

Donald E. Lyons, Ph.D.

Assistant Professor (Senior Research) and Instructor
Department of Fisheries and Wildlife
Oregon State University

don.lyons@oregonstate.edu
104 Nash Hall, Corvallis, OR 97331 USA
+1.541.207.2062

PROFESSIONAL INTERESTS

Avian ecology, conservation biology, animal telemetry, predator-prey dynamics, ecological energetics, natural resource decision making processes, communicating science to diverse audiences

CURRENT PROJECTS

Mapping Physical Characteristics of Coastal Habitats Using Transmittered Diving Waterbirds [PI]

Using diving waterbirds as sensor platforms to measure physical oceanographic parameters (e.g., bathymetry, temperature/salinity vertical profiles) while simultaneously characterizing waterbird foraging habitat characteristics.

Evaluation of Caspian Tern Response to Loss of Nesting Habitat using Satellite Telemetry [Co-PI]

Characterize tern response to management in eastern Washington state. Examine colony site fidelity, breeding dispersal, movements throughout the annual cycle.

Caspian Tern Pacific Flyway Population Monitoring [Co-PI]

Evaluate a dual-frame sampling process to generate an index of the flyway breeding population size.

Conservation of the Critically Endangered Chinese Crested Tern [Co-PI]

Provide technical assistance to researchers in Asia regarding tern restoration and research.

Diet and Juvenile Salmonid Consumption of Oregon Coast Double-crested Cormorants [Co-PI]

Quantify cormorant diet and juvenile salmonid consumption.

Avian Predation on Juvenile Salmonids in the Columbia River Basin

Assess efforts to reduce Caspian tern predation on juvenile salmonids.

Determination of Impacts on Juvenile Salmon from Predation by Double-crested Cormorants and Caspian Terns on East Sand Island [Co-PI]

Assess tern and cormorant management efficacy using recovery of salmonid passive integrated transponders at managed colonies. Determine biotic and abiotic factors that influence predation.

Evaluation of Caspian Tern Restoration Efforts in Interior Oregon and Northeast California

Assess efficacy of Caspian tern restoration efforts at constructed islands.

Colony Connectivity of American White Pelicans in Oregon [PI]

Band American white pelican chicks, determine recruitment to colonies across Pacific Flyway.

PROFESSIONAL EXPERIENCE

Assistant Professor, Senior Research. Oregon Cooperative Fish and Wildlife Research Unit, Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR. 2014-present.

Responsibilities: Develop an externally-funded research program investigating ecological (e.g., predator-prey) relationships between birds and their surrounding communities with emphasis on relationships potentially influenced by anthropogenic perturbations such as land and water use, exotic species introductions, or climate change. Employ a variety of techniques such as telemetry, bioenergetics, isotopic analysis, endocrinology, and direct behavioral observation, as well as work at multiple spatial and temporal scales. Apply research to identify factors limiting bird populations, or assess impacts of abundant bird populations on prey species of conservation concern, and identify possible mitigation strategies where appropriate. Work in freshwater and marine aquatic environments, but in other focal systems as warranted. Prepare funding proposals, work plans, and budgets. Oversee research study design, implementation, and analysis. Coordinate and monitor project results. Present research findings at scientific/professional conferences, management working group meetings, and other venues. Publish research findings in peer-reviewed journals. Supervise and mentor early career scientists and graduate students.

Instructor. Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR, 2010-present.

Course: Problem Solving in Fisheries and Wildlife Science (FW 488)

Responsibilities: Develop and teach (2-3 terms/year) senior-level group problem solving capstone course for the OSU Ecampus Program. Course emphasizes critical thinking, data evaluation, group problem solving, written communication, and natural resource decision making through the examination of multiple case studies from both fisheries and wildlife science.

Post-doctoral Researcher (Faculty Research Assistant). Oregon Cooperative Fish and Wildlife Research Unit, Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR. 2010-2014.

