

## **NOT a Savanna, the Bluegrass Woodland of 1775 was eutrophic and probably much browsed but little opened.**

Julian Campbell, Feb 2014; this summary is based partly on materials posted at bluegrasswoodland.com, especially “Rebuilding the Concept of Bluegrass Woodland” (2010 KNPS Newsletter 25: 6-9).

The idea that original woodland on central Bluegrass uplands was savanna-like, with much open sky between tree canopies, was hatched after 1950, some 200 years after the first Virginian explorers started to record what they saw in Kentucky. This ‘oak-ash savanna-woodland’ hypothesis was articulated with some detail by Bill Bryant and Mary Wharton in the 1980s. But it was presented as fact, and became accepted sheepishly by several subsequent authors, including much gray literature on conservation and management in this region.

The hypothesis can be soundly rejected in favor of a more detailed estimation of the original condition, based largely on witness trees recorded in the first surveys for land grants from Virginia.

- (a) About 20-40% of the woods were relatively mesic, with deep shade dominated by sugar maples and bitternut hickory.
- (b) About 50-70% of the woods were ‘submesic’—with an intermediate condition between deep shade and more open woods; ecological phases varied from relatively palatable ash/elm, to more browsed-out walnut/buckeye, or locally oak/hickory on drier sites.
- (c) Only 1-10% of the land had true openings in the canopy, with dense canebrakes, other shrubbery, or largely treeless grassland; it seems likely that these openings were concentrated along trails of larger animals (with humans) and around camp- or village-sites.

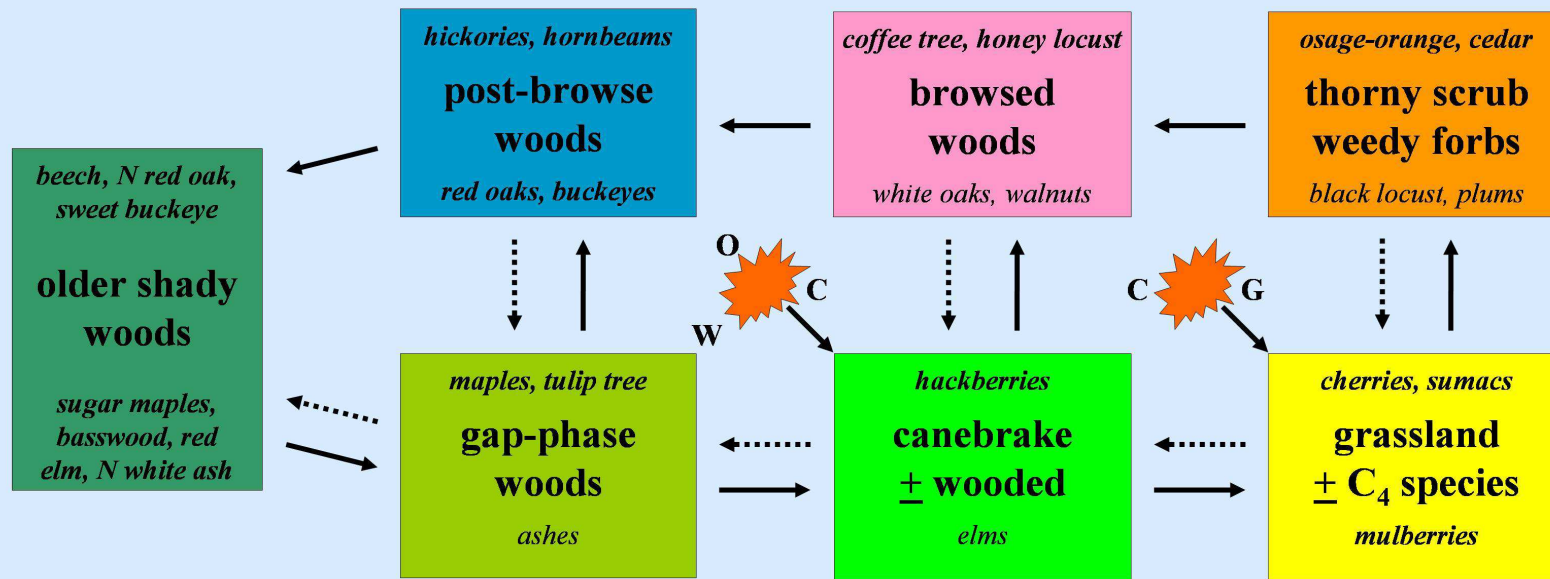
For true conservation of this woodland at protected sites, we will probably not be able to restore its exact original condition. But we should strive to restore the range of conditions from deep shade to open. Moreover, it is likely that herbivory was an essential factor maintaining the ecological diversity, as summarized in the new hypothetical model [overleaf]. We need experimental management with herbivores in order to test and develop this model. Such research is essential for insight to eutrophic woodland of temperate regions, which has become even more depauperate on other continents.

