

REFERENCES CITED

FISHER FINAL RULE—SOUTHERN SIERRA NEVADA DPS

- Abatzoglou, J.T. and A.P. Williams. 2016. Impact of anthropogenic climate change on wildfire across western U.S. forests. *Proceedings of the National Academy of Sciences of the United States of America* 113(42):11,770–11,775.
- Ackerly, David, Andrew Jones, Mark Stacey, Bruce Riordan. (University of California, Berkeley). 2018. San Francisco Bay Area Summary Report. California's Fourth Climate Change Assessment. Publication number: CCCA4-SUM-2018-005.
- Arthur, S.M., T.F. Paragi, and W.B. Krohn. 1993. Dispersal of juvenile fisher in Maine. *Journal of Wildlife Management* 57(4):868–874.
- Asner, G.P., P.G. Brodrick, C.B. Anderson, N. Vaughn, D.E. Knapp, and R.E. Martin. 2016. Progressive forest canopy water loss during the 2012–2015 California drought. *PNAS* E249–E255. <https://doi.org/10.1073/pnas.1523397113>
- Aubry, K.B., and J.C. Lewis. 2003. Extirpation and reintroduction of fishers (*Martes pennanti*) in Oregon: implications for their conservation in the Pacific states. *Biological Conservation* 114(1):79–90.
- Aubry, K.B., and C.M. Raley. 2002. Ecological Characteristics of Fishers in the Southern Oregon Cascade Range, Final Progress Report: June 2002. USDA Forest Service--Pacific Northwest Research Station. Olympia Forestry Sciences Laboratory, 3625 93rd Ave SW, Olympia, Washington. 16pp.
- Aubry, K.B., and C.M. Raley. 2006. Ecological Characteristics of Fishers (*Martes pennanti*) in the Southern Oregon Cascade Range, Update July 2006. USDA Forest Service--Pacific Northwest Research Station. Olympia Forestry Sciences Laboratory, Olympia, Washington. 32pp.
- Aubry, K.B., S.M. Wisely, C.M. Raley, and S.W. Buskirk. 2004. Zoogeography, spacing patterns, and dispersal in fishers: insights gained from combining field and genetic data. Pages 201–220 *in*: D.J. Harrison and A.K. Fuller (eds). *Martens and fishers (Martes) in human-altered environments: an international perspective*. Springer Science+Business Media, New York, New York, USA.
- Barry, B.R. 2018. Distribution, Habitat Associations, and Conservation Status of Pacific Fisher (*Pekania pennanti*) in Oregon. Thesis, Master of Science. Oregon State University. 69 pp.

- Bedsworth, L., D. Cayan, G. Franco, L. Fisher, and S. Ztaja. (California Governor's Office of Planning and Research, Scripps Institution of Oceanography, California Energy Commission, and California Public Utilities Commission). 2018. Statewide Summary Report. California's Fourth Climate Change Assessment. Publication No. SUM-CCCA4-2018-013.
- [BLM] U.S. Department of the Interior, Bureau of Land Management. 2015. Draft resource management plan/environmental impact statement: western Oregon. U.S. Department of the Interior, Bureau of Land Management, Oregon State Office, Portland, Oregon. 4 volumes.
- [BLM] U.S. Department of the Interior, Bureau of Land Management. 2016a. Northwestern and coastal Oregon record of decision and approved resource management plan: Coos Bay, Eugene, Salem Districts, and Swiftwater Field Office, Roseburg District. Bureau of Land Management, Oregon State Office. 308 pp.
- [BLM] (Bureau of Land Management). 2016b. Southwestern Oregon record of decision and approved resource management plan: Klamath Falls Field Office of Lakeview District, Medford District, and South River Field Office, Roseburg District. Bureau of Land Management, Oregon State Office. 308 pp.
- Blomdahl, E.M. 2018. Interactions between fires severity and forest biota in the central Sierra Nevada: Formation and impact of small-scale fire refugia and the effect of fire on forest structure predictive of fisher (*Pekania pennanti*) den habitat. Thesis; M.S. in Ecology, Utah State University, Logan Utah. 31 pp.
- Blomdahl, E.M., C.A. Kolden, A.J.H. Meddens, and J.A. Lutz. 2019. The importance of small fire refugia in the central Sierra Nevada, California, USA. *Forest Ecology and Management* 432:1,041–1,052
- Brady, E. 2013. *Humboldt: Life on America's Marijuana Frontier*. Grand Central Publishing. New York, New York.
- Bureau of Cannabis Control California. 2018. California Cannabis Advisory Committee 2018 Annual Report. State of California, Department of Consumer Affairs, Bureau of Cannabis Control, Rancho Cordova, California.
- Burns, C.E., K.M. Johnston, and O.J. Schmitz. 2003. Global climate change and mammalian species diversity in U.S. national parks. *PNAS* 100(20):11,474–11,477.
www.pnas.org/cgi/doi/10.1073/pnas.1635115100
- California Department of Food and Agriculture. 2020. Cannabis cultivation licenses active on January 24, 2020. Downloaded 24 January 202 from
https://aca6.accela.com/CALCANNABIS/Cap/CapHome.aspx?module=Licenses

- California Department of Pesticide Regulations. 2014. Notice of Final Decision Concerning Brodifacoum (Second Generation Anticoagulant Rodenticide). California Notice 2014-09. August 21, 2014.
- [CAL FIRE] California Department of Forestry and Fire Protections. 2013. Timber Harvesting Plan Status. Site accessed March 29, 2016.
http://www.fire.ca.gov/resource_mgt/resource_mgt_forestpractice_thpstatus.
- [CAL FIRE and USFS]. California Department of Forestry and Fire Protection, and U.S. Forest Service. 2019. Survey Finds 18 Million Trees Died in California in 2018 [Press Release]. Retrieved from:
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/FSEPRD609321.pdf
- Cayan, D., M. Tyree, D. Pierce, and T. Das. 2012. Climate Change and Sea Level Rise Scenarios for California Vulnerability and Adaptation Assessment. California Energy Commission. Publication No: CEC-500-2012-008.
- [CBI] Conservation Biology Institute. 2019a. Powerpoint presentation; Summary of recent fisher modeling.
- [CBI] Conservation Biology Institute. 2019b. Habitat Connectivity for Fishers and Martens in the Klamath Basin Region of California and Oregon. Final Report, July 2019.
- [CBI] Conservation Biology Institute. 2019c. Modeling the Potential for Large High-Severity Fires in the Klamath Basin Region of California and Oregon and Their Potential Impacts on Marten and Fisher. Final Report, August 2019.
- [CDFW] California Department of Fish and Wildlife. 2015. Report to the Fish and Game Commission: a status review of the fisher (*Pekania* [formerly *Martes*] *pennanti*) in California. State of California, Natural Resources Agency, Department of Fish and Wildlife, Sacramento, California.
- [CDFW] California Department of Fish and Wildlife. 2017a. CDFW News (Marijuana tag). State of California, Natural Resources Agency, Department of Fish and Wildlife, Sacramento, California.
- [CDFW] California Department of Fish and Wildlife. 2017b. Frequently Asked Questions about the Cannabis Restoration Grant Program. June 14, 2017. State of California, Natural Resources Agency, Department of Fish and Wildlife, Sacramento, California.
- [CDFW] California Department of Fish and Wildlife. 2019. CDFW News, CDFW confirms increase of Canine Distemper Virus in wild foxes in Siskiyou County. Accessed online March 6, 2019. <https://cdfgnews.wordpress.com/2019/03/01/cdfw-confirms-increase-of-canine-distemper-virus-in-wild-foxes-in-siskiyou-county/>

