

CHAPTER 3-1

FINE ARTS: DECORATIVE

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CHAPTER 3-1

FINE ARTS: DECORATIVE



Figure 1. Mosses used in a shop window to display trolls. Photo courtesy of Irene Bisang.

Decoration

Sheet mosses [large strips of pleurocarpous moss mats such as *Hypnum* (Figure 2), *Thuidium* (Figure 3), and *Ptilium crista-castrensis* (Figure 4) are still quite popular for decoration in store windows and displays (Figure 1), floral arrangements, Christmas tree and train yards, and Christmas ornaments (Miller in Crum 1973).



Figure 2. *Hypnum imponens*, a popular mat-forming moss used in displays. Photo by Janice Glime.



Figure 3. *Thuidium delicatulum*, a mat-forming moss that is often used in displays. Photo by Janice Glime.



Figure 4. *Ptilium crista-castrensis*, a common decorative moss. Photo by Janice Glime.



Figure 7. *Leptodontium styriacum*, member of a genus commonly used to simulate grass in nativity scenes. Photo by Michael Lüth, with permission.

Nativity

I still have the manger scene that belonged to my parents. Among its figures is a crèche, with baby Jesus nestled in a cradle filled with moss. How much nicer that would have been for the real Jesus instead of a bed of straw. In Mexico (and many other places), mosses are used to simulate vegetation in nativity scenes (Figure 5) (Delgadillo & Cárdenas 1990; Tan 2003) or to cover the roof of the nativity. These commonly include *Hypnum* (Figure 2), *Thuidium* (Figure 3), *Campylopus* (Figure 6), *Leptodontium* (Figure 7), and *Polytrichum* (Figure 8).



Figure 5. A nativity scene in Spain, using mosses for the vegetation. Photo courtesy of Francisco Lara.



Figure 8. *Polytrichum strictum*, member of a genus commonly used to cover nativity roofs or to simulate grass. Photo by Michael Lüth, with permission.



Figure 6. *Campylopus pyriformis*, member of a genus that is used to simulate grass or cover the roof of the nativity. Photo by Michael Lüth, with permission.



Figure 9. Village scenes use mosses for vegetation in Spain. Such scenes are often used in miniature train yards. Photo courtesy of Francisco Lara.

Lara *et al.* (2006) reported on the bryophytes used in nativity sets in Spain. They found that 66 bryophytes, 3 ferns, and 37 flowering plants were in use there. Most of the moss species seemed to be collected accidentally among the four favorite mosses and are similar to those used in Mexico: *Thuidium tamariscinum* (Figure 11), *Eurhynchium striatum* (Figure 12), *Hypnum cupressiforme* (Figure 13), and *Pseudoscleropodium purum* (Figure 14). Rees (1976) lists *Campylopus* sp., *Dendropogonella rufescens*, *Dicranum* sp. (Figure 15), *Hypnum* sp., and *Leptodontium* sp. (Figure 7) as the bryophytes being sold in the markets in Oaxaca city, Mexico, at Christmas.



Figure 10. Nativity and village scenes in Spain use mosses for vegetation. Such scenes are often used in Christmas tree yards and miniature train yards. Photos courtesy of Francisco Lara.



Figure 11. *Thuidium tamariscinum*, a species commonly used in nativity scenes in Spain. Photo by Michael Lüth, with permission.



Figure 12. *Eurhynchium striatum*, a species commonly used in nativity scenes in Spain. Photo by Michael Lüth, with permission.



Figure 13. *Hypnum cupressiforme* var. *cupressiforme*, a species commonly used in nativity scenes in Spain. Photo by David Holyoak, with permission.



Figure 14. *Pseudoscleropodium purum*, a species commonly used in nativity scenes in Spain. Photo by Michael Lüth, with permission.



Figure 15. *Dicranum*, a genus that is sold for decoration at Christmastime in Mexico. Photo by Janice Glime.

Salazar Allen (2001) reported the use of mosses for nativity in Panama, including *Thuidium delicatulum* (Figure 3), *Hypnum* sp. (Figure 2), *Leptodontium* sp. (Figure 7), *Breutelia tomentosa* (see Figure 16),

Rhacocarpus purpurascens (Figure 17), *Sematophyllum cuspidiferum* (see Figure 18), and the liverworts *Frullania* (Figure 19) and *Lepidozia* (Figure 20). Similar packages of sheet mosses are sold in the USA (Figure 21).



Figure 16. *Breutelia subtomentosa*. *Breutelia tomentosa* is used in Panama in nativity scenes. Photo by Michael Lüth, with permission.



Figure 17. *Rhacocarpus purpurascens*, a species that is used in Panama in nativity scenes. Photo courtesy of Jeff Duckett and Silvia Pressel.



Figure 18. *Sematophyllum demissum*. *Sematophyllum cuspidiferum* is used in nativity scenes in Panama. Photo by Michael Lüth, with permission.



Figure 19. *Frullania*, a genus that is used in Panama in nativity scenes. Photo by George Shepherd, through Creative Commons.



Figure 20. *Lepidozia glaucophylla*, member of a genus that is used in nativity scenes in Panama. Photo by Jeff Duckett and Silvia Pressel.



Figure 21. This bag of sheet moss is *Thuidium* sp., for sale in a gardening shop in Columbus, Ohio, USA. Photo by Janice Glime.

Christmas Decorations

Other Christmas-related uses also have emerged. There are wreaths made with mosses (Figure 22-Figure 23). And mosses provide a nice covering at the tree base (Figure 24), perhaps helping to reduce evaporation and to cover

bare soil for live trees. Others have created a variety of uses in making decorations and ornaments (Figure 25-Figure 27). Tan (2003) reports the use of mosses at Christmas for window dressing, showcasing gift displays, and packaging.



Figure 22. Moss in wreath in garden shop, Columbus, Ohio, USA. Photo by Janice Glime.



Figure 23. This twig wreath, decorated with mosses, was available at Christmastime at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 24. Moss covering soil in pot with Christmas tree in garden shop in Columbus, Ohio, USA. Photo by Janice Glime.



Figure 25. Moss reindeer in garden shop in Columbus, Ohio, USA. Photo by Janice Glime.



Figure 26. Moss bird's nest (human-made), a potential tree decoration, at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 27. Moss bird house, a potential tree decoration, at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.

Household Decorations

I have seen a moss table runner (Figure 28). I debated putting it in the chapter on household uses, but I consider it

more decorative than practical, so I have included it here. The distributor must expect it to be popular since the label is printed in three languages (Figure 29).



Figure 28. Moss table runner at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 29. Moss table runner for sale at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.

If you want "matching" accessories, there are vine and moss baskets where you can store your fruit (Figure 30). Other entrepreneurial Americans have created a number of decorative pieces (Figure 31-Figure 35).



Figure 30. Moss basket at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 31. Moss snail at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 32. Moss rabbits and owl at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 33. Moss mouse at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 34. Frog made of moss, Denoyer's Nursery, Columbus, Ohio, USA. Photo by Janice Glime.



Figure 35. Moss balls, useful in floral arrangements and Christmas decorations, at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.

Moss Walls

Some moss walls are art in their own right, with elaborate designs using different species with various shades of green, red, and brown. But some are simply green walls, as seen in Figure 36-Figure 37. I have seen pictures of similar green walls flanking one side of a bath tub. What a relaxing background for a bath!



Figure 36. Gaia moss wall in Singapore. Photo courtesy of Ben Tan.



Figure 37. Ben Tan and Etzel at the Gaia moss wall in Singapore. Photo courtesy of Ben Tan.

In Japan, you can buy a kit for making your own moss wall (Figure 38). Thanks to Hironori Deguchi, we can enjoy this vicariously (Figure 39-Figure 42).

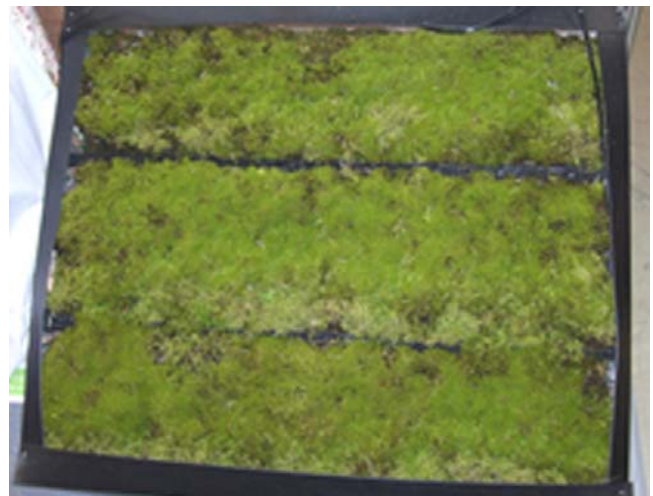


Figure 38. *Sphagnum* Greening Unit for Green Wall Kit. Photo courtesy of Hironori Deguchi.



Figure 39. *Sphagnum* Wall Kit final product on display in Japan. Photo courtesy of Hironori Deguchi.



Figure 41. Moss wall in Mayo Clinic, Rochester, Minnesota, USA. Photo courtesy of Janet Marr.

Shop Windows and Displays

From *Leucobryum glaucum* (Figure 43, Figure 57) in a tailor's window to *Rhytidiadelphus* (Figure 44) in a craft display, to *Hypnum cupressiforme* (Figure 13), *Isoetes myosuroides* (Figure 45), *Pleurozium schreberi* (Figure 46), and *Pseudoscleropodium purum* (Figure 14) in a shop window (Ando 1972), mosses will probably remain popular adornments to add a fresh look to displays (Figure 47). In Japan, even the sporophytes are used to make decorative arrangements (Manzoku 1963).



Figure 40. *Sphagnum* Green Wall Kit by Takeda. Photo courtesy of Hironori Deguchi.

The Mayo Clinic in Rochester, Minnesota, USA, has used mosses and ferns to create a relaxing atmosphere in the clinic. These can be found on walls along stairways and in lobbies around the facility. They are billed as being maintenance-free – the mosses are preserved.



Figure 42. A variation on the *Sphagnum* Green Wall from the kit. Photo courtesy of Hironori Deguchi.



Figure 43. *Leucobryum glaucum*, a species commonly used in floral and shop window arrangements. Photo by Janice Glime.



Figure 44. *Rhytidiadelphus triquetrus*, in a genus commonly used in floral and shop window arrangements. Photo courtesy of John Hribljan.



Figure 45. *Isoetecium myosuroides*, a species commonly used in shop window displays in Europe. Photo by Janice Glime.



Figure 46. *Pleurozium schreberi*, a species commonly used in shop window displays. Photo by Janice Glime.



Figure 47. Shop display in USA with purse on mosses. Photo courtesy of J. Paul Moore.

Like flowers, mosses are used in floral arrangements to create aesthetic appeal or create a relaxing atmosphere (Figure 49-Figure 48).



Figure 48. Moss in bulb pot, in a cafe in Helsingborg, Sweden. Photo courtesy of Irene Bisang.



Figure 49. *Leucobryum glaucum* in floral arrangement in shop window in Vienna, Austria. Photo courtesy of James Dickson.

Floral Industry

Tan (2003) considered horticulture to be the largest market for moss products. Some of these are for gardening, but others are decorative in pots and displays.

Use of bryophytes in the floral industry spans the globe, from *Climacium americanum* (Figure 50) in North America to make wreaths and crosses to *Climacium japonicum* (Figure 51) in Japan to make ornamental water flowers (Mizutani 1963). *Hylocomium splendens* (Figure 52) has been used similarly in North America to make moss roses, but it is also a preferred species in floral arrangements (Welch 1948; Thieret 1956). *Bryum argenteum* (Figure 53) is used in Missouri, USA, for floral arrangements. More commonly, *Dicranum scoparium* (Figure 54), *Hylocomium splendens*, *Rhytidiadelphus loreus* (Figure 55), and *R. triquetrus* (Figure 44) are popular for floral exhibitions because they form large carpets of green (Welch 1948; Thieret 1956).



Figure 50. *Climacium americanum*, a species used in North America to make wreaths and crosses. Photo by Janice Glime.



Figure 51. *Climacium japonicum*, a species used in Japan to make ornamental water flowers. Photo by Li Zhang, with permission.



Figure 52. *Hylocomium splendens*, used here in a shop window display. Photo courtesy of Irene Bisang.



Figure 53. *Bryum argenteum*, a species used in Missouri, USA, in floral arrangements. Photo by Tushar Wankhede, through Creative Commons.



Figure 54. *Dicranum scoparium*, a popular species for floral arrangements. Photo by Janice Glime.



