Curriculum Vitae Dr. Evelyn Hunter Merrill



	lat.
ADDRESS:	Department of Biological Sciences
	University of Alberta, CCIS 1-281
	Edmonton, AB T6G 2E9, Canada
	(780) 492–2842; e-mail: emerill@ualberta.ca
EDUCATION:	• 1987 - Ph.D., University of Washington, Seattle
	• 1978 - M.Sc., University of Idaho, Moscow
	• 1974 - B.A., St. Lawrence University, Canton, New York
	• 1973 - University of Vienna, Vienna, Austria

• 1969 - Sorbonne University, Paris, France

RESEARCH INTERESTS: Research interests include foraging and nutritional ecology of ungulates, trophic interactions among plants, ungulates and carnivores and land use impacts on wildlife populations. Current research uses modeling to address how landscape patterns influence, predator-prey behaviours and disease spread.

ACADEMIC POSITIONS:

Visiting scientist	2022-2023	Inland Norway University of Applied Sciences, Faculty of applied ecology, agricultural sciences and biotechnology
Seconded professorship	2020-2023	Department of Biological Sciences, University of Alberta
Professor Emeritus	2020	Department of Biological Sciences, University of Alberta
Professor	2007-present	Department of Biological Sciences, University of Alberta.
		Tenured faculty - 50% teaching & service, 50 % research.
Associate Professor	1999-2007	Department of Biological Sciences, University of Alberta.
		Tenured faculty - 50% teaching & service, 50 % research
Associate Professor	1996-1999	University of Wisconsin-Stevens Point, Stevens Point, WI.
		Tenured faculty - 50% teaching, 25% outreach & 25% GIS
		lab coordinator.
Assistant Professor	1994-1999	University of Wisconsin-Stevens Point, Stevens Point, WI.
		Tenure-track faculty - 25% teaching, 25% research.
Assistant Professor	1990-1994	Department of Zoology and Physiology, University of
		Wyoming, Laramie, WY. Tenure-track faculty - 50%
		teaching and service, 50% research.
Visiting Professor	1986-1989	Department of Zoology and Physiology, University of
		Wyoming, Laramie, WY. Lecturer - 100% teaching.
Teaching Assistant	1984	Bio 442- Mammalogy, University of Washington, Seattle.
Affiliate Professor	1983-1984	San Francisco State University, Wildlands Institute
Project Leader	1982-1983	School for Field Studies, Cambridge, MA.
Teaching Assistant	1982-1986	University of Washington, Seattle, WA.
Graduate Research	1975-1978	University of Idaho, Moscow, ID.

OTHER POSITIONS:

Wildlife Research Biologist	1979-1982	Idaho Department of Fish and Game, Soda Springs, ID.
Wildlife Biologist	1979	Bureau of Land Management, Idaho Falls, ID.

Wildlife Biologist	1978	Bureau of Land Management, Washington, DC.
Wildlife Technician	1975	Glacier National Park, MT.

ACADEMIC and ADMINISTRATIVE COMMITTEES

Canadian National Committees		
Member	2019-2021	National Committee Canadian Council of
		Animal Care- Wildlife Subcommittee
University of Alberta		
Member	2012-2020	Univ. Animal Policy and Welfare Committee
Member	2016	Selection Committee: Ecologist Position
Member	2011-2014	Science Advisory Selection Committee
Member	2011-2014	General Awards Committee- BioSciences
Chair	2009-2010	Biosciences Animal Use & Care Committee
Member	2008-2015	Univ. Animal Policy and Welfare Committee
Member	2009-2019	Field Research Activities Committee
Member	2008-2009	Faculty of Science: Kaplan Award Committee
Coordinator	2007-2009	Alberta Coop. Conservation Research Unit
Member	2008	Selection Committee: Aquatic Biologist
Committee Member	2006-2015	Environmental Biology & Ecology
Committee Member	2005-2007	Student and Postdoctoral Award Committee
Committee Member	2006	Committee on Issues for Field Research at
		University of Alberta
Committee Member	2004-2015	Geographic Information Systems Advisory
		Committee
Committee Chair	2000-2004	Geographic Information Systems Advisory
		Committee
Committee Member	2000-2003	Learning Initiative Committee
Committee Member	2004-2012	Biological Sciences Animal Care Committee
Committee Member	2004-2005	New Interdisciplinary Science Building
		Committee
Committee Member	1999-2008	Ecology and Environmental Science
		Curriculum
Committee Member	1999-2005	Plant Biology Research & Curriculum
		Committee

PROFESSIONAL DEVELOPMENT ACTIVITIES:

- 2018 Wilderness First Aid, Univ. Alberta, Edmonton, Feb 22-23.
- 2017 Canadian Assoc. Zoo & Wildlife Veterinarians Chemical Immobilization Course, Jan 20-22
- 2014 Spatial Recapture Workshop: Edmonton, AB, 20-25 July
- 2012 Movement Models Workshop: Hedmark University, Evanstad, Norway, 8-10 Aug
- 2010 Institute for Complex Data Structure: statistical workshop, Montreal, CA 4-5 Mar
- 2009 Program Mark Workshop, The Wildlife Society, Monterey, CA, 24 Sept
- 2008 Occurrence and Detection Workshop, D. McKenzie, Edmonton, AB 21-26 Oct
- 2008 Infectious Disease Modeling Workshop. Math & Stats, U. Alberta, Edmonton, AB. 1-13 May.
- 2008 Landscape Genetics. Landscape Ecology Assoc, Madison, WI., 7 Apr.
- 2006 Alberta Veterinary Research Institute Workshop, Edmonton, AB. 27 Jan.
- 2006 Crossing Boundaries: Making partnerships work. Univ. Alberta, 16-17 Mar.
- 2005 GLIM/GAM workshop in habitat modeling, Rideralp, Switzerland, 23-27 Aug.

