

National Elm Trial in Kansas- 2014

- Established: 2007
- Located at Kansas State University John C. Pair Horticultural Center at Haysville, Kansas
- Visitors are welcome-please check in at the office
- 18 cultivars in trial
- The site is flat with mowed vegetation and Canadian-Waldeck fine sandy loam soil
- Irrigated with above ground impact sprinklers when needed
- Insects: European Elm Flea Weevil and Grasshoppers
- Best Trees: Allee, Danada Charm, New Harmony, New Horizon, Morton Accolade, and Princeton

National Elm Trial Contact

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- 1901 E. 95th Street South
- Haysville, KS 67060

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Kansas Site Map

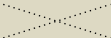
6	1	4	13	1	2	8	3	11	5
17	14	5	7	15	12	6	17	6	17
7	8	14	2	3	7	7	12	1	18
10	13	6	3	18	5	2	9	12	4
16	2	9	16	4	8	11	16	10	13
18	12	12	11	13	16	18	10	7	9
3	5	10	1	14	9	5	1	16	8
4	9	15	17	17	11	13	15	14	3
11	15	18	8	10	6	4	14	15	2
Rep 5		Rep 4		Rep 3		Rep 2		Rep 1	

20 ft

18 ft



- | | | | |
|---|--|----|---|
| 1 | <i>U. americana</i> 'Valley Forge' | 10 | <i>U. x</i> 'Morton Glossy' (Triumph™) |
| 2 | <i>U. x</i> 'Morton Stalwart' (Commendaton™) | 11 | <i>U. x</i> 'Morton' (Accolade®) |
| 3 | <i>U. x</i> 'Frontier' | 12 | <i>U. x</i> 'Morton Red Tip' (Danada Charm™) |
| 4 | <i>U. x</i> 'Homestead' | 13 | <i>U. wilsoniana</i> 'Prospector' |
| 5 | <i>U. x</i> 'Patriot' | 14 | <i>U. propinqua</i> 'JFS-Bieberich' (Emerald Sunshine®) |
| 6 | <i>U. x</i> 'Pioneer' | 15 | <i>U. americana</i> 'Jefferson' |
| 7 | <i>U. parvifolia</i> 'Emer II' (Allee®) | 16 | <i>U. americana</i> 'Princeton' |
| 8 | <i>U. x</i> 'New Horizon' | 17 | <i>U. americana</i> 'New Harmony' |
| 9 | <i>U. x</i> 'Morton Plainsman' (Vanguard™) | 18 | <i>U. americana</i> 'Lewis & Clark' (Prairie Expedition®) |

 Indicates plant died

1 - 14 were planted as bare root liners donated by J. Frank Schmidt & Son Nursery (Boring, OR)

