

JAMES T. CARLTON

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EDUCATION

- University of California, Berkeley Paleontology B.A. 1971
- University of California, Davis Ecology Ph.D. 1979

RESEARCH

Marine Biodiversity and Conservation:

- Ecology, biogeography, history and management of marine bioinvasions
- Modern-day global extinctions of marine organisms
- Environmental history of estuaries and coastal zones

POSITIONS and APPOINTMENTS

2015-	Professor of Marine Sciences Emeritus	Williams College
1993-2015	Professor of Marine Sciences	Williams College
1989-2015	Director	Williams College - Mystic Seaport Maritime Studies Program
1989-1992	Associate Prof. of Marine Sciences	Williams College
1989	Acting Director	University of Oregon Institute of Marine Biology
1986-1989	Assistant Professor of Biology	University of Oregon Institute of Marine Biology
1982-1985	Marine Scientist	Williams College - Mystic Seaport Maritime Studies Program
1978-1982	Postdoctoral Researcher	Woods Hole Oceanographic Institution
1976	Research Associate, UC Berkeley	Naval Arctic Research Laboratory, Point Barrow
1974-1979	Ecology Graduate Group	University of California, Davis
1971-1973	Research Assistant	California Academy of Sciences, San Francisco

ADDITIONAL AFFILIATIONS

- Research Associate California Academy of Sciences, San Francisco
- Associate in Science Bishop Museum, Honolulu

HONORS and AWARDS

- 2018. (The first) *Lifetime Honorary Membership* in the International Association for Open Knowledge on Invasive Alien Species (Invasivesnet). Awarded and presented at NEOBIOTA, Dublin, Ireland, September 4, 2018.
- 2016. *Judith A. Pederson and James T. Carlton Early Career Scientist Travel Award* of the International Conference on Marine Bioinvasions (ICMB) (named January 2016 in Sydney, Australia)
- 2015. *James T. Carlton Annual Fund* of the Williams-Mystic Maritime Studies Program (named fall 2015)
- 2014. *Certificate of Recognition*, National Oceanic & Atmospheric Administration for providing "...invaluable expertise to the Government of the United States ..." on marine invasive species, presented at SERC (Edgewater MD), April 10, 2014.
- 2013. *The Fellows Medal*, California Academy of Sciences, San Francisco, California, awarded to one scientist annually in the United States
- 2008. *Paul Illg Distinguished Lecturer*, Friday Harbor Laboratories, University of Washington
- 2007. *Fellow*, California Academy of Sciences, San Francisco, California

- 2007. Dean of Faculty *Nelson Bushnell Prize for Writing and Teaching*, Williams College
- 2007. *James T. Carlton Marine Science Center* of the Williams College – Mystic Seaport Maritime Studies Program (building dedicated September 2007)
- 1999. U.S. Federal Government *Interagency Recognition Award for Significant and Sustained Contributions to the Prevention and Control of Nonindigenous Species in America's Aquatic Ecosystems* (first U.S. scientist to receive this award) (1999)
- 1998. *Duke University Conservation Scholar*
- 1996. *Pew Fellow* in the Environment and Conservation, The Pew Foundation
- 1996. *Distinguished Research Fellow*, Bodega Marine Laboratory, University of California at Davis
- 1995. "Ocean Hero," Smithsonian Institution, Washington, D.C.
- 1994. *Fellow*, American Association for the Advancement of Science (AAAS), Washington, D.C.

PROFESSIONAL ACTIVITIES (examples)

- Co-Chair, *Committee on Assessing Numeric Limits for Living Organisms in Ballast Water*, National Academy of Sciences National Research Council, Water Science and Technology Board, 2010-2011
- Founding Editor and Editorial Board, *Biological Invasions* (Springer)
- Chair, *Working Group on Introductions and Transfers of Marine Organisms*, International Council for the Exploration of the Sea (ICES), 1991- 2000
- Faculty Instructor, Summer Workshop on Marine Biological Invasions, at the University of Oregon Institute of Marine Biology, Coos Bay, Oregon (1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2019)
- Inaugural Member (First Term Member) *Invasive Species Advisory Council [ISAC]*, Washington, D.C. (2000-2002)
- Principal Investigator, United States of America National Biological Invasions Shipping Studies (NABISS), 1991-2000, involving the oversight and production of the three major National Ballast Water Studies called for by the U.S. Congress: The Shipping Study, the Ballast Exchange Study, and the Biological Study (San Francisco Bay)
- Member, U. S. Delegation to the Marine Environmental Protection Committee (MEPC) of the United Nations International Maritime Organization (IMO), London (1995 – 1999)
- Co-Chair, Committee on Biological Diversity in Marine Systems, National Academy of Sciences, National Research Council, Ocean Studies Board and Board on Biology, Washington, D.C. (1993 – 1995)
- Committee on Ships' Ballast Operations, Marine Board, National Academy of Sciences, National Research Council, Washington, D.C. (1994-1996)

Congressional Testimony

- * Testified 10 times before U.S. Senate and House committees and subcommittees, 1990 – 2011

PUBLICATIONS

BOOKS and MONOGRAPHS

- 1975. Ralph I. Smith and James T. Carlton. Editors/Authors. *Light's Manual: Intertidal Invertebrates of the Central California Coast*. Third Edition. University of California Press, Berkeley, 716 pages.
- 1995. Cheryl A. Butman and James T. Carlton, Co-Chairs. National Research Council, Ocean Studies Board and Board on Biology, Committee on Biological Diversity in Marine Systems. *Understanding marine biodiversity: A research agenda for the nation*. National Academy Press, Washington, D.C., 180 pp.

2003. Gregory M. Ruiz and James T. Carlton. Editors/Authors. *Invasive species: vectors and management strategies*. Island Press, Washington, Covelo CA, London, 518 pp.
2007. James T. Carlton, Editor/Author. *The Light & Smith Manual: Intertidal Invertebrates of the California and Oregon Coasts*. Fourth Edition, University of California Press, Berkeley and Los Angeles, 1001 pp.
2009. James T. Carlton and Lucius Eldredge. *Marine bioinvasions of Hawai'i: The introduced and cryptogenic marine and estuarine animals and plants of the Hawaiian Archipelago*. Bishop Museum Bulletins in Cultural and Environmental Studies 4, Bishop Museum Press, Honolulu, 202 pp.
2011. Bella S. Galil, Paul F. Clark, James T. Carlton. Editors/Authors. *In the wrong place: alien marine crustaceans – distribution, biology and impacts*. Invading Nature - Springer Series in Invasion Ecology 6, Springer, Dordrecht, 716 pp.
2011. James T. Carlton, G. M. Ruiz, J. E. Byers, A. Cangelosi, F. C. Dobbs, E. D. Grosholz, B. Leung, H. J. MacIsaac, and M. J. Wonham. *Assessing the relationship between propagule pressure and invasion risk in ballast water*. Committee on Assessing Numeric Limits for Living Organisms in Ballast Water, National Research Council. The National Academies Press, Washington, D.C. 144 pp.
2015. Neal L. Evenhuis and James T. Carlton. Editors. *Lucius G. Eldredge III Memorial Volume: Tribute to a Polymath*. Bishop Museum Bulletin Zoology 9, 177 pp.

