



Oregon Sea Grant Extension  
Sustainable Tourism &  
Outdoor Recreation Program

# Interpretative Fact Sheet

## Western Sword Fern (*Polystichum munitum*)



The following short article is from the [Oregon Coast 101 Species](#) collection used by the Guide and Outfitter Recognized Professional (GORP) training program. These articles are intended to provide interesting facts you can share with your clientele and add value to your services.

An Interpretive Fact Sheet has been written about each species. We are currently uploading these blogs and creating the links.

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# Western Sword Fern (*Polystichum munitum*)

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 [tourism.oregonstate.edu/western-sword-fern-polystichum-munitum/](https://tourism.oregonstate.edu/western-sword-fern-polystichum-munitum/)

By colliex2

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Western Sword Ferns grow almost everywhere along the Pacific Coast. Indeed, they can be found from southeastern Alaska to southern California, across the U.S., and in several countries.



Western Sword Fern (royalty free Unsplash, by Danieli Cordiero)

These plants are easy to identify and have been around for a very long time. Fossil records of fern-like plants date back almost 400 million years ago. Ferns, and similar plants, were a dominant plant species until about 230 million years ago.

## Identification

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They are easy to identify. The dark green fronds are shaped somewhat like a sword (long and narrow) or dagger (when young). Fronds will grow up to nearly six feet long in the right environment with ample moisture.

The fronds grow in a clump around a rhizome (a root structure) typically in soil that is acidic, well-drained, and rich in humus. Fronds will live for up to two and a half years and remain attached to the rhizome even after withering.

## **Fronds**

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Each frond includes up to 100 small, dark green leaves. On the back side of the leaf, there are rows of small balls. These small balls contain 32 to 64 spores that are part of the reproduction system.

Spores are often distributed on the wind or disturbance that sets the spore floating. A spore contains only half of the chromosomes needed to create a new fern.

Once the spores touch ground, they develop both male and female sex organs, and sperm and eggs. The sperm fertilizes the egg, completing the needed chromosomes, and a new fern develops.

## **Medical**

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The spores have some interesting traditional medical uses. The Cowichan tribe used the sword fern to counteract a stinging nettle rash. Simply rub the spore side of the leaf against the infected area to take the pain away.

The leaves have been used to cure sore throats (the Swinomish tribe of Washington state), and chewed during childbirth (Lummi tribe of Washington).

## **Food**

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Several other Native American/First Nations people would roast, peel, and eat the rhizomes in time of food shortages.

## **Predators**

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Deer and rabbits will eat sword ferns, along with other rodents. The Washington Dept. of Wildlife has a handy table that provides a list of plants that are eaten by Mule, and Black-and White-tailed deer ([https://wdfw.wa.gov/sites/default/files/2019-03/living-with-deer-tables-1-2\\_0.pdf](https://wdfw.wa.gov/sites/default/files/2019-03/living-with-deer-tables-1-2_0.pdf)).

The new, succulent growth is easily damaged and difficult to detect. Deer damage can be more ragged looking. Rodent and rabbit damage appears to be more clipped. Elk and human damage may show up as crushed fronds or rhizomes.

Knowing what kind of animal is doing the damage will make it easier to develop deterrents. Not all critters will eat the plant but can crush it when walking through a clump or tear at the rhizome when trying to remove a leaf.

## Growing it

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Western Sword Ferns are easy to transplant and grow in your garden. They can provide wonderful texture, stabilize soil, protect soil moisture, and even grow in full sun with enough water.

They can be transplanted/divided in the early winter and spring very easily. The location and exposure will dictate techniques to use. In general:

- Add compost to the hole to give the plant a good start.
- Transplanting during hot and dry weather is not recommended, however it is possible if the fronds are dry and the plant has access to moisture. More shade, less protection needed.
- Make sure that the rhizomes peak out or are close to the soil surface or are just lightly covered (with compost) for sun protection.
- Keep the soil moist for the next year to develop the roots and help make the plant fairly drought resistant.
- Finally, if you purchase a Western Sword Fern make sure that it is a “*Polystichum munitum*” and not an imposter. Some imposters can become or are invasive plants.

## REFERENCES:

- Washington Dept. of Fish and Wildlife, Sword Ferns (as noted above).
- Wikipedium, western sword fern ([https://en.wikipedia.org/wiki/Polystichum\\_munitum](https://en.wikipedia.org/wiki/Polystichum_munitum))
- US Dept of Agriculture, Conservation Plant Data ([https://plants.usda.gov/growth\\_habits\\_def.html](https://plants.usda.gov/growth_habits_def.html))
- SF Gate, Interesting Facts About the Western Sword Fern (<https://homeguides.sfgate.com/interesting-western-sword-fern-70704.html>)
- Sword Fern Plant Care: How To Grow Sword Ferns (<https://www.gardeningknowhow.com/ornamental/foilage/sword-fern/sword-fern-care.htm>)