Local Wood in Practice:
A Conversation Across the Material Stream

3.15.2019

NESEA BuildingEnergy Boston

Panelists:

Scott Brockway, Berkshire Wood Products

Brad Morse, Uncarved Block Inc.

Zac Cardwell, Maryann Thompson Architects

Moderator:

Sean Mahoney, MA Dept. of Conservation and Recreation

Agenda

- Learning Objectives (3 minutes)
- Context on Forest Sustainability (10 min)
- Panelist Introductions (5 min)
- Discussion (40 min)
  - We welcome your questions

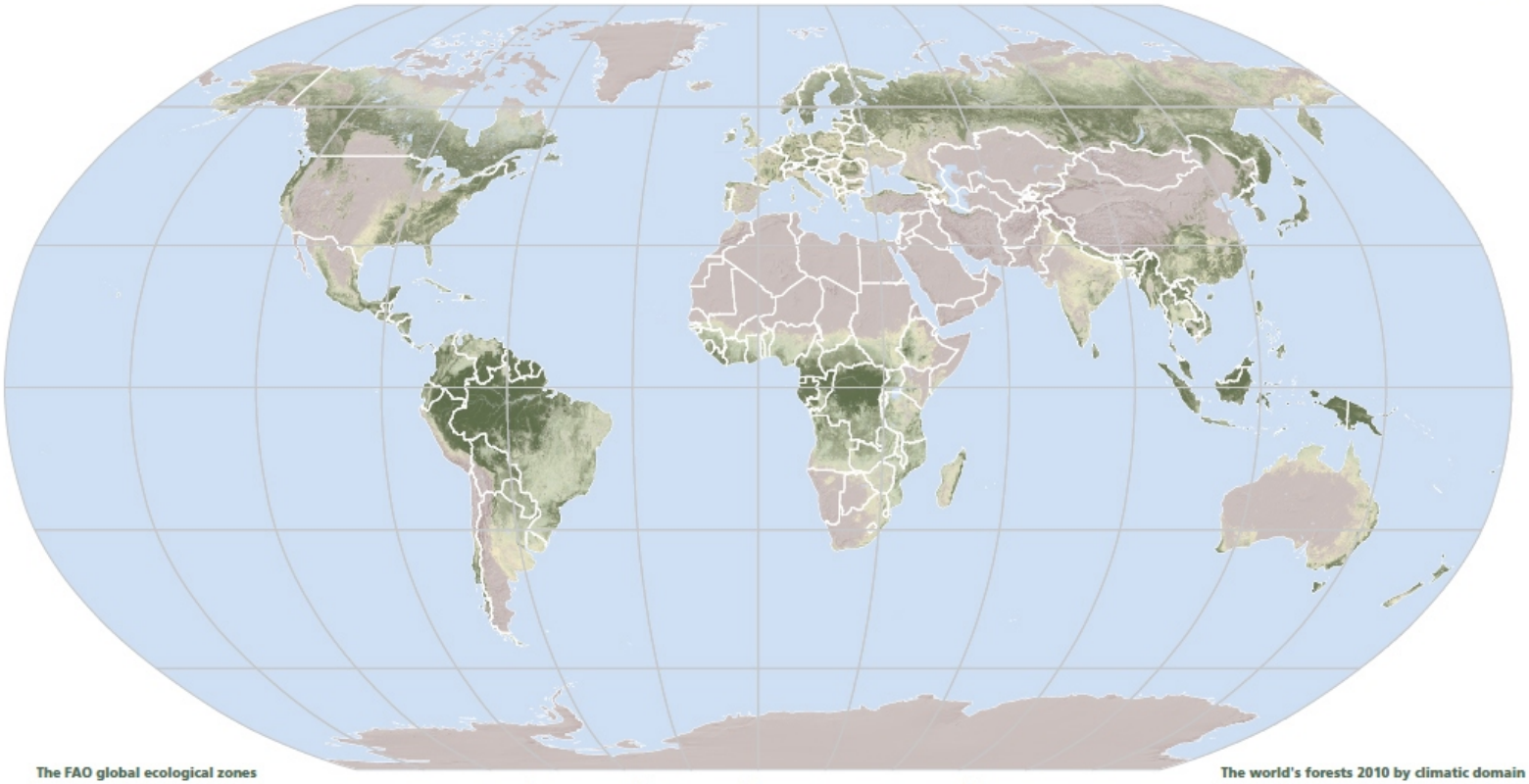
  House Rules:
  - Need to cover Learning Objectives 3&4
  - Raise your hand/wait to be called
- Closing (2 min)