**OTHER PUBLICATIONS
(partial listing)**

1967. Edward L. Bousfield and James Carlton. New records of Talitridae (Crustacea: Amphipoda) from the central California coast. *Bulletin of the Southern California Academy of Sciences* 66(4): 277-284.
1969. James T. Carlton and Victor A. Zullo. Early records of the barnacle *Balanus improvisus* Darwin from the Pacific coast of North America. *Occasional Papers of the California Academy of Sciences* no. 75, 6 pp.
1972. Victor A. Zullo, Dea B. Beach, and James T. Carlton. New barnacle records (Cirripedia, Thoracica). *Proceedings of the California Academy of Sciences* (4), 39(6): 65-74.
1977. Armand M. Kuris and James T. Carlton. Description of a new species, *Crangon handi*, and a new genus, *Lissocrangon*, of crangonid shrimps (Crustacea: Caridea) from the California coast, with notes on adaptation in body shape and coloration. *Biological Bulletin* 153: 540-559.
1979. James T. Carlton. *Chlamydoconcha orcutti* Dall: review and distribution of a little-known bivalve. *The Veliger* 21: 375-378.
1979. James T. Carlton. Introduced invertebrates of San Francisco Bay, pp. 427-444, in T. J. Conomos, editor, *San Francisco Bay: The Urbanized Estuary*. American Association for the Advancement of Science, Pacific Division, San Francisco.
1981. James T. Carlton and Ernest W. Iverson. Biogeography and natural history of *Sphaeroma walkeri* Stebbing (Crustacea: Isopoda) and its introduction to San Diego Bay, California. *Journal of Natural History* 15: 31-48.
1983. Gayle A. Brenchley and James T. Carlton. Competitive displacement of native mud snails by introduced periwinkles in the New England intertidal zone. *Biological Bulletin* 165: 543-558.
1984. Rudolf S. Scheltema and James T. Carlton. Methods of dispersal among fouling organisms and possible consequences for range extension and geographical variation, pp. 127-133, in: J. D. Costlow and R. C. Tipper, eds., *Marine biodeterioration: an interdisciplinary study*. Naval Institute Press, Annapolis, Maryland, 384 pp.

1985. James T. Carlton and Judith A. Scanlon. Progression and dispersal of an introduced alga: *Codium fragile* ssp. *tomentosoides* (Chlorophyta) on the Atlantic coast of North America. *Botanica Marina* 28: 155-165.
1985. James T. Carlton. Transoceanic and interoceanic dispersal of coastal marine organisms: the biology of ballast water. *Oceanography and Marine Biology, An Annual Review* 23: 313-371.
1987. James T. Carlton. Patterns of transoceanic marine biological invasions in the Pacific Ocean. *Bulletin of Marine Science* 41: 452-465.
1988. James T. Carlton. Introduced species and the Galapagos Marine Resources Reserve, pp. 92-104, in: Arthur G. Gaines, Jr., and Hernan Moreano Andrade, editors. *Scientific Research and the Galapagos Marine Resources Reserve. Synopsis of a Workshop April 20-24, 1987, Guayaquil, Ecuador.* Woods Hole Oceanographic Institution Technical Report WHOI-91-41, 199 pp.
1988. James T. Carlton, Daphne G. Fautin, Michael G. Kellogg, Barbara E. Weitbrecht, and Armand M. Kuris. Professor Ralph I. Smith: A tribute to his manuals of marine invertebrates and to his academic progeny. *The Veliger* 31: 135-138.
1989. James T. Carlton. Man's role in changing the face of the ocean: biological invasions and implications for conservation of near-shore environments. *Conservation Biology* 3: 265-273.
1989. Brian W. Meehan, James T. Carlton and Roman Wenne. Genetic affinities of the bivalve *Macoma balthica* from the Pacific coast of North America: evidence for recent introduction and historical distribution. *Marine Biology* 102: 235-241.
1990. James T. Carlton, Janet K. Thompson, Laurence E. Schemel, and Frederic H. Nichols. Remarkable invasion of San Francisco Bay (California, USA) by the Asian clam *Potamocorbula amurensis*. I. Introduction and dispersal. *Marine Ecology Progress Series* 66: 81-94.
1991. James T. Carlton, Geerat J. Vermeij, David R. Lindberg, Debby A. Carlton, and Elizabeth C. Dudley. The first historical extinction of a marine invertebrate in an ocean basin: the demise of the eelgrass limpet *Lottia alveus*. *Biological Bulletin* 180: 72-80.
1991. John W. Chapman and J. T. Carlton. A test of criteria for introduced species: the global invasion by the isopod *Synidotea laevidorsalis* (Miers, 1881). *Journal of Crustacean Biology* 11: 386 - 400.
1991. Jody Berman and James T. Carlton. Marine invasion processes: interactions between native and introduced marsh snails. *Journal of Experimental Marine Biology and Ecology* 150: 267 - 281.
1992. James T. Carlton. Dispersal of living organisms into aquatic ecosystems as mediated by aquaculture and fisheries activities, pp. 13-45, in: Aaron Rosenfield and Roger Mann, editors, *Dispersal of Living Organisms into Aquatic Ecosystems.* Maryland Sea Grant Publication, College Park, Maryland.
1992. James T. Carlton. Introduced marine and estuarine mollusks of North America: an end-of-the-20th-century perspective. *Journal of Shellfish Research* 11: 489 - 505.
1993. James T. Carlton. Dispersal mechanisms of the zebra mussel (*Dreissena polymorpha*), Chapter 40, pp. 677 - 697, in: Thomas F. Nalepa and Donald W. Schloesser, editors, *Zebra Mussels: Biology, Impacts, and Control.* CRC Press, Inc., Boca Raton, Florida.
1993. Edward L. Mills, Joseph H. Leach, James T. Carlton, and Carol Secor. Exotic species in the Great Lakes: a history of biotic crises and anthropogenic introductions. *Journal of Great Lakes Research* 19: 1-54.
1993. Jonathan B. Geller, James T. Carlton, and Dennis A. Powers. Interspecific and intrapopulation variation in

