

The
Black Locust
Journal



Pioneer Issue 1998

The Black Locust Journal

Pioneer Issue

Spring/Summer 1998

* * * *FEATURED ARTICLES* * * *

Introduction	Page 4
Propagation of Black Locust	
General Information <i>by Dave Gell</i>	Page 5
Seeding Black Locust <i>by Carl Leopold</i>	Page 6
Vegetative Propagation Overview <i>by Carl Leopold & Dave Gell</i>	Page 7
Husbandry	
Harvesting <i>by Dave Gell</i>	Page 8
Working the Locust Woods or Grove <i>by Dierk Terlouw</i>	Page 10
Working Black Locust	
Sawing <i>by Dave Gell</i>	Page 13
Working with Locust Lumber <i>by Dave Gell</i>	Page 14
Education	
Starting a Sustainable Forestry Workshop in Your Area <i>by Dave Gell</i>	Page 17
Watchers in the Woods <i>by Glynis Hart</i>	Page 21
Related Topics	
Black Locust: the Question of Toxicity <i>by Jean Foley</i>	Page 24
Apiculture Evaluations of Black Locust <i>by Carolyn Touryniere</i>	Page 25
Remineralization with Rock Powders <i>by Carolyn Touryniere</i>	Page 29
History	
The History of Shipmast Locust <i>by S.B. Detwiler</i>	Page 32
The Black or Yellow Locust <i>by John S. Hicks</i>	Page 35

Introductions **Dave Gell** is a long-time forester and master woodworker who has spent many years researching and working with the black locust tree. He teaches sustainable forestry management to school groups and adults and has initiated experiments in vegetative propagation methods for black locust. **Carl Leopold** is a *W.H. Crocker Scientist Emeritus* at Cornell University. He is the author of five books and numerous research papers. He has done plant research for over forty years. He is a director of *Tropical Forestry Initiative, Inc.*, a not-for profit corporation based in Costa Rica. **Carolyn Touryniere** attained a Master of Science in Sustainable Systems from Slippery Rock University and has spent many years researching and practicing organic/biodynamic soil management and plant husbandry. **Dierk Terlouw** is an MBA from Cornell University and is a retired math teacher. He is a professional draft-horse trainer, farrier and forester *par excellence*. **Jean Foley** is an avid horsewoman, who trains and shows dressage horses. She has raised dairy goats and other homestead animals for 20 years and is an assistant editor to the *Black Locust Journal*. **Glynis Hart** is a staff writer for the *Ithaca Child*.

INTRODUCTION

Black Locust (*Robinia pseudoacacia*) is a member of the legume family and is also known as false acacia or yellow locust. The genus *Robinia* includes several species of trees and shrubs indigenous to North America. *Robinia pseudoacacia*, the most important *tree* form for forest management, is native to the Central Appalachian and Ozark Mountains, has been widely planted in temperate regions worldwide, particularly in Hungary, and adapts well to a variety of climatic and soil conditions. It generally prefers a deep, well-drained, fertile, loosely-structured sandy loam and soils with a limestone origin having brown or reddish brown subsoils, but will grow almost anywhere except in soils which are poorly drained or either very wet, heavy or acid. In the U.S., emigrants brought seeds with them from the east and black locust is now common everywhere in the West and Mid-West, where it has become very drought-tolerant. During World War II, the U.S. government planted black locust in every state for erosion control and as ties for railroad beds.

Black locust is considered a 'pioneer' species, which needs open areas with lots of light. It grows fast on better-than-average sites, and can attain heights of between 55-140 ft. and a 13-40 in. diameter. In dense stands, the stem is branchless and straight; it is inclined to forking, crookedness and branching in open stands. Some of these traits may be partially inherited. 'Shipmast' locust (*Robinia pseudoacacia* var. *rectissima*) is a separate botanical cultivar identified officially by Oran Raber in 1936 on Long Island, but whose origin was traced to the Appalachians in West Virginia. It was known among the mountain dwellers as 'yellow locust', distinct from the common 'brown' locust in its tall, straight posture, with self-pruning branches that did not fork, a narrow crown above the canopy, and resistance to borers. It was known to be more rot-resistant than common locust, and was favored as structural timber for bridges, buildings and fenceposts. The variety did not seed heavily, so was transported to other locations vegetatively. It was introduced to Long Island during the colonial days, widely propagated by the Quakers, and was the focus of the U.S. Dept.

of Agriculture propagation experiments during the 1920's and 1930's. Official efforts at establishing 'rectissima' eventually fizzled out in the U.S., but took off in Hungary and other countries. Hungary, especially, has developed effective techniques to culture the straight-growing types and currently leads all other countries in these efforts.

Here in upstate New York, near Ithaca, we have identified a straight-growing cultivar, associated with Native American sites, and have named it 'haudenosaunee'. We have been tracking the occurrence of straight-growing cultivars at other Native sites, since we believe it is a possibility that straight-growing, durable types of black locust were also recognized by indigenous cultures and carried to northern and other locations from the Appalachians.

