Black Locust Lumber and Markets

Observations from the mill

- Log Quality

----hard to find straight sound logs

----tend to be very reactive (move as tension is released by sawing)

----sound logs often have evidence of vines (Virginia creeper or other less desirable ivy)

IPM for locust borer?

Lumber observations

- Uniform density

----saws easy

- Drying and workability

----dries fast (extractives rather than water bulk cells), very sharp knives plane well w/o burning

- Stability

----very dimensionally stable (low shrink)

----bends or twists rather than cup as drying

Black Locust endgrain 10X

White Oak endgrain 10X

Pores of Black Locust fill with tyloses ---- bubble like structures that fill with extractives (gums, resins, and other metabolic “wastes”

Lumber reality

- Stronger than oak, comparable to hickory
- Higher flex or “spring” than hickory
- Weight comparable to most oaks, slightly less than hickory
- More dimensionally stable
- Heartwood very rot resistant, even in juvenile wood. Sapwood is not rot resistant.

Lumber Grading

Black Locust is known for its knots, mineral streaks, checks and bark insertions.

Premium Grade

Sound knots, 3" in diameter and less, minor mineral streaks and small bark insertions are admitted to highlight characteristics of the Black Locust species. Checks less than 1/12th of the board length are also admitted.

NO.1 GRADE

All sound knots are admitted in this grade. All other characteristics that do not effect the durability of this product are also admitted -- surface checks, mineral streaks, bark insertions and grub holes.

No.2 Common

Ungraded and include boards with unsound knots or other trimming required

Markets:

Building Codes:
“Local municipalities may regulate building materials used in properly permitted construction activities in contact with navigable waters of NYS “

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NYSAISMP:
NEW YORK STATE AQUATIC INVASIVE SPECIES MANAGEMENT PLAN

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Janka hardness

Hickory 1820
Locust 1700
Hard Maple/ Sugar Maple 1450
White Oak 1360
White Ash 1320
American Beech 1300
Red Oak 1290
Black Walnut 1010
Cedar 900

BioEnergy Markets

SRWC potential + limitations

---high energy/ton

---fast growth + regrowth

---low input required

---proven success in Europe and Asia

---root sprouting

---US biomass markets

	Pounds/Cubic ft.	Million BTU per Cord
Osage-orange	54	32.9
Hickory	50	27.7
Black Locust	**48**	**27.9**
White Oak	47	29.1
Red Oak	44	24.6
Hard Maple	44	24.0
White Ash	42	23.6
Soft Maple	38	18.1
White Pine	25	15.9
White Cedar	24	12.2

	#/ft³	BTU/ft³(dry firewood)
Osage-orange	54	257031
Hickory	50	215406
Black Locust	**48**	**217968**
White Oak	47	227343
Red Oak	44	192187
Hard Maple	44	187500
White Ash	42	184375
Soft Maple	38	141406
White Pine	25	124218
White Cedar	24	95312
Wood Pellets	40	330000

Strong stable (and beautiful) flooring

“High end “ siding

Cherry Road Elementary School Syracuse NY

Durable outdoor construction lumber

Docks and other exterior construction particularly in environmentally sensitive areas

Weather resistant outdoor furniture

Other Products

Black Locust permeable pavers

Patent-pending patio biofilter

References and credits:

- 1) The Wood Database; wooddatabase.com
- 2) Black Locust Lumber, 4670 Helton Rd., Granite Falls, NC
- 3)NYDEC 6 CRR-NY 665.4
- 4)NYDEC ; Aquatic Invasive Species Management Plan July 2015
- 5) The Wood Database
- 6) Pinterest

- 7) Black Locust Lumber; Granite Falls, NC
- 8) Allegheny Land Trust; Maple Leaf Black Locust, Inc.
- 9) Woodweb; woodweb.com
- 10) Black Locust Lumber; Granite Falls, NC

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