

Joy B. Zedler

Aldo Leopold Professor of Restoration Ecology
Botany Department and Arboretum, University of Wisconsin Madison, WI 53706

PROFESSIONAL EXPERIENCE and EDUCATION

1998- Professor of Botany; Arboretum Research Director, Univ. of Wisconsin, Madison
1980-98 Professor of Biology, San Diego State University (SDSU)
1986- 1997 Director, Pacific Estuarine Research Laboratory, SDSU
1991-3 Associate Director, Environmental Science Program, SDSU
1969-80 Director, Coastal and Marine Institute, SDSU
1968-80 Asst. and Assoc. Professor, SDSU
1968-69 Instructor in Botany, Univ. of Missouri, Columbia
1968 Ph.D. in Botany (Plant Ecology), Univ. of Wisconsin, Madison
1966 M.S. in Botany, Univ. of Wisconsin, Madison
1964 B.S. in Biology, Augustana College, Sioux Falls, So. Dak.

RESEARCH INTERESTS

Wetland ecology; structure and functioning of wetlands; restoration ecology (especially adaptive restoration--learning while restoring through large field experiments); interactions of native and invasive species, diversity-function relationships in restoration sites; use of native species to manage stormwater; long-term monitoring; applying scientific information to ecosystem management.

PROFESSIONAL SOCIETIES AND EDITORIAL BOARDS

Society for Ecological Restoration International Editorial Board, Restoration Ecology, 2004-
Environmental Law Institute National Wetlands Newsletter Advisory Board 1998-
Society of Wetland Scientists Awards Committee, 2014-2017 International Conference Co-Chair,
2009
Ecological Society of America Editorial Board, Ecosystem Health and Sustainability, 2014-
Vegetation Section Chair, 1996-7 Editorial Board, Ecological Applications, 1992-4;
reappointed 1999-2005
Estuarine Research Federation Vice President, 1987-89
Program Chair, 10th Biennial International Conference, October 1989
Editorial Board, Estuaries, 1984-89 American Ecological Engineering Society
Editorial Board, Ecological Engineering: The Journal of Ecotechnology, 1991-2005
Non-society journals: Advisory Board, National Wetlands Newsletter, 1997- Editorial Board,
Wetlands Ecology and Management, 1988-2005 Editorial Board, Ecosystems, 1997-2000
Science Advisor, Ecological Restoration, 1988-2011

HONORS and AWARDS

Elected Fellow, Ecological Society of America, August 2013
Elected Fellow, Society of Wetland Scientists, May 2013
Stanford/Hopkins Marine Station: Scientific Working Group: thresholds/indicators in marine systems, 2013
International Panel (8 mbrs) to advise South Korea's National Institute of Ecology, Oct. 2012-
Wisconsin Natural Areas Preservation Council, UW System Representative, 1999-2013
Wisconsin Chapter of The Nature Conservancy, Board of Trustees, 2004-

Environmental Defense Fund, Board of Trustees, 1998-2007; National Advisory Council, 2007-
Distinguished Seminar Speaker, Jones Ecological Reserve, Georgia, Feb. 2010 Paul Errington
Distinguished Lecture, Iowa State U., March 2006.
Career Achievement Award, Augustana College: 2004
D. J. Dyksterhuis Distinguished Lecture, Texas A & M U., April 2003.
William A. Niering Outstanding Educator Award (first recipient): Estuarine Research Federation,
International Biennial Conference, Tampa, Fla., November 2001
Southern California Wetlands Recovery Project: First Award for Achievements in Regional Wetland
Conservation, October 2000
The Nature Conservancy National Governing Board, 1995-2004
Lead writer of the Society of Wetland Scientists' Position Paper on Defining "Wetland" 1999.
National Wetlands Award (Environmental Law Inst. & Environmental Protection Agency) for
Science Research, demonstrating "an extraordinary commitment to the conservation and
restoration of the nation's wetlands," May 1997
SDSU Biology Department Teacher-Scholar Award, May 1997
SDSU Alumni Association Award for Outstanding Faculty Contributions to the University,
1997 National Oceanic and Atmospheric Administration, Sanctuaries and Reserves Division,
Special Award for outstanding contributions to the understanding of estuarine ecology and
for contributions to the Tijuana River National Estuarine Research Reserve, March 1997
Society for Ecological Restoration, Theodore M. Sperry Award, 1995
National Research Council (NRC) Committee on the St. Lawrence Seaway: Options to Eliminate
Introduction of Nonindigenous Species into the Great Lakes, Phase II. 2006-08.
NRC Committee on Wetland Characterization, 1993-94
Water Science and Technology Board, 1991-94
NRC Committee on Restoration of Aquatic Ecosystems, 1990-92
NRC Planning Committee for the Second National Forum on Biodiversity, 1996-98
NRC Committee on Wetland Mitigation (chair), 1999-2001
Chancellor's Distinguished Lecturer, University of California, Irvine, April 1992 Phi Beta Kappa
Lecturer, SDSU, Fall 1992
Roger Revelle Perpetual Award, Oceans Foundation, 1991
Fellow, San Diego Natural History Museum, 1989
SDSU Meritorious Performance and Professional Promise Awards, 1985, 1988