Black locust is the most decay-resistant tree indigenous to the Northeast, and its lumber is clearly the best alternative to pressure-treated wood. Fast-growing and strong, locust trees, within 20 years, provide chemical-free lumber for locations exposed to moisture, including playgrounds, decks, docks, outdoor furniture, boats, and root cellars. Locust fence posts can last for generations. Black locust has a very good fuel value, and its legume-fixing root systems and leaf litter have been proven to increase the levels of nitrogen in soil. It is an important nectar-producing tree for beekeepers.

Using sustainable forestry practices, local woodlots can yield a supply of quality locust lumber in perpetuity. The utilization of a straight-growing type of black locust provides a truly superior lumber product, and at the same time it can have a positive effect on the local environment. Consumer involvement will encourage the use and husbandry of this valuable tree and can stimulate enlightened forestry practices. If you have a straight-growing variety of locust in your woods, its highest value is in its seeds and genetic material. The best trees should be left standing in the woodlot and valued for their genetic material. Efforts to identify and propagate these superior trees should be undertaken.

PROPAGATION OF BLACK LOCUST

General Information

by Dave Gell

Demand is increasing for fast-growing, durable locust lumber in applications where chemically treated wood is not desirable.

Straight-growing locust, often associated with Native American sites, *Robinia pseudoacacia* var. *haudenosaunee*, seldom sets seed, however, properly-stored seed of *Robinia pseudoacacia* will maintain vigor for many years.

If you are fortunate enough to have a good seed year for straight-growing locust, gather pods in a seed year fall to spring as they drop. Dry the pods, then remove the seeds. Store in cool, dry conditions as you would beans. Start seeds indoors, the same time as you would tomatoes in your area, in the same size pots, or direct-seed outdoors after danger of hard frost in a prepared nursery bed that is protected from wildlife.

Nick the brown seedcoat with a fingernail clipper, or sand with a fingernail file, through the brown and barely into the white, to make

a place for water to enter. Soak the seeds in good water indoors overnight, then plant them in a quality potting soil in pots indoors or in a specially-prepared planting bed outdoors anywhere from ¼" to ¾" deep (seeds started indoors may be planted at a more shallow depth - outdoors seed can be planted deeper), with a little soil from under the parent tree as inoculant for the nitrogen-fixing microryhzae. Germinate at room temperature with lots of light. Repot if necessary and slowly harden off in the same manner as tomatoes by taking them outside as the weather warms, but protecting them against frost. After the last frost date, plant them out in full sun. Assess the site to see if soil should be loosened or amended. If a container-grown seedling is root-bound and has roots encircling the root ball, cut these to prevent girdling. Be sure to thoroughly water after planting to insure root-to-soil contact and to lessen large voids.

Very small locust seedlings, like many legumes, do not like to have their roots disturbed, so wait until the seedling is fairly good-sized before transplanting. Locust seedlings may safely remain in a nursery situation for at least one or two seasons until big enough to be moved to a more permanent location.

Forestry supply catalogs offer several devices if browsing is a problem, or make your own, being sure not to allow a place for birds to enter and become trapped.

Partly decomposed wood chips is the preferred mulch. Apply on top of the soil, leaving a 3 inch space next to the seedling stem. Don't use a fluffy mulch such as straw as nesting rodents will chew the bark. When choosing mulch, it is important to emulate natural systems. Visit a healthy woods and observe the typical forest floor of fallen leaves, rocks, rotting limbs and other forms of detritus that nourish small trees.



VEGETATIVE PROPAGATION OVERVIEW

CUTTINGS

The Hungarians take softwood stem cuttings in early summer, before the wood becomes hard. Each cutting should include at least two nodes. The leaves are removed and the base of each cutting is treated with a root-stimulating hormone (e.g. Rootone), and planted in sand or vermiculite under mist in a plastic greenhouse.

Rooting is most facile in juvenile wood, such as in watershoots. Severe pruning of an established plant will stimulate the formation of a supply of juvenile water shoots. One can take several softwood cuttings from each water shoot.

ROOT PROPAGATION

Root cuttings are the most popular propagation method with the Hungarian locust growers. The professionals plant stool-beds, young trees which can be partially lifted from the soil at yearly intervals, exposing the main roots which then are cut off for propagation, leaving 3 or 4 main roots to sustain the stool tree. From a field stand of high-quality locust trees, one can expose individual roots which remain near to the soil surface, and take cuttings from these.

Root cuttings should be taken during the winter months, when trees are dormant. Follow a root by digging with a sharp wooden stick, digging on both sides to expose a section of root whose diameter is ¼" to 1 inch. Young roots close to the parent tree are best. Sterilize your pruning shears with a weak bleach solution and cut off a section. Protect from freezing and drying, and store at 35°.

