AARON JOHN WIRSING

School of Environmental and Forest Sciences
University of Washington
Box 352100
Seattle, WA 98195
(206) 543-1585
wirsinga@uw.edu

EDUCATION

2005 Ph.D. Biological Sciences, Simon Fraser University

2001 M.S. Wildlife Resources, University of Idaho

1996 A.B. Biology, Bowdoin College

PROFESSIONAL APPOINTMENTS

2020-Present Professor, School of Environmental and Forest Sciences (SEFS), University of Washington

2016 Visiting Professor, School of Life and Environmental Sciences, University of Sydney

2014-2020 Associate Professor, School of Environmental and Forest Sciences (SEFS), University of Washington

2008-2014 Assistant Professor, School of Environmental and Forest Sciences (SEFS), University of Washington

2006-2008 Post-doctoral Research Associate, Department of Biological Sciences, Florida International University

PEER-REVIEWED PUBLICATIONS

***Denotes graduate student; †denotes an undergraduate student**

116. Uyeda, L. T.*, Ardiantiono, E. Iskandar, **A. J. Wirsing**, and R. C. Kyes. *In press*. Snakebite Envenomation, Attitudes, and Behavior Toward Snakes in Banten, Indonesia. Animals.

115. Bassing, S. B., M. Devivo, T. Ganz, B. Kertson, L. Prugh, T. Roussin, L. Satterfield*, B. Windell, **A. J. Wirsing**, and B. Gardner. *In press*. Are we telling the same story? Comparing

inferences made from camera trap and telemetry data for wildlife monitoring. Ecological Applications.

114. Ripple, W. J., M. K. Phillips, C. Wolf, R. L. Beschta, J. Vucetich, J. B. Kauffman, B. E. Law, **A. J. Wirsing**, J. E. Lambert, E. Leslie, C. Vynne, E. Dinerstein, R. Noss, G. Wuerthner, D. A. DellaSala, J. T. Bruskotter, M. P. Nelson, E. Crist, D. M. Ashe. *In press*. Rewilding the American west. Bioscience.

113. Kachel, S. M.*, K. Karimov, and **A. J. Wirsing**. *In press*. Predator niche overlap and partitioning and potential interactions in the mountains of Central Asia. Journal of Mammalogy.

112. Jensen, P. O., A. J. Wirsing, and D. H. Thornton. 2022. Using camera traps to estimate density of showshoe hare (Lepus americanus): a keystone boreal forest herbivore. Journal of Mammalogy 103: 693-710.

111. **Wirsing, A. J.**, J. J. Kiszka, A. C. Allen, and M. R. Heithaus. 2022. Ecological roles and importance of sea cows (Order: Sirenia): a review and prospectus. Marine Ecology Progress Series 689: 191-215.

110. **Wirsing, A. J.**, A. N. Johnston, and J. J. Kiszka. 2022. Foreword to the Special Issue on 'The rapidly expanding role of drones as a tool for wildlife research'. Wildlife research 49: i-v.

109. Quinn, T. P., **A. J. Wirsing**, and M. Proctor. 2022. Optimal barbed wire height for brown bear hair sample collection. Ursus 33: e2,1-6.

108. Dellinger, J. A.*, C. R. Shores*, A. D. Craig*, S. M. Kachel*, M. R. Heithaus, W. J. Ripple, and **A. J. Wirsing**. 2022. Predators reduce niche overlap between sympatric prey. Oikos e08628.

107. Daum, M., E. Zhang, D. He, M. Balazinska, B. Haynes, R. Krishna, A. Craig*, and **A. Wirsing**. 2022. VOCAL: Video Organization and Interactive Compositional AnaLytics. 12th Annual Conference on Innovative Data Systems Research (CIDR '22). January 10-13, 2022, Chaminade, USA.

106. Bogezi, C., L. M. van Eeden, **A. J. Wirsing**, and J. M. Marzluff. 2021. Ranchers' perspectives on participating in non-lethal wolf-livestock conflict mitigation strategies. Frontiers in Conservation Science 2: 683732.

105. Bracis, C., and **A. J. Wirsing**. 2021. Prey foraging behavior after predator introduction Is driven by resource knowledge and exploratory tendency. Frontiers in Ecology and Evolution 9: 698370.

104. Nowicki, R., J. Thomson, J. Fourqurean, M. Heithaus, and **A. Wirsing**. 2021. Loss of predation risk from apex predators can exacerbate marine tropicalization caused by extreme climatic events. Journal of Animal Ecology 90: 2041-2052.

103. Jensen, P. O., A. J. H. Meddens, S. Fisher, **A. J. Wirsing**, D. L. Murray, and D. H. Thornton. 2021. Broaden your horizon: the use of remotely sensed data for modeling populations of forest species at landscape scales. Forest Ecology and Management 500: 119640.

102. van Eeden, L. M.*, C. Bogezi, D. Leng, J. Marzluff, **A. J. Wirsing**, and S. Rabotyagov. 2021. Public willingness to pay for gray wolf conservation that could support a rancher-led wolf-livestock coexistence program. Biological Conservation 260: 109226.

101. **Wirsing, A. J**., and T. M. Newsome. 2021. Scavenging effects of large canids. Integrative and Comparative Biology 61: 117-131.

100. Bryce, C. M., M. S. Davis, M. E. Gompper, A. Hurt, J. Koster, G. Larson, E. A. Ostrander, M. A. R. Udell, S. Urfer, **A. J. Wirsing**, and A. G. Jimenez. 2021. Biology's best friend: Bridging disciplinary gaps to advance canine science. Integrative and Comparative Biology 61: 76-92.

99. Sabal, M. C., M. S. Boyce, C. L. Charpentier, N. B. Furey, T. M. Luhring, H. W. Martin, M. C. Melnychuk, R. B. Srygley, C. M. Wagner, **A. J. Wirsing**, R. C. Ydenberg, and E. P. Palkovacs. 2021. Predation landscapes influence migratory prey ecology and evolution. Trends in Ecology and Evolution 36: 737-749.

98. Ro, H.[†], J. H. Stern, **A. J. Wirsing**, and T. P. Quinn. 2021. Stable isotopes reveal variation in consumption of Pacific salmon by brown bears, despite ready access in small streams. Journal of Fish and Wildlife Management 12: 40-49.

97. van Eeden, L. M.*, S. S. Rabotyagov, M. Kather, C. Bogezi, **A. J. Wirsing**, and J. Marzluff. 2021. Political affiliation predicts public attitudes toward gray wolf (*Canis lupus*) conservation and ranching. Conservation Science and Practice 3:e387.

96. Lincoln, A. E., **A. J. Wirsing**, and T. P. Quinn. 2021. Prevalence and patterns of scavenging by brown bears (*Ursus arctos*) on salmon (*Oncorhynchus* spp.) carcasses. Canadian Journal of Zoology 99: 9-17.

95. **Wirsing, A. J**., M. R. Heithaus, J. S. Brown, B. P. Kotler, and O. J. Schmitz. 2021. The context-dependence of non-consumptive predator effects. Ecology Letters 24: 133-129.

94. Kilfoil, J. P., I. Rodriguez-Pinto, J. J. Kiszka, M. R. Heithaus, Y. Zhang, C. C. Rao, L. E. Ailloud, M. D. Campbell, and **A. J. Wirsing**. 2020. Using unmanned aerial vehicles and machine learning to improve sea cucumber density estimation in shallow habitats. ICES Journal of Marine Sciences 77: 2882-2889.

93. Lincoln, A. E., **A. J. Wirsing**, and T. P. Quinn. 2020. Long-term use of noninvasive sampling methods: does successful sampling of brown bears by hair snares and camera traps change over time? Wildlife Research 47: 499-508.

92. MacNeil, M. A., D. D. Chapman, M. Heupel, C. Simpfendorfer, M. Heithaus, M. Meekan, E. Harvey, J. Goetze, J. Kiszka, M. E. Bond, L. M. Currey-Randall, C. W. Speed, C. S. Sherman, M. J. Rees, V. Udyawer, K. I. Flowers, G. Clementi, J. Valentin-Albanese, T. Gorham, M. S. Adam, K. Ali, F. Pina-Amargós, J. A. Angulo-Valdés, J. Asher, L. G. Barcia, O. Beaufort, C. Benjamin, A. T. F. Bernard, M. L. Berumen, S. Bierwagen, E. Bonnema, R. M. K. Bown, D. Bradley, E. Brooks, J. J. Brown, D. Buddo, P. Burke, C. Cáceres, D. Cardeñosa, J. C. Carrier, J. E. Caselle, V. Charloo, T. Claverie, E. Clua, J. E. M. Cochran, N. Cook, J. Cramp, B. D'Alberto, M. de Graaf, M. Dornhege, A. Estep, L. Fanovich, N. F. Farabough, D. Fernando, A. L. Flam, C. Floros, V. Fourqurean, R. Garla, K. Gastrich, L. George, R. Graham, T. Guttridge, R. S. Hardenstine, S. Heck, A. C. Henderson, H. Hertler, R. Hueter, M. Johnson, S. Jupiter, D. Kasana, S. T. Kessel, B. Kiilu, T. Kirata, B. Kuguru, F. Kyne, T. Langlois, E. J. I. Lédée, S. Lindfield, A. Luna-Acosta, J. Maggs, B. M. Manjaji-Matsumoto, A. Marshall, P. Matich, E. McCombs, D. McLean, L. Meggs, S. Moore, S. Mukherji, R. Murray, M. Kaimuddin, S. J. Newman, J. Nogués, C. Obota, O. O'Shea, K. Osuka, Y. P. Papastamatiou, N. Perera, B. Peterson, A. Ponzo, A. Prasetyo, L. M. S. Quamar, J. Quinlan, A. Ruiz-Abierno, E. Sala, M. Samoilys, M. Schärer-Umpierre, A. Schlaff, N. Simpson, A. N. H. Smith, L. Sparks, A. Tanna, R. Torres, M. J. Travers, M. v. Z. Bergmann, L. Vigliola, J. Ward, A. M. Watts, C. Wen, E. Whitman, **A. J. Wirsing**, A. Wothke, E. Zarza-Gonzâlez, and J. E. Cinner. 2020. Global status and conservation potential of reef sharks. Nature 583: 801-806.

91. Wold, K. †, **A. J. Wirsing**, and T. P. Quinn. 2020. Do brown bears (Ursus arctos) avoid barbed wires deployed to obtain hair samples? A videographic assessment. Wildlife Biology wlb.00664.

90. Lincoln, A. E., R. Hilborn, **A. J. Wirsing**, and T. P. Quinn. 2020. Managing salmon for wildlife: do fisheries limit salmon consumption by bears in small streams? Ecological Applications 30: e02061.

89. **Wirsing, A. J**., T P. Quinn, J. R. Adams, and L. P. Waits. 2020. Optimizing selection of brown bear hair for noninvasive genetic analysis. Wildlife Society Bulletin 44: 94-100.

88. Bogezi, C., L. M. van Eeden*, **A. Wirsing**, and J. Marzluff. 2019. Predator-friendly beef certification as an economic strategy to promote coexistence between ranchers and wolves. Frontiers in Ecology and Evolution 7: 476.

87. Newsome, T. M., C. Howden, and **A. J. Wirsing**. 2019. Restriction of anthropogenic foods alters a top predator's diet and intra-specific interactions. Journal of Mammalogy 100: 1522-1532.

86. Shores, C. R.*, J. A. Dellinger*, E. S. Newkirk, S. T. Kachel*, and **A. J. Wirsing**. 2019. Mesopredators change temporal activity in response to a recolonizing apex predator. Behavioral Ecology 30: 1324-1335.

85. Peelle, L. E.*, **A. J. Wirsing**, K. L. Pilgrim, and M. K. Schwartz. 2019. Identifying predators from saliva at kill sites with limited remains. Wildlife Society Bulletin 43: 546-557.

84. Nowicki, R., M. Heithaus, J. Thomson, D. Burkholder, K. Gastrich, and **A. Wirsing**. 2019. Indirect effects of an extreme climatic event and seagrass loss on abundance and habitat use of a marine megafaunal community. Ecological Monographs 89:e01365.

83. Waayers, D., T. Tucker, S. Whiting, R. Groom, M. Vanderklift, R. Pillans, J. Rossendell, K. Pendoley, X. Hoenner, M. Thums, K. Dethmers, C. J. Limpus, **A. Wirsing**, C. McMahon, A. Strydom, P. Whittock, K. Howlett, D. Oades, G. McFarlane, T. Duke, M. Guinea, A. Whiting, M. Speirs, J. King, K. Hattingh, M. Heithaus, R. Mau, and D. Holley. 2019. Satellite tracking of marine turtles in the southeastern Indian Ocean: a review of deployments spanning 1990-2016. Indian Ocean Turtle Newsletter 29: 23-37.

82. Robins, C. W.*, B. N. Kertson, J. R. Faulkner, and **A. J. Wirsing**. 2019. Effects of urbanization on cougar foraging ecology along the wildland-urban gradient of western Washington. Ecosphere 10(3) e02605.

81. Dellinger, J. A.*, C. R. Shores*, A. Craig*, M. R. Heithaus, W. J. Ripple, and **A. J. Wirsing**. 2019. Habitat use of sympatric prey suggests divergent anti-predator responses to recolonizing gray wolves. Oecologia 189: 487-500.

80. Walker, L. E., J. M. Marzluff, M. C. Metz, **A. J. Wirsing**, L. M. Moskal, and D. W. Smith. 2018. Population responses of common ravens to reintroduced gray wolves. Ecology and Evolution 8: 11158-11168.

79. **Wirsing, A. J**., T. P. Quinn, C. J. Cunningham, J. R. Adams, A. D. Craig*, and L. P. Waits. 2018. Alaskan brown bears (*Ursus arctos*) aggregate and display fidelity to foraging neighborhoods while preying on salmon in small spawning streams. Ecology and Evolution 8: 9048-9061.

78. Dellinger, J. A.*, C. R. Shores*, M. Marsh, M. R. Heithaus, W. J. Ripple, and **A. J. Wirsing**. 2018. Impacts of naturally recolonizing gray wolves on survival rates and sources of mortality in two sympatric ungulates. Canadian Journal of Zoology 96: 760-768.