ADVISORY PANELS/COMMITTEES

Lead Scientist advising the EPA Science Review Board to endorse the EPA Report on Wetland
Connectivity. 2013.
Science Advisory Group, Nature Reserve of Orange County (NROC), California 2013
Advisory Panel, Stanford U. Hopkins Marine Station Analysis of Thresholds for Marine Ecosystem
Disruption, 2013-
Advisory Panel, South Korea National Institute of Ecology, Seocheon, 2013-
Science Review Panel for San Francisco Bay Responses to Climate Change Effects, 2012-
Science Advisory Council for Ormond Beach Restoration, The Nature Conservancy and CA State
Coastal Conservancy, 2011-
Invasive Spartina Removal in San Francisco Bay, CA State Coastal Conservancy, 2011-
Science Advisory Council for Ballona Wetlands, Santa Monica Bay Restoration Commission, 2010
International Crane Foundation Advisory Board, 2010-
National Ecological Observatory Network (NEON) Science Technology and Education Advisory
Committee, 2008-2010

Wisconsin Department of Natural Resources, Natural Area Preservation Council, 1998-2013
State of Washington Salmon Restoration Validation Monitoring Panel, 2000-2004
UW University Ridge Research Steering Committee, 1999-2003
National Wetlands Awards Selection Committee, US EPA and Environmental Law Inst., 1997-1998
Pro Esteros, Board of Directors, 1990-91;
Advisory Board 1995-8 National Parks Research Program
Reviewer, Invasives in Everglades National Park, 1996-1997
Wetland Advisory Board, City of San Diego, 1992-1996
California Coastal Commission, Technical Review Committee for Developing State-Wide Standards for Mitigation Performance, 1994-2005
American Society of Civil Engineers Task Committee on Physical Processes in Tidal Wetland Restoration, 1996-98
National Wetlands Awards (Environmental Law Inst. & Environmental Protection Agency) Honorable Mention, 1994;
Review panel member, 1995 U.S. Environmental Protection Agency Science Advisory Board Consultant, 1995-8
President Clinton's Forum on Science and Technology, Invitee, March 1994
Technical Panel, Environmental Protection Agency Global Change Program, 1993-5
National Water Research Institute, Research Advisory Board, 1992-3
Wetland Advisory Board, City of San Diego (Mayoral Appointee), 1992-6
California Sea Grant College, Coastal Resources Research Coordinator, 1992-6
Ecological Society of America ad hoc Committee on Wetlands Delineation, 1991
City of San Diego, Famosa Slough Guidance Committee, 1991
National Wetland Technical Council (13 members nationwide), charter member Review Panel, US Dept. of Agriculture Competitive Grants Program for Water Quality, 1991
Scientific Advisory Committee, NOAA Estuarine Habitat Research Program, 1990-3
Tijuana River National Estuarine Research Reserve, Research and Education Committee Chair, 1982-93;
Restoration Committee, 1995-8 Public Affairs Committee, Ecological Society of America (ESA), 1988-91
SDSU representative to the California Sea Grant Committee, 1986-90
Los Peñasquitos Lagoon Foundation, Technical Advisory Committee, 1985-97
Congressman Jim Bates Environment Subcommittee, 1985-6

LEAFLETS (36 illustrated materials that interpret research for a broad audience) at <http://uwarboretum.org> (click "leaflets" on the publications menu)

PUBLICATIONS (not including abstracts)