When cutting sections to length, make an angled cut on the end of the root farthest from the parent tree, and a straight cut on the end closest to the parent tree. Cuttings no shorter than 1 inch will be successful in a well-aerated medium in a 50-60° greenhouse in early spring. Longer lengths (up to 5" are necessary for direct planting outdoors in mid-April. Rooting hormone with fungicide may or may not increase yield. Sow roots with proximal end (straight cut) up, level with the soil surface. Firm the soil around the root, and water. Cover with ¼ inch of soil or sand. The soil surface must be kept moist but not waterlogged.

In April or May, the now budding cuttings may be potted or planted in a shaded nursery in a sandy soil, and kept well-watered as they develop into plantable plantlets. After a few leaves have formed, they can be moved out from the shade to a sunny location.

The Hungarian locust-growers maintain 600 hectares of seed beds and cutting beds to supply the demands for fine black locust. For small operations, one can develop more than 100 seedlings in a square meter of ground, up to the stage when they are ready to move into the field.

-- by Carl Leopold
and Dave Gell

REFERENCES

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Swingle, Charles F. 1937. Experiments on propagating shipmast locust. *Jour. Forestry* 35: 713-720.

**** Propagation from root cuttings will covered in more depth in the 1998 fall/winter issue of the *Black Locust Journal*.**

HARVESTING

by Dave Gell

Often locust will grow into an abandoned field as a pioneer species. The most beneficial first step in managing a young stand is thinning to release straight trees to grow for timber. Vigorous growth is a tree's best defense against insects and disease and mechanical damage. If straight trees have full rounded crowns, leave them a little crowded to grow taller. If tall, straight trees are touching in the canopy showing parallel faces where they rub together in the wind, they could be thinned. Straight, healthy trees are putting on valuable timber and should be left to grow until they begin to approach decline. If a mature tree is ravaged by insects, or suffers substantial mechanical injury at the hand of man, ice, wind or fire, harvest it before it loses much value.

Leave some healthy trees of species besides locust to maintain diversity and ultimately the health of the stand. Locust and walnut do well together, if you're thinking of interplanting. In a monoculture, there is competition for resources, with all the trees needing the same thing at the same time, and disease can quickly spread. With diversity, each organism is contributing something unique. Leave trees which have become home to cavity-nesting birds, important to the health of the woods. You will be disappointed in the value of these trees if you harvest them.

Crowns from felled trees can be left intact in some cases to protect delicious young locust seedlings from deer.

Locust can be managed for firewood by leaving clean, short stumps. Shoots will

develop. These should be thinned, taking out half the first year, then the next year leaving the best one to grow quickly from the existing root system. Trees growing from stumps generally develop defect at the base, of no concern for firewood, but detrimental to sawlogs. Lower branches can be pruned close to but not damaging the trunk.

In a mature woods containing locust, small clearings (40' radius) can be opened between straight, healthy locust, who will then propagate by sending shallow roots into the opening to sprout. Diseased and deformed trees can be removed.

A good time to mark a woods is in the fall. Stressed trees turn color and drop their leaves first. These can be marked to take out first. Leave the trees which will quickly grow into good lumber, to make the most money next time around. Harvesting in the winter is best when the ground is firm to avoid compaction. Leaves are off so trees fall nicely, the bark is tight on the remaining trees to reduce damage, and the harvested logs have little sap. Frozen or dry ground keeps logs cleaner and the brush will be easier to deal with. Cut the top up so it will be easier to work in the woods next time, as it will take a long time for even small locust to rot. Eventually it will enrich the soil. The larger part of the top can be used as firewood. Clean the area enough so you don't have to come back and disturb regeneration.

If possible, skid the logs and firewood with horses, at least through the sensitive areas, to a field or roadway where a tractor or skidder can take over. A combination of horses and skidder is the best choice for most projects involving a site larger than ten acres. The primary concern is saving the invaluable topsoil and understory.

A timber stand improvement will generate irregular logs, whose highest purpose is to be sawn into furniture. By classifying these logs as "ART" instead of firewood we have reduced the number of good-growing trees that need to be harvested to pay the overhead of the operation.



The value of the firewood and sawlogs should come out close to the expense of the endeavor, and leave the stand positioned to grow nicely. Future harvests are increasingly more lucrative, as the quality and quantity increase. The stand will produce sustainable timber indefinitely at a sustainable rate, by harvesting poor trees first and leaving the well-formed trees to reach maturity, just short of decline.

When harvesting in a locust stand, develop a long-term relationship with the woods and property owner, and have a use for the wood in mind. If the project calls for 8' material, try to leave the 10' and 12' butt logs standing, as these will grow quickly for future needs. A story pole will aid in measuring. Logs can be bucked to odd sizes, such as 9'4" if exactly 9' is required for a project, and a few logs can be bucked short to get the most out of a tree with a crook in it.



Reducing scale and overhead, processing raw materials close to the resource, local use, and site-specific micro-management sway the economic equation toward unevenage, multiple use forestry and long rotations. A forest carrying more inventory can carry more carbon from our atmosphere than one that is harvested only at economic, not biologic, maturity. Woodlots managed in this way increase inventory while yielding eventually more annual stumpage than a short-sighted liquidation of resources, while improving our physical and spiritual environment.