Learning Objectives
AIA 1.0 LU/HSW
MA CSL 1.0 hour Energy

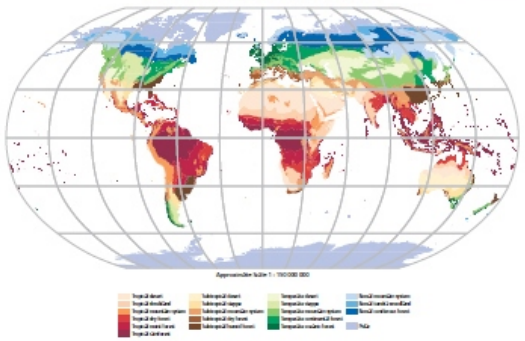
Attendees will be able to:

1. Inform others on the ecological and socio-economic importance of making informed decisions to source various forest derived materials from local, regional, and global sources.
2. Access existing sources of technical expertise from NGOs, State Governments and the U.S. Forest Service to aid in their decision making process when sourcing forest derived building products.
3. Specify local wood for structural building applications by utilizing either graded wood to meet the 2015 IBC/IRC or ungraded wood under 780 CMR 23.00
4. Adapt project design, engineering, and construction to incorporate locally grown and manufactured wood products.

The world's forests 2010



The FAO global ecological zones



This forest cover map was prepared with:

- Forest cover data from the Vegetation Continuous Fields product (VCF) derived from the Moderate Resolution Imaging Spectroradiometer (MODIS) sensor, onboard the Terra and Aqua satellites (Earth Observation System, NASA) with a 250 m spatial resolution (Hansen et al., 2002).
- Water data from the Shuttle Radar Topography Mission (SRTM, NASA) Water Body Data at 250 m spatial resolution in combination with the MODIS global water mask (Carroll et al. 2009).
- Elevation data from the SRTM at 1 km resolution, down-sampled to the 10 million scale.
- Country boundaries and coastlines from the Global Administrative Unit Layer (GAUL, 2008) of the FAO.
- Global ecological zones from Iremonger and Gerrand (2011).

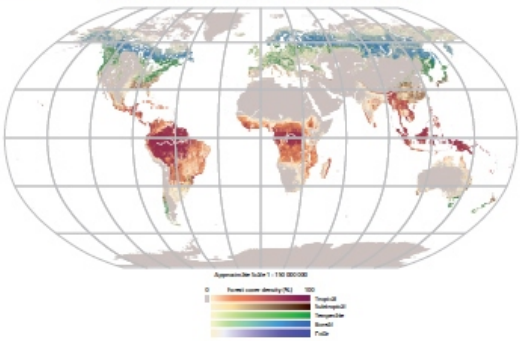
References:

- Hansen, M., R. DeFries, J.R. Townshend, M. Carroll, C. Dimiceli, and R. Sohlberg, 2003. Vegetation Continuous Fields MOD44B, 2001 Percent Tree Cover, Collection 3, University of Maryland, College Park, Maryland, 2001.
- Carroll, M., Townshend, J., DiMiceli, C., Noojipady, P., Sohlberg, R. 2009. A New Global Raster Water Mask at 250 Meter Resolution. International Journal of Digital Earth. (volume 2 number 4)
- GAUL 2008 : www.fao.org/geonetwork
- Iremonger, S. and Gerrand, A. M. (2011). Global Ecological Zones for FAO Forest Reporting, 2010. Unpublished report, FAO, Rome.

