

REFERENCE: Riddell 1834:157.

HERBARIUM RECORDS: 14 Mar 1899—OSU Campus, Cols., *J. H. Schaffner*; 1 Nov 1901—OSU Campus, cult., Cols., *Hartford*.

NOTE: See Braun 1961:63 (illus. p. 60). The Chadwick Arboretum #18 (planted). Originally considered to be native, but today is widely planted throughout the county.

2. **Pinus resinosa* Aiton

Red Pine

Probably planted

Leaves 2 in a fascicle, 9 cm long or more, flexible, breaking when bent; scales without prickles.

HERBARIUM RECORDS: ca. 1982—Blendon Woods, Shadblow picnic area, probably planted, *Owens*; Jul 1987—Highbanks Metro Park, *Kosko*; Jul 1988—Highbanks Metro Park (Delaware Co.), *Kosko* (OS, OWU).

NOTE: See Braun 1961:63.

3. **Pinus nigra* Arnold

Austrian Pine

Cultivated

Syn.: *P. austriaca* (Höss) Asch. & Graebn.

HERBARIUM RECORDS: 15 Mar 1899—OSU campus, *J. H. Schaffner*; 25 May 1906—Cols., *Blakeslee*.

NOTE: See Braun 1961:63.

4. **Pinus sylvestris* L.

Scotch Pine

Cultivated (native of Europe)

Leaves 2 in a fascicle, 2-7 cm long, grayish- or bluish-green.

REFERENCE: Braun 1961:63.

HERBARIUM RECORDS: 6 Jul 1931—Greenlawn Cemetery, Cols., *Hicks*; 22 Jul 1987—Highbanks Metro Park (Delaware Co.), *B. Reed*; Jul 1988—Highbanks Metro Park (Delaware Co.), *Kosko* 76 (OS, OWU).

TAXODIACEAE, Redwood or Bald Cypress Family

The Dawn Redwood, *Metasequoia glytostroboides* Hu & Cheng, was planted on the OSU Campus (OSU Campus Trees #6) and a large planted tree may be found in Canal Winchester.

1. TAXODIUM Rich. Bald Cypress

Trees, deciduous; branches dimorphic, some persistent with axillary buds, others deciduous in autumn with leaves; male cones in drooping terminal panicles; female cones on branches of previous year, long-persistent, subglobose, the scales irregularly 4-angled above, each with 2 ovules.

1. **Taxodium distichum* (L.) Rich.

Bald Cypress

Cultivated

REFERENCES: OSU Campus Trees #53; Chadwick Arboretum #23.

HERBARIUM RECORDS: Sep 1901—OSU campus, Cols., *J. H. Schaffner*; Oct 1902—Cols., *J. H. Schaffner*; 1982—Sharon Woods, *Owens*.

NOTE: See Braun 1961:67.

CUPRESSACEAE, Cypress Family

Leaves opposite or whorled, scalelike or needlelike; leaf-buds not scaly; sporophylls few, cones small, the ovulate becoming coriaceous or berrylike.

