Re: HB 5006 (Oregon Flora) - SUPPORT

#### Dear Committee members:

I am a new resident of Oregon and a retired botanist/plant scientist, writing in strong support HB 5006.

As a resident of New York for 35 years, I served as editor of the Long Island Botanical Society newsletter and taught "Botany 101" to adult learners and horticulture students at the New York Botanical Garden. You might enjoy my TEDX talk entitled "A Cure for Plant Blindness."

But when I moved to Oregon in 2016, I found public interest in botany to be remarkably high. To compare: our native plant society in Eugene is more active and has more members than does the native plant society of Long Island (which has a population 8 million).

The *Flora of Oregon* is unique manifestation of Oregonian's interest in native plants. You have received testimonials from many of the Oregonians who have come to rely upon this resource in their work, landscaping and outdoor recreation. OregonFlora makes me an informed Oregonian proud to live and learn in a state that values its natural resources.

Simply stated, the work of OregonFlora sets a standard for excellence, thoroughness and accuracy, and is recognized by botanists and native plant enthusiasts throughout the United States. Oregon's flora is now shared in botanical libraries around the world!

Attached below is an illustrated copy of Dennis Peck's Oregonian front-page article (4/29/22) about the Oregon Flora project. It covers the history of this effort and the dedication of the current staff.

HB 5006 will provide funds to ensure that our Oregon Flora will be updated and maintained in our uncertain future.

Thank you for your consideration, and please remember to thank a green plant today. Sincerely,

Margaret Conover, Ph.D.

Eugene, OR 97405

# In a labor of love, Oregon Flora team creates an Oregon plant guide for the ages

## By Dennis Peck, for The Oregonian/OregonLive

This is a story about passion. And commitment. And family.

It's also a story about plants.

But, above all, it's a story about love.

It begins in the 1980s, when Eugene-raised botanist Scott Sundberg decided that someday, somehow, he would produce a flora (a very in-depth native plant compendium) for Oregon.

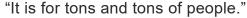
In 1994, he began making that dream a reality, taking a job and a pay cut at Oregon State, giving him access to the plant collections at both OSU and the University of Oregon because some things are more important than money. "Let me at it," he wrote in accepting the position.

But tragedy intervened, as it sometimes does in love stories. In 1999, Sundberg was diagnosed with multiple sclerosis and in 2004, at age 50, he died of lung cancer.

Which is where his widow, Linda Hardison, who started volunteering in 1999, enters the Oregon Flora Project picture in a big way.

Hardison, also a botanist, was not going to let 10 years of work simply go to waste — "I wanted to make sure it got done," she said — so she took over as the project's director and has been at the helm the past 18 years.

"This is a labor of love, it really is," she said, and not just for her. Not even close.





- Photographs of plants in the wild capture important habitat information as well as imagery of the featured species. Here, Amadeo Ramos, Jr, an Oregon Flora staff member, photographs calypso orchid (Calypso bulbosa) in McDonald Forest near Corvallis. Samantha Anne Maggio, courtesy of Oregon Flora

A little background on what Oregon Flora (the name was changed in 2016) entails.

With a grand total of seven paid part-time employees (Hardison included), a passionate, knowledgeable network of volunteers and contractors, huge assists from Oregon State, the university's herbarium and the Native Plant Society of Oregon as well as a variety of grants, the Oregon Flora has produced two Flora of Oregon print volumes totaling more than 1,400 pages combined (the third and final volume goes to the publisher in early 2023). It also manages a website with much of the same information in a more accessible format, and created a wildflowers app.

The Flora of Oregon volumes are a botanist's delight (one called it "phenomenal"), but they also include information for casual plant lovers and home gardeners as well, such as chapters on the 50 botanical hot spots (Volume 1) and gardening with native plants (Volume 2).

The two volumes include thousands of photos, and the online database version includes more than 4,700 plant species.

When perusing the website (<u>OregonFlora.org</u>), it's easy to dig deep on any native Oregon plant species, from acoraceae to zygophyllaceae. Or, if you'd prefer, you can dive into information on Oregon grape or milkweed.

And it's hard to believe, that for a brief stretch, the entire Oregon Flora Project ground to a halt.



Linda Hardison, pictured, OregonFlora's director, leads the effort from Oregon State University in Corvallis.Mark Graves/The Oregonian

Hardison said the operation is "basically self-funded," which she admits can be challenging but can make the group more cohesive as well.

And when the economy went bad in early 2008, she said, "all funding from grants and donations dried up."

Which is when Rob Soreng stepped in. Soreng, himself a plant taxonomist (a scientist who studies and classifies plants, much like the work done by the flora project), asked Hardison what her annual budget was and wrote the Oregon Flora Project a proposal to keep it solvent, covering its operating budget of \$103,000.

And then the John and Betty Soreng Environmental Fund of the Oregon Community Foundation (John and Betty are Rob Soreng's parents) became the major

donor for the next 11 years, although by the time the donations ended, they covered closer to 40% of what has become a \$280,000 budget.

"He knew he was doing something really meaningful for society," Hardison explained.