Disclaimer:

The coordinators of the remote sensing survey gratefully acknowledge the financial contributions of the European Commission, NASA, the Government of France and FAO, and satellite data from USGS and NASA. The maps shown here do not imply the expression of any opinion whatsoever of any these governments or organizations concerning the status of any country, territory or sea area, or concerning the delimitation of frontiers.

The world's forests 2010 by climatic domain



http://www.fao.org/forest-resources-assessment/en/

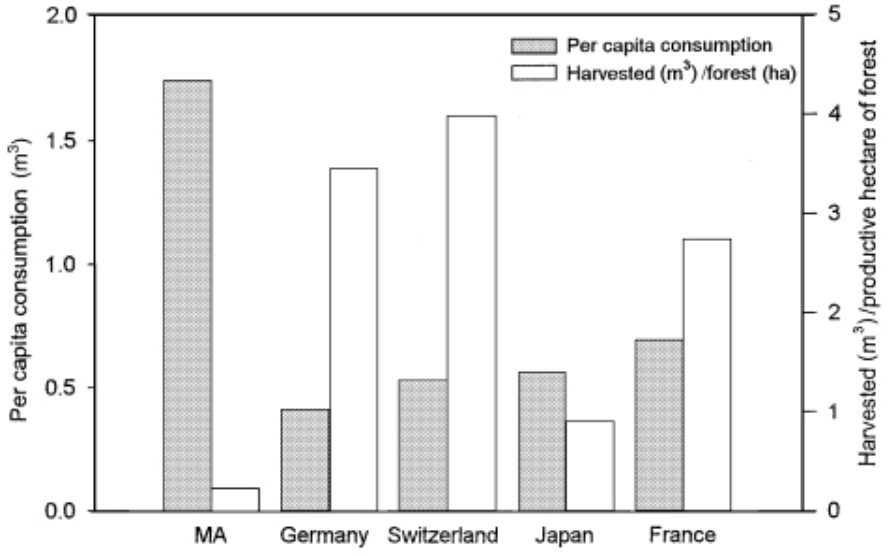
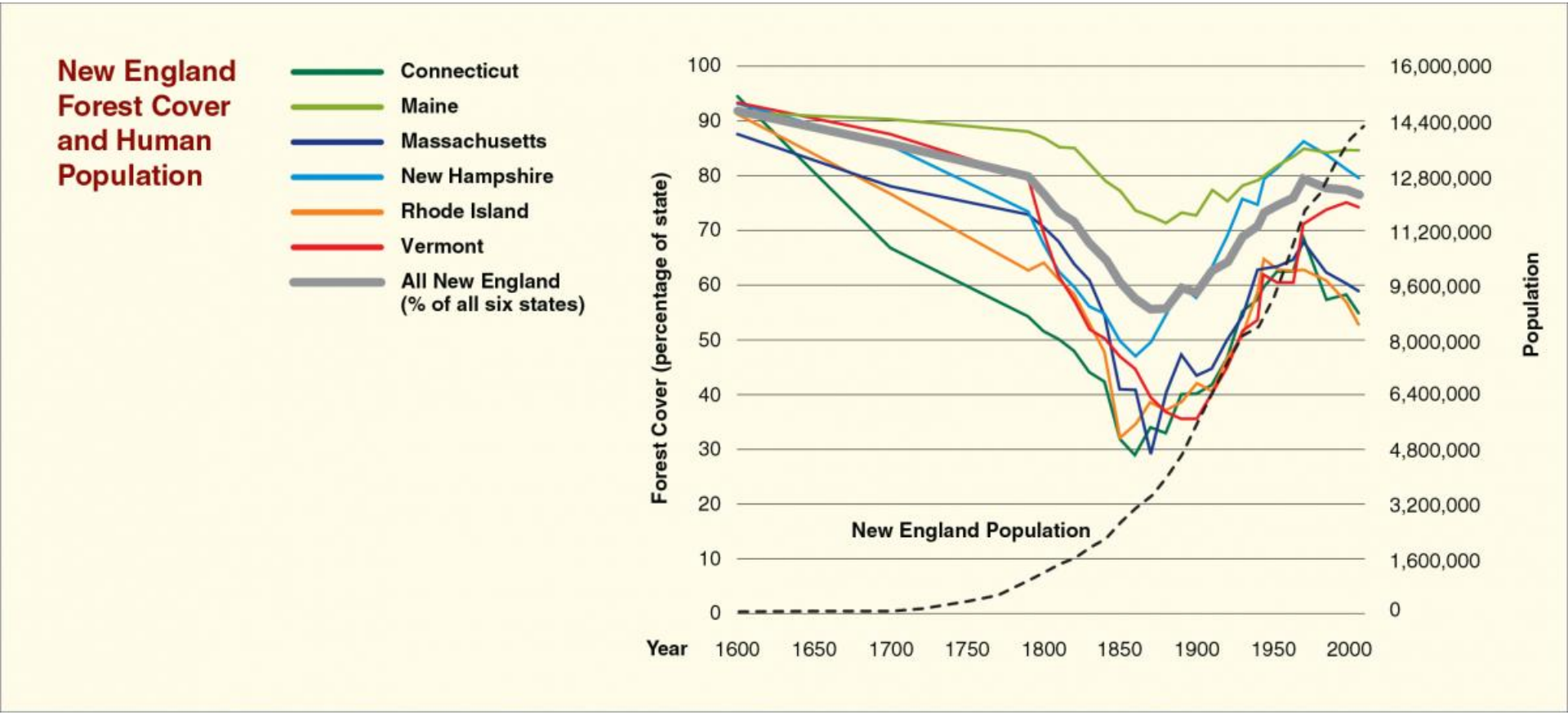


