

Changes in:

Wood Specifications / *Markets*

Sustainability Conference
4/20/2017



Items to Cover

- Pulpwood and Chip Specifications
 - What and Why
- Market Changes
 - Chain of Custody Demand Increases

Pulpwood and Chip Specifications

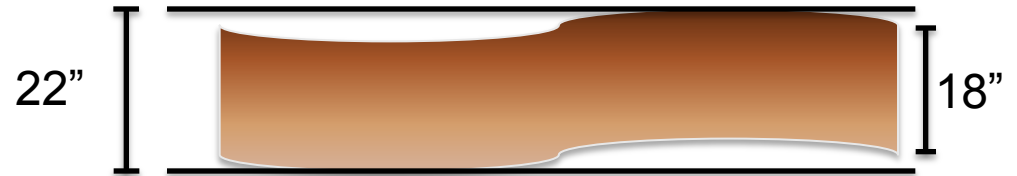
- **Pulpwood**
 - Length 100 in.
 - Min dia. 4 in.
 - Max dia. 20 in THI – 18 in MOS
 - Straight, flush knots, square ends
 - Green (live) wood
- **Softwood Species**
 - THI - All Species except Cedar
 - MOS – All Species except Cedar, Hemlock or Tamarack
 - THI Restricted Species - Balsam / Spruce / Tamarack 20% max
- **Chip Specifications**
 - Overs > 10mm
 - Accepts 2 – 10mm
 - Pins / Fines < 2mm
 - Bark < .5%
- **Unacceptable Criteria**
 - Plastic, Metal, Stone
- **Unacceptable Criteria**
 - Charred, Wormholes, Decayed, Crotched
 - Excessive crook (over 20 in. / 18in)
 - Plastic, Metal, Stone, Sticks and Branches
- **Hardwood Species**
 - All Northern Hardwood
- **Restricted Species**
 - Oak 30% (THI Only)
 - Butternut, Hickory
- **Prohibited Species**
 - Both Mills
 - Aspen, Basswood, Box Elder, Balm-of-Gilead, Cottonwood and Willow
 - MOS
 - Oak



Oversize

- The log must fit through a cylinder
- This is a Safety and a production Issue!!!!

