

James F. Saracco

Research Ecologist, The Institute for Bird Populations
P.O. Box 518, Petaluma, CA 94953 · 544 Austin Ave., Pittsburgh, PA 15243
✉ jsaracco@birdpop.org ☎ 907-957-4790 🌐 birdpop.org

Education

2001. Ph.D., Zoology (Statistics minor), North Carolina State University, Raleigh, NC.
1992. B.S., Biology (Chemistry minor), Indiana University of Pennsylvania, Indiana, PA.

Professional Experience

Jun 2003-pres. Research Ecologist/Program Director. The Institute for Bird Populations, Pt. Reyes Station, CA.

Feb-Jun 2020. Independent Contractor, Department of Fish, Wildlife and Conservation Biology, Colorado State University, Ft. Collins, CO.

Aug 2002- Dec 2004. Adjunct Professor. Biology Program, University of Alaska Southeast, Juneau, AK.

Jun 2004. Independent Contractor, Glacier Bay National Park and Preserve, Gustavus, AK.

2002-03. Research Analyst III. College of Forest Resources, University of Washington, Seattle, WA.

Jun 2003. Independent Contractor, USGS Alaska Science Center, Anchorage, AK.

Teaching

2003-10. Instructor. 12 workshops to train biologists in field and analytical techniques for monitoring landbirds using mist netting and bird banding and sampling for avian influenza (North Carolina, Mexico, Belize, El Salvador, Nicaragua, Costa Rica, and Colombia).

2002, 2004. Instructor. Ornithology (BIOL 426 Lecture and Lab). University of Alaska Southeast, Juneau, AK.

2001. Teaching Assistant. Tropical Avian Biology and Conservation (ZO 572 Seminar). North Carolina State University, Raleigh, NC.

1999. Teaching Assistant. Ornithology (ZO 501). NC State University, Raleigh, NC.

Service

Associate Editor: Ornithological Applications (May 2020 - present) **Reviewer.** *Journals:* Biodiversity and Conservation, Biology Letters, Biotropica, Condor, Diversity and Distributions, Ecography, Ecology, Ecology and Evolution, Ecological Applications, Ecology Letters, Ecosphere, European Journal of Wildlife Research, Global Ecology and Biogeography, Huitzil, Ibis, Journal of Field Ornithology, Journal of Fish and Wildlife Management, Journal of Wildlife Management, Plant Ecology, Nature Communications, PloS ONE, Southeastern Naturalist, Western Birds, Wilson Journal of Ornithology. *Funding agencies:* National Geographic Society, National Science Foundation, Netherlands Organisation for Scientific Research, Graduate Women in Science. *Agency Internal Review:* US Geological Survey, US Environmental Protection Agency **Committee Member.** Monitoring Subcommittee, North American Bird Conservation Initiative (NABCI); International

Committee, North American Banding Council (NABC); Data Management and Applications Committee, NABC. **Volunteer.** Seabird/marine mammal surveyor, oceanography surveys. Glacier Bay NPP. Seabird surveyor Cordell Bank NMS. Student presentation awards, American Ornithological Society.

Awards and Honors

2023. Fellow, American Ornithological Society

2014. USDA Forest Service “Wings Across the Americas” Conservation Award.

2014. Elective Member, American Ornithologists’ Union.

2008. Rainforest Alliance Eco-Index Stellar Project Update. “Habitat-management strategies that enhance overwintering survival of migratory landbirds”.

2006. Rainforest Alliance Eco-Index’s “Are We Making Progress Yet?” Award for useful monitoring and evaluation methodology (MoSI program).