It's a sentiment that runs through everything the Oregon Flora has produced.

"Plants are a part of everybody's lives," Hardison said. "We're all breathing, right?"

She believes that knowing a lot about plants where one lives "ties you to humanity, the planet. We're all interdependent."

It was with that always in mind that the flora volumes and the database were — and are being — produced.

Thea Jaster, the project's first hire in 2001 as a quality control specialist (echoing Sundberg, she also took a pay cut) brought in to create a database of specimens, echoes Hardison's beliefs.

"Plants are everywhere," Jaster said. "This inspires a deeper appreciation of nature." Jaster uses the research in her own garden as well.

"I use our Grow Natives web tool to select native plants to match the habitats in my yard. I also use the Flora to identify weeds. Even the most mundane weed can be beautiful."

And there are other, much more official, uses for the Flora as well.

Such as deciding land-use issues.

It was with that in mind that Joan Seevers, the now-retired state botanist for the Bureau of Land Management, awarded the first grant to the project in 2001. The two-year, \$175,000 grant was provided to document every unique plant species in every Oregon county. That information also formed the foundation dataset for the online product.

"I realized how helpful the new Oregon flora information would be for federal agencies to determine if sensitive species might exist in project areas," she said. "Having this information in one place made contacting multiple federal agencies unnecessary."

It's also used in determining whether to list or de-list plant species as endangered.

On yet another level, local nursery owners make use of the information as well.

"I'm such a big fan of the database," said Cistus Design Nursery's Sean Hogan. "I would never not have it in the field with me."

And Greg Shepherd of Xera Plants says the online site's search engine is "very easy to use" and the plant distribution maps showing where they have been found growing in the state are "incredibly helpful when identifying a species."

"We deeply appreciate the work of the many volunteers who put this together."

"Tons and tons" of volunteers, according to Hardison, without whom OregonFlora might never have published its work.

"In 2001," Jaster said, "I thought we'd lose funding before Volume 1 was completed.

"But we're a tight-knit family, every single one of us. Nobody quits. Nobody leaves."

"We're doing this because we care about it."



Kris Freitag, coordinator of the Citizens Rare Plant Watch (CRPW), prepares a plant specimen from a newly discovered population of a rare plant in the Western Cascades. CRPW is a citizen science program that was started by the Native Plant Society of Oregon and is now run by the Rae Selling Berry Seed Bank and Plant Conservation Program at Portland State University. Freitag's specimen will be pressed, dried, and preserved in a herbarium. Oregon Flora is a repository for information like this for plants across Oregon. Tanya Harvey, courtesy of Oregon Flora

There were the volunteers from the Native Plant Society of Oregon, which also gives thousands of dollars each year, on board from the beginning, surveying plants throughout the state.

Oregon State lent the project "credibility and authority," Hardison said, in addition to donating office space and access to the species in its herbarium.

OSU's Stella Coakley, the chair of the botany department when Sundberg proposed the flora project (he originally envisioned a single volume), helped connect him with the OSU Foundation to get donations. James Mickley, the curator of the OSU Herbarium since 2020, brought expertise in both computer programming and botany.

And contractors like Tanya Harvey, who has provided design, editing and artwork, have been instrumental in producing the volumes.

"This is the best group I've ever worked for," Harvey said. "This is what I should have been doing all along. We are a family."

There have been people from high school students to retirees who have contributed to Oregon Flora's work.

And botanists, of course. You can't produce a flora without botanists.

"There were botanists by profession and botanists by passion," Hardison said.

Some were from Oregon and the Northwest, others from different parts of the country, including Pat and Noel Holmgren, retired from the New York Botanical Garden and authors of the multi-volume Intermountain Flora.

"I feel such immense gratitude for all these people," Hardison said.

It's a feeling that's reciprocated.

"Linda embodies the heart of what we're doing," Jaster said.

Or, as the BLM's Steeves put it, "The Oregon Flora folks are an amazing group of dedicated people."

What's next for Oregon Flora and the tireless, dedicated group of closer-than-family people who have given decades to it?

For now, the answer is easy: Volume 3 still needs attention until it goes to the publisher early next year.

After that, it's not so clear.

"Nobody has been able to wrap their minds around what's next just yet," Jaster said.

Hardison, who said the project has "been my life" since 1999, has some ideas, such as guiding the use of native species in gardens, enhancing the prevalence of native plants in restoration projects, perhaps producing a one-volume field guide and, of course, keeping the information on the website up to date and available.

The follow-through on any and all of those ideas, like the existence of OregonFlora itself, depends on funding, what Hardison called "the most challenging, less-than-fun part of my job."

And the most-fun part?

Not surprisingly, the people.

"Our core team has been through all the milestones of life — birth, deaths, accidents, surgeries, moves, divorce, marriage," she said, "and we have supported one another through them all."

"Some part of me will always want to stay connected to it."

## Five searches to try at OregonFlora.org



- This photo of poison oak (Toxicodendron diversilobum) was made in May 2006 in Klickitat County and is archived as part of the OregonFlora effort.Gerald Carr, courtesy of OregonFlora

OregonFlora.org has a dizzying level of detail. Here are five searches that show just a hint of what you can find. Columbine: Search for "columbine" to stumble across the red columbine. The native flower's red blossoms can find a home in meadowscapes, rocky slopes or pollinator gardens.

