

Curriculum Vitae

Leslie S. Phillmore

Place and Year of Birth:

London, Ontario, Canada, 1972

Education:

Ph.D. 2001, Queen's University, Psychology (Behavioural Neuroscience)

M.A. 1997, Queen's University, Psychology (Basic and Applied)

B.A. 1995, University of Western Ontario, Psychology (Honours)

Research Interests:

Neural basis of perception in wild animals, specifically songbirds, including:

- a) auditory distance perception
- b) auditory discrimination and recognition of individuals
- c) molecular neurobiology (IEGs, neurogenesis)
- d) effects of early learning on adult perception of conspecific vocalizations

Research History:

Assistant Professor, June 2006 - present, Dalhousie University.

Postdoctoral Fellow, January 2002 – June 2006, University of Western Ontario, Dr. S. MacDougall-Shackleton (advisor)

Research Assistant - August - October 2001, Queen's University, Department of Psychology, Dr. H. Mouritsen and Dr. B. Frost (supervisors)

Graduate Student-Research Assistant, September 1995 - August 2001, Queen's University, Department of Psychology, Dr. R. G. Weisman (advisor)

Visiting Scientist, March - April 1996, Johns Hopkins University, Department of Psychology, Dr. G. F. Ball (advisor)

Undergraduate Student-Research Assistant, University of Western Ontario, July - August 1995, Dr. W. A. Roberts (advisor)

Undergraduate Student-Research Assistant, University of Western Ontario, September 1992 - April 1995, Dr. M. R. Cole (advisor)

Research Funding Awards:

NSERC Discovery Grant Individual – 2006-2011

NSERC Equipment Grant – 2006 – Four Soundproof booths

Academic Honours and Fellowships:

NSERC Postdoctoral Fellowship, University of Western Ontario, January 2002-January 2004

Andrew McGhie Prize for Outstanding Doctoral Thesis, Queen's University, 2001-2002

Canadian Psychological Association Certificate of Academic Excellence (Doctoral Thesis), Queen's University, 2001-2002

Natural Sciences Nominee for the NSERC Doctoral Prize, Queen's University, 2001

R.W. McLaughlin Scholarship, Queen's University, September 2000 – August 2001

Runner-Up, D.O.Hebb Student Award for Best Student Presentation (at the joint meeting of the Canadian Society for Brain, Behaviour and Cognitive Science and the Experimental Psychology Society (England)), August 2000

Teaching Assistant Prize in Psychology, Queen's University, 1999 - 2000

Ontario Graduate Scholarship in Science and Technology, Queen's University, 1999 - 2000

Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship (PGS B), Queen's University, 1997 - 1999

Ontario Graduate Scholarship (declined), Queen's University, 1997 - 1998

Queen's Graduate Award, Queen's University, 1997 - 1998

Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship (PGS A), Queen's University, 1995 - 1997

Ontario Graduate Scholarship (declined), Queen's University 1995 -1996

Moira Sansom Award for Excellence in Psychological Research, Huron College at the University of Western Ontario, 1995

John Grant Morden Entrance Scholarship (renewable), Huron College at the University of Western Ontario, 1991 – 1995

Peer Reviewed Journal Articles:

Phillmore, L.S. & MacDougall-Shackleton, S.A. (2007). Photoperiodism and the annual cycle of black-capped chickadees. In Otter, K.A. ed. *Ecology and behavior of chickadees and titmice: an integrated approach*.

Hoshooley, J., Phillmore, L.S., Sherry, D.F., & MacDougall-Shackleton, S.A. (2007). Annual cycle of the black-capped chickadee: seasonality of food-storing and the hippocampus. *Brain, Behaviour, and Evolution*, 69, 161-168.

Phillmore, L.S., Hoshooley, J., Sherry, D.F., & MacDougall-Shackleton, S.A. (2006). Annual cycle of the black-capped chickadee: seasonality of singing rates and vocal-control brain regions. *Journal of Neurobiology*, 66, 1002-1010.

Avey, M.T., Phillmore, L.S., & MacDougall-Shackleton, S.M. (2005). Immediate early gene expression following exposure to acoustic and visual components of courtship in zebra finches. *Behavioural Brain Research*, 165 (2), 247-253.

Phillmore, L.S., Hahn, T.P., & MacDougall-Shackleton, S.A. (2005). A test of absolute photorefractoriness and photo-induced neural plasticity of song-control regions in black-capped chickadees (*Poecile atricapillus*). *Canadian Journal of Zoology*, 83, 747-753.

