IFML SOP 01: Scanning and Image Capture

Updated workflow guidance for scans, photos, and supporting media. Iowa Forestry Media Library.

Purpose

This SOP describes how IFML captures archival-quality scans and related media so records remain suitable for teaching, research, publication, and long-term reuse.

Capture Scope

- **Flatbed scans:** Botanical and forestry materials captured at 600 DPI minimum, with workflows extending to 2400 DPI when finer detail is needed.
- **Color depth:** Up to 48-bit color when supported by the capture setup.
- **Photo support:** Still photography up to 20.9 megapixels for field context, supporting documentation, and non-flat materials.
- **Video support:** Up to 4K video for workflow demonstrations, handling references, or contextual media.

Recommended Scan Settings

Setting	Recommendation
Resolution	600 DPI minimum; 1200 DPI common; 2400 DPI for fine structures or publication-critical detail
File format	Uncompressed TIFF for masters; PNG or JPG derivatives for access use as appropriate
Color handling	Retain embedded profile and disable automatic enhancement unless documented
Scale reference	Include scale or ruler when analytical measurement or verification is expected

Workflow

- Prepare and clean the capture surface, verify lighting or scanner calibration, and confirm the item can be handled safely.
- Position the specimen or object to maximize legibility and include any required scale or orientation markers.
- Run a preview or framing pass before final capture.
- Export the preservation master first, then generate access and presentation derivatives from the master.
- Review sharpness, cropping, fidelity, scale visibility, and file completeness before publication prep.

Quality Control

- Check focus across the full subject area.
- Confirm labels, specimen identifiers, and supporting notes are readable when relevant.
- Verify filenames and record metadata match the captured object.
- Document any exceptions, retakes, or processing decisions that affect interpretation.

IFML prioritizes dependable records over volume. A record should be republished or corrected if quality, labeling, or technical completeness falls below project standards.