

The Writings of Eloise Butler



Ferns in the Wild Garden - 1919

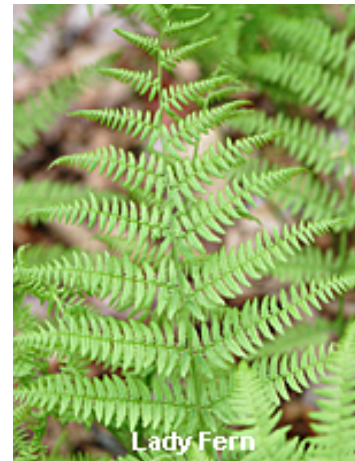
Minnesota is not as rich as Vermont in ferns. How I envy Vermonters! Our university lists in its Fern Guide but thirty-eight species; but Warren Upham in his catalogue of Minnesota Flora printed in 1884 gives authority for these additional species: *Asplenium platyneuron*, *Phegopteris Robertiana*, *Aspidium* (*Dryopteris*) *noveboracense*, *Aspidium bootii*, *Aspidium marginale*, *Aspidium acrostichoides* [Note - this is an unresolved name], *Aspidium lonchitis*, *Polystichum braunii*, *Cystopteris montana*, *Woodsia glabella*, *Woodsia oregana*, *Dicksonia punctilobula*, *Botrychium ternatum*. I have introduced all of the above except *Phegopteris Robertiana*, *Cystopteris montana*, *Woodsia glabella*; and all listed in the University Fern Guide except *Botrychium simplex*, *B. lunaria*, *Cheilanthes feei*, *Woodsia oregana*.



Cinnamon Fern



Interrupted Fern



Lady Fern

Ten ferns are indigenous to my garden: *Osmunda claytonia* which is one of the spectacular features of the place, clothing, as it does, an entire hillside with its tall fronds; *Asplenium filix-femina* forming large masses near the boulder bird bath and scattered throughout the garden; *Adiantum pedatum* gracing the foot paths and reaching unusual size in clumps in the tamarack swamp, where is also found in luxuriant growth *Osmunda cinnamomea*, and fine specimens of the evergreen *Aspidium spinulosum* and *A. cristatum*; the treeless portion of the swamp is carpeted with *Aspidium thelypteris*, and the meadow



Maidenhair Fern



Spinulose Wood Fern



Lady Fern



below the hillside of Clayton's fern is crowded with *Onoclea sensibilis*; while *Botrychium virginianum* dots the entire region just above the marsh line. Of the ten natives, *Pteris aquilina* is the least abundant, but it is rapidly increasing on the sides of the knoll on which my office stands.

In my recently planted Fern Gulch, maidenhair, lady fern and *Aspidium spinulosum* are self-established. It was my aim to make a plantation in

this gully of all the ferns native to Minnesota that were not indigenous in the garden and that could be induced to grow under the prevailing conditions of light and moisture. I see that I have omitted from my list of ferns in the Gulch *Polypodium vulgare*. This was obtained from the vicinity of Minneapolis and naturalized in the Garden. I have also introduced to the garden a few specimens of *Aspidium fragrans*, but I fear that they will die out.

With the exception of a few roots of *Aspidium cristatum* and *Aspidium thelypteris* transferred from the swamp, and specimens of *Camptosorus rhizophyllus*, *Cystopteris fragilis* and *C. bulbosa* that were naturalized in the garden, the plants were all obtained from Gillett's Nursery, Southwick Mass, viz: *Aspidium filix-mas*, *A. noveboracense*, *A. spinulosum* var *dilatatum*, *A. cristatum* var. *Clintonianum*, *A. goldianum*, *A. marginale*, *Polystichum acrostichoides*, *P. braunii*, *Pellaea atropurpurea*, *Asplenium platyneuron*, *A. trichomanes*, *A. angustifolium*, *A. (Athyrrium) acrostichoides (thelypteroides)*, *Dicksonia punctilobula*, *Woodsia ilvensis*, *W. scopulina*, *W. obtusa*, *Phegopteris hexagonoptera*, *P. dryopteris*, *P. polypodioides*. All these have been naturalized with more or less success elsewhere in the garden. The plants from the nursery were fine specimens and I hope that they will winter well. Most of the small species were pot-grown.