Web Resources

The Institute for Bird Populations. 2023. [MAPS Data Exploration Tool: Processed MAPS results. Version 1.0.](#)

DeSante, D. F., D. R. Kaschube, and J. F. Saracco. 2015. [Vital Rates of North American Landbirds: The Institute for Bird Populations.](#)

Preprints

Saracco, J. F. and C. B. Yackulic. Fast and flexible Bayesian Jolly Seber models and application to populations with transients. <https://www.biorxiv.org/content/10.1101/2023.05.25.542303v3.abstract>

Peer-reviewed Publications

Youngflesh, C., J. F. Saracco, R. B. Siegel, and M. W. Tingley. 2024. Reply to: Shrinking body size may not provide meaningful thermoregulatory benefits in a warmer world. *Ecology and Evolution* <https://doi.org/10.1038/s41559-023-02308-1>

Miller, C. V., Bossu, C. M., Saracco, J. F., Toews, D. P. L., Rushing, C. S., Roberto-Charron, A., Tremblay, J. A., Chandler, R. B., DeSaix, M. G., Fiss, C. J., Larkin, J. L., Haché, S., Nebel, S., & Ruegg, K. C. 2024. Genomics-informed conservation units reveal spatial variation in climate vulnerability in a migratory bird. *Molecular Ecology* 33:e17199. <https://doi.org/10.1111/mec.17199>

DeSaix, M. G., Anderson, E. C., Bossu, C. M., Rayne, C. E., Schweizer, T. M., Bayly, N. J., Narang, D. S., Hagelin, J. C., Gibbs, H. L., Saracco, J. F., Sherry, T. W., Webster, M. S., Smith, T. B., Marra, P. P., & Ruegg, K. C. 2023. Low-coverage whole genome sequencing for highly accurate population assignment: Mapping migratory connectivity in the American Redstart (*Setophaga ruticilla*). *Molecular Ecology* 32:5528–5540. <https://doi.org/10.1111/mec.17137>

Youngflesh, C., G. A. Montgomery, J. F. Saracco, D. A. W. Miller, R. P. Guralnick, A. H. Hurlbert, R. B. Siegel, R. LaFrance, and M. W. Tingley. 2023. Demographic consequences of phenological asynchrony for North American songbirds. *Proceedings of the National Academy of Sciences USA* 120:e2221961120. <https://doi.org/10.1073/pnas.2221961120>

- Saracco, J. F., P. Pyle, D. R. Kaschube, M. Kohler, C. M. Godwin, and K. R. Foster. 2022. Demographic declines and variable responses of breeding bird populations to human footprint in the Athabasca Oil Sands Region, Alberta, Canada. *Ornithological Applications* 24:duaco37. <https://doi.org/10.1093/ornithapp/duaco37>
- Saracco, J. F., R. L. Cormier, D. L. Humple, S. Stock, R. Taylor, and R. B. Siegel. 2022. Demographic responses to climate-driven variation in habitat quality across the annual cycle of a migratory bird species. *Ecology and Evolution* 12:e8934. <https://doi.org/10.1002/ece3.8934>
- Abiotic conditions shape spatial and temporal morphological variation in North American birds. *Nature Ecology and Evolution* 6:1860–1870 <https://doi.org/10.1038/s41559-022-01893-x>
