

SARINA JEPSEN

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EMPLOYMENT

The Xerces Society , Director of Endangered Species and Aquatic Programs	<i>2016 – present</i>
Director of Endangered Species Program	<i>2009 – 2016</i>
Endangered Species Coordinator	<i>2007 – 2009</i>
Conservation Associate	<i>2006 – 2007</i>
California Academy of Sciences , Fellowship in Scientific Illustration, Summer Systematics Institute	<i>2005</i>
University of California, Davis , Research Assistant and Teaching Assistant	<i>2003 – 2006</i>
Chicago Botanic Garden , Research Assistant	<i>2002</i>

EDUCATION

University of California, Davis , M.S. in Entomology	<i>2005</i>
University of Oregon , post-baccalaureate coursework in Biology	<i>2000 – 2002</i>
The Colorado College , B.A. in Studio Art	<i>1999</i>

SERVICE

Member , WAFWA Western Monarch and Native Insect Pollinator Working Group	<i>2020–present</i>
Member , Washington Department of Fish and Wildlife Wildlife Diversity Advisory Committee	<i>2022–present</i>
Co-Lead , IUCN Wild Bee Specialist Group, Best Practices SubGroup	<i>2022–present</i>
Co-Chair , IUCN Bumblebee Specialist Group	<i>2013 – 2020</i>
Consultant , IUCN Firefly Specialist Group	<i>2018 – 2021</i>
Steering Committee Member , Keystone Monarch Collaborative	<i>2015 – 2016</i>
Member , American Fisheries Society's Endangered Mussel Committee	<i>2008 – 2012</i>
Chair , Pacific Northwest Native Freshwater Mussel Workgroup	<i>2007 – 2009</i>

PUBLICATIONS

- Dilts TE, SH Black, SM Hoyle, **S Jepsen**, EA May, ML Forster. 2023. Agricultural margins could enhance landscape connectivity for pollinating insects across the Central Valley of California, U.S.A., PLoS ONE 18(2): e0267263.
<https://doi.org/10.1371/journal.pone.0267263>
- Fallon CE, A Walker, S Lewis, and **S Jepsen**. 2022. State of the Fireflies of the United States and Canada: Distributions, Threats, and Conservation Recommendations. 64 pp. Portland, OR: The Xerces Society for Invertebrate Conservation.
<https://xerces.org/publications/scientific-reports/state-of-fireflies-of-united-states-and-canada>
- Lee-Mader E, S Frischie, E Pelton, **S Jepsen**, S McKnight, and SH Black. 2021. 100 Plants to Feed the Monarch. Storey Publishing, North Adams, MA.
- Fallon CE, AC Walker, S Lewis, J Cicero, L Faust, CM Heckscher, CX Perez-Hernandez, B Pfeiffer, **S Jepsen**. 2021. Evaluating firefly extinction risk: Initial red list assessments for North America. PLoS ONE 16(11): e0259379.
<https://doi.org/10.1371/journal.pone.0259379>
- Spiesman BJ, C Gratton, RG Hatfield, WH Hsu, **S Jepsen**, B McCornack, K Patel, and G Wang. 2021. Assessing the potential for deep learning and computer vision to identify bumble bee species from images. Sci. Rep. 11: 1–10.
- Hatfield RG, and **S Jepsen**. 2021. A conservation conundrum: protecting bumble bees under the California Endangered Species Act. California Fish and Wildlife Journal. 107: 98–106.
- Hatfield RG, JP Strange, JB Koch, **S Jepsen**, and I Stapleton. 2021. Neonicotinoid Pesticides Cause Mass Fatalities of Native Bumble Bees: A Case Study From Wilsonville, Oregon, United States. Environmental Entomology 50(5): 1095-1104.
<https://doi.org/10.1093/ee/nvab059>
- Lewis SM, CH Wong, ACS Owens, C Fallon, **S Jepsen**, A Thancharoen, C Wu, R De Cock, M Novak, T Lopez-Palafox, V Khoo, JM Reed. 2020. A global perspective of firefly extinction threats. Bioscience 70:2 157-167.
- Harvey JA, R Heinin, I Armbrrecht, Y Basset, JH Baxter-Gilbert, T Martijn Bezemer, M Bohm, R Bommarco, PAV Borges, P Cardoso, V Clausnitzer, T Cornelisse, EE Crone, M Dicke, KB Dijkstra, L Dyer, J Eilers, T Fartmann, ML Forster, MJ Furlong, A Garcia-Aguayo, J Gerlach, R Gols, D Goulson, J Habel, NM Haddad, CA Hallmann, S Henriques, ME Herberstein, A Hochkirch, AC