Project title: Conservation and management of piscivorous waterbirds in western North America (Supervisor: D. D. Roby).

Contributions: Supported federal, state, and tribal agencies in ongoing efforts to balance populations of piscivorous waterbirds and forage fish species of conservation concern, primarily anadromous salmonids in the Pacific Northwest.

EDUCATION

Ph.D. in Wildlife Science, Oregon State University, 2010.

Dissertation: Bioenergetics-based Predator-prey Relationships Between Piscivorous Birds and Juvenile Salmonids in the Columbia River Estuary (Advisor: Dr. Daniel Roby).

Emphases: ecological energetics, predator-prey interactions, climate effects on foraging ecology, endangered species recovery

M.S. in Wildlife Science, Oregon State University (Statistics Minor) 2004.

Thesis: Foraging ecology of Caspian terns and double-crested cormorants in the Columbia River Estuary (Advisor Dr. Daniel Roby).

Emphases: foraging ecology of central point foragers

M.S. in Electrical Engineering, University of California, Berkeley. 1989.

B.S. in Electrical Engineering, Iowa State University (Mathematics Minor), 1987.

RESEARCH GRANT AWARDS

Impacts on Juvenile Salmon from Predation by Double-crested Cormorants and Caspian Terns on East Sand Island. U.S. Army Corps of Engineers, Portland District, \$79,976, 2015-2016. [PI]

Mapping Physical Characteristics of the Columbia River Mouth Using Transmittered Diving Waterbirds. Office of Naval Research, \$69,861, 2015-2016. [PI]

Diet and Juvenile Salmonid Consumption of Oregon Coast Double-crested Cormorants, Oregon Department of Fisheries and Wildlife, \$66,300, 2015-2016. [Co-PI]

Implementing the Caspian Tern Monitoring Strategy for the Pacific Coast Region. U.S. Fish and Wildlife Service Region 1 Migratory Birds and Habitat Programs, \$41,810, 2014 – 2016. [Co-PI]

Diet and Juvenile Salmonid Consumption of Oregon Coast Double-crested Cormorants, Oregon Department of Fisheries and Wildlife, \$66,300, 2014 – 2015. [Co-PI]

Conservation of the Critically Endangered Chinese Crested Tern: Restoration of a Lost Breeding Colony. Pacific Seabird Group Craig S. Harrison Small Conservation Grant, \$2000, 2014. [Co-PI]

Mapping Physical Characteristics of the Columbia River Mouth Using Transmittered Diving Waterbirds. Office of Naval Research, \$133,958, 2013 – 2015. [Co-PI]

Diet and Juvenile Salmonid Consumption of Oregon Coast Double-crested Cormorants. Oregon Department of Fisheries and Wildlife, \$66,300, 2013 – 2014. [Co-PI]

Colony Connectivity of American White Pelicans in Oregon. U.S. Fish and Wildlife Service Region 1 Migratory Birds and Habitat Programs, \$2,000, 2013. [PI]

Conservation of the Critically Endangered Chinese Crested Tern. U.S. Fish and Wildlife Service Wildlife Without Borders – Critically Endangered Animals Conservation Fund, \$24,258, 2012. [Co-PI]

GRADUATE STUDENT MENTORING

Academic committee member for Olivia Bailey, OSU MS Student. Thesis: Response Caspian terns to reduced habitat availability: Interactions with colony density and neighbor performance.

Field Supervisor, project sponsor, and academic committee member for Adam Peck-Richardson, OSU MS Student. Thesis: Cormorant spatial dispersion at multiple scales from a large nesting colony in the Columbia River estuary.

Academic committee member for Scott Jennings, OSU MS Student. Thesis: Provisioning, growth, and reproductive trade-offs: Mechanisms underlying chick survival in Adélie penguins at Cape Crozier, Antarctica. Thesis defended March, 2015.