- Kaschube, D. R., J. F. Saracco, C. Ray, C. M. Godwin, K. R. Foster, and P. Pyle. 2022. Minimum capture-recapture rates and years of banding station operations to obtain reliable adult annual survival estimates. *Journal of Field Ornithology* 93(1):7. [online] URL: <https://journal.afonet.org/vol93/iss1/art7/> <https://doi.org/10.5751/JFO-00071-930107>
- Bay, R. A., D. S. Karp, J. F. Saracco, W. R. L. Anderegg, L. Frishkoff, D. Wiedenfeld, T. B. Smith, and K. Ruegg. 2021. Genetic variation reveals individual-level climate tracking across the annual cycle of a migratory bird. *Ecology Letters* 24: 819-828. <https://doi.org/10.1111/ele.13706>
- DeSante, D. F., and J. F. Saracco. 2021. Climate variation drives dynamics of a subalpine breeding bird community. *Ornithological Applications*. 123(2): duabo14. <https://doi.org/10.1093/ornithapp/duabo14>
- Pyle, P., K. R. Foster, C. M. Godwin, D. R. Kaschube, and J. F. Saracco. 2020. Yearling proportion correlates with habitat structure in a Boreal forest landbird community. *PeerJ* 8:e8898. <https://doi.org/10.7717/peerj.8898>
- Ruegg, K. C., R. J. Harrigan, J. F. Saracco, T. B. Smith, and C. M. Taylor. 2020. A genoscape-network model for conservation prioritization in a migratory bird. *Conservation Biology* <https://doi.org/10.1111/cobi.13536>
- Saracco, J. F., L. Helton, J. Liske-Clark, and P. Radley. 2020. Recent dynamics and trends of landbird populations on Saipan, Northern Mariana Islands. *Pacific Science* 74(4): 319-329.
- Saracco, J. F. and M. Rubenstein. 2020. Integrating broad-scale data to assess demographic and climatic contributions to population change in a declining songbird. *Ecology and Evolution* 10:1804-1816. doi: 10.1002/ece3.5975
- Roy C., N. Michel, C. Burkhalter, K. Gurney, C. Handel, D. Messmer, K. Princé, C. Rushing, J. F. Saracco, R. Schuster, A. Smith, P. Smith, P. Sólymos, L. Venier, S. Van Wilgenburg, B. Zuckerberg. 2019. Monitoring boreal avian populations: how can we estimate trends and cycles from noisy data? *Avian Conservation and Ecology* 14:8 <https://doi.org/10.5751/ACE-01397-140208>
- Saracco, J. F., R. B. Siegel, L. Helton, S. Stock, and D. F. DeSante. 2019. Phenology and productivity in a montane bird assemblage: Trends and responses to elevation and climate variation. *Global Change Biology* 25:985-086. doi:10.1111/gcb.14538
- Albert, S., D. DeSante, J. Saracco, and K. Ruegg. 2018. El monitoreo de aves migratorias neotropicales en la temporada no reproductiva: éxitos, desafíos y nuevas iniciativas en el programa MoSI. *Zeledonia* 22:43-51.