- Trest, M. T., S. Will-Wolf, R. Keuler, N. Shay, K. Hill, A. Studer, A. Muench, Z. Alexander, A. Adams, L. Dittberner, M. Feehan, H. Lee, N. Galleguillos-Katz, J. B. Zedler, and L. K. Graham. In press. Potential impacts of UV exposure on lichen communities: A pilot study of *Nothofagus dombeyi* trunks in southernmost Chile.
- Doherty, J. M., and J. B. Zedler. In press. Biodiversity-ecosystem function (BEF) theory and wetland restoration. In D. Moreno-Mateos, ed., Section on Wetland Creation and Restoration, Encyclopedia of Wetlands, M. Finlayson and N. Davidson, eds. Springer. 6 pages.
- Rojas, I. M., and J. B. Zedler. 2014. Online. An invasive exotic grass reduced sedge meadow species richness by half. Wetlands Ecology and Management.

- Doherty, J. M., and J. B. Zedler. 2015. Increasing substrate heterogeneity as a bet-hedging strategy for restoring wetland vegetation. *Restoration Ecology* 23:15-25. doi: 10.1111/rec.12154
- Doherty, J. M., J. F. Miller, S. Prellwitz, A. M. Thompson, S. Loheide, and J. B. Zedler. 2014. Bundles and tradeoffs among six wetland services were associated with hydrologic regime. *Ecosystems* 17(6):1026-1039.
- Zedler, J. B., C.L. Bonin, D.J. Larkin, A. Varty. 2014. Ecology of Salt Marshes. Reference Module in Earth Systems and Environmental Sciences, from *Encyclopedia of Ecology* 2008, Pages 3132- 3141.
- Temperton, V. M., E. Higgs, Y. D. Choi, E. Allen, D. Lamb, C-S. Lee, J. Harris, R. J. Hobbs, and J. B. Zedler. 2014. Flexible and adaptable restoration: an example from South Korea. *Restoration Ecology* 22(3): 271-278.
- Zedler, J.B., and N. Miller. In press. Wetland restoration at the landscape scale. In B. A. Middleton and G. R. Gutenspergen, editors, *Concepts in Landscape Ecology* Section, Society of Wetland Scientists *Encyclopedia of Wetlands*.
- Galatowitsch, S. M., and J. B. Zedler. 2014. Chapter 9. Wetland Restoration. Pp. 225-259 in: D. Batzer and R. Sharitz (Eds.) *Ecology and Freshwater and Estuarine Wetlands*, 2nd edition. UC Press, Berkeley, CA.
- Doherty, J. M., and J. B. Zedler. 2014. Dominant graminoids support restoration of productivity but not diversity in urban wetlands. *Ecological Engineering* 65:101-111.
- Morzaria-Luna, H. N., and J. B. Zedler. 2014. Competitive interactions between two salt marsh halophytes across stress gradients. *Wetlands* 34:31-42.
- Zedler, J. B., J. Doherty and I. M. Rojas. 2014. Leopold's Arboretum needs upstream water treatment to restore wetlands downstream. *Water* 2014, 6(1):104-121; doi:10.3390/w6010104 – Online: <http://www.mdpi.com/2073-4441/6/1/104>.
- Zedler, Joy B. 2014. Patterns in nature and their causes. *Bulletin of the Ecological Society of America* 95(1):27-28. Online at <https://www.esa.org>. Invited.
- Zedler, J.B. 2013. Achievable restoration targets for urban wetlands. *Urban Coast* 4(1):5-10. Online journal of the Center for Santa Monica Bay Studies, Los Angeles. <http://www.santamonica.org/Documents/UrbanCoastVol4.Issue1.pdf>
- Lawrence, B. A., and Zedler, J. B. 2013. Tussock structural composition and carbon storage in *Carex stricta* sedge meadows. *Wetlands*. Online.
- Zedler, J. B., and R. A. Lindig-Cisneros. 2013. Restoration of biodiversity, overview. In S. A. Levin, ed. *Encyclopedia of Biodiversity* 2nd Edition, Vol. 6:453-460. Academic Press. Waltham, Massachusetts.
- Lawrence, B., T. Fahey, and J. B. Zedler. 2013. Root dynamics of *Carex stricta*-dominated tussock meadows. *Plant and Soil* 364:325-339. DOI: 10.1007/s11104-012-1360-y
- Zedler, J. B. 2012. Chapter 1. Introduction: diverse perspectives on tidal marshes. Pp. 1-17 In A. Palaima, ed., *Ecology, Conservation, and Restoration of Tidal Marshes: The San Francisco Estuary*. University of California Press, Berkeley.
- Zedler, J. B., J. M. Doherty and N. A. Miller. 2012. Shifting restoration policy to address landscape change, novel ecosystems, and monitoring. *Ecology and Society* 17 (4): 36. [online] URL: [/www.ecologyandsociety.org/vol17/iss4/art36/](http://www.ecologyandsociety.org/vol17/iss4/art36/), also at special feature URL: www.ecologyandsociety.org/issues/view.php/feature/82.
- Johnston, C. A., and J. B. Zedler. 2012. Identifying preferential associates to initiate restoration plantings. *Restoration Ecology* 20:764-772.
- Olson, E., S. Ventura, and J. B. Zedler. 2012. Merging geospatial and field data to predict the distribution and abundance of an exotic macrophyte in a large Wisconsin reservoir. *Aquatic Botany* 96: 31-41.
- Doherty, J. M., C. Callaway, and J. B. Zedler. 2011. Diversity-function relationships changed in a