- 2003 U of Alberta Animal Care Course- Part I. Edmonton, AB. 9 Apr.
- 2003 Survival Analysis Workshop, Christchurch, New Zealand. 5 Dec.
- 2001 Photography and Videography in Resource Assessment Workshop, Amherst, MA. 16-18 May.
- 1999 Geostatistics Workshop, Rutgers University, Princeton, NJ, 22-26 Jun.
- 1998 ArcInfo. Course, Agric. & Life Sciences, U. Wisconsin-Madison, 9-12 Jun.
- 1997 Chemical Immobilization of Animals & Safe-capture, U. Wisconsin-Stevens Point. 25-26 Oct.
- 1997 GIS and Internet Instruction Workshop. University of Wisconsin-Stevens Point, Aug. 18.
- 1996 U of Wisconsin-Stevens Point Development Award: Linking Splus and GIS, Houston, TX. 15-19 Jan.
- 1993 Biomodeling Workshop, National Science Foundation, U Montana, Missoula, MT.

CURRENT CERTIFICATIONS:

Firearms recertification	2020
Chemical immobilization of wildlife	2017
Horse packing- backcountry	2016
Small boat operators license	2016
Marine radio course	2012
Scuba diving certification	2009
Horse packing	2011
AB Resident Furbearer Trapping license	2003
Firearms instruction certification	2000
Certified Wildlife Biologist	2000

AWARDS AND RECOGNITION:

Alberta Chapter – The Wildlife Society	2020
International Journal of Forest Research	2018
Student Choice Honor Roll	2018
Wildlife Research Award	2017
Group Special Recognition Award	2017
Distinguished Service Award	2016
Alumnae Achievement Award	2015
William Rowan Professional Service	2013
Wildlife Society Fellow	2012
Special Recognition Award	2011
Dedicated Service Award	2011
Induction	2011
Honorable mention	2008
Improv lecture, winner	2005
Outstanding College Faculty Member	1998
University Teaching Award	1997
Appreciation Award	1996
Sponsorship Award	1993
Faculty Growth Award	1992

Alberta Environment	
Canadian Assoc. Zoo & Wildlife Vet	
Banff National Park, AB	
Prince Rupert, BC	
Edmonton Marine Squadron, AB	
PADI,AB	
Wilmore Wilderness Assoc. AB	
Alberta Environment, AB	
Alberta Environment, AB	
The Wildlife Society, MD	

Best Technical Journal Article Award ¹
Excellence in Journal Review
Faculty of Science, University of Alberta
Rocky Mountain Elk Foundation
Alberta Chapter, The Wildlife Society
The Wildlife Society
University of Idaho
Alberta Chapter of The Wildlife Society
The Wildlife Society
Alberta Trappers Association
Alberta Chapter, The Wildlife Society
Boone and Crockett: Professional Member
Honorable mention: paper in <i>Landscape Ecology</i>
UA-Alberta Student Chapter, Wildlife Society
College of Natural Resources, U. Wisconsin-
Stevens Point: students in entire college
University of Wisconsin-Stevens Point
Milwaukee Zoological Society
WY Student Chapter, The Wildlife Society
University of Wyoming

EDITORIAL

Editor-in-Chief: Journal of Wildlife Management 2013-2015 **Editorial Boards:**

- Journal of Wildlife Management 2015-2016
- PlosOne 2012-2014
- Wildlife Monographs 2014-2015

- Journal of Wildlife Management 2014-2015
- Wildlife Research 2009-2011
- Wildlife Professional 2008-2010
- Journal of Range Ecology & Management 2002-2004
- Journal of Wildlife Management 1996-1998

Referee for the following journals:

- Acta Theriologica
- Canadian Journal of Botany
- Ecography
- Ecology
- Ecological Applications
- Ecosphere
- EcoScience
- Journal of Range Management
- Journal of Wildlife Management
- Landscape Ecology
- Movement Ecology
- Natural Areas Journal
- Nature

- Northwest Science
- Oecologia
- PlosOne
- Science
- Trans. Wisconsin Academy of Sciences
- Tropical Ecology
- Wildlife Biology
- Wildlife Diseases
- Wildlife Monographs
- Wildlife Review
- Wildlife Society Bulletin
- Forest Ecology & Management
- Behavior Ecology

MAJOR GRANTS & CONTRACTS since at the University of Alberta:

<u>Year</u>	Agency	Shortened title	<u>Amount</u>
2022-2023	AFGA, MSL	Evaluating Bull Elk Reproductive Success using a Wild Pedigree	\$44,278
2021-2023	AFGA, MSL	Integrating disease modeling into spatial harvest tools for managing chronic wasting disease in mule deer in Alberta	\$140,801
2021-2023	AB Envron. Parks	Harvest Management on Mule Deer Across Populations at Different Levels of CWD	\$184,758
2020-2025	NSF	Demography of partially migratory populations	\$599,824
2020-2021	AFGA, MSL	Bull elk recruitment, survival, and harvest in a partially migratory elk herd in the Ya Ha Tinda	\$28,973
2020-2021	AFGA, MSL	Quantifying deer contact rates for modeling CWD transmission in mule deer	\$16,239
2020-2021	WMI	Modeling Spatial Harvest Strategies for Chronic Wasting Disease Transmission	\$28,456
2020-2021	SCI - Northern Alberta, Hunting Heritage Fund	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$5,000
2020-2021	ACA Research Grant	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$11,000
2019-2020	AFGA, MSL	Bull elk recruitment, survival, and harvest in a partially migratory elk herd in the Ya Ha Tinda	\$29,521

