

## Portland's Heritage Elms

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### KEY

#### LEAVES

- If <3.5"      1) English (*Ulmus minor* var, *vulgaris*)  
                         2) Smoothleaf (*Ulmus minor*)
- If >5"      1) Dutch (*Ulmus X hollandica* 'Hollandica')  
                         2) Wych (*Ulmus glabra*)  
                         3) American (*Ulmus americana*)
- If base even or nearly so      1) American (*Ulmus americana*)
- If underside covered with red glands      1) Dutch (*Ulmus X hollandica* 'Hollandica')
- If underside softly pubescent      1) European White (*Ulmus laevis*)
- If underside hairy      1) Wych (*Ulmus glabra*)  
   2) English (*Ulmus minor* var. *vulgaris*)
- If top is (relatively) smooth      1) Dutch (*Ulmus X hollandica*)  
   2) Dutch (*Ulmus X hollandica* 'Hollandica')

#### TWIGS

- If corky      1) English (*Ulmus minor* var. *vulgaris*)  
                         2) Dutch (*Ulmus X hollandica*)  
                         3) Dutch (*Ulmus X hollandica* 'Hollandica')  
                         4) Smoothleaf (*Ulmus minor*)
- If persistently hairy (old & new growth)      1) English (*Ulmus minor* var. *vulgaris*)  
   2) Wych (*Ulmus glabra*)  
   3) European White (*Ulmus laevis*)
- If trunk &/or root sprouts      1) English (*Ulmus minor* var. *vulgaris*)  
   2) Dutch (*Ulmus X hollandica*)  
   3) Dutch (*Ulmus X hollandica* 'Hollandica')  
   4) Smoothleaf (*Ulmus minor*)

#### SEEDS

- If small & edges ciliated      1) American (*Ulmus americana*)  
   2) European white (*Ulmus laevis*)
- If > 3/4"      1) Dutch (*Ulmus X hollandica*)  
   2) Dutch (*Ulmus X hollandica* 'Hollandica')  
   3) Wych (*Ulmus glabra*)

#### BARK

- If ropery      1) American (*Ulmus americana*)
- If scaly      1) European White (*Ulmus laevis*)
- If shallow fissures & flaky      1) Dutch (*Ulmus X hollandica* 'Hollandica')

ENGLISH ELM  
*U. minor* var. *vul-*  
*garis*



DUTCH ELM  
*U. X hollandica*  
#119



WYCH ELM  
*U. glabra*  
#210



AMERICAN ELM  
*U. americana*  
#102



DUTCH ELM  
*U. X hollandica* 'Hollandica'  
#229



ENGLISH ELM  
*U. minor* var. *vulgaris*  
#26



AMERICAN ELM  
*U. americana*  
#69



AMERICAN ELM  
*U. americana*  
#12



SMOOTHLEAF ELM  
*U. minor*  
#120



EUROPEAN WHITE ELM  
*U. laevis*  
#240



CORKY-WINGED TWIG

AMERICAN ELM (*Ulmus americana*)  
HT #12 7821 SE 30th

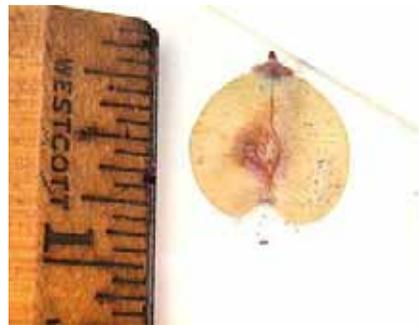


AMERICAN ELM (*Ulmus americana*)

- Over 120' tall, vase-shaped, weeping branches
- ✓ But can be variable in crown shape
- ✓ Bark fissures have "ropey" appearance
- ✓ Leaves 7-15 cm long (2.75-6"), widest in the middle
- ✓ Leaf base not especially lopsided
- ✓ Leaf veins close, straight, 13-18 pairs
- ✓ Leaves & twigs hairy or hairless
- ✓ Fruit small, ciliate, incised to the seed



ENGLISH ELM (*Ulmus minor* var. *vulgaris*)  
HT #26 4124 N Mississippi



ENGLISH ELM (*Ulmus minor* var. *vulgaris*)

