The American Ivy Society Presents:

THE CONSEQUENCES OF IVIES and OTHER VINES ON WALLS AND TREES Annotated Reference List

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There is no research data, only opinion and observation. Only Kridler's 1994 paper reports experiences. The most compelling evidence for the benign influence of vines is that the walls at both Kew Gardens and Princeton University, although planted with ivy for more than 100 years, are still standing!

- American Ivy Society Editors. 1982. [Notes]. Ivy League Sans Ivy. Ivy Journal 8(3): 2. [The ivy torn down from the walls of Harvard University in 1982 is not Hedera, but Boston Ivy, Parthenocissus. "There is a strong feeling that it [the ivy] is causing deterioration of the buildings."]
- American Ivy Society Editors. 1982. [Notes]. Insulate with ivies. Ivy Journal 8(3): 3. [A report of the June 1982 British Ivy Society Newsletter 5(1):17, promoting ivies for its thermal insulation and water shedding properties.]

Brick Institute of America. [n.d.] Ivy on Brickwork: Pros and Cons. 1 p. Engineering and Research Digest. Reston, VA.
["There is no single easy answer. . It is possible that...ivy can...dislodge masonry units...if the walls are not properly constructed. . . Plant growth ...may tend to keep moisture entrapped and in contact with the masonry...[which] may lead to efflorescence or staining of the wall. . . Plant growth can harbor...nesting insects, birds or other animal life and offer them easy access to the inside of the building. . Ivy reduces wall temperature and sheds rainwater. . . A wall [that] is well-built... can...last hundreds of years...[but] the growth of ivy...may shorten the life. Removal should be attempted in a small area. Inspect the exposed area for condition and appearance. . . Cut [the ivy] away close to the wall. . . Do not use chemicals or acids...[which] will...damage or stain the wall. . Leaves the "suckers' in place until they dry up...[and] they can be removed with a stiff fiber brush and laundry detergent."

Carrick, Elizabeth. 1984. The Walls of Ivy. *Ivy Journal* 10(2): 9-12. [The history of planting ivies on the walls of Princeton (NJ) University -- a tradition begun in 1866.]

Fearnley-Whittingstall, Jane. 1992. False Accusations. pp. 7-10. In: *Ivies*. Random House. New York. 160 pp.

[Ivy is not poisonous, although the seed is a purgative to humans; it does not damage sound walls or trees; ivy is beneficial to walls, sometimes holding together old walls; its roots are no more a risk to a foundation than any other plant's; top growth, by its weight, is only detrimental to vulnerable walls; an experiment at Winchester College, 1890-1942 showed that there was no difference in girth of trees that had ivy growing on them as compare to trees that had ivy removed every 10 years.]

Heieck, Ingobert. 1990. Was man vom Efeu noch wissen sollte. pp. 31-33. In: Der Efeu auf unseren Friedhöfen. Gartnerei Abtei Neuburg. Heidelberg. Germany. 34 pp.
[....(still under translation)..... Do not plant ivies on walls constructed with lime mortar; or on unsound walls including plastered walls with cracks or ornamentation that could come loose; or on porous laminated surfaces in which the outer layer could peel off. Ivies do not grow on white painted walls in the sun, on white birches, on walls with high pH (pH 13), and walls with a covering of loose sand or fine particles that are loose and abrade naturally. Ivies are not parasites, do not damage trees, and often outlive their host tree.]

Hibberd, Shirley. **1893**. [Ivies on walls and trees]. pp. 20-30. In: *The Ivy*, Second Edition. W. H. Collingridge. London. 115 pp.
[Damage to walls by ivies is "practically unimportant." Ivy damages trees by "checking circulation of sap in the rind of the tree", and "robs its support of light and air."] *Editor's note: This opinion of ivy damage to trees is not supported by more recent observations*.

Horticulturist and Journal of Rural Art and Rural Taste, Editors. 1856. [Editors Table, Answer to Correspondents. How to get an ivy to cover a wall]. Horticulturist and Journal of Rural Art and Rural Taste (New Series) 11: 45-46.
[To promote ivy growth on a wall, remove unattached terminal ends by cutting back to where stem is attached to wall.]

Kridler, David. 1994. Dispelling the myths. II. Some Thoughts Concerning Vines on Masonry. *Ivy Journal* 20: 46-52.
["In the field it is very important to carefully diagnose the condition of a structure when determining the effects that vine coverage might have." Kridler discusses how to analyze the condition of old walls, and the importance of formulating the correct mortar composition when repointing. In his 20 years' experience, the role of enzyme secretion into walls to the detriment of mortar and ultimately to brick or stone "does not play a big role." Kridler, a practicing stone mason from Fresno, Ohio, is involved in on-going restoration at Stan Hywet Hall, Akron, Ohio.]