Figure 55. *Rhytidiadelphus loreus*, a popular species for floral arrangements. Photo by Malcolm Storey <www.discoverlife.org>, with online permission.

The role of mosses in decorations pervades hotels, shop windows (Figure 52, Figure 57-Figure 58), optometry displays (Figure 59), tea houses (Figure 60) (Tan 2003; Irene Bisang & Lars Hedenäs, pers. comm.), and even displays in the Ford automobile showroom (Kenneth Adams, pers. comm. 1 November 2013). They can enhance the flowers that often serve to greet those entering a building (Figure 61).



Figure 56. A variety of mosses adorn this shop display. Photo courtesy of Irene Bisang.



Figure 57. *Leucobryum* ball in a shop window display at Paradeplatz in Europe. Photo courtesy of Irene Bisang.



Figure 58. Closer view of the variety of mosses adorning this shop display. Photo courtesy of Irene Bisang.



Figure 59. Large pleurocarpous mosses are used here to adorn a display of an optometrist. Photo courtesy of Irene Bisang.



Figure 60. Mosses add to the display of a tea shop window. Photo courtesy of Irene Bisang.



Figure 61. Floral display in Göteborg showing *Leucobryum*. Photo courtesy of Lars Hedenäs and Irene Bisang.

Mosses are ideal for nursery and floral shop displays (Figure 62-Figure 63). Denoyer's Nursery in Columbus, Ohio, USA, uses some of the same sheet mosses they sell to make displays of their garden decorations (Figure 64-Figure 67).



Figure 62. Mosses are used here to enhance a floral display. Photo courtesy of Irene Bisang.



Figure 63. Mosses adding to the decorations in a Paradeplatz florist shop window. This combination of mosses and flowers is reminiscent of the Japanese "kokedama," plant decoration with moss-ball and associated phanerogams. Photo courtesy of Irene Bisang.



Figure 64. Moss base for decorative dolls in garden shop in Columbus, Ohio, USA. Photo by Janice Glime.



Figure 65. Garden furnishings displayed with moss, Denoyer's Nursery, Columbus, Ohio, USA. Photo by Janice Glime.



Figure 66. Garden furnishings displayed with moss, Denoyer's Nursery, Columbus, Ohio, USA. Photo by Janice Glime.



Figure 67. *Leucobryum glaucum* memorial cross. Photo courtesy of Roy Perry.

Moss Rocks

Mosses conjure up a peaceful experience, as recognized so clearly in the Japanese moss gardens. Some entrepreneurs have capitalized on this feeling by creating indoor miniature gardens that are stylized versions of a moss and rock habitat (Figure 68). Such are the creations at Moss & Stone Gardens (Spain 2012). The rocks in Figure 68 show these stylized rocks. Prices range from US \$14.99 for the smallest (6 cm) to \$39.99 for the largest (16.5 cm).



Figure 68. Three sizes of moss rocks available from the Moss & Stone Gardens, Raleigh, NC, USA. Photo by Moss & Stone Gardens.

Flower Pots

The use of mosses to encase flower pots seems to be popular. The mosses are attractive and look natural without detracting from the flower as the center of attention (Figure 69-Figure 75). For clay pots they can reduce evaporation and absorb spills. If they are outside, they may even provide insulation.



Figure 69. Moss flower pots at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 70. Moss flower pot, showing plastic liner, at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 71. Moss and vine flower pot at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 72. Planter decorated with moss-covered twigs in a gardening shop near Columbus, Ohio, USA. Photo by Janice Glime.



Figure 73. Vase decorated with moss-covered twigs in gardening shop near Columbus, Ohio, USA. Photo by Janice Glime.



Figure 74. Moss decorating planter in garden shop, Columbus, Ohio, USA. Photo by Janie Glime.



Figure 75. Mat of twigs with epiphytic mosses, presumably to put under a flower pot. Are there enough mosses to absorb spills? Photo by Janice Glime.

Jewelry

Mosses imbedded in glass or clear plastic have been around for some time. But some enterprising artists have endeavored to create jewelry with living mosses. One example of this is a ring (Figure 76), maintained long enough to produce sporophytes (Figure 77). Mariaela creates jewelry with living mosses in the necklace pendant (Figure 78).



Figure 76. Moss ring with live *Ditrichum pallidum*. Photo by Brandon Holschuh.



Figure 77. Moss ring with living mosses (*Ditrichum pallidum*), including capsules! Photo by Brandon Holschuh.



Figure 78. Moss necklace from Mariaela at <www.etsy.com>.

Collection Dangers

Bryologists in Venezuela are concerned that moss harvesting in the Andes during the Christmas season for use in nativity scenes is endangering the fragile cloud forest and páramos ecosystems (León & Ussher 2005). Similar harvesting occurs in the Pacific Northwest of the USA (Figure 79).



Figure 79. Branch showing removal of bryophytes harvested for use as sheet moss. Photo courtesy of JeriLynn Peck.

Sheet moss (e.g. Figure 4) can be collected at any time, but preferably in summer (I know not why – perhaps because it is dry and light weight then), with a single wholesaler supplying about 14,000 pounds of dry moss per year (Nelson & Carpenter 1965).

These mosses may be packaged and sold for individuals to use in flower pots, tree yards, or other displays (Figure 80-Figure 82). The ones pictured here range US \$6.95-\$9.95 (Figure 80). But some of the "Supermoss" packages contain other things with the common name of "moss" (Figure 80-Figure 82).



Figure 80. Moss bags for decorations at Michael's Hobby Shop in Reynoldsburg, Ohio, USA. Photo by Janice Glime.



Figure 81. Supermoss package of real moss, Denoyer's Nursery, near Columbus, Ohio, USA. Photo by Janice Glime.



Figure 82. Supermoss Reindeer Moss, a lichen in the genus *Cladina*, Denoyer's Nursery, near Columbus, Ohio, USA. Photo by Janice Glime.

Moss Celebration Day

Khoroshyy Petro announced to Bryonet that 22 January was Moss Celebration Day in a short-lived calendar created following the French Revolution, in the French Republican calendar (Khoroshyy Petro, Bryonet 21 January 2021 EST). This calendar, designed to celebrate the arts and nature, lasted only a decade because the church objected. The calendar did not include the traditional recognition of important dates.

Summary

Sheet mosses such as *Hypnum* spp. have been common in decorations, especially nativity scenes, shop windows, and floral arrangements. Some are used for wreaths and crosses and even jewelry. Gathering of bryophytes for Christmas decorations in some countries can lead to conservation concerns due to over collecting and collection of rare species lurking among the common ones being collected.

Acknowledgments

Many Bryonettters have contributed to this and other chapters through Bryonet discussions, pictures, and help in finding references. Thank you to Bob and Janet Marr for taking pictures for me at the Mayo Clinic moss walls.

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CHAPTER 3-2

FINE ARTS: ART

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CHAPTER 3-2

FINE ARTS: ART



Figure 1. Floats made of foam present artistic figures with mosses for hair and other accents. Artwork and photograph courtesy of Minoru Takeda.

In Artwork

Mosses would seem to be a natural for art work (Saito 1973), but they are actually rather difficult to portray. I once helped run a workshop using mosses for water color subjects and tools. The seemingly delicate moss leaves and branches, pressed into water color paints, then onto paper, did little more than make a smudge at the hands of these beginning artists. And painting their delicate structure is no less of a challenge.

Beatrix Potter, of Peter Rabbit fame, rendered mosses in her beautiful watercolors (Edwards 1993).

Most recently, I have seen an advertisement for moss graffiti. The "artist" is experimenting with a formula for painting moss parts onto a building, wall, or even a coffee pot (!) instead of paint to serve as decoration. The creator

provides a recipe involving a blend of mosses, beer, and sugar that are then applied with a paintbrush. The promoter advises to visit your handiwork over the next few weeks to be sure it has ample water. The pictures provided, however, are an artist's rendition with real paint, as the moss artist is still perfecting the moss paint formula.

One Finnish artist, Barbro Eriksson, is creating a sculpture in which mosses will be used to fill in the design on a slab of rock, thus providing the relief (Figure 2).

Other artwork includes picture frames, decorations of bookmarks (Figure 3), and even wall hangings. Pressed, dried bryophytes are often used in framed artwork (Saito 1973), and I was privileged to receive a poem about mosses, framed in the same, from one of my students.

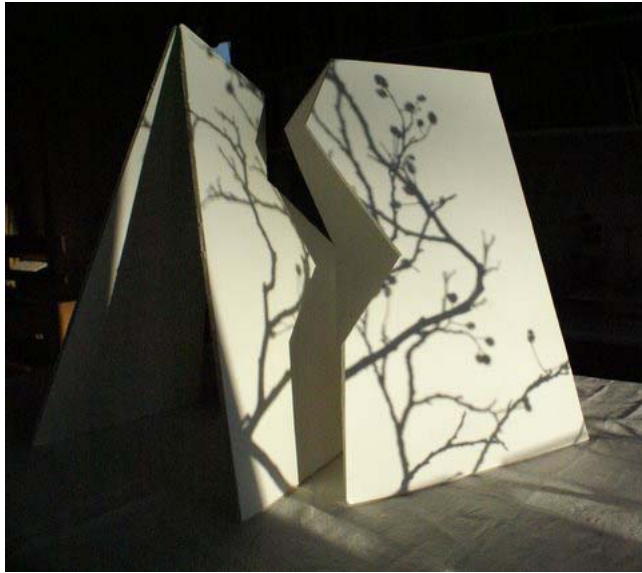


Figure 2. Model of sculpture that will become a living sculpture of mosses growing in the crevices that create the design. Artwork and photo courtesy of Barbro Eriksson.

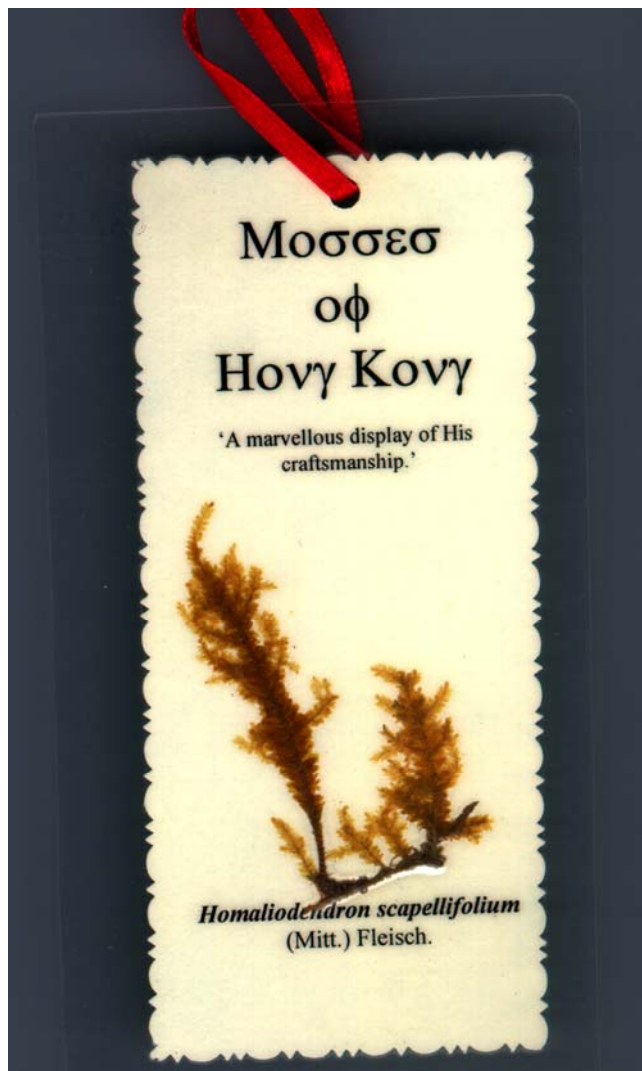


Figure 3. The moss *Homaliodendron scapellifolium* is used here to make a bookmark. Photo by Janice Glime.

Rarely does a moss receive such a place of honor as a coin, but in 1990, a species of *Polytrichum* decorated one side of the Finnish 50 penny coin, with the national animal, a brown bear (*Ursus arctos*), on the other (Hyvönen 1990; Figure 4). It would be nice to think the intention was to honor the moss, but in fact, it was the bear that was "honored" and the moss inclusion was really a product of language. In several Scandinavian languages, the word moss is affiliated with the word for bear, e.g. björnmossa, bjørnemose, and karhunsammal. Hyvönen speculated that the name of the bear may have been associated with the moss because bears sometimes bury their food under carpets of *Polytrichum commune* (Figure 5) in wet forests. Linnaeus reported that bears gather *Polytrichum* to line their winter holes. However, it seems that bears now are not so discriminate, using the more common *Pleurozium schreberi* (Figure 6) and *Hylocomium splendens* (Figure 7).