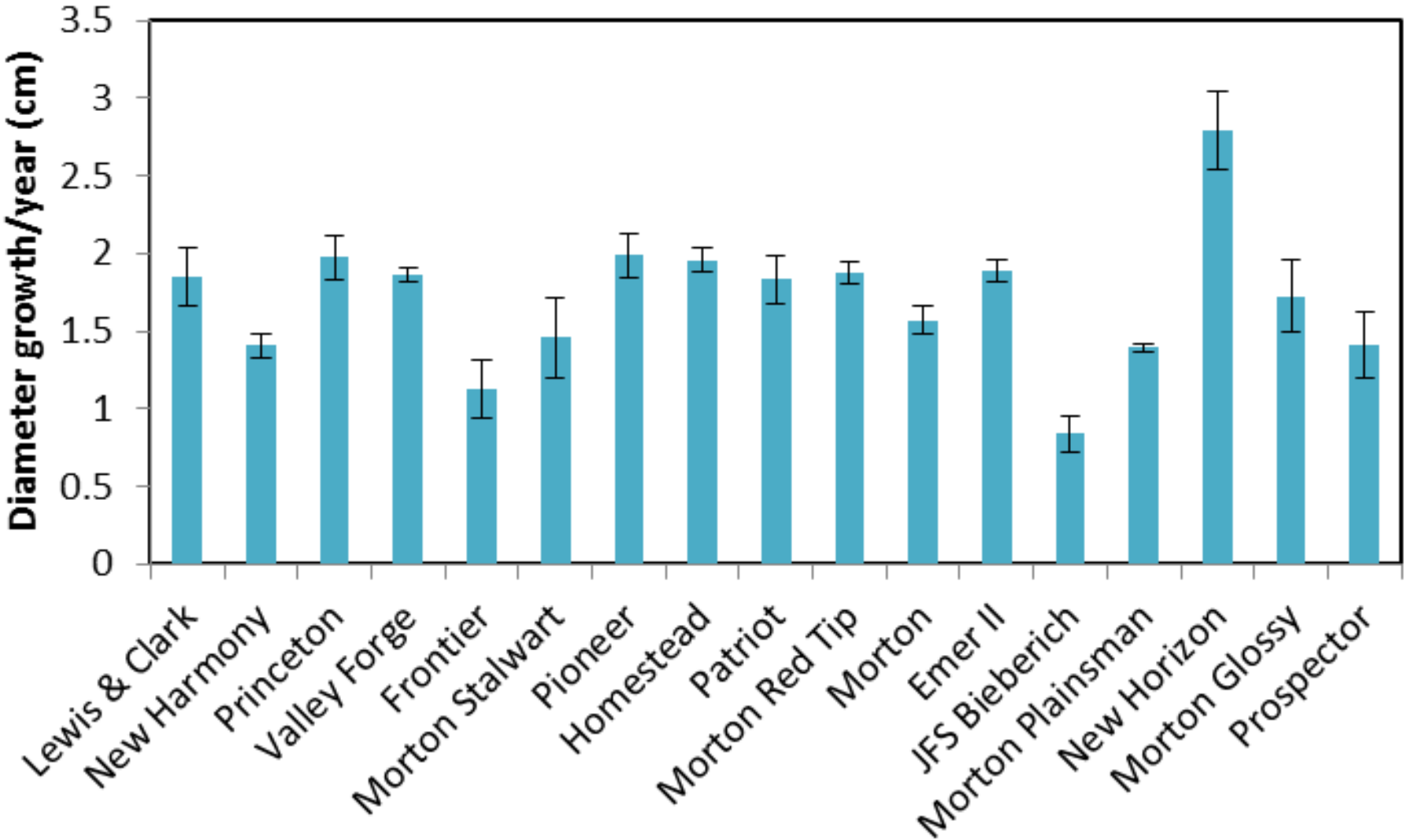
15 was obtained from Phytotecktor as small dormant rooted cuttings and later determined to be the same as 16

16 & 17 were donated by Sunshine Nursery and Arboretum (Clinton, OK) in 3-gal rootmaker containers

