

## CHESTNUTS (and Friends) AT LOCKWOOD FARM, November 2023

Donald Jones, Hans Nienstaedt, Richard Jaynes, and Sandra Anagnostakis

### 1. KENWOOD AVENUE

by gate: *Castanea mollissima*  
 USDA import FP#7275, planted 1939 [peroxidase AB]  
 next west *Castanea mollissima*  
 cultivar '**Bartlett**' grafted 1939 [peroxidase AA+]  
 next west *Castanea mollissima*  
 USDA import FP#7284, planted 1939 [peroxidase BB]  
 next west *Castanea mollissima*  
 USDA import FP#7273, planted 1939 [peroxidase BB]

### FARM, CENTER

### 2. near barns: *Castanea dentata* American Orchard

Four rows of 18 seedlings from Michigan and Wisconsin, provided by Ivan Thor, U. Tennessee. planted 1976 when 2 and 3 yrs old, [all Santamour peroxidase AA].

**R1T1 is at the NE corner, rows run from North to South**

☺ original stem    ☹ old sprouts    ☹ young sprouts, lots of die-back    ↑ North

	Row 4	Row 3	Row 2	Row 1
Tree 1	☹	☹	☹	☹
2	☹	☹	☺	☹
3	☺	☹	☹	☹
4	☹	☹	☹	☺
5	☺	☺	☹	☹
6	☹	☹	☹	☹
7	☺	☺	☹	☹
8	☹	☹	☹	☹
9	☺	☺	☹	☹
10	☹	☹	☹	☹
11	☹	☺	☺	☹
12	☺	☹	☺	☹
13	☹	☹	☺	☹
14	☺	☹	☹	☹
15	☹	☹	☹	☹
16	☺	☹	☹	☹
17	☹	☹	☺	☹
18	☹		☹	☹

South of these are 27 trees from the American Chestnut Cooperator's Foundation planted 2007, and a few other trees from others.

19	Smith Middle School, CT	cross #6-07 American tag #24712	ACCF Pacman	ACCF VT 1
20	ACCF NC Champ <b>best</b>			Smith Middle Schol, CT
21	cross #6-07 American tag #24714		Turkey, C. sativa	ACCF Loudon
22	ACCF NC Champ	ACCF VT 1		Turkey, C. sativa
23	ACCF Thompson	ACCF Thompson	Turkey, C. sativa	Burton 27a, GA 2011
24	ACCF Thompson	Smith Middle School, CT	Smith Middle School, CT	Sault St. Marie tree from Canada
25	ACCF JEB	ACCF JEB		
	Row 4	Row 3	Row 2	Row 1

**3. east, center 'Scientists' Cliffs'** graft originally called "American," from Glendale, MD, land of G.F. Gravatt, also known as FP1000, graft about 1959 This tree is about  $\frac{3}{4}$  *dentata* and  $\frac{1}{4}$  a mixture of *C. sativa* and an unknown Chinese type. [Santamour peroxidase AA]

**4. SE corner** (*Castanea mollissima* x *C. dentata*) x *C. dentata* two clones of hybrid '**Clapper**' from a USDA cross in 1946, grafted here about 1960. This was: "M16" = PI#34517, Tientsin, China (1912) crossed with an "American" in MD known as FP 555, and the hybrid crossed again with FP 555 (original now dead), these two clones are not cross-fertile [peroxidase AA and AA], (stump sprout there too!)

**5. North and East of 'Clapper'**, on the road Commercial chestnuts and 2014 seedlings

	<u>S</u>	<u>Center</u>	<u>N</u>
W	'Colossal' x 'Lockwood'	'Colossal' x 'Lockwood'	'Colossal' [perox. BB]
C	'Colossal' x 'Lockwood'	'Colossal' [perox. BB]	'Colossal' x 'Lockwood'
E	'Colossal' x 'Lockwood'	'Colossal' x 'Lockwood'	'Colossal' x 'Lockwood'

**6. East of 'Clapper'**, on the road, between grapes Commercial chestnut seedlings

	<u>S</u>	<u>Center</u>	<u>N</u>
W	Dunston	Dunston	Dunston
C	Dunston	Dunston	Dunston
E	Dunston	Dunston	Dunston