Sawing by Dave Gell

Set up a portable band saw mill on fairly level, firm ground remembering the plume of sawdust which blows out one side will become a fair pile. Leave room for logs to be pulled parallel to and centered on the mill. Denote an area to pile slabwood, and hopefully put sawn lumber onto a truck or wagon.

Start the day by pulling up a small, convenient log, so the horses learn the way to the mill, the trail can be improved, and the sawyer can get started. Roll the log so the flattest face is up and/or you are cutting off the worst of defect, and take off a slab. Clean the dirt off the logs where the blade will cut through to avoid dulling the blade. Cut shallower on the opening cut than usual, because locust has little sapwood, so you get down to good stuff sooner and it is easier to see how crooked the log is. With locust, it is better to square up the log leaving a log of wane on the corners, and then edge the boards, since the logs are likely to be small. Usually the best thing to do with a small log is make a 4 "X 4" or 6"X 6" post out of the center. Locust logs, as other logs, may deflect from the log. Turning the log more frequently will reduce this. For example, when sawing a 6" X 6" piece that needs to be straight out of a small log, try sawing 7" X 7" with more wane showing, then roll the cant and take off more material.

If wide boards are desired, square up the log a little so it clamps securely, then saw boards down partway until close to the clamp. Roll the cant 180° and it should clamp low. Finish sawing the boards, then edge all the boards. The boards containing heart can be ripped if the two narrower quartersawn boards can be used, or they can be dealt with later if they check. Coating the log ends with wax/oil before or after sawing will minimize end-checking.

A log whose heart is not in the center is under stress from not growing plumb. Boards sawn with the heart at the top or bottom of the log as it sits on the mill, will have a tendency to deflect from plane, which should not be a problem in decking. A log sawn with the off-centered heart to the right or left will have a tendency to check at the heart. Boards above and below the heart will deflect from straight, and need to be edged to become straight.

When stacking a fresh batch of wood, put some blocking on the ground and use stickers. Locust stickers may stain the boards. For a temporary pile, use some slabs off the sawmill to keep it off the ground, and some edgings as stickers. Locust does not have to be covered, except hot sun on fresh wood may cause excessive checking.

Photo by David Craig



Photo by Ransom Blakely



WORKING WITH LOCUST LUMBERby Dave Gell

NAILING AND SCREWING LOCUST

Before starting any assembly, test a couple of drilling, screwing, and nailing options with a scrap of your project material. Spiral galvanized deck nails hold well, and have good sheer strength. Dry locust will need to be drilled before nailing. Green locust should be drilled when nailing near the ends of boards. Choose a bit smaller than the central shaft of the nails, minus the threads. 8d - 10d = 1/8". 16d - 20d = 3/16". Drill to a depth 3/4 of the length of the nail. As soon as you have one nail hole in the board, drive this nail, which will stabilize the board and make it less likely to break the drill bit as you drill the other holes.

When nailing close to the end of a board, place the nail back from the end of the board if possible and still hit your target. To minimize end splitting you can drill with a bit almost as large as the nail including the threads to the depth of the board. All holes can be counterbored in this way to ease nailing.

Drilling and screwing is the best way to secure deck-



A locust deck in Trumansburg, NY. Photo by Mike Hopiak

boards. Use stainless or good rust-resistant screws. Square drive are the best. The one piece counter-sinking counter-boring bit is preferable to the type with a separate pilot bit held in with set screws, although these bits may not have a pilot as long as the screws you are using. In well-seasoned locust, it may be necessary to lengthen the pilot hole by drilling again with a bit the size of the screw shank minus the threads to the full

depth (length) of the screw. #6=7/64", #8=1/8", #10=9/64". With a cordless drill that has a clutch, set the clutch so the screws do not break. A little linseed oil and/or beeswax paste on the screw tip will help, but keep cleaning oil off the driver bit - it may cause it to slip in the screwhead.

If a screwhead gets deformed from the bit slipping, back it out and throw it away. If this continues, drill the holes a little bigger or deeper.

3/8" carriage bolts work well to hold band beams to 4" X 4" posts. Use a long electrician's bit or a speedbit and finish the holes with a brace and bit. If you hack saw off a protruding bolt, file off the burr to avoid injury.

Galvanized joists hangers are made to accept 1 1/2" and 2" wood thickness. The short, fat galvanized nails that come with them drive nicely into locust.

MAKING DECKBOARDS

Select wood from the same batch, if possible, so it all shrinks the same. To maximize logs saw the deckboards in two widths, say 4", and 6" and 1 1/4" thick. Plane the wood at your local lumberyard. Sort and feed the boards with the bottom side (worst side) up at 1 7/32" or 1 3/16" thickness so it barely planes but takes off the high spots, then flip them over and plane with the good side up to 1 1/8" or whatever cleans it. Skimming the bottom first helps band-sawn boards feed smoothly through the planer.