- mitochondrial ribosomal DNA sequences of *Mytilus* spp. (Bivalvia: Mollusca). *Molecular Marine Biology and Biotechnology* 2(1): 44 - 50.
1993. James T. Carlton and Jonathan B. Geller. Ecological roulette: The global transport of nonindigenous marine organisms. *Science* 261: 78-82. [Perspectives essay in reference to this article: "Foreign Invaders," by Joel W. Hedgpeth, pp.34-35]
1993. James T. Carlton. Neoeinctions of marine invertebrates. *American Zoologist* 33(6): 499-509.
1994. Jonathan B. Geller, James T. Carlton, and Dennis A. Powers. PCR-based detection of mtDNA haplotypes of native and invading mussels on the northeastern Pacific coast: latitudinal pattern of invasion. *Marine Biology* 119: 243-249.
1994. Edward L. Mills, Joseph H. Leach, James T. Carlton, and Carol L. Secor. Exotic species and the integrity of the Great Lakes: lessons from the past. *BioScience* 44(10): 666-676.
1994. John W. Chapman and James T. Carlton. Predicted discoveries of the introduced isopod *Synidotea laevidorsalis* (Miers, 1881). *Journal of Crustacean Biology* 14: 700-714.
1995. James T. Carlton and Janet Hodder. Biogeography and dispersal of coastal marine organisms: experimental studies on a replica of a 16th-century sailing vessel. *Marine Biology* 121: 721-730.
1995. James T. Carlton, Donald M. Reid, and Henry van Leeuwen. Shipping Study. The role of shipping in the introduction of non-indigenous aquatic organisms to the coastal waters of the United States (other than the Great Lakes) and an analysis of control options. The National Sea Grant College Program / Connecticut Sea Grant Project R/ES-6. Department of Transportation, United States Coast Guard, Washington, D.C. and Groton, Connecticut. Report Number CG-D-11-95. Government Accession Number AD-A294809. xxviii + 213 pages and Appendices A-I (122 pages).
1995. Cheryl Ann Butman, James T. Carlton, and Stephen R. Palumbi. Whaling effects on deep-sea biodiversity. *Conservation Biology* 9: 462-464.
1995. Andrew N. Cohen, James T. Carlton, and Monique C. Fountain. Introduction, dispersal and potential impacts of the green crab *Carcinus maenas* in San Francisco Bay, California. *Marine Biology* 122: 225-237.
1995. Sally E. Walker and James T. Carlton. Taphonomic losses become taphonomic gains: an experimental approach using the rocky shore gastropod, *Tegula funebris*. *Palaeogeography, Palaeoclimatology, Palaeoecology* 114: 197-217.
1995. Andrew N. Cohen and James T. Carlton. Biological Study. Nonindigenous Aquatic Species in a United States Estuary: A Case Study of the Biological Invasions of the San Francisco Bay and Delta. A Report for the United States Fish and Wildlife Service, Washington, D.C., and The National Sea Grant College Program, Connecticut Sea Grant, NTIS Report Number PB96-166525, 246 pp. + Appendices.
1996. James T. Carlton. Marine bioinvasions: the alteration of marine ecosystems by nonindigenous species. *Oceanography* 9(1): 36-43.
1996. Cheryl Ann Butman, James T. Carlton, and Stephen R. Palumbi. Whales don't fall like snow: Reply to Jelmert. *Conservation Biology* 10(2): 655-656.
1996. James T. Carlton and R. Mann. Transfers and world-wide introductions, Chapter 20, pp. 691-706, in: V. S. Kennedy, R. I. E. Newell, and A. F. Eble, editors, *The Eastern Oyster: Crassostrea virginica*. Maryland Sea Grant, College Park, Maryland.
1996. James T. Carlton. Biological invasions and cryptogenic species. *Ecology* 77: 1653-1655.

1996. Ladd E. Johnson and James T. Carlton. Post-establishment spread in large-scale invasions: the dispersal mechanisms of the zebra mussel *Dreissena polymorpha*. *Ecology* 77: 1686-1690.
1996. James T. Carlton. Pattern, process, and prediction in marine invasion ecology. *Biological Conservation* 78(1/2): 97-106.
1996. Edward L. Mills, David L. Strayer, Mark D. Scheuerell, and James T. Carlton. Exotic species in the Hudson River basin: a history of invasions and introductions. *Estuaries* 19(4): 814-823.
1997. Andrew N. Cohen and James T. Carlton. Transoceanic transport mechanisms : The introduction of the Chinese mitten crab, *Eriocheir sinensis*, to California. *Pacific Science* 51(1):1-11.
1997. James T. Carlton and Mary H. Ruckelshaus. Nonindigenous marine invertebrates and algae, pp. 187-201, *in*: *Strangers in Paradise. Impact and Management of Non-Indigenous Species in Florida*. Edited by Daniel Simberloff, Don C. Schmitz, and Tom C. Brown. Island Press, Washington, D.C. and Covelo CA.
1997. Richard W. Pierce, James T. Carlton, Deborah A. Carlton, and Jonathan B. Geller. Ballast water as a vector for tintinnid transport. *Marine Ecology Progress Series* 149: 295-297.
1997. Gregory M. Ruiz, James T. Carlton, Edwin D. Grosholz, and Anson H. Hines. Global invasions of marine and estuarine habitats by non-indigenous species: mechanisms, extent, and consequences. *American Zoologist* 37(6): 621-632.
1997. Edward L. Mills, Mark D. Scheuerell, James T. Carlton, and David L. Strayer. Biological invasions in the Hudson River Basin: An inventory and historical analysis. *New York State Museum Circular No. 57*, 51 pp.
1998. Andrew N. Cohen and James T. Carlton. Accelerating invasion rate in a highly invaded estuary. *Science* 279 (5350): 555-558.
1998. Claudia E. Mills and J. T. Carlton. Rationale for a system of international reserves for the open ocean. *Conservation Biology* 12: 244-247.
1998. James T. Carlton and Andrew N. Cohen. Periwinkle's progress: The Atlantic snail *Littorina saxatilis* (Mollusca: Gastropoda) establishes a colony on a Pacific shore. *The Veliger* 41(4): 333-338.
1998. James T. Carlton. Apostrophe to the ocean. *Conservation Biology* 12(6): 1165-1167.
1999. James T. Carlton The scale and ecological consequences of biological invasions in the world's oceans, pp. 195-212, *in*: Odd Terje Sandlund, Peter Johan Schei, and Åuslaug Viken, editors, *Invasive Species and Biodiversity Management*. Kluwer Academic Publishers, Dordrecht.
1999. L. David Smith, Marjorie J. Wonham, Linda D. McCann, Gregory M. Ruiz, Anson H. Hines, and James T. Carlton. Invasion pressure to a ballast-flooded estuary and an assessment of inoculant survival. *Biological Invasions* 1(1): 67-87.
1999. Stephan L. Coles, Ralph C. DeFelice, Lu G. Eldredge, and James T. Carlton. Historical and recent introductions of nonindigenous marine species into Pearl Harbor, Oahu, Hawaiian Islands. *Marine Biology* 135: 147-158.
1999. James T. Carlton, Jonathan B. Geller, Marjorie L. Reaka-Kudla, and Elliott A. Norse. Historical extinction in the sea. *Annual Review of Ecology and Systematics* 30: 515 - 538.
1999. James T. Carlton. Molluscan invasions in marine and estuarine communities. *Malacologia* 41(2): 439-454.
2000. Marjorie J. Wonham, James T. Carlton, Gregory M. Ruiz and L. David Smith. Fish and ships: relating dispersal