Field Supervisor and project sponsor for Alexa Piggott, University of Aberdeen Masters of Research Student. Thesis: Dietary overlap and coexistence of two sympatric piscivorous seabirds: Competition or superabundant prey? Thesis defended August, 2013.

PEER REVIEWED JOURNAL PUBLICATIONS

Contribution Notes: Original scholarly contribution in the form of ideas, concepts, experimental approach, analytical method, or conceptual framework (OSC); project administration (A); contribution to field work, data collection, and/or data analysis (F); or writing and manuscript preparation (W).

Suzuki, Y., D.D. Roby, **D.E. Lyons**, K.N. Courtot,, and K. Collis. 2015. Developing Nondestructive Techniques for Managing Conflicts Between Fisheries and Double-crested Cormorant Colonies. *Wildlife Society Bulletin*. [OSC, F, W]

Hostetter, N.J., A.F. Evans, B.M. Cramer, K. Collis, **D.E. Lyons**, and D.D. Roby. 2015. Quantifying Avian Predation on Fish Populations: Integrating Predator-specific Deposition Probabilities in Tag-recovery Studies. *Transactions of the American Fisheries Society* 144:410-422. [OSC, W]

Adkins, J.Y., **D.E. Lyons**, P.J. Loschl, D.D. Roby, K. Collis, A.F. Evans, N.J. Hostetter. 2014. Demographics of piscivorous colonial waterbirds and management implications for ESA-listed salmonids on the Columbia Plateau. *Northwest Science* 88:344-359. [OSC, F, W]

Patterson, A.G.L., A.S. Kitaysky, **D.E. Lyons**, D.D. Roby. 2014. Measuring corticosterone in feathers of nutritionally stressed Caspian tern chicks – a cautionary tale. *Journal of Avian Biology* 45: 1-7. [F, W]

Adkins, J.Y., D.D. Roby, **D.E. Lyons**, K.N. Courtot, K. Collis, H.R. Carter, W.D. Shuford, P.J. Capitolo. 2014. Recent population size, trends, and limiting factors for the double-crested cormorant in Western North America. *Journal of Wildlife Management* 78: 1131-1142. [OSC, W]

Adrean, L.J., D.D. Roby, **D.E. Lyons**, K. Collis, A.F. Evans. 2012. Potential effects of management on Caspian tern (*Hydroprogne caspia*) predation on juvenile salmonids at a colony in San Francisco Bay, California. *Transactions of the American Fisheries Society* 141: 1682-1696. [OSC, W]

Courtot, K.N., D.D. Roby, J.Y. Adkins, **D.E. Lyons**, D.T. King, R.S. Larsen. 2012. Colony connectivity of Pacific Coast double-crested cormorants based on post-breeding dispersal from the region's largest colony. *Journal of Wildlife Management* 76: 1462-1471. [OSC, F, W]

Evans, A.F., N.J. Hostetter, D.D. Roby, K. Collis, **D.E. Lyons**, B.P. Sandford, R.D. Ledgerwood, S. Sebring. 2012. Systemwide evaluation of avian predation on juvenile salmonids from the Columbia River based on recoveries of passive integrated transponder tags. *Transactions of the American Fisheries Society* 141: 975-989. [W]

Collis, K., D.D. Roby, K.W. Larson, L.J. Adrean, S.K. Nelson, A.F. Evans, N. Hostetter, D. Battaglia, **D.E. Lyons**, T. Marcella, A. Patterson. 2012. Trends in Caspian tern nesting and diet in San Francisco Bay: conservation implications for terns and salmonids. *Waterbirds* 35: 25-34. [OSC, F, W]

Lyons, D.E., D.D. Roby. 2011. Validating growth and development of a seabird as an indicator of food availability: captive-reared Caspian Tern chicks fed ad libitum and restricted diets. *Journal of Field Ornithology* 82: 88-100. [OSC, A, F, W]