- DeSante, D. F., J. F. Saracco, and D. R. Kaschube. 2018. Population changes and their demographic drivers in landbirds of western North America: An assessment from the Monitoring Avian Productivity and Survivorship program, in *Trends and traditions: Avifaunal change in western North America* (W. D. Shuford, R. E. Gill Jr., and C. M. Handel, eds.), pp. 269-293. *Studies of Western Birds* 3. Western Field Ornithologists, Camarillo, CA. [doi:10.21199/SWB3.15](https://doi.org/10.21199/SWB3.15).
- Kornegay, M. E., A. Wiewel, J. A. Collazo, J. F. Saracco, and S. J. Dinsmore. 2018. Improving our understanding of demographic monitoring: avian breeding productivity in a dry tropical forest. *Journal of Field Ornithology* 89:258-275. [doi:10.1111/jofo.12263](https://doi.org/10.1111/jofo.12263)
- Pyle, P., J. F. Saracco, and D. F. DeSante. 2018. Evidence of widespread movements between breeding and molting areas in North American landbirds. *The Auk: Ornithological Advances* 135:506-520. [doi:10.1642/AUK-17-201.1](https://doi.org/10.1642/AUK-17-201.1)
- Ray, C., J. F. Saracco, M. L. Holmgren, R. L. Wilkerson, R. B. Siegel, K. J. Jenkins, J. I. Ransom, P. J. Happe, J. R. Boetsch, and M. H. Huff. 2018. Landbird population trends in mountain and historical parks of the North Coast and Cascades Network: 2005-2016 synthesis. *Natural Resource Report NPS/NCCN/NRR-2018/1673*. National Park Service, Fort Collins, Colorado. <https://irma.nps.gov/DataStore/Reference/Profile/2253865>
- Ruegg, K., R. A. Bay, R. J. Harrigan, J. F. Saracco, E. C. Anderson, M. Whitefield, E. Paxton, and T. B. Smith. 2018. Ecological genomics predicts climate vulnerability in an endangered southwestern songbird. *Ecology Letters* 21:1085-1096. [doi:10.1111/ele.12977](https://doi.org/10.1111/ele.12977)
- Saracco, J. F., S. Fettig, G. L. San Miguel, D. Mehlman, S. K. Albert, and B. E. Thompson. 2018. Avian demographic responses to drought and fire: a community-level perspective. *Ecological Applications* 28:1773-1781. [doi:10.1002/eap.1751](https://doi.org/10.1002/eap.1751). *ESA Bulletin Photo Gallery summary*: [doi:10.1002/eap.1751](https://doi.org/10.1002/eap.1751)
- Wilson, S., J. F. Saracco, R. Krikun, D. T. T. Flockhart, C. Godwin, and K. Foster. 2018. Drivers of demographic decline across the annual cycle of a threatened migratory bird. *Scientific Reports* 8:7316. [doi:10.1038/s41598-018-25633-z](https://doi.org/10.1038/s41598-018-25633-z)
- Ahrestani, F. S., J. F. Saracco, J. R. Sauer, K. Pardieck, and J. A. Royle. 2017. An integrated population model for bird monitoring in North America. *Ecological Applications*. 27:916-924. [doi:10.1002/eap.1493](https://doi.org/10.1002/eap.1493)
- Foster, K. R., C. M. Godwin, P. Pyle, and J. F. Saracco. 2017. Reclamation and habitat disturbance effects on abundance and productivity indices of landbirds in the oil sands region of northeastern Alberta, Canada. *Restoration Ecology* 25:532-538. [doi:10.1111/rec.12478](https://doi.org/10.1111/rec.12478)
- Gabriele, C., J. Neilson, J. Straley, C. S. Baker, J. Cedarleaf, and J. F. Saracco. 2017. Natural history, population dynamics and habitat use of humpback whales over 30 years at an Alaska feeding ground. *Ecosphere* 8(1): e01641. [doi:10.1002/ecs2.1641](https://doi.org/10.1002/ecs2.1641) (**top 20 most read paper in Ecosphere 2017-2018**)
- Ray, C., J. F. Saracco, A. L. Holmgren, R. L. Wilkerson, R. B. Siegel, K. J. Jenkins, J. I. Ransom, P. J. Happe, J. R. Boetsch, and M. H. Huff. 2017. Recent stability of resident and migratory landbird populations in National Parks of the Pacific Northwest. *Ecosphere* 8(7):e01902. [doi:10.1002/ecs2.1902](https://doi.org/10.1002/ecs2.1902)
- Ray, C., J. F. Saracco, K. J. Jenkins, M. H. Huff., P. J. Happe, and J. I. Ransom. 2017. Development of a robust analytical framework for assessing landbird population trends, dynamics