There are diverse types of evidence for the original condition, and for how some areas with old trees developed into woodland-pastures.

- (1) **Archaeology.** Gwynn Henderson (1998) summarized data on wood fragments from villages of the region dated ca. 900-1700 A.D.
- (2) **Narrative History.** I continue to search all potential sources. There is overwhelming evidence from accounts of pioneers and early travelers that a fairly diverse woodland existed, with rather few oaks.
- (3) **Surveying History.** The witness trees noted in early surveys provide ample evidence of the generally “well-wooded” nature of the landscape, with much deeply shaded woodland.
- (4) **Early Botany.** The collections and notes of C.W.Short, especially his “Florula Lexingtoniensis” of 1828-29, provide detailed insights.
- (5) **Modern Botany.** Most of the more conservative plant species that remain are typical of more or less shady woodland. Other than cane and others in brushy transitions, few are typical of full sun.
- (6) **Dendrochronology.** Ryan McEwan’s 2008 paper showed that the ancient trees of woodland-pastures started to grow much faster after settlement, with doubling or tripling of radial growth and initiation of their massive spreading limbs. He found no fire-scars.
- (7) **Land-use History.** Several writers during 1800-1840 noted how woodland-pastures were created after settlement. The few small remnants of this type were sampled by Bryant et al., who then argued that they indicate the original condition. Instead, the concentration of blue ash and oaks in these woods can be attributed to direct human selection and the ability of these species to survive for long periods as large trees with intensive grazing around them.

To some extent, the ‘savanna-woodland’ concept may have developed as a romantic notion that linked the modern horse-farm landscape with a supposed past. Some other proponents may now be motivated by interests in open land for wildlife-management or so-called “native warm-season grassland” (which was not native). Given the continued difficulties in consensus-building, I suggest that these issues should be discussed with more transparency, and if necessary debated. I challenge anyone to come up with evidence for an extensive savanna-like condition in the original landscape. And I urge all interested people to combine forces for more effective research.

**Woodland development after intense browsing/grazing, with resistant species**



**Tree canopy decline due to wind/ice, dry/wet episodes, pests/pathogens, fire, cutting; plus increases in forage for ungulates/other herbivores; formerly elephants/mammoths.**

**Letters indicate fuel for fires: W = woody debris; O = oak litter; C = old cane; G = old grass.**

**DIAGRAM OF ECOLOGICAL CONCEPT FOR DYNAMIC VARIATION IN WOODLAND OF THE CENTRAL BLUEGRASS (ASSUMING UNIFORM EUTROPHIC SOIL)**

**Footnote.** This model can be extended to much of the eastern U.S.A. based on concepts developed in central Europe. For further discussion, see Vera, F.W.M. 2000. *Grazing Ecology and Forest History*. CABI Publishing, Wallingford, England. Critics (e.g., Mitchell in *J. Ecol.* 2005, 93: 168-177) have shown Vera's thesis to be exaggerated in some cases, but generally agree that herbivores often cause shifts in vegetation.