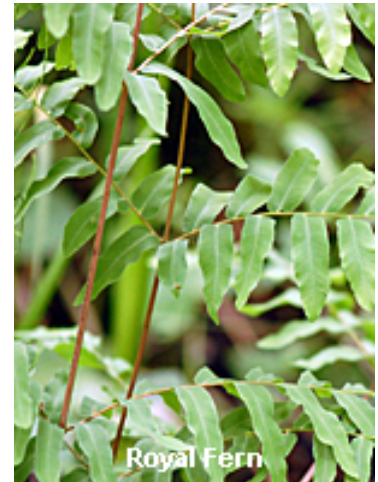


The ferns were set out with reference to size and conditions of light and moisture as well as drainage. I have also outside of the Gulch well established *Osmunda regalis* and large colonies of *Onoclea struthiopteris*. These I did not place in the Gulch because of their need of space and more moisture. I have besides a few highly cherished specimens of the dainty little cliff brake, *Cryptogramma stelleri*, and *Ophioglossum vulgatum*; and when I left the Garden last November a quantity of *Azolla caroliniana* and



Salvinia natans, planted during the summer, were bravely green on the surface of my little pond.

Of fern allies I have *Equisetum arvense*, *E. hyemale*, *E. scirpoides*, *E. sylvaticum*. One lone indigenous specimen of *Lycopodium lucidulum* has been noted in my swamp and I have introduced from time to time, with ill success, *L. complanatum*, *L. clavatum*, and *L. obscurum* var. *dendroideum*, also *Selaginella rupestris*. I will faithfully record in the Bulletin next fall the haps and mishaps of my new fern plantation.



NOTES:

1. The reference to the "Bulletin" indicates Eloise forwarded her paper to the Gray Memorial Botanical Chapter, division D, of the Agassiz Association for publication in the Groups circular bulletin. Eloise was a member of Division D (the middle west) from 1908 until her death. Those bulletins were circulated among members by postal round-robin circulation. The Agassiz Association was founded in the late 1800's to be an association of local chapters that would combine the like interests of individuals and organizations in the study of nature but after 1901 was largely defunct and only the Gray Memorial Botanical Chapter, with its several divisions, was still active and remained so until 1943.

In 1915 Eloise wrote an earlier article on ferns, which was also sent to the Chapter for circulation.

2. Fern names: Since Eloise Butler's day the botanical classification of a number of these ferns has changed. The list below details: 1) the name Eloise used, 2) a new name if there is one, 3) the common name, 4) dates she brought in the species to the Garden. 5) Indigenous species are noted, those possibly indigenous are marked with a "P".

- *Adiantum pedatum*; no new name; Maidenhair Fern; Indigenous, 1916, '17.
- *Aspidium bootii*, *Dryopteris X bootii*; Bootts Wood Fern; 1913, '16.
- *Aspidium cristatum*; *Dryopteris cristata*; Crested Woodfern. Indigenous.
- *Aspidium cristatum* var. *Clintonianum*; *Dryopteris clintoniana*; Clinton Fern; 1916, '18. P
- *Aspidium filix-mas*; *Dryopteris filix-mas*; Male Fern; 1918.
- *Aspidium goldianum*, *Dryopteris goldiana*; Goldie's Fern; 1916, '18.
- *Aspidium lonchitis*; *Polystichum lonchitis*; Northern Holly Fern; 1918.
- *Aspidium marginale*; *Dryopteris marginalis*; Marginal Wood Fern; 1908, '09, '18.
- *Aspidium noveboracense*; *Thelypteris noveboracensis*; New York Fern; 1909, '18. P
- *Aspidium spinulosum*; *Dryopteris carthusiana*; Spinulose Wood Fern; Indigenous, 1911, '18.
- *Aspidium thelypteris*; *Thelypteris palustris*; Marsh Shield Fern; date not certain.
- *Asplenium filix-femina*; *Athyrium filix-femina*; Lady Fern; Indigenous.
- *Asplenium platyneuron*; no new name; Ebony Spleenwort; 1909, '13, '14, '18. P
- *Athyrium acrostichoides*; *Deparia acrostichoides*; Silvery False Spleenwort; 1909, '11, '18
- *Botrychium ternatum*; *Botrychium rugulosum*; Ternate Grapefern; 1909, '16. P
- *Botrychium virginianum*; no new name; Virginia Grape Fern; Indigenous. P
- *Camptosorus rhizophyllus*; *Asplenium rhizophyllum*; Walking Fern; 1908, '12, '17, '18. P