and relationships with environmental covariates in the North Coast and Cascades Network. Natural Resources Report NPS/NCCN/NRR-2017/1483. National Park Service, Fort Collins, Colorado. <https://pubs.er.usgs.gov/publication/70190517>

Albert, S., D. DeSante, R. Siegel, D. Kaschube, and J. Saracco. 2016. [Monitoring landbirds in national parks: understanding populations, migratory connectivity, and climate change](#). Pages 11-17 in: S. Weber, editor. Engagement, Education, and Expectations: The Future of Parks and Protected Areas: Proceedings of the 2015 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites. Hancock, Michigan: George Wright Society.

Albert, S.K., D.F. DeSante, D.R. Kaschube, and J.F. Saracco. 2016. [MAPS \(Monitoring Avian Productivity and Survivorship\) data provide inferences on demographic drivers of population trends for 158 species of North American landbirds](#). North American Bird Bander 41:133-140.

Ruiz-Gutierrez, V., W. L. Kendall, J. F. Saracco, and G. C. White. 2016. Overwintering strategies of migratory birds: a novel approach for estimating movement patterns of residents and transients. *Journal of Applied Ecology* 53:1035-1045 [doi:10.1111/1365-2664.12655](https://doi.org/10.1111/1365-2664.12655)

Rushing, C. S., T. B. Ryder, A. Scarpignato, J. F. Saracco, and P. P. Marra. 2016. Using demographic attributes from long-term monitoring data to delineate natural populations. *Journal of Applied Ecology* 53:491-500 [doi:10.1111/1365-2664.12579](https://doi.org/10.1111/1365-2664.12579)

Saracco, J. F., P. Radley, P. Pyle, E. Rowan, R. Taylor, and L. Helton. 2016. Linking avian vital rates to rainfall and vegetation greenness on a tropical island. *PLoS ONE* 11(2): e0148570. [doi:10.1371/journal.pone.0148570](https://doi.org/10.1371/journal.pone.0148570)

Siegel, R., R Taylor, J. F. Saracco, L. Helton, and S. Stock. 2016. GPS-tracking reveals molt migration and year-round movements of a black-headed grosbeak from Yosemite National Park. *Journal of Field Ornithology* 87:196-203. [doi:10.1111/jofo.12149](https://doi.org/10.1111/jofo.12149).

George, T. L., R. J. Harrigan, J. L. LaManna, D. F. DeSante, J. F. Saracco, and T. B. Smith. 2015. Persistent impacts of West Nile virus on North American bird populations. *Proceedings of the National Academy of Sciences USA* 112:14290-14294. [doi:10.1073/pnas.1507747112](https://doi.org/10.1073/pnas.1507747112)

Rushing, C. S., T. B. Ryder, J. F. Saracco, and P. P. Marra. 2014. Assessing migratory connectivity for a long-distance migratory bird using multiple intrinsic data sources. *Ecological Applications* 24:445-456. [doi:10.1890/13-1091.1](https://doi.org/10.1890/13-1091.1)

Saracco, J.F., A. L. Holmgren, R. L. Wilkerson, R. B. Siegel, R. C. Kuntz II, K. J. Jenkins, P. J. Happe, J. R. Boetsch, and M. H. Huff. 2014. Landbird trends in national parks of the North Coast and Cascades Network, 2005-12: U.S. Geological Survey Open-File Report 2014-1202, 36 p., <http://dx.doi.org/10.3133/ofr20141202>.

Saracco, J. F., C. M. Gabriele, and J. Neilson. 2013. Population dynamics and demography of humpback whales in Glacier Bay and Icy Strait, Alaska. *Northwestern Naturalist* 94:187-197. [doi:10.1898/12-34.1](https://doi.org/10.1898/12-34.1)

LaManna, J. A., T. L. George, J. F. Saracco, M. P. Nott, and D. F. DeSante. 2012. El Niño-Southern Oscillation influences annual survival of a migratory songbird at a regional scale. *Auk* 129:734-743. [doi:10.1525/auk.2012.12017](https://doi.org/10.1525/auk.2012.12017)

Saracco, J. F., J. A. Royle, D. F. DeSante, and B. Gardner. 2012. Spatial modeling of survival and residency and application to the Monitoring Avian Productivity and Survivorship program. *Journal of Ornithology* 152 (Supplement 2):S469-S476. [doi:10.1007/s10336-010-0565-1](https://doi.org/10.1007/s10336-010-0565-1)

