DR. MAGGIE P. MACPHERSON

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EDUCATION

Ph.D. 2017 Ecology & Evolutionary Biology

Tulane University

M.Sc. 2014 Biology

York University

B.Sc. 2008 Wildlife Biology (honours)

University of Guelph

PEER-REVIEWED PUBLICATIONS

- **MacPherson, M.**, S. Chiasson, A. E. Jahn, and C. Taylor. Measuring circulating fatty acids from small volumes of blood plasma: New insights form a comparison of conspecific resident and migratory birds. Ecology and Evolution *Revised and Resubmitted*.
- Jahn, A.E., V. Bejarano, M.B. Guzman, L.M. Brown, I.C.C. Provinciato, J.Cereghetti,
 V.R. Cueto, J.I. Giraldo, V.Gomez-Bahamon, M.S.Husak, H.K. LePage, M.
 MacPherson, M.A. Marini, M.A. Pizo, A. Quickle, D.B. Roeder, J.H. Sarasola,
 and D.T. Tuero. 2017. Molting while breeding? Lessons from New World
 Tyrannus Flycatchers. Journal of Ornithology. 158: 1061-1071.
- Jahn, A.E., N.E. Seavy, V. Bejarano, M. Benavides Guzman, I. Celso Carvalho Provinciato, M.A. Pizo, and M. MacPherson. 2016. Intra-tropical migration and wintering areas of Fork-tailed Flycatchers (*Tyrannus savana*) breeding in Sao Paulo, Brazil. Brazilian Journal of Ornithology. 24(2): 116-121.
- Jahn, A.E., J.I. Giraldo, M. MacPherson, D.T. Tuero, J Sarasola, J. Cereghetti, D.A. Masson, and M. Morales. 2016. Demographic variation in timing and intensity of feather molt in migratory Fork-tailed Flycatchers (Tyrannus s. savana). Journal of Field Ornithology. 87(2): 143-154.
- Calandra Q. Stanley, Emily A. McKinnon, Kevin C. Fraser, **Maggie P. MacPherson**, Garth Casbourn, Lyle Friesen, Peter P. Marra, Colin Studds, T.

 Brandt Ryder, Nora E. Diggs, and Bridget J.M. Stutchbury. 2014. Connectivity of Wood Thrush Breeding, Wintering, and Migration Sites Based on Range-Wide Tracking. Conservation Biology. 29(1): 164-174.
- Emily A. McKinnon, Calandra Q. Stanley, Kevin C. Fraser, **Maggie MacPherson**, Garth Casbourn, Peter P. Marra, Colin E. Studds, Nora Diggs,
 Bridget J.M. Stutchbury. 2012. Estimating geolocator accuracy for a migratory

- songbird using live ground-truthing in a tropical forest. Animal Migration. 1: 31-38. doi: 10.2478/ami-2013-0001.
- Calandra Q. Stanley[§], **Maggie MacPherson**[§], Kevin C. Fraser, Emily A. McKinnon, and Bridget J.M. Stutchbury. 2012. Repeat tracking of individual songbirds reveals consistent migration timing but flexibility in route. PLOSOne. 7(7): e40688. Doi: 10.1371/journal.pone.0040688. § These authors contributed equally to the work. *This article is in the top 10% most cited from PLOSOne.
- Bridget J.M. Stutchbury, Elizabeth A. Gow, Tyler Done, **Maggie MacPherson**, James W. Fox, and Vsevolod Afanasyev. 2010. Effects of post-breeding moult and energetic condition on timing of songbird migration into the tropics. Proceedings of the Royal Society B. doi: 10.1098/rspb.2010.1220.

 *6th most cited paper from Royal Society B in 2011

SOLICITED PUBLICATIONS

- Jahn, A.E., D.T. Tuero, V. Bejarano, **M. MacPherson**, M.A. Pizo. 2017. Austral migration patterns: *Tyrannus savana* the migrant. Pp. xxx-xxx *in* Reboreda, J.C., et al. Behavioral Ecology of Neotropical Birds. *In Prep*.
- **MacPherson, M.** 2017. Fork-tailed Flycatcher. Pp. xxx-xxx *in* De Dijn, B.P.E., et al. Natural History and Ecology of Suriname. WWF-Guianas, Paramaribo. *In Press*.
- Cueto, V.R., A.E. Jahn, D.T. Tuero, A.C. Guaraldo, J.H. Sarasola, S.P. Bravo, V. Gomez, J.I. Giraldo, D.A. Masson, **M. MacPherson**, and J.E. Jimenez. Febrero-Marzo. 2015. Las aves migratorias de America del Sur: Nuevas tecnicas revelan informacion sobre su comportamiento. *Ciencia Hoy* magazine. 24(142):19-25.