- [CFGFC] California Fish and Game Commission. 2016. Notice of Findings, Fisher (*Pekania* [formerly *Martes*] *pennanti*). State of California, Fish and Game Commission, Sacramento, California. 12pp.
- Clayton, D. 2016. Electronic mail correspondence between Dave Clayton, Rogue River-Siskiyou National Forest, and Cindy Donegan, Jim Thrailkill, Sue Livingston, and Laura Finley, U.S. Fish and Wildlife Service, and others, on February 11, 2016, re: necropsy report from f09, rodenticides.
- Clayton, D. 2019. Electronic mail correspondence between Dave Clayton, Rogue River-Siskiyou National Forest, and Laura Finley, Yreka Fish and Wildlife Office on March 13, 2019, re: anticoagulant rodenticide data for southwest Oregon.
- Cocking, M.I., J.M. Varner, and R.L. Sherriff. 2012. California black oak responses to fire severity and native conifer encroachment in the Klamath mountains. *Forest Ecology and Management* 270(2012):25–34.
- Cocking, M.I., J.M. Varner, and E.E. Knapp. 2014. Long-term effects of fire severity on oak-conifer dynamic in the southern Cascades. *Ecological Applications* 24(1):94–107.
- Comprehensive Medical Cannabis Regulation and Safety Act. 2016. Includes 2015 bills SB 643, AB 266, AB 243 and 2016 bills SB 837, AB 21, AB 2516, and AB 2679. California State Law, Sacramento, California.
- [COMTF] California Oak Mortality Task Force. 2019. California Oak Mortality Task Force Report April 2019. Retrieved from: <http://www.suddenoakdeath.org/wp-content/uploads/2019/04/COMTF-Report-April-2019.pdf>
- [CTMTF] California Tree Mortality Task Force. 2020. California Tree Mortality Viewer. Retrieved from: <https://egis.fire.ca.gov/TreeMortalityViewer/>
- Dalton, M.M., K.D. Dello, L. Hawkins, P.W. Mote, and D.E. Rupp. 2017. The third Oregon climate assessment report, Oregon Climate Change Research Institute, College of Earth, Ocean and Atmospheric Sciences, Oregon State University, Corvallis, Oregon. 98 pp.
- Davis, R. J., Ohmann, J.L., Kennedy, R. E., Cohen, W. B., Gregory, M. J., Yang, Z., Roberts, H. M., Gray, A. N., and Spies, T A. 2015. Northwest Forest Plan—the first 20 years (1994–2013): status and trends of late-successional and old-growth forests. Gen. Tech. Rep. PNW-GTR-911. Portland, Oregon: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 111 pp.
- Davis, R., Z. Yang, A. Yost, C. Belongie, and W. Cohen. 2017. The normal fire environment—Modeling environmental suitability for large forest wildfires using past, present, and future climate normals. *Forest Ecology and Management* 390:173–186.

- Dettinger M., Alpert H., Battles J., Kusel J., Safford H., Fougères D., Knight C., Miller L., Sawyer S. 2018. Sierra Nevada Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-004. 94 pp.
- [DOI] Department of the Interior. 2016. Memorandum of Understanding between: United States Department of the Interior, Bureau of Land Management; United States Department of the Interior, Fish and Wildlife Service; State of Oregon, Oregon Department of Fish and Wildlife; State of Oregon, Oregon Department of Forestry; Department of Agriculture, United States Forest Service; United States Department of the Interior, National Park Service; for the conservation of fishers in western Oregon. Agreement number BLM-OR-930-1603, Bureau of Land Management, Oregon State Office, Portland, Oregon. 9 pp.
- [DOJ] Department of Justice. 2018. Press Release: Federal, State and Local Leaders and Experts Announce Results of Forest Watch, a Public Lands Marijuana Grow Eradication and Reclamation Project. Dated August 28, 2018. 2 pp.
- Drew, R.E., J.G. Hallett, K.B. Aubry, K.W. Cullings, S.M. Koepf, and W.J. Zielinski. 2003. Conservation genetics of the fisher (*Martes pennanti*) based on mitochondrial DNA sequencing. *Molecular Ecology* 12:51–62.
- [EPA] US Environmental Protection Area. 2008. Risk Mitigation Decision for Ten Rodenticides. May 28, 2008. Office of Pesticide Programs. 121 pp.
- Facka, A. 2013. Electronic mail correspondence dated May 17, 2013, sent to Katherine Fitzgerald, U.S. Fish and Wildlife Service, Yreka, California regarding Climate change and fishers.
- Fettig, C.J., L.A. Mortenson, B.M. Bulaon, and P.B. Foulk. 2019. Tree mortality following drought in the central and southern Sierra Nevada, California, U.S. *Forest Ecology and Management* 432:164–178.
- Frankham, R. 1995. Effective population size/adult population size ratios in wildlife: a review. *Genetics Research* 66(2):95–107.
- Frankham, R, C. Bradshaw, and B. Brook. 2014. Genetics in conservation management: Revised recommendations for the 50/500 rules, Red List criteria and population viability analyses. *Biological Conservation* 170:56-63.
- Franklin, A.B., P.C. Carlson, A. Rex, J.T. Rockweit, D. Garza, E. Culhane, S.F. Volker, R.J. Dusek, V.I. Shearn-Bochser, M.W. Gabriel, and K.E. Horak. 2018. Grass is not always greener: rodenticide exposure of a threatened species near marijuana growing operations. *BMC Research Notes* 11:94. <https://doi.org/10.1186/s13104-018-3206-z>

- Fuller, T. 2019. Getting Worse, Not Better’: Illegal Pot Market Booming in California Despite Legalization. The New York Times Post, article dated April 27, 2019. Downloaded January 28, 2020. <https://www.nytimes.com/2019/04/27/us/marijuana-california-legalization.html>
- Furnas B.J., R.H. Landers, R.L. Callas, and S.M. Matthews. 2017. Estimating population size of fishers (*Pekania pennanti*) using camera stations and auxiliary data on home range size. *Ecosphere* 8(3):1–20.
- Gabriel, M.W. 2018. Personal communication. Record of telephone conversation with Betty Grizzle, U.S. Fish and Wildlife Service on November 15, 2018.
- Gabriel M.W., and G.M. Wengert. 2019. Unpublished Information submitted to the Service, March 4, 2019. Pp.11.
- Gabriel, M.W., L.W. Woods, G.M. Wengert, N. Stephenson, J.M. Higley, and C. Thompson. 2015. Patterns of natural and human-caused mortality factors of a rare forest carnivore, the fisher (*Pekania pennanti*) in California. *PLoS ONE* 10(11):e0140640.doi:10.1371/journal.pone.0140640.
- Gabriel, M.W., G.M. Wengert, J.M. Higley, D.L. Clifford, R.H. Poppenga, L.W. Woods, S. McMillian, and S. Torres. 2017. Science with Solutions: Documentation, Reclamation and Monitoring of the Ecological Impacts of Marijuana Cultivation on Endangered Species. Final Performance Report, Grant #F14AP00021, U.S. Fish and Wildlife Service: Endangered Species Act (Section-6) Grant-in-Aid.
- Gabriel, M., L. Diller, J. Dumbacher, G. Wengert, J. Higley, R. Poppenga, and S. Mendia. 2018. Exposure to rodenticides in Northern Spotted and Barred Owls on remote forest lands in northwestern California: evidence of food web contamination. *Avian Conservation and Ecology* 13.
- Geduhn, A., A. Esther, D. Schenke, H. Mattesand, and J. Jacob. 2014. Spatial and temporal exposure patterns in non-target small mammals during brodifacoum rat control. *Science of the Total Environment* 496:328–338.
- Golightly, R.T., T.F. Penland, W.J. Zielinski, and J.M. Higley. 2006. Fisher diet in the Klamath/North Coast Bioregion, Unpublished Report. Department of Wildlife, Humboldt State University, Arcata, California, USA.
- Gonzalez, P., R.P. Neilson, J.M. Lenihan, and R.J. Drapek. 2010. Global patterns in the vulnerability of ecosystems to vegetation shifts due to climate change. *Global Ecology and Biogeography* 19:755–768.
- Grantham, T. 2018. North Coast Summary Report. California’s Fourth Climate Change Assessment. Publication number: SUM-CCC4A-2018-001.