## 7. NEW HYBRIDS, just WEST of the American orchard

Rows run from South to North with the first row on the East side of the plot

R1T1 is at the SE corner

R1T1	Fred Blankenship hybrid 2013	
R1T2		
R1T3	<i>C. ozarkensis</i> x <i>C. crenata</i> , NH R2T2 x WL R34T6, 2011	<b>F1</b>
R1T4	<i>C. ozarkensis</i> x <i>C. crenata</i> , NH R2T2 x WL R34T6, 2011	<b>F1</b>
R1T5	<i>C. dentata</i> x <i>C. crenata</i> , HH R1T6 x WL R34T6	<b>F1</b>
R1T6		
R1T7	<i>C. ozarkensis</i> x <i>C. crenata</i> , NH R2T2 x WL R34T6, 2011 'Les Paul'	<b>F1</b>
R1T8		
R1T9	<i>C. ozarkensis</i> x <i>C. crenata</i> , NH R2T2 x WL R34T6, 2011	<b>F1</b>
R1T10		
R1T11	<i>C. dentata</i> x <i>C. crenata</i> cross #14-91, RH(5) R2T5 (farm) x WL R34T6 (Plantation), male sterile, Excellent resistance, shed nuts by mid-September, poor apical dominance	<b>F1</b>
R1T12-13		
R1T14	<i>C. dentata</i> x <i>C. crenata</i> cross #11-91, RH(11) R2T7 x WL R34T6 (Plantation), male sterile, form poor, resistance good, early nuts, seedlings have good roots, good apical dominance (peroxidase AB)	<b>F1</b>
R1T15		
R1T16	<i>C. dentata</i> x <i>C. crenata</i> , HH R1T6 x WL R34T6	<b>F1</b>
R1T17-18		
R1T19	<i>C. ozarkensis</i> x <i>C. crenata</i> , NH R2T2 x WL R34T6, 2011 'Jackie'	<b>F1</b>
R2T1		
R2T2	<i>C. ozarkensis</i> x <i>C. ozarkensis</i> cross #8-02, CC RetaT4 x CC RgammaT3 (both Arkansas)	
R2T3	<i>C. dentata</i> x <i>C. henryi</i> cross #9-09 RH(5) R2T5 x WL R32T1	<b>F1</b>
R2T4		
R2T5	<i>C. ozarkensis</i> x ( <i>C. henryi</i> x <i>C. ozarkensis</i> ) cross #6-06, RgammaT4 x SpL R5T37, male fertile, one nut per bur	<b>BC1</b>
R2T6	<i>C. ozarkensis</i> Arkansas 1 from Steve Bost 2013, Nat. d-w Scott County, AR, Ouachita National Forest, o.p.	
R2T7	<i>C. ozarkensis</i> x <i>C. crenata</i> , HH R2T1 x WL R34T6, 2011	<b>F1</b>
R2T8		
R2T9	<i>C. ozarkensis</i> Arkansas 2 from Steve Bost 2013, Nat. d-w Scott County, AR, Ouachita National Forest, o.p.	
R2T10-11		
R2T12	<i>C. ozarkensis</i> Arkansas 2 from Steve Bost 2013, Nat. d-w Scott County, AR, Ouachita National Forest, o.p.	
R2T13		
R2T14	<i>C. dentata</i> x <i>C. henryi</i> cross #9-09 RH(5) R2T5 x WL R32T1	<b>F1</b>
R2T15-16		

R2T17 'Eaton' x *C. ozarkensis* (OK), Kenwood orchard x HH R2T1, 2013  
**'Dr. Sandy'**  
R2T18-19 'Eaton' x *C. ozarkensis* (OK), Kenwood orchard x HH R2T1, 2013  
R3T1-6 'Colossal' x *C. ozarkensis* (AR), commercial orchard x HH R2T2, 2013  
R3T7  
WATER LINE  
R3T8-9 'Colossal' x *C. ozarkensis* (AR), commercial orchard x HH R2T2, 2013  
R3T10  
R3T11-12 'Colossal' x *C. ozarkensis* (AR), commercial orchard x HH R2T2, 2013  
R3T14  
R3T15-16 'Colossal' x *C. ozarkensis* (AR), commercial orchard x HH R2T2, 2013  
R3T17 'Colossal' x 'Lockwood', 2014  
R3T18  
R3T19 'Colossal' x *C. ozarkensis* (AR), commercial orchard x HH R2T2, 2013