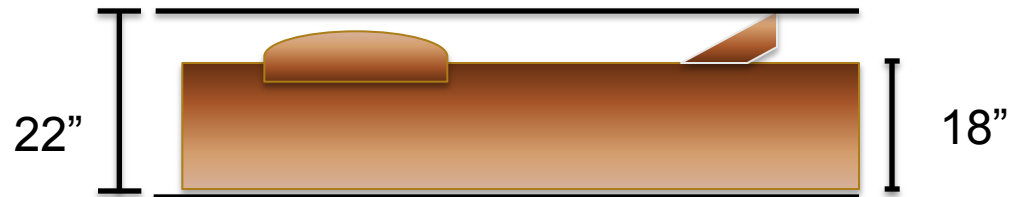
- Sweep Crook



- Butt Swell



- Knot Trim
- Burl

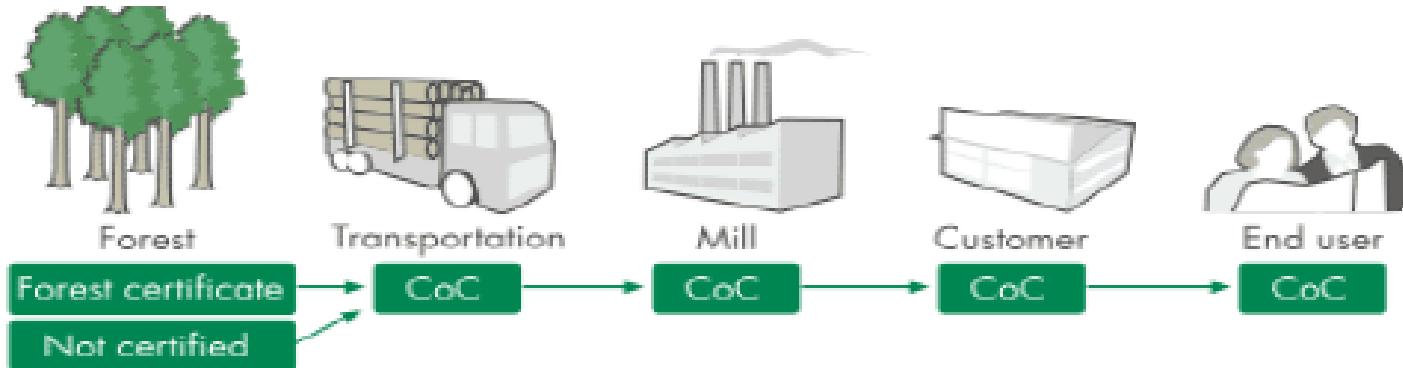


Reasons for Specifications

- Safety
 - Oversize
- Product Quality
 - Bark
 - Plastic
 - Species
 - Char / Burnt Wood
 - Metal
- Yield
 - Knots
 - Undersize / Oversize
 - Dead Wood
 - Species
- Production Efficiency
 - Anything that stops or slows our process

What is Chain of Custody?

• **Forest Certification** is a voluntary process to assess that a forest is managed according to the acceptable standards of sustainable forest management.



• **Chain-of-Custody (CoC) Certification** is the act of tracking and recording the possession and transfer of fiber from its point of origin through the supply chain

- Documented Control Procedures
- Annual 3rd party audit

Chain of Custody Demand

- 18 months – dramatic increase in demand for FSC certified product.



- Where / Why?
 - Mostly on food product side of the business
 - Increase in product to Europe
 - Suspect decrease in focus on Publication Papers

Certification Standards



The mark of responsible forestry

BV-COC-089061

© 1996 FSC



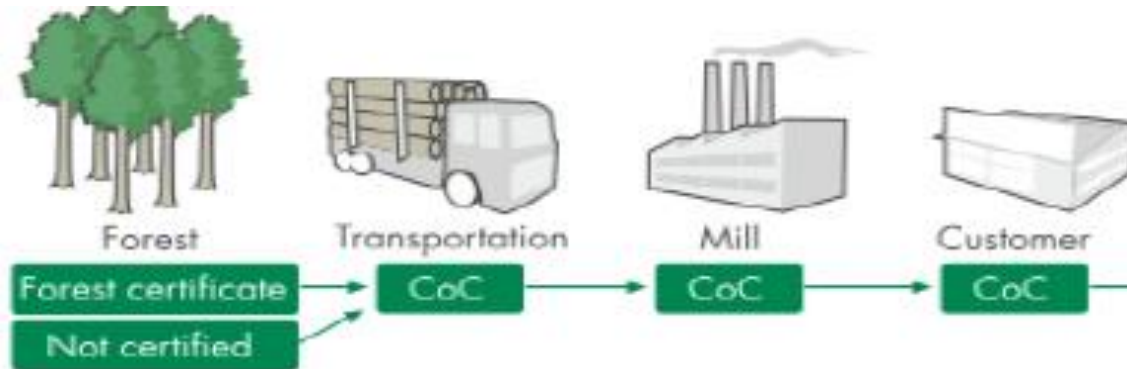
Good for you. Good for our forests.™



PEFC/29-31-169

| Forest Stewardship Council | Sustainable Forestry Initiative | Programme for the Endorsement of Forest Certification Schemes |
|--|---|---|
| FSC | SFI | PEFC |
| North American Origins / International Recognition | North American | International Recognition |
| Preferred in the market <i>(independent roots)</i> | Higher volumes of certified fiber available | Recognizes SFI certified fiber |
| <p style="text-align: center;">SFI Certified Fiber Sourcing</p> <p>“Addresses the 90 percent of the world's forests that are not certified. Program participants must show that the raw material in their supply chain comes from legal and responsible sources, whether the forests are certified or not.” sfiprogram.org</p> | | |

How Does Chain of Custody Work ?