Figure 6 Per capita wood consumption and harvest per forested area: Massachusetts, Germany, Switzerland, Japan and France. Although relatively heavily forested, harvesting per unit area from Massachusetts forests is low compared with other countries. In contrast, per capita consumption of wood is several times greater in Massachusetts. [Source: Massachusetts, DEM; Howard (1997); Alerich (2000); MISER; Other nations, FAO (2000), http://apps.fao.org].

- Less than 2% of wood consumed in Massachusetts comes from Massachusetts
- 4.89 Billion BF Consumed Annually
- Approximately 250,000 truckloads/ year

Berlik, M.M., Kittredge, D.B. and Foster, D.R., 2002. The illusion of preservation: a global environmental argument for the local production of natural resources. *Journal of Biogeography*, *29*(10-11), pp.1557-1568.



Caption: Historical changes in forest cover show that reforestation of abandoned farmland from the mid-19th through the late 20th century has provided a second chance to determine the fate of the region's forests. Recent trends show the loss of forest throughout the region.
Source: Modified and updated from Foster, D. R., and J. Aber, editors. 2004. Forests in time: the environmental consequences of 1,000 years of change in New England. Yale University Press, New Haven, Connecticut.

Foster, D.R., B.M. Donahue, D.B. Kittredge, K.F. Lambert, M.L. Hunter, B.R. Hall, L.C. Irland, R.J. Lilieholm, D.A. Orwig, A.W. D'Amato, E.A. Colburn, J.R. Thompson, J.N. Levitt, A.M. Ellison, W.S. Keeton, J.D. Aber, C.V. Cogbill, C.T. Driscoll, T.J. Fahey, and C.M. Hart. 2010. Wildlands and Woodlands: A Vision for the New England Landscape. Harvard Forest, dist. by Harvard University Press, Cambridge, Massachusetts. 36pp.