- [GDRC] Green Diamond Resource Company. 2018. Forest Habitat Conservation Plan on the California Timberlands of Green Diamond Resource Company. Prepared for the U.S. Fish and Wildlife Service. Final plan, dated December 2018.
- [GDRC] Green Diamond Resource Company. 2019. Letter to the U.S. Fish and Wildlife Service regarding: Revised Proposed Rule: Threatened Species Status for West Coast Distinct Population Segment of Fisher with Section 4(d) Rule, 84 FR 18856 (May 2, 2019). Received December 31, 2019.
- Green, R.E. 2017. Reproductive ecology of the fisher (*Pekania pennanti*) in the southern Sierra Nevada: an assessment of reproductive parameters and forest habitat used by denning females. Ph.D. dissertation, University of California, Davis.
- Green, D.S., S.M. Matthews, R.C. Swiers, and R.A. Powell. 2016. The effects of mixed-severity wildfires on fisher (*Pekania pennanti*) population dynamics. Baseline report of population dynamics pre-wildfires, in partial fulfillment of Cooperative Agreement #F15AC00857. Institute for Natural Resources, Oregon State University, Corvallis, Oregon.
- Green, D.S., S.M. Matthews, R.C. Swiers, and R.A. Powell. 2017. The effects of mixed severity-wildfires on fisher (*Pekania pennanti*) population dynamics, in partial fulfillment of Cooperative Agreement Award F15AC00857. Institute for Natural Resources, Oregon State University, Corvallis, Oregon.
- Green, R.E., K.L. Purcell, C.M. Thompson, D.A. Kelt, and H.U. Wittmer. 2018a. Reproductive parameters of the fisher (*Pekania pennanti*) in the southern Sierra Nevada, California. *Journal of Mammalogy* 99:537–553.
- Green, D.S., S.M. Matthews, R.C. Swiers, R.L. Callas, J.S. Yaeger, S.L. Farber, M.K. Schwartz, and R.A. Powell. 2018b. Dynamic occupancy modelling reveals a hierarchy of competition among fishers, grey foxes and ringtails. *Journal of Animal Ecology* 87:813–824.
- Green, R., K. Purcell, and E. McGregor. 2019a. Brief Summary from the Kings River Fisher Project in regards to tree mortality, fishers, and fisher habitat in the southern Sierra Nevada. Submitted to the U.S. Fish and Wildlife Service on April 5, 2019.
- Green, D.S., R.A. Powell, and S.M. Matthews. 2019b. Forest fires have a short-term negative effect on the forest-dependent carnivore the fisher (*Pekania pennanti*). Draft unpublished manuscript.
- Green, R.E., K.L. Purcell, C.M. Thompson, and D.A. Kelt. 2019c. Microsites and structures used by fishers (*Pekania pennanti*) in the southern Sierra Nevada: a comparison of forest elements used for daily resting relative to reproduction. *Forest Ecology and Management* 440:131–146.

- Green, D.S., A.N. Facka, K.P. Smith, S.M. Matthews, and R.A. Powell. 2020. Estimates of population growth, reproduction, and survival of a reintroduced population of fishers (*Pekania pennanti*) on a landscape managed for timber production. Draft, unpublished manuscript dated February 10, 2020.
- Grinnell, J., J. Dixon, and J.M. Linsdale. 1937. Fur-bearing mammals of California. University of California Press, Berkeley, California.
- Hanson, C.T. 2013. Habitat Use of Pacific Fishers in a Heterogeneous Post-Fire and Unburned Forest Landscape on the Kern Plateau, Sierra Nevada, California. *The Open Forest Science Journal* 6:24–30.
- Hanson, C. T. 2015. Use of higher severity fire areas by female Pacific fishers on the Kern Plateau, Sierra Nevada, California, USA. *Wildlife Society Bulletin* 39(3):497–502.
- Hanson, C.T. and D.C. Odion. 2016. Historical forest conditions within the range of the Pacific Fisher and Spotted Owl in the Central and Southern Sierra Nevada, California USA. *Natural Areas Journal* 36(1):8–19. <https://doi.org/10.3375/043.036.0106>
- Happe, P. J., K. J. Jenkins, T. J. Kay, K. Pilgrim, M. K. Schwartz, J. C. Lewis, and K. B. Aubry. 2017. Evaluation of fisher (*Pekania pennanti*) restoration in Olympic National Park and the Olympic Recovery Area: 2016 final annual progress report. *Natural Resource Report NPS/OLYM/NRR—2017/1531*. National Park Service, Fort Collins, Colorado. 76 pp.
- Happe, P.J., R.M. McCaffery, J.C. Lewis, K.L. Pilgrim, and M.K. Schwartz. 2020. Occupancy Patterns in a Reintroduced Fisher Population during Reestablishment. *The Journal of Wildlife Management* 84:344–358.
- Hayes, G.E., and J.C. Lewis. 2006. Washington State Recovery Plan for the Fisher. Washington Department of Fish and Wildlife, Olympia, Washington. 62+ viii pp.
- Hayhoe, K., D. Cayan, C.B. Field, P.C. Frumhoff, E.P. Maurer, N.L. Miller, S.C. Moser, S.H. Schneider, K.N. Cahill, E.E. Cleland, L. Dale, R. Drapek, R.M. Hanemann, L.S. Kalkstein, J. Lenihan, C.K. Lunch, R.P. Neilson, S.C. Sheridan, and J.H. Verville. 2004. Emissions pathways, climate change, and impacts on California. *Proceedings of the National Academy of Sciences of the United States of America* 101:12,422–12,427.
- Higley, M. 2015. Electronic mail correspondence on September 3, 2015, from Mark Higley, Hoopa Tribal Forestry to Laura Finley, U.S. Fish and Wildlife Service and Sean Matthews, Oregon State University, responding to request if any new information available regarding fisher population data at Hoopa since the last report.
- Higley, J.M., G.M. Wengert, S.M. Matthews, and K.M. Rennie. 2014. Bobcat ecology and relationship with and influence on fisher survival on the Hoopa Valley Indian Reservation. Final Report USFWS TWG CA U-29-NA-1. Hoopa Valley Tribe, Hoopa, California. 112 pp.