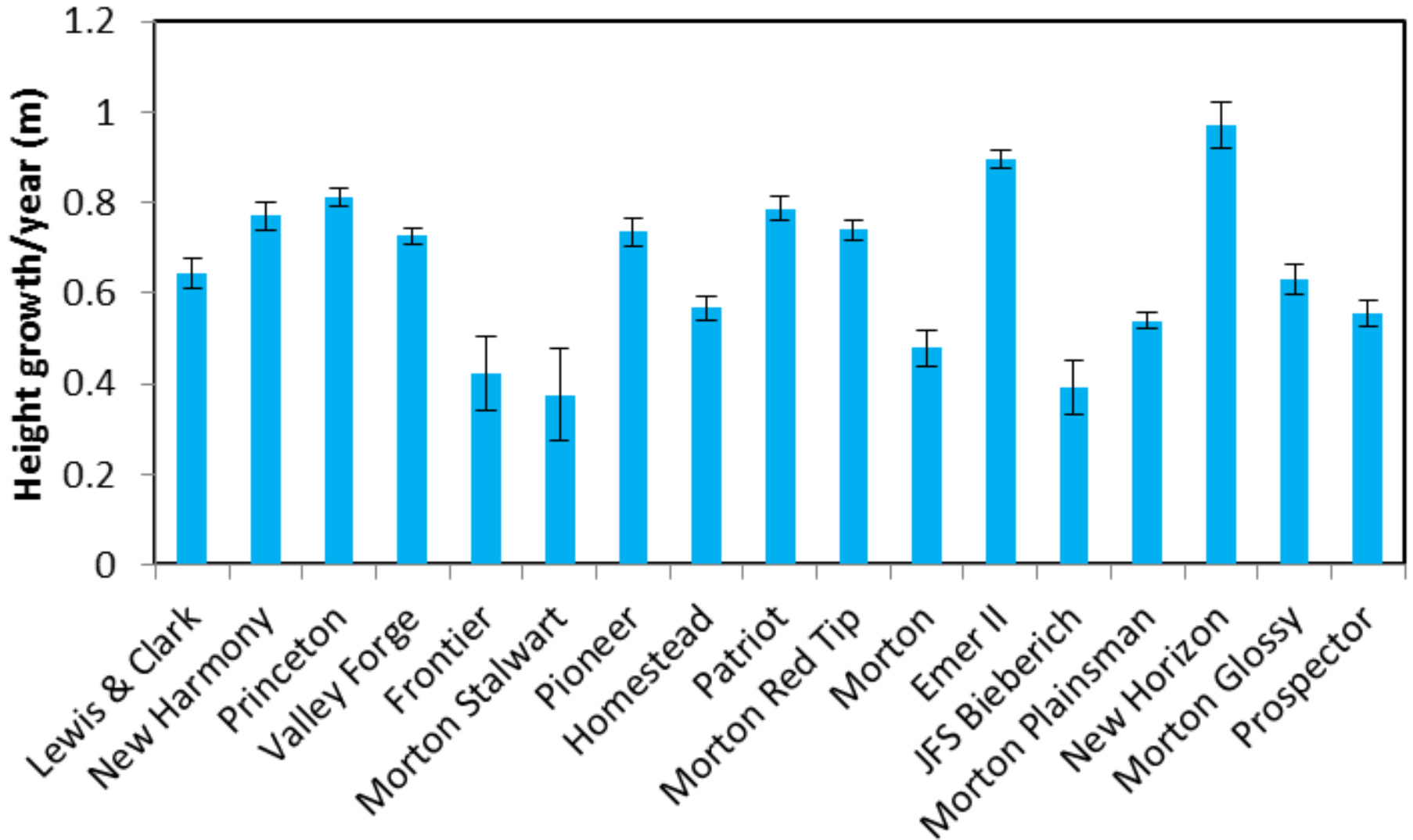
18 was obtained by Bill Jacobi



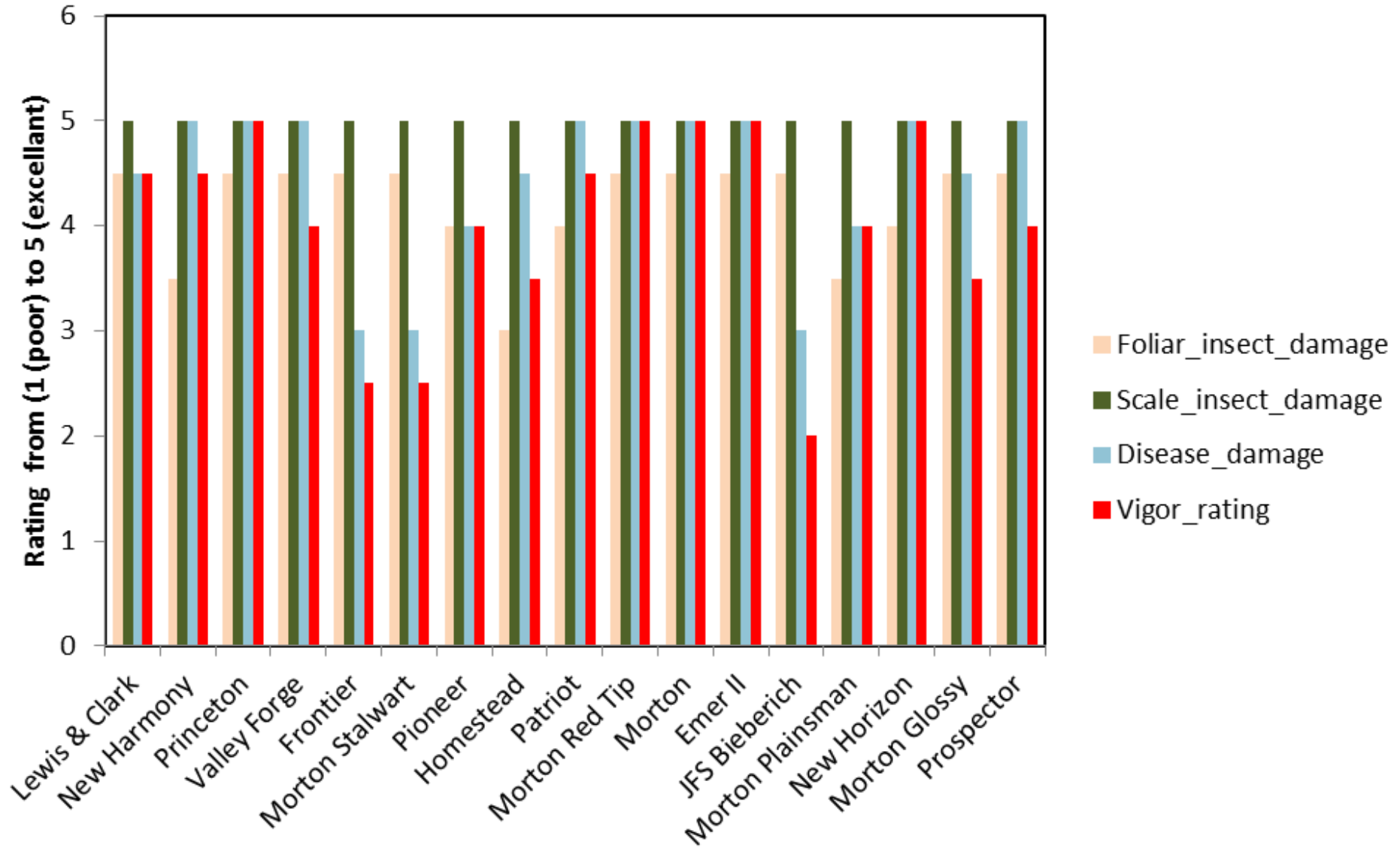
Kansas Diameter Growth/Year



Kansas Height Growth/Year



Insect Disease and overall Performance



'Valley Forge' (*Ulmus americana*)



Date: 8/2014

Survival: 100%

Diameter at 1.4m (cm): 14.4

Height (m): 7.8

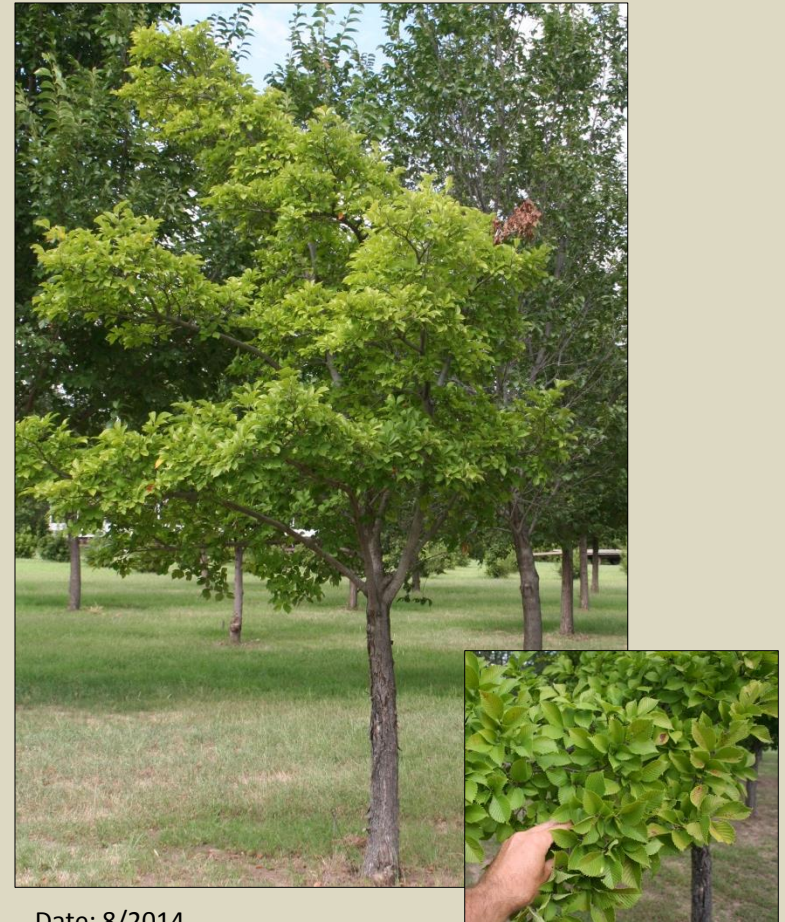
Crown shape: Vase

Insects: Lacebug damage to foliage (minimal)

European elm flea weevil damage (minimal)

Comments: Strong grower, broad spreading

'Morton Stalwart' Commendation™ (*U. carpinifolia* X *U. pumila* X *U. wilsoniana*)



Date: 8/2014

Survival: 60%

Diameter at 1.4m (cm): 7.4

Height (m): 3.4

Crown shape: Oval

Insects: None

Comments: Some wet wood, trunk cankers, chlorotic foliage

'Frontier' (*Ulmus carpinifolia* X *U. parvifolia*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 9.2
Height (m): 5.7
Crown shape: Vase, Oval
Insects: None
Comments: Slow growing, thin, wet wood and cankers, chlorotic foliage