- ✓• Upright to 100'
- ✓• Basal branches thick & stiff
- ✓• Bark fissured
- ✓• Root sprouts & trunk suckers numerous
- ✓• Young shoots often corky-winged, pubescent
- ✓• Leaves circular to ovate, 4.5-9 cm. (2-3.5") long
- ✓• Leaves more or less rough above
- ✓• Leaves evenly pubescent beneath
- ✓• Axillary pubescence beneath
- ✓• Leaf base uneven
- ✓• Fruit nearly circular, 10-17 mm. (1/2-3/4") long
- ✓• Fruit glabrous
- Fruit with small incision at apex
- ✓• Seed near incision
- ✓• Tree shoots are alternate

**Some North American stock**

- ✓• Leaves 3.5-5"
- Leaves elliptic
- Leaves less pubescent



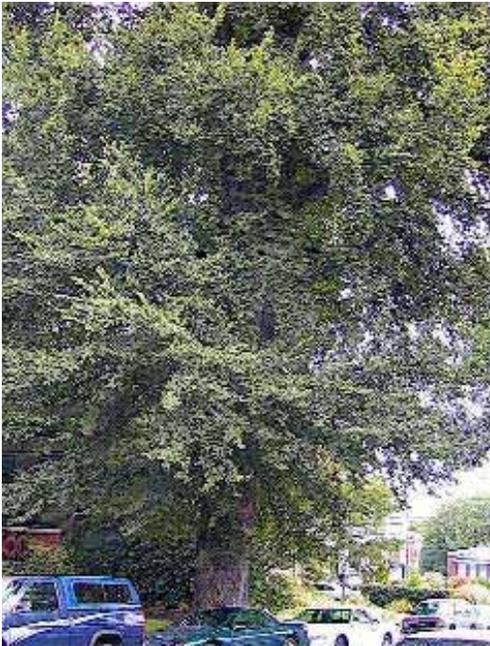
**TARTAN ELM (*Ulmus minor* 'Variegata')**  
**HT #30 2120 SE 24th**



**TARTAN ELM (*Ulmus minor*  
'Variegata')**

- Leaves creamy-white variegated, especially near the margins
- Leaves <3.5"
- Axillary pubescence underside of leaf
- Leaf smooth above
- Originated in France ca. 1772

ENGLISH ELM (*Ulmus minor* var. *vulgaris*)  
HT #36 2363 NW Flanders



ENGLISH ELM (*Ulmus minor* var. *vulgaris*)

- ✓ Upright to 100'
- ✓ Basal branches thick & stiff
- ✓ Bark fissured
- ✓ Root sprouts & trunk suckers numerous
- ✓ Young shoots often corky-winged, pubescent
- ✓ Leaves circular to ovate, 4.5-9 cm. (2-3.5") long
- ✓ Leaves more or less rough above
- ✓ Leaves evenly pubescent beneath
- ✓ Axillary pubescence beneath
- ✓ Leaf base uneven
- ✓ Fruit nearly circular, 10-17 mm. (1/2-3/4") long
- ✓ Fruit glabrous
- ✓ Fruit with small incision at apex
- ✓ Seed near incision
- ✓ Tree shoots are alternate

**Some North American stock**

- Leaves 3.5-5"
- Leaves elliptic
- Leaves less pubescent

AMERICAN ELM (*Ulmus americana*)  
HT #69 710 NE 32nd



AMERICAN ELM (*Ulmus americana*)

- ✓• Over 120' tall, vase-shaped, weeping branches
- But can be variable in crown shape
- ✓• Bark fissures have "ropey" appearance
- ✓• Leaves 7-15 cm long (2.75-6"), widest in the middle
- ✓• Leaf base not especially lopsided
- ✓• Leaf veins close, straight, 13-18 pairs
- ✓• Leaves & twigs hairy or hairless
- ✓• Fruit small, ciliate, incised to the seed



**AMERICAN ELM (*Ulmus americana*)**  
**HT #102 4534 SW 60th Pl.**

This elm was originally misidentified as an *Ulmus x hollandica* 'Vegeta'. Although it is not a typical American elm, the seeds prove it to be one.