- Hindmarch, S. and J.E. Elliott. 2018. Ecological Factors Driving Uptake of Anticoagulant Rodenticides in Predators. *In*: van den Brink N., J. Elliott, R. Shore, and B. Rattner (eds.). *Anticoagulant Rodenticides and Wildlife. Emerging Topics in Ecotoxicology (Principles, Approaches and Perspectives)*, vol 5. Springer International Publishing AG, Cham, Switzerland. 398 pp.
- Hosea, R.C. 2000. Exposure of Non-Target Wildlife to Anticoagulant Rodenticides in California. Proceedings of the 19th Vertebrate Pesticide Conference. University of California, Davis, California.
- Hughes, T. 2017. Marijuana's legalization fuels black market in other states. USA Today, article dated August 1, 2017. Downloaded 20 May 2019, <https://www.usatoday.com/story/news/nation/2017/07/31/marijuana-black-market/507417001/>
- Hurteau, M.D., S. Liang, A.L. Westerling, and C. Wiedinmyer. 2019. Vegetation-fire feedback reduces projected area burned under climate change. *Scientific Reports* 2019(9):2838. <https://doi.org/10.1038/s41598-019-39284-1>
- [IERC] Integral Ecology Research Center. 2017. Final Report for U.S. Fish and Wildlife Service Agreement F16AP00732; Illegal marijuana cultivation impacts on prey and carnivore community dynamics in fisher, Humboldt marten, and Northern spotted owl habitat. Dated April 30, 2017. 6 pp.
- Jain, T.B., M.A. Battaglia, H.S. Han, R.T. Graham, C.R. Keyes, J.S. Fried, and J.E. Sandquist. 2012. A comprehensive guide to fuel management practices for dry mixed conifer forests in the northwestern United States. General Technical Report RMRS-GTR-292. Fort Collins, Colorado: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 331 pp.
- Jamieson, I.G., and F.W. Allendorf. 2012. How does the 50/500 rule apply to MVPs? *Trends in Ecology and Evolution* 27(10):578–584.
- Kadir T, Mazur L, Milanes C, Randles K. 2013. Indicators of climate change in California. Report for California Office of Environmental Health Hazard Assessment. Dated August 2013. Retrieved February 2018 from: <https://oehha.ca.gov/media/downloads/risk-assessment/document/climatechangeindicatorsreport2013.pdf>. 258 pp.
- Keeley, J.E. and A.D. Syphard. 2016. Climate Change and Future Fire Regimes: Examples from California. *Geosciences* 6(37). doi:10.3390/geosciences6030037
- Klassen, M., and B.P. Anthony. 2019. The effects of recreational cannabis legalization on forest management and conservation efforts in U.S. national forests in the Pacific Northwest. *Ecological Economics* 162(2019):39–48.

- Knaus, B.J., R. Cronn, A. Liston, P. Pilgrim, and M.K. Schwartz. 2011. Mitochondrial genome sequences illuminate maternal lineages of conservation concern in a rare carnivore. *BMC Ecology* 11:10.
- Kordosky, J.R. 2019. Landscape of Stress: Does Drought Prevail Over Anthropogenic Activity in Influencing Cortisol Levels and Fitness in the Pacific Fisher? Utah State University. All Graduate Theses and Dissertations. 7439.
- Lamberson, R.H., R.L. Truex, W.J. Zielinski, and D. MacFarlane. 2000. Preliminary analysis of fisher population viability in the southern Sierra Nevada. Humboldt State University, Arcata, California.
- Larvie, K., T. Moody, J. Axelson, C. Fettig, and P. Cafferata. 2019. Synthesis of research into the long-term outlook for Sierra Nevada forests following the current bark beetle epidemic. California Department of Forestry and Fire Protection, Sacramento, California. 30 pp.
- Lawler, J.J., H.D. Safford, and E.H. Girvetz. 2012. Martens and fishers in a changing climate. Pp. 371–397 *In*: Martens, Sables, and Fishers: A New Synthesis (Aubry, K.B., W.J. Zielinski, M.G. Raphael, G. Proulx, and S.W. Buskirk (eds.)). Cornell University Press, Ithaca, New York.
- Lewis, J.C., and G.E. Hayes. 2004. Feasibility Assessment for Reintroducing Fishers (*Martes pennanti*) to Washington. Washington Department of Fish and Wildlife, Olympia, Washington. 70 pp. Available online at: <http://wdfw.wa.gov/wlm/diversty/soc/fisher/>
- Lewis, J.C., T. Chestnut, J.I. Ransom, and D.O. Werntz. 2018. Cascades Fisher Reintroduction Project: Progress Report for March 2017 to February 2018. Washington Department of Fish and Wildlife, National Park Service, and Conservation Northwest, unpublished progress report. Washington Department of Fish and Wildlife, Olympia, Washington. 20 pp.
- Lewis, J. C., J. I. Ransom, T. Chestnut, D. Werntz, S. Black, J. L. Postigo, and A. Moehrenschrager. 2019. Cascades fisher reintroduction project: Progress report for March 2018 to March 2019. Natural Resource Report NPS/PWR/NRR–2019/1982. National Park Service, Fort Collins, Colorado.
- Loarie, S.R., B.E. Carter, K. Hayhoe, S. McMahon, R. Moe, C.A. Knight, and D.D. Ackerly. 2008. Climate Change and the Future of California's Endemic Flora. *PLoS ONE* 3:e2502.
- Lofroth, E.C., C.R. Raley, J.M. Higley, R.L. Truex, J.S. Yaeger, J.C. Lewis, P.J. Happe, L.L. Finley, R.H. Naney, L.J. Hale, A.L. Krause, S.A. Livingston, A.M. Myers, and R.N. Brown. 2010. Conservation of Fishers (*Martes pennanti*) in South-Central British Columbia, Western Washington, Western Oregon, and California –Volume I: Conservation Assessment. USDI Bureau of Land Management, Denver, Colorado, USA.

- Lofroth, E.C., J.M. Higley, R.H. Naney, C.M. Raley, J.S. Yaeger, S.A. Livingston, and R.L. Truex. 2011. Conservation of Fishers (*Martes pennanti*) in South-Central British Columbia, Western Washington, Western Oregon, and California-Volume II: Key Findings from Fisher Habitat Studies in British Columbia, Montana, Idaho, Oregon, and California. USDI Bureau of Land Management, Denver, Colorado, USA. 117pp.
- Lopez-Perea, J.J. and R. Mateo. 2018. Secondary Exposure to Anticoagulant Rodenticides and Effects on Predators. Anticoagulant Rodenticides and Wildlife. Springer International Publishing, Cham, Switzerland. Pp. 159–193.
- Mallek, C.H., H. Safford, J. Viers, and J. Miller. 2013. Modern departures in fires severity and area vary by forest type, Sierra Nevada and southern Cascades, California, USA. *Ecosphere* 4(12):153. <http://dx.doi.org/10.1890/ES13-00217>
- Marcot, B.G., K.L. Pope, K. Slauson, H.H. Welsh, C.A. Wheeler, M.J. Reilly, and W.J. Zielinski. 2018. Chapter 6: Other Species and Biodiversity of Older Forests (Pp. 371–459) *in*: Northwest Forest Plan, Synthesis of Science to Inform Land Management Within the Northwest Forest Plan Area, Volume 2.
- Matthews, S., and D. Green. 2020. Phone conversation between Sean Matthews (Oregon State University, Institute for Natural Resources), Sue Livingston, (U.S. Fish and Wildlife Service), and Elizabeth Willey (U.S. Fish and Wildlife), February 13, 2020. Notes from phone conversation submitted to Sean and David Green for review (March 3–5, 2020) and final notes incorporate their review.
- Matthews, S.M., J.M. Higley, J.S. Yaeger, and T.K. Fuller. 2011. Density of fishers and the efficacy of relative abundance indices and small-scale occupancy estimation to detect a population decline on the Hoopa Valley Indian Reservation, California. *Wildlife Society Bulletin* 35:69–75.
- Matthews, S.M., D.S. Green, J.M. Higley, K.M. Rennie, C.M. Kelsey, and R.E. Green. 2019. Reproductive den selection and its consequence for fisher neonates, a cavity-obligate mustelid. Draft document. Institute for Natural Resources, Oregon State University, Corvallis, Oregon.
- [MAUCRSA] Medicinal and Adult-Use Cannabis Regulation and Safety Act. Amended September 16, 2017. California State Law. Sacramento, California.
- Millar, C.I., and N.L. Stephenson. 2015. Temperate forest health in an era of emerging mega-disturbance. *Science* 349(6250):823–826.
- Mohren, S. 2016. Electronic mail correspondence from Sean Mohren, Crater Lake National Park, to Elizabeth Willey, U.S. Fish and Wildlife Service on February 18, 2016, re: providing summary of fisher detections.