- Huges, **S Jepsen** *et al.* 2020. International scientists formulate a roadmap for insect conservation and recovery. *Nature Ecology & Evolution* 4: 174-176.
- Blevins E, **S Jepsen**, and S Selvaggio. 2020. Petition to list the western ridged mussel *Gonidea angulata* (Lea, 1838) as an Endangered Species under the U.S. Endangered Species Act. Portland, OR: The Xerces Society for Invertebrate Conservation. Available at: <https://xerces.org/publications/>
- Fallon C, S Hoyle, S Lewis, A Owens, and **S Jepsen**. 2019. Conserving the Jewels of the Night: Guidelines for Protecting Fireflies in the United States and Canada. Portland, OR: The Xerces Society for Invertebrate Conservation.
- Pelton EP, CB Schultz, **SJ Jepsen**, SH Black, EE Crone. 2019. Western monarch population plummets: Status, probable causes, and recommended conservation actions. *Frontiers in ecology and evolution*.
- Dilts, T, M Steele, JD Engler, EM Pelton, **SJ Jepsen**, S McKnight, AR Taylor, CE Fallon, SH Black, EE Cruz, DR Craver, ML Forister. 2019. Host plants and climate structure habitat associations of the western monarch butterfly. *Frontiers in Ecology and Evolution*. doi: 10.3389/fevo.2019.00188.
- McKnight S, C Fallon, E Pelton, R Hatfield, A Code, J Hopwood, **S Jepsen**, SH Black. 2018. Best Management Practices for Pollinators on Western Rangelands. 126+vii pp. Portland, OR: The Xerces Society for Invertebrate Conservation.
- Pelton EP, S McKnight, C Fallon, A Code, J Hopwood, S Hoyle, **S Jepsen**, SH Black. 2018. Managing for monarchs in the West: Best Management Practices for conserving the monarch butterfly and its habitat. 106+vi pp. Portland, OR: The Xerces Society.
- Wojick V, L Smith, W Carromero, LD Adams, S Davis, SJ DeBano, C Fallon, R Hatfield, SH Black, T Kaye, **S Jepsen**, S McKnight, L Morandin, E Pelton, P Rhoades, K Rourke, M Rowland, W Tinkham. 2018. New Research and BMPs in Natural Areas: A synthesis of the Pollinator Management Symposium from the 44th Natural Areas Conference. *Natural Areas Journal* 38(5): 334-346.
- Jepsen S**, E Pelton, SH Black, C Fallon, C Voight, and S Weiss. 2017. Protecting California's Butterfly Groves: Management Guidelines for Monarch Butterfly Overwintering Habitat. 36 pp. The Xerces Society.
- Blevins E, **S Jepsen**, J Brim Box, D Nez, J Howard, A Maine, C O'Brien. 2017. Extinction risk of western North American freshwater mussels: *Anodonta nuttalliana*, the *Anodonta oregonensis/kennerlyi* clade, *Gonidea angulata*, and *Margaritifera falcata*. *Freshwater Mollusk Biology and Conservation* 20(2), 71-88.
- Blevins, E, L McMullen, **S Jepsen**, M Blackburn, A Code, and SH Black. 2017. Conserving the Gems of Our Waters: Best Management Practices for protecting native freshwater mussels during aquatic and riparian restoration, construction, and land management projects and activities. 108 pp. Portland OR: The Xerces Society.
- Pelton E, **S Jepsen**, C Schultz, C Fallon, and SH Black. 2016. State of the Monarch Butterfly Overwintering Sites in California. 40+vi pp. Portland, OR: The Xerces Society for Invertebrate Conservation.
- Brown MJF, LV Dicks, RJ Paxton, KCR Baldock, AB Barron, M Chauzat, BM Freitas, D Goulson, **S Jepsen**, C Kremen, J Li, P Neumann, DE Pattemore, SG Potts, O Schweiger, CL Seymour, JC Stout. 2016. A horizon scan of future threats and opportunities for pollinators and pollination. *PeerJ*. <https://peerj.com/articles/2249.pdf>
- Spevak, E, **S Jepsen**, PH Williams. 2016. Bumblebee conservation worldwide within the IUCN framework. In *Pollination Services to Agriculture: Sustaining and enhancing a key ecosystem service*, edited by B. Gemmill-Herren. London: Routledge Press.
- Blevins E, **S Jepsen**, J Brim Box, and D Nez. 2016a. *Anodonta nuttalliana*. The IUCN Red List of Threatened Species 2016: e.T91149898A91149903. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T91149898A91149903.en>
- Blevins E, **S Jepsen**, J Brim Box, and D Nez. 2016b. *Anodonta oregonensis*. The IUCN Red List of Threatened Species 2016: e.T189487A69491650. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T189487A69491650.en>
- Blevins E, **S Jepsen**, J Brim Box, and D Nez. 2016c. *Gonidea angulata*. The IUCN Red List of Threatened Species 2016: e.T173073A62905403. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T173073A62905403.en>
- Blevins E, **S Jepsen**, J Brim Box, and D Nez. 2016d. *Margaritifera falcata*. The IUCN Red List of Threatened Species 2016: e.T91109639A91109660. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T91109639A91109660.en>
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- Jepsen S** and SH Black. 2015. Understanding and conserving the western North American monarch population. In *Monarchs in a Changing World: Biology and Conservation of an Iconic Butterfly* (Eds.) K. S. Oberhauser, K. R. Nail, and S. Altizer.
- Hatfield R, **S Jepsen**, R Thorp, L Richardson, S Colla, S Foltz Jordan, E Evans. 2015. Red List Assessments of North American Bumble Bees. The IUCN Red List of Threatened Species 2015: <http://www.iucnredlist.org/search/link/558c4179-6ae51a41>.
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- Hatfield R, SH Black, and **S Jepsen**. 2015. The imperiled mardon skipper butterfly: An initial conservation success. In *Butterfly Conservation in North America. Efforts to Help Save our Charismatic Microfauna*, edited by J. C. Daniels, 117–146. Dordrecht: Springer.