Evans, A.F., D.D. Roby, K. Collis, B.M. Cramer, J.A. Sheggeby, L.J. Adrean, D.S. Battaglia, **D.E. Lyons**. 2011. Recovery of coded wire tags on a Caspian tern colony in San Francisco Bay: A technique to evaluate

impacts of avian predation on juvenile salmonids. *North American Journal of Fisheries Management* 31:79-87. [F]

Lyons, D.E., D.D. Roby, K. Collis. 2007. Foraging patterns of Caspian Terns and Double-crested Cormorants in the Columbia River Estuary. *Northwest Science* 81:91-103. [OSC, A, F, W]

Anderson, S.K., D.D. Roby, **D.E. Lyons**, K. Collis. 2007. Relationship of Caspian tern foraging ecology to nesting success in the Columbia River estuary, Oregon, USA. *Estuarine, Coastal, and Shelf Science* 73:447-456. [OSC, F]

Antolos, M., D.D. Roby, **D.E. Lyons**, S.K. Anderson, K. Collis. 2006. Effects of nest density, location and timing on breeding success of Caspian terns. *Waterbirds* 29:465-472. [OSC, W]

Lyons, D.E., D.D. Roby, K. Collis. 2005. Foraging ecology of Caspian Terns in the Columbia River Estuary, USA. *Waterbirds* 28: 280-291. [OSC, A, F, W]

Antolos, M., D.D. Roby, **D.E. Lyons**, K. Collis, A.F. Evans, M. Hawbecker, B.A. Ryan. 2005. Caspian tern predation on juvenile salmonids in the Mid-Columbia River. *Transactions of the American Fisheries Society* 134: 466-480. [OSC, F, W]

Anderson, S.K., D.D. Roby, **D.E. Lyons**, K. Collis. 2005. Factors affecting chick provisioning by Caspian Terns nesting in the Columbia River Estuary. *Waterbirds* 28:95-105. [OSC, F, W]

Suryan, R.M., D.P. Craig, D. D. Roby, N.D. Chelgren, K. Collis, W.D. Shuford, **D.E. Lyons**. 2004. Redistribution and growth of the Caspian tern population along the Pacific Coast of North America: A 20-year assessment of population status. *Condor* 106: 777-790. [F]

Roby, D.D., **D. E. Lyons**, D.P. Craig, K. Collis, G.H. Visser. 2003. Quantifying the effect of predators on endangered species using a bioenergetics approach: Caspian terns and juvenile salmonids in the Columbia River estuary. *Canadian Journal of Zoology* 81: 250-265. [OSC, A, F, W]

Roby, D.D., K. Collis, **D.E. Lyons**. 2003. Conservation and management for fish-eating birds and endangered salmon. *Proceedings of the Third International Partners in Flight Conference, Asilomar, CA*. USDA Forest Service General Technical Report PSW-GTR-191. [F]

Roby, D.D., K. Collis, **D.E. Lyons**, D.P. Craig, J.Y. Adkins, A.M. Myers, R.M. Suryan. 2002. Effects of colony relocation on diet and productivity of Caspian terns. *Journal of Wildlife Management* 66:662-673. [OSC, A, F]

Collis, K., D.D. Roby, C.W. Thompson, **D.E. Lyons**, M. Tirhi. 2002. Barges as temporary nesting colonies for Caspian terns: Assessing suitability of potential colony restoration sites. *Wildlife Society Bulletin* 30:1140-1149. [F]

Collis, K., D.D. Roby, D.P. Craig, S. Adamany, J.Y. Adkins, **D.E. Lyons**. 2002. Population size and diet composition of fish-eating colonial waterbirds on the lower Columbia River: Implications for losses of juvenile salmonids to avian predation. *Transactions of the American Fisheries Society* 131:537-550. [F]

GENERAL ARTICLES, TECHNICAL REPORTS, AND BOOK REVIEWS

Lyons, D.E., A.F. Evans, N.J. Hostetter, A. Piggot, L. Weitkamp, T.P. Good, D.D. Roby, K. Collis, P.J. Loschl, B. Cramer. 2014. Factors influencing predation on juvenile salmonids by double-crested cormorants in the Columbia River estuary: A retrospective analysis. Report submitted to the U.S. Army Corps of Engineers, Portland, OR. 30 pp.