2019-2020	AFGA, MSL	Quantifying deer contact rates for modeling CWD transmission in mule deer	\$19,100
2019-2021	Rocky Mt. Elk Foundation	Contact rates in mule deer: Inputs for assessing transmission of CWD	\$30,114
2019-2020	SCI - Northern Alberta, Hunting Heritage Fund	Winter behavior in new migratory segment: Ya Ha Tinda elk herd	\$5,000
2019-2020	SCI - Northern Alberta, Hunting Heritage Fund	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$11,700
2019-2020	ACA Research Grant	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$32,400
2019-2021	ACA, Grants in Biodiversity	Winter behaviour in a new migratory segment: Ya Ha Tinda elk herd	\$11,280
2019-2021	ACA, Grants in Biodiversity	Analysis of Mule Deer (Odocoileus hemionus) Contacts and Transmission of Chronic Wasting	\$10,200
2019-2020	WCSC - W. Garfield Weston Fellowship Award	Influences of nutritional resources on woodland caribou in Northern Ontario	\$5,000
2018-2021	Alberta Innovates Bio Solution, (APRI)	Quantifying contact rates for modeling CWD transmission in wild mule deer populations	\$208,529
2018-2019	AFGA, MSL	Bull elk recruitment, survival and harvest elk herd in the Ya Ha Tinda	\$26,719
2018-2019	AFGA, MSL	Quantifying deer contact rates for modeling CWD transmission in mule deer	\$15,000
2018-2019	Boone and Crockett Club, WI Spencer Conservation Grant	Quantifying contact rates for disease transmission in mule deer	\$15,444 USD
2018-2019	SCI - Northern Alberta,	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$13,800
2018-2019	Hunting Heritage Fund SCI - Northern Alberta, Hunting Heritage Fund	The waiting game: remote cameras to investigate elk avoidance of predators at Ya Ha Tinda	\$3,073
2018-2019	SCI - Northern Alberta, Hunting Heritage Fund	Are there costs of shifting migration linked to parasitism?	\$5,660
2018-2019	ACA Research Grant	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$32,400
2017-2022	NCASI	Caribou nutrition in relation for forest management	\$110,986
2017-2019	Alberta Innovates Bio Solution, (APRI)	Quantifying contact rates for modelling CWD transmission in wild mule deer populations	\$302,857
2017-2019	ACA, Grants in Biodiversity	Trading-off space use and vigilance to avoid multiple predators: Investigating the behavioural differences between migrant and resident elk	\$13,750
2017-2019	ACA, Grants in Biodiversity	Can contents of predator scat predict the spatial risk of predation for elk at Ya Ha Tinda?	\$16,800
2016-2022	NSERC, Discovery Grant	Partial migration of elk in a heterogeneous landscape	\$310,000

2016-2020	Genome Canada	Systems Biology and Molecular Ecology of Chronic Wasting Disease (Co-PI) (\$11,534,556)	\$81,000
2016-2021	NSF	Long Term Research in Environmental Biology (LTREB), (Co-PI Mark Hebblewhite)	\$434,340 USD
2014-2020	<i>McGill University,</i> <i>CREATE</i>	Enhancing Canada's prosperity through innovative environmental assessment, monitoring and management, (PI, Stan Boutin at UA; Murry Humphries at McGill)	\$275,472
2016-2018	WSF, Alberta Chapter	Does predator scat content reflect spatial risk for big horn sheep?	\$6,875
2014-2018	NSERC, EQPEG	Biotelemetry System: Infrastructure for Assessing Disease Transmission in Wildlife	\$150,000
2017-2018	AFGA, MSL	Bull elk recruitment, survival and harvest in a partially migratory elk herd in the Ya Ha Tinda	\$10,320
2017-2018	AFGA, MSL	Quantifying deer contact rates for modeling CWD transmission in mule deer	\$12,500
2017-2018	SCI - Northern Alberta, Hunting Heritage Fund	Effects of migration on parasite levels of the Ya Ha Tinda elk herd	\$3,000
2017-2018	SCI - Northern Alberta, Hunting Heritage Fund	Can contents of predator scats predict predation risk for elk?	\$4,500
2017-2018	SCI - Northern Alberta, Hunting Heritage Fund	Trading-off space use and vigilance by migrant and resident elk to avoid multiple predators	\$4,500
2017-2018	SCI - Northern Alberta Chapter, Hunting Heritage Fund	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$8,000
2017-2018	ACA Research Grant	Chronic Wasting Disease in deer: modeling transmission from contact rates	\$27,600
2016-2017	TD Friends of the Environment Foundation	Do spatial differences in carnivore scat reflect predation risk for elk in the Ya Ha Tinda, AB?	\$4,375
2016-2017 2016-2017	AFGA, MSL ACA Research Grant	Persistence of the Ya Ha Tinda elk population Persistence of the Ya Ha Tinda elk population: the role of calf survival	\$19,262 \$34,197
2016-2017	SCI Foundation	Persistence of the Ya Ha Tinda elk population	\$25,000
2016-2017	SCI - Northern Alberta, Hunting Heritage Fund	Ya Ha Tinda Elk Herd: Calf survival studies	\$7,600
2016-2017	CICan, Clean Tech Internship Program	Persistence of the Ya Ha Tinda elk population (field technician internship – Camille Roberge)	\$12,000
2016-2017	CICan, Clean Tech Internship Program	Diet analysis of carnivores in Ya Ha Tinda (field technician internship - Mitch O'Donnell)	\$12,000
2016-2017	SCI - Northern Alberta, Hunting Heritage Fund	Ungulate predation risk through carnivore diet analysis in a multi-carnivore community	\$3,100
2015-2016	WSF, Alberta Chapter	Spatial interactions in multi-carnivore communities in the Rocky Mountains of Alberta	\$4,560
2015-2017	Rocky Mt. Elk Foundation- WA	Mount St. Helens forest succession & carrying capacity for elk study.	\$15,899 USD