- long-term restoration experiment. *Ecological Applications* 21: 2143-2155.
- Lawrence, B. A., and J. B. Zedler. 2011. Formation of tussocks in sedges: effects of hydroperiod and nutrients. *Ecological Applications* 21: 1745-1759.
- Zedler, J. B. 2011. Restoring a dynamic ecosystem to sustain biodiversity. *Ecological Restoration* 29:152-160.
- Zedler, J. B. 2011. Wetlands. Pp. 698-704 in D. Simberloff and M. Remanek, eds. *Encyclopedia of Introduced Invasive Species*. UC Press. Berkeley, CA.
- Jelinski, N. A., C. J. Kucharik and J. B. Zedler. 2011. A test of diversity-productivity models in natural, degraded, and restored wet prairies. *Restoration Ecology* 19:186:293).
- Zedler, J. B. 2010. How frequent storms affect wetland vegetation: A preview of climate change impacts. *Frontiers in Ecology and the Environment* 8:540-547.
- Zedler, J. B. 2010. Wetlands as harbingers of climate change. *National Wetlands Newsletter* 32: 13- 17.
- Healy, M.G., and J. B. Zedler. 2010. Setbacks in replacing *Phalaris arundinacea* monotypes with sedge meadow vegetation. *Restoration Ecology* 18: 155-164.
- Allen, A. E., F. J. Santana-Michel, C. Ortiz Arrona and J. B. Zedler. 2010. Integrating ecological and ethnobotanical priorities into riparian restoration. *Ecological Restoration* 28: 377-388.
- Prasser, N., and J. B. Zedler. 2010. Salt tolerance of invasive *Phalaris arundinacea* exceeds that of native *Carex stricta* (Wisconsin). *Ecological Restoration* 28:238-240.
- Johnston, C. A., M. Tulbure, and J. B. Zedler. 2010. Latitudinal gradient of floristic condition among Great Lakes Coastal Wetlands. *Journal of Great Lakes Research* 36: 772-779.
- Hall, S. J., and J. B. Zedler. 2010. Constraints on sedge meadow self-restoration in urban wetlands. *Restoration Ecology* 5:671-680.
- Zedler, J. B. 2009. Feedbacks that might sustain natural, invaded and restored states in herbaceous wetlands. Pages 236-258 in R. Hobbs and K. N. Suding, eds., *New models for ecosystem dynamics and restoration*, Island Press, Washington, D.C.
- Larkin, D., J. West, and J. B. Zedler. 2009. Created pools and food availability for fishes in a restored salt marsh. *Ecological Engineering* 35:65-74.
- Gardner, R. C., J. Zedler, A. Redmond, R. E. Turner, C. A. Johnston, V. A. Alvarez, C. A. Simenstad, K. L. Prestegard, and W. J. Mitsch. 2009. Compensating for wetland losses under the Clean Water Act (Redux): Evaluating the Federal Compensatory Mitigation Regulation. *National Wetland Newsletter* 31(2):1, 3-8 (short, reformatted version of the following).
- Gardner, R. C., J. Zedler, A. Redmond, R. E. Turner, C. A. Johnston, V. A. Alvarez, C. A. Simenstad, K. L. Prestegard, and W. J. Mitsch. 2009. Compensating for wetland losses under the Clean Water Act (Redux): Evaluating the Federal Compensatory Mitigation Regulation. *Stetson Law Review* 38:213-249.
- Johnston, C. A., Joy B. Zedler, M. G. Tulbure, C. B. Frieswyk DeJong, B. L. Bedford, L. Vaccaro. 2009. A unifying approach for evaluating the condition of wetland plant communities and identifying related stressors. *Ecological Applications* 19:1739-1957.
- Callaway, J. C., and J. B. Zedler. 2009. Salt marsh conservation along the leading edge of the continent. Pp. 285-307 in B. Silliman, E. Grosholz and M. Bertness, eds. *Human impacts on Salt Marshes*. University of California Press, Berkeley, CA.
- Zedler, J. B. and J. M. West. 2008. Declining diversity in natural and restored salt marshes: A 30-year study of Tijuana Estuary. *Restoration Ecology* 16:249-262.
- Frieswyk, C. B., C. Johnston, and J. B. Zedler. 2008. Identifying and characterizing dominant plants as an indicator of community condition. *Journal of Great Lakes Research* 33(Special Issue 3):125-135.
- Adam, P., M. D. Bertness, A. J. Davy, and J. B. Zedler. 2008. Saltmarsh. Pp. 157-171 in N. Polunin, ed. *Aquatic Ecosystems*. Cambridge University Press. Cambridge, U.K. Johnston,