77. Ripple, W. J., C. Wolf, T. M. Newsome, M. Hoffmann, **A. J. Wirsing**, and D. J. McCauley. 2018. Reply to Pincheira-Donosoet and Hodgson: both the largest and smallest vertebrates have elevated extinction risk. Proceedings of the National Academy of Sciences of the United States of America 115: E5847-E5848.

76. Thornton, D. H., **A. J. Wirsing**, C. Lopez-Gonzalez, J. R. Squires, S. Fisher, K. W. Larsen, A. Peatt, M. A. Scrafford, R. A. Moen, A. E. Scully, T. W. King, and D. L. Murray. 2018. Asymmetric cross-border protection of peripheral transboundary species. Conservation Letters 11: e12430.

75. Kilfoil, J. P., **A. J. Wirsing**, M. D. Campbell, J. J. Kiszka, K. R. Gastrich, M. R. Heithaus, Y. Zhang, and M.E. Bond. 2017. Baited Remote Underwater Video surveys undercount sharks at high densities: insights from full-spherical camera technologies. Marine Ecology Progress Series 585: 113-121.

74. Ripple, W. J., C. Wolf, T. M. Newsome, M. Hoffmann, **A. J. Wirsing**, and D. J. McCauley. 2017. Reply to Kalinkat et al.: Smallest terrestrial vertebrates are highly imperiled. Proceedings of the National Academy of Sciences of the United States of America 114: E10265.

73. Ripple, W. J., C. Wolf, T. M. Newsome, M. Hoffmann, **A. J. Wirsing**, and D. J. McCauley. 2017. Extinction risk is most acute for the world's largest and smallest vertebrates. Proceedings of the National Academy of Sciences of the United States of America 114: 10678-10683.

72. Newsome, T. C., A. C. Greenville, D. Ćirović, C. R. Dickman, C. N. Johnson, M. Krofel, M. Letnic, W. J. Ripple, E. G. Ritchie, S. Stoyanov, and **A. J. Wirsing**. 2017. Top predators constrain mesopredator distributions. Nature Communications 8: 15469 doi: 10.1038/ncomms15469

71. Doherty, T. S., C. R. Dickman, A. S. Glen, T. M. Newsome, D. G. Nimmo, E. G. Ritchie, A. T. Vanak, and **A. J. Wirsing**. 2017. The global impacts of domestic dogs on threatened vertebrates. Biological Conservation 210: 56-59.

70. Newsome, T. M., P. J. S. Fleming, C. R. Dickman, T. S. Doherty, W. J. Ripple, E. G. Ritchie, and **A. J. Wirsing**. 2017. Making a new dog? Bioscience 67: 374-381.

69. Ripple, W. J., G. Chapron, J. V. López-Bao, S. M. Durant, D. W. MacDonald, P. A. Lindsey, E. L. Bennett, R. L. Beschta, J. T. Bruskotter, A. Campos-Arceiz, R. T. Corlett, C. T. Darimont, A. J. Dickman, R. Dirzo, H. T. Dublin, J. A. Estes, K. T. Everatt, M. Galetti, V. R. Goswami, M. W. Hayward, S. Hedges, M. Hoffmann, L. T. B. Hunter, G. I. H. Kerley, M. Letnic, T. Levi, F. Maisels, J. C. Morrison, M. P. Nelson, T. H. Newsome, L. Painter, R. M. Pringle, C. J. Sandom, J. Terborgh, A. Treves, B. V. Valkenburgh, J. A. Vucetich, **A. J. Wirsing**, A. D. Wallach, C. Wolf, R. Woodroffe, H. Young, and L. Zhang. 2017. Conserving the world's megafauna and biodiversity: the fierce urgency of now. Bioscience 67: 197-200.

68. Quinn, T. P., C. J. Cunningham, and **A. J. Wirsing**. 2017. Diverse foraging opportunities drive the functional response of local and landscape-scale bear predation on Pacific salmon. Oecologia 183: 415-429.

67. Ripple, W. J., G. Chapron, J. V. López-Bao, S. M. Durant, D. W. MacDonald, P. A. Lindsey, E. L. Bennett, R. L. Beschta, J. T. Bruskotter, A. Campos-Arceiz, R. T. Corlett, C. T. Darimont, A. J. Dickman, R. Dirzo, H. T. Dublin, J. A. Estes, K. T. Everatt, M. Galetti, V. R. Goswami, M. W. Hayward, S. Hedges, M. Hoffmann, L. T. B. Hunter, G. I. H. Kerley, M. Letnic, T. Levi, F. Maisels, J. C. Morrison, M. P. Nelson, T. H. Newsome, L. Painter, R. M. Pringle, C. J. Sandom, J. Terborgh, A. Treves, B. V. Valkenburgh, J. A. Vucetich, **A. J. Wirsing**, A. D. Wallach, C. Wolf, R. Woodroffe, H. Young, and L. Zhang. 2016. Saving the world's terrestrial megafauna. Bioscience 66: 807-812.

66. Newsome, T. M., L. Boitani, G. Chapron, P. Ciucci, C. R. Dickman, J. A. Dellinger*, J. V. López-Bao, R. O. Peterson, C. R. Shores*, **A. J. Wirsing**, and W. J. Ripple. 2016. Food habits of the world's grey wolves. Mammal Review 46: 255-269.

65. Uyeda, L. T.*, E. Iskandar, A. Purbatrapsila, **A. J. Wirsing**, and R. C. Kyes. 2016. The role of traditional beliefs in conservation of the water monitor lizard *Varanus salvator* and reticulated python *Python reticulatus* in Banten, Indonesia. Oryx 50: 296-301.

64. Vitense, K.*, **A. J. Wirsing**, R. C. Tyson, and J. J. Anderson. 2016. Theoretical impacts of habitat loss and generalist predation on predator-prey cycles. Ecological Modeling 327: 85-94.

63. Uyeda, L. T.*, E. Iskandar, R. C. Kyes, and **A. J. Wirsing**. 2015. Encounter rates, agonistic interactions, and social hierarchy among garbage-feeding Water Monitor Lizards (*Varanus salvator bivittatus*) on Tinjil Island, Indonesia. Herpetological Conservation and Biology 10: 753-764.

62. Newsome, T. M., G. Ballard, M. S. Crowther, A. Glen, J. A. Dellinger*, P. J. S. Fleming, A. C. Greenville, C. N. Johnson, M. Letnic, D. G. Nimmo, M. P. Nelson, C. R. Shores*, W. J. Ripple, E. G. Ritchie, A. D. Wallach, **A. J. Wirsing**, and C. R. Dickman. 2015. Resolving the value of the dingo in ecological restoration: could a reintroduction experiment help? Restoration Ecology 23: 201-208.

61. Kiszka, J. J., M. R. Heithaus, and **A. J. Wirsing**. 2015. Behavioral drivers of the ecological roles and importance of marine mammals. Marine Ecology Progress Series 523: 267-281.
60. Newsome, T. M., J. Dellinger*, C. R. Pavey, W. J. Ripple, C. Shores*, **A. J Wirsing**, and C. R. Dickman. 2015. The ecological effects of providing resource subsidies to predators. Global Ecology and Biogeography 24: 1-11.

59. Quinn, T. P., **A. J. Wirsing**, B. Smith, C. J. Cunningham, and J. Ching. 2014. Complementary use of motion-activated cameras and unbaited wire snares for DNA sampling reveals diel and seasonal patterns of brown bears foraging on adult sockeye salmon. Canadian Journal of Zoology 92: 893-903.

58. Sergio, F., O. J. Schmitz, C. Krebs, R. Holt, M. R. Heithaus, **A. J. Wirsing**, W. Ripple, E. Ritchie, D. G. Ainley, D. Oro, Y. Jhala, F. Hiraldo, and E. Korpimäki. 2014. Towards a cohesive, holistic view of top predation: a definition, synthesis and perspective. Oikos 123: 1234-1243.

57. **Wirsing, A. J**., M. R. Heithaus, and A. Frid. 2014. Cross-fertilizing aquatic and terrestrial research to understand predator risk effects. WIREs Water 2014. doi: 10.1002/wat2.1039

56. Heithaus, M. R., T. Alcoverro, R. Arthur, D. A. Burkholder, K. A. Coates, M. J. A. Christianen, N. Kelkar, S. A. Manuel, **A. J. Wirsing**, W. J. Kenworthy, and J. W. Fourqurean. 2014. Seagrasses in the age of sea turtle conservation and shark overfishing. Frontiers in Marine Science 1. doi: 10.3389/fmars.2014.00028

55. Uyeda, L.*, E. Iskandar, A. Purbatrapsila, J. Pamungkas, **A. Wirsing**, and R. Kyes. 2014. Water monitor lizard *(Varanus salvator)* satay: a treatment for skin ailments in Muarabinuangeun and Cisiih, Indonesia. Biawak 8: 35-38.

54. **Wirsing, A. J.**, and M. R. Heithaus. 2014. Accounting for individual behavioural variation in studies of habitat selection. Journal of Animal Ecology 83: 319-321.

53. Ripple, W. J., J. A. Estes, R. L. Beschta, C. C. Wilmers, E. G. Ritchie, M. Hebblewhite, J. Berger, B. Elmhagen, M. Letnic, M. P. Nelson, O. J. Schmitz, D. W. Smith, A. D. Wallach, and **A. J. Wirsing**. 2014. Status and ecological effects of the world's largest carnivores. Science 343: 1241484(2014).

52. Burkholder, D., M. Heithaus, J. Fourqurean, **A. Wirsing,** and L. Dill. 2013. Patterns of top-down control in a seagrass ecosystem: could a roving apex predator (*Galeocerdo cuvier*) induce a behavior-mediated trophic cascade? Journal of Animal Ecology 82: 1192-1202.

51. Ellsworth, E., **A. J. Wirsing**, L. A. Shipley, and D. L. Murray. 2013. Do measures of plant intake and digestibility from captive feeding trials align with foraging patterns of free-ranging snowshoe hares? Wildlife Research 40: 349-357.

50. Uyeda, L.*, E. Iskandar, **A. Wirsing**, and R. Kyes. 2013. Nocturnal activity of *Varanus salvator* on Tinjil Island, Indonesia. Biawak 7: 15-20.

49. Heithaus, M. R., J. J. Vaudo, S. Kreicker, C. A. Layman, M. Krutzen, D. A. Burkholder, K. Gastrich, C. Bessey, R. Sarabia, K. Cameron, **A. J. Wirsing**, J. A. Thomson, and M. M. Dunphy-Daly. 2013. Apparent resource partitioning and trophic structure of large-bodied marine predators in a relatively pristine seagrass ecosystem. Marine Ecology Progress Series 481: 225-237.

48. Thornton, D. H., **A. J. Wirsing**, J. D. Roth, and D. L. Murray. 2013. Habitat quality and population density drive occupancy dynamics of snowshoe hare in variegated landscapes. Ecography 36: 610-621.

47. Ripple, W. J., **A. J. Wirsing**, C. C. Wilmers, and M. Letnic. 2013. Widespread mesopredator effects after wolf extirpation. Biological Conservation 160: 70-79.

46. Abele, S. L., **A. J. Wirsing**, and D. L. Murray. 2013. Precommercial forest thinning alters abundance but not survival of snowshoe hares. Journal of Wildlife Management 77: 84-92.

45. Olson, E. L., A. K. Salomon, **A. J. Wirsing**, and M. R. Heithaus. 2012. Large-scale movements of male loggerhead turtles on a relatively pristine feeding ground in Shark Bay, Australia. Marine and Freshwater Research 63: 1108-1116.

44. **Wirsing, A. J.**, and M. R. Heithaus. 2012. Behavioral transition probabilities in dugongs change with habitat and shark presence: implications for sirenian conservation. Marine and Freshwater Research 63: 1069-1076.

43. Heithaus, M. R., **A. J. Wirsing**, and L. M. Dill. 2012. The ecological importance of intact top predator populations: a synthesis of fifteen years of research in a seagrass ecosystem. Marine and Freshwater Research 63: 1039-1050.

42. **Wirsing, A. J.**, S. W. Buskirk, W. J. Ripple, and R. L. Beschta. 2012. Wolves and lynx: plausible ideas make for testable hypotheses. Wildlife Society Bulletin 36: 572-577.

41. Thornton, D. H., **A. J. Wirsing**, J. D. Roth, and D. L. Murray. 2012. Complex effects of site preparation and harvest on snowshoe hare abundance across a patchy forest landscape. Forest Ecology and Management 280: 132-139.

40. Thomson, J. A., M. R. Heithaus, D. A. Burkholder, J. J. Vaudo, **A. J. Wirsing**, and L. M. Dill. 2012. Site specialists, diet generalists? Isotopic variation, site fidelity, and foraging by loggerhead turtles in Shark Bay, Western Australia. Marine Ecology Progress Series 453: 213-226.

39. **Wirsing, A. J**., J. R. Phillips, M. E. Obbard, and D. L. Murray. 2012. Incidental nest predation in freshwater turtles: inter- and intra-specific differences in vulnerability are explained by relative crypsis. Oecologia 168: 977-988.

38. Ripple, W. J., **A. J. Wirsing**, R. L. Beschta, and S. W. Buskirk. 2011. Can restoring wolves aid in lynx recovery? Wildlife Society Bulletin 35: 514-518.

37. **Wirsing, A. J.**, and W. J. Ripple. 2011. A comparison of shark and wolf research reveals similar behavioral responses by prey. Frontiers in Ecology and the Environment 9: 335-341.

36. **Wirsing, A. J.**, M. R. Heithaus, and L. M. Dill. 2011. Predator-induced modifications to diving behavior vary with foraging mode. Oikos 120: 1005-1012.

35. Dunphy-Daly, M. M., M. R. Heithaus. **A. J. Wirsing**, J. S. F. Mardon, and D. A. Burkholder. 2010. Predation risk influences the diving behavior of a marine mesopredator. The Open Ecology Journal 3: 8-15.