Mathes, Martin C. 1987. The Hallowed Walls of Ivy. *Ivy Journal* 13(1): 35-36. [How to control ivy growth on walls by planting specimens in bottomless 10-inch containers].

Newlands, Willy. 1980. Good Cheer for Ivy. *The Daily Mail* (London) [1980? issue not identified]. Reprinted in the *Ivy Bulletin* 6(4): 11.
[A listing of positive attributes of ivy, according to the Forestry Commission in England. Ivy is a boon to wildlife: it prevents ground freezing, enabling small birds to forage in hard weather; provides nesting crevices and warm cover for birds, and winter retreat for butterflies; provides abundant nectar in early winter when few sources available. "Ivy does not...strangle anything. It does not compete noticeably in the soil for nutrients and it does not harm healthy trees."]

Princeton University. 1992. Princeton's Green Menace. [Princeton Alumni Magazine], Sept. 1992.

[In order to repoint ivy-covered walls that had not been repointed since the **mid-1800's**, ivies were peeled back from the walls, supported by scaffolding, and then refastened. "We pay dearly for ivy-covered buildings," says the university's grounds director of the \$320,000 project.]

Rose, Peter Q. 1980. *Ivies*. p. 23. Blandford Press. Poole, Dorset. England. ["Ivies will not harm any building in good repair. The museum buildings at the Royal Botanic Gardens, Kew, have supported ivies for almost 100 years with no sign of trouble..."] Sulgrove, Sabina Mueller. 1987. Versatile new ivies. [Plant Page]. *Garden Design* 6(3): 78, 80, 82, 84, 86.

[If mortar and walls are sound, ivy does no damage; if there is a crack ivy will get into it. Do not plant ivies on vinyl or wood siding. Ivies thrive on unpainted walls, but after painting, walls are less porous and ivies do not do as well. Fence preservatives may impede or inhibit plant growth. Ivies are not parasitic and do not damage trees, but rather thrive in the light of defoliating old, dying trees.]

- Taffler, Stephen. 1990. The Myth of Ivy Damage to Walls. pp. 96-97. In: *Climbing Plants & Wall Shrubs*. Crowwood Press. Swindon, England. 128 pp. Also reprinted as
 "Dispelling the Myths. I." In: *Between the Vines* (American Ivy Society) 4(1): 4, 1992
 [Lime-based mortar, used in very old walls, is weak, and can crumble under the weight of neglected, arborescent ivy buffeted by the wind. Old walls covered with ivy are often in better condition and are dry as compared to those without ivy.]
- Taffler, Stephen. 1990. In Defence of Ivy. p. 97. In: *Climbing Plants & Wall Shrubs*. Crowwood Press. Swindon, England. 128 pp. Also reprinted as "Dispelling the Myths.
 I." In: *Between the Vines* (American Ivy Society) 4(1): 4, 1992
 [The shade cast by a healthy crown will confine an ivy to the trunk & lower limbs. Only when a tree is dying and has lost its canopy of foliage does the ivy rapidly climb in response to the available sunlight. Ivies are neither parasitic, nor strangle their host.]
- Watson, Lori A. 1995. Dispelling the Myths. III. A Literature Review: The Effects of Fungi, Bacteria, and Plants on Historic Buildings; and Recommendations for Wall Maintenance. Between the Vines [Newsletter of the American Ivy Society] 7(2) 1.3-4,7-9, 11. [First printed as, The Effects of Botanical and Biological Growths on Buildings, I: "The Historic Dimension Series," A publication series prepared by students in the Department of Housing and Interior Design at the university of North Carolina at Greensboro: revised and re-titled for the American Ivv Society. ["Decay [is] often a symptom rather than a cause of structural problems." How to recognize and remove fungi is reviewed. "Vines may have a harmful effect if they are not properly maintained, or if brick or mortar is of the soft variety. . . Vines hinder the inspection of gutters, downspouts and cornices. . . and may contribute to the efflorescence and staining of the wall. . . On structurally sound walls, [vines] can act as insulation against wind, frost, cold, and rain. 4 categories of vines damage walls differently. ...Plants cause damage to wood through discoloration, abrasion, moisture retention, and prying and splitting when seeds germinate in cracks of old timbers. Roots of trees and shrubs can interfere with drainage and contribute to ground soil movement." How to remove vines from walls and how to choose and care for vegetation is also reviewed. Bibliography included.]
- Whitehouse, Ron. 1980. Does Ivy Have the Killer Instinct? *Ivy Bulletin* 6(4):10. [Although ivy extracts have been reported to kill bean sprouts in a student project, Whitehouse points to concentration as a probable cause.

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