Hoshooley, J., Phillmore, L.S., & MacDougall-Shackleton, S.A. (2005). An examination of avian hippocampal neurogenesis in relation to photoperiod. *Neuroreport*, 16, 987-991.

Bloomfield, L., Weisman, R. G., Phillmore, L.S., & Sturdy, C. B. (2005). Note Types and Coding in Parid Vocalizations III: The Chick-a-dee Call of the Carolina Chickadee (*Poecile carolinensis*). *Canadian Journal of Zoology*, 83, 820-833.

Phillmore, L.S., Bloomfield, L., & Weisman, R. (2003). Effects of songs and calls on ZENK response in the auditory telencephalon of field- and isolate-reared black-capped chickadees. *Behavioural Brain Research*, 147, 125-134.

Phillmore, L., Sturdy, C., & Weisman, R. (2003). Does reduced social contact affect discrimination of distance cues and individual vocalizations? *Animal Behaviour*, 65, 911-922.

Bloomfield, L., Sturdy, C.B., Phillmore, L., and Weisman, R. (2003). Open-ended categorization of chick-a-dee calls by black-capped chickadees (*Poecile atricapilla*). *Journal of Comparative Psychology*, 177, 290-301.

Phillmore, L., Sturdy, C., Turyk, M., & Weisman, R., (2002). Discrimination of Individual Vocalizations by Black-Capped Chickadees (*Poecile atricapilla*), *Animal Learning and Behavior*, 30, 43-52.

Sturdy, C. B., Phillmore, L. S., Weisman, R. G. (2001). Reduced social contact causes auditory perceptual deficits in zebra finches. *Animal Behaviour*, 62, 1207-1218.

Sturdy, C. B., Phillmore, L. S., Weisman, R. G. (2000). Call-note discriminations in black-capped chickadees (*Poecile atricapillus*). Journal of Comparative Psychology, 114, 357-364.

Sturdy, C. B., Phillmore, L. S., Weisman, R. G. (1999). Note types, harmonic structure, and note order in the songs of zebra finches (*Taeniopygia guttata*). Journal of Comparative Psychology, 113 (2), 194–203.

Sturdy, C. B., Phillmore, L. S., Price, J. L., & Weisman, R. G. (1999). Song-note discriminations in zebra finches (*Taeniopygia guttata*): Categories and pseudocategories. Journal of Comparative Psychology, 113 (2), 204-212.

Phillmore, L. S., Sturdy, C. B., Ramsay, S. M. & Weisman, R. G. (1998). Discrimination of auditory distance cues in black-capped chickadees (*Poecile atricapillus*) and zebra finches (*Taeniopygia guttata*). Journal of Comparative Psychology, 112 (3), 282-291.

Weisman, R., Njegovan, M., Sturdy, C., Phillmore, L., Coyle, J., & Mewhort, D. (1998). Frequency range discriminations: Special and general abilities in zebra finches (*Taeniopygia guttata*) and humans (*Homo sapiens*). Journal of Comparative Psychology, 112 (3), 244 - 258.

Other Publications:

Theses:

Ph.D. thesis: Perception of conspecific vocalizations in black-capped chickadees, Dr. R. G. Weisman (advisor), July 2001, Queen's University.

M.A. thesis: Discrimination of auditory distance cues in black-capped chickadees (*Parus atricapillus*) and zebra finches (*Taeniopygia guttata*), Dr. R. G. Weisman (advisor), August 1997, Queen's University.

B.A. thesis: The effects of variable- and fixed-interval schedule histories on rates and patterning of response in a fixed-ratio schedule, Dr. M. Cole (supervisor), May 1995, Huron College at the University of Western Ontario.

Conference Presentations:

Phillmore, L.S. (2007, March). A review of discrimination learning: From behaviour to brain. Conference on Comparative Cognition, (Melbourne, Florida, 14th Annual Meeting). (Invited symposium speaker).

Phillmore, L.S., Hoshoooley, J., Sherry, D.S., & MacDougall-Shackleton, S.A. (2005, November). Neuronal recruitment to the hippocampus changes seasonally but hippocampal volume does not in food-storing black-capped chickadees. Society for Neuroscience Annual Meeting (Washington, DC). (Poster).

