arthropod Guilds in Ecological Processes
- ◆ Arboreal Habitat Colonization Rates (Oribatid Mites)
- ◆ Seasonal Differences in Species Presence and Abundance

### Ecology of Coastal Montane Bats

- ◆ Elevational Distribution of Bat Species
- ◆ Bat Habitat Use of Different Montane Ecosystems
- ◆ Roosting Requirements of Montane Bats
- ◆ Roost Site Selection

### Ecological Processes and Forest Management

- ◆ Role of Corridors in Ecological Processes
- ◆ Size and Distribution of Wildlife Tree Patches
- ◆ Effects of Riparian Management
- ◆ Landscape-Level Fragmentation Processes
- ◆ Modeling Impacts on Biological Diversity

## Biodiversity Inventory

Biodiversity inventory provides an assessment of species presence in coastal montane ecosystems. This information contributes to a biodiversity database, and aids in setting priorities for research.

Components of operational inventory include:

#### Plants:

Lichens, Bryophytes, Vascular Plants

#### Invertebrates:

Spiders, Insects, Mites, Millipedes, Crustaceans

#### Vertebrates:

Birds, Mammals, Amphibians, Reptiles

#### Habitat Structure:

Coarse Woody Debris, Wildlife Trees, Bear Dens, Terrestrial Ecosystem Mapping (TEM)

## Forest Practices Code Implementation Issues

Concerns about present and future implementation of the Forest Practices Code set priorities for research projects and adaptive management tests in coastal montane ecosystems.

Specific components of the Forest Practices Code under assessment include:

#### Biodiversity Guidebook

#### Riparian Management Guidebook

#### Higher-Level Plans Guidebook

#### Managing Identified Wildlife Guidebook

#### Credits:

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