Forest Sustainability

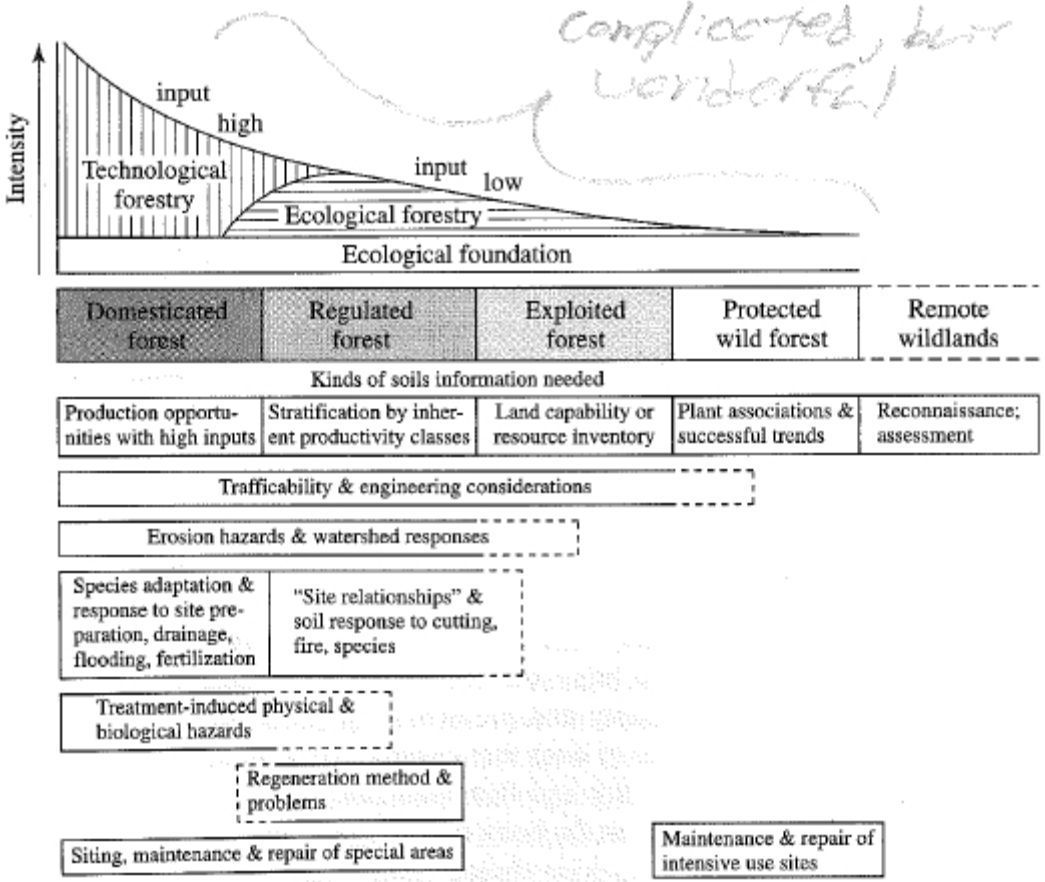


FIGURE 2-6
Conditions of the soil and other environmental factors that regulate productivity determine the intensity of forestry and many use opportunities that a site will support at a sustained level. From Stone, E.L. *Forest Soils and Forest Land Management*, B. Bernier and C.H. Winget, Eds., pages 1–9.

Definition: Sustainable Forestry,

Sustainable Forest Management (SFM) is an evolving concept based on the practice of meeting forest resource needs and values of the present without compromising the similar capability of future generations.

Accepted by:
Society of American Foresters
UN Food and Agriculture Organization

Left: Nyland, R.D., 2002. Silviculture. *Concepts and Applications, second ed. Waveland Press, Long Grove, Illinois, 82p*.
Right: Helms, J.A., 1998. The dictionary of forestry.