- Phillmore, L.S., Hoshooey, J., Sherry, D.S., & MacDougall-Shackleton, S.A. (2005, July). Seasonal plasticity of the brain and behaviour in black-capped chickadees. Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting (Montreal, QC). (Paper).
- Phillmore, L. & MacDougall-Shackleton, S. (January 2003). Photoperiodism in black-capped chickadees. Society for Integrative and Comparative Biology Annual Meeting (Toronto, ON). (Paper). Abstract published in *Integrative and Comparative Biology*, 42(6), 1293-1294.
- Phillmore-MacPhail, L., Kadis, D., Avey, M., & MacDougall-Shackleton, S. (2002). Effect of mate versus non-mate song playback on ZENK expression in female zebra finches. Conference on the Behavioural Neurobiology of Birdsong (New York, NY). (Poster).
- Phillmore, L., Bloomfield, L., & Weisman, R. (2002). ZENK response to conspecific calls and songs in Black-capped chickadees. The International Conference on Comparative Cognition (Melbourne, FLA.; 9th Annual Meeting) (Paper).
- Bloomfield, L., Sturdy, C. B., Phillmore, L., & Weisman, R. (2002). Do black-capped chickadees treat their calls and those of Carolina chickadees as different categories? The International Conference on Comparative Cognition (Melbourne, FLA.; 9th Annual Meeting) (Paper).
- Bloomfield, L., Phillmore, L., & Weisman, R. (2002). Solving the syntax of the Carolina chickadee call. The International Conference on Comparative Cognition (Melbourne, FLA.; 9th Annual Meeting) (Paper).
- Phillmore, L., & Weisman, R. (2001). ZENK response to conspecific calls and songs in Black-capped chickadees. Sixth Northeast Regional Birdsong Workshop (Rockefeller Research Centre). (Paper).
- Phillmore, L., Bloomfield, L., & Weisman, R. (2001). Effect of vocalization type on ZENK response in Black-capped chickadees. Canadian Society for Brain Behaviour and Cognitive Science 11th Annual Meeting (Quebec City, Quebec). (Poster).
- Weisman, R., Kovelman, I., Phillmore, L., & Sturdy, C. (2001). Conspecific calls and songs have special cognitive status in auditory category discrimination. Canadian Society for Brain Behaviour and Cognitive Science 11th Annual Meeting (Quebec City, Quebec). (Paper).
- Phillmore, L., Sturdy, C., & Weisman, R. (2000). Auditory distance perception in black-capped chickadees. . The Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS/EPS) (Cambridge, UK; 10th Annual Meeting) (Paper).
- Weisman, R., Sturdy, C., & Phillmore, L. (2000). Natural auditory categories behave like screen-based visual categories. The International Conference on Comparative Cognition

(Melbourne, FLA.; 7th Annual Meeting) (Paper).

Phillmore, L., Sturdy, C., & Weisman, R. (1999). Individual recognition in songbirds. The International Conference on Comparative Cognition (Melbourne, FLA; 6th Annual Meeting) (Paper).

Phillmore, L., Sturdy, C., Turyk, M., & Weisman, R. (1999). Individual recognition over distance by black-capped chickadees. Animal Behavior Society (Lewisberg, PA; 35th Annual Meeting) (Paper).

Sturdy, C., Phillmore, L., & Weisman, R. (1999). The development of songbird perception. The International Conference on Comparative Cognition (Melbourne, FLA; 6th Annual Meeting) (Paper).

Sturdy, C., Phillmore, L., Hughes, M., Nowicki, S., & Weisman, R. (1999). Discrimination of natural acoustic categories by black-capped chickadees (*Poecile atricapillus*). Animal Behavior Society (Lewisberg, PA; 35th Annual Meeting) (Paper).

Sturdy, C., Phillmore, L., Sartor, J. J., & Weisman, R. (1999). Isolation's effects on auditory perception in songbirds. Animal Behavior Society (Lewisberg, PA; 35th Annual Meeting) (Paper).

Phillmore, L., Sturdy, C. & Weisman, R. (1998). Is amplitude an effective auditory distance cue? The International Conference on Comparative Cognition (Melbourne, FLA.; 5th Annual Meeting) (Paper).

Phillmore, L., Sturdy, C., Ramsay, S. & Weisman, R. (1998). Amplitude and signal-to-noise ratio: Importance to discrimination of distance in songbirds. The Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS) (Ottawa, ON; 8th Annual Meeting) (Paper).

Phillmore, L., Sturdy, C., Ramsay, S., & Weisman, R. (1998). Amplitude and signal-to-noise ratio: Importance to discrimination of distance in songbirds. Third Northeast Regional Birdsong Workshop (Vassar College, NY).

Sturdy, C., Phillmore, L., & Weisman, R. (1998). Bioacousticians and songbirds classify song notes: at one with nature? Psychonomic Society (Dallas, TX.; 39th Annual Meeting) (Paper).