34. **Wirsing, A. J.**, K. E. Cameron, and M. R. Heithaus. 2010. Spatial responses to predators vary with prey escape mode. Animal Behaviour 79: 531-537.

33. **Wirsing, A. J.**, and M. R. Heithaus. 2009. Olive-headed sea snakes (*Disteria major*) shift seagrass microhabitats to avoid predators. Marine Ecology Progress Series 387: 287-293.

32. Heithaus, M. R., B. K. Delius, **A. J. Wirsing**, and M. M. Dunphy-Daly. 2009. Physical factors influencing the distribution of a top predator in a subtropical oligotrophic estuary. Limnology and Oceanography 54: 472-482.

31. Heithaus, M. R., **A. J. Wirsing**, D. Burkholder, J. Thomson, and L. M. Dill. 2009. Towards a predictive framework for predator risk effects: the interaction of landscape features and prey escape tactics. Journal of Animal Ecology 78: 556-562.

30. **Wirsing, A. J.**, R. Abernethy, and M. R. Heithaus. 2008. Speed and maneuverability of adult loggerhead sea turtles (*Caretta caretta*) under simulated predatory attack: do the sexes differ? Journal of Herpetology 42: 411-413.

29. Kerford, M. R., **A. J. Wirsing**, M. R. Heithaus, and L. M. Dill. 2008. Danger on the rise: tidal state mediates an exchange of food for safety by the bar-bellied sea snake *Hydrophis elegans*. Marine Ecology Progress Series 358: 289-294.

28. Heithaus, M. R., A. Frid, **A. J. Wirsing**, and B. Worm. 2008. Predicting ecological consequences of marine top predator declines. Trends in Ecology and Evolution 23: 202-210.

27. Heithaus, M. R., **A. J. Wirsing**, J. A. Thomson, and D. A. Burkholder. 2008. A review of lethal and non-lethal effects of predators on adult marine turtles. Journal of Experimental Marine Biology and Ecology 356: 43-51.

26. **Wirsing, A. J.**, M. R. Heithaus, A. Frid, and L. M. Dill. 2008. Seascapes of fear: evaluating sublethal predator effects experienced and generated by marine mammals. Marine Mammal Science 24: 1-15.

25. Heithaus, M. R., **A. J. Wirsing**, A. Frid, and L. M. Dill. 2007. Behavioral indicators in marine conservation: lessons from a pristine ecosystem. Israel Journal of Ecology and Evolution 53: 355-370.

24. **Wirsing, A. J.**, M. R. Heithaus, and L. M. Dill. 2007. Can you dig it? Use of excavation, a risky foraging tactic, by dugongs is sensitive to predation danger. Animal Behaviour 74: 1085-1091.

23. **Wirsing,** A. J., M. R. Heithaus, and L. M. Dill. 2007. Fear factor: do dugongs (*Dugong dugon*) trade food for safety from tiger sharks (*Galeocerdo cuvier*)? Oecologia 153: 1031-1040.

22. Heithaus, M. R., A. Frid, **A. J. Wirsing**, L. M. Dill, J. W. Fourqurean, D. Burkholder, J. Thomson, and L. Bejder. 2007. State-dependent risk-taking by green sea turtles mediates top-down effects of tiger shark intimidation in a marine ecosystem. Journal of Animal Ecology 76: 837-844.

21. **Wirsing,** A. J., M. R. Heithaus, and L. M. Dill. 2007. Can measures of prey availability improve our ability to predict the abundance of large marine predators? Oecologia 153: 563-568.

20. **Wirsing, A. J.**, and D. L. Murray. 2007. Food supplementation experiments revisited: verifying that supplemental food is used by its intended recipients. Canadian Journal of Zoology 85: 679-685.

19. **Wirsing, A. J.**, M. R. Heithaus, and L. M. Dill. 2007. Living on the edge: dugongs prefer to forage in microhabitats allowing for escape from rather than avoidance of predators. Animal Behaviour 74: 93-101.

18. **Wirsing, A. J.**, F. C. C. Azevedo, S. Larivière, and D. L. Murray. 2007. Patterns of gastrointestinal parasitism among five sympatric prairie carnivores: are males reservoirs? Journal of Parasitology 93: 504-510.

17. Heithaus, M. R., **A. J. Wirsing**, L. M. Dill, and L. I. Heithaus. 2007. Long-term movements of tiger sharks satellite-tagged in Shark Bay, Western Australia. Marine Biology 151: 1455-1461.

16. Ireland, D. H., **A. J. Wirsing**, and D. L. Murray. 2007. Phenotypically plastic responses of green frog embryos to conflicting predation risk. Oecologia 152: 162-168.

15. Sargeant, B. L., **A. J. Wirsing**, M. R. Heithaus, and J. Mann. 2007. Can environmental heterogeneity explain individual foraging variation in wild bottlenose dolphins (*Tursiops* sp.)? Behavioral Ecology and Sociobiology 61: 679-688.

14. Monello, R. J., J. J. Dennehy, D. L. Murray, and **A. J. Wirsing**. 2006. Growth and behavioral responses of two native frogs to an exotic competitor, *Rana catesbeiana*. Journal of Herpetology 40: 403-407.

13. Heithaus, M. R., I. M., Hamilton, **A. J. Wirsing**, and L. M. Dill. 2006. Validation of a randomization procedure to assess animal habitat preferences: microhabitat use of tiger sharks in a seagrass ecosystem. Journal of Animal Ecology 75: 666-676.

12. Azevedo, F. C. C., V. Lester, W. Gorsuch, S. Larivière, **A. J. Wirsing**, and D. L. Murray. 2006. Spring dietary breadth and overlap among five sympatric prairie carnivores. Journal of Zoology 269: 127-135.

11. **Wirsing, A. J.**, M. R. Heithaus, and L. M. Dill. 2006. Tiger shark (*Galeocerdo cuvier*) abundance and growth in a subtropical embayment: evidence from seven years of standardized fishing effort. Marine Biology 149: 961-968.

10. **Wirsing, A. J.**, J. D. Roth, and D. L. Murray. 2005. Can prey use dietary cues to distinguish predators? A test involving three terrestrial amphibians. Herpetologica 61: 104-110.

9. Heithaus, M. R., A. Frid, **A. J. Wirsing**, L. Bejder, and L. M. Dill. 2005. Biology of sea turtles under risk from tiger sharks at a foraging ground. Marine Ecology Progress Series 288: 285-294.

8. Murray, D. L., J. D. Roth, and **A. J. Wirsing**. 2004. Predation risk avoidance by terrestrial amphibians: The role of prey experience and vulnerability to native and exotic predators. Ethology 110: 635-647.

7. **Wirsing, A. J.** 2003. Predation-mediated selection on prey morphology: a test using snowshoe hares. Evolutionary Ecology Research 5: 315-327.

6. **Wirsing, A. J.**, T. D. Steury, and D. L. Murray. 2002. Noninvasive estimation of body composition in small mammals: a comparison of conductive and morphometric techniques. Physiological and Biochemical Zoology 75: 489-497.

5. **Wirsing, A. J.**, and D. L. Murray. 2002. Patterns of browse consumption by snowshoe hares in the northwestern United States. Ecoscience 9: 440-449.

4. **Wirsing, A. J.**, T. D. Steury, and D. L. Murray. 2002. Relationship between body condition and vulnerability to predation in red squirrels and snowshoe hares. Journal of Mammalogy 83: 707-715.

3. Steury, T. D., **A. J. Wirsing**, and D. L. Murray. 2002. Using multiple treatment levels as a means of improving inference in wildlife research. Journal of Wildlife Management 66: 292-299.

2. Murray, D. L., J. D. Roth, E. Ellsworth, **A. J. Wirsing**, and T. D. Steury. 2002. Estimating low-density snowshoe hare populations using fecal pellet counts. Canadian Journal of Zoology 80: 771-781.

1. **Wirsing, A. J.**, T. D. Steury, and D. L. Murray. 2002. A demographic analysis of a southern snowshoe hare population in a fragmented habitat: evaluating the refugium model. Canadian Journal of Zoology 80: 169-177.

BOOKS AND BOOK CHAPTERS

Heithaus, M. R., R. E, Dunn, N. F. Farabaugh, E. Lester, E. Madin, M. G. Meekan, Y. P. Papastamatiou, G. Roff, J. J. Vaudo, and **A. J. Wirsing**. 2022. Advances in our understanding of the ecological importance of sharks and their relatives. Pages 487-522 *in* Biology of Sharks and Their Relatives: Third Edition (J. C. Carrier, C. A. Simpfendorfer, M. R. Heithaus, and K. E. Yopak, eds.), CRC Press, Boca Raton, Florida.

Heithaus, M. R., A. Frid, J. J. Vaudo, B. Worm, and **A. J. Wirsing**. 2010. Unraveling the ecological importance of elasmobranchs. Pages 611-637 *in* Sharks and Their Relatives II: Biodiversity, Adaptive Physiology, and Conservation (J. C. Carrier, M. R. Heithaus, and J. Musick, eds.), CRC Press, Boca Raton, Florida.

OTHER PUBLICATIONS

Doherty, T., A. J. Wirsing, C. Dickman, D. Nimmo, E. Ritchie, and T. Newsome. 2017. The bark side: domestic dogs threaten endangered species worldwide. *The Conversation* http://theconversation.com/the-bark-side-domestic-dogs-threaten-endangered-species-worldwide-76782

Uyeda, L. T.*, E. Iskandar, R. C. Kyes, and **A. J. Wirsing**. 2012. Proposed research on home ranges and resource use of the water monitor lizard, *Varanus salvator*. Forestry Chronicle 88: 542-546.

Wirsing, A. J. 2005. Predation-sensitive foraging behaviour of dugongs (*Dugong dugon*).

Ph.D. Dissertation, Simon Fraser University.

Wirsing, A. J. 2003. Tiger sharks: important players in Shark Bay's seagrass ecosystem. Monkey Mia News 8: Spring 2003.

Wirsing, A. J. 2001. Demographic and nutritional analyses of a southern snowshoe hare population. M.S. Thesis, University of Idaho.

RESEARCH GRANTS AND CONTRACTS

2022

Supplement to Washington Department of Fish and Wildlife contract (PI) titled, "Black bear diet reconstruction", University of Washington (**$7,100**)

Olympic Park Associates grant (PI), funding for the project titled, "Assessment of Pacific marten status in Olympic National Park, are they headed to extirpation?", University of Washington (**$3000**)

Washington Department of Fish and Wildlife contract supplement (PI) titled, "Black bear diet supplement", University of Washington (**$10,500**)

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year seven", University of Washington (gift of **$92,500**)

2021

Washington Department of Fish and Wildlife contract (PI) titled, "Black bear diet reconstruction", University of Washington (**$17,232**)

National Park Service grant (PI) titled, "Assessment of Pacific marten status in Olympic National Park, are they headed to extirpation?", University of Washington (**$86,475**)

Conservation, Research and Education Opportunities International (CREOi) grant (PI) titled, "Assessing large carnivore dietary interactions in eastern WA", University of Washington (**$20,000**)

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year seven", University of Washington (gift of **$47,836**)

2020

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year seven", University of Washington (gift of **$25,000**)

2019

NASA FINESST grant (PI) titled, "Fighting fire with four hooves: effects of carnivore-herbivore interactions on fuel characteristics and fire severity", University of Washington (**$135,000**)

Royalty Research Fund (RRF) Grant (PI) titled, "Using accelerometers to understand the hunting success of cougars in a human-dominated landscape", University of Washington **($37,394**)

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year six", University of Washington (gift of **$27,500**)

2018

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year five", University of Washington (gift of **$15,000**)

2017

Washington Department of Fish and Wildlife Aquatic Lands Enhancement Account (ALEA) Volunteer Cooperative Grant Program grant (PI) titled, "Assessing wolf-cougar interactions and impacts in Washington", University of Washington (**$16,200**)

Conservation, Research and Education Opportunities International (CREOi) grant (PI) titled, "Large predator competition in an urbanizing world: Cougar and black bear interactions along the wildland-urban gradient of western Washington", University of Washington (**$20,000**)

Washington Department of Fish and Wildlife contract (PI) titled, "Washington Predator/Prey Dynamics", University of Washington (**$1,075,941 with co-PIs Gardner and Prugh**) $231,911

National Science Foundation REU supplement (PI) to DEB-1145902 titled, "REU: Does Anti-predator Behavior Modify Indirect Effects of Top Predators?", University of Washington **($6,323**)

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year four", University of Washington (gift of **$15,000**)

2016

Army Corps of Engineers grant titled, "Evaluating flora and fauna diversity in the John Day/Willow Creek Project for special status species protection" (#W912HZ-16-SOI-0018, co-PI), University of Washington (**$444,918**)

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year three", University of Washington (gift of **$18,475**)

National Institute of Food and Agriculture (NIFA) grant (PI) titled, "Modeling the effects of forest management on snowshoe hare population dynamics in Washington at the landscape scale", University of Washington (**$10,972**)

2015

Safari Conservation International Foundation (SCIF) grant (PI) titled, "Effects of North American wolf recolonization on deer fawn survival", University of Washington (**$35,000**)

Washington Department of Fish and Wildlife Aquatic Lands Enhancement Account (ALEA) Volunteer Cooperative Grant Program grant (PI) titled, "Investigating how landscape characteristics shape cougar foraging ecology along the urban-to-wildland gradient of western Washington", University of Washington (**$9,302**)

Student technology Fee grant (PI) titled, "Wildlife ecology education and research using trail cameras", University of Washington (**$24,692**)

Seattle City Light grant (PI) titled, "Interactions between wolves and cougars in NE Washington", University of Washington (**$46,173**)

Continuing Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia): year two", University of Washington (gift of **$15,000**)

Mule Deer Foundation grant (PI) titled, "Do wolves indirectly affect mule deer fawn survival", University of Washington (**$2,100**)

2014

National Science Foundation grant (co-PI, CNIC-1427542, Catalyzing New International Collaborations) titled, "US-Canada planning visit: building a transboundary research program to understand the influence of climate change on southern range limits", University of Washington (**$47,255** over 1 year; UW share = **$8,498**)