~4 tons of Wood

OR

~1 ton of Pulp

=

1 Ton Paper

=

1 Credit



Expera Chain of Custody Certification

| | | |
|------------------------|---|---|
| Incoming Raw Materials | Wood & Pulp Procurement Accounting | BPAL JDE / Stratum |
| Processing | Sales / Marketing Customer Service Scheduling / Inventory Accounting | JDE Stratum Additional Spreadsheets |
| Outgoing | Customer Service | JDE Stratum |

How does Chain of Custody work inside Expera?

- Credits originate from a Certified Forest
- Certified wood must be purchased by a certified buyer / operator
- FSC Wood must not be mixed with non-certified wood at an intermediate location
- Correct paperwork must accompany each load identifying the COC # and the location of the Contract Area
- Ownership must be maintained by a certified body for the credits to be passed.

▪ Therefore – The Chain of Custody!



Corporate Sustainability Commitment

Working harder for a more wonderful world.



soar
Above. Beyond. For a better earth.
EXPERA SPECIALTY SOLUTIONS

To find up-to-date information and resources for landowners, please visit Expera's website containing certification and sustainability information:
<http://experaspecialty.com/sustainability/certifications>



BUREAU VERITAS
Certification

Certification
Awarded To
EXPERA SPECIALTY SOLUTIONS, LLC
1101 600 Thimbley Road
Kaukauna, WI 54130 - USA

PLEASE SEE APPENDIX FOR ADDITIONAL CERTIFIED LOCATIONS
Bureau Veritas Certification North America, Inc. certifies that the sustainable forestry management practices of the above organization has been audited and found to be conformant with the requirements of the standards detailed below

STANDARDS
SUSTAINABLE FORESTRY INITIATIVE® STANDARD IN ACCORDANCE WITH SFI® 2010:2014, SECTION 2 - CERTIFIED SOURCING

SCOPE OF SUPPLY
WOOD PROCUREMENT

Original Approval Date: **11 September 2009**
Subject to the continued satisfactory operation of the Organization's Management System, this certificate will remain valid until: **9 September 2015**

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organization.
Certificate No: **BY-SEFIS-13605196-1**
Issue Date: **10 September 2012**
Revision Date: **19 February 2015**

For Bureau Veritas Certification North America, Inc.
300 Business Drive, Houston, Texas, USA
www.us.bureauveritas.com/bvnc

ANAB ACCREDITED
SUSTAINABLE FORESTRY INITIATIVE SFI-00134
PEFC PEFC/29-31-169

Expera is certified in multiple 3rd party Programs:

- Chain of Custody
 - FSC
 - SFI
 - PEFC
- Process Certification
 - SFI Procurement System
- Supply Chain Support
 - FSC Group Certification



Expera Outreach

Find more information on Policies and Standards here...

Sustainability

- ◆ Central Office
- ◆ Material Balance Spreadsheets
- ◆ Controlled Wood Sourcing Program
- ◆ Group Logger Certification
- ◆ Standards
- ◆ Training



To access all of Expera's Chain of Custody certificates please go to: <http://experaspecialty.com/sustainability/certifications/>

Sustainable Forest Policy

Expera Specialty Solutions, LLC

Expera Specialty Solutions, LLC is committed to implement and achieve certification to the SFI Program Requirements for Fiber Sourcing, Chain of Custody and Product Labels and the Program for the Endorsement of Forest Certification (PEFC) Chain of Custody Standard.

Expera Specialty Solutions, LLC is also committed to implementing the Forest Stewardship Council (FSC) Standards addressing chain of custody (FSC-STD-40-004), controlled wood (FSC-STD-40-005), and on-product labeling (FSC-STD-40-201) for its fiber procurement and manufacturing operations. The company implements best efforts to avoid trading in wood or wood fiber that is: a) illegally harvested, b) harvested in violation of traditional and civil rights, c) harvested where global conservation priorities are threatened, d) harvested in natural forests being converted to

CERTIFICATIONS

Our eco responsibility runs deep.

We believe sustainable timber harvesting is key in maintaining healthy forests while providing raw materials for manufacturing. By standing up for cleaner air and water and helping sustain plantlife and the wildlife it nurtures, we are leading the way in an industry that is dedicated to the most sustainable source of raw material in the world.