2015-2017	Rocky Mt. Elk Foundation	Ya Ha Tinda Elk Calf Study	\$25,198 USD
2015-2017	ACA, Grants in Biodiversity	Spatial interactions in multi-carnivore communities in the Rocky Mountains of Alberta	\$14,130
2015-2016	SCI Foundation	Persistence of the Ya Ha Tinda elk population	\$32,483
2015-2016	Environment Canada, Sci. Horizons Internship	Diet and distribution of predators in relation to a declining elk herd	\$12,000
2015-2016	Environment and Climate Change Canada	Shifting migration in a shifting climate: the role of anthropogenic factors and predation in a declining elk herd	\$12,000
2015-2016	TD Friends of the Environment Foundation	Spatial interactions in multi-carnivore communities and ungulate predation in the Rocky Mountains of Alberta	\$6,444
2015-2016	International Association for Bear Research & Management	Spatial interactions in multi-carnivore communities and ungulate predation in the Rocky Mountains of Alberta	\$5,094.45
2015-2016	ACA Research Grant	Persistence of the Ya Ha Tinda elk population: the role of calf survival	\$29,386
2015-2016	SCI, Northern Alberta Chapter	Predator Interaction Study	\$3,700
2015-2016	SCI, Northern Alberta Chapter	Ya Ha Tinda Elk Calf Study	\$5,000
2015-2016	AFGA, MSL	Persistence of the Ya Ha Tinda elk population: the role of calf survival	\$16,000
2014-2015	RMEF, WA Chapter	Mount St. Helens forest succession and carrying capacity for elk study	\$10,253
2014-2017	Alberta Innovates Bio Solution, (APRI)	Experimental harvests for CWD control in wild cervids	\$119,015
2014-2015	Parks Canada Agency	Banff Field Unit, YaHa Tinda Elk Data Analysis	\$12,900
2013-2015	SCI, Northern Alberta Chapter	Experimental harvests for CWD control in wild Cervids	\$6,000
2014-2015	SCI, Northern Alberta Chapter	Elk Ya Ha Tinda Calf Study: Persistence of the Ya Ha Tinda elk population	\$3,913
2014-2015	AFĜA, MSL	Experimental Harvests for CWD Control in Mule Deer	\$20,000
2014-2015	AFGA, MSL	Persistence of the Ya Ha Tinda elk population	\$26,769
2014-2015	ACA	Experimental harvest for CWD control in wild cervids in Alberta	\$38,809
2014-2015	ACA	Persistence of the Ya Ha Tinda elk population: the role of calf survival	\$23,000
2013-2015	RMEF	Ya Ha Tinda Elk Study - 2013	\$15,249
2013-2016	Alberta's Conservation	Experimental harvests for CWD control in	\$25,000
	Collaboration, MSL	wild cervids	
2013-2014	Alberta's Conservation Collaboration, MSL	Persistence of the Ya Ha Tinda elk herd: the role of calf survival	\$18,399
2013-2014	SCI, Northern Alberta Chapter	Persistence of the Ya Ha Tinda elk herd: the role of calf survival	\$23,171