- Moriarty, K., S. Matthews, E. Pero, T. Lysak, and C. Morozumi. 2016. Pacific Fisher Overwintering Distribution and Carnivore Monitoring Report, North Cascades of Oregon. Dated August 23, 2016.
- Moriarty, K., S. Matthews, S. Hayner, and C. Cummins. 2017. Klamath Plateau Fisher Project: Preliminary Report on Fisher Use of Green Diamond Resource Company Property. Dated May 16, 2017.
- Moriarty, K.M., C.M. Kelsey, and S.M. Matthews. 2019. Den, rest site, and movement characteristics of Pacific fisher (*Pekania pennanti*) in the southern Oregon Cascades. Final report.
- Moritz, M.A., C. Topik, C.D. Allen, P.F. Hessburg, P. Morgan, D.C. Odion, T.T. Veblen, and I.M. McCullough. 2018. A Statement of Common Ground Regarding the Role of Wildfire in Forested Landscapes of the Western United States. Fire Research Consensus Working Group Final Report.
- Mote, P.W., and E.P. Salathé, Jr. 2010. Future climate in the Pacific Northwest. *Climatic Change* 102:29–50.
- Mote, P.W., J.T. Abatzoglou, and K.E. Kunkel. 2013. Climate: variability and change in the past and the future. Pp. 25–40 *In: Climate Change in the Northwest: Implications for Our Landscapes, Waters and Communities* (Dalton, M.M., P.W. Mote, and A.K. Snover (eds.)). Island Press, Washington, D.C.
- Naney, R.N., L.L. Finley, E.C. Lofroth, P.J. Happe, A.L. Krause, C.R. Raley, R.L. Truex, L.J. Hale, J.M. Higley, A.D. Kasic, J.C. Lewis, S.A. Livingston, D.C. MacFarlane, A.M. Myers, and J.S. Yaeger. 2012. Conservation of Fishers (*Martes pennanti*) in South-Central British Columbia, Western Washington, Western Oregon, and California – Volume III: Threats Assessment. USDI Bureau of Land Management, Denver, Colorado, USA.
- Niblett, M.R., R.L. Church, S.H. Sweeney, and K.H. Barber. 2017. Characterizing Habitat Elements and Their Distribution over Several Spatial Scales: The Case of the Fisher. *Forests* 8(186). <http://doi: dx.doi.org/10.3390/f8060186>
- [ODF] Oregon Department of Forestry. 2016. Sudden Oak Death (*Phytophthora ramorum*): Forest Health Fact Sheet. 2 pp.
- [ODF] Oregon Department of Forestry. 2018. Oregon Department of Forestry Forest Practice Administrative Rules and Forest Practices Act: Chapter 629 Forest Practices Administration. Salem, Oregon. 136 pp.

- Odion, D.C., C.T. Hanson, W.L. Baker, D.A. DellaSala, and M.A. Williams. 2016. Areas of Agreement and Disagreement Regarding Ponderosa Pine and Mixed Conifer Forest Fire Regimes: A Dialogue with Stevens *et al.* PLoS ONE 11(5):e0154579. *Doi:* 1371/journal.pone.0154579
- Ohman, J. L., and M. J. Gregory. 2002. Predictive mapping of forest composition and structure with direct gradient analysis and nearest-neighbor imputation in coastal Oregon, USA. *Canadian Journal of Forest Research* 32:725–741.
- Olson, L.E., J.D. Sauder, N.M. Albrecht, R.S. Vinkey, S.A. Cushman, and M.K. Schwartz. 2014. Modeling the effects of dispersal and patch size on predicted fisher (*Pekania* [Martes] pennanti) distribution in the U.S. Rocky Mountains. *Biological Conservation* 169:89–98.
- [OLCC] Oregon Liquor Control Commission. 2020. List of Marijuana business licenses approved as of January 17, 2020. Oregon Liquor Control Commission, Salem, Oregon. Downloaded January 22, 2020 from: <https://www.oregon.gov/olcc/marijuana/pages/default.aspx>
- Pacific Lumber Company, Scotia Pacific Holding Company, and Salmon Creek Corporation. 1999. Habitat Conservation Plan for the Properties of the Pacific Lumber Company, Scotia Pacific Holding Company, and Salmon Creek Corporation. Dated February 1999. 158 pp.
- Parsons, M.A. 2018. Effects of forest management, prey, and predators on the habitat selection of fishers in the South Cascades of Washington. M.S. Thesis, University of Washington. 80 pp.
- Pierce, D.W., D.R. Cayan, T. Das, E.P. Maurer, N.L. Miller, Y. Bao, M. Kanamitsu, K. Yoshimura, M.A. Snyder, L.C. Sloan, G. Franco, and M. Tyree. 2013. Probabilistic estimates of future changes in California temperature and precipitation using statistical and dynamical downscaling. *Climate Dynamics* 40:839–856.
- Pilgrim, K. and M. Schwartz. 2014, 2015, 2016, and 2017. BLM-Klamath fisher (*Martes pennanti*) hair survey samples 2013. Unpublished reports from U.S. Forest Service Rocky Mountain Research Station to Steve Hayner, Lakeview District BLM, regarding genetic testing results of fisher hair samples. Reports for each year, 2014–2017.
- Polade, S.D., A. Gershunov, D.R. Cayan, M.D. Dettinger, and D.W. Pierce. 2017. Precipitation in a warming world: Assessing projected hydro-climate changes in California and other Mediterranean climate regions. *Scientific Reports* 7: 10783. *DOI:10.1038/s41598-017-11285-y*
- Powell, R.A. 2013. Climate change and fishers. Electronic mail correspondence dated May 17, 2013, sent to Katherine Fitzgerald, U.S. Fish and Wildlife Service, Yreka, California.

- Powell, R.A., and W.J. Zielinski. 1994. Fisher. Pp. 38–73 *in*: The scientific basis for conserving forest carnivores: American marten, fisher, lynx, and wolverine (L.F. Ruggiero, K.B. Aubry, S.W. Buskirk, L.J. Lyon, and W.J. Zielinski (eds.)). Rocky Mountain Forest and Range Experiment Station, United States Department of Agriculture Forest Service, General Technical Report RM-254:1-184.
- Powell, R.A., R.C. Swiers, A.N. Facka, S. Matthews, and D. Clifford. 2014. Understanding a Fisher Reintroduction in Northern California From 2 Perspectives. (Former annual reports entitled: Reintroduction of Fishers into the Northern Sierra Nevada of California). Report dated June 30, 2014. Submitted to: U.S. Fish and Wildlife Service, Yreka, California; the California Department of Fish and Wildlife, Redding, California; and Sierra Pacific Industries, Anderson, California. 42 pp.
- Powell, R.A., D. Clifford, A.N. Facka, D. Green, S. Matthews, and K.P. Smith. 2019. Understanding a Fisher Reintroduction in Northern California from 2 Perspectives. Draft Final Report 2017. 260 pp.
- Prestemon, J.P., F.H. Koch, G.H. Donovan, and M.T. Lihou. 2019. Cannabis legalization by states reduces illegal growing on US national forests. *Ecological Economics* 164(2019):106366. 13 pp.
- Primack, R.B. 2014. *Essentials of Conservation Biology*, 6th Ed. Sinauer Associates, Inc., Sunderland, Massachusetts.
- Purcell, K., C. Thompson, R. Roberts, and R. Sweitzer. 2018. Sugar Pine Fisher Project Final Report. A Continuation of the Sierra Nevada Adaptive Management Project (SNAMP). Dated May 18, 2018. USDA Forest Service, Pacific Southwest Research Station.
- Raley, C.M., E.C. Lofroth, R.L. Truex, J.S. Yaeger, and J.M. Higley. 2012. Habitat ecology of fishers in western North America: a new synthesis. Pp. 231–254 *in*: Aubry, K.B., W.J. Zielinski, M.G. Raphael, G. Proulx, and S.W. Buskirk (eds). *Biology and conservation of martens, sables, and fishers: a new synthesis*. Cornell University Press, Ithaca, New York, USA. 580 pp.
- Restaino, C.R. and H.D. Safford. 2018. Fire and climate change. Fire in California's ecosystems. Second edition. University of California Press, Berkeley, California, USA. Pp. 493–505.
- Ruggiero, L.F., S.W. Buskirk, K.B. Aubry, L.J. Lyon, and W.J. Zielinski. 1994. Chapter 7: Information needs and a research strategy for conserving forest carnivores. Pp. 138–152 *in*: L.F. Ruggiero, K.B. Aubry, S.W. Buskirk, L.J. Lyon, and W.J. Zielinski (technical eds.). *The scientific basis for conserving forest carnivores: American marten, fisher, lynx and wolverines in the western United States*. General Technical Report RM-254. U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. Fort Collins, Colorado. 184 pp.