Figure 4. The Finnish 50 cent coin exhibits a bear on one side and the moss *Polytrichum* on the other. Photo courtesy of Jaakko Hyvönen.



Figure 5. *Polytrichum commune*, a model for the image on the 50 cent Finnish coin. Photo by Christopher Tracey through Creative Commons.



Figure 6. *Pleurozium schreberi*, a moss used by bears to line their beds. Photo by Janice Glime.



Figure 7. *Hylocomium splendens* on spruce forest floor, a moss used by bears to line their beds. Photo by Janice Glime.

Foam Novelties

Not surprisingly, the Japanese use bryophytes in their artwork. Minoru Takeda is a master at growing art pieces with bryophytes (Deguchi 2007; Figure 1, Figure 8). He has kindly contributed the many photographs that follow. Among these are foam figures that float on ponds (Figure 9 - Figure 11) or in glass dishes to decorate a table (Figure 12).



Figure 8. Floats and mascots with moss highlights, usually forming hair. Artwork and photo courtesy of Minoru Takeda.

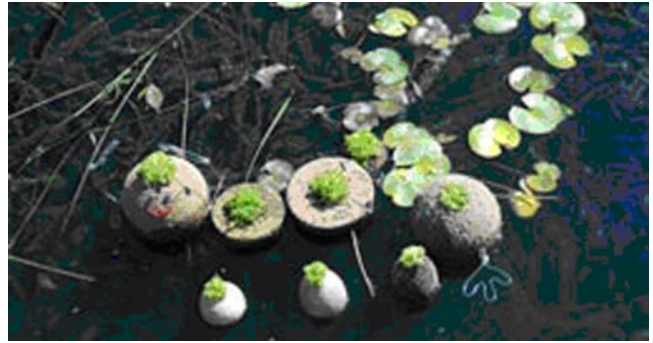


Figure 9. Moss floats on a pond in Japan. Artwork and photo courtesy of Minoru Takeda.



Figure 10. Moss floats on a pond in Japan. Artwork and photo courtesy of Minoru Takeda.



Figure 11. Moss floats on a pond in Japan. Artwork and photo courtesy of Minoru Takeda.



Figure 12. Japanese moss float decoration. Artwork and photo courtesy of Minoru Takeda.

The use of bryophytes in artwork, particularly moss pots and ceramic designs (Figure 13 - Figure 15), is popular enough that there are classes where students of all ages learn the art (Figure 16 - Figure 18). Even streets may be decorated with this unusual form of art (Figure 19).



Figure 13. Float with moss as hair. Artwork and photo courtesy of Minoru Takeda.



Figure 14. Float with moss. Artwork and photo courtesy of Minoru Takeda.



Figure 15. Japanese mascot with *Sphagnum* as hair. Artwork and photo courtesy of Minoru Takeda.



Figure 16. Students of all ages learning how to create moss art in Japan. Photo courtesy of Minoru Takeda.



Figure 17. A moss art teacher demonstrates how to make moss pots. Photo courtesy of Minoru Takeda.



Figure 18. Students complete their moss pots with *Sphagnum* as a bed. Photo courtesy of Minoru Takeda.



Figure 19. Mascot with moss as hair. Artwork and photo courtesy of Minoru Takeda.



Figure 20. Mascot *Racomitrium japonicum* "hair." Photo courtesy of Hironori Deguchi.



Figure 21. Mascot *Racomitrium japonicum* art. Photo courtesy of Hironori Deguchi.

Glass Bryophytes

For teaching purposes, various museums and other institutions have engaged artists to make glass bryophytes. These endeavor to illustrate the special structures on a scale that can easily be seen without a handlens and in three dimensions (Figure 23-Figure 30).



Figure 22. Workshop students in China learning how to make molds for creating bryophytes. Photo courtesy of Zhang Li.



Figure 23. *Bryum capillare* model in Chinese educational display. Photo courtesy of Zhang Li.



Figure 24. *Haplomitrium mnoides* model in Chinese educational display. Photo courtesy of Zhang Li.



Figure 25. *Marchantia emarginata* model in Chinese educational display. Photo courtesy of Zhang Li.



Figure 26. *Phaeoceros laevis* model in Chinese educational display. Photo courtesy of Zhang Li.



Figure 29. Show table of models in Chinese educational display. Photo courtesy of Zhang Li.



Figure 27. *Physcomitrium eurystomum* model in Chinese educational display. Photo courtesy of Zhang Li.



Figure 30. *Funaria* model in USA educational display. Photo courtesy of David Wagner.

Corpus Christi Festival

In Béjar, Salamanca, Spain, mosses are a major part of the Corpus Christi celebration (Martínez Abaigar & Núñez Olivera 2001). The border between the Moslem and Christian kingdoms had been under siege for more than 300 years. According to the legend of the Moss Men, Christians were hidden in the mountains at El Castañar, 3 km from the present town of Béjar. On the day of the feast of St. Marina of Bitinia, the Christians gathered to celebrate mass at La Centenna. After the ceremony, they covered their clothes and weapons with mosses from nearby stones. So camouflaged, they went to the Moslem fortress and lay on the walls and rocks. When the gates opened at dawn, they were able to enter and surprise the watchtowers. In a day-long struggle, the Christians took the streets one-by-one. Thus, on the ninth Sunday after Easter each year the event is celebrated with Moss Men as part of the Corpus Christi festival. Six Moss Men volunteers from the region of Béjar each year use more than 200 m² of moss made into moss plates, including such common ones as *Hypnum cupressiforme* (Figure 31), *Antitrichia californica* (Figure 32), *A. curtipendula* (Figure 33), and *Homalothecium sericeum* (Figure 34). They use these plates to dress



Figure 28. *Pogonatum subfuscum* model in Chinese educational display. Photo courtesy of Zhang Li.

themselves in commemoration of this historic event (Figure 35 - Figure 40). Fortunately, these moss plates are kept at the Convent of San Francisco, and only damaged parts need be replaced by new mosses each year.



Figure 31. *Hypnum cupressiforme*, one of the mosses used in commemorative dress in the Corpus Christi festivity. Photo by Michael Lüth, with permission.



Figure 32. *Antitrichia californica*, one of the mosses used in commemorative dress in the Corpus Christi festivity. Photo by Michael Lüth, with permission.



Figure 33. *Antitrichia curtipendula*, one of the mosses used in commemorative dress in the Corpus Christi festivity. Photo by Michael Luth, with permission.



Figure 34. *Homalothecium sericeum*, one of the mosses used in commemorative dress in the Corpus Christi festivity. Photo by Proyecto Musgo through Creative Commons.



Figure 35. Men being dressed in mosses for the Corpus Christi Festival. Photo by Eloy Diaz-Redondo.



Figure 36. Parade of Moss Men in the Corpus Christi celebration. Photo by Eloy Diaz-Redondo.



Figure 37. Participants of the Corpus Christi Festival clothed in mosses. Photo by Eloy Diaz-Redondo.



Figure 38. Corpus Christi celebrators surround the "monstrance," a sacred vessel in which the consecrated host is displayed. Photo by Eloy Diaz-Redondo.



Figure 39. Moss Men with one of the dignitaries during the Corpus Christi celebration. Photo by Eloy Diaz-Redondo.



Figure 40. Close view of one of the Moss Men in the Corpus Christi celebration. Photo by Eloy Diaz-Redondo.

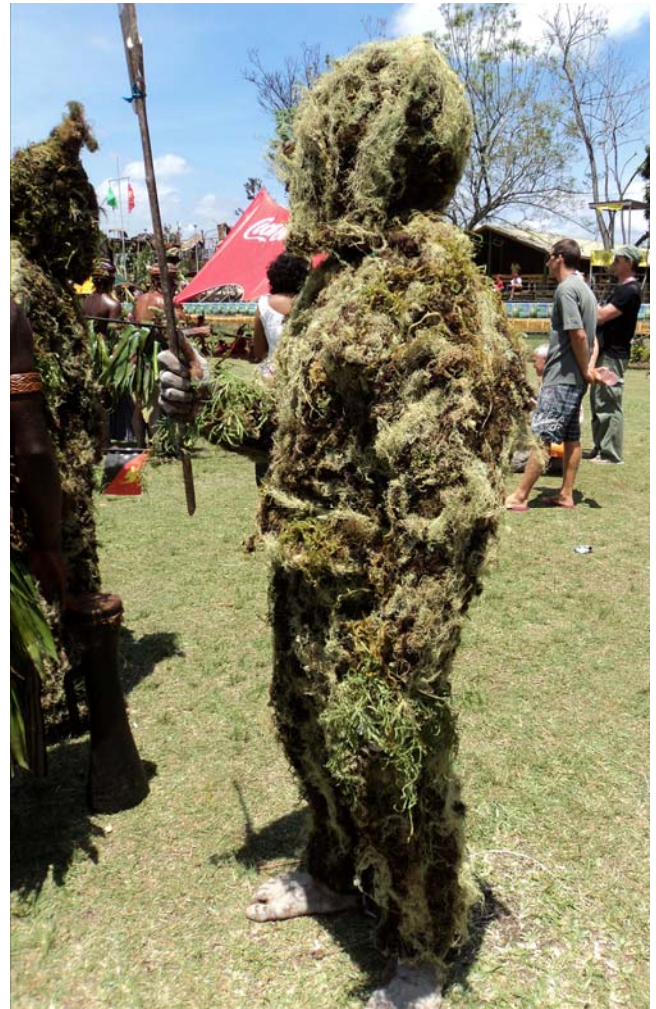


Figure 41. Moss costumes in Papua New Guinea. Photo by Deb Jordan through Robin Stevenson.



Figure 42. Moss costumes in Papua New Guinea. Photo by Deb Jordan, provided by Robin Stevenson.

In what is apparently a different ceremonial use of bryophytes in New Guinea, the villagers of Payakona Village hold a singing ceremony (Laman 2012). They are not covered with bryophytes, but rather wear what appear to be mosses in strategic positions to create beards, hair, and decorative pieces on the head or over the chest. In what appears to be a reverse of the usual confusion, the decorations labelled lichens and Spanish moss appear to be real mosses.

Body Art

In The Philippines, *Dawsonia* (Figure 43), *Pogonatum* (Figure 44), and *Spiridens* (Figure 45) are used both as body decoration and to ward off evil spirits.



Figure 43. *Dawsonia polytrichoides*, in a genus used as body decoration in the Philippines. Photo by Niels Klazenga, with permission.



Figure 44. *Pogonatum aloides* males, in a genus used as body decoration in the Philippines. Photo by David Holyoak, with permission.



Figure 45. *Spiridens flagellosus*, in a genus used as body decoration in the Philippines. Photo by John Game Flickr Creative Commons.

Statues or Topiary?

Bryophytes can be fashioned into various forms with the help of wires and some sort of central core – or just moss. These are sometimes stained so they remain green, but they also can remain alive for a period of time, the duration depending on the suitability of conditions. Such statues (are these really topiary, since they are planted that way instead of cut to make the shapes?) are used to decorate gardens and lawns or used in displays indoors.

Atproot (2009) reports that mosses and lichens can have a different relationship to statues and outdoor art. They may be introduced with stones used in outdoor art. And rock carvings may be damaged by the invasion of bryophytes and lichens, as witnessed at Tennes in Balsfjord, Troms, Norway (Bjerke 2000).



Figure 46. Decorative moss turtle on display at Denoyer's Nursery, Columbus, Ohio, USA. Photo by Janice Glime.



Figure 47. Decorative moss frog on display at Denoyer's Nursery, Columbus, Ohio, USA. Photo by Janice Glime.



Figure 48. Labramoss topiary at Gray Summit, Franklin County, Missouri. Photo courtesy of Marshall Crosby.



Figure 49. Close view of labramoss topiary. Photo courtesy of Marshall Crosby.



Figure 50. Moss dog moodle topiary. Photo courtesy of Marshall Crosby.



Figure 51. Close view of moss topiary of dog moodle. Photo courtesy of Marshall Crosby.



Figure 52. Toad topiary in Europe. Photo courtesy of David Long.



Figure 53. Swan moss topiary in Europe. Photo courtesy of David Long.



Figure 54. Moss topiary dragonfly in Europe. Photo courtesy of David Long.