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Scott Brockway, Owner
Berkshire Wood Products
berkshirewoodproducts@gmail.com

Brad Morse, Owner
Uncarved Block Inc.
brad@uncarvedblockinc.com

Zac Cardwell, Senior Associate
Maryann Thompson Architects
zac@maryannthompson.com

Moderator
Sean Mahoney, Wood Utilization Forester
Massachusetts Department of Conservation and Recreation
Sean.Mahoney@state.ma.us

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Massachusetts


AdvanTech

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Massachusetts


ZIP System

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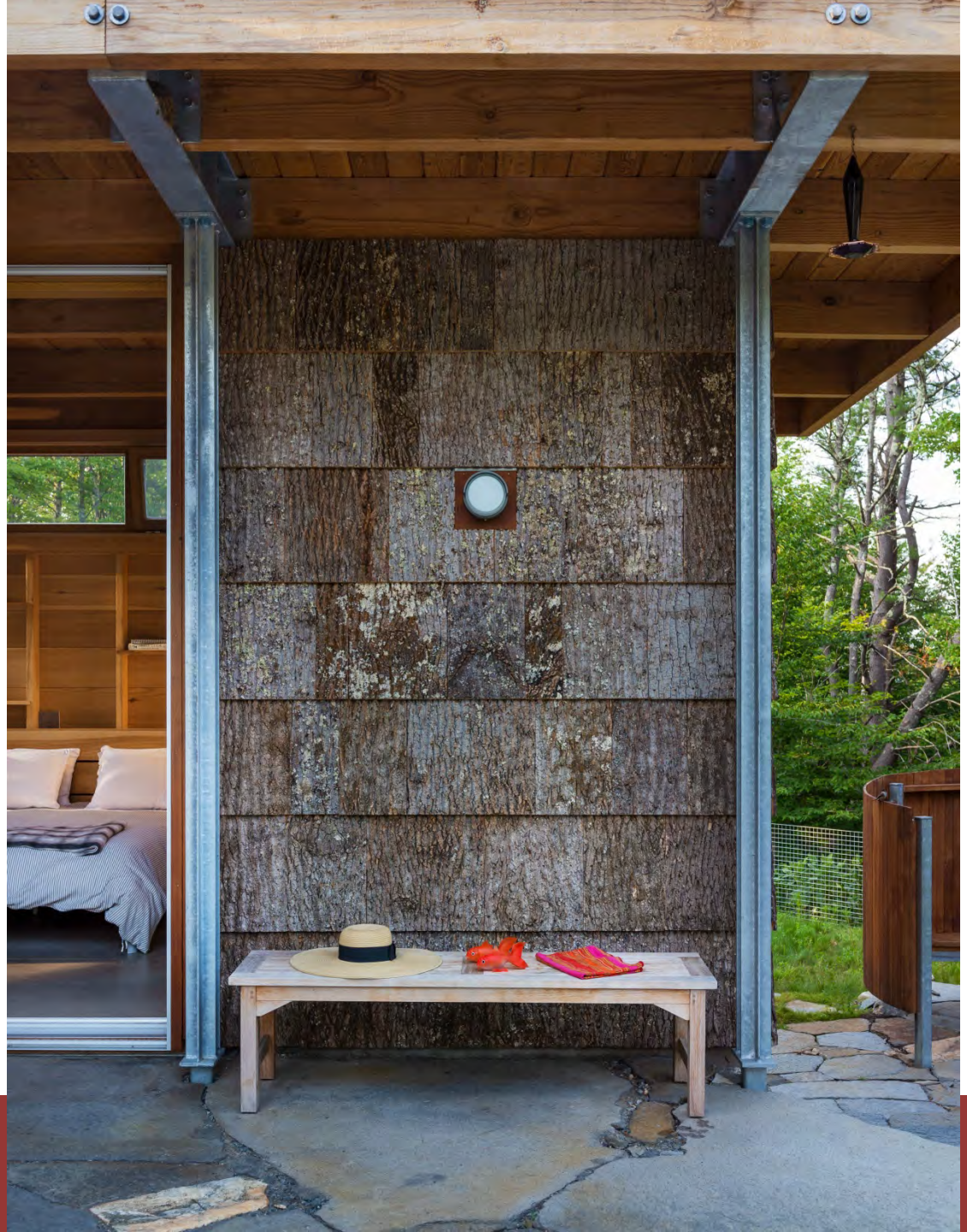

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