**8. TURKISH CHESTNUT TREES** directly south of the New Hybrids  
**Rows run from South to North with the first row on the East side of plot**

R1T1 is at the SE corner, at the road  
R1T1 #24771, Eastern Turkey, Artvin Province, Collection 1, 2007, perox. AB  
R1T2 #24772, Eastern Turkey, Artvin Province, Collection 1, 2007, perox. AB  
R1T3 Eastern Turkey, Artvin Province, Collection 1, 2007, perox. AB  
R1T4  
R1T5  
R1T6 #24770, Eastern Turkey, Artvin Province, Collection 1, 2007, perox. BB  
R1T7  
R1T8 Eastern Turkey, Artvin Province, Collection 2, 2007, perox. AB  
R1T9  
R1T10 Eastern Turkey, Artvin Province, Collection 2, 2007, perox. AB  
R1T11  
R1T12 #24776, Eastern Turkey, Artvin Province, Collection 2, 2007, perox. AB  
R1T13  
R2T1  
R2T2  
R2T3  
R2T4 R2T5  
R2T6 Eastern Turkey, Artvin Province, Collection 4, 2007, perox. BB  
R2T7  
R2T8  
R2T9 #24781, Eastern Turkey, Artvin Province, Collection 4, 2007, perox. BB  
R2T10 Eastern Turkey, Artvin Province, Collection 4, 2007, perox. AB  
R2T11 #24784, Eastern Turkey, Artvin Province, Collection 4, 2007, perox. AB  
R2T12 R2T13 Eastern Turkey, Artvin Province, Collection 4, 2007, perox AB  
R3T1

R3T2  
 R3T3  
 R3T4  
 R3T5  
 R3T6  
 R3T7  
 R3T8  
 R3T9  
 R3T10  
 R3T11

R3T12 *C. ozarkensis* x *C. henryi*, NH R2T2 x WL R32T1, 2011 **F1**  
 R3T13 *C. ozarkensis* x *C. henryi*, NH R2T2 x WL R32T1, 2011 **F1**

**9. HUMPHREY HILL (East of the Bird and Butterfly garden)**

West end \_\_\_\_\_ along the north end, small trees \_\_\_\_\_ East end

*C. henryi* GA FL pum. MD pum. MD pum FL pum. FL pum. MD pum. MD pum.  
*C. pumila* from North Florida, planted July 2011,  
*C. pumila* from Maryland planted 2014  
*C. henryi* from Callaway Gardens, GA, planted 2011 (See Beyond the Rock)

**Rows run from North to South, with the first row on the East side of the plot**

R1T1 is at the NE corner

R1T1 *C. dentata* x (*C. ozarkensis* x *C. seguinii*) "Windsor Nice #1"  
 moved here from Windsor in 2006 one nut/bur!  
 cross #19-93, RH(3) R4T2 x WL R29T14 (#23-60)  
 R1T2 *C. sativa*  
 from Bursa, Turkey; wild population #010, seed 1990, planted 1991  
 (peroxidase AA)  
 R1T3 *C. ozarkensis* x *C. ozarkensis*  
 cross #8-02, CC RetaT4 X CC RgammaT3 (both Arkansas)  
 R1T4-5 *C. sativa*  
 from Bursa, Turkey; wild population #018, seed 1990, planted 1991  
 (peroxidase AA, AA)  
 R1T6 *C. dentata*  
 Roxbury #2 op: open-pollinated seedling from tree #2 in a group of  
 American chestnut sprouts on Painter Hill Rd. in Roxbury, CT seed 1988,  
 planted 1989, no leaf hairs (peroxidase AA)  
 R1T7-8 *C. crenata*  
 open pollinated '**Japanese Giant**' from Rochester, NY, seed 1990,  
 planted 1991 (peroxidase BB)  
 R2T1 *C. ozarkensis* Ouachita National Forest, OK, planted 2004  
 R2T2 *C. henryi* o.p. WL R32T1 o.p. 2009 (has 3 nuts per bur, male fertile)  
 R2T3-4 *C. sativa*  
 from Bursa, Turkey, wild population #018, seed 1990, planted 1991  
 (peroxidase AA, & AA)