Film-making

To make a film of King Kong, film makers had to actually miniaturize the mosses (Simpson 2006). Real mosses posed two problems – they were at the wrong scale for the landscape, shrubs, logs, and trees created for the set, and they dried too rapidly under the studio lights. They used a material called flocking that they attached to dacon with adhesive. But in Lord of Rings trilogy, the scene

when a member of the Fellowship of Rings dies on a bed of pleurocarpous mosses used real mosses. Moss Man in Masters of Universe also had real moss. However the toy made in his image used green flock.



Figure 55. Moss monkey in garden shop in Columbus, Ohio, USA. Photo by Janice Glime

Summary

Artists have used bryophytes in framing, accenting relief in sculptures, and providing texture. Even a Finnish coin sports a moss. The Japanese use them to simulate hair and other adornments on foam statues and floats.

The Corpus Christi Festival in Béjar, Salamanca, Spain celebrates the capture of the Moslem fortress by donning sheets of moss and parading through town.

Mosses have been used in movies and in others miniature artificial mosses were used. For educational purposes, some museums and other teaching organizations have ade model mosses of glass or ceramics.

Moss topiary can be made into almost any shape.

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CHAPTER 3-3

FINE ARTS: LITERATURE

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CHAPTER 3-3

FINE ARTS: LITERATURE



Figure 1. Rugged shorelines such as this with a bank of moss (*Grimmia maritima*) inspire poems that relate the ruggedness of the moss. Photo by Michael Lüth, with permission.

Stories and Verse

For some, mosses inspire poetic thoughts. Allan Fife (bryonet, 26 June 2008) has provided us with "a more or less contemporary thought on the study of mosses" by Thomas Taylor, a botanist in the British Isles, apparently written in the year he died, and published in the *London Journal of Botany* in 1848:

"They who consider attention paid to such minute objects a trifling with time, should recollect, that a moss is as much a species as a man, and the work of the same divine Creator; also, that the attentive study of the little leads to the discovery of general laws applicable to the great; and the knowledge of such laws arms the mind and the hand with power convertible to the highest purposes of life."

I began my search for mention of mosses in the Haiku poetry book I found at a used book sale, but alas, not a single poem mentioned a moss. However, a less likely occurrence is the theme of a Japanese opera developed around a moss! In Volume 1, Chapter 9-5 on light I have

described this story, which is developed around the luminous properties of the cave moss, *Schistostega pennata* (Figure 2-Figure 3). According to legend, the luminescence of the moss (protonemata) saved the life of the man in its foreground.



Figure 2. *Schistostega pennata* mature gametophytes. Photo courtesy of Martine Lapointe.

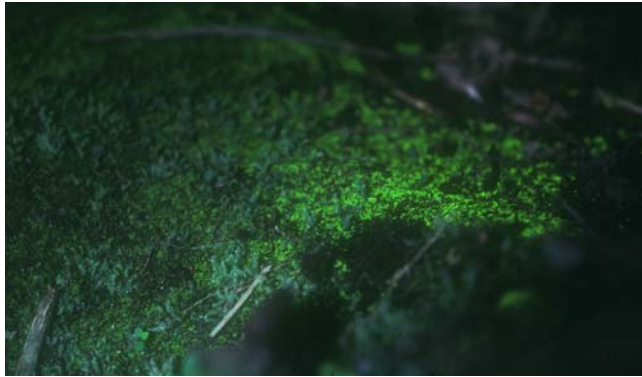


Figure 3. *Schistostega pennata* protonemata reflecting light. Photo from Rausu, Japan, by Janice Glime.

Philip Stanley, in his message to Bryonet on 13 July 2008, tells us of an unusual 203-page novel written by the Reverend W. R. Megaw of Belfast, who was also a bryologist. The novel was published in 1934 by The Quota Press of Belfast. In this novel, "*Ulota* is a story, *Ulota* is a moss, and again *Ulota* is an Irish cottage (Figure 4). How the story, the moss, and the cottage are blended into one... this is the secret charm of the book" – the comment on the dustcover of the book.



Figure 4. *Ulota phyllantha* at Traeth Gaslyn Nature Reserve, Wales. Photo by Janice Glime.

One famous quote, permeating many cultures, includes a moss: "The rolling stone gathereth no moss." Although old, this quote is still used to remind us that we need to keep busy, that accomplishments require our energy. It is too bad that it treats the moss as a symbol of laziness. I prefer to think of it as enduring, settled, or peaceful.

Hawthorne (1996) uses mosses to describe a scene in "The Old Manse, Preface to Mosses:" "Looking down into the river, I once discovered some heavy fragments of the timbers, all green with half-a-century's growth of water-moss; for during that length of time, the tramp of horses and human footsteps have ceased, along this ancient highway." This theme of representing the passage of time is a common use of mosses in poetry.

John Ruskin discovered mosses late in life, stating "It is mortifying enough to write, - but I think thus much ought to be written, - concerning myself as the author of Modern Painters. In three months I shall be fifty years old; and I

don't at this hour – ten o'clock in the morning of the two hundred and sixty-eighth day of my forty-ninth year – know what 'moss' is. He did indeed get introduced to moss, examining the "emerald green velvet" of a brick, and later wrote, "No words that I know of will say what these mosses are. None are delicate enough, none perfect enough, none rich enough." Kendall (1926) says of him, "To Ruskin, mosses were no mere botanical pigeonhole – they were a fresh pasture for his thought. With the bright thread of his fancy he wove them into the very texture of life."

Ruskin sees mosses as having particular roles in the natural world, with the adornment of rock as their principal role. Like many other poets, he refers to them as "soft mosses." And like so many others, he compares them to death, stating, "No other plants have so endless variety on so similar a structure as the mosses; and none teach us so well the Humility of Death. As for the death of our bodies, we have learned, wisely, or unwisely, to look the fact of that in the face."

Mosses often represent the passing of time, as will be seen in several of the poems here. Judson Crews, in his book, *The Clock of Moss*, writes about native peoples, farmers, and Penitentes in the Southwest, picturing the changing of the Southwest and the difficult journeys of the these people.

Shakespeare seems not to appreciate mosses as objects of beauty, but like so many poets considers them as signs of age.

In *Comedy of Errors*, Act II, Sc. 2:

"It is dross, usurping ivy, brier, or idle moss."

In *Titus Andronicus*, Act II, Sc. 3:

A barren, detested vale . . .

The trees, though summer, yet forlorn

Oercome with moss, and baleful mistletoe.

Occasionally an entire poem or story may be dedicated to moss, although it is more likely that mosses are used in the imagery. Some of these attempt to describe bryophytes in ways to rest the soul, but others tell stories from the perspective of the moss. Such is the poetic prose by the Indian writer Uma Narayan (*The Adirondack Review*):

Gathering Moss

Surely the stone would not suddenly find itself encased in a velvet muff of moss if it merely stopped rolling; after all, it might come to a standstill in a spot that lacked the moist good moss requires. Piles of sedentary stone have stood in sandy deserts, bleached by sun, unspeckled by moss. There was no moss on indolent moon rocks; lunar vegetation would have made the headlines, provoked thoughtful interviews with Carl Sagan. Evidently, many stationary stones manage to miss out on moss. There is more to moss than mere halting – unplanned fluke, serendipity. Knowing that, it may make more sense to accept the loss of moss, and enjoy the rough adventures of rolling, despite the implications of downward mobility. You wake up in a different place each day and never grow bored or outstay your welcome. You travel without a passport, see the world without paying for transport. You careen down mountains scaring hikers, go rafting in unruly waters, surrender to slope, to gravity. Moss requires tradeoffs, and one of them is staying put in a damp spot. Some stones may find real satisfaction in settled tranquility,

in providing space for green growth. Other pebbles have precipitate souls, value exuberance, cultivate the arts of falling fluently, and embrace the spry delights of a mossless life. In this matter of moss, as in many others, there are pluralities of possibility, a rich variety of ways to be stone.

Gathering Moss is also the title of a popular book by Robin Wall Kimmerer (2003). It is the Winner of the 2005 John Burroughs Medal Award for Natural History Writing. Its description in the online advertisement:

Living at the limits of our ordinary perception, mosses are a common but largely unnoticed element of the natural world. *Gathering Moss* is a beautifully written mix of science and personal reflection that invites readers to explore and learn from the elegantly simple lives of mosses. Robin Wall Kimmerer's book is not an identification guide, nor is it a scientific treatise. Rather, it is a series of linked personal essays that will lead general readers and scientists alike to an understanding of how mosses live and how their lives are intertwined with the lives of countless other beings, from salmon and hummingbirds to redwoods and rednecks. Kimmerer clearly and artfully explains the biology of mosses, while at the same time reflecting on what these fascinating organisms have to teach us. Drawing on her diverse experiences as a scientist, mother, teacher, and writer of Native American heritage, Kimmerer explains the stories of mosses in scientific terms as well as in the framework of indigenous ways of knowing. In her book, the natural history and cultural relationships of mosses become a powerful metaphor for ways of living in the world. *Gathering Moss* appeals to a wide range of readers, from bryologists to those interested in natural history and the environment, Native Americans, and contemporary nature and science writing.

Elizabeth Gilbert (2013) has contributed *The Signature of All Things*. This fictional book is not much about mosses themselves, although some are mentioned specifically. What it does include is the story of a girl, then a woman, who became a botanist and met some of the great personalities in bryology.

Edwards (1992) has analyzed the role of mosses in literature. He suggests that they moved from the maligned, being associated with death, to the benign, representing the accumulation of time. They also have represented stagnation and barrenness, but likewise may represent the "spark of green, or optimism in an otherwise bleak place." They can represent solitude, but they also represent haunting, which Edwards suggests may be due to their habit of growing on tombstones.

Ando (1990) summarizes similar associations with "koke," the Japanese word for moss. These comprise four groups: 1) old age, antiquity, solemnity, 2) Beauty, quiet, elegance, 3) seclusion, simplicity, loneliness, and 4) desolation, retrospection, mutability, death.

Fillers

The editors of *The Bryologist* from 1966 to 1975 found a great use of bryological literature. These were placed to fill empty spaces at the ends of articles, especially near the ends of issues. Since these contributions are not cited in

the regular indices of *The Bryologist*, Reese (1994) published the references in *Evansia*. These numbered 79, including both bryophytes and lichens.

Poetry

The poets seem to think of mosses in two extremes, one as the delicate beings on the forest floor, requiring moisture and refuge from the sun (Figure 5), and the other as rugged and enduring, living where nothing else can (Figure 1). This short verse by Willis Boyd Allen describes the delicate nature of woodland mosses:

Children of lowly birth,
Pitifully weak;
Humblest creatures of the wood
To your peaceful brotherhood
Sweet the promise that was given
Like the dew from heaven:
'Blessed are the meek,
They shall inherit the earth'
Thus are the words fulfilled:
Over all the earth
Mosses find a home secure.
On the desolate mountain crest,
Avalanche-ploughed and tempest-tilled,
The sweet **mosses** rest;
On shadowy banks of streamlets pure,
Kissed by the cataracts shifting spray,
For the bird's small foot a soft highway
For the many and one distressed.
Little sermon of peace.



Figure 5. "On shadowy banks of streamlets pure, Kissed by the cataracts shifting spray." Here *Platyhypnidium riparioides* fulfills the poet's verse. Photo by Michael Lüth, with permission.

A. Muriel Saunders wrote "*Sphagnum Moss* (Figure 6)," describing the virtues of using peatmosses for bandages:

The doctors and the nurses
Look North with eager eyes,
And call on us to send them
The dressing that they prize,
No other is its equal –
In modest bulk it goes,
Until it meets the gaping wound
Where the red life blood flows,
Then spreading, swelling in its might,
It checks the fatal loss,

And kills the germ, and heals the hurt –
The kindly *Sphagnum* Moss (Figure 6).



Figure 6. *Sphagnum* in a poor fen. Photo by Janice Glime.

Marshall (1907) includes a varied collection of poetry and prose where mosses help to describe the nature of things. When he discusses using moss for chinking and filling cracks, he compares this to uses by birds in building their nests (Figure 7) by quoting a poem by Claire, **The Thrush's Nest**:

Within a thick and spreading hawthorn bush
That overhung a molehill large and round,
I heard from morn to morn a merry thrush
Sing hymns of rapture, while I drank the
Sound with joy – and oft an unintruding guest,
I watched her secret toils from day to day;
How true she warped the **moss** to form her nest,
And modell'd it within with wood and clay.



Figure 7. "How true she warped the **moss** to form her nest," this bird's nest is constructed of dead plant material with living **mosses** woven among it. Photo courtesy of Jeri Peck.