Safari Conservation International Foundation (SCIF) grant (PI) titled, "Impact of wolves on deer in Washington: seasonality and fawn survival", University of Washington (**$49,500**)

Seattle City Light grant (PI) titled, "Do wolves indirectly affect mule deer fawn survival by modifying coyote predation?", University of Washington (**$51,684**)

Seeley Fund grant (PI) titled, "Investigating the ecology of reef sharks in Tetiaroa (Society Islands, French Polynesia)", University of Washington (gift of **$13,000**)

2013

Safari Conservation International Foundation (SCIF) grant (PI) titled, "Impact of re-colonizing gray wolves on mule and white-tailed deer in Washington state, USA", University of Washington (**$45,000**)

Washington Department of Fish and Wildlife Aquatic Lands Enhancement Account (ALEA) Volunteer Cooperative Grant Program grant (PI) titled, "Impact of wolves on mule and white-tailed deer", University of Washington (**$11,105**)

Institute of Forest Resources grant (co-PI) titled, "Feasibility of a wolf economy for Washington", University of Washington **($175,000**)

Seattle City Light grant (PI) titled, "Will a warming climate affect mesocarnivore interactions in Washington's southern boreal forests?", University of Washington (**$24,052**)

Royalty Research Fund (RRF) Grant (co-PI) titled, "Predation by brown bears on Pacific salmon", University of Washington **($28,986**)

2012

Seattle City Light grant (co-PI) titled, "Wolverine distribution and ecology in the North Cascades Ecosystem – Argos satellite telemetry", University of Washington (**$22,146**; UW share = **$20,168**)

National Science Foundation grant (PI, DEB-1145902, Division of Environmental Biology) titled, "Collaborative Research: Does Anti-predator Behavior Modify Indirect Effects of Top Predators?", University of Washington (**$789,977**)

2011

United States Forest Service Cost Reimbursable Agreement (PI; non-competitive grant) titled, "Patterns of predation on snowshoe hares in north-central Washington", University of Washington (**$10,000**)

McIntire-Stennis Equipment Grant (PI) titled, "Does anti-predator behavior modify indirect effects of top predators?", University of Washington (**$10,468**)

2010

McIntire-Stennis Cooperative Forestry Research Grant (PI) titled, "Fine-scale resource use by snowshoe hares in the boreal forests of north-central Washington", University of Washington (**$13,000**)

McIntire-Stennis Cooperative Forestry Research Grant (co-PI) titled, "Assessing the role of harvest intensity in improving forest health and providing biodiversity as an ecosystem service: A comparison of western and eastern Cascade forests", University of Washington (**$10,110**)

2009

Royalty Research Fund (RRF) Grant (PI) titled, "Using snowshoe hare responses to forest stand structure and fragmentation to guide lynx recovery in Washington", University of Washington **($39,073**)

2007

National Geographic Society Committee for Research and Exploration (CRE) Grant (PI) titled, "Does habitat structure affect depth preferences and indirect effects of tiger sharks in a seagrass community?", Florida International University **($24,000**)

2003

National Geographic Society Expeditions Council Grant (PI) titled, "Foraging ecology of dugongs in a pristine seagrass ecosystem", Simon Fraser University (**$22,500**)

CONFERENCE PRESENTATIONS

***Denotes graduate student; †denotes an undergraduate student**

2019

Quinn, T., K. Wold†, and **A. J. Wirsing**. How often do bears avoid barbed wire hair snares? Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

Satterfield, L.*, B. McClintock, B. Kertson, T. Newsome, and **A. Wirsing**. Identification of cougar feeding sites from GPS data using hidden Markov models. 2019 American Fisheries Society & The Wildlife Society Joint Annual Conference, Reno, NV, USA

Bassing, S., T. Ganz, L. Prugh, L. Satterfield*, **A. Wirsing**, and B. Gardner. Potential biases in camera trap data when monitoring multiple species. 2019 American Fisheries Society & The Wildlife Society Joint Annual Conference, Reno, NV, USA

Gardner, B., S. Bassing, T. Ganz, L. Prugh, T. Roussin, O. Sanderfoot, L. Satterfield*, and **A. Wirsing.** Smoke on the water, fire in the sky: quantifying the effects of smoke pollution on large mammal movement and detections. 2019 American Fisheries Society & The Wildlife Society Joint Annual Conference, Reno, NV, USA

2018

Lincoln, A., T. P. Quinn, and **A. J. Wirsing**. Are bears becoming wire shy? Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

Satterfield, L.*, T. Newsome, B. Kertson, and **A. Wirsing**. Competition on two legs and four: impacts of wolf-cougar co-occurrence on resource selection and survival across an anthropogenic gradient. 2018 International Wolf Symposium, Minneapolis, MN, USA.

Robins, C.*, B. Kertson, J. Faulkner*, and **A. Wirsing**. Investigating the effects of urbanization on cougar foraging ecology along the wildland-urban gradient of western Washington. The Wildlife Society 25th Annual Conference, Cleveland, OH, USA.

Wirsing, A. J., T. P. Quinn, J. Adams, and L. Waits. Rating the bear hair that we snare: should we care? Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

2017

Kilfoil, J. P., M. Campbell, M. Heithaus, K. Gastrich, J. Kiszka, **A. Wirsing**, M. Bond, and Y. Zhang. Are limited fields-of-view limiting elasmobranch conservation efforts? Implications for baited remote underwater video surveys (BRUVs). American Fisheries Society 2017 Annual Meeting, Tampa, FL, USA.

Peelle, L.* and **A. J. Wirsing**. Predator species identification from saliva at kill sites with limited remains. Joint Meeting of the Washington Chapter of The Wildlife Society and the Washington State Society of American Foresters, Yakima, WA, USA.

2016

Wirsing, A. J., T. Quinn, C. Cunningham, J. Adams, A. Craig*, and L. Waits. There probably is a bear around that next bend: non-invasive genetic CMR population estimates reveal an abundance of bears at Aleknagik's salmon spawning streams. Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

Thornton, D.H., **A. J. Wirsing**, and D.L. Murray. Peripheral transboundary species: conflicting cross-border management may threaten a large number of peripheral species. North American Congress for Conservation Biology. Madison, WI, USA.

2015

Wirsing, A. J., T. Quinn, C. Cunningham, J. Adams, and L. Waits. A tale of two neighborhoods: brown bears show fidelity to distinct salmon spawning stream networks. Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

Kilfoil, J. P., J. J. Kiszka, J. Mourier, **A. J. Wirsing**, M. R. Heithaus, and Y. Zhang. Unmanned aerial drone and stationary video surveys to estimate reef shark densities in shallow nursery habitats. International Council for the Exploration of the Sea (ICES) Annual Science Conference, Copenhagen, Denmark.

2013

Wirsing, A. J., T. Quinn, C. Cunningham, and L. Waits. Noninvasive exploration of brown Bear behavior along salmon spawning streams in the Wood River Lakes System, AK: an Update. Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

Smith, B., T. Quinn, and **A. Wirsing**. Comparative effectiveness of non-invasive observation techniques for brown bears (*Ursus arctos*). Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

Bolis, J.*, K. Aubry, C. Raley, and **A. Wirsing**. Effects of variable physiography and animal behavior on Argos location error and acquisition. The Wildlife Society 20th Annual Conference, Milwaukee, WI, USA.

Richardson, K. A.*, W. Gaines, **A. Wirsing**, and R. Long. Patterns of black bear abundance in the North Cascades Ecosystem: Implications for the role of wilderness in large carnivore conservation. 22nd International Conference on Bear Research and Management, Provo, UT, USA.

2012

Quinn, T., and **A. J. Wirsing**. Who are those guys? Snare the hair to ID the bear. Alaska Salmon Program Science Symposium, University of Washington, Seattle, WA, USA.

Heithaus, M. R., C. Bessey, **A. J. Wirsing**, D. Burkholder, and J. Forqurean. Do tiger sharks influence seagrass ecosystems through multiple indirect pathways? 7th World Congress of Herpetology, University of British Columbia, Vancouver, BC, Canada.

Burkholder, D., M. R. Heithaus, J. Fourqurean, and **A. J. Wirsing**. Top-down control in a relatively intact seagrass ecosystem. 7th World Congress of Herpetology, University of British Columbia, Vancouver, BC, Canada.

Wirsing, A. J., and M. R. Heithaus. Behavioral transition probabilities in dugongs change with habitat and shark presence. 97th Annual Meeting of the Ecological Society of America, Portland, OR, USA.

Ettl, G. J., S. Tóth, N. Konnyu, J. Comnick, K. Ceder, S. Rabotyagov, **A. J. Wirsing**, and L. Rogers. ECOSEL, an online market-based tool for monetizing ecosystem services: Pack Forest, a case study. 97th Annual Meeting of the Ecological Society of America, Portland, OR, USA.

Uyeda, L. T.*, E. Iskandar, R. C. Kyes, and **A. J. Wirsing**. Combining sociological and ecological research approaches to investigate the role of the water monitor lizard (*Varanus salvator*) in Indonesia. Future Forestry Leaders Graduate Student Research Symposium, Vancouver, BC, Canada.

2011

Wirsing, A. J., M. R. Heithaus, and L. M. Dill. Anti-predator responses of diving dugongs depend on foraging mode. 19th Biennial Conference on the Biology of Marine Mammals, Tampa, FL, USA.

Santos, L. O., A. N. Zerbini, J. L. Laake, K. J. Raedeke, and **A. J. Wirsing**. Estimating abundance of harbor porpoises in Puget Sound, WA: A correction for observer bias. 19th Biennial Conference on the Biology of Marine Mammals, Tampa, FL, USA.

Wirsing, A. J., W. J. Ripple, R. L. Beschta, and S. W. Buskirk. Can restoring wolves help lynx recovery? Special Session titled, "Predator interactions on both sides of the Pacific", 91st Annual Meeting of the American Society of Mammalogists, Portland, OR, USA.

2009

Wirsing, A. J., and W. J. Ripple. The scope of fear: large predators trigger similar indirect risk effects in marine and terrestrial systems. Special Session titled, "Surf and Turf: Establishing New Paradigms by Integrating Theory and Forging Partnerships Between Marine and Terrestrial Ecology", 94th Annual Meeting of the Ecological Society of America, Albuquerque, NM, USA.

Heithaus, M., C. Layman, P. Matich, B. Delius, **A. Wirsing**, and M. Dunphy-Daly. Stable isotopic analysis reveals individual variation in feeding behavior of juvenile bull sharks. 25th Annual Meeting of the American Elasmobranch Society, Portland, OR, USA.

Burkholder, D., M. Heithaus, J. Thomson, and **A. Wirsing**. Does tiger shark (*Galeocerdo cuvier*) predation risk influence habitat use of green sea turtles (*Chelonia mydas*) at multiple spatial scales? 25th Annual Meeting of the American Elasmobranch Society, Portland, OR, USA.

Wirsing, A. J., M. R. Heithaus, C. A. Layman, B. K. Delius, and M. M. Dunphy-Daly. No bull: juvenile bull sharks may play diverse functional roles in coastal food webs. 19th Annual Review of Research, The Water Center, University of Washington, Seattle, WA, USA.

2006

Wirsing, A. J., M. R. Heithaus, and L. M. Dill. Living on the edge: dugongs prefer foraging microhabitats allowing for escape when predators are abundant. 91st Annual Meeting of the Ecological Society of America, Memphis, TN, USA.

Wirsing, A. J., M. R. Heithaus, and L. M. Dill. "Living on the edge: dugongs prefer foraging microhabitats allowing for escape when predators are abundant". 8th Annual Biology Research Symposium, Florida International University, North Miami, FL, USA.

2005

Wirsing, A. J., M. R. Heithaus, and L. M. Dill. Predation-sensitive foraging by dugongs in a subtropical Australian embayment. 42nd annual Animal Behavior Society Conference, Snowbird, UT, USA.

Heithaus, M. R., **A. J. Wirsing**, L. M. Dill, and I. M. Hamilton. Microhabitat use of tiger sharks in Shark Bay, Western Australia: predator-prey interactions at multiple spatial scales. 21st Annual Meeting of the American Elasmobranch Society, Tampa, FL, USA.

Wirsing, A. J., M. R. Heithaus, and L. M. Dill. Predation-sensitive foraging by dugongs in a subtropical Australian embayment. 26th annual Pacific Ecology and Evolution Conference, Ellensburg, WA, USA.

2004

Murray, D. L., E. Ellsworth, S. Field, S. Johnson, T. Steury, and **A. J. Wirsing**. Do southern snowshoe hare populations cycle, or simply fluctuate irregularly? 2nd International Lagomorph Conference.

2003

Wirsing, A. J., M. R. Heithaus, and L. M. Dill. Habitat use and foraging decisions of dugongs in response to varying tiger shark predation risk. 11th Annual BC Marine Mammal Symposium, Vancouver, BC, Canada.

2001

Wirsing, A. J., and D. L. Murray. Do food quantity and quality influence the dynamics of southern snowshoe hare populations? 81st Annual Meeting of the American Society of Mammalogists, Missoula, MT, USA.

2000

Wirsing, A. J., T. D. Steury, and D. L. Murray. Population dynamics of snowshoe hares and lynx conservation in Idaho. 14th Annual Meeting of the Society for Conservation Biology, Missoula, MT, USA.

Wirsing, A. J., T. D. Steury, and D. L. Murray. Population dynamics of snowshoe hares in Idaho. Annual meeting of the Idaho Chapter of the Wildlife Society, Post Falls, ID, USA.

1999

Steury, T. D., and **A. J. Wirsing**. Population Regulation Theory: Emancipation from the Quest for Density Dependence. 84th Annual Meeting of the Ecological Society of America, Spokane, WA, USA.

Murray, D. L., T. D. Steury, and **A. J. Wirsing**. Snowshoe Hare and Red Squirrel Ecology in the Bitterroot Mountains of Idaho. Western Forest Carnivore Meeting, Post Falls, ID, USA.

INVITED TALKS

2021

Wirsing, A. J., and T. M. Newsome. Scavenging effects of large canids. Society for Integrative and Comparative Biology (SICB) annual meeting. Symposium titled, "S11: Biology's Best Friend: Bridging Disciplinary Gaps to Advance Canine Science IV". Washington DC, USA.

