

Kathleen Sayce
P O Box 91
Nahcotta, WA 98637
360-665-5292
ksayce@willapabay.org

EDUCATION:

Graduate studies (Botany) Arizona State University, Tempe AZ, 1979-1980.

Master of Science (Botany) Washington State University, Pullman WA, 1978.

Bachelor of Science (Biology) Fairhaven College at Western Washington University, Bellingham WA. 1975.

WORK:

1987– current, principal, Shoalwater Botanical, doing ecological services, including wetland delineations, species assessments, habitat assessments and ecological surveys.

1998 – 2010: Assistant Vice President, Science Officer, ShoreBank Pacific, Ilwaco Washington. Major focus: develop mission assessment process, using The Natural Step as the basis, applied to business clients. Worked with clients to improve process, operate businesses more efficiently. Other tasks: public speaking, writing for bank. Consulting work: Wetland delineations, mitigation plans, mitigation monitoring, ecological assessments, more than 50 clients in 10 years.

1996 -1998 – Science Director, Willapa Alliance, South Bend WA. Produced Willapa Indicators for Sustainable Community, chaired Willapa Science Group and organized annual local science conference, maintained biotic inventory, and developed science related programs for the Alliance, including library, GIS, and monitoring programs.

1995-6 – Wetland Educators Institute, Seaside, OR. Botanical instructor for week-long program; trained teachers in wetlands science methods and to focus on goals instead of curriculum in developing programs. Funded by USFWS; organizer, Neal Maine, North Coast Land Conservancy, Seaside, Oregon.

1996-1997 – Instructor, Clatsop Community College. Taught stewardship class, continuing education.

1993 - 1995 – Project Coordinator, Willapa Watershed Volunteers, WSU Cooperative Extension stewardship group. Pacific County, WA. Responsibilities: Scheduled, coordinated and taught classes, organized ongoing field trips and coordinated volunteer activities.

1993-1995 – Toxic phytoplankton monitoring, Washington Department of Health, Shellfish Program. Multiple sampling sites on Willapa Bay and ocean beaches. Funding US FDA.

1992-93 – Fellowship, Ecotrust, Portland, OR. Phytoplankton of Willapa Bay. Organized network of samplers for Willapa Bay and Columbia River, ongoing maintenance of database was part time in 1994-5, partially supported by Washington Department of Health during 1993-1995 to continue data set. Determined that bloom origination for several dinoflagellate and diatom species was not in nearshore coastal environments, which led eventually to the discovery of offshore origination in gyres around Cobb Seamount by NOAA team.

1990-1992 – Ecological field work, including flight period surveys for Oregon silverspot butterfly on Long Beach Peninsula; sites covering six miles of old coastal dune prairie; Washington Department of Fisheries and Wildlife. As part of this work, 12 acres of prairie was acquired for habitat restoration.

- 1991-1996 – Contractor, mitigation plan for Airport Improvement Project, City of Westport, WA. Worked with Lou Messmer, designed and implemented mitigation plan for the city's airstrip expansion program.
- 1988-92 – Library Associate, Timberland Regional Library. Managed Ilwaco and Ocean Park branches of TRL system. Supervised five staff and twelve volunteers, represented library to Ilwaco city library advisory board and Peninsula Friends of Library board.
- 1987-88 – Contractor, Willapa National Wildlife Refuge, Ilwaco WA. Ecological study of smooth cordgrass, *Spartina alterniflora* in Willapa Bay. Digital copy of report available on Friends of Willapa NWR website. This was the first paper on impacts of spartina on estuaries in the Pacific Northwest.
- 1975 – Field worker, USFWS, Willapa National Wildlife Refuge, Ilwaco, WA. Timber-cruised Long Island stands, timberland-for-land-and-private-timberland trade between USFWS and Weyerhaeuser Co. Long Island was eventually purchased by USFWS; the western red cedar grove that triggered the original logging controversy in 1972, and which drove this acquisition, remains the largest lowland/coastal old-growth cedar stand in the Pacific Northwest.

COMMUNITY PARTICIPATION:

- 2014 – Ongoing: President, Filipendula Chapter of Native Plant Society of Oregon, on the north coast of Oregon and south coast of Washington, including Pacific, Clatsop and Tillamook Counties.
- 2012 – Ongoing: President of Board, South Pacific County Community Foundation. Mission: To improve the quality of life in south Pacific County.
- 2002 – 2014: Board member, Confluence Project. Member for south Pacific County. Built 5 public art installations by 2010, designed by Maya Lin, as part of the bicentennial activities for the Lewis & Clark Expedition. Locations are along the Snake and Columbia Rivers. Local site is at Cape Disappointment.
- 2001 – 2004 Board member, Lower Columbia River Estuary Partnership. Financial sector member; LCREP works to unify both states and local communities to improve water and habitat quality along the Columbia River west of Bonneville Dam.
- 1984-ongoing: Volunteer, Willapa National Wildlife Refuge.
- 1990-ongoing: volunteer weed identification for WSU-Long Beach Coastal Research Station, Long Beach, WA.
- 1987-ongoing: Vascular plants of Columbia Coast, site lists and background information posted at:
<http://users.reachone.com/columbiacoastplants/>

PUBLICATIONS & WEB POSTINGS (Partial List):

- 2015 Sayce, Kathleen and Roche, Cindy. Plant of the year: Sea Bluff Bluegrass (*Poa unilateralis*), in *Kalmiopsis* 21, pp 32-38.
- 2012 – current, Natural History Column, Chinook Observer, Long Beach WA, and reposted on blog, Columbia Coast Natural History.
- 2010 Sayce, Kathleen. "Oregon Plants, Oregon Places: Botanizing in the Swala-lahos Floristic Area," *Kalmiopsis*, Vol 17, pp 17-28.
 "Legacy Bulbs," Pacific Bulb Society, <http://www.pacificbulbsociety.org/pbswiki/index.php/LegacyBulbs>
 Discusses bulbs that outlive their original gardeners in temperate to subtropical climates around the world.
- 2007 Brennan, Kirsten and Sayce, Kathleen. "Noteworthy Collections–Washington: *Abronia umbellata* at Leadbetter Point, Pacific County, Washington." *Madrono* Vol. , pp.