- R2T5 *C. sativa*  
European (Black Forest, Germany), seed 1984, planted here 1988  
(peroxidase AA)
- R2T6 *C. dentata*  
seed 1984 from E. Wisniewski, Norwich, CT, planted 1988 no leaf hairs  
(peroxidase AA)
- R2T7 *C. dentata*  
Rox 2 op, see R1T6, no leaf hairs (peroxidase AA)
- R2T8 *C. mollissima*  
Chinese, cultivar '**Orrin**', planted 1963
- R3T1 *C. mollissima*  
Chinese, cultivar '**Kuhling**' PI #108552, "K'uei Lee"  
from Louis Gerard Nursery in Illinois, planted 1961
- R3T2 *C. sativa*  
from the Cavcas Biosphere Reserve, seed 1993, planted 1994  
collected by Fred Paillet (peroxidase AA)
- R3T3 *C. seguini* cross, *clearly hybrid*, HH R4T2 x SL R8T4, 2011
- R3T4 *C. sativa* hybrid  
looks like a European X Japanese hybrid, seed from E. W. Morse,  
Grandview, Washington, 1944 as "various unidentified" nuts, moved  
here 1952
- R3T5 *C. mollissima*  
"wild Chinese" from Dr. Liu Liu, Nanjing, seed 1992, planted 1994 [perox AB]
- R3T6 *C. dentata*  
American, seed 1985 of Watertown III X Watertown I, trees in upstate  
New York thought to have some blight resistance, seedling from W.  
Mac Kentley, St. Lawrence Nurseries, Potsdam, NY, planted 1989, no leaf  
hairs (peroxidase AA)
- R3T7 *C. mollissima*  
Chinese, cultivar '**Abundance**' from Louis Gerard Nursery in Illinois,  
planted 1963
- R3T8 *C. dentata*  
seedling of Watertown III x Watertown I, see notes R3T6, planted 1989  
(peroxidase AA)
- R4T1 *C. pumila*  
from Empire Chestnut Co., 2000 (peroxidase AA)
- R4T2 *C. seguinii* x *C. seguinii* "ever-flowering"  
cross #4-98 of SL R8T4 x SL R2T16, planted 1999, perox. A+BB
- R4T3 '**Scientists' Cliffs**' x *C. dentata*
- R4T4 '**Scientists' Cliffs**' x Roxbury #5, planted 1990, no leaf hairs
- R4T4 *C. mollissima* x *C. mollissima*  
cross #15-90, '**Mahogany**' SL R1T15 x '**Tiger Paw**' SL R9T2,  
planted 1991, very late blooming, (peroxidase AA+),



**11. HYBRID CHESTNUT TREES** (South of the Dense Michigan tree Planting)

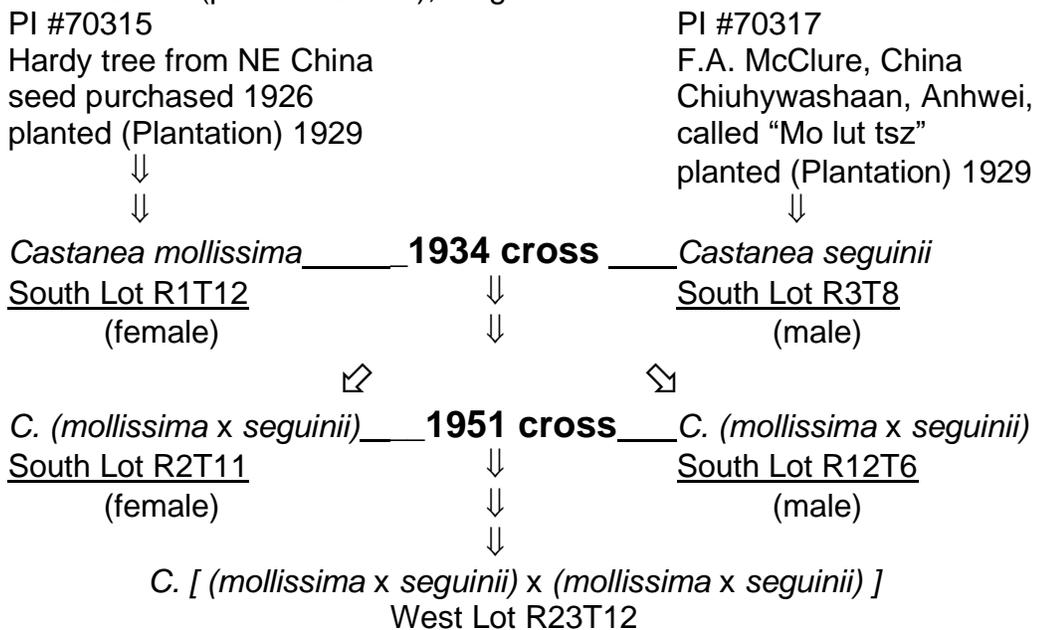
**R3T1 is on the North-East corner, rows North to South?**