- frequency to success in biological invasions. *Marine Biology* 136: 1111 - 1121.
2000. James T. Carlton. Global change and biological invasions in the oceans, pp. 31 - 53, *in*: Harold A. Mooney and Richard J. Hobbs, eds., *Invasive Species in a Changing World*. Island Press, Covelo CA.
2000. Martha Hill Canning and James T. Carlton. Predation on kamptozoans (Entoprocta). *Invertebrate Biology* 119: 386 - 387.
2000. Gregory M. Ruiz, Paul W. Fofonoff, James T. Carlton, Marjorie J. Wonham, and Anson H. Hines. Invasion of coastal marine communities in North America: apparent patterns, processes, and biases. *Annual Review of Ecology and Systematics* 31: 481-531. + Appendix 1 (*on line*).
2000. Carlton, James T. Quo Vadimus Exotica Oceanica?: Marine Bioinvasion Ecology in the Twenty-First Century, pp. 6 - 23 *in*: Judith Pederson, editor. *Marine Bioinvasions: Proceedings of the First National Conference*. Massachusetts Institute of Technology, MIT Sea Grant College Program, MITSG 00-2, Cambridge, Massachusetts.
2001. James T. Carlton. Endangered marine invertebrates, pp. 455 - 464, *in*: *Encyclopedia of Biodiversity, Volume 2*. Academic Press, San Diego, California.
2001. Robert Steneck and James T. Carlton. Human alterations of marine communities: students beware!, pp. 445 - 468, *in*: Mark D. Bertness, Steven D. Gaines, and Mark E. Hay, editors. *Marine Community Ecology*. Sinauer Associates, Inc., Publishers, Sunderland, Massachusetts
2001. Bax, Nicholas, Carlton, James T., Mathews-Amos, A., Haedrich, Richard L, Howarth, Frank G., Purcell, Jennifer E., Rieser, Alison, and A. Gray. The control of biological invasions in the world's oceans. *Conservation Biology* 15: 1234-1246.
2001. James T. Carlton. Introduced species in U.S. coastal waters: environmental impacts and management priorities. Pew Oceans Commission, Arlington, Virginia, iii + 28 + (1) pp.
2001. Ladd E. Johnson, Anthony Ricciardi, and James T. Carlton. Overland dispersal of aquatic invasive species: a risk assessment of transient recreational boating. *Ecological Applications* 11(6): 1789-1799.
2002. James T. Carlton. Bioinvasion Ecology: Assessing Invasion Impact and Scale, pp. 7 -19 *in*: *Invasive Aquatic Species of Europe. Distribution, Impacts, and Management*, E. Leppäkoski, S. Gollasch, and S. Olenin, Editors. Kluwer Academic Publishers, Dordrecht, The Netherlands.
2002. Tim Wyatt and James T. Carlton. Phytoplankton introductions in European coastal waters: why are so few invasions reported?, pp. 41-46, *in*: CIESM (Commission Internationale pour l'Exploration Scientifique de la mer Mediterranee), *Alien marine organisms introduced by ships in the Mediterranean and Black Seas*, Istanbul, 6-9 November 2002, Workshop Monographs no. 20, 136 pp., Monaco (www.ciesm.org/publications/Istanbul02.pdf).
2003. James T. Carlton and Janet Hodder. Maritime mammals: terrestrial mammals as consumers in marine intertidal communities. *Marine Ecology Progress Series* 256: 271-286.
2003. James T. Carlton and Andrew N. Cohen. Episodic global dispersal in shallow water marine organisms: the case history of the European shore crabs *Carcinus maenas* and *Carcinus aestuarii*. *Journal of Biogeography* 30: 1809-1820.
2003. Paul W. Fofonoff, Gregory M. Ruiz, Brian Steves, and James T. Carlton. In ships or on ships? Mechanisms of transfer and invasion for nonnative species to the coasts of North America, pp. 152-182, *in*: *Invasive species: vectors and management strategies*, G. M. Ruiz and J. T. Carlton, eds. Island Press, Washington, Covelo CA, London.