Marshall (1907) begins his chapter entitled "**Leafy Mosses**" with this poem (Figure 8):

The tiny **moss**, whose silken verdure clothes
The time-worn rock, and whose bright capsules rise,
Like fairy urns, on stalks of golden sheen,
Demand our admiration and our praise,
As much as cedar, kissing the blue sky,

Or Krubul's giant flower. God made them all,
And what He deigns to make should ne'er be deemed
Unworthy of our study and our love.



Figure 8. "The time-worn rock, and whose bright capsules rise, Like fairy urns, on stalks of golden sheen," aptly describes this *Ortrhotrichum pulchellum*, although this species grows on bark of trees. Photo by Michael Lüth, with permission.

Humble Moss

The delicate and peaceful nature of mosses has inspired poets. Smallness and closeness to the ground have labelled bryophytes as humble in many literary treatments. Thus begins the poem of Richard Henry Dana, Sr. (1787-1879), a lecturer, lawyer, and journalist, but also a poet, from Massachusetts. He found the moss a worthy literary subject in his poem, **The Moss Supplicateth for the Poet**. (Figure 9):

Though I am humble, slight me not,
But love me for the Poet's sake;
Forget me not till he's forgot,
For care of slight with him I take.

For oft he passed the blossoms by
And turned to me with kindly look;
Left flaunting flowers and open sky,
And wooed me by the shady brook.

They said the world he fain would shun,
And seek the still and twilight wood, -
His spirit, weary of the sun,
In humblest things found chiefest good;

That I was of a lowly frame,
And far more constant than the flower,
Which, vain with many a boastful name,
But fluttered out its idle hour;

That I was kind to old decay,
And wrapped it softly round in green, -
On naked root, and trunk of gray,
Spread out a garniture and screen.

He praised my varied hues, - the green,
The silver hoar, the golden, brown;
Said, lovelier hues were never seen;
Then gently pressed my tender down.

And where I sent up little shoots,
He called them trees, in fond conceit:
Like silly lovers in their suits
He talked, his care awhile to cheat.

I said, I'd deck me in the dews,
Could I but chase away his care,
And clothe me in a thousand hues,
To bring him joys that I might share.

He answered, earth no blessing had
To cure his lone and aching heart;
That I was one, when he was sad,
Oft stole him from his pain, in part.

But e'en from thee, he said, I go,
To meet the world, its care and strife,
No more to watch this little flow,
Or spend with thee a gentle life.

That I was of a lowly frame,
And far more constant than the flower,
Which, vain with many a boastful name,
But fluttered out its idle hour;

That I was kind to old decay,
And wrapped it softly round in green,
On naked root, and trunk of gray,
Spread out a garniture and screen.

They said, that he was withering fast,
Without a sheltering friend like me;
That on his manhood fell a blast,
And left him bare, like yonder tree;

That spring would clothe his boughs no more,
Nor ring his boughs with song of bird, -
Sounds like the melancholy shore
Alone were through his branches heard.

Methought, as then he stood to trace
The withered stems, there stole a tear, -
That I could read in his sad face,
Brothers, our sorrows make us near.

And then he stretched him all along,
And laid his head upon my breast,
Listening the water's peaceful song: -
How glad was I to tend his rest!

Then happier grew his soothed soul;
He turned and watched the sunlight play
Upon my face, as in it stole.
Whispering, Above is brighter day!

He praised my varied hues, - the green,
The silver hoar, the golden, brown;
Said, Lovelier hues were never seen;
Then gently pressed my tender down.

And where I sent up little shoots,
He called them trees, in fond conceit:
Like silly lovers in their suits
He talked, his care awhile to cheat.

I said, I'd deck me in the dews,
Could I but chase away his care,
And clothe me in a thousand hues,
To bring him joys that I might share.

He answered, earth no blessing had
To cure his lone and aching heart;
That I was one, when he was sad,
Oft stole him from his pain, in part.

But e'ven from thee, he said, I go,
To meet the world, its care and strife,
No more to watch this little flow,
Or spend with thee a gentle life.

And yet the brook is gliding on,
And I, without a care, at rest,
While he to toiling life is gone;
Nor finds his head a faithful breast.

Deal gently with him, world, I pray;
Ye cares, like softened shadows come;
His spirit, well nigh worn away,
Asks with ye but awhile a home.

O, may I live, and when he dies
Be at his feet a humble sod;
O, may I lay me where he lies,
To die when he awakes in God!



Figure 9. *Grimmia elongata* demonstrates "He praised my varied hues, - the green, the silver hoar, the golden, brown." Photo by Michael Lüth, with permission.

Carol Reed-Jones tells how she develops a list poem, in this case first listing all the things she sees in the woods. Then she must think how they relate to each other and how she can use the senses to describe them. Thus, she adds moisture and texture to the green color of the moss to make the image come alive (Figure 10):

In the Woods

In the woods, scraps of fog
drape themselves
like gray scarves on the trees.
In the woods,
frogs sing and crows squawk,
and one heron flaps past on silent wings.
In the woods, blooming plants
exhale a sweet perfume,
and the taste of green growing things
is in the air.
In the woods, each tree
wears soft, moist green **moss**
over its rough, dry bark.



Figure 10. Here every tree "wears the soft, green moss" *Eurhynchium praelongum*. Photo by Michael Lüth, with permission.

One reference that seems common in the use of mosses in literature is that they are "soft underfoot," as Edwards (1993a) points out. He found fifteen occurrences of such a reference.

From Twenty Lessons on British Mosses (1846)

by William Gardiner (1808-1852)

O! Let us love the silken **moss**
That clothes the time-worn wall
For great its Mighty Author is,
Although the plant be small.

The God who made the glorious sun
That shines so clear and bright,
And silver moon, and sparkling stars,
That gem the brow of night-

Did also give the sweet green **moss**
Its little form so fair;
And, though so tiny in all its parts,
Is not beneath His care.

When wandering in the fragrant wood,
Where pale primroses grow
To hear the tender ring-dove coo,
And happy small birds sing,

We tread a fresh and downy floor,
By soft green **mosses** made ;
And, when we rest by woodland stream,
Our couch with them is spread.

In valley deep, on mountain high-
The **mosses** still are there :
The dear delightful little things-
We meet them everywhere!

And when we mark them in our walks,
So beautiful, though small,
Our grateful hearts should glow with love
To Him who made them all.

The American poet Amy Clampitt begins her poem, **Cloudberry Summer**, part of her collection 'What the Light Was Like,' as follows:

Cloudberry Summer
First ventured into
in mid-July, the bog's sodden hollow
muffled the uproar of the shore
it hunkered in the lee of. Wrung residues
of *Sphagnum* moss steeped in self-
manufactured acids stained the habitat's
suffusing waters brown...

Rugged Mosses

It seems it is often the smallness that is stressed, and seldom the ruggedness, but these poems show that the tenacity of such a small plant gives hope that we too can survive adversity. This wonderful little poem, Ode to *Grimmia*, Anonymous, p. 433, describing *Grimmia* (Figure 11) as only a bryologist could, obviously had an author, but I had only a photocopy and a page number, with no indication of where it came from. A year after my plea for help in identifying the author (first edition of this chapter), Andi Cairns found a scrap of paper with the poem and the author Peter Albert, but no source. Fortunately, I misread her email as a name familiar to me, Peter Alpert. I was able to track him down and contact him. Peter responded that this was the first and last poem he ever wrote, a contribution to his doctoral thesis (Alpert 1982).

Ode to *Grimmia* – by Peter Alpert

The most casual talker, if he be a walker,
is surely acquainted with moss;
He will say it's a thing that to grow needs a spring,
leafy shade, and a log to emboss.
But he's wrong three times over; he's yet to discover
there's a moss which is doughty and tough;
One he's likely to see, and dismiss thoughtlessly
as dead, brown, old fungus-like stuff.
Bravely crowning a rock, this is pure mossy stock,
air, it's dry, yes, but far from inert;
Give one drop of rain – it will turn green again!
And resume making moss leaves, unhurt.
It can manage drought slyly, knowing poikilohydry,
like its kin in the genus of *Grimmia*,,
Which from bare alpine col to the seer chaparral
make hard boulders seem soft and familiar.



Figure 11. *Grimmia arenaria* demonstrates the brown-black moss as described in *Ode to Grimmia*. Photo by Michael Lüth, with permission.

Thomas James Allen seems also to find moss in those dreary places in his four poem parts called "Moss Upon the Brick." But in the end, the endurance of the moss gives him hope:

Moss Upon The Brick - Part 1

In an older part of town,
Covered far and green and thick,
An ancient house, an antique home,
With **moss** upon the brick.

A window's broken, boards are split,
The clocks inside have stopped,
The pictures hung upon the walls
Have bent their nails and dropped.

A fence outside surrounds the house,
The gate squeaks with the breeze,
The yard is filled from left to right
With dying grass and trees.

The road untravelled past the house
Is muddy, brown and slick,
And the sidewalk from the house
Has **moss** upon the brick.

Moss Upon The Brick - Part 2

The children discover the ancient house
That townsfolk pass by quick,
A haunted place with summer weeds,
And **moss** upon the brick.

They sneak inside through an open door
That leads into a hall,
An empty spiderweb above
Is stretched from wall to wall.

They wander past the dining room,
That's lit through broken panes,
The rug on the floor below the chairs
Is soiled by coffee stains.

The kitchen with its well-worn tiles
Is empty, dark and cold;
A hardened breadcrumb on the floor
Is covered with blue mold.

The children wander past the stairs,
They're walking hand in hand;
They're frightened by an old umbrella,
Discarded in a corner stand.

All at once the wind blows hard
And slams a door upstairs;
The children race back through the rooms,
Disturbing rugs and chairs.

Back home they run with screaming cries,
For Nature's played a trick;
They'll never come to play in the house
With **moss** upon the brick.

Moss Upon The Brick - Part 3

A November walk down an old rutted road
Through a fog, though misty and thick,
I've ventured to see that old rustic house,
With **moss** upon the brick.

The sun has been swallowed behind the dark clouds,
The air is bitter and chilled,
The winds change from North to East to South-
South-West, but never are stilled.

The weeds growing thick by the edge of the house,
Live now, while others cannot,
They thrive in the cold with the wind and the snow,
Instead of the summertime hot.

The apple trees dropped their fruits in the yard
When nobody came to call,
The red and the yellow lie mixed with the brown
Of the leaves that were dropped in the Fall.

A November day in the life of the house,
Like others of future or past,
Does little to change the brick and the wood,
Or the darkened shadows cast.

An early Fall snow still clings to the roof,
And ice makes the sidewalk slick,
But the wind and the cold can never remove
The **moss** upon the brick.

Moss Upon The Brick - Part 4

Now I have grown old, my hair has turned gray,
The passage of time was so quick;
I wonder if years have weathered the house
With **moss** upon the brick?

I remember the house as it was in my youth,
I'm drawn down the muddy lane;
The trees, the walk, the peeling paint,
The broken window pane.

Why, even in my day, the boards on the porch,
From lying so long were sore,
They'd bent their necks and arched their backs,
Pulling their nails from the floor.

I wonder if years have caved in the roof?
If the weeds are growing thick?
If wind and rain have even left
A brick upon a brick?

I'm nearing the house, I'm afraid to look,
I laugh, my fearing is odd;
I'd always supposed the house would stand strong,
Like mountains, or faith in a god.

But mountains with time have melted away,
And I've had my faith in God shaken,
And someday the earth will not turn 'round the sun,
Oh what is this risk that I've taken?

If I shatter a memory by returning to see
Whether my childhood world is the same,
And finding that things are not as I left them,
I've only myself to blame.

My hand on the gate, I look up the walk,
My heart turns the clock back a tick;
My faith, my life saved! - for there stands the house,
With **moss** upon the brick.

Among the more famous bryological poems (at least among bryologists) is the one by Mungo Park, written

about his African travels when he thought he would surely die in the desert, with no compass and no food, but who gained the hope he needed upon seeing a lowly moss, a small *Fissidens* (Figure 12), green and growing (Crum 1973). Park wrote in his journal, "Can that Being (thought I), who planted, watered, and brought to perfection in this obscure part of the world a thing which appears of so small importance, look with unconcern upon the situation and sufferings of creatures formed after his own image? Surely not! Reflections like these would not allow me despair. I started up, and disregarding both hunger and fatigue, travelled forward, assured that relief was at hand." He did indeed survive to reach hospitable land:

Sad, faint and weary, on the sand
Our traveller sat him down; his hand
Cover'd his burning head.
Above, beneath, behind, around,
No resting for the eye he found;
All nature seemed as dead.