2020

Wirsing, A. J.., and M. R. Heithaus. The enduring and outsized value of longitudinal field research. School of Environmental and Forest Sciences (SEFS) Autumn Seminar Series, University of Washington, Seattle, WA, USA.

2019

Bassing, S., T. Ganz, L. Prugh, L. Satterfield*, **A. Wirsing**, and B. Gardner. Potential biases in camera trap data when monitoring multiple species. Autumn 2019 Fish and Wildlife Ecology Seminar Series, University of Washington, Seattle, WA, USA.

Wirsing, A., T. Quinn, C. Cunningham, J. Adams, A. Craig*, and L. Waits. Local and landscape drivers of brown bear aggregation to and predation in salmon spawning streams in southwestern Alaska. Symposium titled, "The interface of predation and migration in aquatic and terrestrial ecosystems", 2019 American Fisheries Society & The Wildlife Society Joint Annual Conference, Reno, NV, USA.

Wirsing, A., C. Shores*, J. Dellinger*, E. Newkirk, and S. White. Timescapes of fear: ungulates change spatiotemporal activity in response to contrasting risk from humans and predators. Symposium titled, "The community ecology of large carnivores in the mountain west", 2019 American Fisheries Society & The Wildlife Society Joint Annual Conference, Reno, NV, USA.

Quinn, T., and **Wirsing, A. J.** Bears and salmon: The Yin and Yang of predator-prey interactions. Winter 2019 Fish and Wildlife Ecology Seminar Series, University of Washington, Seattle, WA, USA.*

*Speaking split evenly between the two co-presenters.

Wirsing, A. J., and L. Prugh. The Washington Predator-Prey Project: an update. Senate Agriculture, Water, Natural Resources & Parks Committee Meeting, 1/22/2019. Olympia, WA, USA.

2018

Wirsing A. J., J. A. Dellinger*, M. R. Heithaus, and W. J. Ripple. Escape behavior predicts divergent prey responses to predators in both marine and terrestrial ecosystems. Marine Sciences Seminar (Graduate Student Invited Speaker), Florida International University, North Miami, FL, USA.

Wirsing, A. J., T. Quinn, C. Cunningham, A. Craig*, J. Adams, and L. Waits. Alaskan brown bears display fidelity to foraging neighborhoods while preying on Pacific salmon in small streams. Office of Animal Welfare All Staff Meeting, University of Washington, Seattle, WA, USA.

Wirsing, A. J., T. Quinn, C. Cunningham, A. Craig*, J. Adams, and L. Waits. Alaskan brown bears display fidelity to foraging neighborhoods while preying on Pacific salmon in small streams. Understanding change across high latitudes – Arctic science at the University of Washington (ESRM 429), University of Washington, Seattle, WA, USA.

2017

Dellinger, J. A.*, **A. J. Wirsing**, M. R. Heithaus, and W. J. Ripple. All bark and no bite? Impacts of recolonizing gray wolves are primarily non-consumptive in a managed landscape of western North America. Invited symposium talk for "S24: Managing novel communities and multiple

threats to achieve biodiversity outcomes", 12th International Mammalogical Congress, Perth, Western Australia.

Wirsing, A. J., J. A. Dellinger*, and A. Craig*. Impacts of recolonizing gray wolves on sympatric mule and white-tailed deer in a managed landscape of eastern WA. Biology, Ecology, and Evolution Research (BEER) Group Invited Seminar, California State University, Northridge, USA.

2016

Wirsing, A. J. and T. D. Newsome. A cross continent comparison of two top predators. Youth at the Zoo (YATZ) Seminar, Taronga Zoo, Sydney, Australia.

Wirsing, A. J. Ecological impacts of gray wolf recolonization in managed landscapes of the western USA. Centre for Integrative Ecology 2016 Seminar, Deakin University, Melbourne, Australia.

Wirsing, A. J., T. P. Quinn, C. Cunningham, J. Adams, and L. P. Waits. Patterns of brown bear foraging in salmon spawning stream neighborhoods. Department of Biological Sciences Seminar, Boise State University, Boise, ID, USA.

2015

Wirsing, A. J., T. P. Quinn, C. Cunningham, and L. P. Waits. Patterns of brown bear foraging in salmon spawning stream neighborhoods. University of Idaho Fish and Wildlife Sciences Seminar, Graduate student invited speaker, Moscow, ID, USA.

Wirsing, A. J. Exploring the ecological consequences of wolf recolonization in Washington. Washington Department of Fish and Wildlife Game and Diversity Winter Workshop. Wenatchee Convention Center, Wenatchee, WA, USA.

2014

Wirsing, A. J. Snowshoe hare interactions with predators and population dynamics in north-central Washington. Canada Lynx Transboundary Research Workshop. Manning Park Resort, British Columbia, Canada.

Wirsing, A. J. Using a multidisciplinary approach to explore the consequences of wolf recolonization in Washington. Vashon Allied Arts Science Lecture Series, Vashon Island, WA, USA.

Wirsing, A. J. The rise of animal-borne video systems as tools for wildlife research. Plenary session titled, "The Rise of Technology in Wildlife Science: Transforming Wildlife Conservation

in the 21st Century". Annual Meeting of the Northwest Section of the Wildlife Society, Boise, ID, USA.

2013

Wirsing, A. J. Exploring the ecological and economic consequences of wolf recovery in WA. Wolf Advisory Group Meeting, October 2013, Ellensburg, WA, USA.

Wirsing, A. J. Using a multidisciplinary approach to explore the consequences of wolf recolonization in Washington. Osher Lifelong Learning Institute Lunch and Learn Seminar Series, University of Washington, Seattle, WA, USA.

Wirsing, A. J., T. P. Quinn, C. J. Cunningham, and L. P. Waits. Noninvasive exploration of brown bear behavior along salmon spawning streams in the Wood River Lakes System, AK. Alaska Salmon Program Spring Meetings, University of Washington, Seattle, WA, USA.

2012

Wirsing, A. J. The importance of breadth in ecology: using a multidisciplinary approach to explore the consequences of wolf recolonization in Washington. Program on the Environment Capstone Symposium, Seattle, WA, USA.

Wirsing, A. J., S. L. Abele, and D. L. Murray. How do snowshoe hares respond to precommercial forest thinning? Autumn Wildlife Science Seminar Series, School of Environmental and Forest Sciences, University of Washington, Seattle, WA, USA.

Wirsing, A. J. Surviving in shark-infested waters: for green sea turtles, it's all about gaining weight. Nerd Nite Lecture Series, Seattle, WA, USA.

Wirsing, A. J. Ecology and habitat use of deer mice, pocket gophers, snowshoe hares, and western red-backed voles. Northern Spotted Owl Prey Ecology: What's for Dinner? Forest Service/Bureau. Forest Service/Bureau of Land Management Workshop, Eugene, OR, USA.

Wirsing, A. J. Using prey escape behavior to predict indirect effects of predators. Departmental Seminar, Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR, USA.

Wirsing, A. J. Off the menu: how prey animals avoid becoming a predator's lunch. 2012 College of the Environment Lunch and Learn in the Desert, Rancho Mirage, CA, USA.

2009

Wirsing, A. J., and W. J. Ripple. The scope of fear: large predators trigger similar indirect risk effects in marine and terrestrial systems. Department of Biology Autumn Seminar Series, University of Washington, Seattle, WA, USA.

Wirsing, A. J., and W. J. Ripple. The scope of fear: large predators trigger similar indirect risk effects in marine and terrestrial systems. Brown Bag Seminar Series, Washington Department of Fish and Wildlife, Olympia, WA, USA.

Wirsing, A. J. Using tiger sharks to protect and restore seagrass meadows. Aquatic and Fishery Sciences Spring Departmental Seminar Series, University of Washington, Seattle, WA, USA.

Wirsing, A. J. Carnivore conservation in the Pacific Northwest. "Sustaining Our Northwest World" Winter Lecture Series, College of Forest Resources, University of Washington, Seattle, WA, USA.

Heithaus, M. R., C. A. Layman, B. K. Delius, **A. J. Wirsing**, and M. M. Dunphy-Daly. Among-individual niche variation of a marine top predator species, the bull shark (*Carcharhinus leucas*), suggests diverse functional roles within coastal food webs. Winter Water Center Seminars, University of Washington, Seattle, WA, USA.

Heithaus, M. R., C. A. Layman, B. K. Delius, **A. J. Wirsing**, and M. M. Dunphy-Daly. Among-individual diet variation of a marine top predator, the bull shark. Winter Wildlife Science Seminar Series, College of Forest Resources, University of Washington, Seattle, WA, USA.

2008

Wirsing, A. J. Using behavior to predict the consequences of large predator loss. Autumn Wildlife Science Seminar Series, College of Forest Resources, University of Washington, Seattle, WA, USA.

Wirsing, A. J. Predicting predation risk effects in communities. Public seminar, College of Forest Resources, University of Washington, Seattle, WA, USA.

2007

Wirsing, A. J. Towards a predictive framework for sublethal top predator effects in marine communities. Public seminar, University of Sydney, Sydney, New South Wales, Australia.

Wirsing, A. J. Danger on the rise: does tidal state mediate an exchange of food for safety by the sea snake *Hydrophis elegans*? Marine Biology Seminar Series, Florida International University North Miami, FL, USA..

2006

Wirsing, A. J. Living in shark infested waters: predation-sensitive foraging by dugongs in a subtropical Australian embayment. Public seminar, Murdoch University Centre for Fish and Fisheries Research, Perth, Western Australia.

2004

Wirsing, A. J., M. R. Heithaus, and L. M. Dill. Do large, marine herbivores trade-off between food and safety? A case study using the dugong. Marine Science and Engineering Seminar Series, University of Western Australia, Crawley, Australia.

2002

Wirsing, A. J. So why don't southern snowshoe hare populations cycle? *Les Ecologistes* Seminar Series, Simon Fraser University, Burnaby, BC, Canada.

CONFERENCE POSTERS

***Denotes graduate student**

2018

Booth, H. †, A. Craig*, and **A. J. Wirsing**. The relationship between wildfire and cascading impacts of predators and plants. Joint meeting of the Oregon Chapter of the Wildlife Society, Washington Chapter of the Wildlife Society, Society for Northwestern Vertebrate Biology, and Northwest Partners in Amphibian and Reptile Conservation, Portland, OR, USA.

2017

Craig, A.*, S. Szablewski, and **A. J. Wirsing**. Do recolonizing wolves impact deer hunter success? Joint Meeting of the Washington Chapter of The Wildlife Society and the Washington State Society of American Foresters, Yakima, WA, USA.

2015

Dellinger, J. A.*, C. Shores*, A. Craig*, and **A. J. Wirsing**. Impact of re-colonizing wolves on mule and white-tailed deer in Washington, USA. 11th Biennial Western States and Provinces Deer and Elk Workshop, Canmore, Alberta, Canada.

2014

Kachel, S. M.*, T. M. McCarthy, and **A. J. Wirsing**. Snow Leopards, Wolves, and the Ecology of Fear in Central Asia. The Wildlife Society Annual Conference, Pittsburgh, PA, USA.

2013

Dellinger, J. A.*, W. Myers, E. Krausz, M. Marsh, B. Kertson, and **A. J. Wirsing**. Impact of recolonizing wolves on mule and white-tailed deer in Washington. International Wolf Symposium 2013, Duluth, MN, USA.

Dellinger, J.*, **A. Wirsing**, E. Krausz, M. Marsh, W. Myers, and B. Kertson. Impact of recolonizing gray wolves on mule and white-tailed deer in Washington. 10th Biennial Western States and Provinces Deer and Elk Workshop, Missoula, MT, USA.

2001

Wirsing, A. J., T. D. Steury, and D. L. Murray. The relationship between body condition and vulnerability to predation in two small mammals. Annual SFU/UBC/UVIC graduate student retreat, Squamish, BC, Canada.

TEACHING EXPERIENCE

Courses

2022

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Spring Quarter, University of Washington

"ESRM 150: Wildlife in the Modern World", Spring Quarter, University of Washington

"ESRM 450: Wildlife Ecology and Conservation", Winter Quarter, University of Washington

2021

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Autumn Quarter, University of Washington

"ESRM 350: Wildlife Biology and Conservation", Autumn Quarter, University of Washington

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Spring Quarter, University of Washington

“ESRM 150: Wildlife in the Modern World”, Spring Quarter, University of Washington

“ESRM 450: Wildlife Ecology and Conservation”, Winter Quarter, University of Washington

2020

“ESRM 304: Environmental and Resource Assessment” (wildlife module), Autumn Quarter, University of Washington

“ESRM 350: Wildlife Biology and Conservation”, Autumn Quarter, University of Washington

“ESRM 304: Environmental and Resource Assessment” (wildlife module), Spring Quarter, University of Washington

“SEFS 590: Predator-Prey Interactions (graduate seminar)”, Spring Quarter, University of Washington

“ESRM 459: Wildlife Conservation in Northwest Ecosystems”, Spring Quarter, University of Washington

“ESRM 450: Wildlife Ecology and Conservation”, Winter Quarter, University of Washington

2019

“ESRM 350: Wildlife Biology and Conservation”, Autumn Quarter, University of Washington

“ESRM 304: Environmental and Resource Assessment” (wildlife module), Spring Quarter, University of Washington

“SEFS 590: Predator-Prey Interactions (graduate seminar)”, Spring Quarter, University of Washington

“ESRM 459: Wildlife Conservation in Northwest Ecosystems”, Spring Quarter, University of Washington

“ESRM 450: Wildlife Ecology and Conservation”, Winter Quarter, University of Washington

2018

“ESRM 350: Wildlife Biology and Conservation”, Autumn Quarter, University of Washington

“ESRM 304: Environmental and Resource Assessment” (wildlife module), Spring Quarter, University of Washington

"SEFS 590: Predator-Prey Interactions (graduate seminar)", Spring Quarter, University of Washington

"ESRM 459: Wildlife Conservation in Northwest Ecosystems", Spring Quarter, University of Washington

"ESRM 450: Wildlife Ecology and Conservation", Winter Quarter, University of Washington

