Non-Wood Forest Products in an Ecosystem Services Framework



All photos by Marla R. Emery unless otherwise noted.

Marla R. Emery, Ph.D.
Research Geographer

U.S. Forest Service





NWFPs:3300bce to 2015







An ancient relationship with forests

Photo credit: South Tyrol Museum of Archaeology



Photo credit: John Zasada

A living
relationship
with forests







Sambucus nigra













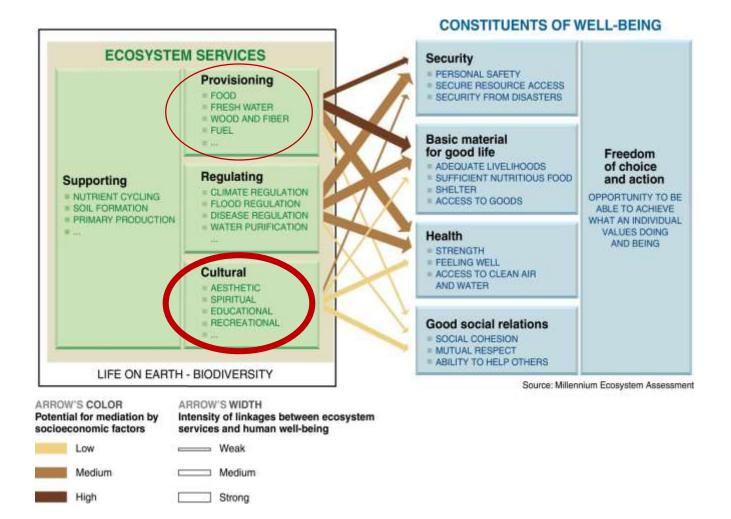




Alliaria petiolata











What is Culture?

Learned patterns and practices of thought and behavior

- Social cohesion
- Human wellbeing
- Lifeways adapted to biophysical environment
- Times of change and insecurity

Barnard & Spencer 2002; Dockery 2010; Kassam et al 2010; American Anthropological Association 2014





Accounting: How widespread is collecting NWFPs?

		Question Timeframe						
Universe	Year	Sample size	12 months	5 years	Last few years	Positive response rate		
Scotland, GP ¹	2006	1015	Χ			13		
Scotland, GP	2003	944	X			18		
US New England ²	2004	1650	Χ			18		
Scotland, WV ³	2006	564	X			23		
Scotland, GP	2004	944		X		24		
US New England	2004	1650		X		26		
Great Britain WV ⁴	2005	2672			x /	27		
US Northern ⁵	2005-2009	30000	X			36		

^{1.} Scotland, general population; 2. Massachusetts, Maine, New Hampshire, Vermont; 3. Scotland, woodland visitors; 4. Great Britain, woodland visitors; 5. 20-state region



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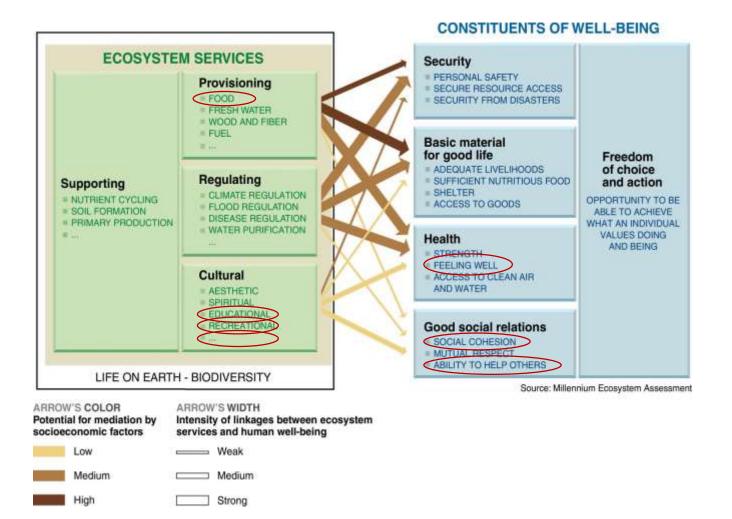
Accounting: Patterns & practices

		Functional Uses					Livelihood Uses				
Universe	Year	Edible	Medicinal	Decorative	Cultural	Other	Personal use	Gifting	Sale Raw	Sale Value Added	Other
New England	2004	62	2 8	59	16	13	88	5	1	2	4
Great Britain	2005	13	3 2	13	9	73	n/a	n/a	n/a	n/a	n/a
Scotland	2006	37	2	45	30	31	86	6	0	0	6