<u>Ferns:</u> Just for fun, search for "fern" to see specimens ranging from Achillea filipendulina to Woodsia scopulina.

Orchids: Or search "orchids" and you'll stumble across the calypso orchid to learn more about the showy native flower.

<u>Oregon sunshine</u>: Everyone could use some Oregon sunshine, and searching for it on the Oregon Flora site

reveals it to be Eriophyllum lanatum, also called a woolly sunflower. The landing page also tells you it will grow up to 3-feet high and 2-feet wide and suggests natives to plant with it. Oh, and that it likes sun.

<u>Poison oak:</u> Make sure you can identify this member of the Anacardiaceae family known for making hikers miserable. A map shows you that it's found pretty much everywhere in western Oregon and a selection of poison oak photographs can prove helpful if you're wondering if a plant is safe to handle.

## **GLOSSARY**

**Flora:** A list of the plant life of a particular region.

**Dicots:** One of two divisions of flowering plants (monocots is the other). This grouping includes maple trees, roses, daisies and grapevines among its 200,000 (worldwide) varieties.

**Monocots:** Grass and grasslike flowering plants, such as orchids, grasses, sedges, rice, wheat.

Bulbs such as lilies, daffodils and irises are monocots, too.

**Pteridophytes:** They produce neither seed nor flowers, instead spreading through the dissemination of spores. Ferns and horsetail are pteridophytes.

**Gymnosperms:** Seeds appear on the surface of the plant, and there are no flowers. Examples are cycads, conifers and gingkos.

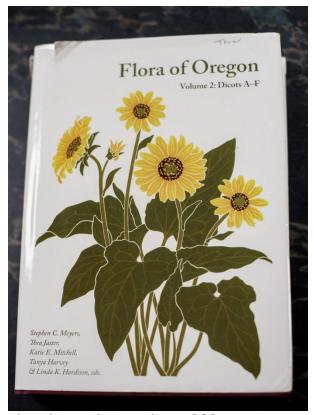
**Taxa:** Plural of taxon, which refers to the level of hierarchy in the classification of living things.

Aizoaceae: A large family of flowering dicots, made up primarily of succulents.

**Fagaceae:** This flowering family of dicots includes beeches and oaks.

Herbarium: A collection of preserved plant specimens and data used for scientific study.

## **FLORA OF OREGON**



With a small staff and a large network of volunteers, OregonFlora has created a repository of information about plants across Oregon. The project manages oregonflora.org and a wildflowers app, has produced two Flora of Oregon print volumes and is finalizing production on a third volume. Linda Hardison, OregonFlora's director, leads the effort from Oregon State University in Corvallis.Mark Graves/The Oregonian

**Volume 1:** Pteridophytes, Gymnosperms and Monocots. Ferns, conifers, grasses, and lilies are among the 1,054 taxa of native and naturalized plants. Published in September of 2015. Includes illustrations of 521 species, 50 of the best places to see wildflowers and biographical sketches of Oregon botanists. 608 pages.

**Volume 2:** Dicots Aizoaceae-Fagaceae. Groups among the 1,668 taxa covered include the mustard family, stonecrops and legumes. Published in October of 2020. Front chapters cover gardening with native plants and

plant-insect interactions. 880 pages.

**Volume 3:** Expected to be sent to the publisher in early 2023.

**Online:** The Oregon Flora Project has an easy-to-use tool linking to thousands of native plants. It can be found at <u>OregonFlora.org</u>.

#### WHERE TO BUY

Books are available at the OregonFlora website (<a href="https://oregonflora.org/pages/store.php">https://oregonflora.org/pages/store.php</a>). Books are \$75 (Volume 1) and \$85 (Volume 2) plus about \$6 shipping and handling. They also can be found on Amazon at various prices.

### **OREGON WILDFLOWERS APP**

This app combines OregonFlora's research into a mobile app covering more than 1,000 wildflowers. The app does not need an internet connection to run. It can be purchased on the OregonFlora website as well as at the Apple App Store and Google-play and costs \$9.99.

## **NATIVE PLANT SOCIETY OF OREGON**

**What:** Founded in 1961, it's an all-volunteer nonprofit organization of 1,000 and has been involved with supporting the Oregon Flora Project since its beginning.

Website: <a href="mailto:npsoregon.org">npsoregon.org</a>
OREGONFLORA TALK

When: 6 p.m. Thursday, May 12

**Topic:** What Grows Here? Exploring Oregon's Plant Diversity

What: Join botanist and Oregon Flora Project director Linda Hardison to discover the why and

where of plant diversity in Oregon.

Where: Museum of Natural and Cultural History, 1685 E. 15th Ave., Eugene

**Registration:** Opens to the public on Wednesday, May 4.

**CORRECTION:** This post has been updated to correct the number of paid employees working for

OregonFlora.

— Dennis	Peck,	for T	he	Oregonian	/OregonL	.ive