2003. Gregory M. Ruiz and James T. Carlton: Invasion vectors: a conceptual framework for management, pp. 459-504, *in*: Invasive species: vectors and management strategies, G. M. Ruiz and J. T. Carlton, eds. Island Press, Washington, Covelo CA, London.
2003. James T. Carlton. Community assembly and historical biogeography in the North Atlantic Ocean: the potential role of human-mediated dispersal vectors. *Hydrobiologia* 503:1-8.
2004. Chela J. Zabin, James T. Carlton, L. Scott Godwin. First report of the Asian sea anemone *Diadumene lineata* from the Hawaiian Islands. Occasional Papers of the Bernice P. Bishop Museum no. 79, pp. 54-57.
2005. Shannon M. Weigle, L. David Smith, James T. Carlton, and Judith Pederson. Assessing the risk of introducing exotic species via the live marine species trade. *Conservation Biology* 19: 213-223.
2005. Marjorie J. Wonham and James T. Carlton. Trends in marine biological invasions at local and regional scales: The Northeast Pacific Ocean as a model system. *Biological Invasions* 7: 369-392.
2005. James T. Carlton and Gregory M. Ruiz. The magnitude and consequences of bioinvasions in marine ecosystems: implications for conservation biology, pp. 123 – 148, *in*: Elliott A. Norse and Larry B. Crowder, eds. *Marine Conservation Biology: The Science of Maintaining the Sea's Biodiversity*. Island Press, Washington, DC.
2005. James T. Carlton and Gregory M. Ruiz. Vector science and integrated vector management in bioinvasion ecology: conceptual frameworks, pp. 36-58, *in*: Harold A. Mooney, Richard N. Mack, Jeffrey A. McNeely, Laurie E. Neville, Peter Johan Schei, and Jeffrey K. Waage, editors, *Invasive Alien Species: A New Synthesis*. Island Press, Covelo, California.
2005. Cohen, Andrew N., Leslie H. Harris, Brian L. Bingham, James T. Carlton, John W. Chapman, Charles C. Lambert, Gretchen Lambert, John C. Ljubenkov, Steve N. Murray, Linda C. Rao, Kathleen Reardon and Evangelina Schwindt. Rapid Assessment Survey for exotic organisms in southern California bays and harbors, and abundance in port and non-port areas. *Biological Invasions* 7(6) 995-1002.
2005. Jana L. D. Davis, Nicole A. Dobroski, James T. Carlton, James Prevas, Sarah Parks, Diana Hong, and Eve Southworth. Autotomy in the Asian shore crab (*Hemigrapsus sanguineus*) in a non-native area of its range. *Journal of Crustacean Biology* 25: 655-660.
2006. F. Arenas, J.D.D. Bishop, J.T. Carlton, P.J. Dyrinda, W.F. Farnham, D.J. Gonzalez, M. Jacobs, C. Lambert, G. Lambert, S.E. Nielsen, J.A. Pederson, J.S. Porter, S. Ward and C. A. Wood. Alien species and other notable records from a rapid assessment survey of marinas on the south coast of England. *Journal of the Marine Biological Association of the United Kingdom* 86: 1329-1337.
2006. David M. Lodge, S. L. Williams, H. J. MacIsaac, K. R. Hayes, B. Leung, S. Reichard, R. N. Mack, P. B. Moyle, M. Smith, D. A. Andow, J. T. Carlton, A. McMichael. Biological invasions: recommendations for U. S. policy and management. *Ecological Applications* 16: 2035-2054.
2007. James T. Carlton. Ballast, pp. 249-251, *in*: John B. Hattendorf, editor, *The Oxford Encyclopedia of Maritime History*. Volume 1 (677 pp.), Oxford University Press.
2007. James T. Carlton. Shipworm, pp. 694-696, *in*: John B. Hattendorf, editor, *The Oxford Encyclopedia of Maritime History*. Volume 3 (715 pp.) Oxford University Press.
2007. James T. Carlton. Introduced species, pp. 294-297, *in*: Mark W. Denny and Steven D. Gaines, editors, *Encyclopedia of Tidepools and Rocky Shores*. University of California Press.
2007. John W. Chapman, James T. Carlton, M. Renee Bellinger, and April M. H. Blakeslee. Premature refutation of a human-mediated marine species introduction: the case history of the marine snail *Littorina littorea* in the northwestern Atlantic. *Biological Invasions* 9(6): 737-750.

2008. John W. Chapman, April M. H. Blakeslee, James T. Carlton, and M. Renee Bellinger. Parsimony dictates a human introduction: on the use of genetic and other data to distinguish between the natural and human-mediated invasion of the European snail *Littorina littorea* in North America. *Biological Invasions* 10: 131-133.
2008. Arthur C. Mathieson, Clinton J. Dawes, Judith Pederson, Rebecca A. Gladych, and James T. Carlton. The Asian red seaweed *Grateloupia turuturu* (Rhodophyta) invades the Gulf of Maine. *Biological Invasions* 10: 985-988.
2008. James T. Carlton. The zebra mussel *Dreissena polymorpha* found in North America in 1986 and 1987. *Journal of Great Lakes Research* 34: 770-773.
2009. James T. Carlton. Deep invasion ecology and the assembly of communities in historical time, pp. 13-56, *in*: Gil Rilov and Jeffrey A. Crooks, editors, *Biological Invasions in Marine Ecosystems*. Springer-Verlag, Berlin, Heidelberg.
2009. Paul W. Fofonoff, Gregory M. Ruiz, Anson H. Hines, Brian D. Steves, and James T. Carlton. Four centuries of biological invasions in tidal waters of the Chesapeake Bay region, pp. 479-506, *in*: Gil Rilov and Jeffrey A. Crooks, editors, *Biological Invasions in Marine Ecosystems*. Springer-Verlag, Berlin, Heidelberg.
2009. James T. Carlton and William A. Newman. Reply to Clare and Hoeg. *Balanus amphitrite* or *Amphibalanus amphitrite*? A note on barnacle nomenclature. *Biofouling* 25(1): 77-80.
2010. Jonathan B. Geller, John A. Darling, and James T. Carlton. Genetic perspectives in marine biological invasions. *Annual Review of Marine Science* 2: 367-393.
2010. Cascade J. B. Sorte, Susan L. Williams, and James T. Carlton. Marine range shifts and species introductions: comparative spread rates and community impacts. *Global Ecology and Biogeography* 19: 303-316.
2010. James T. Carlton. The impact of maritime commerce on marine biodiversity. *The Brown Journal of World Affairs* 16(2): 131-142.
2011. James T. Carlton. Ballast, pp. 43-49, *in*: D. Simberloff and M. Rejmanek, editors. *Encyclopedia of Biological Invasions*, University of California Press, Berkeley.
2011. James T. Carlton. Invertebrates, Marine, pp. 385-390, *in*: D. Simberloff and M. Rejmanek, editors. *Encyclopedia of Biological Invasions*, University of California Press, Berkeley.
2011. James T. Carlton. The inviolate sea? Charles Elton and biological invasions in the world's oceans, pp. 25-33, *in*: David M. Richardson, ed., *Fifty Years of Invasion Ecology. The Legacy of Charles Elton*. Wiley-Blackwell, Oxford, England.
2011. David M. Richardson, Petr Pysek, and James T. Carlton. A compendium of essential concepts and terminology in invasion ecology, pp. 409-420, *in*: David M. Richardson, ed., *Fifty Years of Invasion Ecology. The Legacy of Charles Elton*. Wiley-Blackwell, Oxford, England.
2011. Jennifer Jacquet, Ian Boyd, James T. Carlton, Helen E. Fox, Ayana Elizabeth Johnson, Laurence Mee, Joe Roman, Mark Spalding, William Sutherland. Scanning the ocean for solutions. *Solutions* 2(1): 46-55.
2011. James T. Carlton. The Global Dispersal of Marine and Estuarine Crustaceans, pp. 3-23, *in*: Galil, Clark, and Carlton, Eds., *In the wrong place: alien marine crustaceans – distribution, biology and impacts*. Springer.
2011. James T. Carlton, William A. Newman, Fábio Bettini Pitombo. Barnacle invasions: introduced, cryptogenic, and range expanding Cirripedia of North and South America, pp. 159-213, *in*: Galil, Clark, and Carlton, Eds., *In the wrong place: alien marine crustaceans – distribution, biology and impacts*. Springer.