Social and environmental certifications.

We make it our business to be certified to the highest social and environmental standards in the market. We are pleased to offer our customers Chain of Custody certified papers not only through the Forest Stewardship Council®, but also the Sustainable Forestry Initiative®. SFI® certification can provide even higher sustainability ratings than FSC® certification due to the personal responsibility we must take on the harvest site to ensure that best management practices are always followed.

Interested in Certified Products?

SFI® certified fiber sourcing (overachiever alert).

To support and promote the efforts of enhancing and continuing sustainable forest management throughout the industry, Expera's active education/outreach program is focused on providing up-to-date information on sustainable forest management techniques, biological diversity enhancement, conservation practices, and certification opportunities to their wood suppliers. More information for landowners can be found here:

[Expera Landowner Resource Guide](#)

[SFI – 2014 – Priv Landowners Forestry Guide](#)

CORPORATE SUSTAINABILITY COMMITMENT

Working harder for a more wonderful world.



Resource Guide

Microsoft Word - EXP-SFI-02 ... x

experspecialty.com/wp-content/uploads/2013/10/Expera-Landowner-Resource-Guide.pdf

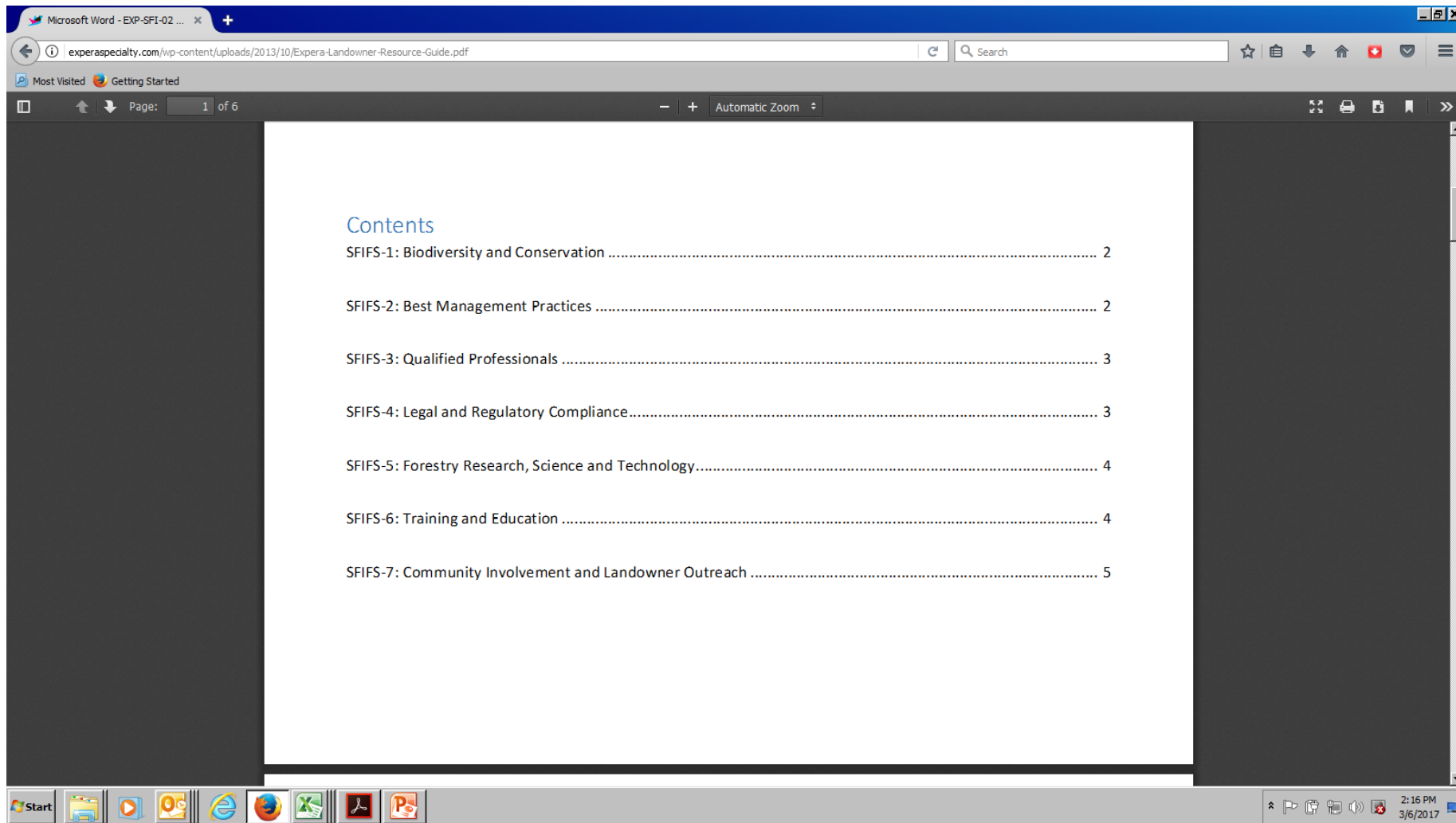
Document Owner: Fiber Supply Manager
Document #: EXP-SFI-02
Last Revised: 4/29/2016