Lyons, D.E., A. Peck-Richardson, D.D. Roby. 2013 – 2015. Mapping Physical Characteristics of the Columbia River Mouth Using Transmittered Diving Waterbirds. Annual reports submitted to the Office of Naval Research, Renton, VA.

Lyons, D.E., D.D. Roby, A.F. Evans, N.J. Hostetter, K. Collis, S.H. Sebring. 2012. Benefits to Columbia River anadromous salmonids from potential reductions in predation by double-crested cormorants nesting at the East Sand Island colony. Report submitted to the U.S. Army Corps of Engineers, Portland, OR. 50 pp.

Lyons, D.E., D.D. Roby, A.F. Evans, N.J. Hostetter, K. Collis. 2011. Benefits to Columbia River anadromous salmonids from potential reductions in avian predation on the Columbia Plateau. Report submitted to the U.S. Army Corps of Engineers, Walla Walla, WA. 78 pp.

Adkins, J.Y., D.D. Roby, **D.E. Lyons**, Y. Suzuki, P.J. Loschl, K. Collis, A.F. Evans. 2011. Colony size, nesting success, and limiting factors of piscivorous colonial waterbirds in the Columbia Plateau region, 2004 – 2009. Report submitted to the U.S. Army Corps of Engineers, Walla Walla, WA. 29 pp.

Lyons, D.E., D.D. Roby, J.Y. Adkins, P.J. Loschl, L.R. Kerr, T.K. Marcella, A.F. Evans, N.J. Hostetter, K. Collis, D.R. Kuligowski, B.P. Sandford. 2011. Impacts of piscivorous birds on native anadromous fishes in the mid-Columbia River. Report submitted to the U.S. Army Corps of Engineers, Walla Walla, WA. 26 pp.

Cramer, B.M., A.F. Evans, K. Collis, D.D. Roby, P.J. Loschl, T.K. Marcella, **D.E. Lyons**. 2011. Abundance, distribution, and diet composition of double-crested cormorants over-wintering on the lower Snake River. Report submitted to the U.S. Army Corps of Engineers, Walla Walla, WA. 20 pp.

Adkins, J.Y., D.D. Roby, **D.E. Lyons**, et al. 2009. A status assessment of the double-crested cormorant in Western North America: 1998 – 2009. Report submitted to the U.S. Army Corps of Engineers, Portland, OR.

Roby, D.D., K. Collis, **D.E. Lyons**, et al. 1998 – 2015. Research, monitoring, and evaluation of avian predation on salmonid smolts in the lower and mid-Columbia River. Annual reports submitted to the Bonneville Power Administration and U.S. Army Corps of Engineers, Portland, OR and Walla Walla, WA.

Roby, D.D., K. Collis, **D.E. Lyons**, D.P. Craig, M. Antolos. 2003. Caspian tern. *In* Birds of Oregon: A general reference. D.B. Marshall, M.G. Hunter, A.L. Contreras editors. Oregon State University Press, Corvallis, OR.

Jodice, P.G.R., D.D. Roby, M. Antolos, **D.E. Lyons**, D.J. Rizzolo, S.K. Wright, C.D. Anderson, S.K. Anderson, S.K. Nelson, A. Gall. 2003. Book review of Biology of Marine Birds, E.A. Schreiber and J. Burger Editors. *Auk* 120:240-245.

INVITED PRESENTATIONS AND SEMINARS

Lyons, D.E., D.D. Roby, A.F. Evans, N.J. Hostetter, K. Collis. 2011. Benefits to Columbia River anadromous salmonids from potential reductions in avian predation on the Columbia Plateau. U.S. Army Corps of Engineers Anadromous Fish Evaluation Program: 2011 Annual Review, Walla Walla, WA.