- C.A., B. Bedford, M. Bourdaghs, T. Brown, C. B. Frieswyk, M. Tulbure, L. Vaccaro, and J. B. Zedler. 2008. Plant species indicators of physical environment in Great Lakes coastal wetlands. *Journal of Great Lakes Research* 33 (Special Issue 3):106-124.
- Johnston, C.A., D. Ghioca, M. Tulbure, SB. L. Bedford, M. Bourdaghs, C. B. Frieswyk, L. Vacaro, and J. B. Zedler. 2008. Partitioning vegetation response to anthropogenic stress to develop multi-taxa indicators of wetland condition. *Ecological Applications* 18:983-1001.
- Varty, A., and J. B. Zedler. 2008. How waterlogged microsites help an annual plant persist among salt marsh perennials. *Estuaries and Coasts* 31:300-312.
- Stiles, C. A., B. Bemis, and J. B. Zedler. 2008. Evaluating edaphic conditions favoring reed canary grass invasion in a restored native prairie. *Ecological Restoration* 26:61-70.
- Zedler, J. B., and K. Potter. 2008. Southern Wisconsin's herbaceous wetlands: Their recent history and precarious future. Pages 193-210 in *The vanishing present*. D. Waller and T. Rooney, eds. University of Chicago Press.
- Larkin, D. J., S. P. Madon, J. M. West and J. B. Zedler. 2008. Topographic heterogeneity influences fish use of an experimentally-restored tidal marsh. *Ecological Applications* 18:483-496.
- Zedler, J. B., C. L. Bonin, D. J. Larkin, and A. Varty. 2008. Salt marshes. Pages 3132-3141 in Sven Erik Jorgensen & Brian D. Fath, 2008. *Encyclopedia of Ecology*, 1st Edition, Elsevier B.V., Oxford.
- Boers, A. M., and J. B. Zedler. 2008. Stabilized water levels and *Typha* invasiveness. *Wetlands* 28: 676-685.
- Wagner, K., S. K. Gallagher, M. Hayes, B. A. Lawrence, and J. B. Zedler. 2008. Wetland restoration in the new millennium: Do research efforts match opportunities? *Restoration Ecology* 16: 367-372.
- Hall, S. J., R. A. Lindig-Cisneros and J. B. Zedler. 2008. Does harvesting sustain plant diversity in Central Mexican wetlands? *Wetlands* 28:776-792.
- Peterson, C. H., K. W. Able, C. F. DeJong, M. F. Piehler, C. A. Simenstad, and J. B. Zedler. 2008. Practical proxies for tidal marsh ecosystem services: Application to injury and restoration. *Advances In Marine Biology* 54:221-266.
- Committee on the St. Lawrence Seaway Options to Eliminate Introduction of Nonindigenous Species into the Great Lakes, Phase 2. 2008. *Great Lakes Shipping, Trade, and Aquatic Invasive Species*. Transportation Research Board, National Research Council. Washington, D.C.
- Bonin, C. L., and J. B. Zedler. 2008. Plant traits and plasticity help explain abundance ranks in a California salt marsh. *Estuaries and Coasts* 31:682-693.
- Boers, A., R. Veltman, and J. B. Zedler. 2007. *Typha x glauca* dominance and extended hydroperiod constrain restoration of wetland diversity. *Ecological Engineering* 29:232-244.
- Morzaria-Luna, H., and J. B. Zedler. 2007. Does seed availability limit plant establishment during salt marsh restoration? *Estuaries* 30:12-25.
- Frieswyk, C. B., and J. B. Zedler. 2007. Vegetation change in Great Lakes coastal wetlands: Deviation from the historical cycle. *Journal of Great Lakes Research* 33:366-380.
- Kercher, S. M., A. Herr-Turoff, and J. B. Zedler. 2007. Understanding invasion as a process: The case of *Phalaris arundinacea* in wet prairies. *Biological Invasions* 9:657-665.
- Zedler, J. B. 2007. Success: An unclear, subjective descriptor of restoration outcomes. *Ecological Restoration* 25:162-168.
- Wilcox, J. C., M. T. Healy and J. B. Zedler. 2007. Restoring native vegetation to an urban wet meadow dominated by reed canarygrass (*Phalaris arundinacea* L.) in Wisconsin, USA. *Natural Areas Journal* 27:354-365.
- Sullivan, G., J. Callaway and J. B. Zedler. 2007. Plant assemblage composition explains and