Deliver the boards to the site and round the top edges with a router or power hand planer. Rain will temporarily discolor locust if the boards are touching in the pile, so use a few stickers or cover the pile.

Screw the deck boards down soon after milling. Place them tight together if the wood is fresh, and it will shrink to an

appropriate gap (1/4" - 3/8"). Leave a gap between dry locust boards. Cut the board to length and lay it in place. Figure out a way to push on it to take out the curve, if required.

If a board is warped out of place, or raised, clamp or block it into place before drilling, to avoid breaking drill bits, or breaking screws trying to move it with screw pressure. Use a good countersinking/counterboring bit, set to the length of your screw. Use 2 1/2" rust resistant square drive deck screws for 5/4" decking.

When building with green lumber in sunny weather, keep a coffee-can of beeswax/linseed oil paste on hand, and at the end of the day's progress, and before assembly, coat the freshly cut end-grain to minimize checking (and on buried posts ends).

Locust, as other boards, seems to cup so as to straighten the growth rings as seen on the cut off end. If the rings are nearly vertical (quarter-sawn) little shrinkage will occur. Locust logs have very little light-colored sapwood, but this is less rot-resistant than the heartwood. Wide boards containing the center pith of the log are likely to check, so they can be ripped lengthwise at that width, and used as two narrow boards.

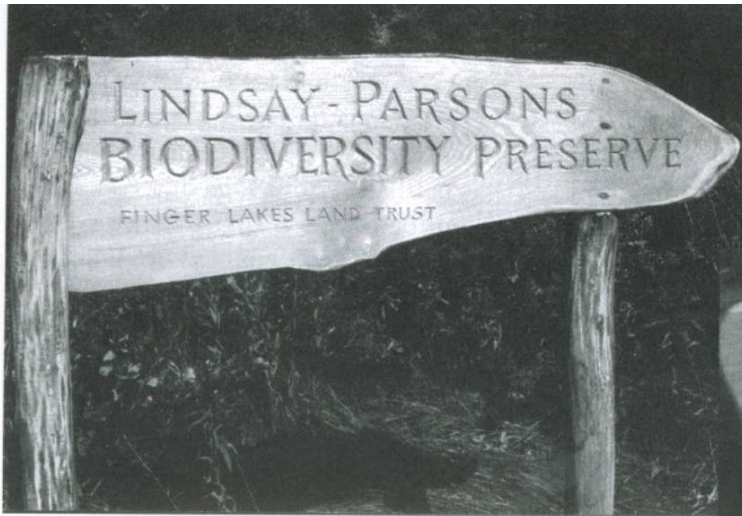
Wide boards without the heart present can be used if provision is made for them to be able to shrink in width.. Those narrow boards under 6" can be screwed fast. Wide

boards should be butted to other wide boards so everything can shrink, or else bolted with carriage bolts having been drilled with oversize holes, or screwed with counterbore holes enlarged slightly but so the screws don't pull through, or allowed to shrink before assembly for a couple of months outdoors. Locust has low shrinkage (volumetric = 11.4%, tangential = 6.9%, radial 4.4%). Expect it to shrink less than oak.

If a plank looks like it is going to check for sure, drill a long pilot hole in the end at an angle (after cutting to length) across the weak spot. Then counterbore and countersink a long screw to hold it together. Don't forget that this metal is in the wood, while working on the piece. Indoor furniture can be stabilized with the usual butterfly across the grain, but outdoors this will allow water penetration. Wax/oil will help.

Locust posts will last longer if dry on the outside before burying them in the ground. When using round posts, the bark will easily peel off if the logs are stacked log-cabin style for a season, so the wood shrinks. Sawn posts will air-dry enough in a month or two, making the outer layer less inviting to decay organisms.

Rough-cut locust can be smoothed a little for outdoor benches or picnic table tops with a paint scraper. Sharpen by filing parallel to the width of the blade.



Sign at left features a hand-carved catalpa signboard decoratively supported by locust tree posts. Locust and catalpa by Dave Gell/ Lettering by Chris Wolf

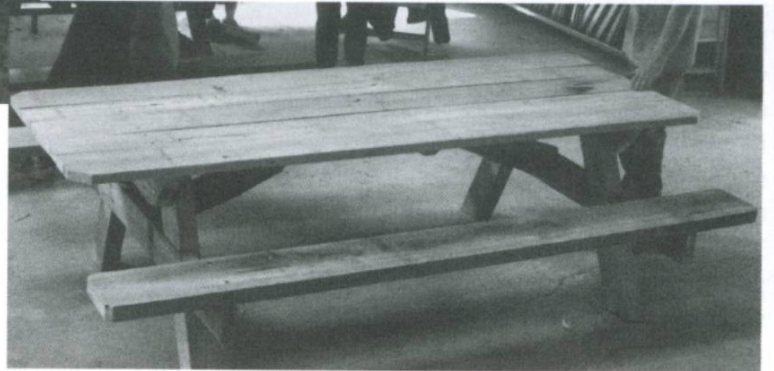


Below: Outdoor bench of 'haudenosaunee' locust in front of the Rongovian Embassy to the USA, Trumansburg, NY