Lyons, D.E. 2011. What's the benefit of managing birds to help salmon? Science meets policy in the Pacific Northwest. Avian Ecology Seminar Series, Oregon State University, Corvallis, OR.

Lyons, D.E. 2011. Chinese Crested Tern conservation in a global context: Opportunities for China. Xiangshan Fisheries Festival, Shipu Township, Zhejiang Province, People's Republic of China.

Lyons, D.E. 2011. Ocean/climate effects on estuarine piscivorous birds. Hatfield Marine Science Center Seminar Series, Oregon State University, Newport, OR.

Lyons, D.E., D.D. Roby, J.Y. Adkins, L.H. Reinalda, K. Collis. 2007. Evaluation of avian predation on juvenile salmonids in the Columbia River estuary. Northwest Power and Conservation Council Science Policy Exchange, Portland, OR.

Lyons, D.E., J.Y. Adkins, Y. Suzuki. 2007. Ecology, conservation, and management of double-crested cormorants at their largest breeding colony. Avian Ecology Seminar Series, Oregon State University, Corvallis, OR.

Lyons, D.E. 2005. Avian predation in the Columbia River: no end to trouble? Hatfield Marine Science Center Seminar Series, Oregon State University, Newport, OR.

Lyons, D.E. 2005. Caspian Tern management and colony restoration on the Columbia River. U.S. Army Corps of Engineers Northwest Division Fifth Annual Wildlife Biology Conference, Eugene, OR.

Lyons, D.E. 2004. Avian predation and salmon recovery: scapegoat or silver bullet? Oregon Institute of Marine Biology Seminar Series, University of Oregon, Charleston, OR.

Lyons, D.E., D.D. Roby, K. Collis, C.W. Thompson, D.P. Craig. 2002. Colony restoration techniques for Caspian terns in the Pacific Northwest. Habitat Management for Terns Symposium. Waterbird Society Annual Meeting, La Crosse, WI.

Lyons, D.E. 2002. Do predators really impact prey abundance? A tern – salmon – ESA example. Willamette University Biology Seminar Series, Salem, OR.

SELECTED CONTRIBUTED PRESENTATIONS

Lyons, D.E., T.J. Lawes, A. Patterson, D.D. Roby, Y. Suzuki, P. Loschl. 2015. Caspian tern migration and overwintering behavior in western North America. World Seabird Conference, Cape Town, South Africa.

Lyons, D.E., A. Peck-Richardson, D.D. Roby, J. Lerczak. 2015. Tracking sympatric diving seabirds: Synergistic identification of foraging habitat niches and mapping of physical oceanographic parameters. Second World Seabird Conference, Cape Town, South Africa.

Lyons, D.E., D.D. Roby, A.F. Evans, L. Weitkamp, T.P. Good. 2015. Challenges for quantifying the benefits to fisheries of cormorant management and population control. Waterbirds Society Annual Meeting, Bar Harbor, ME.

Lyons, D.E., J. Tennyson, A. Patterson, D.D. Roby, Y. Suzuki, P. Loschl. 2015. Initial response of Caspian terns to a managed reduction in nesting habitat. International Wildlife Management Conference, Sapporo Japan.

Lyons, D.E., A. Peck-Richardson, J. Lerczak. 2015. Office of Naval Research Littoral Geosciences and Optics Annual Program Review, Monterey, CA.

Lyons, D.E., D.D. Roby, Y. Suzuki, J.Y. Adkins, A. Peck-Richardson, K. Collis. 2014. The plight of fish-eating birds: Cormorants and endangered salmonids in western North America. 26th International Ornithological Congress, Tokyo, Japan.

Lyons, D.E., A. Peck-Richardson, D.D. Roby, J. Lerczak. 2014. Mapping physical characteristics of the Columbia River mouth using diving seabirds fitted with archival GPS and sensor tags. Pacific Seabird Group Annual Meeting, Juneau, AK.