SCI, Northern Alberta

Chapter SCI, Northern Alberta

2013-2014

2013-2015

	Page 8
Persistence of the Ya Ha Tinda elk herd: the role of calf survival	\$2,500
Experimental harvests for CWD control in wild Cervids	\$6,000
Persistence of the Ya Ha Tinda elk population: the role of calf survival	\$3,500
Persistence of the Ya Ha Tinda elk population: the role of calf survival	\$4,485
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2013-2015	SCI, Northern Alberta Chapter	Experimental harvests for CWD control in wild Cervids	\$6,000
2013-2014	TD Friends of the	Persistence of the Ya Ha Tinda elk	\$3,500
2013 2011	Environment Foundation	population: the role of calf survival	ψ5,500
		population, are fore of call bar first	
2013-2016	Alberta Sport	Persistence of the Ya Ha Tinda elk	\$4,485
	Connection, Recreation,	population: the role of calf survival	
	Parks & Wildlife		
	Foundation		
2013-2014	ACA	Persistence of the Ya Ha Tinda elk	\$20,000
		population: the role of calf survival	
2012-2013	ACA	Estimating deer contact rates to design a long-	\$8,455
		term experiment for reducing CWD	
2012 2012		prevalence in Alberta	\$25,500
2012-2013	ACA	Long-term Studies and Elk Calf Study at Ya	\$25,500
		Ha Tinda	
2012-2013	Parks Canada, Banff	Wolf Scat Analysis	\$4,992
2012-2013	National Park	Wolf Seat 7 Marysis	ψ -, $\mathcal{I}\mathcal{I}$
2011-2013	NCASI	Effects of Herbicide Application and Elk	\$37,359
		Herbivory on Vegetation at Mount St. Helens	USD
2011-2017	NSERC, Discovery Grant	Ecological Processes in Heterogeneous	\$190,000
	-	Landscapes: predation and disease	
2011-2012	Washington Commission	Effects of Forestry Herbicides and Herbivory	\$39,737
	of Pesticides	on Habitat Quality for Big Game in Western	
		Washington	
2011-2012	RMEF	Mount Saint Helens Habitat Assessment #1	\$12,997
2010-2012	Alberta Innovates	Decision Support Tools for Chronic Wasting	\$117,780
		Diseases	*****
2009-2014	Parks Canada	Vegetation and Elk Population Research for	\$74,975
2000 2010		Managing the Ya Ha Tinda Elk Herd	\$20.000
2009-2010 2009-2010	ACA ACA	Ya Ha Tinda Elk & Vegetation Study	\$20,000 \$24,500
2009-2010	ACA	Predicting CWD Spread from Saskatchewan into Alberta	\$34,500
2009-2010	SCI, Northern Alberta	Wolf Summer Kill Rates	\$4,000
2007-2010	Chapter	won Summer Kin Rates	ψ - ,000
2009-2012	ACA, Biodiversity Grant	Summer Wolf Predation in the Central	\$19,800
		Eastern Slopes of the Rocky Mountains,	4-29000
		Alberta	
2009	Alberta Sport,	Wolf Summer Kill Rates	\$4,700
	Recreation, Parks &		
	Wildlife Foundation		
2008-2009	ACA	Deer Sight-ability and Survey Design in	\$39,742
		Alberta Prairies	
2008-2009	ACA	Ya Ha Tinda Elk Vegetation Study	\$34,500
2008-2009	ACA	Pack-size and Wolf Predation	\$37,200
2008-2009	SCI, Northern Alberta	Pack-size and Wolf Predation	\$3,500
2000 2000	Chapter		ФОО 000
2008-2009	FNAWS, Alberta Chapter	Pack-size and Wolf Predation	\$30,000

2008-2009	FNAWS, Eastern Chapter	Pack-size and Wolf Predation	\$1,000 USD
2008-2009	Alberta Professional Outfitters Society	Pack-size and Wolf Predation	\$30,000
2008-2009	AFGA, MSL	Pack-size and Wolf Predation	\$17,250
2003-2009	FNAWS, International	Pack-size and Wolf Predation	\$25,000
2007-2008	Chapter	Tack-size and won Tredation	\$25,000 USD
2007-2008	FNAWS, Alberta Chapter	Pack-size and Wolf Predation	\$30,000
2007-2008	Alberta Professional	Pack-size and Wolf Predation	\$30,000
2007 2000	Outfitters Society		#= 000
2007-2008	Alberta Sport, Recreation, Parks & Wildlife Foundation	Ya Ha Tinda Elk Winter Foraging	\$5,000
2007-2008	ACA	Deer Sight-ability and Survey Design in	\$34,742
2007 2000	non	Alberta Prairies	φ3 1 ,7 1 2
2007-2008	ACA	Modeling for proactive management of CWD	\$30,200
2007-2008	Alberta Professional	Modeling for proactive management of CWD	\$2,000
	Outfitters Society	51 5	+)
2006-2010	APRI	Spatial spread of CWD: genetic and animal	\$1,636,000
		movement approaches (Co-PI's - D. Coltman & M. Pybus)	
2006-2007	FNAWS	Wolf predation on ungulates (Co-PI - N. Webb)	\$10,000
2006-2007	Alberta Professional	Wolf predation on ungulates (Co-PI - N.	\$8,000
	Outfitters Society	Webb)	
2006-2007	ACĂ	Deer movements to predict chronic wasting	\$30,000
		disease spread	*
2006-2007	ACA	New field techniques for estimating wolf	\$33,000
		densities (Co-PI - N. Webb)	
2006-2011	NSERC, Discovery Grant	Linking species to ecosystems: predation	\$116,000
		mediated nutrient flows	
2005-2006	NSF	Joint Ecology & Ecosystem Panels,	\$80,000
		Mechanistic basis for landscape ecology of	USD
		ungulates (Co-PI's - P. Turchin, M. Turner, J.	
		Fryxell, M. Boyce)	
2005-2007	RMEF	Determining wolf predation from GPS-based	\$51,888
		movements (Co-PI - N. Webb)	
2005-2006	ACA	Habitat use and population monitoring of elk	\$12,000
		in East Central foothills of Alberta (Co-PI's -	
		R. Anderson & J. Frair)	
2005-2006	Talisman Oil Company	A computer interface for models of	\$15,000
		cumulative impacts from land management on	
		elk (Co-PI's - R. Anderson & J. Frair)	
2005-2006	ACA, Biodiversity Grant	Determining wolf pregnancy using fecal	\$8,000
		hormones (N. Webb)	**
2005-2006	Alberta Professional	Determining wolf predation from GPS-based	\$3,444
2 7	Outfitters Society	movements	
2005	NSERC, RTI Grant	Travel infrastructure for field studies (Co-PI -	\$36,567
		S. Hannon)	