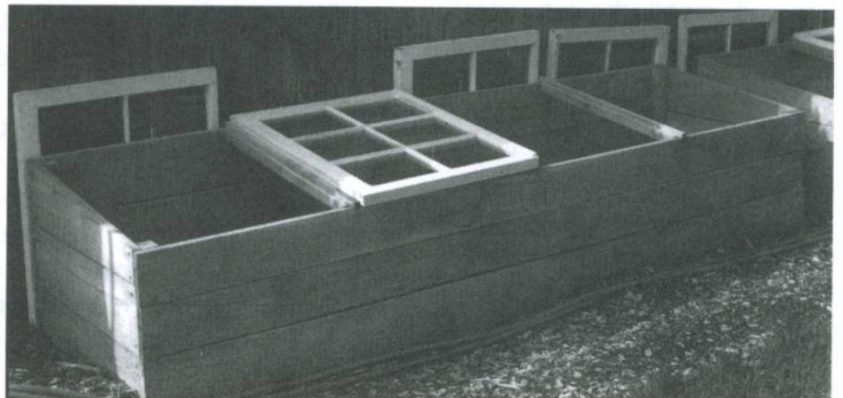
Above: Gay Nicholson sitting on her locust fence boards in Ludlowville, NY, sawn from a 20-year old locust grove.

Below: Locust gazebo by Blake Warmer, Port Orchard, WA.



Above: Locust picnic table built at 4-H Acres, Ithaca, NY

Below: Locust cold frames at Cornell Cooperative Extension, Ithaca, NY. Designed and built by Al Wurster.



Starting a Sustainable Forestry Workshop Program in Your Area

By Dave Gell

Collect enough skilled volunteers to organize the project, including a forester/naturalist and select the lucky woodlot with an environmentally concerned owner. Contact a local youth group accustomed to taking outdoor field trips and discuss a budget and transportation. Create a project agenda consistent with the budget, age group and woodlot

Most importantly, include the interpretative eco-tour, which provides interaction between the intelligence of the forest community and the receptive human audience.

The forest will use this initial small workshop to guide its own management, creating an eco-logical forestry plan and a geo-logical main trail plan.

Inexpensive activities include eco-games, eco-theater, tree planting, dead limb pruning in softwood plantations, trail improvements, and birdhouses.

Schedule later more expansive workshops for a dry or frozen time of the year.

Consult a local pro-environment forester, to identify biologically mature trees (those which are near decline and will not improve in lumber value). From these, select those which should stay and die naturally for habitat and to eventually enrich the soil, save trees which have good genetics if they are still seeding and don't have limbs over a trail or pose a hazard as they fall apart over the years.

Among the younger trees, if there is a stand of a single species, diseased trees can

be removed and the best trees can be given a little more room to grow vigorously, if they have grown to the point where their crowns are touching.

Near beautiful seed trees, create small openings for regeneration. If too much understory of the same species is present, the poorer ones can be lopped off by hand.

Decide which few trees can be harvested easily, with overall improvement to the stand. During the workshop the forester can lead nature walks, explaining these decisions.

Hire a local sawyer with a portable mill, and set this up convenient to the harvested trees, and generally near the crafting site, with some separation for noise. Choose a crafting site on even terrain accessible by a pick-up truck.

Into the crafting area, bring sawhorses, workbenches, shaving horses, etc. and wood from a previous workshop. At the last minute, bring tools. Telephone cable spools serve as work surfaces.

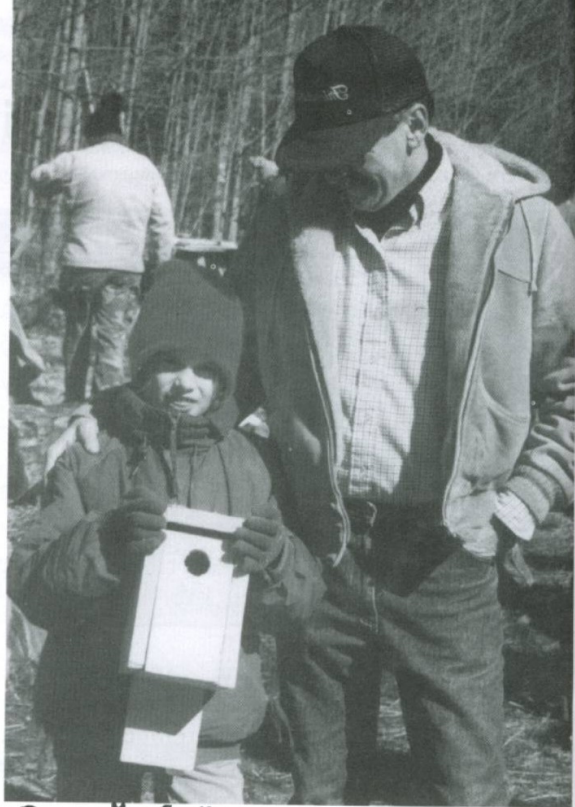
Simple projects include birdhouses, coat racks, and corner shelves.