Lyons, D.E., D.D. Roby, K. Collis, T.J. Lawes, K.S. Bixler, A. Patterson. 2012. Build it and they will come? Assessment of a mitigation habitat network for Caspian terns. The Wildlife Society Annual Meeting, Portland, OR.

Lyons, D.E., D.D. Roby. 2012. Comparative foraging ecology of two sympatric piscivorous waterbirds in the Columbia River estuary, USA. 5th North American Ornithological Conference, Vancouver, BC.

Lyons, D.E., D.D. Roby, J.Y. Adkins, P.J. Loschl, K. Collis, A.F. Evans. 2010. Predator-prey interactions between seabirds and salmonids: A global perspective. World Seabird Conference, Victoria, BC.

Lyons, D.E., D.D. Roby, J.Y. Adkins, Y. Suzuki, K.N. Courtot, P.J. Loschl, T. Marcella, K. Collis, A.F. Evans. 2010. Columbia River estuary double-crested cormorants: Adaptive research for adaptive management? Columbia River Estuary Conference, Astoria, OR.

Lyons, D.E., D.D. Roby, J.Y. Adkins, L.H. Reinalda, P.J. Loschl, K. Collis. 2009. Climate effects on juvenile salmonid consumption by an estuarine predator. Coastal and Estuarine Research Foundation, Portland, OR.

Lyons, D.E., D.D. Roby, J.Y. Adkins, L.H. Reinalda, P.J. Loschl. 2009. Bottom-up effects of climate on juvenile salmonid consumption by an estuarine based avian predator. Salmon Ocean Ecology Meeting, Juneau, AK.

Lyons, D.E., D.D. Roby, J.Y. Adkins, L.H. Reinalda, P.J. Loschl, K. Collis. 2009. Relationships between ocean conditions and the population dynamics of estuarine piscivorous birds in the California Current. Pacific Seabird Group Annual Meeting, Hakodate, Japan.

Lyons, D.E., D.D. Roby, K. Collis. 2005. Growth and development of captive-reared Caspian tern chicks fed ad libitum and restricted diets. Waterbird Society Annual Meeting, Jekyll Island, GA.

Lyons, D.E., D.D. Roby, K.N. Fischer, C.D. Anderson, C.L. Couch, K. Collis. 2004. Cormorant predation on ESA-listed salmonids in the Columbia River Estuary: An emerging conflict. Symposium on the Biology and Management of Double-crested Cormorants, American Ornithologist's Union Annual Meeting, Quebec City, QC.

Lyons, D.E., D.D. Roby, K. Collis, C.W. Thompson, D.P. Craig. 2003. Colony restoration techniques for Caspian terns in the Pacific Northwest. Northwest Chapter of the Society for Ecological Restoration Annual Meeting, Portland, OR.

Lyons, D.E., D.D. Roby, K. Collis. 2002. Management of Caspian Terns in the Columbia River Estuary to Reduce Predation on Juvenile Salmonids. U.S. Army Corps of Engineers Anadromous Fish Evaluation Program: 2002 Annual Review, Portland, OR.

Other First-authored Contributed Presentations

American Fisheries Society, Oregon Chapter: 2000, 2005
American Ornithologists' Union: 2000-2001, 2004, 2008, 2012
Cooper Ornithological Society: 1999
Pacific Seabird Group: 2000-2012, 2014-2015
Salmon Ocean Ecology Conference: 2007, 2009
Waterbird Society: 2000, 2002, 2005, 2009
Wildlife Society: 2000, 2012
Wildlife Society, Oregon Chapter: 2000-2005, 2007, 2009

SYMPOSIUM AND SPECIAL PAPER SESSION CONVENER

Roby, D.D., **D.E. Lyons**, Y. Suzuki, S. Chan, S. Chen. 2016. Tern colony restoration and broader conservation networks. Pacific Seabird Group Annual Meeting, Oahu, HI.