**Best eye-witness descriptions of the original woodland:  
note many species, no dominance of ash and little oak.**

**Thomas Hanson. 1774.** Journal, April 7-August 9. Pages 110-133 in: R.G. Thwaites & L.P. Kellogg. 1905. Documentary History of Dunmore's War. Wisconsin Historical Society. Madison: describing surveys near Elkhorn Creek in what became western Scott County: "July 7th: Our survey began on the North Branches of Elkhorn Creek, about seven or eight miles from the fork... July 8th: We continued our surveys, the [1000 acre] lines running parallel to each other, running in length N. 20E., in breadth, S. 70E. The land is so good that I cannot give it its due praise. Its undergrowth is clover pea vine cane & nettles.—intermixed with richweed [*Ageratina atissima*]. Its timber is honey locust, black walnut, sugar tree, hickory, iron wood, hoop wood [probably hackberry], mulberry, ash, & elm, & some oak."

**James Nourse. 1775.** Diary. Printed in 1925. Journey to Kentucky in 1775. Journal of American History 14: 251-260+: along Kentucky River to a buffalo crossing above Leestown, then east on uplands. "May 30th... walked 3 miles and came to the River—Struck off again by the paved landing along a buffalo path, which soon led to good Buffaloes, all sizes... Went on to a small island... land a good bottom and high land tolerable—came to the foot of a steep hill of mountain over which the path led—steep and rocky but not so bad but a horse might now go up and is capable of being made a wagon road—it is about two miles from the river on top of the hill, the land is level and well timbered with oak [on soils of the Eden Shale]. Afterwards [on soils of the Inner Bluegrass] it is light with timber—little oak—mostly sugar tree, walnut, ash, and buckeye (horse chestnut) but the tops of the trees mostly scraggy, the surface of the ground covered with grass along the path, which was as well trod as a market-town path [probably on or near what became Old Frankfort Pike]. About twelve mile the further we went the richer the land, better though of the same sort of timber, the ash very large and high, and large locusts of both sorts—some cherry—the growth of grass under amazing—blue grass [perhaps *Poa pratensis*], white clover [probably *Trifolium*

*stoloniferum*], buffalo grass [perhaps *Dichanthelium clandestinum*] and seed knee and waist high: what would be called a fine swarth of Grass in cultivated meadows, and such was its appearance without end—in little dells in this [what became northern Woodford Co. south of Midway]. We passed several dry branches but no running water our course S.E. At about twelve miles came to a small run [probably Lees Branch] and soon after I discovered a pretty spring that joined its waters—here we resolved to dine, being both hungry and thirsty. We had in our walk seen about 5 herd of buffaloes."

**James Nourse, Jr. 1779-1780.** Journal. Edited by Neal O. Hammon (Louisville, Kentucky). 1973. Filson Club History Quarterly 47: 262. Feb 17th, 1780: "On my journey to these two stations, [I] was obliged to avoid a very thick cane break and keep near a south course from Strouds [Winchester], then [proceed] to the west till we got upon the ridge which divides the Elkhorn from the Licking Creek waters. Along this ridge where there are vast cane breaks, there has been during the winter a great resort of buffalo, as we judged from the quantities of dung, but the snows now wetted off the ground, they have now left it. The lands along this ridge is very good and in many places we came across sink holes, where I do not doubt in the least but water would be easily got at. As we came upon Elkhorn waters, [we] got upon lands which seem to me to be of the very best quality, and I believe it is. The soil [is] very dark, and by the roots of the trees which were blown down, I could discover no variation. The ground even in this season of the year [is] green with clover and wild rye; the growth [of trees consist of] black walnut, wild cherry, locust, Ash of different sorts, [and] shell bark hickory. I thought I has got into a garden spot, but found the lands continued nearly the same all the way to Bryan's [Station]."

**Needham Parry. 1794.** Diary of trip westward. J.D. Shane's copy printed in 1948. Filson Club History Quarterly 22: 227-247: June 21-22nd. "I crossed Stoner again [now in the Paris area, Bourbon Co.], and rode about 15 miles through the country [now Ky. Route 627], and came to John Coulson's [perhaps at the intersection with Ky. Route 57, southern Bourbon Co.]. The land I rode through today was

also of the first quality, being timbered like the rest, with walnut, cherry, blue-ash, buckeye, locust, and hackberry; and the water good... [on what became Route 537]... and so came to Mt. Sterling, or the Little Mountain Town, and as the road was but narrow, hemmed in with cane, the most of the way, and the weather wet, caused the road to be exceeding muddy, and a good deal of it very hilly, that it made a tiresome days journey [probably Ky. Route 537 to US 460]. The land all the way was very good; the timber in some places was chiefly honey-locust, but in others varified with walnut, buckeye, hackberry and sugar-tree.”

