IFML SOP-01: Scanning and Image Capture

Scope and Purpose

This SOP governs all scanning and image capture activities for the Iowa Forestry Media Library (IFML).

The objective is to create archival-quality digital negatives suitable for scientific, educational, and long-term preservation use.

Core Capture Principles

Spatial resolution (DPI) is prioritized over color unless color is analytically required.

No scanner-side enhancements, corrections, compression, or resizing are permitted.

Approved Equipment

Primary scanner: Epson Expression 13000XL.

Scanners must support true optical resolution of at least 600 DPI and 48-bit color depth.

Standard Scan Settings

Mode: Professional Mode.

Resolution: 300–1200 DPI depending on specimen type.

Color: Grayscale or Color as defined by analytical purpose.

File format: TIFF, no compression.

Specimen-Specific Standards

Roots: 600–1200 DPI; color optional unless stained.

Leaves: 300–600 DPI; color recommended.

Acorns: ~300 DPI; color required due to 3D structure.

Tree cookies: 2400 DPI, 24-bit color, no processing.

Quality Control

Entire specimen must be visible.

No clipped highlights or shadows.

Rejected scans are deleted and rescanned.