'Homestead' (*U. glabra* X *U. carpinifolia* X *U. pumila*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 15.1
Height (m): 7.0
Crown shape: Round
Insects: European elm flea weevil damage (Heavily)
Comments: Canopy lacking density, branches lack rigidity

'Patriot' (*U. glabra* X *U. carpinifolia* X *U. pumila*) X
U. wilsoniana



Date: 8/2014

Survival: 100%

Diameter at 1.4m (cm): 14.6

Height (m): 8.7

Crown shape: Vase, Pyramid and Oval

Insects: European elm flea weevil (Minimal)

Comments: Strong grower with irregular habit

'Pioneer' (*U. glabra* X *U. carpinifolia*)



Date: 8/2014

Survival: 100%

Diameter at 1.4m (cm): 15.4

Height (m): 7.9

Crown shape: Round, Pyramid

Insects: European elm flea weevil

Comments: Defoliation, branches lack rigidity, main stem is bent/leaning due to wind, visible trunk canker

'Emer II' Allee® (*U. parvifolia*)



Date: 8/2014
Survival: 80%
Diameter at 1.4m (cm): 11.4
Height (m): 6.4
Crown shape: Round
Insects: European elm flea weevil (Minimal)
Comments: Strong grower with dense canopy and attractive bark

'New Horizon' (*U. pumila* X *U. japonica*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 21.1
Height (m): 9.2
Crown shape: Round
Insects: European elm flea weevil (Heavy)
Comments: Strong grower with uniform/upright rounded habit, some leaf gall

'Morton Plainsman' Vanguard™ (*U. pumila* X *U. japonica*)



Date: 8/2014
Survival: 80%
Diameter at 1.4m (cm): 9.5
Height (m): 4.3
Crown shape: Vase, Pyramid, Oval
Insects: European elm flea weevil (Heavy)
Comments: Medium growth, unattractive, wet wood

'Morton Glossy' Triumph™ (*U. pumila* X *U. japonica* X *U. wilsoniana*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 13.8
Height (m): 7.2
Crown shape: Pyramid, Vase
Insects: European elm flea weevil (Minimal)
Comments: Tall with irregular growth, not attractive

'Morton' Accolade® (*U. japonica* X *U. wilsoniana*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 12.8
Height (m): 6.0
Crown shape: Vase
Insects: European elm flea weevil (Minimal)
Comments: Attractive, dark green foliage

'Morton Red Tip' Danada Charm™ (*U. japonica* X *U. wilsoniana*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 15.9
Height (m): 8.2
Crown shape: Vase and Pyramid
Insects: European elm flea weevil (Minimal)
Comments: Strong grower, irregular habit, dark green and attractive foliage

'Prospector' (*U. wilsoniana*)



Date: 8/2014

Survival: 100%

Diameter at 1.4m (cm): 12.1

Height (m): 6.8

Crown shape: Round

Insects: European elm flea weevil (Minimal)

Comments: Dense canopy with large leaves

'Emerald Sunshine' (*U. propinqua*)



Date: 8/2014

Survival: 80%

Diameter at 1.4m (cm): 6.0

Height (m): 4.5

Crown shape: Vase

Insects: None

Comments: Weak, stunted, thin canopy with only a few chlorotic cupped leaves

'Jefferson' (*U. americana*)

These Jefferson reps were found to be the same cultivar as Princeton



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 15.4
Height (m): 8.3
Crown shape: Vase
Insects: See 'Princeton'

'Princeton' (*U. americana*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 15.1
Height (m): 8.3
Crown shape: Vase
Insects: European elm flea weevil (Minimal)
Lacebug damage to foliage (Minimal)
Comments: Impressive grower, upright habit, attractive tree

'New Harmony' (*U. americana*)



Date: 8/2014
Survival: 100%
Diameter at 1.4m (cm): 11.1
Height (m): 7.2
Crown shape: Vase and Round
Insects: European elm flea weevil damage (Minimal)
Lacebug damage to foliage (Significant)
Comments: Narrow, upright habit with strong, central axis

'Lewis and Clark' Prairie Expedition®
(*U. americana*)



Date: 8/2014
Survival: 80%
Diameter at 1.4m (cm): 11.4
Height (m): 5.2
Crown shape: Broad oval
Insects: European elm flea weevil damage (Minimal)
Lacebug damage to foliage (Minimal)
Comments: Strong grower with broad spreading habit, some wet wood



Yellowing from lacebug feeding



Wetwood at old pruning scar



Elm flea weevil feeding damage



Elm flea weevil feeding damage