

The Bracken Fern

BARBARA JOE

Bracken is perhaps the commonest fern in the world, and is especially plentiful in California from our sagebrush to forest land where sufficient moisture exists for its growth. Its bundance permitted settlers to use it for thatching roofs. Indians made tough ropes, textiles, and baskets from the rhizomes which were also valued as food for the high starch content. During the late 1600's Europeans were so destitute of wheat that bread was made from the rhizomes of this fern. In Siberia the rhizomes were mixed with malt to brew a certain kind of beer. Today young fiddleheads are still gathered as food by people in many parts of the world. The toxicity of bracken to livestock is well known and is partly explained by the presence of an enzyme, thiaminase. As the name indicates, the enzyme destroys thiamin, vitamin B₁. Horses severely afflicted with this nutritional deficiency were reportedly cured by injections of thiamin. Indications are that bracken may be rendered harmless to livestock by heating.

Some California Indians reportedly ate the young fronds raw. This may mean that man, at least the Miwok Indians, is not affected by the toxin or that young fiddleheads do not accumulate the toxin. Nevertheless most cultures prepare their dishes by cooking the fiddleheads. Among the Japanese, tender fiddleheads are boiled and served in soups or seasoned with sugar, soy sauce, and sesame seeds. Sometimes the latter ingredients are ground together to form a thick paste which is served as a side dish. The flavor of the fern itself is difficult to distinguish from the seasonings. It is generally described as tasting somewhat like bland asparagus. Western culture has devised several recipes of interest including one for creamed bracken.

Aside from its culinary interest, bracken is used as a garden ornamental. This may be deplored by those who have had to eradicate this fern as a troublesome weed. On the other hand some gardeners choose to have bracken rather than a variety of weeds. Perhaps the most common use of bracken is that of fillings in borders or neglected places where weeds would tend to grow. Areas between large shrubs are sometimes planted with bracken. The result is a mass display of pleasing textural contrast reminiscent of our forest areas. Smaller plants would most likely be crowded out by the bracken as it spreads by means of underground rhizomes. Plants usually reach 1 to 4 feet in height under cultivation, but are known to reach 9 feet in the wild.

The scientific name of bracken is *Pteridium aquilinum*. The genus *Pteridium* is generally considered to contain but this one variable species. The botanical description is: *Pteridium aquilinum* (L.) Kuhn, (*Pteris aquilinum* L.). Bracken or brake. Medium to large terrestrial ferns; rhizomes long creeping, branched, underground, hairy, slender; frond arising one at a time, 3 to 4 times pinnate, triangular to elongate, densely hairy, the texture firm to leathery, the veins free except for an inconspicuous marginal strand connecting the vein ends; sori linear, borne along the margin, frequently continuous around the tips of segments and sinuses; indusium obscure, being covered by a conspicuous false indusium, the reflexed leaf margin. (Fig. 2) Tropical and temperate areas of the world.

var. *pubescens* Underw. (var. *lanuginosum* (Bong.) Fernald). Western bracken. Growing tip of rhizome with tuft of dark hairs, the leaf surfaces between margin

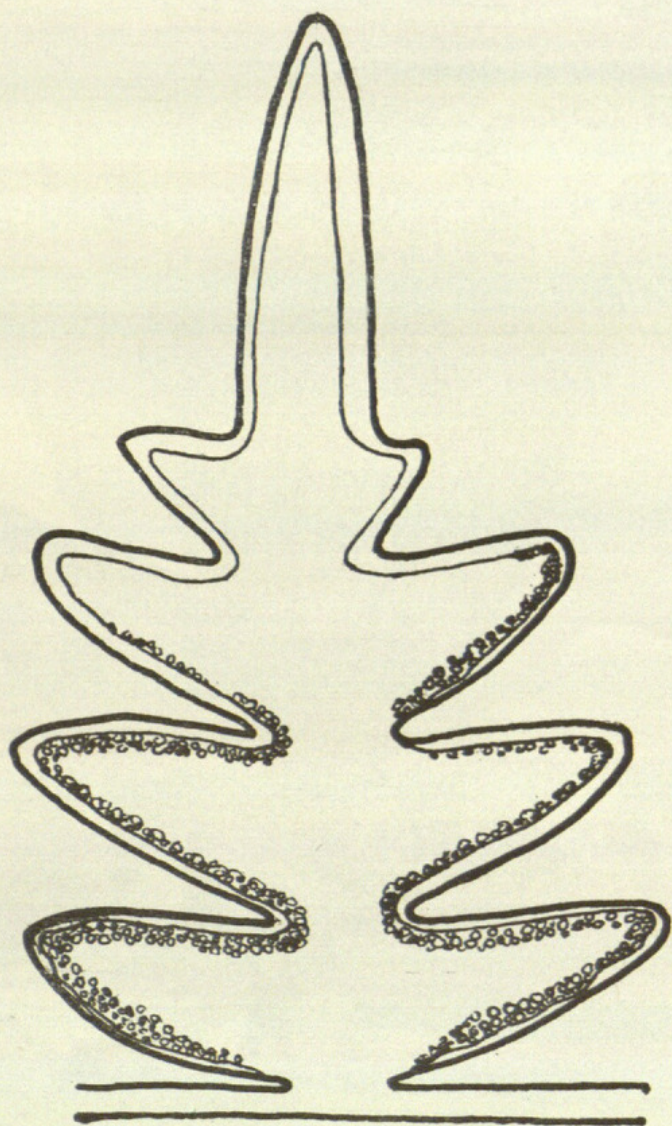
and midrib of segment hairy, the indusium ciliated. California to Alaska, scattered areas to Quebec.

var. *latiusculum* (Desv.) Underw. Eastern bracken. Growing tip of rhizome with whitish tuft of hairs, the leaf surfaces between margin and midrib of segment essentially glabrous, the indusium glabrous. Eastern Canada, Northeastern United States and scattered areas west.

var. *pseudocaudatum* (Clute) Heller. Growing tip of rhizome with tuft of dark hairs, the leaf surfaces between the margin and midrib of the segment essentially glabrous, the indusium glabrous. Eastern United States to Oklahoma and Texas.

Pteridium is difficult to transplant, being best done in spring with young plants. A robust rapid grower, it is considered a weed in some areas. A hardy evergreen at temperatures above 40°. It is otherwise deciduous and grows to 9 feet tall. It can be grown in sun or shade and light watering is needed.

Pteridium is distinguished from other bracken-like ferns by its linear sori. It may be possibly confused with the Australian brake, *Pteris tremula*, and *Histiopteris*, both differing from *Pteridium* by the absence of hairs throughout the plant.



Typical Indusium



Hoshizaki, Barbara Joe. 1963. "The Bracken fern." *Lasca leaves* 13(Autumn 1963), 88–89.

View This Item Online: <https://www.biodiversitylibrary.org/item/130954>

Permalink: <https://www.biodiversitylibrary.org/partpdf/139550>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Los Angeles Arboretum

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: The Arboretum Library at the Los Angeles County Arboretum and Botanic Garden

License: <http://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <https://www.biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.