RECENT GRANTS AND AWARDS

2017	American Ornithological Society Travel Award for the 2017 AOS/SCO/SOC meeting, American Ornithological Society
2016	Graduate Student Research Award, Department of Ecology & Evolutionary Biology, Tulane University
2016	American Ornithologists' Union Travel Award for the 2016 NAOC VI meeting, American Ornithologists' Union
2016	Teaching award for lower-level undergraduate courses, Department of Ecology & Evolutionary Biology, Tulane University
2015	Office of Graduate and Postdoctoral Studies/Graduate Studies Student Association travel grant, Tulane University

2013	Office of Graduate and Postdoctoral Studies/Graduate Studies Student Association travel grant
2013	Stone Center Graduate Student Summer Field Research Grant "Estimating physiological consequences of roosting densities in the austral migrant Fork-tailed Flycatcher (<i>Tyrannus savana</i>)"
2012	Stone Center Graduate Student Summer Field Research Grant "How do migratory birds fuel spring migration? A comparative approach"
2012	IBM Corporation Fellowship in Computational Science
CONFER	RENCE PRESENTATIONS
2017	MacPherson, M., A.E. Jahn, V. Cueto, J.Cereghetti, J. Sarasola, D. Tuero, M. Pizo, and E. Hill. How seasonality in the Southern Hemisphere affects migration of austral migrant <i>Tyrannus savana</i> . <u>Association of Field Ornithologists Ornithological Congress of the Americas</u> . Puerto Iguazu, Argentina, Oral presentation.
2017	MacPherson, M. and A.E. Jahn. How seasonality in Northern vs. Southern Hemispheres affects distributions of different types of migrants. <u>American Ornithological Society</u> . East Lansing, Michigan, USA, Oral presentation.
2017	MacPherson, M., A.E. Jahn, and C.M. Taylor. Convergent evolution on the morphology of migration within an entire bird genus (<i>Tyrannus</i>). Society for Integrative and Comparative Biology. New Orleans, Louisiana, USA, Oral presentation.
2015	MacPherson, M. Exploring the morphology of migration: Are subspecies of Kingbirds diverging via diet? <u>Neotropical Ornithological Congress</u> . Manaus, Amazonas, Brazil, Oral presentation.
2012	MacPherson, M. Testing hypotheses for the evolution of migration: A comparative approach contrasting migrant systems. North American Ornithological Congress, Vancouver, British Colombia, Canada. Oral presentation.
2011	MacPherson, M. and B.J.M. Stutchbury. Pairing geolocators with physiology to determine the role of migratory strategies in a North-temperate passerine. <u>Neotropical Ornithological Congress</u> , Cusco, Peru. Oral presentation.
2010	MacPherson, M. Spring Migration in Wood Thrush: Carry-Over Effect to Reproductive Output. 25 th <u>International Ornithological Congress</u> , Campos do Jordao, Sao Paulo, Brazil. Oral presentation.

2010 MacPherson, M. and B.J.M. Stutchbury. Spring Migration Strategy:
Carry-Over Effects to Reproductive Output. Joint meeting of <u>Cooper</u>
Ornithological Society, American Ornithologists' Union, and Society of
Canadian Ornithologists. San Diego, California, USA.