Expera Community Education and Outreach Program Exhibit

Purpose of this Education and Outreach Program

To support and promote the efforts of enhancing and continuing sustainable forest management throughout the industry, Expera's active education/outreach program is focused on providing up-to-date information on sustainable forest management techniques, biological diversity enhancement, conservation practices, and certification opportunities to their wood suppliers. To accomplish this, Expera has developed this packet containing informational brochures, handouts, list of websites/programs, and other relevant sources of information that were created/are provided by consulting foresters, state and federal agencies, state or community groups, professional societies, conservation organizations, Indigenous Peoples and governments, sporting organizations, university and extension agencies, the American Tree Farm System® and/or other landowner cooperative programs. The following provides a list of enclosures by sector as well as a list of websites where additional information and educational resources can be found.

Resource Guide



SFIFS-1: Biodiversity and Conservation

Informational Websites

Biodiversity and Conservation Organizations and State Action Plans

National Organizations

| | |
|---------------------------------|---|
| American Forests | https://www.americanforests.org/ |
| Center for Biological Diversity | http://www.biologicaldiversity.org/ |
| Conservation Fund, The | http://www.conservationfund.org/ |
| National Audubon Society | http://www.audubon.org/ |
| National Wildlife Federation | http://www.nwf.org |
| NatureServe | http://www.natureserve.org |

Michigan Organizations

| | |
|---------------------------------|--|
| MI Natural Features Inventory | www.mnfi.anr.msu.edu |
| MI Nature Conservancy | www.nature.org/michigan |
| MI State University – Extension | www.msue.anr.msu.edu/topic/info/forestry |

Wisconsin Organizations

| | |
|--------------------------------|--|
| WI National Heritage Inventory | www.dnr.wi.gov/topic/nhi |
| WI Nature Conservancy | www.nature.org/wisconsin |
| University of WI – Extension | www.woodlandinfo.org/ |