One tiny tuft of **moss** alone,
Mantling with freshest green a stone,
Fix'd his delighted gaze;
Through bursting tears of joy he smiled,
And while he raised the tendril wild,
His lips o'erflowed with praise.

Oh! shall not He who keeps thee green,
Here in the waste, unknown, unseen,
Thy fellow-exile save?
He who commands the dew to feed
Thy gentle flower, can surely lead
Me from a scorching grave.

Thy tender stalks, and fibres fine,
Here find a shelter from the storm;
Perhaps no human eye but mine
Ere gazed upon thy lovely form.

He that form'd thee, little plant,
And bade thee flourish in this place,
Who sees and knows my every want,
Can still support me with His grace.



Figure 12. *Fissidens bryoides*, identified by W. J. Hooker, surviving in the desert soil, brought hope to Mungo Park as he was about to give up all hope. Photo by Michael Lüth, with permission.

Winter seems to inspire mention of mosses, when all else is dark and grey, as in this verse by George Crabbe called **Tales of the Hall**:

All green was banished save of pine and yew,
That still displayed their melancholy hue;
Save the green holly with its berries red,
And the green **moss** that o'er the gravel spread.

But Whittier, in **Mogg Megone**, Pt. III, speaks of spring, when other plants overtake the mosses:

'Tis spring-time on the eastern hills!
Like torrents gush the summer rills,
Through winter's **moss** and dry dead leaves
The bladed grass revives and lives,
Pushes the mouldering waste away,
And glimpses to the April day.

The freshness of rainfall likewise makes the mosses stand out, inspiring the poet, as Alfred Tennyson writes in **The Lotos Eaters: Choric song**:

Here are cool **mosses** deep,
And thro' the **moss** the ivies creep.

One anonymous poem appeared in the *Bryological Times* 96 in 1998 as lyrics of a song sung by the students in a peatlands bryophyte course in Finland in 1997:

Ten Keen Bryologists

Ten keen bryologists
Were learning bryophytes,
one of them got stuck in those,
but nine spent all their nights!

Nine freak bryologists
went out into a mire,
one of them got grilled in there,
but eight survived the fire!

Eight smart bryologists went out into a bog,
one found too much *Sphagnum* there,
the rest got through the fog!

Seven dumb bryologists went out into a fen,
one discovered two bears there,
the others passed the den!

Six sane bryologists collected more mass samples,
one mistook it all for spinach
five needed no example!

Five lax bryologists
took a break with sauna,
one got broiled like a fish,
the rest remained living fauna!

Four wise bryologists,
jumped into a river,
one of them jumped down the rapids,
three cared not a shiver!

Three sure bryologists
identified Mniaceae,
one took *Mnium* (Figure 13) for a *Bryum* (Figure 14),
two were like Timo so crazy!

Two brave bryologists
were walking near the border,
one saw a Russian endemic,
the other returned in order!

One lone bryologist
liked bryophytes, so then
he looked for nine more bryophiles
and started again as ten!



Figure 13. *Mnium hornum* with capsules. Photo by Jan-Peter Frahm, with permission.



Figure 14. *Bryum capillare* with capsules. Photo through Creative Commons.

Some poetry is just for fun and expresses the author's state of mind. This anonymous 1996 poem, published in Bull. Brit. Bryol. Soc. 67: 45, perhaps by a frustrated student, expresses the trials and tribulations of dealing with bryophyte systematics (Figure 15 - Figure 18):

Modern studies in *Drepanocladus*
Lars Hedenäs of Sweden,
By the Nine Gods he swore,
The genus *Drepanocladus*
Should trouble us no more.

The concept was old-fashioned
Just taxonomic tedium,
So he split it into several parts,
And one of them's *Scorpidium* (Figure 16).

Perplexed and puzzled by the rest,
He paused to scratch his ear,
And after labours long and hard,
Arrived at *Warnstorfia* (Figure 17).

Axillary hairs he laboured o'er,
And peristomial matters,
And other trivial details which
Will drive us mad as hatters.

At last he faced the final rump
'Now what on earth'll I call this?'
Then final inspiration struck –
And gave us *Hamatocaulis* (Figure 18).

Now sound his reasons may well be,
For splitting, and not lumping,
But as I struggle with new names,
I'm half inclined to thump him.



Figure 15. The traditional genus *Drepanocladus* has few remaining species, now including this *D. sendtneri*, as Hedenäs has attempted to "trouble us no more." Photo by Michael Lüth, with permission.



Figure 16. Hedenäs concluded that this member of *Drepanocladus* should be moved to *Scorpidium* as *S. revolvens*. Others, such as Blockeel (2000) still include it in *Drepanocladus*. Photo by Michael Lüth, with permission.



Figure 17. Once called *Drepanocladus exannulatus*, Hedenäs has renamed this one *Warnstorfia exannulatus*. Photo by Michael Lüth, with permission.



Figure 18. And another once named *Drepanocladus vernicosus*, this one is now *Hamatocaulis vernicosus*. It seems that Hedenäs has solved the problems of *Drepanocladus* by removing most of its species! This seems to have resulted in no less consternation by his student, as lamented in the poem, *Modern Studies in Drepanocladus*. Photo by Michael Lüth, with permission.

There are many translations of a poem by the Chinese poet Wang Wei, where in the end it is the moss that is given importance (Figure 19). I prefer this one by W. J. B. Fletcher in 1919:

So Lone seem the hills; there is no one in sight there.
But whence is the echo of voices I hear?
The rays of the sunset pierce slanting the forest,
And in their reflection green **mosses** appear.



Figure 19. *Hypnodendron menziesii*, showing "The rays of the sunset pierce slanting the forest, And in their reflection green mosses appear." Photo by Jan-Peter Frahm, with permission.

In a discussion on Bryonnet in June 2008, Dan Paquette was more a realist in this contribution:

Dirty Little Moss
By Dan Paquette

Dirty little **moss**
on the cottonwood trunk,
my spray bottle
washes away the debris.

Your stem snuggles close
to your siblings, green
unbrushed curls
of sun-loving leaves.

Your generation lies
criss-crossed above

tired wet scaffolding
twisted remnants
of your first borne branches
and some great, great
uncles and aunts
in mucous, brown

intertwined stems, leaves—
limp banners
of whom
they once were—

mosses.

One day, your skin
will be coal pudding
for some thermal bacteria

long after you and I

It is seldom that mosses figure in such touching dramas and struggles as seen in the works of Walt Whitman in his twelve-poem sequence, "Live Oak, with Moss." In 1858 or 1859, Whitman described one man's love for another, the happiness they shared, and the aftermath of that relationship (Parker 1996). But that sequence, in its original form and presentation of honest struggles, was never published. Rather, a revised version, missing the comma, was ultimately published as "Live Oak with Moss" within a forty-five poem "Calamus" section of the 1860 *Leaves of Grass*. The original "Live Oak, with Moss," finally published by Bowers in 1953 (see Parker 1996), gives an honest rendition of the struggle and feelings of a man's love for a man while living in a world of homophobia.

In contrast to the usual imagery and friendly moss names, it seems that in recent works in Great Britain, scientific names of mosses may appear in literary works. For example, in Dulcie Domum's "Bad Housekeeping" (*The Guardian*, 8 February 1992), she writes "Gertrude was seated on a mat of *Grimmia pulvinata* (Figure 20) gazing thoughtfully out across glittering Rough Dike reservoir." (Edwards 1993a; Figure 20). Even less recently, Dutton, in "The Craggie" (1976) wrote "Remarkable woman," mused the Doctor, turning again to the wall. "Had an entire liverwort subspecies named after her – *Dicranodontium uncinatum* McHattii (Figure 21); should have been a genus – *Agenesia*." It is too bad that *Dicranodontium* is a moss, not a liverwort (Figure 21).



Figure 20. This *Grimmia pulvinata* hardly gives the image of "Gertrude was seated on a mat of *Grimmia pulvinata* gazing thoughtfully out across glittering Rough Dike reservoir," but it can form extensive mats, and those spiny looking hair tips are actually quite soft. Photo by Michael Lüth, with permission.



Figure 21. This moss, *Dicranodontium uncinatum*, is clearly not the liverwort as referenced in the words of Dutton. Perhaps it is best that poets stick to common names. They cannot be easily challenged and are usually more poetic. Photo by Michael Lüth, with permission.

Perhaps more commonly, mosses are used as a means of describing something else. In her poem describing the habit of burying daughters live with their dead fathers in Arabia, Anne Sexton (1981) again uses mosses as a means of showing the passing of time, writing:

The **Moss** of his Skin
It was only important
to smile and hold still,
to lie down beside him
and to rest awhile,
to be folded up together
as if we were silk,
to sink from the eyes of mother
and not to talk.
The black room took us
like a cave or a mouth
or an indoor belly.
I held my breath
and daddy was there,
his thumbs, his fat skull,
his teeth, his hair growing

like a field or a shawl.
I lay by the **moss**
of his skin until
it grew strange. My sisters
will never know that I fall
out of myself and pretend
that Allah will not see
how I hold my daddy
like an old stone tree.

Even in poetry, mosses are often associated with death and decay. John Greenleaf Whittier wrote, in **A Dream of Summer**:

The Night is Mother of the Day,
The Winter of the Spring,
And ever upon old Decay,
The greenest **mosses** cling.

And John Masfield wrote in **Vagabond**:

Dunno about Life – it's jest a tramp alone
From wakin'-time to doss,
Dunno about Death – it's jest a quiet stone
All over-grey wi' **moss**.

Emily Dickinson often wrote of death, so it is not surprising that mosses entered into her imagery. In "**I died for Beauty – but was scarce**," she uses it as her final image, signifying the passage of time as the moss covers our names (on the tombstone):

Adjusted in the Tomb
When one who died for Truth, was lain
In an adjoining Room –
He questioned softly "Why I failed"?
"For Beauty", I replied –
"And I – for Truth – Themselves are One –
We Brethren, are," He said –
And so, as Kinsmen, met a Night –
We talked between the Rooms –
Until the **Moss** had reached our lips –
And covered up – our names

A pleasant contrast to these morbid references to mosses is "The Thorn" by William Wordsworth (Everything2 2005). In this poem, of 22 stanzas, he starts by describing the thorn tree as sad, aging, and decrepit with lichens. Later, however, he describes the heap of earth the size of a child's grave by that same tree as more beautiful than any he has seen because the **moss** growing there shines with all kinds of colors – olive green and scarlet bright. The **moss** looks like a skillfully woven patchwork with beautiful colors of green, red, and pearly white. Here, the **moss** seems to symbolize that life goes on despite death around it.

Johann Greilhuber on Bryonet 15 July 2008, "The nice mossy poem by Siegfried von Vegesack, posted by Goda Sporn on June 30, 2008, was probably incomprehensible to those, who had no training in German language. Therefore I tried a free paraphrasing translation (I hope, with not too many errors) as follows:"

Moss

Have you already **mosses** seen?
Have you already down there been,
looking not just from above,
not being close enough –

no – kneeling down, so that you look
at them as if you read the letters in a book?
O wizard fonts! O wondersigns!
A matchless jungle grows, where branch to branch aligns,
and thrives and sprouts abundantly
in forest dawn.

Throughout the year you see
the curled fringes, peaked cones,
the silverhelmets, bells, pompones,
the tangled branchlets, crossed shafts
with petticoats of laced tufts.

This lowly grows on soil and stones --
just **mossy** stuff.
And huge above
the forest thrones.

But now and then a slender deer
walks below the bushes here,
bows under the leafy roof,
stamps into the **moss** its hoof.

And a guileless leveret might
bleed under the foxes bite.
Crawling over liverworts
a paunchy hedgehog lightly snorts,
and in endless caravans
march here legions of ants.

A weasel jumps and rips the prey,
while cool and impressively may
a snake find through the **moss** its way.
What happens here in brushweed deep
on **mossy** stones
nobody learns, the **mosses** secrets keep.
And huge above the forest thrones.

Have you already down there been?
Have you already **mosses** seen?

The original by Siegfried von Vegesack:

Moos

Hast du schon jemals **Moos** gesehen?
Nicht bloss so im Voruebergehen,
so nebenbei, von oben her,
so ungefaehr -
nein, dicht vor Augen, hingekniet,
wie man sich eine Schrift besieht?