**Reverand David Barrow. 1795.** Diary of David Barrow of his Travel Thru Kentucky in 1795. Typewritten transcription in Special Collections, University of Kentucky, p. 23: summarizing the settled parts of Kentucky, now referred to as the Bluegrass region. “The growth in these parts is black walnut in great abundance; vastly large and tall sugar tree, black lin [probably basswood], hackberry, white ash, white walnut, wild cherry, coffee nut tree and buckeye with a mixture of others too tedious to mention. These are in the first quality of land... The growth of trees in those countries is so luxurious that they form a shade so universal and add thereto the darkness of the soil, that it may be called as it is rendered from some of the Indian tongue, “The dark and bloody ground”. Undergrowth: shrubs of various kinds as wild spice [*Lindera*], red bud [*Cercis*], prickley [ash] [probably *Zanthoxylum*], elder-ash [*Sambucus*]... The herbage is very plentiful in the uninhabited parts (tho’ as usual it is mostly devoured in the settlements) as wild pea vine [*Amphicarpaea*], wild rice [ryes] [*Elymus*], buffalo grass [perhaps *D. clandestinum*], Kentucky nettle, a weed peculiar to those countries and a sign of great fertility [perhaps *Urtica chamaedryoides*], and many others too numerous to mention. The wild grape vine [*Vitis vulpina*] grows in those regions to an astonishing size; which indicated to me that it is famous for vineyards.

**David Meade. 1796.** Letter to Joseph Prentis in Webb-Prentis Papers, Alderman Library, University of Virginia. Register of the Kentucky Historical Society 90: 117-139. “Property in Fayette

County is much divided, consequently high... An oak tree is as scarce in this country as a black walnut or ash is upon high land with you. The growth here is sweet maple [sugar maple], wallnut, ash, both kinds of locust, particularly the fruit bearing [honey locust], which is extremely high & large. Poplar [tulip/yellow poplar] only in some places & these of vast size, scaly bark hickory [shagbark/shellbark] not uncommon. Buckeye (differing materially from your horse chestnut being only a species or variation of the same genus); cherry tree, mulberry, &c with but few of the common kinds to the eastwards. The undergrowth, usually the spice bush & frequently a young growth of sugar maple. Wherever the woods are a little open or a piece of cleared ground not in cultivation, the whole is covered with elder bushes mixed with a high weed call’d devils bit or iron weed [*Vernonia gigantea*], well known to me at Maycox [Virginia] to be eradicated only by the grubing hoe. The only wild grass in the settled parts is what is here call’d the nimble-will [*Muhlenbergia schreberi*] more resembling the wire grass [*Poa compressa* according to Gill & Curtis] than any other in Virginia. It is rather finer.”

**Francois André Michaux. 1802.** Travels to the West of the Allegheny Mountains. Reprinted in R.G. Thwaites. 1904. Early Western Travels.1748-1846. Vol. 3. Arthur C. Clark Co., Cleveland, Ohio. “In Kentucky and Cumberland [Tennessee], independent of a few trees, [among] natives of this part of these countries, the mass of the forests in estates of the first class, is composed of the same species which are found, but very rarely, east of the mountains. In the most fertile soil, these species are the following: cerasus virginia [*Prunus serotina*], or cherry-tree; juglans oblonga [*Carya cordiformis*], or white walnut; pavia lutea [*Aesculus*], buck-eye; fraxinus alba [*americana*], nigra [perhaps *pennsylvanica*], cerulea [*quadrangulata*], or white, black, and blue ash; celtis foliis villosis [*occidentalis*], or ’ack berry; ulmus viscosa [*rubra*], or slippery elm; *Quercus imbricaria* [sic], or black-jack oak; guilandina dioica [*Gymnocladus*], or coffee tree; *Gleditsia triacanthos* [sic], or honey locust; and the annona triloba [*Asimina*], or pawpaw, which grows thirty feet in height. These latter three species denote the richest lands.”