- Rustigian-Romsos, H. 2013. Refined PATCH outputs ready. Electronic mail correspondence on November 15, 2013, with Katherine Fitzgerald, U.S. Fish and Wildlife Service, Yreka, California.
- Sabet, K. 2018. Marijuana and Legalization Impacts. Regents of University of California. Issue 23:1, Spring 2018. DOI: <https://doi.org/10.15779/Z381V5BD5S>
- Safford, H.D. and J.T. Stevens. 2017. Natural Range of Variation for Yellow Pine and Mixed-Conifer Forests in the Sierra Nevada, Southern Cascades, and Modoc and Inyo National Forests, California, USA. U.S. Department of Agriculture, Pacific Southwest Research Station. October 2017. General Technical Report PSW-GTR-256.
- Safford, H.D., and Van de Water, K.M. 2014. Using fire return interval departure (FRID) analysis to map spatial and temporal changes in fire frequency on national forest lands in California. Research Paper PSW-RP-266. Albany, California: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 59 pp.
- Safford, H.D., M. North, and M.D. Meyer. 2012. Chapter 3: Climate change and the relevance of historical forest conditions. Pp. 23–46 *in*: M. North (ed.). Managing Sierra Nevada forests. General Technical Report PSW-GTR-237. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. Albany, California. 184 pp.
- Sage, M., M. Cœurdassier, R. Defaut, F. Gimbert, P. Berny, and P. Giraudoux. 2008. Kinetics of bromadiolone in rodent populations and implications for predators after field control of the water vole, *Arvicola terrestris*. Science of the Total Environment 407(1):211–222.
- Salathé, E.P., Jr., L.R. Leung, Y. Qian, and Y. Zhang. 2010. Regional climate model projections for the State of Washington. Climatic Change 102:51–75.
- Self, S.E., E. Murphy, and S. Farber. 2008. Preliminary estimate of fisher populations in California and southern Oregon. Unpublished Report: Sierra Pacific Industries, Redding, California.
- Sequoia Forest Keeper. 2019. Unpublished information submitted to the Service, dated March 4, 2019. 18 pp.
- [Service] U.S. Fish and Wildlife Service. 2014. Draft species report: fisher (*Pekania pennantii*), west coast population. U.S. Fish and Wildlife Service, Yreka, California. Dated January 13, 2014.
- [Service] U.S. Fish and Wildlife Service. 2016. Final species report: fisher (*Pekania pennantii*), west coast population. U.S. Fish and Wildlife Service, Yreka, California. Dated March 2016.

- [Service] U.S. Fish and Wildlife Service. 2019a. Unpublished data and analysis related to population size, distribution, and threats. Pacific Southwest Region, Sacramento, California.
- [Service] U.S. Fish and Wildlife Service. 2019b. Incidental Take Permit for the Green Diamond Resource Company's Habitat Conservation Plan. Permit Issued by the U.S. Fish and Wildlife Service (Effective June 13, 2019 through June 14, 2069). Permit Number: TE43702D-0. 2 pp.
- [Service] U.S. Fish and Wildlife Service. 2020. Map of fisher locations. March 2020. 1 p.
- [SFI] Sustainable Forestry Initiative. 2015. SFI 2015-2019 extended through December 2021 forest management standard. Sustainable Forestry Initiative U.S.A., Washington, D.C.
- Sheehan, T., D. Bachelet, and K. Ferschweiler. 2015. Projected major fire and vegetation changes in the Pacific Northwest of the conterminous United States under selected CMIP5 climate futures. *Ecological Modeling* 317:16–29.
- Shore, R.F., and M. Coeurdassier. 2018. Secondary Exposure to Anticoagulant Rodenticides and Effects on Predators. *Anticoagulant Rodenticides and Wildlife*. Springer International Publishing. Cham, Switzerland. Pp. 159–193.
- Skinner, C.N., A.H. Taylor, J.K. Agee, C.E. Briles, and C.L. Whitlock. 2018. Klamath mountains bioregion. Pp. 171–193 *in*: J. Van Wagtendonk, N.G. Sugihara, S. L. Stephens, A.E. Thode, K.E. Shaffer, and J. Fites-Kaufman (eds.). *Fire in California's ecosystems*. 2nd edition. University of California Press, Berkeley, California.
- Slauson, K.M., J. Baldwin, W.J. Zielinski, and M. Schwartz. 2009. Estimating Detection Probabilities for Fishers Using Non-Invasive Methods and Implications for Survey Protocols. P. 68 *In*: USDA Forest Service, Pacific Southwest Research Station, Redwood Sciences Laboratory, Arcata, California.
- Spencer, W., H. Rustigian-Romsos, J. Strittholt, R. Scheller, W.J. Zielinski, and R. Truex. 2011. Using occupancy and population models to assess habitat conservation opportunities for an isolated carnivore population. *Biological Conservation* 144:788–803.
- Spencer, W.D., S.C. Sawyer, H.L. Romsos, W.J. Zielinski, R.A. Sweitzer, C.M. Thompson, K.L. Purcell, D.L. Clifford, L. Cline, H.D. Stafford, S.A. Britting, and J.M. Tucker. 2015. Southern Sierra Nevada fisher conservation assessment. Unpublished report produced by Conservation Biology Institute. 117 pp.
- Spencer, W.D., S.C. Sawyer, H.L. Romsos, W.J. Zielinski, C.M. Thompson, and S.A. Britting. 2016. Southern Sierra Nevada Fisher Conservation Strategy. Version 1.0. Report produced by Conservation Biology Institute.

- Spencer, W.D., S.C. Sawyer, H.L. Romsos, W.J. Zielinski, C.M. Thompson, and S.A. Britting. 2017. Changed Circumstances and Implementation of the Southern Sierra Nevada Fisher Conservation Strategy. Letter from Conservation Biology Institute.
- Spies, T.A., P.F. Hessburg, C.N. Skinner, K.J. Puettmann, M.J. Reilly, R.J. Davis, J.A. Kertis, J.W. Long, and D.C. Shaw. 2018. Chapter 3: old growth, disturbance, forest succession, and management in the area of the Northwest Forest Plan. Pp. 95–243 *in*: Spies, T.A., P.A. Stine, R. Gravenmier, J.W. Long, and M.J. Reilly (tech. coords.). Synthesis of science to inform land management within the Northwest Forest Plan area. General Technical Report PNW–GTR–966. Portland, Oregon: USDA, Forest Service, Pacific Northwest Research Station. 1,020 pp., 3 vol.
- Stephens, S.L., J.M. Lydersen, B.M. Collins, D.L. Fry, and M.D. Meyer. 2015. Historical and current landscape-scale ponderosa pine and mixed conifer forest structure in the Southern Sierra Nevada. *Ecosphere* 6(5):79. <http://dx.doi.org/10.1890/ES14-00379.1>
- Stephens, S. L., B.M. Collins, C.J. Fettig, M.A. Finney, C.M. Hoffman, E.E. Knapp, M.P. North, H. Safford, and R.B. Wayman. 2018a. Drought, tree mortality, and wildfire in forests adapted to frequent fire. *BioScience* 68:77–88.
- Stephens, S.L., J.M. Kane, and J.D. Stuart. 2018b. North Coast Bioregion. Fire in California’s ecosystems. Second edition. University of California Press, Berkeley, California, USA, Pp. 149–170.
- Stock, S. 2020. Electronic mail correspondence from Sarah Stock, (National Park Service, Yosemite National Park) to Stephanie Eyes (U.S. Fish and Wildlife Service, Sacramento Field Office), dated February 12, 2020.
- Suffice, P., M. Cheveau, L. Imbeau, M.J. Mazerolle, H. Asselin, and P. Drapeau. 2019. Habitat, Climate, and Fisher and Marten Distributions. *The Journal of Wildlife Management*. DOI: 10.1002/jwmg.21795
- Sweitzer, R.A., V.D. Popescu, R.H. Barrett, K.L. Purcell, and C.M. Thompson. 2015a. Reproduction, abundance, and population growth for a fisher (*Pekania pennanti*) population in the Sierra National Forest, California. *Journal of Mammalogy* 96:772–790.
- Sweitzer, R., C. Thompson, K. Purcell, and R. Barrett. 2015b. Sierra Nevada Adaptive Management Project (SNAMP). Appendix D: Fisher Team Final Report, dated May 3, 2015.
- Sweitzer, R.A., V.D. Popescu, C.M. Thompson, K.L. Purcell, R.H. Barrett, G.M. Wengert, M.W. Gabriel, and L.W. Woods. 2016a. Mortality risks and limits to population growth of fishers. *The Journal of Wildlife Management* 80:438–451.