- R3 T1, 2 **'Hope', and 'Madison'**, same origin as **'Little Giant'** (below)
- T3 "*C. dentata*" from Schlarbaum, #90027, from State Nursery 2002 (mycorrhizae)
- T4 #24785, Eastern Turkey, Artvin Province, Collection 5, 2007
- T5 "*C. dentata*" from Schlarbaum, #90027, from CT State Nursery 2002 (mycorrhizae)
- T6 Eastern Turkey, Artvin Province, Collection 5, 2007
- T7 "*C. dentata*" from Hibben (Lasden Arboretum, CT) via Schlarbaum, #90025, from CT State Nursery 2002 (mycorrhizae)
- T8 *C. crenata* Bee & Thistle o.p., CT State Nursery 2002
- T40-42 large DW trees

R4 T3 **'King Arthur'** (peroxidase BB) same origin as **'Little Giant'** (below)

R5

R5 T12 **'Little Giant'** (peroxidase BB), origin as follows:



- 1971** R.A. Jaynes collected open pollinated seed from West Lot R23T12, and planted 76 seedlings at Lockwood Farm (on Humphrey Hill)
- 1973** one of the 1971 trees had a heavy crop of nuts (open pollinated), Jaynes planted 12 seedlings from these in Row 5
- 1977** R5T12 was a very small tree with large nuts, and prolific production in 1976, 1977, and 1978, later named **'Little Giant'**

## **12. Species and hybrids**

Rows 6, 7, 8, and 9 were planted in the spring of 2004 and 2005. Long numbers are Ozark chinquapins from the Ozark Plateau in Oklahoma, raised in the Georgia nursery, and sent here (dormant) by Scott Schlarbaum in 2004.

**Rows run from North to South, with the first row on the East side of the plot**

<u>Row 6 (EAST)</u>	...	...
<u>ozarkensis</u>	...	12031
13281 1 perox AA	#7.5-03	...
13287 2 AA	#7.5-03	...
13272 3 AA	#7.5-03	
...	12848 18 AA	
...	12832 19 AA	
...	13032 20 AA	
...	...	
...	12022 21 AA	
...	...	
12071 4 AA		
12054 5 AA	12819 22 AA	
12055	...	
12076 6 AA	..	
...	13377 23	
13335 7 AA	...	
12053 8 AA	13260 24 AA	
12072	13255 25 AA	
13346 9 AA	13259 26 AA	
12073 10 AA	...	
13345 11 AA	...	
13347 12 AA	...	
13340	...	
...	12033 27 AA	
...	12016 28 AA	
...	12018	
12868 13 AA	12014	
12855 14 AA	12010 29 AA	
<del>12862</del>	12017	
...	...	
12847 15 AA	12004	
...	12030	
12861 16 AA	12013	
12853 17 AA	12019 30 AA	
... ..	...	
...	12021	
...	12006	
...	...	

<u>Row 7 next WEST row</u>	...
Cross 4, 2003	...
HH R1T1 x 'Little Giant'	...
#4-03 Wn nice*LG	12881
.	12975
.	...
#14-04 Wtn x Rox	...
#4-03	12909
#14-04 Wtn X Rox	
#4-03 Wn nice*LG	
#4-03	
#4-03	
#4-03	
#16-04 K Art x LK	
#4-03	
#18-06	
#18-06	
#18-06	
#8-06	
#7-06	
#12-06	
#9-06	
#9-06	
#10-06	
#10-06	
...	
...	
12982 ozarkensis	
12882 ozarkensis	
...	
...	
...	
...	
12967	
...	
...	
...	
...	
...	
...	
13072	
...	