**Humphrey Marshall. 1812.** The History of Kentucky. Revised and extended. 1824. Henry Gore, Frankfort. Pages 5, 8-9: speaking of the pioneers in Kentucky during 1775, and prior Indian conflicts. “Their arrival on the plains of Elkhorn, was in the dawn of summer; when the forest composed of oaks of various kinds, of ash, of walnut, cherry, buckeye, hackberry, sugar trees, towering aloft to the clouds, overspread the luxuriant undergrowth, with their daily shade; while beneath, the class of trees—the shrubs, the cane, the herbage, and the different kinds of grass, and clover, interspersed with flowers, filled the eye, and overlaid the soil with the forest’s richest carpet... And because these [Indian] combats were frequent—the country being thickly wooded, and deeply shaded—was called in their expressive language, THE DARK AND BLOODY HUNTING GROUND.”

**Lyman C. Draper [collector and editor] and John D. Shane [interviewer of pioneers]. 1842-51.** Draper Manuscripts in the Archives of the Wisconsin Historical Society, Madison, Wisconsin.

11CC, p. 158: **Samuel Matthew**, interviewed by Shane in 1840s, about land around Bryan’s Station in about 1783. “There was a great deal of walnut about Bryan’s Station. Land that had not cane on it, was grown up with white blossoms, and the trees were tall ash, sugar-trees, elms, hackberry, tall and very thick. What locust there was, was very high and wind broken. [In contrast] Locust, walnut, low scrubby hackberry, and some elm, and sometimes sugar trees, vast quantities of buckeye, where cane grew abundant. Soil much better where cane was. Buckeye outlasts sugar tree [perhaps meaning that it persists in settlement]. Plums, haws, wild-cherry, pawpaw, hackberry, grass nuts, turkeys fed on. Mistletoe grew on walnut and elm. No chestnut N of Kentucky River: all S and W of that River.”

11CC, p. 216-217: **Robert Gwynne**, interviewed by Shane in 1840s, about the Clover Bottom area on “Shawnee Run Road” in 1784, now Mundys Landing Road in southern Woodford County. “Cane down here [along Shawnee Run Road] was only in very little patches, and that not the big rank quality but a kind of maiden cane, as high as a man’s head. Here the timber was white, red, and black oak. There

[presumably further from the river on better soils] ash and walnut. Where ever big ash or big walnut now grows, there was cane lands. But little black walnut [young trees in second growth] is not on what was cane ground. The Shawnee Run Indian trace was never more than a foot wide.—was a foot deep. It passed thro’ Clover bottom, where Mr. Clanahan made a pre-emption.—called so bec’s [because] the Buffalo clover grew up there in a little space, about twice as big as this house (a stone house w 3 rooms on the ground floor.)”

11CC, p. 221-224: **Mrs. Ephraim January**, interviewed by Shane in the 1840s, about Spring Station during April 1780, now in northern Woodford Co. on Beals Run 3-4 miles west of Midway. “I tho’t [thought] it was as pretty a place as ever I had seen, so level. The sugar trees and buckeyes were all out. The place where you went down to the springs was all grassy.—No hills.”

**B.H. Young and S.M. Duncan. 1898.** A History of Jessamine County from its Earliest Settlement [1798] to 1898. Courier-Journal Job Printing Company, Louisville. p. 69. “Col. John Price induced many of his Virginia friends to settle in the Marble creek neighborhood. The following letter to Lewis Tapp will be extremely interesting, as he has many descendants in Jessamine county: “Lexington, Ky., May 10, 1805. Dear-Sir and Friend: I have received yours of April 2d. I take great pleasure in informing you that if you have a desire to leave Virginia and settle in Kentucky I would advise you to pay a visit to this portion of Kentucky. Jessamine county was formed eight years ago. I settled in the limits of the county in 1788 The population is 5,400. The surface of the land for the most part gently undulating, rising here and there into hills and moderate elevations. The timber is white ash, hickory, hackberry, elm, white oak, also white and black walnut. Besides this variety of timber in the county, cedar trees, yellow poplar, beech and cherry is scattered over various parts of the county.””