**AMERICAN ELM (*Ulmus americana*)**

- Over 120' tall, vase-shaped, weeping branches
- √ But can be variable in crown shape
- √ Bark fissures have "ropey" appearance
- √ Leaves 7-15 cm long (2.75-6"), widest in the middle
- √ Leaf base not especially lopsided
- √ Leaf veins close, straight, 13-18 pairs
- √ Leaves & twigs hairy or hairless
- √ Fruit small, ciliate, incised to the seed

DUTCH ELM (*Ulmus X hollandica*)  
HT #119 2455 NW Johnson



DUTCH ELM (*Ulmus x hollandica*) crosses between *U. minor* and *U. glabra*

Much variance, depending on parentage

- Up to 120' in height
- √ Branches wide, can be nodding
- √ Bark deeply fissured
- √ Root sprouts
- √ Twigs can be corky-winged
- √ Young shoots glabrous or slightly pubescent
- Leaves elliptic-ovate, 8-12 cm. (3-5") long
- √ Leaf base uneven
- √ Leaf rather smooth above
- √ Axillary pubescence beneath
- √ Fruit elliptic-ovate, 2-2.5 cm. (3/4-1") long
- √ Seed touches incision

SMOOTHLEAF ELM (*Ulmus minor*)  
HT #120 6125 SW Boundary



SMOOTHLEAF ELM (*Ulmus minor*)

- Up to 100' tall
- √• Branches more or less pendulous
- √• Leaves not necessarily smooth or narrow, axillary pubescence beneath
- √• Petiole 1/4-1/2" long, usually pubescent
- √• Leaves between 2.25-3.5" (if leaves are longer, think *U. x hollandica*)
- √• Can have root suckers & corky twigs
- √ Leaf base very oblique

**DUTCH ELM (*Ulmus X hollandica* 'Hollandica')**  
**HT #172 1150 SW King**



*(U. x hollandica* 'Hollandica')

- ✓ Small red glands on both sides of leaf are possible
- ✓ Trunk short and stout
- ✓ Bark shallowly fissured, finely flaky, red-brown
- ✓ Main branches crooked or sinuous, often pendulous
- ✓ Twigs & root shoots can be corky
- ✓ Leaves relatively broad, 2.5-6"
- ✓ Leaf base oblique
- ✓ Upper side of leaf shiny & nearly hairless
- ✓ Underside of leaf bright green with axillary tufts
- ✓ Stem 1/4-3/8"
- ✓ Seed 3/4-1", seed near notch

**WYCH ELM (*Ulmus glabra*)**  
HT #210 222 SE 17th



**WYCH ELM (*Ulmus glabra*)**

- Broad crown to 150' – massive dome
- ✓ Bark eventually rough & furrowed
- ✓ Young shoots red-brown & thickly pubescent
- ✓ Rarely suckers, twigs never corky-winged
- ✓ Leaves broad ovate to elliptic, 5-16 cm. (2-7") long
- ✓ Leaves abruptly acuminate
- ✓ Leaf base uneven, can cover 3 mm. (3/4-1") of petiole
- ✓ Leaf dark green & rough above, pubescent beneath
- ✓ Fruit obovate to elliptic, 2-2.5 cm. (3/4-1") long
- ✓ Seed in center & chestnut brown, surrounded by pale green
- ✓ Shoots covered with hairs, can be opposite or alternate on one tree

**EUROPEAN WHITE ELM (*Ulmus laevis*)**  
**HT #240 3331 NE Hancock**



**EUROPEAN WHITE ELM (*Ulmus laevis*)**

- Up to 90', nodding branches
- ✓ Young shoots pubescent & twigs persistently hairy
- ✓ Leaves softly pubescent beneath, mildly rough above
- ✓ Leaves 9-10 cm. (3.5-4.25") long, broad & abruptly pointed, widest above the middle
- ✓ Leaf base very oblique
- ✓ Fruit ciliate (like Am. elm, but rounder)
- ✓ Bark scales off with age, grey-brown
- Seed abundant only every 2-3 years
- ✓ Trunk base fluted (buttressed)