2017

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Autumn Quarter, University of Washington

"ESRM 350: Wildlife Biology and Conservation", Autumn Quarter, University of Washington

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Summer Quarter, University of Washington

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Spring Quarter, University of Washington

"SEFS 590: Predator-Prey Interactions (graduate seminar)", Spring Quarter, University of Washington

"ESRM 459: Wildlife Conservation in Northwest Ecosystems", Spring Quarter, University of Washington

"ESRM 450: Wildlife Ecology and Conservation", Winter Quarter, University of Washington

2016

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Summer Quarter, University of Washington

"ESRM 350: Wildlife Biology and Conservation", Autumn Quarter, University of Washington

2015

"ESRM 304: Environmental and Resource Assessment" (wildlife module), Summer Quarter, University of Washington

"ESRM 459: Wildlife Conservation in Northwest Ecosystems", Spring Quarter, University of Washington

“ESRM 455: Wildlife Seminar”, Winter Quarter, University of Washington

“ESRM 450: Wildlife Ecology and Conservation”, Winter Quarter, University of Washington

2014

“ESRM 350: Wildlife Biology and Conservation”, Autumn Quarter, University of Washington

“ESRM 304: Environmental and Resource Assessment” (wildlife module), Summer Quarter, University of Washington

“SEFS 590 B: Behavioral Ecology”, Spring Quarter, University of Washington

“ESRM 459: Wildlife Conservation in Northwest Ecosystems”, Spring Quarter, University of Washington

“ESRM 455: Wildlife Seminar”, Winter Quarter, University of Washington

“ESRM 450: Wildlife Ecology and Conservation”, Winter Quarter, University of Washington

2013

“ESRM 350: Wildlife Biology and Conservation”, Autumn Quarter, University of Washington

“SEFS 590 D: Uses of Animal Behavior in Conservation”, Spring Quarter, University of Washington

“ESRM 459: Wildlife Conservation in Northwest Ecosystems”, Spring Quarter, University of Washington

“ESRM 450: Wildlife Ecology and Conservation”, Winter Quarter, University of Washington

2012

“ESRM 150: Wildlife in the Modern World”, Autumn Quarter, University of Washington

“CFR 590 D: Uses of Animal Behavior in Conservation”, Spring Quarter, University of Washington

“ESRM 459: Wildlife Conservation in Northwest Ecosystems”, Spring Quarter, University of Washington

“ESRM 450: Wildlife Ecology and Conservation”, Winter Quarter, University of Washington

2011

"CFR 590 B: Current Topics in Behavioral Ecology", Autumn Quarter, University of Washington

"CFR 590 D: Uses of Animal Behavior in Conservation", Spring Quarter, University of Washington

"ESRM 459: Wildlife Conservation in Northwest Ecosystems", Spring Quarter, University of Washington

"ESRM 450: Wildlife Ecology and Conservation", Winter Quarter, University of Washington

2010

"CFR 590 B: Current Topics in Behavioral Ecology", Autumn Quarter, University of Washington

"CFR 590 D: Uses of Animal Behavior in Conservation", Spring Quarter, University of Washington

"ESRM 459: Wildlife Conservation in Northwest Ecosystems", Spring Quarter, University of Washington

"ESRM 450: Wildlife Ecology and Conservation", Winter Quarter, University of Washington

2009

"CFR 590 B: Current Topics in Behavioral Ecology", Autumn Quarter, University of Washington

"CFR 590 D: Uses of Animal Behavior in Conservation", Spring Quarter, University of Washington

"ESRM 450: Wildlife Ecology and Conservation", Winter Quarter, University of Washington

2007

"PCB 3043: Ecology", Florida International University

2000

“WILDLIFE 314: Wildlife Ecology I”, University of Idaho

“WILDLIFE 315: Wildlife Ecology I Lab”, University of Idaho

Guest Lectures

2022

“FISH 497 – Aquatic Ecological Research in Alaska”, lecture titled, “Brown bear foraging along small, salmon-spawning streams in Alaska: abundance, site fidelity, predation rates, diel activity, and responses to humans”, Alaska Salmon Program, University of Washington (2 lectures and two field trips)

“ESRM 351 – Wildlife Research Techniques”, lecture titled, “Sampling Large Carnivores”, University of Washington

“Forest Ecosystems and Society (FES) 499 – Large Carnivores in Ecology”, lecture titled, “Status and top-down ecological effects of sharks”, Oregon State University

“ESRM 201 – Sustaining Pacific Northwest Ecosystems”, lecture titled, “Wildlife conservation in the Anthropocene: the case of wolves in Washington”, University of Washington

“ESRM 300 – Principles of Sustainability”, lecture titled, “Sustaining top predator populations”, University of Washington

2021

“GENERAL STUDIES 297 – Exploring Majors”, lecture titled, “Escape behavior predicts divergent deer responses to recolonizing wolves”, University of Washington

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

“ESRM 351 – Wildlife Research Techniques”, lecture titled, “Sampling Large Carnivores”, University of Washington

“ESRM 201 – Sustaining Pacific Northwest Ecosystems”, lecture titled, “Wildlife in the urban-wildland gradient”, University of Washington

“ESRM 300 – Principles of Sustainability”, lecture titled, “Sustaining top predator populations”, University of Washington

2020

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington (twice)

2019

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

“FISH 511 – Current Topics in Evolution, Ecology, and Behavior”, lecture titled, “Foraging and Risk Aversion”, University of Washington

2018

“ESRM 201 – Sustaining Pacific Northwest Ecosystems”, lecture titled, “Wildlife conservation in the Anthropocene: the case of wolves in Washington”, University of Washington

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“FISH 497 – Aquatic Ecological Research in Alaska”, lecture titled, “Alaskan brown bears display fidelity to foraging neighborhoods while preying on Pacific salmon along small streams”, Alaska Salmon Program, University of Washington

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

2017

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“General Studies 391 – Undergraduate Research Program (URP)”, lecture titled, “All bark and no bite? Impacts of recolonizing gray wolves on prey are primarily fear-based in a managed landscape of Washington state”, University of Washington

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

“BIOL/SEFS/FISH 567 – Topics in Advance Ecology”, two-part lecture/discussion titled, “Rebound without recovery: the conundrum of recovering depleted species in a world without large predators”, University of Washington

2016

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

“BIOL 597/497 – Science and Society”, lecture titled, “Responses to predators depend on prey escape behavior: implications for trophic cascades”, Boise State University

2015

“ESRM 304 – Environmental and Resource Assessment (Spring)”, lecture titled, “Censusing wildlife populations”, University of Washington

“ESRM 304 – Environmental and Resource Assessment (Spring)”, lecture titled, “The nature of wildlife populations”, University of Washington

“ESRM 201 – Sustaining Pacific Northwest Ecosystems” (just the two 3-hour labs), University of Washington

“ESRM 351 – Wildlife Research Techniques”, lecture titled, “Sampling large carnivores”, University of Washington

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

“ESRM 201 – Sustaining Pacific Northwest Ecosystems”, lecture titled, “Wildlife in the urban-wildland gradient”, University of Washington (included two 3-hour labs)

2014

“ESRM 304 – Environmental and Resource Assessment (Autumn)”, lecture titled, “Censusing wildlife populations”, University of Washington

“ESRM 304 – Environmental and Resource Assessment (Autumn)”, lecture titled, “The nature of wildlife populations”, University of Washington

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“GENERAL STUDIES 197G – Freshmen Seminar: Exploring Environmental Majors at the UW”, lecture titled, “The ecology of reef sharks in French Polynesia”, University of Washington

“ESRM 304 – Environmental and Resource Assessment (Spring)”, lecture titled, “Censusing wildlife populations”, University of Washington

“ESRM 304 – Environmental and Resource Assessment (Spring)”, lecture titled, “The nature of wildlife populations”, University of Washington

“ESRM 351 – Wildlife Research Techniques”, lecture titled, “Sampling Large Carnivores”, University of Washington

“ESRM 323 – Practical Silviculture”, lecture titled, “Silviculture for wildlife habitat”, University of Washington

“ESRM 201 – Sustaining Pacific Northwest Ecosystems”, lecture titled, “Wildlife in the urban-wildland gradient”, University of Washington (included two 3-hour labs)

“BIOL/SEFS/FISH 567 – Topics in Advance Ecology”, two-part lecture titled, “Responses to predators depend on prey escape behavior: implications for trophic cascades”, University of Washington

2013

“ESRM 304 – Environmental and Resource Assessment (Autumn)”, lecture titled, “Censusing wildlife populations”, University of Washington

“ESRM 304 – Environmental and Resource Assessment (Autumn)”, lecture titled, “The nature of wildlife populations”, University of Washington

“GENERAL STUDIES 197G – Freshmen Seminar: Exploring Environmental Majors at the UW”, lecture titled, “How do snowshoe hares respond to precommercial forest thinning?”, University of Washington

“ESRM 304 – Environmental and Resource Assessment (Spring)”, lecture titled, “Censusing wildlife populations”, University of Washington

“ESRM 304 – Environmental and Resource Assessment (Spring)”, lecture titled, “The nature of wildlife populations”, University of Washington

“BIOL/SEFS/FISH 567 – Topics in Advance Ecology”, two-part lecture titled, “Responses to predators depend on prey escape behavior: implications for trophic cascades”, University of Washington

2012

“ESRM 350 – Wildlife Biology and Conservation”, lecture titled, “Biology and conservation of marine mammals, with special reference to the Pacific Northwest”, University of Washington

“ESRM 350 – Wildlife Biology and Conservation”, lecture titled, “The nutria (*Myocastor coypus*), with notes on some close cousins”, University of Washington

“GENERAL STUDIES 197G – Freshmen Seminar: Exploring Environmental Majors at the UW”, lecture titled, “How do snowshoe hares respond to precommercial forest thinning?”, University of Washington

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Climate change and biotic interactions: will warming temperatures affect predation on snowshoe hares?”, University of Washington

“ENVIR 100 – Environmental Studies: Interdisciplinary Foundations”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

2011

“GENERAL STUDIES 197G – Freshmen Seminar: Exploring Environmental Majors at the UW”, lecture titled, “The scope of fear: large predators trigger similar indirect risk effects in marine and terrestrial systems”, University of Washington

“GENERAL STUDIES 197K – Wolves: Natural History, Behavior, and Society”, lecture titled, “The wolf-elk relationship: elk anti-predator behavior and its ecosystem consequences”, University of Washington

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Prey responses to predators depend on escape behavior: a cross-ecosystem comparison”, University of Washington

“FOR/FW 547 – Trophic Cascades”, lecture titled, “Responses to predators depend on prey escape behavior: implications for trophic cascades”, Oregon State University

“BIOL/CFR/FISH 567 – Topics in Advance Ecology”, two-part lecture titled, “Contingency in risk effects of predators”, University of Washington

“ENVIR 100 – Environmental Studies: Interdisciplinary Foundations”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“FISH 497 – Conservation of Sharks: History and Future”, lecture titled, “The behavior and ecological effects of tiger sharks”, University of Washington

2010

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Prey responses to predators depend on escape behavior: a cross-ecosystem comparison”, University of Washington

“GENERAL STUDIES 197G – Freshmen Seminar: Exploring Environmental Majors at the UW”, lecture titled, “The scope of fear: large predators trigger similar indirect risk effects in marine and terrestrial systems”, University of Washington

“ENVIR 100 – Environmental Studies: Interdisciplinary Foundations”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

2009

“FISH 522 – Hot Topics in Fisheries Science and Aquaculture”, lecture titled, “The multiple roles of top of the food chain predators in aquatic ecosystems”, University of Washington

“ENVIR 100 – Environmental Studies: Interdisciplinary Foundations”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“HONORS 100B: Knowledge Across the Disciplines”, lecture titled, “The scope of fear: large predators trigger similar indirect risk effects in marine and terrestrial systems”, University of Washington

“GENERAL STUDIES 197G – Freshmen Seminar: Exploring Environmental Majors at the UW”, lecture titled, “The scope of fear: large predators trigger similar indirect risk effects in marine and terrestrial systems”, University of Washington

“ESRM 150 – Wildlife in the Modern World”, lecture titled, “Beyond mortality: predator risk effects in different ecosystems”, University of Washington

“FISH 475 – Marine Mammalogy”, lecture titled, “Do marine mammals fear their predators? Evidence and community consequences”, University of Washington

“FISH/ENVIR 439 – Attaining a Sustainable Society”, lecture titled, “Attitudes toward sharks and the sustainability of the world’s fisheries”, University of Washington

“LANDSCAPE ARCHITECTURE 363 – Ecological Design and Planning”, lecture titled, “Landscape geometry and the outcome of predator-prey interactions”, University of Washington

“FOR/FW 547 – Trophic Cascades”, lecture titled, “The scope of fear: predators trigger similar indirect risk effects in marine and terrestrial systems”, Oregon State University

“ENVIR 100 – Environmental Studies: Interdisciplinary Foundations”, lecture titled, “Using tiger sharks to restore seagrass meadows”, University of Washington

“BIOL/CFR/FISH 567 – Topics in Advance Ecology”, two-part lecture titled, “Contingency in predator risk effects”, University of Washington

2008

“GENERAL STUDIES 197 – Freshmen Seminar”, lecture titled, “Using behavior to predict the consequences of large predator loss”, University of Washington

“OCB 3043: Marine Biology and Oceanography”, lecture titled, “Marine Mammal Ecology”, Florida International University

2007

“BSC 4934: Coastal Marine Conservation”, lecture titled, “Towards a predictive framework for marine conservation”, Florida International University

2002

“BISC 304: Animal Ecology”, lecture titled, “Predators and prey: games, higher-order interactions, and lessons from a place called Shark Bay”, Simon Fraser University

2001

“BISC 304: Animal Ecology”, lecture titled, “So why don’t southern snowshoe hare populations cycle?”, Simon Fraser University

2000

“WILDLIFE 448: Multi-species Interactions”, lecture titled, “Costs and benefits of alarm response behavior”, University of Idaho

“WILDLIFE 448: Multi-species interactions”, lecture titled “Functional, numerical, and total responses”, University of Idaho

