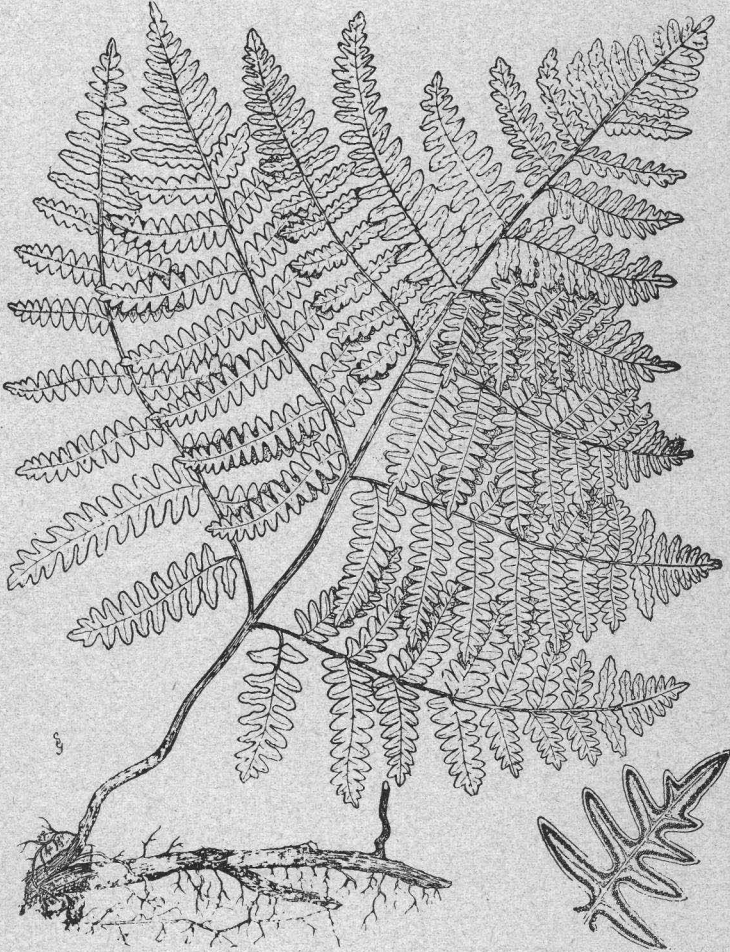


Fern

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FERN—*Pteridium aquilinum* var. *pubescens*—Showing leaf, nature of root growth and enlarged section of under side of leaf illustrating spore producing area.

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Fern

(*Pteridium aquilinum* var. *pubescens*)

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Illustrations by Cathrine Davis Young

Other names: Brake fern, Bracken, Western bracken, Hay brake, and Hog brake.

This weed is one of the most troublesome pests in the western part of the state, particularly in the Coast Range Mountains. It reproduces by creeping rootstocks and by spores borne in numerous, small, brown pustules on the undersides of the leaves. Pastures, meadows, and recently cleared fields are often full of fern. Cut-over and burned-over timberlands usually become almost solid fern patches if not seeded to adapted permanent grasses. This weed is well known and no other plants resemble it. Therefore, further description is omitted.

Livestock poisoning. Fern, either growing or dried, is poisonous to horses, sheep, and cattle. Work by the Veterinary Medicine Department of Oregon State College, and by Dr. Robert Jay, U. S. Department of Agriculture veterinarian stationed in Oregon, indicates that young cattle, unaccustomed to fern, may be poisoned, but that they usually develop immunity, and losses are rare among older cattle unless they come from nonfern-growing districts. Dr. Jay states that in the case of cattle, fern is not cumulative in its effect, but the reacting tissue is activated by the sun rays from 11:00 a. m. to 3:00 p. m., and that if owners would stable their cattle from say 9:00 a. m. to 5:00 p. m. fern could be fed without danger. With horses, however, approximately 6 pounds of cured fern fed daily are reported to have been fatal in 4 or 5 weeks.†

Poisoned animals lose control of the leg muscles, stand with legs spread apart, become constipated, but have no fever. The pupils of the eyes dilate, giving an unnatural staring appearance. Affected animals should be kept in the shade and fed plenty of clean hay, some warm bran mash, and carrots, if available. Sunlight aggravates the symptoms.

Control. If cultivation is possible, plow the land deeply, then harrow out, pile up, and burn the rootstocks. Cultivate often during the remainder of the season or use a row crop. In the latter case, the hoe must be used unsparingly. Oats and vetch cut early for hay, followed by summer fallow, is a good control method. Sodium chlorate is effective at the rate of 2 pounds per square rod, but it is too expensive except for small patches. (See Extension Bulletin 510.)

Fern is found mainly on uncultivated land so steep or rough, or so covered with logs, that cultivation is impossible. Such fern areas should be burned in the fall, seeded to good permanent grasses, and then pastured as soon as the grasses are established. Chewings fescue, tall fescue, creeping red fescue, highland bentgrass, orchard grass, and tall oatgrass are all adapted to western Oregon fernland. Annual grasses, such as Italian ryegrass, are of little value for fern control.

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† L. H. Pammel, Torch Press, Cedar Rapids, Iowa, "A Manual of Poisonous Plants."

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