2011. Wataru Doi, Seiichi Watanabe, and James T. Carlton. Alien marine crustaceans of Japan: a preliminary assessment, pp. 419-449, *in*: Galil, Clark, and Carlton, Eds., *In the wrong place: alien marine crustaceans – distribution, biology and impacts*. Springer.
2011. Darren C. J. Yeo, James T. Carlton, Serena L. M. Teo, and Peter K. L. Ng. 2011. An incoming flood on a cryptic stage: Understanding alien crustacean invasions in Southeast Asia, pp. 403-417, *in*: Galil, Clark, and Carlton, Eds., *In the wrong place: alien marine crustaceans – distribution, biology and impacts*. Springer.
2011. Tim M. Blackburn, Petr Pysek, Sven Bacher, James T. Carlton, Richard P. Duncan, Vojtech Jarosik, John R. U. Wilson, and David M. Richardson. A proposed unified framework for biological invasions. *Trends in Ecology and Evolution* 26: 333-339.
2011. Angela Mead, James T. Carlton, Charles L. Griffiths, and Marc Rius. Revealing the scale of marine bioinvasions in developing regions: a South African re-assessment. *Biological Invasions* 13(9): 1991-2008.
2011. Angela Mead, James T. Carlton, Charles L. Griffiths, and Marc Rius. Introduced and cryptogenic marine and estuarine species of South Africa. *Journal of Natural History* 45: 2463-2524.
2011. Linsey E. Haram and James T. Carlton. Contribution to the biology and ecology of the spongivorous snail *Cerithiopsis greenii* (Gastropoda: Cerithiopsidae) in New England, USA. *The Nautilus* 125(4): 221-227.
2011. João Canning-Clode, Amy E. Fowler, James E. Byers, James T. Carlton, and Gregory M. Ruiz. 'Caribbean Creep' chills out: climate change and marine invasive species. *PLoS ONE* 6(12): e29657 [5 pages].
2013. Dor Edelist, Gil Rilov, Daniel Golani, James T. Carlton, and Ehud Spanier. Restructuring the sea: profound shifts in the world's most invaded marine ecosystem. *Diversity and Distributions* 19: 69-77.
2013. James T. Carlton. Endangered marine invertebrates, *in*: S. A. Levin (editor), *Encyclopedia of Biodiversity*, Second Edition, 3: 199-204. Academic Press, San Diego, California.
2013. Timothy M. Davidson, Catherine E. de Rivera, and James T. Carlton. Small increases in temperature exacerbate the erosive effects of a non-native burrowing crustacean. *Journal of Experimental Marine Biology and Ecology* 446: 115-121.
2013. John W. Chapman, Ralph A. Breitenstein, and James T. Carlton. Port-by-port accumulations and dispersal of hull fouling invertebrates between the Mediterranean Sea, the Atlantic Ocean, and the Pacific Ocean. *Aquatic Invasions* 8(3): 249-260.
2013. João Canning-Clode, Paul Fofonoff, Linda McCann, James T. Carlton, and Gregory Ruiz. Marine invasions on a subtropical island: fouling studies and new records in a recent marina on Madeira Island (Eastern Atlantic Ocean). *Aquatic Invasions* 8: 261-270.
2013. Susan L. Williams, Ian C. Davidson, Jae R. Pasari, Gail V. Ashton, James T. Carlton, R. Eliot Crafton, Rachel E. Fontana, Edwin D. Grosholz, A. Whitman Miller, Gregory M. Ruiz, and Chela J. Zabin. Managing multiple vectors for marine invasions in an increasingly connected world. *Bioscience* 63(12): 952-966.
2013. James T. Carlton. Global Marine Extinctions in Historical Time: What We Know and Why We Don't Know (a Lot) More, pp. 23-29, *in*: CIESM Workshop Monograph 45, Frederic Brand, editor. *Marine Extinctions – patterns and processes*. CIESM Publisher, Monaco, 188 pp.
2014. James T. Carlton. Biological Invasions, pp. 418-427, including Tables 6.10 and 6.11, *in*: G. Lopez *et al.*, *Biology and Ecology of Long Island Sound*, *in*: J. S. Latimer, *et al.*, eds., *Long Island Sound: Prospects for the Urban Sea*. Springer, New York, 558 pp.