A good meal in the woods is a great communal experience. Set up a wood stove in cold weather to heat herbal tea and cocoa, and stew for lunch. Pancakes are an easy hot snack. Hay bales are handy seating.

Entice skilled craftsman to participate; one instructor to five students.

Workshops can produce sawhorses and workbenches for future workshops. Used tools can be found at yard sales, and antique and junk shops. The activity can produce lumber to dry for future workshops.

Photos by Kansom Blakely



Dear Mr. Gelly
Thank you for a wonderful
time at your forest. I think my
favorite part was building things.
It was also fun to learn about
trees. It was a very special time
for my family.

from Abigail
Adams

Thank you so much for the time
and effort you put into the
day in your forest! I had a
wonderful time! I really liked
building my bench. It made me
realize what hard work that kind
of building is. I enjoyed every
moment of it! Thanks, Bethany Adams



from: Nathaniel Adams
 Mr. Gell I want to thank you for your
 time to organize your forestry day. It was
 loads of fun learning about forestry and
 making things. Thank again for your time.
 Nathaniel Adams.

Thank you very much for a great
 memory as well as a wonderful learning
 experience. Until we made the benches
 at your openhouse, I had seen the the
 wooden bench vise before, but until I
 made my bench I never knew how they
 worked. Thank-you again!

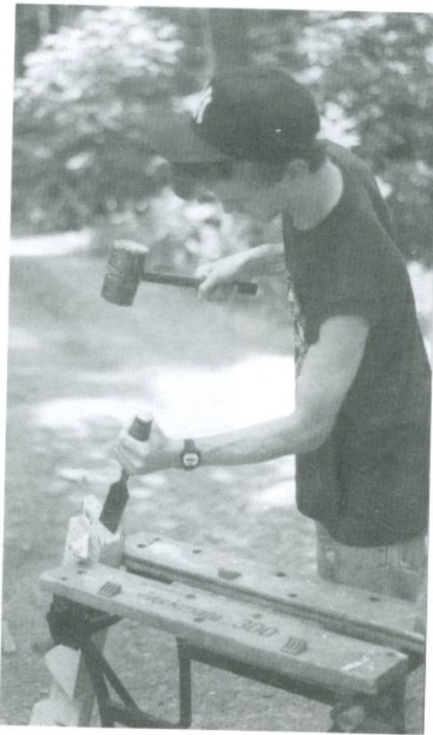
Sarah Adams

All my children are still talking
 about the day they spent in the
 forest. They had a wonderful time
 and are so proud of what they
 built. Their Dad had a great time, too.
 It was an inspiration. Many thanks
 for the invitation. Lynn Adams- Mom.





*Above and to the Right: Chris Martelli and Alan Vogel bring their class from B.O.C.E.S. who use hand tools to craft a locust picnic table to take back to their school
Photos by Carolyn Touryniere*



*Below and to the Right: Eric Yettru's 7th grade technology class from Trumansburg Middle School - our first group, 1995.
Photos by Jennifer Gell*



Some quotes from Aldo Leopold, in **A Sand County Almanac** (1948)

✧ regarding the timely renewal of land ethics ✧

A land ethic changes the role of Homo sapiens from the conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.

All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to co-operate (perhaps in order that there may be a place to compete for).