- Siegel, R. B., R. L. Wilkerson, R. C. Kuntz II, J. F. Saracco, and A. L. Holmgren. 2012. Elevation ranges of birds at Mount Rainier National Park, North Cascades National Park Service Complex, and Olympic National Park. *Northwestern Naturalist* 93:23-39. doi:10.1898/11-08.1
- Saracco, J. F., R. B. Siegel, and B. L. Wilkerson. 2011. Occupancy modeling of black-backed woodpeckers on burned Sierra Nevada forests. *Ecosphere* 2(3): art31. doi:10.1890/ES10-00132.1
- Siegel, R. B., R. L. Wilkerson, J. F. Saracco, and Z. Steel. 2011. [Elevation ranges of birds on the Sierra Nevada's west slope](#). *Western Birds* 42:2-26.
- Fuller, T., S. Saatchi, E. Curd, E. Toffelmier, H. Thomassen, W. Buermann, D. F. DeSante, M. P. Nott, J. F. Saracco, C. J. Ralph, J. Pollinger, J. Alexander, and T. B. Smith. 2010. Mapping risk of avian influenza in wild birds in the US. *BMC Infectious Diseases* 10:187. doi:10.1186/1471-2334-10-187
- Saracco, J. F., J. A. Royle, D. F. DeSante, and B. Gardner. 2010. Modeling spatial variation in avian survival and residency probabilities. *Ecology* 91:1885-1891. doi:10.1890/09-0705.1
- DeSante, D. F., D. K. Kaschube, James F. Saracco, and J. E. Hines. 2009. [Power to detect differences and trends in apparent survival rates](#). *Bird Populations* 9:29-41.
- DeSante, D. F. and J. F. Saracco. 2009. [Power of the MAPS program to detect differences and trends in survival and a vision for future program expansion](#). *Bird Populations* 9:42-75.
- Robinson, R. A., R. Julliard, and J. F. Saracco. 2009. Constant effort: monitoring avian population change through standardised ringing. *Ring and Migration* 24:199-204. doi:10.1080/03078698.2009.9674392
- Saracco, J. F., D. F. DeSante, M. P. Nott, and D. R. Kaschube. 2009. [Using the MAPS and MoSI programs to monitor landbirds and inform conservation](#). Pp. 651-658 In: *Proceedings of the Fourth International Partners in Flight Conference* (T. D. Rich, C. D. Thompson, D. Demarest, and C. Arizmendi, editors). *Partners in Flight*.
- Saracco, J. F., D. F. DeSante, M. P. Nott, W. M. Hochachka, S. Kelling, and D. Fink. 2009. [Integrated bird monitoring and the Avian Knowledge Network: using multiple data resources to understand spatial variation in demographic processes and abundance](#). Pp. 659-661 In: *Proceedings of the Fourth International Partners in Flight Conference* (T. D. Rich, C. D. Thompson, D. Demarest, and C. Arizmendi, editors). *Partners in Flight*.
- Saracco, J. F., D. F. DeSante, and D. R. Kaschube. 2008. Assessing landbird monitoring programs and demographic causes of population trends. *Journal of Wildlife Management* 72:1665-1673. doi:10.2193/2008-129
- Dovciak, M., C. B. Halpern, J. F. Saracco, S. A. Evans, and D. A. Liguori. 2006. Persistence of ground-layer bryophytes in a structural-retention experiment: initial effects of level and pattern of overstory retention. *Canadian Journal of Forest Research* 36:3039-3052. doi:10.1139/x06-168
- DeSante, D. F., T. S. Sillett, R. B. Siegel, J. F. Saracco, C. A. Romo de Vivar Alvarez, S. Morales, A. Cerezo, D. Kaschube, B. Mil?, and M. Grosselet. 2005. [MoSI \(Monitoreo de Sobrevivencia Invernal\): Assessing habitat-specific overwintering survival of neotropical migratory landbirds](#). Pp. 926-936 In: *Bird Conservation Implementation and Integration in the Americas* (C. J. Ralph and T. D. Rich, Editors). USDA Forest Service Gen. Tech. Rep. PSW-GTR-191.
- Halpern, C., D. McKenzi, S. Evans, J. Saracco, D. Maguire, and J. Halaj. 2005. [Vegetation Responses to Varying Levels and Patterns of Overstory Retention: Early Results of the DEMO Experiment](#).

Pp. 357-359 In (C. E. Peterson and D. A. Maguire, Editors). Balancing ecosystem values: innovative experiments for sustainable forestry: Proceedings of a conference. Gen. Tech. Rep. PNW-GTR-635. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Saracco, J. F., J. A. Collazo, M. J. Groom, and T. A. Carlo. 2005. Crop size and fruit neighborhood effects on bird visitation to fruiting *Schefflera morototoni* trees in Puerto Rico. *Biotropica* 37:81-87. doi:10.1111/j.1744-7429.2005.04040.x

DeSante, D. F., J. F. Saracco, D. R. O'Grady, K. M. Burton, and B. L. Walker. 2004. [Methodological considerations of the Monitoring Avian Productivity and Survivorship Program](#). *Studies in Avian Biology* 29:28-45.