State Action Plans

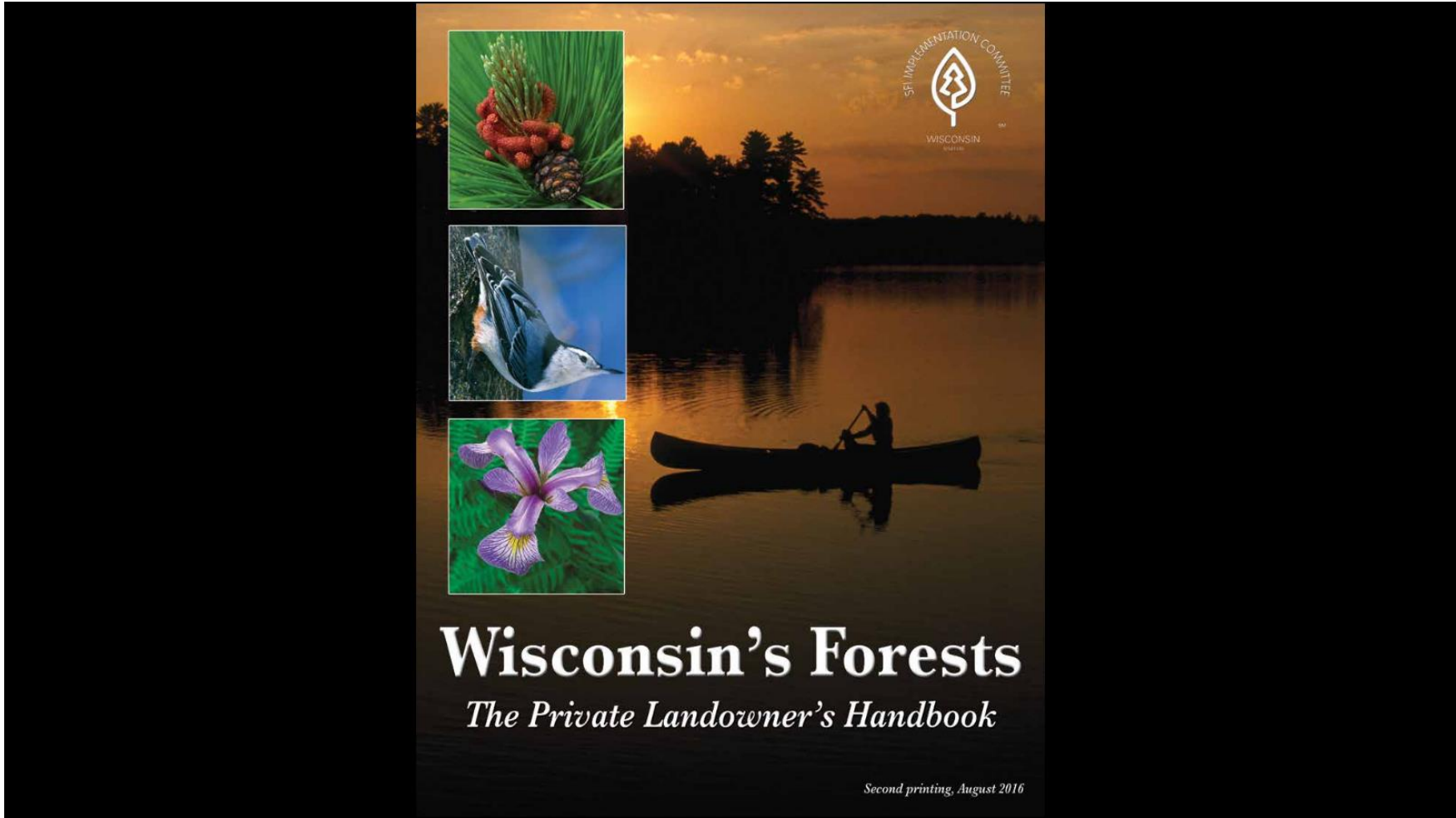
| | |
|-------------------------------|---|
| MI State Forest Action Plan | http://www.michigan.gov/dnr/0,4570,7-153-30301_30505--,00.html |
| MI State Wildlife Action Plan | www.michigan.gov/dnr/wildlifeactionplan |
| WI State Forest Action Plan | http://dnr.wi.gov/topic/ForestPlanning/actionPlan2010.html |
| WI State Wildlife Action Plan | www.dnr.wi.gov/topic/wildlifehabitat/actionplan.html |

SFIFS-2: Best Management Practices

Links to State-Issued BMP Manuals and Forest Management Guidelines

State-Issued Best Management Practices and Forest Management Guidelines

Wisconsin Landowners Handbooks



Landowners Handbooks

Wisconsin-Landowners-Manu... x +

experaspecialty.com/wp-content/uploads/2013/10/Wisconsin-Landowners-Manual-2016.pdf

Most Visited Getting Started

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Planning Your Forest:

Fill out this questionnaire, share it with your family and your resource professional, and then tailor your silvicultural activities to achieve your goals.