- predicts how biodiversity affects salt marsh functioning. *Ecological Monographs* 77:569-590.
- Herr-Turoff, A. and J. B. Zedler. 2007. Does morphological plasticity of the *Phalaris arundinacea* canopy increase invasiveness? *Plant Ecology* 193:265-277.
- O'Brien, E., and J. B. Zedler. 2006. Accelerating the restoration of vegetation in a southern California salt marsh. *Wetlands Ecology and Management* 14:269-286.
- Larkin, D. J., G. Vivian-Smith, and J. B. Zedler. 2006. Topographic heterogeneity theory and ecological restoration. Pp. 144-164 In: Falk, D., M. Palmer, and J. B. Zedler, eds. *Foundations of Restoration Ecology*. Island Press, Washington, D.C.
- Falk, D., M. Palmer, and J. B. Zedler, eds. 2006. *Foundations of Restoration Ecology*. Island Press. Washington, D.C.
- Palmer, M. A., D. A. Falk, and J. B. Zedler. 2006. Ecological theory and restoration ecology. Pp 1-10 In: Falk, D., M. Palmer, and J. B. Zedler, eds. *Foundations of Restoration Ecology*. Island Press, Washington D.C.
- Falk, D. A., M. A. Palmer, and J. B. Zedler. 2006. Integrating restoration ecology and ecological theory: A synthesis. Pp. 341-345 In: Falk, D., M. Palmer, and J. B. Zedler, eds. *Foundations of Restoration Ecology*. Island Press. Washington D.C.
- Peach, M. A. and J. B. Zedler. 2006. How tussocks structure sedge meadow vegetation. *Wetlands* 26: 322-335.
- Boers, A., C. Frieswyk, J. Verhoeven and J. Zedler. 2006. Chapter 10: Contrasting approaches to the restoration of diverse vegetation in herbaceous wetlands. Pp. 225-246 in R. Bobbink, B. Beltman, J.J.T.A. Verhoeven, and D.F. Whigham, eds. *Wetlands as a natural resource*, Vol. 2. *Wetlands: Functioning, Biodiversity Conservation and Restoration*. Springer Verlag.
- Zedler, J. 2006. Wetland restoration. Pp. 348-406 in D. P. Batzer and R. R. Sharitz, eds. *Ecology of Freshwater and Estuarine Wetlands*. Elsevier, Inc., San Diego.
- Frieswyk, C. B., and J. B. Zedler. 2006. Do seed banks confer resilience to coastal wetlands invaded by *Typha x glauca*? *Canadian Journal of Botany* 84:1882-1893.
- Callaway, J. C., K. W. Wallace and J. B. Zedler. 2006. Reply to comment on our paper Evolution of tidal creek networks in a high sedimentation environment: a 5-year experiment at Tijuana Estuary, California. *Estuaries and Coasts* 29:1268-1269.
- Zedler, J. B. 2005. Restoring wetland plant diversity: A comparison of existing and adaptive approaches. *Wetlands Ecology and Management* 13:5-14.
- Fellows, M. and J. B. Zedler. 2005. Effects of the non-native grass, *Parapholis incurva* (Poaceae), on the rare and endangered hemiparasite, *Cordylanthus maritimus subsp. maritimus* (Scrophulariaceae). *Madroño* 52:91-98.
- Zedler, J. B. 2005. *Restoration ecology: Principles from field tests of theory*. San Francisco Estuary and Watershed Science. On line at:
<http://repositories.cdlib.org/jmie/sfews/vol3/iss2/art4>
- Zedler, J. B. 2005. How compatible are biodiversity and ecosystem-service restoration goals? *National Wetlands Newsletter* 27(6):1,11-13,19.
- Herr-Turoff, A., and J. B. Zedler. 2005. Does wet prairie vegetation retain more nitrogen with or without *Phalaris* invasion. *Plant and Soil* 277:19-34.
- Lindig-Cisneros, R. y J. B. Zedler. La restauración de humedales. 2005. Pp. 201-213 In: Sánchez, Ó., E. Peters, R. Márquez-Huitzil, E. Vega, G. Portales, M. Valdés y D. Azuara, eds. *Temas Sobre Restauración ecológica*. Instituto Nacional de Ecología-Semarnat. U.S. Fish and Wildlife Service, Unidos para la Conservación. México, D. F.
- Wallace, K.J., J.C. Callaway, and J.B. Zedler. 2005. Evolution of tidal creek networks in a high sedimentation environment: A 5-year experiment at Tijuana Estuary, California. *Estuaries* 28:795-811.