<u>Row 8 next WEST</u>	#8-03
#4-03 HH R1T1 X LG	#8-03
#4-03	#8-03
#4-03	...
#4-03	...
#4-03	...
#4-03	#8-03
#4-03	#8-03
#4-03	...
...	#8-03
#4-03	#8-03
#4-03	...
#4-03	#8-03
...	...
...	and 14 #17-03 trees
...	<u>Morris (Merribrook)</u>
#6-03 BC3 (C)RH R3T20	<u>Stamford</u>
#6-03	...
#6-03	...
#7-03 BC3 (C)RH R3T14	...
#7-03	...
...	...
...	...
...	...
...	...
...	...
...	...
#7-03	...
...	...
...	...
...	...
#7-03	...
#7-03	...
...	...
#7-03	...
#7-03	...
#7-03	...
#7-03	...
#7.5-03	...
BC3(C)RHR4T14	...
#7.5-03 BC3 (C)	...
...	...
#8-03 BC3 (C)	...
...	...
#8-03	...



Row 10, next West

1. HH ozarkensis x HH  
R4T7 Watertown  
American (2008 seed)
3. HH ozarkensis x HH  
R4T7 Watertown  
American (2008 seed)
4. HH ozarkensis x HH  
R4T7 Watertown  
American (2008 seed)
5. HH ozarkensis x HH  
R4T7 Watertown  
American (2008 seed)
- 6.
- 7.

Bee and Thistle o.p.  
*C. crenata* trees in rest of  
row

Row 11, next West

HH *ozarkensis* x SpL  
R7T61            **BC1**  
oz x (*crenata*\**ozarkensis*)  
cross #6-08 (15 alive)  
[WL R7T7 x Ark.  
RgammaT3]

Row 12, next West

1-6 HH R1T6 x HH R4T7  
Rox x Watertown  
7-9 KA \*Lock x HH  
R4T7, #16-04 x  
Watertown  
10-36 #7-08 HH oz x  
SpL R8T62        **BC1**  
oz x oz\*J Δ  
(24 alive)

### 13. WEST OF THE ROCK, ROCKY HILL ORCHARD

Seed was from a wood-lot on Rt. 3 in Rocky Hill, CT in 1985 (open pollinated) from numbered female trees, seed planted at Smith College in a seed bed. Trees were transplanted to Lockwood Farm in the spring of 1988, and replacements for dead trees moved in the spring of 1989.

**Rows run from South to North, with the first row at the East side of the plot**

R1T1 (at the SE corner) RH #2 op, peroxidase AA  
R1T2-3 RH #3 op, both peroxidase AA  
R1T4-7 RH #5 op, all peroxidase AA  
R1T8 RH #11 op, peroxidase AA  
R1T9-10 RH #14 op, both peroxidase AA  
R1T11 RH #26 op, peroxidase AA  
R2T1 RH #2 op, peroxidase AA  
R2T2 RH #3 op, peroxidase AA  
R2T3-6 RH #5 op, all peroxidase AA  
R2T7 RH #11 op, peroxidase AA  
R2T8 RH #5 op, peroxidase AA  
R2T9 RH #14 op, peroxidase AA  
R2T10-11 RH #26 op, both peroxidase AA  
R3T1-3 RH #3 op, all peroxidase AA  
R3T4 RH #5 op, peroxidase AA  
R3T5-6 RH #5 op, both peroxidase AA  
R3T7 RH #3 op, peroxidase AA  
R3T8 RH #14 op, peroxidase AA  
R3T9 RH #5 op, peroxidase AA  
R3T10 RH #3 op, peroxidase AA  
R3T11 RH #26 op, peroxidase AA  
R4T1-2 RH #3 op, both peroxidase AA  
R4T3-6 RH #5 op, all peroxidase AA  
R4T7 RH #11 op, peroxidase AA  
R4T8 RH #14 op, peroxidase AA  
R4T9 RH #3 op, peroxidase AA  
R4T10 RH #11 op, peroxidase AA

THE ROCKY HILL PLANTING WAS EXTENDED IN JUNE 1996

R3T13-14 [(*Castanea dentata* x *mollissima*) x *C. dentata*] x *C. dentata* **BC2**  
cross #7-95, NH R2T10 x RH(14) R3T8 [SL R10T12 x RH(5) R4T3]  
R3T216-17? [(*Castanea dentata* x *mollissima*) x *C. dentata*] x *C. dentata* **BC2**  
cross #7-95, NH R2T10 x RH(14) R3T8 [SL R10T12 x RH(5) R4T3]  
R4T12 [(*Castanea dentata* x *mollissima*) x *C. dentata*] x *C. dentata* **BC2**  
cross #7-95, NH R2T10 x RH(14) R3T8 [SL R10T12 x RH(5) R4T3]