Oh Wunderschrift! Oh Zauberzeichen!
Da waechst ein Urwald ohnegleichen,
und wuchert wild und wunderbar
im Tannendunkel, Jahr fuer Jahr,
mit krausen Fransen, spitzen Huetchen,
mit silbernen Trompetentuetchen,
mit wirren Zweigen, krummen Stoeckchen,
mit Sammethaerchen, Bluetengloeckchen,
und waechst so klein und ungesehen -

ein Huempel **Moos**.

Und riesengross
die Baeume stehen.

Doch manchmal kommt es wohl auch vor,
dass sich ein Reh hierher verlor,
sich unter diese Zweige bueckt,
ins **Moos** die spitzen Fuesse drueckt
und dass ein Has, vom Fuchs gehetzt,
dies **Moos** mit seinem Blute netzt...

Und schnaufend kriecht vielleicht hier auch
ein sammetweicher Igelbauch,
indes der Ameis' Karawanen
sich unentwegt durchs Dickicht bahnen.

Ein Wiesel pfeift, ein Sprung und Stoss...
und kalt und gross
gleitet die Schlange durchs **Moos**...
Wer weiss, was alles hier geschieht,
was nur das **Moos** im Dunkeln sieht:
Kein Wort verraet das **Moos**.
Und riesengross die Baeume stehen.
Hast du schon jemals **Moos** gesehen?

Sir Orfeo (translated by J.R.R. Tolkien 1975) written by a
medieval poet whose name is unknown:

He once had ermine worn and vair,
on bed had purple linen fair,
now on the heather hard doth lie,
in leaves is wrapped and grasses dry.
He once had castles owned and towers,
water and wild, and woods, and flowers,
now though it turn to frost or snow,
this king with **moss** his bed must strow.

In the *Bible*

Old names and changes in language make it difficult to
determine if any bryophytes are truly mentioned in the
Bible. Most references to them seem shaky at best. Sean
Edwards (1993b) has demonstrated this difficulty with
several examples.

In the *Bible*, hyssop has dubious meaning. In Exodus
12:22, Leviticus 14:4, 6, 49-52, Numbers 19:6,18, and
Hebrews 9:19, hyssop refers to use in procedures involving
dipping it into blood or water and sprinkling it about.
Again in Psalms 41:7 it was used to purge or cleanse, and
in John 19:29 it was used as a sponge for vinegar. Scholars
think different plants may have been used in these different
examples, and there is no clear evidence any was a moss.

However, in I Kings 4:33, the "hyssop that springeth
out of the wall" narrows the habitat enough to encourage
the suggestion of a moss. Other possibilities include small
wall ferns, and even species today known as hyssop are
possible. However, Linnaeus, who was not known for his
understanding of mosses, identified this text to refer to the
moss *Bryum truncatulum*, later known as *Pottia truncata*,
and now known as *Hennediella truncata* (Figure 22),
stating that "The houses and walls of Jerusalem are clothed
at their base with green moss, the smallest of all;

Hasselquist sent me some and it is *Bryum truncatum*. He similarly concludes that the other references to hyssop refer to moss, using the argument that all mosses absorb liquids and can be used as absorbents. The argument is, however, hardly proof.



Figure 22. *Hennediella truncata*, once known as *Pottia truncata*, and before that as *Bryum truncatum*, was the guess of Linnaeus for the "hyssop that springeth out of the wall" (1 Kings 4:33). Photo by Michael Lüth, with permission.

The saga does not end there, however, as Mr. Dickson subsequently identified what appears to be the same moss, collected from the location described in the Bible, as *Bryum pyriforme*, figured by Hedwig as *Gymnostomum fasciculare*, and now named as *Entosthodon fascicularis* (Figure 23) (Edwards 1999).



Figure 23. This possible "hyssop that springeth out of the wall" is possibly *Entosthodon fascicularis*, a moss. However, it is possible that the plant in question in the Bible was not a moss at all, but a tracheophyte, perhaps even a fern. Photo by Michael Lüth, with permission.

On the other hand, I (Janice Glime) just loaded searchable pdf files of the old and new testaments. Then I did a search for "moss." Zero records were found. So if moss is named in the King James Bible, the reference must be indirect.

Literature References from Bryonettters

In April 2016, Bryonettters opened a discussion on proverbs and folk sayings regarding mosses. These included introductory comments by Robin Stevenson, Bryonet 4 April 2016:

Proverbs, and similar folk sayings, are a way of preserving fundamental truths or pieces of advice. In English the only moss-related example which springs to mind is: **'Rolling stones gather no moss.'**

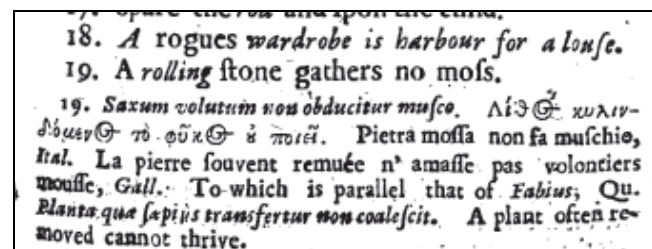
A non-proverbial observation which verges on a 'Law' is that 'Leaning trees gather most moss', whilst an undoubted element of name-magic frequently surfaces in the course of field meetings; someone will say 'Has anybody seen *Bryum elixir-vitae* yet?' and it is usually found very soon afterwards.

Javier Martínez-Abaigar, Bryonet 4 April 2016, reported that "in Spanish we have a similar saying as that reported by Robin (**'rolling stones gather no moss'**): "piedra movediza nunca moho la cobija." Curiously, this saying is mentioned in the act XV of the "Tragicomedy of Calisto and Melibea," known in Spain as "La Celestina," published in 1499. Also curiously, the term "moho" (English "mould") mentioned in that saying was used in ancient Spanish with the meaning of "musgo" (English "moss"). This use was maintained until probably the XVIII century, when the meaning of these two words (moho-musgo) was clearly different (mould-moss).

Pierre Morisset, Bryonet 4 April 2016, reported that "the same saying is used in French: "Pierre qui roule n'amasse pas mousse." As mentioned in <<http://www.expressio.fr/expressions/pierre-qui-roule-n-amasse-pas-mousse.php>>, it also occurs in German, Italian, Portuguese, Dutch, Walloon... and Latin.

Norbert Stapper, pers. comm. 4 April 2016, agreed that "Pierre is right, but I actually never heard someone using this nice phrase in Germany. Hasty research reveals that it is not necessarily meant in a negative way (i.e. that 'people who don't shave get a beard,' or "that someone gets rusty bones due to being lazy"). Instead, it can also be used to indicate that a restless and constantly moving person lacks the requisite for a successful life and the ability to take permanent responsibility."

Chris Preston added that as Pierre says, 'A rolling stone...' is known in several languages and in his pioneer 'A collection of English proverbs' (1670) the naturalist John Ray included Italian, French, Latin, and Greek versions:



Chris Preston contributed several occurrences of "moss" in literature:

Ray also includes Scottish proverbs including 'Better woove over middling nor over **moss**' - I assume that moss here is equivalent to bog, as in Guy's proverb, and that middling is a midden or rubbish heap, but the proverb still seems rather obscure. Maybe Gordon could assist here? Some of the Scottish proverbs are more direct, such as 'Better sit idle than work for nought.'

Ray's third moss proverb – which may only be in the second edition (1678) – is 'I took him napping, as **Moss** took his mare' but as Ray comments, 'Who this **Moss** was is not very materiall to know.'

Two quotes from Shakespeare were recalled by Ann Gordon, Bryonet 4 April 2016:

•in As You Like It: "Under an old oak, whose boughs were **mossed** with age..."

•in The Comedy of Errors: "Usurping ivy, brier, or idle **moss**..."

Moss in Music

In his tribute to Wilf Schofield, Adolf Ceska reports that mosses are only seldom mentioned in classical music. One mention, however, is in Richard Wagner's Parsifal. Kundry describes to Parsifal the way his mother cared for him as a child:

Gebettet sanft auf weichen **Moosen**
den hold geschlafert sie mit Kosen.

or

Gently bedded in soft **moss**
she lulls carressingly her darling boy.

The Czech composer Bedrich Smetana was a follower of Wagner and as such had a similar moss theme. In his opera "Hubicka (Kiss)," the smugglers walk through a forest and sing (quite loudly) a nice chorus:

"Quiet, quiet, [step] on **moss** ..."

Uses of the Word Moss

The word moss is used by many ecologists to mean bryophyte, but an even broader use is to mean any small plant. It is also used to refer to bogs and fens, to moss heaths, or other mossy habitats.

Johannes Enroth, Bryonet 4 April 2016, contributed this Finnish use of the word for moss:

Well, in Finnish colloquial speech moss translates to "sammal," from which stems the verb "sammaltaa," meaning speaking in a very unclear manner, especially when one is heavily drunk. You speak as if you had your mouth full of moss or something like that.

From Norway, Hans K. Stenøien, Bryonet 4 April 2016, contributed this:

In Norwegian one might say that there are "owls in the moss" ("ugler i mosen"), meaning that something is not right, suspicious.

(Note, the burrowing owl uses mosses in its nest – JG)

Later, Stenøien added:

My literate friends Hans Blom and Gustaf Granath have pointed out to me that "ugler i mosen" (Norwegian) and "ugglor i mossen" (Swedish) is actually derived from Danish: "ulve i mosen," and that "ugler" ("owls") is a complicated way of saying "uller," which is dialect for "ulver" or wolves.

The original Danish (medieval?) saying would therefore be "wolves in the mire" rather than "owls in the moss," with the meaning being the same: something fishy (suspicious).

Stefan Schneckenburger, Bryonet 4 April 2016, offered some German things:

- Moos haben – to have moss – to have money, to be rich
- ein bemoostes Haupt haben/sein: to have/to be a mossy head: to be old
- das Moss der Maennlichkeit – the moss of maleness: beard
- Ohne Moss nix los: Nothing happens without moss. Here Moos means money

To the last German statement, Norbert Stapper (Bryonet 4 April 2016) added:

A second meaning of moss ("Moos") in colloquial German means money, and the phrase "ohne Moos nix los" (= life is dull without money or, similar, in French: "sans pognon pas de trognon") is used frequently. This use of Moos goes back to the Yiddish language.

With regard to the word moss in German everyday use Stapper contributed "I would like to add that moss (Moos) is widely accepted, as long as it grows in the woods or in a similar natural habitat. People then talk about *e.g.* "Moosteppich" (moss carpet), positive connotation. But as soon as you enter the direct human environment, the words "bemoost" (=covered by moss) or "übermoost" (totally covered by mosses) are often linked to dirt or deterioration. Then they are used to illustrate the transition from a well-maintained building to a ruin with wet walls *etc.* If something is grown by mosses, it is in a bad state.

This brings us to one of the reasons to get rid of mosses on *e.g.* cobblestones or on the small houses of litter bins. Principle: Keep the wild out! Moss symbolizes the wild. There seems to be a difference between the European countries in tolerance to mosses in human/urban environment, maybe it is linked to recent history, the fact to have rebuilt the country after the war?

In parallel to the differing interpretations of the proverb with the word moss (see my mail from the afternoon), the use and the connotation of the word Moos itself appears to be conflicting – at least in the language of the people in the part of Deutschland where I live.

As a followup to the comments by Stapper, Stefan Schneckenburger, Bryonet 4 April 2016, commented that Shakespeare didn't really discriminate between mosses and lichens. "At the moment I am studying the Bard's plants when curating an exhibition in the German Botanic Gardens: http://www.verband-botanischer-gaerten.de/pages/bg_woche.html".

Possibly he owed Gerads "Herball" from 1597 (as Peter Ackroyd pointed out in his biography). Here you can

find *Lycopodium* species, mosses, and lichens under "Mosses" – even a specific moss on human skulls (the German text relies on the borrowing of German woodcuts by the British publisher and printer). Even algae are listed under "sea mosses." Hepatics are treated separately; including *Cetraria* e.g. Here you can find the "Herball" from 1597; the mosses are treated on p. 1369-ff.

Very impressive is a scene in bloody "Titus Andronicus": A forest is first described as sunny, warm, and sexually stimulating (Tamora is waiting for her lover). 80 verses later, the same forest is the location of murder and rape (act II, sc. 3):

My louely Aaron,
Wherefore look'st thou sad,
When euerything doth make a Gleefull boast?
The Birds chaunt melody on euery bush,
The Snake lies rolled in the chearefull Sunne,
The greene leaues quiuer.with the cooling winde,
And make a cheker'd shadow on the ground:
Vnder their sweete shade, Aaron let vs sit,
And whil'st the babling Eccho mock's the Hounds,
Replying shrilly to the well tun'd-Hornes,
As if a double hunt were heard at once,
Let vs sit downe, and marke their yelping noyse:
And after conflict, such as was suppos'd.
The wandring Prince and Dido once enioy'd,

Haue I not reason thinke you to looke pale.
These two haue tic'd me hither to this place,
A barren, detested vale you see it is.
The Trees though Sommer, yet forlorne and leane,
Ore-come with **Mosse**, and balefull Misselto.
Heere neuer shines the Sunne, heere nothing breeds,
Vnlesse the nightly Owle, or fatall Rauen:
And when they shew'd me this abhorred pit,
They told me heere at dead time of the night.