Sturdy, C., Phillmore, L., Price, J. & Weisman, R. (1998). Conspecific song note discrimination in zebra finches: Critical acoustic features? Third Northeast Regional Birdsong Workshop (Vassar College, NY) (Paper).

Sturdy, C., Phillmore, L., Price, J. & Weisman, R. (1998). Conspecific song note category discrimination in zebra finches (*Taeniopygia guttata*). The International Conference on Comparative Cognition (Melbourne, FLA; 5th Annual Meeting) (Paper).

Sturdy, C., Phillmore, L., Price, J. & Weisman, R. (1998). Song-note discrimination in

zebra finches (*Taeniopygia guttata*). The Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS) (Ottawa, ON; 8th Annual Meeting) (Paper).

Weisman, R., Sturdy, C., & Phillmore, L. (1998). Genes, perception, and conceptual knowledge. The Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS) (Ottawa, ON; 8th Annual Meeting) (Paper).

Phillmore, L., Sturdy, C., & Weisman, R. (1997). A laboratory simulation of distance ranging in zebra finches and black-capped chickadees. Second Northeast Regional Birdsong Workshop (Cornell University, NY) (Paper).

Phillmore, L., Sturdy, C., & Weisman, R. (1997). Operant discrimination of distance in songbirds. Animal Behaviour Society (College Park, MD; 34th Annual Meeting) (Poster).

Phillmore, L., Sturdy, C., & Weisman, R. (1997). Auditory distance perception in songbirds. The International Conference on Comparative Cognition (Melbourne, FLA; 4th Annual Meeting) (Paper).

Sturdy, C., Phillmore, L., & Weisman, R. (1997). Note types in zebra finch song; bioacoustics and perception. Second Northeast Regional Birdsong Workshop (Cornell University, NY) (Paper).

Sturdy, C., Phillmore, L., & Weisman, R. (1997). Constraints on auditory discrimination learning in songbirds. Psychonomic Society (Philadelphia, PA.; 38th Annual Meeting) (Paper).

Sturdy, C., Phillmore, L., & Weisman, R. (1997). Note order variability in the songs of zebra finches (*Taeniopygia guttata*). Animal Behaviour Society (College Park, MD; 34th Annual Meeting) (Poster).

Sturdy, C., Phillmore, L., & Weisman, R. (1997). Note order variability in the songs of zebra finches (*Taeniopygia guttata*). The International Conference on Comparative Cognition (Melbourne, FLA; 4th Annual Meeting) (Paper).

Njegovan, M., Phillmore, L., Sturdy, C., & Weisman, R. (1996). Multiple frequency range discrimination in song birds, nonsongbirds, and humans. The International Conference on Comparative Cognition (Melbourne, FLA; 3rd Annual Meeting) (Paper)

Phillmore, L.S. & Cole, M.R. (1996). The effects of variable- and fixed-interval schedule histories on rates and patterning of response in a fixed-ratio schedule. The International Society for Comparative Psychology, (5th Annual Meeting).

Njegovan, M., Phillmore, L.S., Weisman, R.G. & Coyle, J. (1996). Multiple frequency range discrimination in songbirds, non-songbirds, and humans. Animal Behavior Society (33rd Annual Meeting).

Phillmore, L., Sturdy, C., & Weisman, R. (1996). Bioacoustic analysis of the harmonic structure of zebra finch song, *Taeniopygia guttata*. Animal Behaviour Society (Flagstaff,

AZ; 33rd Annual Meeting) (Poster).

Sturdy, C., Phillmore, L., & Weisman, R. (1996). Active and passive filtering in zebra finch song, *Taeniopygia guttata*. Animal Behaviour Society (Flagstaff, AZ; 33rd Annual Meeting) (Paper).

Invited Talks and Colloquia:

Phillmore, L. (November 2004). What's that you say? Behavioural and Neural Measures of Perception in Black-Capped Chickadees. Invited Speaker, Psychology Department, Dalhousie University, Halifax, Nova Scotia.

Phillmore, L. (November, 2003; January 2004). Use of Immediate-early Genes to Measure Activity in Auditory Perceptual Areas in Songbirds. Invited Speaker, Biology Department (2003); Psychology Department (2004), Wilfrid Laurier University, Waterloo, Ontario.

Phillmore, L. (January, 2003). Neural and Perceptual Processing in Songbirds. Invited Speaker, Behaviour, Cognition, and Neuroscience Group, University of Windsor, Windsor, Ontario.