Saracco, J. F., J. A. Collazo, and M. J. Groom. 2004. How do frugivores track resources? Insights from spatial analyses of bird foraging in a tropical forest. *Oecologia* 139:235-245. doi:10.1007/s00442-004-1493-7

Saracco, J. F. and J. A. Collazo. 1999. [Predation on artificial nests along three edge types in a North Carolina bottomland hardwood forest](#). *Wilson Bulletin* 111:541-549.

DeSante, D. F., K. M. Burton, J. F. Saracco, and B. L. Walker. 1995. Productivity indices and survival-rate estimates from MAPS, a continent-wide programme of constant-effort mist-netting in North America. *Journal of Applied Statistics* 22:935-947. doi:10.1080/02664769524720

Selected Technical Reports

DeSante, D. F., J. F. Saracco, P. Pyle, L. Helton, R. Taylor, D. Kaschube, and S. Albert. 2021. MoSI Operations Manual: Instructions for establishing and operating bird-banding stations as part of the Monitoreo de Sobrevivencia Invernal program. The Institute for Bird Populations, Petaluma, CA. <https://www.birdpop.org/docs/misc/MoSI-Manual-English.pdf>

Kaschube, D. R., J. F. Saracco, C. Ray, P. Pyle, C. Godwin, and K. Foster. 2020. Minimum Capture Rates to Obtain Reliable Vital Rate Estimates Using MAPS Data. The Institute for Bird Populations/Owl Moon Environmental, Inc.

Saracco, J. F., P. Pyle, C. Godwin, and K. Foster. 2020. Human footprint effects on avian demography and demographic trends in the Athabasca Oil Sands region of Alberta, Canada. The Institute for Bird Populations/Owl Moon Environmental, Inc.

Saracco, J. F., D. R. Kaschube, and M.-A. Cyr. 2020. Vital rates of selected bird species of conservation concern in Canada: an application of the Monitoring Avian Productivity and Survivorship (MAPS) program. The Institute for Bird Populations, Point Reyes Station, CA.

Marra, P. P., T. B. Ryder, S. Sillett, M. Betts, R. Siegel, J. Saracco, and R. Fischer. 2017. Using a hierarchical approach to model regional source-sink dynamics for Neotropical-Nearctic songbirds to inform management practices on Department of Defense installations. SERDP Project RC-2121 Final Report. <http://www.dtic.mil/get-tr-doc/pdf?AD=AD1036310>

Saracco, J.F. and L. Helton. 2016. Seasonal demographics of landbirds on Saipan: report on the 2014-15 TMAPS program. The Institute for Bird Populations, Point Reyes Station, CA.

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Saracco, J.F., P. Radley, P. Pyle, E. Rowan, and R. Taylor. 2014. Vital rates of landbirds on Saipan and links to remote-sensed habitat data: A summary of five years (2008-2012) of the Tropical Monitoring Avian Productivity and Survivorship (TMAPS) program on Saipan, Northern Mariana Islands. The Institute for Bird Populations, Point Reyes Station, CA.

Saracco, J. F. V. Ruiz-Gutierrez, W. L. Kendall, P. Pyle, J. L. Alcántara, L. Andino, and R. Taylor. 2012. Identification and management of priority winter bird habitats for migratory landbirds: research results and implications for conserving and managing winter habitat. Report to the US Fish and Wildlife Service.

Saracco, J.F., and V. Ruiz-Gutierrez. 2012. Development of restoration and scaling options for songbirds. The Institute for Bird Populations, Point Reyes Station, CA.

Siegel, R.B., J.F. Saracco, R.L. Wilkerson, and S. Stock. 2012. Long-term demographics of Yosemite's songbirds: an analysis of data from the Monitoring Avian Productivity and Survivorship (MAPS) Program in Yosemite National Park. Report to Yosemite National Park. The Institute for Bird Populations, Point Reyes Station, CA.

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