- Sweitzer, R.A., B.J. Furnas, R.H. Barrett, K.L. Purcell, and C.M. Thompson. 2016b. Landscape fuel reduction, forest fire, and biophysical linkages to local habitat use and local persistence of fishers (*Pekania pennanti*) in Sierra Nevada mixed-conifer forests. *Forest Ecology and Management* 361:208–225.
- Taylor, A.H. and C.N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. *Forest Ecology and Management* 111(1998):285–301.
- Taylor, A.H. and C.N. Skinner. 2003. Spatial patterns and controls on historical fire regimes and forest structure in the Klamath Mountains. *Ecological Applications* 13(3):704–719.
- Tebaldi, C., K. Hayhoe, J.M. Arblaster, and G.A. Meehl. 2006. Going to the Extremes. *Climatic Change* 79:185–211.
- Thompson, C.M. 2020. Personal communication, Southern Sierra Nevada Fisher Working Group Meeting Notes (excerpt).
- Thompson, C. and D. Clayton. 2016. Ashland forest resiliency fisher monitoring FY2016 interim report. U.S. Forest Service, Pacific Southwest Research Station and Rogue River-Siskiyou National Forest.
- Thompson, C., Sweitzer, R., Gabriel, M., Purcell, K., Barrett, R. and Poppenga, R. 2014. Impacts of rodenticide and insecticide toxicants from marijuana cultivation sites on fisher survival rates in the Sierra National Forest, California. *Conservation Letters* 7:91–102. doi: 10.1111/conl.12038 (Article first published online: June 18, 2013).
- Thompson, C.M., M.W. Gabriel, and K.L. Purcell. 2017. An Ever-Changing Ecological Battlefield; Marijuana cultivation and toxicant use in western forests. *The Wildlife Professional*, May/June 2017 issue. Pp. 42–46.
- Thompson C., K. Purcell, H. Smith, and R. Green. 2019a. DRAFT, Fisher use of post-fire landscapes; implications for habitat restoration. 30 pp + maps and table.
- Thompson C., W. Spencer, H. Romsos, S. Sawyer. 2019b. Southern Sierra Nevada Fisher Conservation Strategy DRAFT Interim Recommendations, December 2019. Report produced by Conservation Biology Institute, Corvallis, Oregon.
- Tosh, D.G., R.A. McDonald, S. Bearhop, N.R. Llewellyn, W.I. Montgomery, and R.F. Shore. 2012. Rodenticide exposure in wood mouse and house mouse populations on farms and potential secondary risk to predators. *Ecotoxicology* 21(5):1,325–1,332.
- Truex, R.L., and W.J. Zielinski. 2013. Short-term effects of fuel treatments on fisher habitat in the Sierra Nevada, California. *Forest Ecology and Management* 293:85–91.

- Tucker, J.M. 2013. Assessing changes in connectivity and abundance through time for fisher in the southern Sierra Nevada [dissertation]. Missoula, Montana: University of Montana. 130 pp.
- Tucker, J.M. 2015. Peer Review of the Proposed Rule: Threatened Species Status for West Coast Distinct Population Segment of Fisher. Letter from Jody Tucker, Ph.D., Wildlife Biologist, Sequoia National Forest and Sierra Nevada Carnivore Monitoring Team Leader, dated January 5, 2015.
- Tucker, J.M. 2019. Personal communication. USFS Pacific Southwest Research Station Research station. Detailed manuscript in preparation by J. Tucker, D. Green and S. Matthews. Comments on the 2019 Revised Proposed Rule, submitted during public comment period. Dated December 2, 2019.
- Tucker, J. M., M.K. Schwartz, R.L. Truex, K.L. Pilgrim, and F.W. Allendorf. 2012. Historical and contemporary DNA indicate fisher decline and isolation occurred prior to the European settlement of California. *PloS one* 7.
- Tucker, J.M., M.K. Schwartz, R.L. Truex, S.M. Wisely, F.W. Allendorf. 2014. Sampling affects the detection of genetic subdivision and conservation implications for fisher in the Sierra Nevada. *Conservation Genetics* 15(1):123–136.
- Tucker, J.M., F.W. Allendorf, R.L. Truex, and M.K. Schwartz. 2017. Sex-biased dispersal and spatial heterogeneity affect landscape resistance to gene flow in fisher. *Ecosphere* 8(6):e01839. [10.1002/ecs2.1839](https://doi.org/10.1002/ecs2.1839)
- [USDA and USDI] U.S. Department of Agriculture, Forest Service and U.S. Department of the Interior, Bureau of Land Management. 1994. Record of decision for amendments to Forest Service and Bureau of Land Management Planning documents within the range of the northern spotted owl—standards and guidelines for management of habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. (Northwest Forest Plan). Portland, Oregon. (Document in 2 parts, Northwest Forest Plan Record of Decision and Northwest Forest Plan Standards and Guidelines). February 1994.
- [USFS] U.S. Department of Agriculture, U.S. Forest Service. 2004. Record of Decision for the Sierra Nevada Forest Plan Amendment. U.S. Forest Service. 72 pp.
- [USFS] U.S. Department of Agriculture, Forest Service, Pacific Southwest Region, Sierra Forest Legacy, California Department of Forestry and Fire Protection, State of California Sierra Nevada Conservancy, The Nature Conservancy, USDI National Park Service Pacific Region, The Wilderness Society, The Sierra Club, Center for Biological Diversity, Northern California Prescribed Fire Council, and Southern Sierra Prescribed Fire Council. 2015. Memorandum of Understanding (MOU) for the purpose of increasing the use of fire to meet ecological and other management objectives. OMB 0596-0217, FS-1500-15. 14 pp.