Phillmore, L. (2002). Perception of conspecific vocalizations in songbirds as measured by immediate early genes. Invited Speaker, Animal Learning Seminar, Queen's University, Kingston, Ontario.

Phillmore, L. (2002). What's that you say? Behavioural and neural measures of perception in black-capped chickadees. Invited Speaker, Animal Cognition Seminar Series, University of Western Ontario, London, Ontario.

Phillmore, L. (2000). The importance of experience to auditory distance perception in black-capped chickadees. Invited Speaker, University of Western Ontario, Animal Cognition Seminar Series, London, Ontario.

Phillmore, L., Sturdy, C., Ramsay, S., Turyk, M., & Weisman, R. (2000). Distance perception in songbirds. Invited Speaker: Queen's Brain Behaviour and Cognitive Science Colloquium Series, Kingston, Ontario (Paper).

Sturdy, C., Phillmore, L., & Weisman, R. (1999). Songbird acoustic communication: production and perception. Invited Speaker: Queen's Brain Behaviour and Cognitive Science Colloquium Series, Kingston, Ontario (Paper).

Sturdy, C., Phillmore, L., Sartor, J., & Weisman, R. (1999). The effects of isolation on auditory perception in songbirds. Invited Speaker: Queen's Brain Behaviour and Cognitive Science Colloquium Series, Kingston, Ontario (Paper).

Phillmore, L., Sturdy, C., Ramsay, S. & Weisman, R. (1998). Individual recognition and

distance in songbirds. Invited Speaker: Queen's EEB Colloquium Series, Kingston, Ontario (Paper).

Phillmore, L., Sturdy, C., Ramsay, S. & Weisman, R. (1998). Distance makes the bird fly farther or discrimination of auditory distance cues by songbirds. Invited Speaker, University of Alberta, Edmonton.

Phillmore, L., Sturdy, C., Ramsay, S. & Weisman, R. (1998). From field to laboratory: studying auditory distance perception in songbirds. Invited Speaker: BEERS, Kingston, Ontario (Paper).

Sturdy, C., Phillmore, L., Price, J., Sartor, J., & Weisman, R. (1998). Acoustic Category Learning: How Birds Learn to Recognize Conspecific Song. Invited Speaker: Queen's Brain Behaviour and Cognitive Science Colloquium Series, Kingston, Ontario (Paper).

Sturdy, C., Phillmore, L., Price, J., Sartor, J., & Weisman, R. (1998). Acoustic Category Learning: How Birds Learn to Recognize Conspecific Song. Invited Speaker: Queen's EEB Colloquium Series, Kingston, Ontario (Paper).

Phillmore, L., Sturdy, C., Ramsay, S. & Weisman, R. (1997). Auditory distance perception in songbirds: Problems and solutions. Invited Speaker: Queen's Brain Behaviour and Cognitive Science Colloquium Series, Kingston, Ontario (Paper).

Weisman, R., Sturdy, C., & Phillmore, L. (1997). Genes, their expression, and the role of early experience in the auditory perception of songbirds. Invited Speaker: Queen's Brain Behaviour and Cognitive Science Colloquium Series, Kingston, Ontario (Paper).

Teaching Experience:

Adjunct Professor, Experimental Psychology: Learning, Queen's University, September - December 2001

Teaching Assistant, Experimental Psychology: Learning, Queen's University, September - December 2000

Teaching Assistant in Statistics, Queen's University, September - December 1996, 1997, 1998, 1999

Laboratory Instructor & Teaching Assistant in Statistics, Queen's University, September 1995 - May 1996

Student Supervision History:

I have supervised 1 undergraduate research project at Dalhousie University (NESC 3001).

I assisted in the supervision of 1 independent research project at the University of Western Ontario.

I assisted in the supervision of 5 honours theses and 3 directed reading courses while a graduate student at Queen's University, 1995 - 2001.

Professional Affiliations:

Animal Behavior Society

Canadian Society for Brain, Behaviour, and Cognitive Science

Society for Neuroscience

Committee Work:

Animal Advisory Committee, Department of Psychology, Queen's University, 2001

Association of Graduate Students in Psychology (AGSIP) Safety Committee Representative, Queen's University, 2000 - 2001, 1996 - 1999

Association of Graduate Students in Psychology (AGSIP) Departmental Committee Representative, Queen's University, 1999 - 2000

Association of Graduate Students in Psychology (AGSIP) Graduate Committee Representative, Queen's University, 1998 - 1999

Association of Graduate Students in Psychology (AGSIP) B.B.C.S. Committee Representative, Queen's University, 1997 - 1998