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## Early accounts of conversion to woodland-pastures and other transitions to settled land in the central Bluegrass.

**David Meade 1796.** See reference above. “Wherever the woods are a little open or a piece of cleared ground not in cultivation, the whole is covered with elder bushes mixed with a high weed call’d devils bit or iron weed [*Vernonia gigantea*], well known to me at Maycox [Virginia] to be eradicated only by the grubing hoe. The only wild grass in the settled parts is what is here call’d the nimble-will [*Muhlenbergia schreberi*] more resembling the wire grass [*Poa compressa* according to Gill & Curtis] than any other in Virginia. It is rather finer. Perhaps there never has been heretofore a time or is likely to be hereafter when this country did or will appear to greater disadvantage where the early stations were established. The wild herbage consisting of cane & pea vine is entirely eat out and the place of it supplied by weeds not agreeable to cattle. The wood range is therefore not good yet but where the wild food has been more recently consumed the whole face of the earth is as bare of every kind of herbage as the gravel walks in your garden. In these parts of cow would starve in the woods. In the very earliest settlements as about Danville, the nimble-will, a very good pasture grass, has taken place of the weedy growth which first succeeded the primitive cane brake. This will be the case in four or five years every where on this side [of] the Kentucky River. In the mean time it behooves the farmer to cultivate grass & all those who have lands enough opened to spare, sew them in blue grass or clover. No farm ever so small is without a timothy meadow. Vast quantities of hay are made here. Many good farmers make extensive wood pasture by clearing up the under brush & small trees and sewing blue grass seed sometimes mixed with timothy. Of that number is your acquaintance Col. G. Nicholas [first attorney general of Kentucky].”

**Samuel Right Brown. 1817.** The Western Gazetteer; or emigrants directory... Printed by H.C. Southwick, Auburn, New York. Page. 92, describing the Lexington area: “The grazing parks hare a peculiar neatness; tlie charming groves, the small, square and beautiful

meadows, and above all, the wide spreading forests of corn waving in grandeur and luxuriance, and perfuming the air with its fragrance, combine to render a summer's view of Lexington inexpressibly rich, novel, grand and picturesque.” Page 109, under “THE RANGE”:  
“The reed cane, an evergreen, which in the first settlement of the state covered the country on all the rich lands from Big Sandy to the Tennessee frontier, and which constitute the principal food for horses and cattle in winter, has of late years almost entirely disappeared. But a still more valuable succedaneum [sic] has sprung up in its stead, so that the woods and commons in the best counties afford a rich and luxuriant pasturage. This is a short, nutritious grass called “nimble will,” which has completely overspread with astoniching celerity, almost every spot of waste or uncultivated ground. The inhabitants affirm that the range is now better for horses and cattle, than it was when the country was in a state of nature.”

**Constantine Samuel Rafinesque. 1822.** The Cosmonist—No. VIII. On the botany of the western limestone region. Kentucky Gazette, new series 1: 2-3, April 4th. “Another remarkable feature in our Botany, is the casual change of the prevailing plants and trees upon many peculiar spots of grounds. It has been observed by the ancient settlers that the following plants have followed each other in succession in many [?places?] as the prevailing growth.

The Canes, or *Miega arundinacea* [*Arundinacea gigantea*].

The Butterweed, or *Eupatorium urticaefolium* [*E. rugosum*].

The Ironweed, or *Vernonia prealta* [*V. gigantea*].

The Nimblewill, or *Panicum dactylon*

[*Cynodon dactylon* or, more likely, *Muhlenbergia schreberi*].

The Hardgrass, or *Panicum glaucum* [probably *Setaria pumila*]

The wild Camomile, or *Anthemis cotula*, &c.