Schneckenburger added, "If you will visit Germany during June or later – please inform you beforehand, in which Botanic Garden you can see my exhibition on Shakespeare's plants! I add "bonus material," prepared for of my exhibition, dealing with mosses. Even if you are not able to read German, you will find two plates from Gerard's Herball."

To the word usage of "moss," Mark Seaward (Bryonet 5 April 2016) added "Stefan is right: it should be remembered, when reading any old texts and correspondence, certainly in Britain, that in the past "growths" on trees, rocks, and indeed skeletons did not differentiate between mosses and lichens, and mostly referred to both. Furthermore, common names for lichens are named "Moss" even to this day, such as:

Iceland Moss – *Cetraria islandica*
Reindeer Moss – *Cladonia* subgenus *Cladina*

And Norbert Stapper (Bryonet 5 April 2016) added Eichenmoos (Oak moss) = *Evernia prunastri*.

This is one of the few German lichen names that, like "Gelbflechte" (*X. parietina*), seems to be part of common language (if there is anything "common" with lichens at all). As you will know for sure, some people, among them

Volker, have created a list of German names of lichens. I hope I will never be compelled to use 'em in textwork...

Ambroise Baker, Bryonet 5 April 2016, reflected on similar usage in Switzerland. "We have sweets called Mousse d'Islande (Islandisch Moos, Muschio Islandese), which I read from the ingredients contain 0.17% of 'Iceland lichen extract.' How to tell which moss lores refer to moss proper? Most people won't tell moss from lichen apart. – I'll ponder over it sucking on my Swiss sweets..."

Adolf Ceska, Bryonet 4 April 2016, reported that the "national anthem of Japan is a song entitled 'Kimigayo.' It was formally designated the national anthem in 1893, during the reign of the Meiji Emperor. The song was composed by an Imperial Court Musician of the Meiji era. The lyrics are from a poem that was written over 1000 years ago. The words mean 'May your reign continue for a thousand, nay, eight thousand generations and for the eternity that it takes for small pebbles to grow into a great rock and become covered with **moss**.'"

Masaki Shimamura, Bryonet 5 April 2016, clarified the words in the national anthem of Japan:

Many people might think the phrase "small pebbles to grow into a great rock" is unscientific. This is the problem with translation. In here, a Japanese term "Sazare-Ishi" have been simply translated in "small pebbles." Strictly speaking, "Sazare-Ishi" means "conglomerate rock" (small pebbles cemented by calcium carbonate or Iron oxide-hydroxide) and "Sazare-Ishi no Iwao" means "a giant conglomerate rock" (may be calcareous). In this poem, the giant and mossy conglomerate rock represents the eternity.

In honor of bryologist Wilf Schofield, Adolf Ceska (1997) <<http://bomi.ou.edu/ben/ben168.html>> reminded us of Schofield's love of music and poetry. Ceska cited the anthology "A Book of Luminous Things" (edited by Czeslaw Milozs) as having a poem "Moss-Gathering" by Theodore Roethke (1944). The poem describes techniques of moss collecting. This technique is exactly the same as that applied by Dr. Wilf Schofield (see also Peck 2006):

To loosen with all ten fingers held wide and limber
And lift up a patch, dark-green, the kind for lining
cemetery baskets,
Thick and cushiony, like an old-fashioned doormat,
The crumbling small hollow sticks on the underside mixed
with roots,
And wintergreen berries and leaves still stuck to the top,-
That was **moss**-gathering.

[Roethke feels remorse for gathering so much moss:]

But something always went out of me when I dug those
loose carpets
Of green, or plunged my elbows in the spongy yellowish
moss of the marshes:

And afterwards I always felt mean, jogging back over the
logging road,

As if I had broken the natural order of things
in that swampland;

Disturbed some rhythm, old and of vast importance.
By pulling off flesh from the living planet (Figure 24);
As if I had committed, against the whole scheme of life,
a desecration.



Figure 24. Jeri Peck would agree with Roethke as he writes, "Disturbed some rhythm, old and of vast importance, By pulling off flesh from the living planet." Here she records data on the impact of harvesting in the Pacific Northwest, USA, while examining a patch that has been loosened "with all ten fingers held wide and limber" and lifted up. Photo courtesy of Jeri Peck.

From North America, Guy Brassard, Bryonet 4 April 2016, contributed this:

There is an interesting old one from Newfoundland (Canada): **moss child**: an illegitimate child; presumably originating because such children were often conceived on the fens or bogs.

Also from North America, Annie Martin (Bryonet 5 April 2016) added colloquial uses of the word moss:

Most people in my moss world are moss lovers, not scientists. As I share my interest in moss gardening with others, I use scientific terminology to describe the botany of bryophytes and advocate proper nomenclature instead of common names. However, I have my own moss "slang" words – nouns, verbs and adjectives:

Mosser: Any person who engages in the enjoyment of mosses; collects/harvests/rescues mosses; creates moss landscapes

Mossin': The act of enjoying, collecting, harvesting, rescuing, creating with mosses.

Moss-scape: A landscape that features mosses.

Moss-some: Exceptional moss landscapes; exclamation of joy or admiration synonymous with awesome.

"I am a **mosser** who goes **mossin'** on a daily basis. My greatest pleasure is to create **moss-scapes** that are **moss-some**."

When I was writing my book, *The Magical World of Moss Gardening*, I used the reference – "Mossy Smile." The publisher discouraged this usage. In my mind, it meant a beaming face with a big smile because the person's spirit was happy over mosses. Well, "mossy smile" means grungy, green teeth in several cultures. So I resisted using this term to avoid any negative connotation.

The Urban Dictionary offers quite a few interpretations of the word "moss" used in recent years. **Mainly, moss means to chill out or relax.** However, there are other very different meanings, including several references for un-sportsman-like behavior. I've cited a few "new" meanings for moss and related moss words. Some uses of the word "moss" were not fit for polite company and therefore are not mentioned. To review all comments, visit: Urban Dictionary <<http://www.urbandictionary.com/>>.

When someone is funny in an awkward and charming way.

"That boy was so **Moss** when he tripped in front of the girl he likes and blushed to make her laugh."

Describes one's hair.

"Dennis Eckersly had some serious moss in the 80's."

Someone who is a know it all, but when challenged on a topic they profess to be a genius about, they can't front up – just like moss they have no depth / roots

"He's moss."

moss ayre: Arabic familiar expression used by friends to greet each other

Mossbird: Looking at things from a higher perspective. Eating the seeds of knowledge and using it to accomplish goals.

"Just look at it from a Mossbird's perspective."

To jump up and catch a football over a defender.

"He jumped up and mossed him to score the touchdown."

Originally used in football, it is now being used to indicate that you have destroyed someone in a verbal, or physical manner. Bad-sportsmanship-like behavior.

The act of puking, usually associated with the flu or heavy drinking.

"Dude, that guy just mossed all over the place"

A super secret slang word for marijuana. Getting mossed equates to getting high.

"Hey man... you got any moss over there?"

Translations to other languages can introduce confusion. Masaki Shimamura, Bryonet 6 April 2016, tells us that "in eastern Asia, the notations of Chinese character corresponding to liverworts and mosses vary depending on the region. In Japan, '苔' means 'bryophytes' (without distinctly differentiating mosses and liverworts) as informal term. In the academic field, '苔' means 'liverworts' and '蘚' means 'mosses,' '角苔' means 'hornworts.' However, in Taiwan that is completely the opposite to Japanese usage. In Taiwan, '苔' means 'mosses' and '蘚' means 'liverworts.' Maybe, the usage in Taiwan is correct with respect to the original meaning of Chinese characters (The researchers of Taiwan strongly insisted so). Although the detailed reason is not known, in the process of establishing the modern Botany in Japan, Japanese old botanists may have mistook the original meaning of the Chinese character. If this

opinion is right, as far as I know, the usage originated from the misunderstanding of Japanese also has been spread widely in Mainland China."

Zhang Li, Bryonet 7 April 2016, contributed this on the Chinese characters: "The confirmed earliest Chinese character relevant to bryophytes is 落 (liverworts, pronounced tai, equivalent to 苔 later) which occurred in a poem written by Ms Ban Jueyu (born 48 BC, died 2 AD) who is the Hancheng Empire's princess. Originally, 落 indicates all small plants in moist and shady habitats. Most of them are bryophytes of course. I don't believe the ancient people can differ liverworts from mosses correctly, including lichens and small ferns.

Interestingly, the term 苔 (liverworts) is quite popular in ancient poems from the Tang Dynasty (618-907 AD) and afterwards. Dr PAN Fujun, a colleague in Taiwan, investigated the plants occurring in poems written in the Tang Dynasty. There are totally 398 plant species mentioned in 53,000 pieces of poems, and the top five plants are willow, bamboo, pine, lotus and peach, and 苔 (liverworts) ranks the sixth, occurring in 1,248 pieces of poems.

Ann Gordon, Bryonet 6 April 2016, Contributed this personal story. "When our first grandchild was about to be born, my daughter asked me what I wanted to be called for my 'grandmother' name. I said that the first grandchild might pick the best, but if they needed a 'choice' from me, I would pick MOSSY, because learning about and experiencing mosses is such a passion of mine."

"Things went along fine until...! my older son, who lives in China, suggested I doublecheck The Urban Dictionary for current 'meanings' before I really got comfortable with Mossy as my name. So I did, and to my dismay, I discovered that 'mossy' and therefore moss, was being given a really bad rap!!! I think at that time there were 6 definitions for mossy and EACH was derogatory to the -nth degree in MY book! I was furious! I either had to give in to cultural norms, give up my name, and let moss have a bad rap, OR submit my OWN definition! So I DID. And they accepted it. It has now moved to #1 definition. Here it is as I submitted it:

(Check out Urban Dictionary under 'mossy' and see some terrible definitions. Thumbs up votes for my definition will help us keep moss in the realm of meanings it deserves!"

mossy: n.

1. a person of great integrity; resilience, sustainability; true blue, forever, dependable.
2. a bearer of enthusiasm, delight; a supporter of new life on the earth.
3. in ancient times, it has been said to be used as a name for a loving grandmother, always there to support the earth's little ones.

adj.: like, similar to the moss of the earth, resilient, bringing forth new seeds of life, able to survive even when other living forms can't.

n. She was called Mossy, the one who delighted in all the young offspring. Mossy nurtured their bodies, their souls, and their dreams in a way that only a good grandmother could do!

adj. The mossy bank was always there. It held the moisture from the air even when all else was drying and dying off from the drought. Seeds blew to the mossy beds to grow their roots and start new life.

Literature and Bryophyte Names

Literature often plays a role in the naming of organisms. Sometimes it is because the organism reminds someone of a character or story. Sometimes the story dictates the behavior of the author. Such was the naming of *Buxbaumia* (Figure 25) (Crum 1973). Johann Christian Buxbaum discovered the genus in 1712 and described it in 1728. He chose to name it after his father, but he recalled the story of the fox who was derided for asking for grapes, not for himself, of course, but for his sick mother. The modest Buxbaum left the moss unnamed. It was 1744 when Haller finally named the moss *Buxbaumia*.



Figure 25. *Buxbaumia aphylla*, named for its discoverer Johann Christian Buxbaum. Photo by Štěpán Koval, with permission.

The Greek term for bryophytes is *Bruon*, but its meaning in the time of Aristotle is much wider than that (Scott 1987). Furthermore, this term does not seem to appear in the botanical literature of that period. It was not until about the first century B.C. that the Latin term *Muscus* was introduced into general use, particularly by poets.

Summary

Bryophytes have been mentioned in literature to create imagery. Often they are used to create images of passing time, death, or other indications of aging. In some cases they are used to create an image of serenity. They sometimes appears in titles when they have no part in the actual story.

In older literature, and in common usage today, the word moss has multiple meanings. It is commonly used to mean any small plant. And in the vernacular, it has been used to create mental images in rather creative ways.

The Bible seems to overlook them, with only a few references that use the word hyssop, which has multiple interpretations.

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