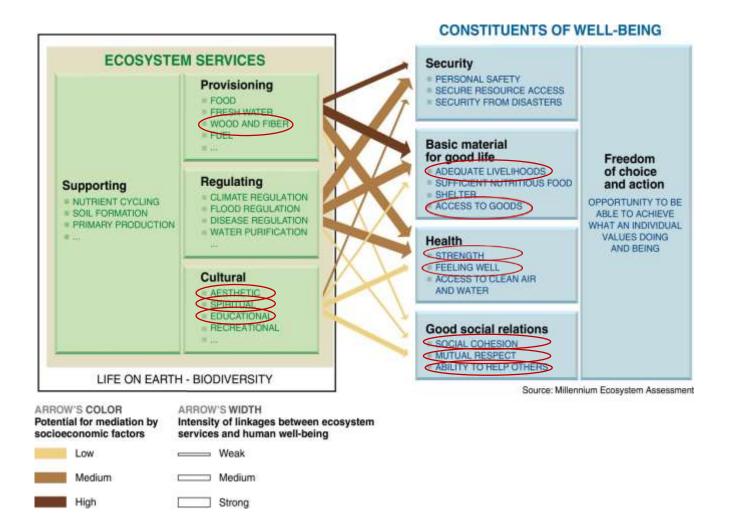






Emery EU Non-Wood Forest Products Network















CONSTITUENTS OF WELL-BEING **ECOSYSTEM SERVICES** Security PERSONAL SAFETY Provisioning ■ SECURE RESOURCE ACCESS FOOD SECURITY FROM DISASTERS = WOOD AND FIBER * FUEL Basic material E 44 for good life Freedom ADEQUATE LIVELIHOODS SUFFICIEN NUTRITIOUS FOOD of choice Regulating and action Supporting = CLIMATE REGULATION = SHELTER # NUTRIENT CYCLING OPPORTUNITY TO BE = ACCESS TO GOODS - FLOOD REGULATION SOIL FORMATION ABLE TO ACHIEVE DISEASE REGULATION * PRIMARY PRODUCTION WHAT AN INDIVIDUAL - WATER PURIFICATION VALUES DOING Health AND BEING = STRENGTH = FEELING WELL Cultural = ACCESS TO CLEAN AIR AND WATER - AESTHETIC = EDUCATIONAL Good social relations = RECHEATIONAL SOCIAL COHESION = MUTUAL RESPECT ABILITY TO HELP OTHERS LIFE ON EARTH - BIODIVERSITY Source: Millennium Ecosystem Assessment ARROW'S COLOR ARROW'S WIDTH Intensity of linkages between ecosystem Potential for mediation by

UAS

Emery



- Weak

Medium Medium

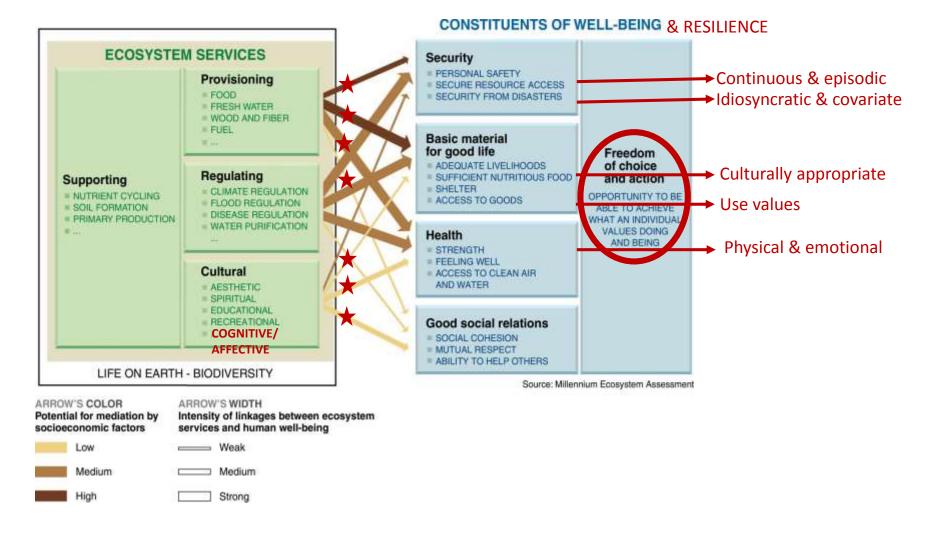
Strong

services and human well-being

socioeconomic factors

Low









Non-Wood Forest Products in an Ecosystem Services Framework

Taxonomy

 Provisioning & Cultural: A distinction without a difference?

Accounting

- People & uses, not things
- Health & wellbeing
- Quantifying without misrepresenting









Photo credit: Ricardo A. Rodriguez

Thank you!

Marla R. Emery, Ph.D.
U.S. Forest Service
Burlington, Vermont, USA
802-656-1720
memery@fs.fed.us





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