Suryan, R., **D.E. Lyons**, M. Hipfner. 2015. Seabirds as prey. Second World Seabird Conference, Cape Town, South Africa.

INFORMATION TRANSFER AND OUTREACH PRESENTATIONS

Columbia River Avian Predation Workshop: 2014-2015
Columbia River Double-crested Cormorant Working Group: 2010-2014
Columbia River Inland Avian Predation Working Group: 2010-2012
Columbia River Studies Review Work Group: 2010-2011, 2013-2014
Columbia River Caspian Tern Working Group: 1999-2004
Columbia Basin Fish and Wildlife Authority: 1998
Priest Rapids Coordinating Committee 2013-2015
Oregon House of Representatives Coastal Caucus: 2012
Primary school programs in Zhejiang Province, People's Republic of China: 2011
Oregon State University College of Agricultural Sciences Outreach Tour: 2008
Audubon Society chapters across Oregon: 1999, 2001, 2011
Oregon State Parks campfire programs: 1999-2001

SERVICE

Pacific Seabird Group Aleutian Tern Conservation Working Group 2015-2016
OSU Fisheries and Wildlife Departmental Seminar Committee (2015-16 academic year)
OSU Fisheries and Wildlife Promotion and Tenure Committee (Senior FRA II, 2015; Associate Professor, 2009)
OSU Fisheries and Wildlife Peer Review Teaching Evaluation (2015)
Malheur Lake Aquatic Health Scientific Advisory Board, Malheur National Wildlife Refuge, Princeton, Oregon: 2013-present
Pacific Seabird Group Executive Council Member: 2006-2013
Pacific Seabird Group 2013 Annual Meeting Local Committee Member
Peer Reviewer:
Acta Oecologica; Auk; Behavioral Ecology and Sociobiology; Condor; Endangered Species Research; Estuarine, Coastal, and Shelf Science; Journal of Functional Ecology; Marine Ecology Progress Series; Marine Ornithology; NOAA Northwest Fisheries Science Center Internal Grants Program; North American Journal of Fisheries Science; Northwest Naturalist; Northwest Science; Studies in Avian Biology; Studies in Avian Ecology; Transactions of the American Fisheries Society; University of Alaska Global Change Student Research Grant Competition.

Professional Society Memberships

American Ornithologists' Union
Pacific Seabird Group
Waterbird Society
Wildlife Society

STUDENT AWARDS

Outstanding Doctoral Student, OSU College of Agricultural Sciences (\$1000)
Best Student Paper – 2005 Waterbird Society Annual Meeting
P.F. and Nellie Buck Yerex OSU Graduate Fellowship (\$6000)
Best Contributed Paper – 2001 Joint Annual Meeting of the Oregon Chapter of The Wildlife Society and Oregon Chapter of the American Fisheries Society.
Best Student Paper – 2000 Oregon Chapter of The Wildlife Society Annual Meeting.

OTHER INTERESTS

Backpacking, telemark and cross-country skiing, canoeing, ultimate frisbee, dog training

REFERENCES

Dr. Daniel Roby, Unit Leader
USGS Oregon Cooperative Fish and Wildlife Research Unit
Department of Fisheries and Wildlife
Oregon State University
104 Nash Hall
Corvallis, OR 97331
541.737.1955
daniel.robby@oregonstate.edu

Dr. Patrick Jodice, Unit Leader
USGS South Carolina Cooperative Fish and Wildlife Research Unit
Department of Forestry and Natural Resources
Clemson University
G27 Lehotsky Hall
Clemson, SC 29634
864.656.6190
pjodice@clemson.edu

Ken Collis, M.S.
President
Real Time Research, Inc.
52 S.W. Roosevelt Ave.
Bend, OR 97702
541.382.3836
ken@realtimeresearch.com