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- Jepsen S**, E Evans, RW Thorp, R Hatfield, and SH Black. 2013. Petition to list the rusty patched bumble bee *Bombus affinis* (Cresson), 1863 as an Endangered Species under the U.S. Endangered Species Act. Portland, OR: The Xerces Society for Invertebrate Conservation. Available at: <https://xerces.org/publications/>
- Jordan SF, SH Black, and **S Jepsen**. 2012. Petition to list the island marble butterfly, *Euchloe ausonides insulanus*. 47 pgs. Portland, OR. The Xerces Society for Invertebrate Conservation. Available at: <https://xerces.org/publications/>
- Gerlach J, SH Black, A Hochkirch, **S Jepsen**, M Seddon, S Spector, and P Williams. 2012. Terrestrial invertebrate life. In *Spineless: Status and Trends of the World's Invertebrates*, edited by B. Collen, M. Böhm, R. Kemp, and J. Baillie, 46–57. London: Zoological Society of London.
- Hatfield R, **S Jepsen**, E Mader, S Hoffman Black, and M Shepherd. 2012. Conserving bumble bees: Guidelines for creating and managing habitat for America's declining pollinators. 32 pp. Portland, OR: The Xerces Society for Invertebrate Conservation.
- Cameron S, **S Jepsen**, E Spevak, J Strange, M Vaughan, J Engler, and O Byers (eds.). 2011. North American Bumble Bee Species Conservation Strategy. Final Report from Conservation Planning Meeting. IUCN/SSC Conservation Breeding Specialist Group: Apple Valley, MN. Available at: <http://www.xerces.org/stlouis-iucn-bumblebee-conservation/>
- Thorp RW, **S Jepsen**, SF Jordan, E Evans, and SH Black. 2010. Petition to list Franklin's bumble bee *Bombus franklini* (Frison), 1921 as an Endangered Species under the U.S. Endangered Species Act. The Xerces Society for Invertebrate Conservation. Available at: <https://xerces.org/publications/>
- Jordan SF, **S Jepsen**, N Greenwald, C Mazzacano, and SH Black. 2010. Petition to list the western glacier stonefly, *Zapada glacier* (Baumann & Gaufin, 1971), as endangered under the Endangered Species Act. Portland, OR: The Xerces Society for Invertebrate Conservation. Available at: <https://xerces.org/publications/>
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- Jepsen S**, JA Adams, L Schonberg, E Arnold, C Mazzacano. 2007. Aquatic invertebrates in Pacific Northwest freshwater wetlands: An identification guide and educational resource (CD-ROM). The Xerces Society for Invertebrate Conservation, Portland, OR.
- Jepsen SJ**, JA Rosenheim and CE Matthews. 2007. The impact of sulfur on the reproductive success of *Anagrus* spp. parasitoids in the field. *Biocontrol* 52: 599-612.
- Jepsen SJ**, JA Rosenheim and ME Bench. 2007. The effect of sulfur on biological control of the grape leafhopper, *Erythroneura elegantula*, by the egg parasitoid *Anagrus erythroneurae*. *Biocontrol* 52: 721-732.
- Rosenheim JA, **SJ Jepsen**, CE Matthews, DS Smith, and MR Rosenheim. 2007. Portrait of an ephemeral adult stage: Egg maturation, oviposition, and longevity of the gall midge *Rhopalomyia californica* (Diptera: Cecidomyiidae). *Annals of the Entomological Society of America* 100(4) 549-561.
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