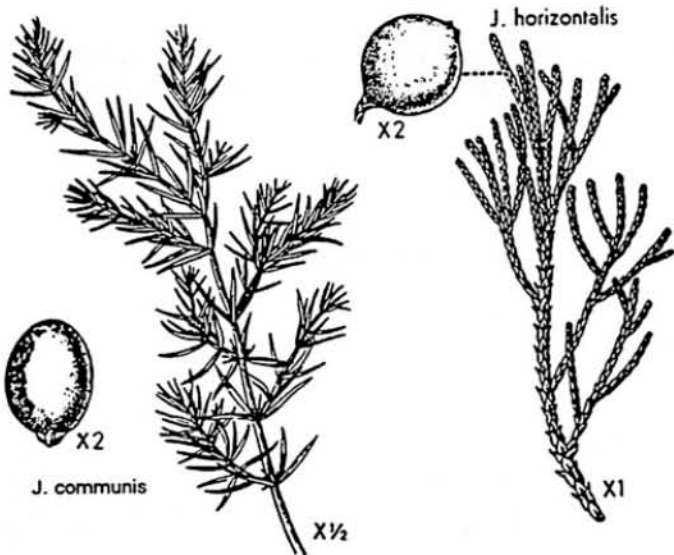
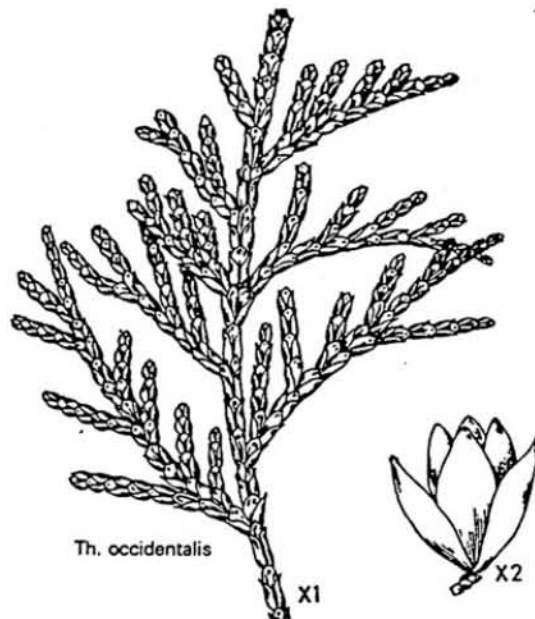
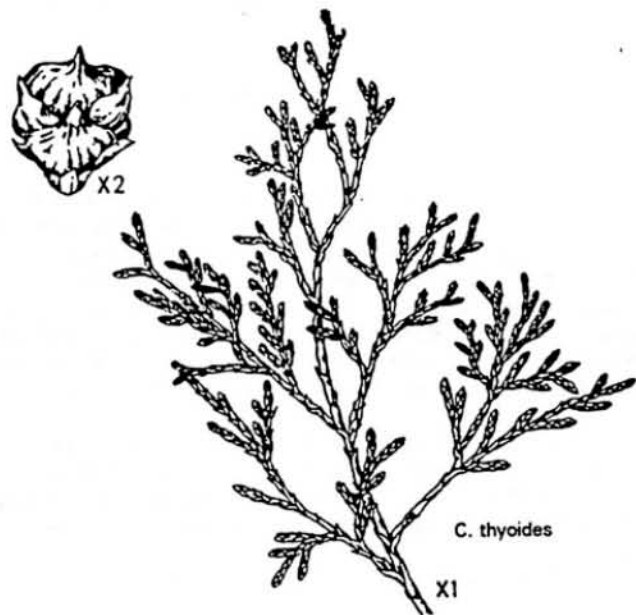
The Atlantic White Cedar, *Chamaecyparis thyoides* (L.) Britton, Sterns & Poggenb., has been cultivated on the OSU Campus (27 May 1902—OSU campus, Cols., *J. H. Schaffner*; Apr 1915—campus, *N. Musselman*).

a Leaves opposite, 4-ranked, scalelike; ovulate cone becoming coriaceous. 1. **THUJA**

a' Leaves opposite or in whorls of 3, some scalelike, some awl-shaped, or all awl-shaped; ovulate cone becoming berrylike. 2. **JUNIPERUS**

1. THUJA L. Arbor Vitae

CHAMAECYPARIS
THUJA
TAXODIUM
JUNIPERUS



Evergreen small tree; monoecious; twigs flat, branched, in fanlike sprays; leaves scalelike, appressed, 4-ranked; cones terminal, the 2 kinds on different branches, staminate very small, carpellate about 1 cm long, with 4-6 scales, middle scales bearing 2 ovules each; seeds winged all around.

Thuja orientalis L., Oriental Arbor Vitae, is a cultivated species (3 Mar 1899—OSU Greenhouse, *J. H. Schaffner*; 19 Feb 1932—Cols., *Blaydes*).

1. †*Thuja occidentalis* L.

Arbor Vitae, Northern White Cedar

REFERENCES: Riddell 1834:157 (rocky situations); Sullivant 1840:40; Selby & Craig 1890:15; Selby 1892a:111 (Scioto R. N of the City); Dobbins 1937:100-101 (glacial relics of boreal relict associations: "Another type of habitat in which the arbor vitae has been able to persist is the limestone cliff constantly wet with seepage of ground water. Such habitats occur along the Scioto in N Franklin Co. near Dublin, pictures 26 and 27, ... and disappeared only with the construction of the O'Shaughnessey dam across the gorge of the Scioto in SW Delaware Co. in recent years"); Braun 1961:65 (illus. p. 64); Elfner 1971:8 (#8), 39 (#8) [Site #8 Favorite Peat, "located about 7 mi. S of the center of Cols., about ¼ mi. E of SR 104 (Jackson Pike), about ½ mi. S of Hibbs Rd., about ½ mi. N of the S boundary of Franklin Co. in Jackson Twp." (Dobbins 1937:97 & Chapman 1934:3). "No documentation by way of a specimen for the pre-historic existence of arborvitae (assumed that Dobbins meant *Thuja*) ... has been found for this site in Franklin Co."]; ODNR-DNAP 1996.