INVITED RESEARCH SEMINARS

2017	MacPherson, M. Surfing the Heat Wave or the Green Wave: How Will
	Different Types of Migrants Track Seasonal Resources in a Changing
	Climate? Keynote address at <u>Bald Eagle Expo</u> of Morgan City, Louisiana,
	USA.
2017	MacPherson, M. Surfing the Heat Wave or the Green Wave: How Will
	Different Types of Migrants Track Seasonal Resources in a Changing
	Climate? EcoLunch Seminar Series, Department of Ecology &
	Evolutionary Biology, Tulane University, New Orleans, Louisiana, USA.
2016	MacPherson, M. Explaining Seasonal Movements of <i>Tyrannus</i>
	Flycatchers in South America. EcoLunch Seminar Series, Department of
	Ecology & Evolutionary Biology, Tulane University, New Orleans,
	Louisiana, USA.
2016	MacPherson, M., and A.E. Jahn. Surfing the Green Wave: Is Winter
	Itinerancy in Migratory Kingbirds Explained by Following Seasonal
	Climatic Gradients? <u>Baton Rouge Audubon Society</u> , Baton Rouge,
	Louisiana, USA.
2015	MacPherson, M. Exploring the Morphology of Migration. Ecology &
	Evolutionary Biology department's EcoLunch Seminar Series, Tulane
	University, New Orleans, Louisiana, USA.
2015	MacPherson, M. Studying Migrant Birds: Why, How, & Where?
	Invited Speaker for <u>Ducks Unlimited Annual General Meeting</u> , New
	Liskeard, Ontario, Canada.
2014	MacPherson, M. What Makes Migrants Move? Geolocators, GIS,
	eBird and the Importance of Collaborations in Migratory Bird Research.
	Invited Lecturer for New Orleans Audubon Society, New Orleans,
	Louisiana, USA.
2014	MacPherson, M. Conservation of migratory birds: Why do migrants
	move? Invited Speaker for <u>Ducks Unlimited Annual General Meeting</u> ,
	New Liskeard, Ontario, Canada.

2013	MacPherson, M. Birds, Banding, and Research: Adventures Studying Migrant Birds. Invited Keynote Speaker for <u>Ducks Unlimited Annual General Meeting</u> , New Liskeard, Ontario, Canada.
2013	MacPherson, M. Optimal annual routines: Understanding life history strategies of Fork-tailed Flycatchers (<i>Tyrannus savana</i>). Invited lecturer at The Stone Center for Latin American Studies, Tulane University, New Orleans, Louisiana, USA.
2013	MacPherson, M. Optimal annual routines: Understanding life history strategies of Fork-tailed Flycatchers (<i>Tyrannus savana</i>). Invited lecturer at the Environmental Protection Agency, Georgetown, Guyana.
2011	MacPherson, M. A donde van tus aves? Metodos actuals para seguirlas. Invited speaker for Western Hemisphere Bird Banding Network Annual General Meeting in Cusco, Peru.
2011	MacPherson, M. The Technology That Could Pros & Cons of Exploring Migratory Behaviour in Songbirds Using Geolocators. Invited Lecture for Ontario Bird Banding Association's Annual General Meeting, Port Rowan, Ontario, Canada.
2009	MacPherson, M., C. Stanley, B.J.M. Stutchbury, T. Done, E.A. Gow, K. Kyser, J. Fox, and V. Afanasyev. Carry-over Effects: Winter Habitat Quality, Migration & Reproductive Effort. <u>Hawk Mountain Sanctuary and Northern Saw-whet Owl Research Program</u> . Invited speaker for oral presentation. Hamburg, Pennsylvania, USA.
POSTERS	
2016	MacPherson, M., A. Jahn, V. Cueto, M. Husak, D. Tuero, J. Sarasola, J. Cereghetti, D. Roeder, C. Lister, T. Hendrix, A. E'etessam. Surfing the Heat Wave or the Green Wave: Divergent Ecological and Evolutionary Consequences for Nearctic Neotropical and Austral Migrant Kingbirds. North American Ornithological Congress IV, Washington, DC, USA.
2016	MacPherson, M., Clare Lister, Trey Hendrix, Amethys E'Etessam. Are Migratory Birds Tracking Rain? School of Science & Engineering Research Day poster competition, Tulane University, New Orleans, Louisiana, USA. *Selected as a finalist achieving honorable mention.
2013	MacPherson, M. and C. Taylor. Optimal Annual Routine Modeling: The Evolution of Avian Long-distance Migration. School of Science & Engineering Research Day, Tulane University, New Orleans, Louisiana, USA. *Selected as a finalist.

MacPherson, M. C.Q. Stanley, K.C. Fraser, E.A. McKinnon, and B.J.M. Stutchbury. Repeat tracking of individual songbirds reveals consistent migration timing but flexibility in route. <u>School of Science & Engineering Research Day</u>, Tulane University, New Orleans, Louisiana, USA.