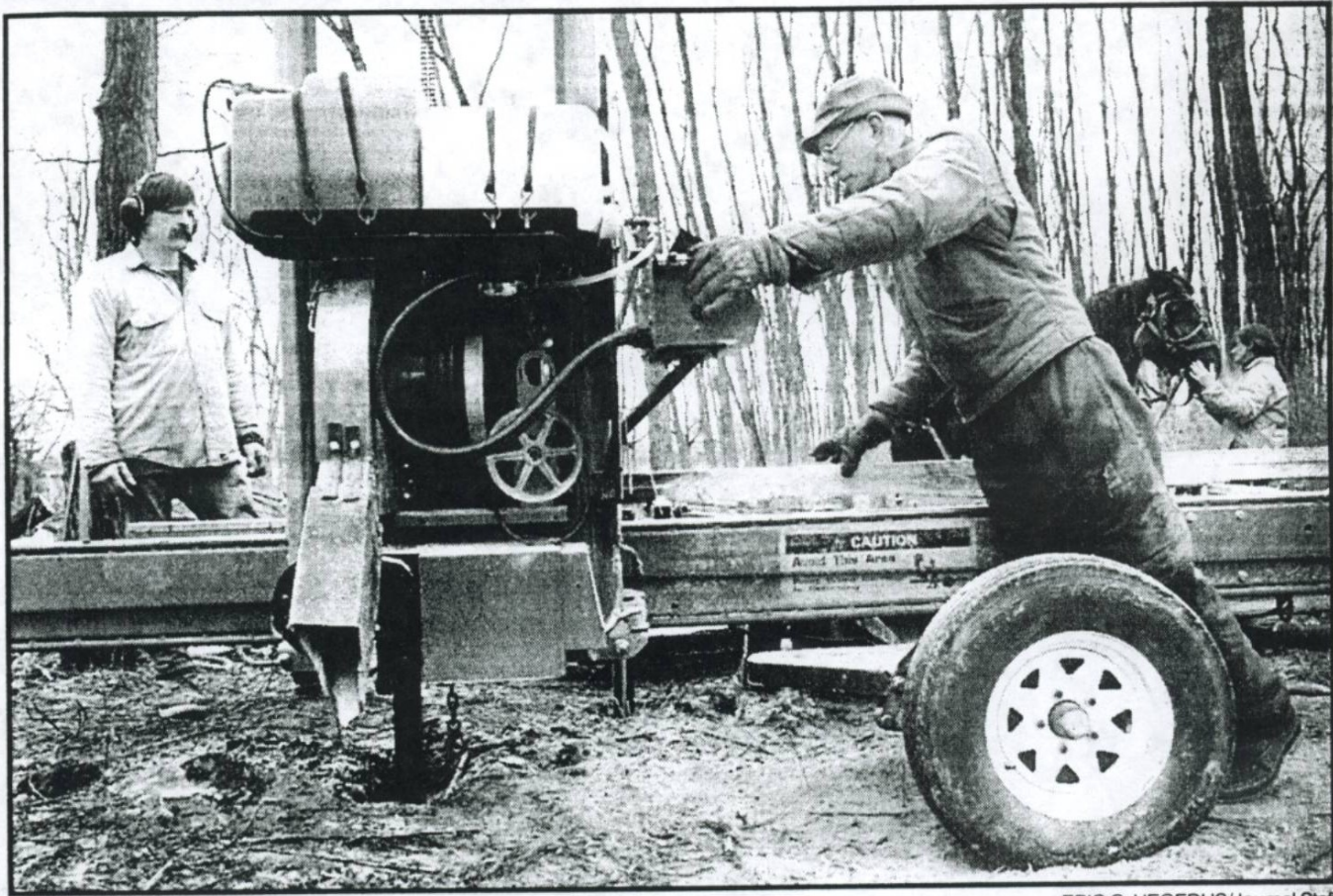
The land ethic simply enlarges the boundaries of the community to include soils, water, plants, animals, or collectively: the land.

It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value.

A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community.

It is wrong when it tends otherwise.

Among the black locusts



ERIC C. HEGEDUS/Journal Staff

GOOD WOOD: Dave Gell, left, watches as Dierk TerLouw right, Carolyn Touryniere tends to Miss, who is used for moving cut trees.

T-burg forester selects his cuts with environmental care

By ERIC C. HEGEDUS
Journal Staff

TRUMANSBURG — By all appearances, Dave Gell's low-impact logging operation seems somewhat outdated.

After all, how many lumber mills employ an 18-year-old horse named Miss to move cut wood from one area to another?

But Gell's simple formula has the distinction of producing high-quality, toxin-free lumber that leaves the forest better off than when he arrived.

"We're using it in the same application as pressure-treated wood, but this doesn't have the arsenic and chromium that pressure-treated wood has," said Gell. "We're not putting toxins into the environment."

His harvest is black locust wood from a 10-acre parcel in Trumansburg. This particular species has proven more superior than many others at adding nitrogen to the soil,



Neighbors

'We are selecting the trees that have little potential to grow into good timber logs ...'

— Dave Gell,
of Trumansburg

which stimulates the growth of other trees in the immediate area, he said.

Many locusts tend to be crooked, partly due to genetics and branching habit. Gell and his team — which includes Miss and Ithaca residents Dierk TerLouw and Carolyn Touryniere — cut the less-perfect trees into small logs for fence-building material.

This leaves behind the nitrogen-rich soil and, just as important, growing room for straighter trees. "We are selecting the trees that have little potential to grow into good timber logs, and we're using them now, giv-

ing more room for trees that show potential to grow," Gell said.

The Trumansburg resident has been doing about two portable mill jobs a year for the last decade, usually finding them by word-of-mouth.

The final product of their most recent efforts will be 2,000 board feet of wood for an 8-foot-high by 180-foot-long fence. Not to mention a healthier tract of land.

"We're looking for long-term benefits in the woods," Gell said.

Additionally, many seedlings planted for later use as lumber are dying because of poor soil quality. Logging operations and lumber companies have been "making money at the cost of environmental degradation," Touryniere said.

"I'm choosing toward sustainable forestry," Gell said, "not the big buck."

'Neighbors' is a weekly Journal feature focusing on the unsung people of Tompkins County. If you have a suggestion for a 'Neighbors' profile, drop a note to The Ithaca Journal Photo Department, 123 W. State St., Ithaca, N.Y. 14850; or call 274-9211.