2005	NSERC, RTI Grant	Integrated field system for measuring animal movement (Co-PI - Cassidy St. Clair)	\$21,786
2005	FNAWS	Wolf predation on ungulates	\$3,500
2005	SCI, Northern Alberta	Predation rates on ungulates by wolves in	\$1,000
	Chapter	Alberta	ŕ
2004-2006	Weyerhauser Company	Trans-boundary elk and wolf movements to Jasper National Park	\$127,000
2004-2006	ACA	New field techniques for estimating wolf densities and predation rates	\$72,038
2004-2005	Wilburforce Foundation, Y2Y Grant	Pregnancy rates of wolves: a non-evasive approach through scat analysis	\$29,887
2003-2008	NSERC, Collaborative Research Opportunities	Spatial dynamics of wolf predation in Central East Alberta (Co-PI's - M. Boyce & J. Fryxell)	\$1,064,840
2005	RMEF	Foraging ecology of native ungulate communities: implications for dietary competition	\$13,000
2003-2006	RMEF	Ya Ha Tinda elk migration and management study	\$65,060
2003-2006	ACA	Evaluation fire management scenarios: ungulate habitat potential (Co-PI - M. Hebblewhite)	\$54,430
2003-2004	ACA, Biodiversity Grant	Wolf predation on elk migration (Co-PI - M. Hebblewhite)	\$13,050
2002-2006	NSERC, Strategic Project	Precision Ranching: Multi-species grazing systems (Co-PI's - R. Hudson, R. Grant, E. Bork, D. Hik & J. Cahill)	\$784,000
2002-2004	Parks Canada, Wood Buffalo National Park	Seasonal dynamics and carry capacity of bison forages in Wood Buffalo National Park (Co-PI - J. Wilmshurst)	\$49,047
2001-2004	Parks Canada, Banff National Park	Effects of wolf predation and seasonal forage dynamics on elk migration in Banff National Park	\$184,600
2001-2003	National Geographic Society	Wolves in Yellowstone: Multi-trophic level responses to the addition of a top carnivore (Co-PI's - R. Peterson, M. Boyce & L. Mech)	\$150,000 USD
2001	RMEF	Effects of elk herbivory on soil and vegetation in grassland communities of Alberta	\$12,000
2001	CFI	Precision Ranching (Co-PI's - M. Price, E. Bork, R. Hudson, J. Cahill, D. Hik, R. Pelletier, S. Jeffery & S. Moore)	\$440,000
2000-2004	Sunpine Forests, Weyerhauser, RMEF & ACA	Population monitoring and land-use impacts on resident and translocated elk in Alberta	\$450,000
2001-2004	National Science Foundation of Innovation	Building a mechanistic basis for landscape ecology of ungulate (Co-PI's - P. Turchin, M. Turner, J. Fryxell & M. Boyce)	\$2,080,000 USD
2000-2002	Parks Canada, Jasper National Park	Grazing in grassland communities in Jasper National Park	\$20,000

2000	CFI, New Opportunities	Biotelemetry analysis system: infrastructure	\$340,000
	Equipment Grant	for cumulative effects (Co-PI's - M. Boyce &	
		S. Lele)	

CONFERENCE/MEETING ORGANIZATION & CHAIR since 2010

- 2019 Moderator, Conservation & Ecology of Mammals, The Wildlife Society, Reno, NV, Oct 2
 Program Co-Chair, Joint meeting of the Alberta Chapter and the Canadian Section of The Wildlife Society, Canmore, AB Mar 25-27
- 2017 Co-organizer The Canadian Section of The Wildlife Society (CSTWS) Symposium National Conservation Summit, Kananaskis, AB - Nov 26-28
 - Predator Control Special Session AB Chapter of The Wildlife Society, Lac La Biche, AB, 19 Mar
- 2016 Symposium Organizer, Joint meeting: Canadian Section Canadian Section of The Wildlife Society & Canadian Ecology & Evolution Society, St John's, NF - Jul 7-10
 - Wildlife Society 22nd Conference, Ecology & Habitat Relationships, Winnipeg MB, 20 Oct
- 2015 Western States & Provinces Deer and Elk Workshop, CWD Special Session, Canmore, AB, 14 May
- 2013 Co-Chair, Joint Meeting of the Canadian Section of the Wildlife Society and the Alberta Chapter of The Wildlife Society, Canmore, AB Mar 8-10
- 2010 Co-Chair, Special Symposium on sustainable use and hunting, ICCB-Society for Conservation Biology Annual Meeting, Edmonton, AB - July 4
 - Co-Chair, Program Committee, Canadian Section Annual Meeting, Edmonton, AB July 3

INVITED REVIEWS

Research Grants:

- USGS, Review of our spatial analyses for feedground elk related to CWD, Aug 2022
- Alberta Agriculture and Forestry: Research Proposal, Nov 2021
- Natural Sciences and Engineering Research Council of Canada (NSERC) Reviews Discovery Grants (10 reviews) since 2005
- Alberta Conservation Association Biodiversity Student Grants 2002-2019
- Minnesota Environment Natural Resources Trust Fund Research Grant 2016
- MITACS MITACS Accelerate Grant 2016
- Natural Environment Research Council (NERC)-Science Programs, UK New Investigator Grant – 2014
- Alberta Conservation Association Grant Eligible Conservation 2005-2014
- Natural Environment Research Council (NERC), UK PFD Scholarships 2012
- US-Israel Bi-national Science Foundation, Ecology Program 2009
- National Science Foundation, Ecology Program Grant (2) 2008
- Research Council of Biological Sciences and Environment, Academy of Finland, Research Grants 2003, 2005
- South African Resource Foundation, Pretoria, Research Grants 2003
- National Science Foundation: Ecology Program, Washington D.C., Research Grants 1992, 1994
- Milwaukee Zoological Society, Student Scholarship Grants 1996, 1998
- UW-National Park Service Center, Laramie WY, National Park Research Grants 1990-1993