- Zedler, J. B., and S. Kercher. 2005. Wetland resources: Status, ecosystem services, degradation, and restorability. *Annual Review of Environment and Resources* 30:39-74. Annual Reviews, Palo Alto, CA.
- Kercher, S. M., and J. B. Zedler. 2004. Multiple disturbances accelerate invasion of reed canary grass (*Phalaris arundinacea* L.) in a mesocosm study. *Oecologia* 138:455-464.
- Zedler, J. B. 2004. Compensatory mitigation for damages to wetlands: Can net losses be reduced? *Transactions of the Wisconsin Academy of Arts, Letters and Sciences* 90:103-117.
- Callaway, J. C. and J. B. Zedler. 2004. Restoration of urban salt marshes: Lessons from southern California. *Urban Ecosystems* 7:107-124.
- Morzaria-Luna, H., J. C. Callaway, G. Sullivan and J. B. Zedler. 2004. Relationship between topographic heterogeneity and vegetation patterns in a Californian salt-marsh. *Journal of Vegetation Science*.15:523-530.
- Kercher, S. M., Q. Carpenter, and J. B. Zedler. 2004. Interrelationships of hydrologic disturbances, reed canary grass (*Phalaris arundinacea* L.), and native plants in Wisconsin wet meadows. *Natural Areas Journal* 24:316-325.
- Zedler, J. B., and S. Kercher. 2004. Causes and consequences of invasive plants in wetlands: Opportunities, opportunists, and outcomes *Critical Reviews in Plant Sciences* 23:431-452.
- Kercher, S. M., and J. B. Zedler. 2004. Flood tolerance in wetland angiosperms: a comparison of invasive and noninvasive species. *Aquatic Botany* 80:89-102.
- Zedler, J. B. 2004. Compensating for wetland losses in the United States. In M. M. Rehfisch, C. F. Feare, N. V. Jones, and C. Spray, eds. *Climate Change and Coastal Birds*. Ibis 146 (Suppl. 1): S92-S100.
- Zedler, J. B., and J. C. Callaway. 2003. Adaptive restoration: A strategic approach for integrating research into restoration projects. Pp. 167-174 in D. J. Rapport, W. L. Lasley, D. E. Rolston, N. O. Nielsen, C. O. Qualset, and A. B. Damania, eds. *Managing for Healthy Ecosystems*. Lewis Publishers, Boca Raton, Florida.
- Zedler, J. B. 2003. Wetlands at your service: Reducing impacts of agriculture at the watershed scale. *Frontiers in Ecology and Environment* 1:65-72.
- Ward, K. M., J. C. Callaway, and J. B. Zedler. 2003. Episodic colonization of an intertidal mudflat by a native cordgrass (*Spartina foliosa*) at Tijuana Estuary. *Estuaries* 26:116-130.
- Lindig-Cisneros, R., J. Desmond, K. Boyer, and J. B. Zedler. 2003. Wetland restoration thresholds: Can a degradation transition be reversed with increased effort? *Ecological Applications* 13:193- 205.
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