- [USFS] U.S. Department of Agriculture, Forest Service. 2016. Unpublished data. Analysis of Forest Service timber harvest activities in Region 5 within the west coast fisher DPS. Data downloaded February 11, 2016, from:
<http://www.fs.usda.gov/detail/r5/landmanagement/gis/?cid=STELPRDB5327833>
- [USFS] U.S. Department of Agriculture, Forest Service, Pacific Southwest Region and National Fish and Wildlife Foundation. 2017. Challenge Cost Share Agreement. Pacific Southwest Fuels Management Strategic Cost Share Investment Partnership. OMB 0596-0217, FS-1500-10. 21 pp.
- [USFS] U.S. Department of Agriculture, Forest Service. 2019. Information on the Rapid Assessment of Burned Vegetation (RAVG) and RAVG Query Builder. Accessed December 2018 at: <https://www.fs.fed.us/postfirevegcondition/whatis.shtml>
- [USFS] U.S. Department of Agriculture, Forest Service, Sierra Pacific Industries, California Department of Forestry and Fire Protections, and National Fish and Wildlife Foundation. 2020. Memorandum of Understanding (MOU) for addressing large scale, high-severity wildfire risks to Northern spotted owls, California spotted owls, the West Coast Distinct Population Segment of Fishers, and their habitat. Incorporates addendum that includes 14 other commercial forest landowners. OMB 0596-0217, FS-1500-15. 26 pp.
- Weir, R.D., M. Phinney, and E.C. Lofroth. 2012. Big, sick, and rotting: Why tree size, damage, and decay are important to fisher reproductive habitat. *Forest Ecology and Management* 265:230–240.
- Wendt, R. 2019. Enforcing the wild west of weed. *POLICE Magazine*. Article published July 7, 2019. Downloaded 24 January 2020 from:
<https://www.policemag.com/517634/enforcing-the-wild-west-of-weed>
- Wengert, G.M. 2013. Ecology of intraguild predation on fishers (*Martes pennanti*) in California [dissertation]. Davis, California: University of California. 126 pp.
- Westerling, A.L. 2016. Increasing western U.S. forest wildfire activity: sensitivity to changes in the timing of spring. *Philosophical Transactions of the Royal Society B* 271:20150178.
<http://dx.doi.org/10.1098/rstb.2015.0178>
- Westerling, A.L. 2018. Wildfire Simulations for California’s Fourth Climate Change Assessment: Projecting Changes in Extreme Wildfire Events with a Warming Climate. California’s Fourth Climate Change Assessment, California Energy Commission. Publication Number: CCCA4-CEC-2018-014. 57 pp.
- Westerling, A.L., and B.P. Bryant. 2008. Climate change and wildfire in California. *Climatic Change* 87:231–249.
- Williams, A.P., R. Seager, J.T. Abatzoglou, B.I. Cook, J.E. Smerdon, and E.R. Cook. 2015. Contribution of anthropogenic warming to California drought during 2012–2014. *Geophysical Research Letters* 42:6,819–6,828. doi:10.1002/2015GL064924

- Wisely, S.A., S.W. Buskirk, G.A. Russell, K.B. Aubry, and W.J. Zielinski. 2004. Genetic diversity and structure of the fisher (*Martes pennanti*) in a peninsular and peripheral metapopulation. *Journal of Mammalogy* 85(4):640–648.
- Wolfer, B. 2014. Electronic mail correspondence on January 31, 2014, with Sue Livingston, U.S. Fish and Wildlife Service, Portland, Oregon re: regarding fisher detections.
- Young, D.J.N., J.T. Stevens, J.M. Earles, J. Moore, A. Ellis, A.L. Jirka, and A.M. Latimer. 2017. Long-term climate and competition explain forest mortality patterns under extreme drought. *Ecology Letters* 20:78–86.
- Zielinski, W.J. and A.N. Gray. 2018. Using routinely collected regional forest inventory data to conclude that resting habitat for the fisher (*Pekania pennanti*) in California is stable over ~20 years. *Forest Ecology and Management* 409:899–908.
- Zielinski, W.J., R.L. Truex, G.A. Schmidt, F.V. Schlexer, K.N. Schmidt, and R.H. Barrett. 2004. Resting habitat selection by fishers in California. *Journal of Wildlife Management* 68:475–492.
- Zielinski, W. J., R. L. Truex, F. V. Schlexer, L. A. Campbell, and C. Carroll. 2005. Historical and contemporary distributions of carnivores in forests of the Sierra Nevada, California. *Journal of Biogeography* 32:1,385–1,407.
- Zielinski, W.J., C. Carroll, and J.R. Dunk. 2006. Using landscape suitability models to reconcile conservation planning for two key forest predators. *Biological Conservation* 133:409–430.
- Zielinski, W.J., J.R. Dunk, and A.N. Gray. 2012. Estimating habitat value using forest inventory data: the fisher (*Martes pennanti*) in northwestern California. *Forest Ecology and Management* 275:35–42.
- Zielinski, W.J., J.A. Baldwin, R.L. Truex, J.M. Tucker, and P.A. Flebbe. 2013. Estimating trend in occupancy for the southern Sierra Nevada fisher *Martes pennanti* population. *Journal of Fish and Wildlife Management* 4(1):3–19.
- Zielinski, W.J., J.M. Tucker, and K.M. Rennie. 2017. Niche overlap of competing carnivores across climatic gradients and the conservation implications of climate change at geographic range margins. *Biological Conservation* 209:533–545.

FEDERAL REGISTER AND OTHER GOVERNMENT DOCUMENTS:

- 48 FR 49244. Endangered and Threatened Wildlife and Plants; Preparation of Environmental Assessments for Listing Actions under the Endangered Species Act. October 25, 1983.
- 59 FR 22951. President's Memorandum on Government-to-Government Relations With Native American Tribal Governments. April 29, 1994.
- 59 FR 34270. Endangered and Threatened Wildlife and Plants: Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities. July 1, 1994.
- 59 FR 34271. Endangered and Threatened Wildlife and Plants: Policy on Information Standards Under the Endangered Species Act Info Standards Policy. July 1, 1994.
- 59 FR 34272; Endangered and Threatened Wildlife and Plants: Notice of Interagency Cooperative Policy for Endangered Species Act Section 9 Prohibitions. July 1, 1994.
- 61 FR 4722; Interagency Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the ESA. (Re: Senate Report 151, 96th Congress, 1st Session).
- 74 FR 35885; Endangered and Threatened Wildlife and Plants: Permit application northern spotted owl. Safe Harbor Agreement for northern spotted owls in Oregon.
- 79 FR 60419. Endangered and Threatened Wildlife and Plants; Threatened Species Status for West Coast Distinct Population Segment of Fisher. October 7, 2014. Proposed rule.
- 79 FR 76950. Endangered and Threatened Wildlife and Plants; Threatened Species Status for West Coast Distinct Population Segment of Fisher; December 23, 2014. Proposed rule; extension of comment period.
- 80 FR 19953. Endangered and Threatened Wildlife and Plants; 6-Month Extension of Final Determination of the Proposed Threatened Status for the West Coast Distinct Population Segment of Fisher; April 14, 2015.
- 81 FR 15737. Proposed Template Candidate Conservation Agreement With Assurances for the Fisher in Oregon and a Draft Environmental Action Statement. March 24, 2016.
- 81 FR 22710. Endangered and Threatened Wildlife and Plants; Withdrawal of the Proposed Rule to List the West Coast Distinct Population Segment of Fisher. April 18, 2016.
- 84 FR 644. Notice in the *Federal Register* to reopen the comment period on the October 7, 2014, proposed rule to list the DPS as a threatened species. January 31, 2019
- 84 FR 4851. Proposed Green Diamond Resource Company Candidate Conservation Agreement With Assurances for Fisher in Oregon. February 19, 2019.

84 FR 31903. Proposed Site Plans Under a Candidate Conservation Agreement With Assurances for the Fisher in Oregon; Enhancement of Survival Permit Applications. July 3, 2019.

84 FR 60278. Endangered and Threatened Wildlife and Plants; Threatened Species Status for West Coast Distinct Population Segment of Fisher With Section 4(d) Rule. Revised Proposed Rule.

84 FR 69712. Endangered and Threatened Wildlife and Plants; Threatened Species Status for West Coast Distinct Population Segment of Fisher With Section 4(d) Rule. Re-opening of Comment Period. December 19, 2019.

Secretarial Order 3206. American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act. June 5, 1997.