HERBARIUM RECORDS: 1889—Scioto R., *Selby*; 22 Sep 189—Col. [Cols.], *Luustrey* [?]; 1892—Scioto R. [Franklin/Delaware Co. line], *W. Kellerman*; Apr 1892—Scioto R., *Werner*; 14 Nov 1901—OSU campus (cult.), Cols., *Hartford*; Mar 1902—OSU campus (cult.), *J. H. Schaffner*; 16 May 1920—Scioto R. bluff (Delaware Co.), N of Franklin Co. line, *J. H. Schaffner*; 1 Apr 1967—limestone cliff by abandoned quarry along E bank of the Scioto R., approx. 1 mi. S of Dublin, *Stuckey 3354*; 22 Jul 1992—The Quarry, off Rt. 33, E side of the Scioto R., just in front of the Riverside Green entrance, approx. 1½ mi. S of Rt. 161, limestone cliffs, Perry Twp., *Lowden 4991*.

NOTE: Riddell and Sullivant called it *Cypressus thyoides*, whereas Selby and Craig referred it to *Chamaecyparis sphaeroidea* Spach.

2. JUNIPERUS L. Juniper

Evergreen trees and shrubs; dioecious or monoecious; leaves opposite or in whorls of 3, awl-shaped, or some scalelike and some awl-shaped; both kinds of cones small; carpellate scales becoming fleshy and coalescent, mature cone dark blue, berrylike; seeds wingless.

Two cultivated species of *Juniperus* are included in the key below.

- a Young plants with awl-shaped leaves, older plants with mostly scalelike leaves; cones terminal.
 - b Erect tree. 1. *J. virginiana*
 - b' Prostrate shrub. *J. horizontalis* Moench, Shrubby or Creeping J.
- a' Leaves all awl-shaped, jointed at base; cones axillary. *J. communis* L., Common J.

1. *Juniperus virginiana* L.

Red Cedar

REFERENCES: Riddell 1834:157 (rocky situations); Sullivant 1840:41, 60 (*Juniperus sabina* L.); Selby & Craig 1890:15; Chapman 1929 (Red Hills Region of Franklin Co.: #46 "*Juniperus virginiana*, Red Cedar - scattered. Dry prairies"); Braun 1961:66 (illus. p. 64); Elfner 1971:8, 39-40, 97 (Table 4, Refugee Rd.). Two sites in Franklin Co. [First site, #8 Favorite Peat, "located about 7 mi. S of the center of Cols. about ¼ mi. E of SR 104 (Jackson Pike), about ½ mi. S of Hibbs Rd., about ½ mi. N of the S boundary of Franklin Co. in Jackson Twp." (Dobbins 1937:97 & Chapman 1934:3) "No documentation by way of a specimen for the pre-historic existence of ... red cedar (*Juniperus*) has been found for this site in Franklin Co." even though reported by Dobbins & Chapman as such], [Second site, #9 Refugee Rd., "an account of buried cedar (*Juniperus virginiana*) is by Garrison (1967 p. 96): 'A former bog, buried under urban debris, was exposed during foundation excavation at Refugee Rd., SE Cols., Ohio. Pollen samples were collected at two-inch intervals from 2 to 7½ feet below the present surface. The uppermost 3 feet of peat, overlying 2½ feet of detritus gyttja, contained ... juniper (*Juniperus*) ... Pollen analyses indicate ... the site was abandoned prior to the increase in oak and other hardwood pollen which marks the beginning of the hypsithermal interval.' ... According to Garrison (1967), the organic sediments were uncovered in October, 1965, in Franklin Co., Marion Twp., SW ¼, Section 25, T5N, R 22 W. The deposit is in a former kettle N and W of the Johnstown-Reesville Moraine. The wood of *Juniperus virginiana* ... was embedded 10-36 inches below the surface in a brown, fibrous woody peat. Two wood samples from this level were dated (OWU-177) 13,125 ± 470 B.P., and (OWU-177A) 12,695 ± 240 years B.P., and a peat sample from the same level was dated (OWU-197) 13,200 ± 480 years B.P. ... at least one site in Franklin Co. existed about 13,000 years ago, where *Juniperus virginiana* could have grown on organic soils"].

HERBARIUM RECORDS: 1890—Big Darby R., *Selby*; 28 Oct 1897—Scioto R., Cols., *W. Kellerman*; 22 May 1899—Big Darby, *Selby*; 17 Nov 1911—Westerville, dry hills, *Hanawalt*; Jan 1983—Blendon Woods, along trail leading from the Hickory Picnic area to the Day Camp area, *Owens*; 14 May 1992—Graessle Rd., bluff area, Battelle Darby Creek Metro Park, Pleasant Twp., *Lowden 4948*.

NOTE: A juvenile specimen was sighted by me on 18 Jun 1991 growing naturally in a limestone crevice along the top edge of a canyon falls, 1 mi. N of Tuttle Rd. off Dublin Rd., between bridge and deep ravine, W bank of Scioto R., Washington Twp.