

WHAT IS HAPPENING TO THE SWORD FERNS?

In 2014 an ecologist from the University of Washington noticed something strange when walking though Seward Park- a hillside that was previously covered with waist-high sword ferns was entirely bare. All the ferns were dead. Since that time the die-off has spread rapidly, and now covers more than ten acres of the park

This 100 acre forest has never been logged. It is home to 500 year-old trees, nesting eagles, Douglas squirrels, Pileated woodpeckers, ravens, the occasional coyote and sword ferns that can each live up to 500 years.

Sword ferns colonize bare ground left after fire, glaciation, or logging. Once established, and once the forest canopy forms above them, they rarely reproduce. Typically, there are almost no new young ferns sprouting up in the midst of an old forest.

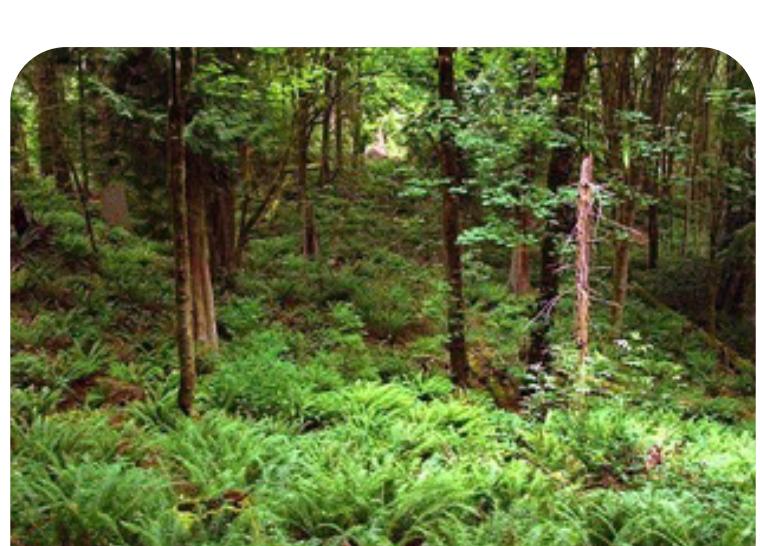
When you see ferns beneath big trees at Seward Park, the odds are good that each individual plant has been rooted at the spot for hundreds of years.



SWORD FERN
Polystichum munitum



JUNE 2011



MAY 2017

A natural cycle of the forest?

A result of Seattle's recent dry weather?

A disease or pest targeting the ferns?

A team of volunteer scientists- ecologists and plant biologists as well as citizen scientists- have come up with many hypotheses, but none have stood up to initial lab and field testing. The die-off remains a mystery.

The new bare regions, emptied of ferns, are not regenerating. No new plants, weeds or native species, have sprouted in the bare ground left by the dying ferns. So as the ferns die, the understory structure of the forest disappears, and the overall structure of the forest- its interwoven ecology - is compromised.



- To see the fern die-off for yourself, see interpretive signage on the Hatchery Trail.

Expert fern biologists attest that this pattern of die-off is unique: they have never seen anything like this before. It is plausible that the sword fern die-off at Seward Park, which we now are starting to see elsewhere, may be an early sign of a larger Pacific Northwest regional phenomenon.

To find out more about the Seward Park Fern Die-off and the efforts of the volunteer team to promote a research program to search for solutions, remedies and strategies for replanting and restoration, go to www.website.com