Invited Program/Scholarship/Tenure Reviews:

- Review Panel: Canadian Council of Animal Care guidelines: Wildlife, 2020-2021
- University of Wyoming Full professor review, 2021
- Alberta Chronic Wasting Disease Management and Policy Review, 2018-2019

- Draft Research and Monitoring Plan for the Little Smoky Caribou Rearing Facility June 2019
- Tenure and Promotion review, Memorial University October 2018
- Tenure and promotion review, Lakehead University September 2018
- Columbia Mountains Institute, BC, Program Review: Southern MT Caribou 2016
- University of Minnesota, Tenure/Promotional External Review 2016
- Southern Illinois University, Tenure/Promotional External Review 2015
- ESRI Canada, ESRI Canada Scholarship Program 2016
- University of Alberta, Dick Peter Conference Student Judge 2015
- University of Vermont, Tenure External Review 2014
- Swedish University of Agricultural Sciences, PhD External Examiner 2013
- Iowa State University, Tenure External Review 2012
- University of Saskatchewan, PhD External Examiner 2011
- The Wildlife Society-Technical Report, Ungulate Management in Parks 2011
- University of Calgary, Biological Sciences, Faculty Tenure Review 2010
- Université Claude Bernard-Lyon 1, Laboratoire de Biométrie et Biologie Evolutive (LBBE), PhD Dissertation Examiner 2008
- US Forest Service-Alaska Region, Wildlife Resource Monitoring, Technical Reviewer 2005
- Washington State University, Natural Resources, Tenure/Promotional External Review 2002

Professional Activities and Positions:

- 2018-2024 Canadian Section Representative to The Wildlife Society
- 2018-2022 Board member, Canadian Section of Wildlife Society
 - 2012 Fellow, The Wildlife Society
 - 2018 Board Member, British Columbia Government, Management Plan for Rocky Mountain Elk
- 2015-2018 Chair, The Wildlife Society Canadian Section Awards
- 2012-2018 Co-Chair, Boone & Crocket Club Conservation Grants Subcommittee, 2012-2018
 - 2017 MSc Thesis External Examiner, Memorial University (Dec)
 - 2016 Alberta Prion Research Institute, CWD Regional Workshop
 - 2015 Past President, The Wildlife Society Canadian Section
 - 2014 President, The Wildlife Society Canadian Section
 - 2013 President-elect, The Wildlife Society Canadian Section
 - 2012 Fellow, The Wildlife Society
 - 2012 Chair, The Wildlife Society Aldo Leopold Award Committee
 - 2011 Co-organizer, The Wildlife Society Canadian Section, 1st Student Conclave
 - 2011 Chair, The Wildlife Society Jim McDonough Awards
- 2010-2011 Past President, The Wildlife Society Alberta Chapter
- 2009-2010 Executive Board Member, The Wildlife Society Canadian Section
- 2007-2010 Committee Member, Alberta Ingenuity: Policy for TSE Surveillance
 - 2009 Chair, The Wildlife Society, Presidential Nominations
- 2008-2009 President, The Wildlife Society Alberta Chapter
 - 2008 President-elect, The Wildlife Society Alberta Chapter
 - 2008 Chair, Alberta Fish & Wildlife, Wolf Management Research
- 2007-2008 Chair The Wildlife Society Canadian Section, Nominations Committee
- 2007-2008 Committee Member, Alberta Prion Research Institute, Planning and Priority Committee: CWD Surveillance
 - 2007 President, The Wildlife Society Alberta Chapter
 - 2006 President-elect, The Wildlife Society Alberta Chapter
 - 2005 Scientific Committee Member Jasper National Park, Elk Monitoring Review Panel

- **2004** International Expert Panel Member CWD in Canadian Wildlife, University of Saskatchewan, Canadian Cooperative Wildlife Health Centre
- 1999-2003 Membership Chair, The Wildlife Society Alberta Chapter
- 2001-2002 Executive Board Member, The Wildlife Society Alberta Chapter
 - 2000 Selection Committee Member, Journal of Wildlife Management (Editor search)
- 1995-1996 Treasurer, University of Wisconsin-Stevens Point Sigma Xi
- 1992-1993 Chair, The Wildlife Society Wyoming Chapter, Awards Committee
- 1990-1991 Chairperson, The Wildlife Society Wyoming Chapter, Resolutions and Position Statements
- 1988-1990 Newsletter Editor, The Wildlife Society, Wyoming Chapter 1988-1990

Professional Memberships:

- Boone & Crockett Club, Professional member since 2011
- Wild Sheep Foundation Life member since 2010
- Wildlife Disease Association Life member since 2008
- The Wildlife Society Canadian Section since 2007
- The Wildlife Society Alberta Chapter- since 1999
- The Wildlife Society Wisconsin Chapter- 1994-1999
- The Wildlife Society Wyoming Chapter 1986-1994
- The Wildlife Society since 1976
- Canadian Society of Ecology and Evolution since 2006
- Ecological Society of America since 1988
- International Association for Landscape Ecologists since 1996
- Rocky Mountain Elk Foundation Life member since 1985
- Society of Conservation Biologists since 1993
- Sigma Xi 1995-2015