WORKING GROUP MEMBERSHIPS

2014 -	Scientific Researchers in Guyana https://www.facebook.com/groups/684662421620904/
2013 -	South Rupununi Conservation Society (SRCS) http://www.srcs.gy/
2012 -	TyrannusNet: a project sponsored by Aves Internacionales members who study life history strategies in the bird genus <i>Tyrannus</i> .
2010 -	Aves Internacionales http://avesinternacionalesenglish.wordpress.com
2010-2012	Western Hemisphere Bird Banding Network http://www.raaho.info/index.php?option=com_content&view=article&id=21&Itemid=26⟨=en
1994 -	Hilliardton Marsh Research & Education Center http://www.thehilliardtonmarsh.com

MENTORING EXPERIENCE

2017	Elliot Hill	Currently improving upon a method of analyzing geolocator data to be able to analyze all types of geolocators using the FLightR package in R.
2015-2016	Clare Lister	Development of a spatial statistics model for <i>Tyrannus</i> flycatchers through space and time.
2015-2016	Trey Hendrix	Development of an R-language program of functions for making animations that track migratory individuals across space and time.
2015-2016	Amethys E'Et	Niche modelling project studying the kernel density plots of resident species of <i>Tyrannus</i> flycatchers with respect to environmental variables from the National Centers for Environmental Prediction dataset using ArcMap.
2009-2011	60 Volunteers	

Trained 20 undergraduate volunteers in each of 3 field seasons during my Master of Science research how to responsibly extract songbirds from mist nets, and band them.

American Ornithologists Society Student Advisory Committee member

PROFESSIONAL SERVICE AND OUTREACH

2017

	(AOS SOC)
2016-	Volunteer field guide for Eagle Expo. Cajun Coast Visitors & Convention Bureau, Morgan City, Louisiana, USA.
2016-	Volunteer bird banding with Barataria-Terrebone National Estuary Program (BTNEP) Red Knot banding program. Grand Isle, Louisiana, USA.
2015	Volunteer trip leader for Christmas Bird Count for Kids (CBC for Kids). Hilliardton Marsh, Hilliardton, Ontario, Canada.
2013-2015	Student representative on Graduate Council. Tulane University, New Orleans, Louisiana, USA.
2013-2015	Student representative on IT Committee. Tulane University, New Orleans, Louisiana, USA.
2013-	EcoLunch Coordinator. Department of Ecology & Evolutionary Biology, Tulane University, New Orleans, Louisiana, USA.
2013-2014	Vice President of Graduate Studies Student Association. Tulane University, New Orleans, Louisiana, USA.
2013-2014	Senator on Graduate and Professional Student Association. Tulane University, New Orleans, Louisiana, USA.
2012-	Social Chair. Department of Ecology & Evolutionary Biology, Tulane University, New Orleans, Louisiana, USA.
2012-2015	Events Coordinator for Club for Rumination of Ecology, Evolution, and Phylogenetics (CREEP). Tulane University, New Orleans, Louisiana, USA.
2012-2014	Volunteer Referee for First Lego League in New Orleans area elementary school competitions. New Orleans, Louisiana, USA.
2012	Coordinated JMP statistical computing software workshop. Department of Ecology & Evolutionary Biology, Tulane University, New Orleans, Louisiana, USA.
2011-2013	Ecology & Evolutionary Biology representative on Graduate Studies Student Association. Tulane University, New Orleans, Louisiana, USA.

2011-	Volunteer field guide for Yellow Rails & Rice Festival. Louisiana State University, Jennings, Louisiana, USA.	
2010-	Bird bander trainer for Western Hemisphere Bird Banding Network.	
2010-	Reviewer for IBIS journal	
PROFESSIONAL DEVELOPMENT		
2017	Adventures in Quantitative Ecology double feature: analysis methods for community ecology and an introduction to mixed effects modelling (1 day). Guest quantitative ecology workshop by Dr. Rachel Blakey, University of Missouri, Columbia, Missouri, USA.	
2017	Graduate TA and Post Doc Teaching Workshop (1 day). Center for Engaged Learning and Teaching, Tulane University, New Orleans, Louisiana, USA.	
2016	Creating Talks that Inform and Inspire (2 hours). Society for Integrative & Comparative Biology Webinar.	
2016	Giving Stellar Presentations and Job Talks (2 hours). Office of Graduate and Postdoctoral Studies, Tulane University, New Orleans, Louisiana, USA.	
2016	High Performance Computing Workshop (1 day). Technology Services, Tulane University, New Orleans, Louisiana, USA.	
2016	Geolocation with Open-Source Tools Workshop (2 days). North American Ornithological Congress IV, Washington, DC, USA.	
2016	Supporting International Students and Scholars Workshop Series (1 day). Center for Global Education, Tulane University, New Orleans, Louisiana, USA.	
2016	Software Carpentry Workshop (2 days). Tulane University, New Orleans, Louisiana, USA.	
2013	Responsible Conduct of Research (semester-long interdisciplinary seminar course). Tulane University, New Orleans, Louisiana, USA.	