"WILDLIFE 316: Wildlife Ecology II", lecture titled, "Population ecology of snowshoe hares", University of Idaho

MENTORING EXPERIENCE

Post-doctoral supervision

2020-Present Dr. James Kilfoil

2013-2014 Dr. Thomas Newsome

Graduate Students (active)

2022-Present MSc Committee Chair, Dylan Hubl, SEFS, University of Washington

2017-Present PhD Committee Chair, Clint Robins, SEFS, University of Washington

2016-Present PhD Committee Chair, Lauren Satterfield, SEFS, University of Washington

2016-Present PhD Committee Chair, Laurel Peelle, SEFS, University of Washington

2014-Present PhD Committee Chair, Apryle Craig, SEFS, University of Washington

Graduate students (completed)

2015-2022 MSc Committee Chair, Michael Havrda, SEFS, University of Washington

2014-2021 Shannon Kachel, PhD, SEFS, University of Washington

2013-2020 Carolyn Shores, PhD, SEFS, University of Washington

2012-2018 Justin Dellinger, PhD, SEFS, University of Washington

2013-2017 Clint Robins, MSc, SEFS, University of Washington

2011-2016 Jeff Harris, MSc, SEFS, University of Washington

2009-2016 Laurel Peelle, MSc, SEFS, University of Washington

2010-2015 Linda Uyeda, PhD, SEFS, University of Washington

2013-2014 Kelsey Vitense, MSc, Quantitative Ecology and Resource Management (QERM), University of Washington

2011-2013 Kristen Richardson, MSc, SEFS, University of Washington

2010-2013 Jessica Bolis, MSc, SEFS, University of Washington

Graduate Committees (active)

2021-Present PhD Committee Member, Zoe Rand, Quantitative Ecology and Resource Management (QERM), University of Washington

2020-Present PhD Committee Member, Marta Gomez-Buckley, School of Aquatic and Fishery Sciences, University of Washington

2019-Present MSc Committee Member, Trent Roussin, School of Environmental and Forest Sciences, University of Washington

2018-Present PhD Committee Member, Taylor Ganz, School of Environmental and Forest Sciences, University of Washington

2018-Present PhD Committee Member, Sarah Bassing, School of Environmental and Forest Sciences, University of Washington

2017-Present MSc Committee Member, Jessica Hale, School of Aquatic and Fishery Sciences, University of Washington

2017-Present PhD Committee Member, Samantha Zwicker, School of Environmental and Forest Sciences, University of Washington

Graduate Committees (completed)

2017-2021 PhD Committee Member, Robbie Emmet, Quantitative Ecology and Resource Management (QERM), University of Washington

2016-2020 PhD Committee Member, Saethra Fritscher, Department of Psychology, University of Washington

2017-2019 MSc Committee Member, Hannah Sipe, Quantitative Ecology and Resource Management (QERM), University of Washington

2014-2019 PhD Committee Member, Carly Loyer, Department of Psychology, University of Washington

2014-2019 PhD Committee Member, Rochelle Kelly, Department of Biology, University of Washington

2016-2019 MSc Committee Member, Alex Lincoln, School of Aquatic and Fishery Sciences, University of Washington

2014-2019 PhD Committee Member, Benjamin Dittbrenner, School of Environmental and Forest Sciences, University of Washington

2012-2019 PhD Committee Member, Carol Bogezi, School of Environmental and Forest Sciences, University of Washington

2013-2018 PhD Committee Member, Lindsey Nietmann, Department of Psychology, University of Washington

2012-2018 PhD Committee Member, Kaeli Swift, School of Environmental and Forest Sciences, University of Washington

2015-2017 Peace Corps International Masters (PCMI) Committee Member, Zak Williams, School of Environmental and Forest Sciences, University of Washington

2015-2017 Peace Corps International Masters (PCMI) Committee Member, Jordan Bunch, School of Environmental and Forest Sciences, University of Washington

2014-2017 PhD Committee Member, Sarah Faegre, Department of Psychology, University of Washington

2015-2017 MSc Committee Member, Tessia Robbins, School of Environmental and Forest Sciences, University of Washington

2015-2017 MSc Committee Member, Leif Hansen, School of Environmental and Forest Sciences, University of Washington

2017 PhD Committee Member, Alicia Kinney-Clawson, College of Education, University of Washington (*Late replacement as GSR)

2013-2016 Peace Corps International Masters (PCMI) Committee Member, Alia Kroos, School of Environmental and Forest Sciences, University of Washington

2015-2016 MSc Committee Member, Amber Mount, School of Environmental and Forest Sciences, University of Washington

2012-2015 PhD Committee Member, Lauren Walker, School of Environmental and Forest Sciences, University of Washington

2012-2015 PhD Committee Member, Michael Clawson, School of Environmental and Forest Sciences, University of Washington

2012-2015 PhD Committee Member, Curry Cunningham, School of Aquatic and Fishery

Sciences, University of Washington

2012-2014 PhD Committee Member, Chloe Bracis, Quantitative Ecology and Resource Management (QERM), University of Washington

2012-2014 PhD Committee Member, Amy Yahnke, School of Aquatic and Fishery Sciences, University of Washington

2012-2013 PhD Committee Member, Adam Hansen, School of Aquatic and Fishery

2010-2013 PhD Committee Member, Morgan Bond, School of Aquatic and Fishery Sciences, University of Washington

2012 PhD Committee Member, Jennifer Griffiths, School of Aquatic and Fishery Sciences, University of Washington (*Late replacement as GSR)

2010-2012 MSc Committee Member, Christie Galitski, School of Environmental and Forest Sciences, University of Washington

2011-2012 Master of Science in Biology Teaching (MBST) Program Committee Member, Emily Owens, University of Washington

2010-2012 PhD Committee Member, Chris Gast, Quantitative Ecology and Resource Management (QERM), University of Washington

2008-2011 MSc Committee Member, Erica Olson, School of Resource and Environmental Management, Simon Fraser University

2009-2011 MSc Committee Member, Luciana Santos, School of Forest Resources, University of Washington

2009-2011 PhD Committee Member, Neala Kendall, School of Aquatic and Fishery Sciences, University of Washington

2011 PhD Committee Member, Jonathan Reum, School of Aquatic and Fishery Sciences, University of Washington (*Late replacement as GSR)

2010-2011 MSc Committee Member, Kristine Mazur, School of Forest Resources, University of Washington

2009-2011 MSc Committee Member, Carrie Schloss, School of Forest Resources, University of Washington

2009-2011 MSc Committee Member, Laura Farwell, School of Forest Resources, University of Washington

2009-2011 MSc Committee Member, Lauren Seckel, School of Forest Resources, University of Washington

2009-2011 MSc Committee Member, John Burk, School of Forest Resources, University of Washington

2009-2011 PhD Committee Member, Amanda Bradford, School of Aquatic and Fishery Sciences, University of Washington

2008 Master of Science in Biology Teaching (MBST) Program Committee Member, Linda Uyeda, University of Washington

Undergraduate Mentoring

2021-Present Thesis (Capstone) Advisor, Casey Sowers

2021 Thesis (Capstone) Advisor, Gabby Krohn

2021 Thesis (Capstone) Advisor, Isabelle Hoecherl

2020 Thesis (Capstone) Advisor, Sierra Herzberger

2020 Thesis (Capstone) Faculty Advisor, Program on the Environment, Kera Zegar

2020 Thesis (Capstone) Advisor, Alle Johnson

2020 Thesis (Capstone) Advisor, Julia Harry

2019 Thesis (Capstone) Advisor, Katherine Wold

2019 Thesis (Capstone) Advisor, Hyejoo Ro

2019 Thesis (Capstone) Advisor, Xin Deng

2019 Thesis (Capstone) Advisor, Thadeus Sternberg

2019 Thesis (Capstone) Advisor, Xin Deng

2019 Thesis (Capstone) Advisor, Alexis Krapas

2019 Thesis (Capstone) Advisor, Sophie Feathers

2019 Thesis (Capstone) Advisor, Lexi Wachtell

2019 Thesis (Capstone) Faculty Advisor, Program on the Environment, Alec Egurrola

2018	Thesis (Capstone) Advisor, Tiffany Lloyd
2018	Thesis (Capstone) Advisor, Ryan Caffey
2018	Thesis (Capstone) Advisor, Liz Allyn (SAFS)
2018	Thesis (Capstone) Advisor, Caroline Sullivan
2018	Thesis (Capstone) Advisor, Nina Mowat
2018	Thesis (Capstone) Advisor, Nicholas Ulacia
2017	Thesis (Capstone) Advisor, Tali Hamilton
2017	Thesis (Capstone) Advisor, Nathan Redon
2017	Thesis (Capstone) Advisor, Megan Schenk
2017	Thesis (Capstone) Advisor, Alison Wang
2017	Thesis (Capstone) Advisor, John Soren Reyes
2017	Thesis (Capstone) Advisor, Kathryn Jesser
2017	Thesis (Capstone) Advisor, Erin Strand
2016	Thesis (Capstone) Advisor, Paris Werner
2016	Thesis (Capstone) Advisor, Connor Meyer
2015	Thesis (Capstone) Advisor, Lyndsey Smith
2015	Thesis (Capstone) Advisor, Christina Mebust-Boscolo
2015	Thesis (Capstone) Advisor, Katie Fergot
2015	Thesis (Capstone) Advisor, Aurielle Pfeifer
2015	Thesis (Capstone) Advisor, Ghee-hee Yang
2015	Thesis (Capstone) Advisor, Sarah Schooler
2015	Thesis (Capstone) Advisor, Emily Chan
2015	Thesis (Capstone) Faculty Advisor, Program on the Environment, Simon Nhan

2014	Thesis (Capstone) Advisor, Travis Fuller
2014	Thesis (Capstone) Advisor, Maria Gamman
2014	Thesis (Capstone) Advisor, Jordan Aragon
2014	Thesis (Capstone) Advisor, Brenna Dart
2014	Thesis (Capstone) Advisor, Ashley Sacco
2014	Thesis (Capstone) Advisor, Tara Wilson
2014	Thesis (Capstone) Advisor, Justin Johnson
2014	Thesis (Capstone) Advisor, Ashley Imhof
2014	Thesis (Capstone) Advisor, Julie Hower
2014	Thesis (Capstone) Advisor, Michael Havrda
2014	Thesis (Capstone) Advisor, Rebbekah Curtin
2014	Thesis (Capstone) Advisor, Emily Chudek
2013	Thesis (Capstone) Faculty Advisor, Program on the Environment, Marika Wegerbuaer
2013	Thesis (Capstone) Faculty Advisor, Program on the Environment, Connie Combs
2013	Thesis (Capstone) Advisor, Ian Riley
2013	Thesis (Capstone) Advisor, Graeme Riggins
2013	Thesis (Capstone) Advisor, Amanda Rasmussen
2013	Thesis (Capstone) Advisor, Grace Teller
2013	Thesis (Capstone) Advisor, Kyla Caddey
2013	Thesis (Capstone) Advisor, Octavia Graham
2012	Thesis (Capstone) Advisor, Tiffany Chan
2012	Thesis (Capstone) Advisor, Terence Thomas
2012	Thesis (Capstone) Advisor, Jazmine Kim

2012	Thesis (Capstone) Faculty Advisor, Program on the Environment, Samantha Zwicker
2012	Thesis (Capstone) Advisor, Monica White
2012	Thesis (Capstone) Advisor, Andrea Nichols
2012	Thesis (Capstone) Faculty Advisor, Program on the Environment, Tory Johnson
2012	Thesis (Capstone) Advisor, Jessica Gray
2012	Thesis (Capstone) Advisor, Russell Pharr
2011	Thesis (Capstone) Advisor, Sara Meicho
2011	Thesis (Capstone) Advisor, Marlena Staton
2011	Thesis (Capstone) Advisor, Ashley Kees
2011	Thesis (Capstone) Advisor, Randy Bacon
2010-2011	Thesis (Capstone) Faculty Advisor, Program on the Environment, Cara Appel
2010	Thesis (Capstone) Faculty Advisor, Program on the Environment, Tyson Wine
2009-2010	Thesis (Capstone) Advisor, Lindsey Kirschman
2009-2010	Thesis (Capstone) Advisor, J. Kimiko LaHaela
2009	Thesis (Capstone) Advisor, Mathew E. Weintraub
2006	Student Mentor, Strategies for Ecology Education, Development, and Sustainability (SEEDS), 91st Annual Meeting of the Ecological Society of America

ACADEMIC DISTINCTIONS AND AWARDS

2020

College of the Environment Outstanding Teaching Faculty Award, University of Washington

2017

Runner-up, School of Environmental and Forest Sciences Faculty Member of the Year

Finalist, University of Washington Distinguished Teaching Award competition

2016

Finalist, University of Washington Distinguished Teaching Award competition

2013

Exemplary Teaching Award, Annual Recognition Event, School of Environmental and Forest Sciences, University of Washington

2011

Winter Quarter Faculty Teaching Award, School of Forest Resources, University of Washington

2010

Winter Quarter Faculty Teaching Award, School of Forest Resources, University of Washington

2001

Outstanding Instructor Award, nominated by a student with a disability, University of Idaho

Outstanding Graduate Student Award, Department of Fish and Wildlife Resources, University of Idaho

2000

Ted Trueblood Communications Award, Best graduate student presentation, Annual meeting of the Idaho Chapter of the Wildlife Society

ACADEMIC SERVICE

2022	Member, Search Committee for a without-tenure (WOT) professor in the area of marine top predators, School of Aquatic and Fishery Sciences (SAFS), University of Washington
2022	Dissertation reviewer, University of Melbourne, Australia