2014. Dale R. Calder, James T. Carlton, and Henry H. C. Choong. 2014. *Clava multicornis* (Forsskål, 1775): rediscovery of a North Atlantic hydroid (Cnidaria, Hydrozoa, Anthothecata) on the Pacific coast of North America. *Bioinvasion Records* 3(2): 71-76.
2014. Christophe Lejeusne, Alice Saunder, Nicolas Petit, Melanie Beguer, Michio Otani, James T. Carlton, Ciro Rico, and Andy J. Green. High genetic diversity and absence of founder effects of a worldwide aquatic invader. *Scientific Reports* 4, number 5808, doi:10.1038/srep05808
2014. Macarena Ros, Gail V. Ashton, Mariana B. Lacerda, James T. Carlton, Maite Vazquez-Luis, Jose M. Guerra-Garcia, Gregory M. Ruiz. The Panama canal and the transoceanic dispersal of marine invertebrates: Evaluation of the introduced amphipod *Paracaprella pusilla* Mayer, 1890 in the Pacific Ocean. *Marine Environmental Research* 99: 204-211.
2014. Dale R. Calder, Henry H. C. Choong, James T. Carlton, John W. Chapman, Jessica A. Miller, and Jonathan Geller. Hydroids (Cnidaria: Hydrozoa) from Japanese tsunami marine debris washing ashore in the northwestern United States. *Aquatic Invasions* 9(4): 425-440.
2015. Neal L. Evenhuis and James T. Carlton. Lucius G. Eldredge (1938–2013): The man and his work, pp. 5-23, *in*: Neal L. Evenhuis and James T. Carlton, editors, Lucius G. Eldredge III Memorial Volume: Tribute to a Polymath. *Bishop Museum Bulletin Zoology* 9.
2015. James T. Carlton and Lucius G. Eldredge. Update and Revision of The Marine Bioinvasions of Hawai'i: The Introduced and Cryptogenic Marine and Estuarine Animals and Plants of the Hawaiian Archipelago, pp. 25-47, *in*: Neal L. Evenhuis and James T. Carlton, editors, Lucius G. Eldredge III Memorial Volume: Tribute to a Polymath. *Bishop Museum Bulletin Zoology* 9.
2015. Niels-Viggo Hobbs, Eric Lazo-Wasem, Marco Faasse, Jeffery R. Cordell, John W. Chapman, Carter S. Smith, Robert Prezant, Rebecca Shell, and James T. Carlton. Going Global: The Introduction of the Asian Isopod *Ianiropsis serricaudis* Gurjanova (Crustacea: Peracarida) to North America and Europe. *Aquatic Invasions* 10(2): 177-187.
2015. Robert Hershler, Hsiu-Ping Liu, James T. Carlton, Andrew N. Cohen, Cheryl B. Davis, Jeff Sorensen and David Weedman. New discoveries of introduced and cryptogenic fresh and brackish water gastropods (Caenogastropoda: Cochliopidae) in the western United States. *Aquatic Invasions* 10(2): 147-156.
2015. Bella S. Galil, Ferdinando Boero, Marnie L. Campbell, James T. Carlton, Elizabeth Cook, Simonetta Fraschetti, Stephan Gollasch, Chad L. Hewitt, Anders Jelmert, Enrique Macpherson, Agnese Marchini, Cynthia McKenzie, Dan Minchin, Anna Occhipinti-Ambrogi, Henn Ojaveer, Sergej Olenin, Stefano Piraino, Gregory M. Ruiz. 'Double trouble': the expansion of the Suez Canal and marine bioinvasions in the Mediterranean Sea *Biological Invasions* 17: 973-976.
2015. Henn Ojaveer, Bella S. Galil, Marnie L. Campbell, James T. Carlton, João Canning-Clode, Elizabeth J. Cook, Alisha D. Davidson, Chad L. Hewitt, Anders Jelmert, Agnese Marchini, Cynthia H. McKenzie, Dan Minchin, Anna Occhipinti-Ambrogi, Sergej Olenin, Gregory Ruiz. Classification of non-indigenous species based on their impacts: considerations for application in marine management. *PLoS Biol* 13(4): e1002130. doi:10.1371/journal.pbio.1002130
2015. Gregory M. Ruiz, Paul W. Fofonoff, Brian P. Steves, and James T. Carlton. Invasion history and vector dynamics in coastal marine ecosystems: a North American perspective. *Aquatic Ecosystem Health and Management* 18(3): 299-311.
2015. Linda McCann, Inti Keith, James T. Carlton, Gregory M. Ruiz, Terence P. Dawson and Ken Collins. First record of the non-native bryozoan *Amathia* (= *Zoobotryon*) *verticillata* (delle Chiaje, 1822) (Ctenostomata) in the Galapagos Islands. *BioInvasion Records* 4: 255-260.