There is therefore a kind of natural perennial change of vegetation, when a species has exhausted the soil of a peculiar nutrition which it requires, it gives way to another for a series of years, &c.”

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“You blooming fields and you enchanting groves,  
Where peace and hapiness nout sought in vain  
Reside from Nature’s friendly bard receive

The greeting, tuneful, song, or else his thanks,  
Deserv'd by sweet sensations oft conveyed  
To his warm soul with purity of thought,  
And gratefully accepted, duly nursed.” [What was he smoking?]

**Thomas Hulme. 1828.** Journal Made During a Tour of the Western Country. Reprinted in R.G. Thwaites. 1905. Early Western Travels. Vol. 10, Arthur C. Clark Co., Cleveland, Ohio. Page 65, in 10th July 1819: “Had the good fortune to meet Mr. Clay, who carried us to his house, about a mile in the country. It is a beautiful residence, situated near the centre of a very fine farm, which is just cleared and is coming into excellent cultivation. I approve of Mr. Clay’s method very much, especially in laying down pasture. He clears away all the brush and underwood, leaving timber enough to afford a sufficiency of shade to the grass, which does not thrive here exposed to the sun as in England and other such climates. By this means, he has as fine grass and clover as can possible grow.”

**Anonymus. 1834-35.** Travels in Hot Weather. Reprinted in E.L. Schwaab (ed.). 1973. Travels in the Old South. University Press of Kentucky. Page 266: in 1834, from Georgetown to Lexington. “The woodland pastures, which are peculiar to this section of country, are remarkable beautiful... This pleasing effect is produced by a simple procedure. The woodlands are all inclosed [sic]; the underwood and the useless trees are removed, and the valuable timber trees are left, standing sufficiently wide apart to admit the rays of the sun and the free circulation of the air between them. The ground is sown with grass, and extensive tracts, which would otherwise have been mere forest, are thus converted into spacious lawns, studded with noble trees. These are so numerous, and of such extent, as to form a prominent feature in the scenery, and it is impossible to imagine any thing of this kind more beautiful than the alternations of woodland and meadow, with hemp and corn fields, and orchards, which the eye here meets in every direction... Within the memory of living witnesses, the region which is now so splendidly embellished, and which support a numerous and highly refined population, was covered with savage forests and vast cane-breaks...”

**Charles Fenno Hoffman. 1835.** A Winter in the West, Harper & Brothers, New York, p. 150-164, early April. From Georgetown to Lexington: “The enclosures, too, were all in better order, and I now, for the first time, saw some of those beautiful wooded pastures which, as they are the pride of Kentucky, are peculiar, I believe to this State. An occasional villa, imbosomed [sic] in trees and shrubbery, was soon after observable.” Lexington to Frankfort: “Leaving the road, we entered at once upon a large and beautiful park or chase [“cattle-range”]. It was enclosed by a common worm-fence, but afforded some charming vistas among its noble clumps of trees, where a large herd of deer were browsing unmolested. This was the grazing portion of the farm, and the hardy *blue* grass, even thus early, afforded a rich sward beneath the boughs that were just putting forth their leaves. Passing completely through this wooded pasture, we entered a square enclosure of some eight or ten acres of garden, lawn and orchard combined... [same locality] descending a slight knoll back of the house, where a lively brook came singing from a rocky cave within a few yards of the door, we entered a wooded enclosure of about a hundred acres, separated by a fence from the woodland pasture around. Here a herd of *elk*, startled by the sound of our horses feet, reared their tall figures from the patches of underwood, and banding together in a moment, scampered after their antlered leader.” Returning to Lexington: “the woodland and arable land were so intermixed, that the tall and taper trees of the former, now ranging in open avenues along a hill-side, and now disposed in clumps upon the meadows, as if set there by the eye of taste, produced the impression of riding through a magnificent park, whose verdant swells and imbowered glades had only been and there invaded and marred by the formal fences drawn through them.”