2005. Civile, J.C., Sayce, K., Smith, S.D. & Strong, D.R. "Reconstructing a century of *Spartina alterniflora* invasion with historical records and contemporary remote sensing." Ecoscience, Vol 12(3): 367-375.
2004. Sayce, Kathleen. "Columbia Coast Plants." URL: www.reachone.com/columbiacoastplants. Website was assembled by and is maintained by Bev Arnoldy; content is author's responsibility. Includes site lists for eight state and national parks, regional plant list, and essays on local plant habitats.
2002. Sayce, Kathleen. "The last straw." Beachcomber's Alert, Spring 2002. Edited by Curt Ebbesmeyer, Seattle, WA.
1998. Sayce, Kathleen, editor. Willapa Indicators for a Sustainable Community - 1998. Willapa Alliance, South Bend, WA.
1997. Sayce, Kathleen, Dumbauld, Brett, and Hidy, James. "Drift potential for *Spartina alterniflora* stems, spikes and leaves." Proceedings of second International Spartina Control Conference, March 1997, Olympia, WA.
1997. Sigleo, Anne & Sayce, Kathleen. Poster, "Nutrient Source Assessment for Willapa Bay, Washington." Annual Estuarine Research Society Conference, October 1997, Providence, Rhode Island.
1997. Text sections and slides on *Calamagrostis*, *Spartina alterniflora*, *S. anglica*, *S. patens* and *Phragmites communis* for Wetlands Plants of Western Washington, produced by Washington Native Plant Society, editor, Sarah Spear Cooke.
1996. "Local Science in Willapa Bay, Washington," a case study, in The Rain Forests of Home: Profile of a North American Bioregion. edited by Peter Schoonmaker, Bettina von Hagen and Edward C. Wolf. Island Press.
1996. Sigleo, Anne & Sayce, Kathleen. "Runoff, nutrient, and phytoplankton variations in Willapa Estuary, Washington." abstract for conference presentation, AGU ASLO 1996 Ocean Sciences Meeting, February 12-16, 1996, San Diego, California.
1996. Poster, "Dinoflagellate blooms in Willapa Bay, 1992-1996." World Aquaculture Conference, Seattle WA.
1996. Sayce, K. & Horner, R. "*Pseudo-nitzschia* spp. blooms in Willapa Bay, Washington, 1992-1993." International Symposium on Toxic Phytoplankton. Paper presented as poster session at conference in Japan, summer 1995 by Rita Horner, junior author.
1995. "Assessing the risks smooth cordgrass and its control pose to wildlife in Willapa Bay, Washington." Grue, Christian E, G.R. VanBlaricom, F. L. Pavaglio, K.M.Kilbride, J.A. Hidy, J.C. Civile and K. Sayce. Paper presented at Wildlife Society Annual Conference, 1995 by C. Grue.
1995. "Phytoplankton of Willapa Bay, Washington, 1992-1994." Fellowship report to Ecotrust, Portland, OR, the Willapa Alliance, South Bend, WA, and The Nature Conservancy, Seattle, WA. Details two years of weekly phytoplankton species surveys and general water conditions, historical survey of related research.
1993. "Burrowing shrimp Integrated Pest Management Plan" finalized in committee. Revised draft available for public distribution, 1994.
1993. Spartina Management Plan for Willapa Bay, Washington. Draft prepared for WDA, used as starting draft for Pacific County's SMP, 1994.
1993. "Surface and vertical tows to determine zooplankton volumes in Willapa Bay, Washington, from winter to summer solstices, 1993." Report prepared for Willapa Alliance, South Bend, WA. 7 pages plus graphs.

1991. "Survey and management of Oregon silverspot butterfly habitat on Long Beach Peninsula, Washington." Washington Dept. Wildlife, 5 pp.
1991. "Species displaced by *Spartina* in the Pacific Northwest." pp. 26-27, in Spartina Workshop Record, Eds. T. Mumford, P. Peyton & J. Sayce. Spartina Workshop, November 14-15, 1990, Seattle, WA. Washington Sea Grant Program, College of Ocean and Fishery Science, University of Washington, Seattle, WA. 73 pp.
1990. "Evaluation and proposed management of Oregon silverspot butterfly habitat on Long Beach Peninsula, Washington." Washington Dept. Wildlife, 22 pp.
1988. Introduced cordgrass, *Spartina alterniflora* Loisel., in salt marshes and tidelands of Willapa Bay, Washington. USFWS contract # FWSI-87058 (TS). July 1988, 70 pp. Digital copy is posted on Friends of Willapa NWR, website, www.willapabay.org/~fwnwr, in spartina section, spartina studies