- *Cryptogramma stelleri*; no new name; Slender Cliff Brake Fern; 1909, '13.
- *Cystopteris bulbosa*; *Cystopteris bulbifera*; Bublet Bladder Fern; 1908, '09, '12, '14, '17, '18, '19. P
- *Cystopteris fragilis*; no new name; Brittle Bladder Fern; 1910, '11, '13, '18, '19.
- *Cystopteris montana*; no new name; Mountain Bladder Fern; never planted pre 1920.
- *Dicksonia punctilobula*; *Dennstaedtia punctilobula*; Hay-scented Fern; 1909, '16, '18. P
- *Onoclea sensibilis*; no new name; Sensitive Fern; Indigenous, 1918.
- *Onoclea struthiopteris*; *Matteuccia struthiopteris*; Ostrich Fern; 1907, '08, '10, '14.
- *Osmunda cinnamomea*; no new name; Cinnamon Fern; Indigenous.
- *Osmunda claytonia*; *Osmunda claytoniana*; Interrupted Fern; Indigenous.
- *Osmunda regalis*; no name change; Royal Fern; 1907, '08, '09, '15, '20.
- *Phegopteris dryopteris*; *Gymnocarpium dryopteris*; Western Oakfern; 1908, '09, '12, '13, '16, '18. P
- *Phegopteris hexagonoptera*; no name change; Beech Fern; 1912, '18, '19. P
- *Phegopteris polypodioides*; *Phegopteris connectilis*; Long Beech Fern; 1908, '09, '16, '18. P
- *Phegopteris Robertiana*; *Gymnocarpium robertianum*; Scented Oak Fern, never planted pre 1920.
- *Polypodium vulgare*; *Polypodium virginianum*; Common Polypody; 1908, '12, '13, '17, '18. P
- *Polystichum acrostichoides*; no name change; Christmas Fern; 1908, '09, '11, '16.
- *Polystichum braunii*; no name change; Braun's Holly Fern; 1909, '16. P
- *Pteris aquilina*; *Pteridium aquilinum*; Western Bracken Fern; P.
- *Woodsia glabella*; no name change; Smooth Woodsia; never planted pre 1920.
- *Woodsia ilvensis*; no name change; Rusty Woodsia; 1908, '12, '14, '16, '18, '19. P
- *Woodsia obtusa*; no name change; Blunt-lobe Cliff Fern; 1909, '12, '15, '18, '20. P
- *Woodsia oregana*; no name change; Oregon Cliff Fern; never planted pre 1920
- *Woodsia scopulina*; no name change; Rocky Mountain Woodsia; 1914, '18. P

Fern relatives:

- *Azolla caroliniana*; no name change; Carolina Mosquitofern; 1918, '19, '20.
- *Equisetum arvense*; no name change; Field Horsetail; considered indigenous.
- *Equisetum hyemale*; no name change; Scouring Rush Horsetail; considered indigenous.
- *Equisetum scirpoides*; no name change; Dwarf Scouring Rush; 1915.
- *Equisetum sylvaticum*; no name change; Woodland Horsetail; considered indigenous.
- *Lycopodium clavatum*; no name change; Running Clubmoss; 1916.
- *Lycopodium complanatum*; no name change; Ground Pine; 1916, '18.
- *Lycopodium lucidulum*; *Huperzia lucidula*; Shining Club Moss; Indigenous, 1916, '18, '19.
- *Lycopodium obscurum* var. *dendroideum*; *Lycopodium dendroideum*; Tree Groundpine; 1916.
- *Ophioglossum vulgatum*; no name change; Southern Adderstongue; 1912.
- *Salvinia natans*; no name change; Floating Watermoss; 1918, '19.
- *Selaginella rupestris*; no name change; Northern Selaginella; 1914.



The Wild Botanic Garden in Wirth Park, became the "Native Plant Reserve" and was then renamed the Eloise Butler Wild Flower Garden in 1929.

Photo of Eloise Butler, ca. 1920, at top of first page courtesy Minneapolis Public Library. The other photos are ©G D Bebeau