**Charles Augustus Murray. 1835.** Journal in: 1839. Travels in North America... Vol. 1. Richard Bentley, London. Pages 223-225, arriving at Lexington: “This is a neat pleasant town, containing a considerable number of locust-trees and small gardens, which give it a cheerful appearance, while they afford the occasional luxury of shade... Mr. Clay’s residence is about a mile from the town, situated in a pretty woodland scene, somewhat resembling an English park... His

pastures are on fine virgin soil, well shaded by noble forest-timber, with here and there an open glade (something like an English park).”

**William Stickney. 1872.** Autobiography of Amos Kendall. Lee and Shephard, New York. Pages 112: from 1814 and after, when Kendall or his father-in-law arrived in Lexington: “The wood pastures, so called, were particularly novel and interesting. Originally, the site of Lexington and the surrounding country was covered with heavy timber, under which was a thick growth of cane so intertwined with pea-vine as to be almost impenetrable to man and beast. The leaf of the cane very much resembles that of Indian corn but not as long or broad, and it constituted the favorite food as well of the buffalo as of domestic cattle. As soon as the latter, became numerous, they fed the cane so closely as to kill it as well as the pea-vine, leaving the forest without any undergrowth. The cane and vine were soon replaced by a thick and luxurious growth of bluegrass; affording, perhaps, the richest pastures in the world--as beautiful to look upon and wander over as pleasure-grounds kept in order by incessant labor in other regions. But the thought would intrude, that even the beauty of these natural parks are transient, for there is no young growth to take the place of the trees that are destroyed by the axe or by time, and that at no distant day the forest must entirely disappear.”

**James Lane Allen. 1886.** The Blue-Grass region of Kentucky. Harper’s New Monthly Magazine 72: 365-382. “Characteristically beautiful spots on the blue-grass landscape are the woodland pastures.... a Kentucky sylvan slope has a loveliness unique and local.... The foliage of the Kentucky trees is not thin nor disheveled, the leaves crowd thick to the very ends of the boughs, and spread themselves full to the sky, making, where they are close together, under – species of green gloom scarcely shot through by sunbeams. Indeed, one often finds here the perfection of tree forms. I mean that rare development which brings the extremities of the boughs to the very limit of the curve that nature intends the trees to define as the particular shape of its species... Here the same characteristic strikes you in the wild cherry, the maple, and the

sycamore – even in great walnuts and ashes and oaks; and I have occasionally discovered exceeding grace of form in hackberries, in locusts, and in the harsh hickories – loved by Thoreau. But to return to the woodland pastures. They are the last vestiges of that unbroken primeval forest which, together with canebrakes and pea – vines, covered the face of the country when it was first beheld by the pioneers. No blue-grass then. In these woods the timber has been so cut out that the remaining trees often stand clearly revealed in their entire form, their far-reaching boughs perhaps not even touching those of their nearest neighbor, or interlacing them with ineffectual fondness.”

**John Burroughs. 1890.** A taste of Kentucky Blue-Grass. The Century 40: 339-348. “The feature of this part of Kentucky which strikes me most forcibly, and which is perhaps the most unique, are the immense sylvan or woodland pastures. The forests are simply vast grassy orchards of maple and oak, or other trees, where the herds graze and repose. They everywhere give a look to the land as of royal parks and commons. They are clean as a meadow and as inviting as long, grassy vistas and circles of cool shade can make them. All the saplings and brushy undergrowth common to the forests have been removed, leaving only the large trees scattered here and there, which seem to protect rather than occupy the ground. Such a look of leisure, of freedom, of amplitude as these forest groves give to the landscape!”

**Jessamine Woodson. 1898** (or before). History of Jessamine County for the Acme Club, extract printed in Young and Duncan (ibid.), p. 147. “Our bluegrass pasture lands are our special pride. Grass as soft as velvet, and with blades often a yard long, and as fine as a silken cord, without a weed, growing close to the very trunks of the tall wide-spreading elms, walnut, oak and maple trees. Here is the home of the dryads and wood-nymphs, and here the poet must have been inspired to write, “The Grove’s were God’s First Temples,” and these actually were to the noble army of pioneers who first set up “The Banner of the Cross” while building log-cabins with rifles in their hands.”