## 14. SOUTH OF THE ROCK

Rows run from East to West with the first row at the North end of the plot

Row 1 Tree 1 is in the north-east corner

R1	T1,2 T3,4 T3-13 T14-15 Lanz, (Japanese?) o.p. T16-18 Szego (Long Island) <i>seguine*dentata</i> x <i>dentata*crenata</i>	
R2	T1-2 <i>C. dentata</i> x [ <i>C. dentata</i> x [( <i>C. crenata</i> x <i>sativa</i> ) x <i>C. dentata</i> ]] cross #9-95, RH(14) R1T10 X NH R2T3 (ex 'Hammond-86')	BC3
	T3	
	T4 [( <i>C. dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	BC2
	T5 unknown <i>Castanea</i> from Rau in Washington State	
	T6	
	T7-8 <i>C. dentata</i> x [ <i>C. dentata</i> x [( <i>C. crenata</i> x <i>sativa</i> ) x <i>C. dentata</i> ]] cross #9-95, RH(14) R1T10 x NH R2T3 (ex 'Hammond-86')	BC3
	T9	
	T10 <i>C. dentata</i> x [ <i>C. dentata</i> x [( <i>C. crenata</i> x <i>sativa</i> ) x <i>C. dentata</i> ]] cross #9-95, RH(14) R1T10 x NH R2T3 (ex 'Hammond-86')	BC3
	T11-13 unknown <i>Castanea</i> from Rau in Washington State	
	T14	
	T15-16 <i>C. dentata</i> x [ <i>C. dentata</i> x [( <i>C. crenata</i> x <i>sativa</i> ) x <i>C. dentata</i> ]] cross #9-95, RH(14) R1T10 x NH R2T3 (ex 'Hammond-86')	BC3
	T17	
	T18 <i>C. dentata</i> x [ <i>C. dentata</i> x [( <i>C. crenata</i> x <i>sativa</i> ) x <i>C. dentata</i> ]] cross #9-95, RH(14) R1T10 x NH R2T3 (ex 'Hammond-86')	BC3
R3	T1 [( <i>C. dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	BC2
	T2-4 root sprouts of seedling 'Little Giant'	
	T5	
	T6 [( <i>Castanea dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	BC2
R3	T7	
	T8 <i>C. "henryi"</i> II, (probably not pure <i>henryi</i> ) from Liu Liu, Nanjing, 1991 Botanical Garden (root sprouts only, 2000)	
	T9-12 <i>C. henryi</i> I, from Liu Liu, Nanjing Botanical Garden, 1991	
R4	T13-14 [( <i>C. dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	BC2
R5	T1-2 [( <i>C. dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	BC2
	T3 <i>Castanea dentata</i> x 'Lockwood' cross #13-94, RH(11) R1T7 x HH R4T8	
	T4 <i>Castanea dentata</i> x 'Lockwood'	

	cross #11-94, RH(5) R1T5 x HH R4T8	
T5-6	[( <i>C. dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	<b>BC2</b>
T7	STUMP	
T8-9	<i>C. dentata</i> x ' <b>Lockwood</b> ' cross #11-94, RH(5) R1T5 x HH R4T8	
T10-13	[( <i>C. dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	<b>BC2</b>
T14	<i>C. dentata</i> x ( <i>C. dentata</i> x <i>mollissima</i> ) cross #25-94, RH(5) x NH R3T5	<b>BC1</b>
T15	[( <i>C. dentata</i> x <i>mollissima</i> ) x <i>dentata</i> ] x <i>dentata</i> cross #9-99, NH R2T10 x Walbridge, OH American	<b>BC2</b>