- 1. What are your goals?** (Check all that apply)
 - Clean water
 - Income
 - Hunt/Fish
 - Timber production
 - Firewood
 - Soil protection
 - Reduced tax burden
 - Protection from development
 - Aesthetics
- 2. What are your resource priorities?** (Rank in order of importance)

| | |
|------------------|---------------------|
| Wildlife | Beauty (Aesthetics) |
| Water protection | Soil protection |
| Recreation | Timber production |
- 3. What are your recreation and aesthetic goals?** (Check all that apply)

| | |
|---|--|
| <input type="checkbox"/> Horseback riding | <input type="checkbox"/> Park-like appearance |
| <input type="checkbox"/> Biking or hiking trails | <input type="checkbox"/> Observe fall colors |
| <input type="checkbox"/> Camping | <input type="checkbox"/> Protect historic/unique areas |
| <input type="checkbox"/> Fishing | <input type="checkbox"/> Allow others to use your forest |
| <input type="checkbox"/> Boating | <input type="checkbox"/> Nature study/photography |
| <input type="checkbox"/> Harvest berries/fruit | <input type="checkbox"/> Bird watching |
| <input type="checkbox"/> Promote flowering trees/plants | <input type="checkbox"/> Wildflower enhancement |
- 4. Which water quality protection actions would you undertake?**
 - Stabilize roads and trails
 - Plan and select Best Management Practices (BMPs) before site disturbance
 - Leave buffer strips next to streams and water bodies
 - Re-vegetate bare roads and trails where erosion is likely
 - Restrict cattle from woodlots and streamside areas
 - Test soil to determine fertilizer and lime rates
 - Construct proper stream crossings
- 5. Which forest management approach appeals to you?**

| | |
|--|--|
| <input type="checkbox"/> Improve the forest's health | <input type="checkbox"/> Produce future timber income |
| <input type="checkbox"/> Provide periodic income | <input type="checkbox"/> Have wildlife and healthy forests |
| <input type="checkbox"/> Have recreation and timber | <input type="checkbox"/> Have recreation and healthy forests |
| <input type="checkbox"/> Protect wildlife and timber | |
| <input type="checkbox"/> Other combinations Please list: | |

Types of Forest Planning Assistance

There are approximately 350,000 of you out there: private forest landowners. Cooperation among natural resource professionals is essential in order to meet your demands for planning and managing your forest.

Forest management information and assistance is available in Wisconsin through a network of public and private resource managers, industries, landowner organizations, and educators.

Consultants must comply with DNR standards and rules when giving forest management advice; they must attend continuing education courses and file periodic reports with the department.

Things to Consider When Selecting a Private Forester

To achieve your objectives, it is essential that you select the right forester. Review a forester's qualifications, talk to their references, **ask questions!**

Consider:

- Years and types of experience
- Educational background
- Affiliation with professional forestry organizations, such as the Association of Consulting Foresters or the Society of American Foresters
- Availability throughout your entire project
- Whether they carry appropriate insurance
- References from former clients
- Empathy towards your objectives
- Knowledge of sustainable forestry and willingness to follow its principles
- Overall attitude towards you and consideration of your land

In the private sector, including university extension and agencies, assistance with management questions and concerns is generally provided at no charge or a minimal charge for some services. Demand and workload constraints may limit the availability of public sector assistance.

In the private sector, there are over 200 private consulting and industrial foresters who offer services to private landowners. Consulting foresters are independent contractors who make their living by charging a fee. Forest products companies employ industrial foresters. They may offer free advice in return for the first right to bid on timber when you are ready for a harvest.

Private consulting foresters and industrial foresters can voluntarily apply to participate in the DNR's co-operating forester program. Find an up-to-date listing of foresters at dnr.wis.gov (Keyword: Forestry Assistance Locator).

A directory is also available from your local DNR Service Center or Wisconsin DNR/Div. of Forestry
101 South Webster St.
PO Box 7921, Madison, WI 53707-7921
or call 608-267-7494.

Wisconsin's Forests: The Private Landowner's Handbook

Section 1 (6)

Start

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Expera Website

- experaspecialty.com
Sustainability
Certifications
- <http://experaspecialty.com/sustainability/certifications/>

Thank You!