2015. Alejandro Bortolus, James T. Carlton, and Evangelina Schwindt. Reimagining South American coasts: unveiling the hidden invasion history of an iconic ecological engineer. *Diversity and Distributions* 21(11): 1267-1283.
2015. Amy E. Fowler, April M. H. Blakeslee, Joao Canning-Clode, Michele F. Repetto, Anne M. Phillip, James T. Carlton, Fredrika C. Moser, Gregory M. Ruiz, A. Whitman Miller. Opening Pandora's bait box: a potent vector for biological invasions of marine species. *Diversity and Distributions* 22(1):30-42.
2015. James T. Carlton and Gregory M. Ruiz. Anthropogenic vectors of marine and estuarine invasions: an overview framework, pp. 24-36, *in*: João Canning-Clode, editor. *Biological Invasions in Changing Ecosystems: Vectors, Ecological Impacts, Management, and Predictions*. De Gruyter Open.
2016. James T. Carlton. The non-mystery of non-native species. *Human-Wildlife Interactions* 10(1):137-139.
2016. Frances E. Lucy, Helen Roy, Annie Simpson, James T. Carlton *et al.* [+ 36 additional authors]. INVASIVESNET towards an International Association for Open Knowledge on Invasive Alien Species. *Management of Biological Invasions* 7(2): 131-139.
2017. April M. H. Blakeslee, Yumi Kamakura, Jaclyn Onufrey, Wataru Makino, Jotaro Urabe, Susan Park, Carolyn L. Keogh, A. Whitman Miller, Mark S. Minton, James T. Carlton, and Osamu Miura. Reconstructing the invasion history of the Asian shore crab, *Hemigrapsus sanguineus* (De Haan 1835) in the Western Atlantic. *Marine Biology* 164: 47 (19 pp.)
2017. João Canning Clode and James T. Carlton. Refining and Expanding Global Climate Change Scenarios in the Sea: Poleward Creep Complexities, Range Termini, and Setbacks and Surges. *Diversity and Distributions* 23(5): 463-473.
2017. Tamar Guy-Haim, Orit Hyams-Kaphzan, Erez Yeruham, Ahuva Almogi-Labin, and James T. Carlton. A novel marine bioinvasion vector: ichthyochory, live passage through fish. *Limnology and Oceanography Letters* 2: 81-90.
2017. Anthony Ricciardi, Timothy M. Blackburn, James T. Carlton, Jaimie T.A. Dick, Philip E. Hulme, Josephine C. Iacarella, Jonathan M. Jeschke, Andrew M. Liebhold, Julie L. Lockwood, Hugh J. MacIsaac, Petr Pyšek, David M. Richardson, Gregory M. Ruiz, Daniel Simberloff, William J. Sutherland, David A. Wardle, and David C. Aldridge. Invasion Science: A Horizon Scan of Emerging Challenges and Opportunities. *Trends in Ecology and Evolution* 32: 464-474.
2017. Anthony Ricciardi, Tim M. Blackburn, James T. Carlton, Jaimie T.A. Dick, Philip E. Hulme, Josephine C. Iacarella, Jonathan M. Jeschke, Andrew M. Liebhold, Julie L. Lockwood, Hugh J. MacIsaac, Petr Pyšek, David M. Richardson, Gregory M. Ruiz, Daniel Simberloff, William J. Sutherland, David A. Wardle, and David C. Aldridge. Invasion science: looking forward rather than revisiting old ground -- A reply to Zenni et al. *Trends in Ecology and Evolution* DOI: <http://dx.doi.org/10.1016/j.tree.2017.08.007>
2017. James T. Carlton, John W. Chapman, Jonathan B. Geller, Jessica A. Miller, Deborah A. Carlton, Megan I. McCuller, Nancy C. Treneman, Brian P. Steves, Gregory M. Ruiz. Tsunami-driven rafting: Transoceanic species dispersal and implications for marine biogeography. *Science* 357 (6358): 1402-1406.
Supplementary Materials at www.sciencemag.org/content/357/6358/1402/suppl/DC1
Dryad Digital Depository at <http://dx.doi.org/10.5061/dryad.rh01m>
Science video (<http://www.sciencemag.org/news/2017/09/japanese-tsunami-transported-hundreds-species-united-states-and-canada-video-reveals>)
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2018. Jessica A. Miller, James T. Carlton, John W. Chapman, Jonathan B. Geller, Gregory M. Ruiz. Transoceanic dispersal of the mussel *Mytilus galloprovincialis* on Japanese tsunami marine debris: An approach for evaluating rafting of a coastal species at sea. *Marine Pollution Bulletin* 132: 60-69.
2018. Jessica A. Miller, Reva Gillman, James T. Carlton, Cathryn Clarke Murray, Jocelyn C. Nelson, Michio Otani, and Gregory M. Ruiz. Trait-based characterization of species transported on Japanese tsunami marine debris: Effect of prior invasion history on trait distribution. *Marine Pollution Bulletin* 132: 90-201.
2018. Thomas W. Therriault, Jocelyn C. Nelson, James T. Carlton, Luran Liggan, Michio Otani, Hiroshi Kawai, Danielle Scriven, Gregory M. Ruiz, Cathryn Clarke Murray. The invasion risk of species associated with Japanese Tsunami Marine Debris in Pacific North America and Hawaii. *Marine Pollution Bulletin* 132: 82-89.
2018. James T. Carlton, John W. Chapman, Jonathan B. Geller, Jessica A. Miller, Gregory M. Ruiz, Deborah A. Carlton, Megan I. McCuller, Nancy C. Treneman, Brian P. Steves, Ralph A. Breitenstein, Russell Lewis, David Bilderback, Diane Bilderback, Takuma Haga, and Leslie H. Harris. Ecological and biological studies of ocean rafting: Japanese tsunami debris in North America and the Hawaiian Islands. *Aquatic Invasions* 13(1): 1-19.
2018. James T. Carlton and Amy E. Fowler. Ocean Rafting and Marine Debris: A Broader Vector Menu Requires a Greater Appetite for Invasion Biology Research Support. *Aquatic Invasions* 13(1): 11-15.
2018. David W. Elvin, James T. Carlton, Jonathan B. Geller, John W. Chapman, and Jessica A. Miller. Porifera (Sponges) from Japanese Tsunami Marine Debris arriving in the Hawaiian Islands and on the Pacific coast of North America. *Aquatic Invasions* 13(1): 31-41.
2018. Henry H. C. Choong, Dale R. Calder, John W. Chapman, Jessica A. Miller, Jonathan B. Geller, and James T. Carlton. Hydroids (Cnidaria: Hydrozoa: Leptothecata and Limnomedusae) on 2011 Japanese tsunami marine debris landing in North America and Hawai'i, with revisory notes on *Hydrodendron* Hincks, 1874 and a diagnosis of Plumaleciidae, new family. *Aquatic Invasions* 13(1): 43-70.
2018. Nancy C. Treneman, James T. Carlton, Luisa M.S. Borges, J. Reuben Shipway, Michael J. Raupach and Bjørn Altermark. Species diversity and abundance of shipworms (Mollusca: Bivalvia: Teredinidae) in woody marine debris generated by the Great East Japan Earthquake and Tsunami of 2011. *Aquatic Invasions* 13(1): 87-100.
2018. Nancy C. Treneman, Luisa M. S. Borges, J. Reuben Shipway, Michael J. Raupach, Bjørn Altermark and James T. Carlton. A molecular phylogeny of wood-borers (Teredinidae) from Japanese tsunami marine debris. *Aquatic Invasions* 13(1): 101-112.
2018. Hayato Tanaka, Moriaki Yasuhara and James T. Carlton. Transoceanic transport of living marine Ostracoda (Crustacea) on tsunami debris from the 2011 Great East Japan Earthquake. *Aquatic Invasions* 13(1): 125-135.
2018. Megan I. McCuller, James T. Carlton. Transoceanic rafting of Bryozoa (Cyclostomata, Cheilostomata, and Ctenostomata) across the North Pacific Ocean on Japanese tsunami marine debris. *Aquatic Invasions* 13(1): 137-162.
2018. Megan I. McCuller, James T. Carlton, Jonathan B. Geller. *Bugula tsunamiensis* n. sp. (Bryozoa, Cheilostomata, Bugulidae) from Japanese tsunami marine debris landed in the Hawaiian Archipelago and the Pacific coast of the USA. *Aquatic Invasions* 13(1): 163-171.
2018. Nicholas Ta, Jessica A. Miller, John W. Chapman, Allen E. Pleus, Thomas Calvanese, Timothy Miller-Morgan, James Burke and James T. Carlton. The Western Pacific barred knifejaw, *Oplegnathus fasciatus* (Temminck & Schlegel, 1844) (Pisces: Oplegnathidae) arriving with tsunami debris on the Pacific coast of North America. *Aquatic Invasions* 13(1): 179-186.

2018. Mickey Agha, Melissa K. Riley, Eric Sanford, James T. Carlton, William A. Newman, Brian D. Todd. A review of epizoic barnacles reported from freshwater turtles with a new record from California. *Herpetological Review* 49: 25-28.
2018. Cathryn Clarke Murray, Thomas W. Therriault, Hideaki Maki, Nancy Wallace, James T. Carlton, and Alexander Bychkov. ADRIFT in the North Pacific: The movement, surveillance, and impact of Japanese tsunami debris. *Marine Pollution Bulletin* 132: 1-4.
2018. John A. Darling and James T. Carlton. A framework for understanding marine cosmopolitanism in the Anthropocene. *Frontiers in Marine Science*. doi: 10.3389/fmars.2018.00293, 25 pages.
2018. Henn Ojaveer, Bella S. Galil, James T. Carlton, Heidi Alleway, Philippe Gouletquer, Maiju Lehtiniemi, Agnese Marchini, Whitman Miller, Anna Occhipinti-Ambrogi, Melita Peharda, Gregory M. Ruiz, Susan L. Williams, and Anastasija Zaiko. Historical baselines in marine bioinvasions: Implications for policy and management. *PLOS One*, <https://doi.org/10.1371/journal.pone.0202383>, 48 pages.
2018. Bella S. Galil, Henn Ojaveer, and James T. Carlton. Marine Bioinvasions [7 pp.] in *Encyclopedia of Ocean Sciences*, Third Edition. Elsevier.