### 15. Nut Planting South of the Rock

Rows run from South to North with the first row at the East end of the plot

R1T1 is at the South East corner

Row 1	Row 2	Row 3	Row 4	Row 5	Row 6	Row 7	Row 8	Row 9
'Sadie Hunter'	'Colossal' x henryi 2011				'Colossal' x henryi 2011		Persian Walnut 'Hansen'	
'Colossal' x henryi 2011	'Eaton' x henryi 2011	PERSIAN WALNUT 'Somers'	PERSIAN WALNUT 'Hansen'	BLACK WALNUT 'Grundy'		PERSIAN WALNUT 'Hansen'	PERSIAN WALNUT 'Broad-view'	
'Colossal' x henryi 2011	'Eaton' x henryi 2011	'Colossal' x henryi 2011	'Eaton' x henryi 2011	BLACK WALNUT 'Vander-sloot'	'Eaton' x henryi 2011	'Eaton' x henryi 2011	'Eaton' x henryi 2011	
				GA 30 C. henryi (GA) 2011	GA 30 C. henryi (GA) 2011	GA 30 C. henryi (GA) 2011	'Eaton' x henryi 2011	
PERSIAN WALNUT 'Broad-view'	BLACK WALNUT 'Grundy'?		GA 30 C. henryi (GA) 2011	C. henryi? Schm. 2013	C. henryi? Schm. 2013	CHESTNUT 'Hartman' 17-8	C. henryi? Schm. 2013	HEART-NUT 'Rhodes'
X	CHESTNUT 'Orrin'	CHESTNUT 'Eaton'	CHESTNUT 'Lenoir'	PERSIAN WALNUT 'Broad-view'	C. henryi? Schm. 2013	C. henryi? Schm. 2013		

**16. Grafted Butternuts** from Tom Hall, TN, planted May 2012, April 2013, updated 5 June 2013

South East corner

	PA 25-9	PA 64-4		PA 18-4	PA 18-4
	VT Richmond A-19			PA 18-4	PA 64-4
	IA 12004	BUT BS #1	PA 61-1	PA 64-4	PA 25-4
VT Williston #4		PA 61-1			PA 61-1
BUT RS #1		PA 5-8	VT Williston #2		
VT Williston #1	VT Fox Run #1	VT St. Albans #3	PA 10-2		
	PA 64-1	VT St. Albans #3			MOCA 17
PA 64-6		PA 59-6		PA MOCA 17	PA 10-9
VT St. Albans #2	IA 021001	PA 17-1	PA 10-2	PA 10-8	VT Williston#2
PA 17-1		BUT BS #1	PA 10-9	PA 10-2	

North-West corner

**17. Elm trees**

From Gene Smalley, planted spring 1992

South-East end

<i>U. parvifolia</i>	2213	2213	2245-9	2245-9	2245-9	2245-9
all	"	2244-1	2245-3	"	"	2250-1
this	"	"	"	"	2245-10	"
row	"	"	"	"	"	"
	"	"	"	"	"	"
	"	"	"	"	"	"
	"	"	"	"	"	"
	"	"	"	2245-8	"	"
	2276-1	"	"	"	"	"
	"	2233-1	"	"	2247-3	"
	"	"	2245-2	"	"	
	"	"	"	"	"	
	"	"	"	"	"	
	"	"	"	"	"	
	"	"	"	"	"	2245-5

## **18 Fabaceae Genetics Project**

2007

- Crossed 'Mahogany' X 'Nanking' pollen
  - 304 nuts planted in the greenhouse, CAES
  - seedlings tagged/numbered and individual leaves sent to T. Kubisiak in Saucier, MS for DNA
  - seedlings planted at Lockwood Farm (CAES), Hamden, CT in 2008
  - with no record of their numbers

2008

- Crossed 'Mahogany' X 'Nanking' pollen (as above)
  - 70 nuts planted in the greenhouse, CAES
  - seedlings tagged/numbered and individual leaves sent to T. Kubisiak in Saucier, MS for DNA
  - seedlings planted at Lockwood Farm (CAES), Hamden, CT in 2010
    - trees 10 ft apart in rows 10 ft apart

**Rows run from South to North, with the first row on the East side of the plot  
Planted 2008 (without Kubisiak numbers) and 2010 (with Kubisiak numbers)**

S-E

South West

THE FIRST 7 ROWS DO NOT HAVE DNA NUMBERS

row 8	row 9	row 10	row 11
24829	24823	24815	24836
24793	24830	24822	24837
24794	24831	24817	24806
24803	24832	24820	24805
24842	24834	24821	24856
24828	24835	24816	24852
24802	24819	24810	24851
24843	24814	24804	24858
24844	24813	24809	24857
24795	24818	24849	
24801	24824	24808	
24827	24847	24848	
t	24846	24850	
t	24825	24807	
t	24799	24841	
t	24800	24840	
t	24797	24838	
t	24796	24839	
t	24826	24854	
t	24845		