2021-Present	Graduate Program Coordinator (GPC), School of Environmental and Forest Sciences, University of Washington
2021	Member, SEFS Students and Academic Services (SAS) Manager search committee, University of Washington
2021	Chair, search committee for the Program on the Environment (POE), Assistant Teaching Professor position with an emphasis on food systems, College of the Environment, University of Washington
2021	Chair, search committee for the Center for Quantitative Science (CQS) Director, College of the Environment, University of Washington
2021	Moderator, *Pathways to a Postdoc* (panel discussion), College of the Environment, University of Washington
2021	College of the Environment Awards Selection Committee, University of Washington
2020	Expert commentator, *Scientific American* story about an *Animal Behaviour* paper titled, "Effect of early exposure to predation on risk perception and survival of fish exposed to a non-native predator" (article published May 19)
2020-Present	Editor-in-Chief, *Wildlife Research*
2019-Present	Member, University of Washington Institutional Animal Care and Use Committee (IACUC)
2019-Present	Member, University of Washington Program on the Environment (PoE) Faculty Council
2017-2021	SEFS Research Committee
2019-2021	Member, UW Royalty Research Fund (RRF) subcommittee for the Basic Biological and Biomedical Sciences
2018-2019	Associate Editor, *Wildlife Research*
2017-2020	Quantitative Ecology and Resource Management (QERM) Application Review Committee, University of Washington
2016-2021	SEFS Promotion, Merit, and Tenure (PMT) Committee
2016-2020	Associate Editor, *Ecological Applications*

2013-Present	Associate Editor, *Oecologia*
2008-Present	Student Chapter Advisor, The Wildlife Society, University of Washington
2002-Present	Peer reviewer for **75** journals (**243** total reviews): *Acta Theriologica*, *American Midland Naturalist*, *Animal Behaviour*, *Animal Conservation*, *Annales Zoologici Fennici*, *Australian Journal of Zoology*, *Behavioral Ecology*, *Behavioral Ecology and Sociobiology*, *Biological Conservation*, *Biological Invasions*, *Biological Journal of the Linnean Society*, *Biological Reviews*, *Biotropica*, *BMC Ecology*, *Canadian Journal of Fisheries and Aquatic Sciences*, *Canadian Journal of Forest Research*, *Canadian Journal of Zoology*, *Chelonian Conservation Biology*, *Conservation Biology*, *Conservation Letters*, *Current Biology*, *Ecography*, *Ecological Monographs*, *Ecological Research, Ecology*, *Ecology and Evolution*, *Ecology Letters*, *Ecoscience*, *Endangered Species Research*, *Environmental Science and Policy*, *Ethology*, *Forest Ecology and Management*, *Frontiers in Ecology and Evolution*, *Frontiers in Ecology and the Environment*, *Herpetological Conservation and Biology*, *IBIS*, *Integrative and Comparative Biology*, *Integrative Zoology*, *Journal of Animal Ecology*, *Journal of Ecology*, *Journal of Experimental Marine Biology and Ecology*, *Journal of Mammalogy*, *Journal of Wildlife Management*, *Knowledge and Management of Aquatic Ecosystems*, *Mammal Study*, *Mammalian Biology*, *Marine Biology*, *Marine Ecology Progress Series*, *Marine and Freshwater Research*, *Marine Mammal Science*, *Natural Resource Modeling*, *Nature Ecology and Evolution*, *Naturwissenschaften*, *Northwestern Naturalist*, *Oceans*, *Oecologia*, *Oikos*, *PeerJ*, *Pest Management Science*, *Physiological and Biochemical Zoology*, *PLoS Biology*, *PLoS ONE*, *Polar Biology*, *Proceedings of the National Academy of Sciences of the United States of America*, *Scientific Reports*, *Southeastern Naturalist*, *Trends in Ecology and Evolution*, *Urban Ecosystems*, *Wildlife Biology*, *Wildlife Research*, *Wildlife Society Bulletin*, *WIREs Water*
2002-Present	Grant reviewer for National Geographic Society Committee for Research and Exploration (CRE), CRE Young Explorers program, National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA) FY18 Saltonstall Kennedy Competition, National Science Foundation (NSF) (Biological Oceanography, Division of Environmental Biology [Long-Term Research in Environmental Biology, LTREB; Opportunities for Promoting Understanding Through Synthesis, OPUS; Population and Community Ecology Cluster), Oregon Sea Grant, University of Washington Royalty Research Fund (RRF)
2014-2018	Steering Committee, Doris Duke Conservation Scholars Program (DDCSP)

2016-2017	Faculty mentor, Doris Duke Conservation Scholars Program (DDCSP), 'Wolf recovery in the Pacific Northwest' conservation practice team project, University of Washington
2015-2017	Faculty mentor, Doris Duke Conservation Scholars Program (DDCSP), 'Wildlife on the Coastal Margins' conservation practice team project, University of Washington
2016	Faculty Panel Member, International Forestry Students' Association (IFSA) panel comparing forestry and wildlife management practices in Austria and Washington
2016	Panel Member, Ungulate Research Scientist search, Washington Department of Fish and Wildlife
2016	External peer reviewer, Wildlife Program 2015-17 Program Plan Initiative Charter 6 [a document assessing vulnerability of ungulate populations in WA to predation], Washington Department of Fish and Wildlife
2014	Peer teaching evaluator for Professor Sharon Doty, ESRM 325 / SEFS 523 "Environmental Applications of Plants: Bioremediation and Bioenergy", University of Washington
2014	Expert commentator, *Oregon State University News and Research Communications* news release titled, "Aspen recovering as wildlife populations shift in Yellowstone national Park" (article published September 30)
2013-2015	Elected Faculty Advisory Council (EFAC)
2012	Representative for the School of Environmental and Forest Sciences, College of the Environment "Meet a Scientist" Breakout Session, SACNAS National Meeting, University of Washington
2012	Dissertation reviewer, Ben-Gurion University of the Negev, Israel
2012	Faculty Coordinator, Qualifying Exam for Tait Bowers, Center for International Trade in Forest Products (CINTRAFOR), School of Environmental and Forest Sciences, University of Washington
2012	Host for Nicholas Dulvy, guest speaker, Bevan Series on Sustainable Fisheries, School of Aquatic and Fishery Sciences, University of Washington

2012	Expert commentator, *Associated Press* article titled, "Study: Yellowstone wolves helping park trees rebound" (article published January 2)
2012	Expert commentator, *Jackson Hole Daily* article titled, "Wolves helping aspens" (article published January 2)
2011	Faculty Portfolio Committee, tasked with identifying future needs in teaching, research, and outreach, SEFS
2011	Faculty panel member, Graduate student orientation, School of Forest Resources
2011	Expert commentator, *USA Today* article titled, "Loss of predators in the food chain can alter the ecosystem" (article published on July 15)
2011	Expert commentator, *ScienceNOW* article titled, "Why penguins are afraid of the dark" (article published on-line in June)
2011	Advisor, Dead Elk Society, spring and autumn quarters
2011	Faculty Advisor, ESRM 490 H ("Indirect linkages in Ecology"), spring quarter
2011	Peer reviewer, book titled, "Behavioural Responses to a changing world: Mechanisms and Consequences"
2010-2013	Member, Lynx Research Science Advisory Committee, Convened to evaluate ongoing lynx research effort headed by the Washington Department of Fish and Wildlife
2010	Peer reviewer, manuscript titled, "Cougar prey use in a wildland-urban environment in western Washington" to be submitted to the *Journal of Mammalogy*, Washington Cooperative Fish and Wildlife Research Unit, University of Washington
2010	Peer reviewer, report titled, "Climate change and wildlife habitat management at Olympic National Forest and Olympic National Park", prepared by participants of the Wildlife Adaptation Workshop representing Olympic National Park, Olympic National Forest, United States Geological Survey, Forest Service, and University of Washington
2010	Faculty panel member, Graduate student orientation, School of Forest Resources
2009-2013	Member, Washington State Lynx Working Group, Partnership involving the Bureau of Land Management, Conservation Northwest, United States

Department of Agriculture Forest Service, United States Fish and Wildlife Service, University of Washington, Washington Department of Fish and Wildlife, and Washington Department of Natural Resources that meets biennially with the goal of facilitating lynx research and recovery in the Pacific Northwest.

2009 Participant, CFR Centennial Grove maintenance, Union Bay Natural Area, University of Washington Botanic Gardens, April 4 (9am – 12pm)

2004 Coordinator, joint venture involving researchers from Simon Fraser University, the Western Australian Department of Conservation and Land Management (CALM), and the Yadgalah Aboriginal Corporation to fit loggerhead turtles with satellite tags (5 deployments)

2003 Coordinator, joint venture involving researchers from Simon Fraser University, the Western Australian Department of Conservation and Land Management (CALM), and the Yadgalah Aboriginal Corporation to fit dugongs with underwater video and data recording systems (Crittercam; 3 deployments)

2001 Participant, Burnaby Mountain Biodiversity Challenge, Simon Fraser University

2000 Graduate student representative, 5th Year Review Committee for Dr. Kerry Reese, University of Idaho

PUBLIC EDUCATION AND OUTREACH

2021 Invited speaker, talk titled, "Ecological effects of wolf recolonization in Washington", December Meeting for the Flathead Audubon Society, Kalispell, MT

2021 Invited presenter, talk titled, "Deer are also afraid of the 'Big Bad Wolf", Puesta del Sol PTA – MEET THE SCIENTIST!, Bellevue, WA (remote)

2020 Featured Faculty for the College of the Environment's *Labs Unlocked* event; exhibit titled, "Unlocking the secrets of reef shark nurseries", University of Washington

2019 Invited interview, story titled, "Bunny boom: Garden expert Ciscoe's secret recipe repels pesky rabbits", KIRO Radio, Seattle, WA

2019 Invited interview, story titled, "Seattle rabbits seem to be breeding like, well, rabbits", KUOW Public Radio, Seattle, WA

2018	Invited presenter, talk titled, "Effects of gray wolf recolonization on ungulates and mesopredators: an update", Confederated Tribes of the Colville Reservation Natural Resources Committee Meeting, Nespelem, WA
2018	Invited speaker for "Port Ludlow's Dine and Discover", a monthly seminar series for the Port Ludlow, WA community; talk titled, "Using a multidisciplinary approach to explore the consequences of wolf recolonization in Washington"
2017	Featured speaker for "Science and a Movie presents *Jaws*", a collaboration between the Pacific Science Center and Central Cinema that allows moviegoers to learn how science relates to classic cinema; talk titled, "Tiger sharks keep seagrass ecosystems healthy by scaring sea turtles"
2017	Featured co-author for a Spokane Public Radio broadcast titled, "Study: to mitigate problem predators, give wolves more space, tolerance", based on paper published in *Nature Communications*
2017	Panelist for the College of the Environment's Center for Creative Conservation event titled, "Earthgames on Tap", University of Washington
2017	Panelist for the College of the Environment's *Amplify* event titled, "Communicating science in a world with differing values", University of Washington
2017	Featured Faculty for the College of the Environment's *Labs Unlocked* event; exhibit titled, "Top dog: how the reemergence of gray wolves in Washington shapes our diverse landscapes", University of Washington
2017	Expert contributor to BBC *CrowdScience* broadcast titled, "Why are cats loners?" (http://www.bbc.co.uk/programmes/p04skkwl)
2016	Panelist for forum on wolf conservation titled, "Crying wolf in Washington State: Unraveling out complicated relationship with wolves", hosted by the Woodland Park Zoo
2016	Featured biologist for educational video titled, "Ecology of Fear: Wolf v Deer", produced in collaboration with Symbio Studies for use at multiple grade levels as part of the Houghton Mifflin ScienceFusion Program
2014	Research featured in a PBS Quest documentary titled, "Wolves and the Ecology of Fear", which was awarded a 2014 American Association for the Advancement of Science (AAAS) Kavli Science Journalism Award in the 'Spot News/Feature Reporting' category

2014	Wolf research profiled in article titled, "Predator feared but essential", *Mercer Island Reporter*
2014	Wolf research profiled in article titled, "Washington wolves: after 80 year absence, the pack is back", *The Daily* (of the University of Washington)
2014	Wolf research project featured in a blog titled, "Exclusive: collar camera records deer predation by cougar", *American Hunter* magazine
2014	Host and moderator for a panel on gray wolf research and management in the Pacific Northwest co-sponsored by the Pacific Wolf Coalition, University of Washington, Seattle, WA
2014	Guest Speaker, Educational talk titled, "Lynx, snowshoe hares, and the future of Washington's boreal forests", Streamkeeper Academy, Adopt A Stream Foundation (AASF), Everett, WA
2012	Guest Speaker, Educational talk titled, "Lynx, snowshoe hares, and the future of Washington's boreal forests", Streamkeeper Academy, Adopt A Stream Foundation (AASF), Everett, WA
2011	Featured author, "Beyond the Frontier", monthly podcast produced by the Ecological Society of America in which authors whose articles will appear in the upcoming issue of *Frontiers in Ecology and the Environment* are interviewed (podcast aired in August)
2011	Guest Speaker, Educational talk titled, "Lynx, snowshoe hares, and the future of Washington's boreal forests", Streamkeeper Academy, Adopt A Stream Foundation (AASF), Everett, WA
2010	Guest Speaker, Educational talk titled, "Lynx, snowshoe hares, and the future of Washington's boreal forests", Streamkeeper Academy, Adopt A Stream Foundation (AASF), Everett, WA
2009	Featured speaker, University of Washington Television program titled, "Carnivore Conservation in the Pacific Northwest"
2007	Featured biologist, on-line *Discovery News* article titled, "Tiger Sharks Keep Seagrass Tidy"
2007	Featured biologist, Network Ten Australia wildlife documentary titled, "Dugongs in Shark Bay" (part of the *Totally Wild* series)
2006	Featured biologist, book titled *Gone to Shark Bay*, University of Western Australia Press

2006	Guest biologist, Network Ten Australia wildlife documentary titled, "Mysteries of Shark Bay" (part of the *Totally Wild* series)
2004	Guest biologist, Australian Broadcasting Channel (ABC) wildlife documentary titled, "Shark Bay"
2004	Featured biologist, National Geographic Television wildlife documentary titled, "Dugongs", episode 11 of the *Crittercam* series
2004	Guest biologist, National Geographic Television wildlife documentary titled, "Turtles", episode 13 of the *Crittercam* series
2002-2007	Weekly research seminar speaker, talk titled, "Shark Bay: realm of the tiger shark", given to visitors to the Monkey Mia Dolphin Resort, Western Australia (total of roughly 96 talks)