Community Involvement

- 2018 2022 Dukes Rach, Riding Establishment
- 2005 2018 Sherwood Park Fish and Game Club
- 2002 2021 Alberta Trapper Association: Registered Trapline
- 2002 2003 Cancer Society- canvassing, Edmonton
- 2001 2003 PTA McKernan Junior High School, Edmonton
- 2000 2003 SWAT Hockey League, Edmonton
- 1995 1997 PTA Steven Point Middle School, Stevens Point
- 1995 1999 Portage County Youth on Ice Hockey League representative
- 1994 1999 Boy Scouts of America Pack 292
- 1994 1999 YMCA, Steven Point, WI

COURSES TAUGHT

<u>Undergraduate Courses</u>	# Semesters	# Students	# Credits
University of Alberta (1999- present)			
Conservation biology (Bio 468)	12	12-18	3
Diversity of life (Bio 108)	8	315-360	3
Landscape ecology (Bio 471) *	21	11-18	3
Landscape ecology & applications (Bio 571) *	21	11-18	3
University of Wisconsin-Stevens Point (1994-1999)			
Introduction to Fish & Wildlife Management*	3	25-30	3
Wildlife Techniques*	8	25-30	3

University of Wyoming (1986-1994)			
General Biology	1	350	3
Wildlife Management (Game Biology) *	4	65-70	3
Vertebrate Natural History*	2	35-40	4
Introduction to Birds & Mammals*	2	35-40	2
Natural History of Fishes, Amphibians & Reptiles*	2	45-40	2
* Lab courses			
Graduate Courses and Seminars	<u># Semesters</u>	<u># Students</u>	<u> # Credits</u>
<u>University of Alberta (1999- present)</u>			
Biol 633: Movement in habitat selection	1	13	1
Biol 633: Spatial epidemiology	1	6	1
Biol 633: Models for animal movement	1	8	1
Biol 468: Conservation Biology	2	20	3
Biol 633: Habitat Ecology	1	8	1
Biol 571: Landscape Ecology	9	12	3
Biol 633: Herbivore Nutritional Ecology	1	6	1
Biol 564: Introduction to GIS and GPS	1	7	1
<u>University of Wisconsin-Stevens Point</u> (1994-1999)			
Issues of Scale in Ecology	1	10	2
Advanced Statistics	1	8	0.5
Biodiversity and Conservation	2	15	2
Plant-Herbivore Dynamics	1	12	2
<u>University of Wyoming</u> (1986-1994)			
Wildlife Habitat Ecology	3	13-16	2
Spatial Statistics and Modeling	1	12	2
GIS Applications in Environmental Modeling	1	11	2 1
Riparian Ecology & Management Seminar	1	8	1
Game Harvest Management	1	14	1
Fire Ecology Seminar	1	12	1
Multivariate Statistics Seminar	1	8	1

Short-courses:

2011

Applied Ecology: Resource selection functions. International Research School in Applied Ecology, Hedmark University, Evanstat, Norway. 9-12 August 2011.

Student Advising:

2007-2010	Advisor: Ecology program	University of Alberta
2006	Mentor: Outreach program	WP Wagner High School, Edmonton
1990-1994	<i>Advisor:</i> Student Chapter of The Wildlife Society	University of Wyoming
SUPERVISED		
<u>Undergraduate</u>	e Supervision:	

ision:	
<u>Dates</u>	Project Title and Awards
2021	URI - Effect of Insect Harassment on Woodland Caribou
	Movement in Northeastern Ontario
2020	USRA – Deer contacts from remote cameras
2019	URI - Deer RSF from remote cameras
2018-2019	Bio 499 – Honors thesis, Ya Ha Tinda elk grouping dynamics
2018-2019	Bio 499 – Honors thesis, Landscape heterogeneity on mule deer
2018-2019	Bio 399 - Time-to-event modeling for deer habitat use
	Dates 2021 2020 2019 2018-2019 2018-2019

Dascha Ivanova Robert Lu Maria Dobbin Eleanor Stern	2018-2019 2018-2019 2018 2018	Bio 298 – Woody cover influence on deer contact domains Bio 298 – Habitat selection of mule deer CWD mule deer study, Summer NSERC USRA CWD Modeling with ALCES, Blanch Summer Undergrad
Khadija Malik Michelle Bentley Dana Wong Tehseenah Zahrah Jessica Melsted Darby McPhee	2017-2018 2017-2018 2017-2018 2017-2018 2017-2018 2017-2018	Researcher Stipend Bio 398, Caribou foraging ecology – video translation Bio 499, Summer elk response to predator occurrences Bio 398, Caribou foraging ecology – video translation
Jesse Lentz Jed Pettit	2016-2017 2015-2016	Bio 499, Honors. Thesis, Hormonal reaction to stress in elk Bio 399, Honors Thesis, Density-dependent habitat selection
Alyssa Bonart Alyshia Skurdal Alexandra Beatty Trevor Pettitt	2014-2015 2014-2015 2014-2015 2014-2015	of elk Bio 499, Honor Thesis, Spatial predation at Ya Ha Tinda Bio 399, Undergrad research: Prey Diversity in Predator Diets Bio 398, Undergrad research: Comparison of scat methods Bio 499, Honors thesis, Genetic relatedness and connectivity
Nicole Boucher Kerri Krawchuk	2014-2015 2013-2014	in deer Bio 499, Honors thesis, Stress hormones in elk Bio 499. Honors thesis. Grizzly bear habitat selection, Biology 499 Student award
Stephanie Coates	2012-2013	Comparison of wolf diets at Ya Ha Tinda, 2005 and 2012. Parks Canada Report, 15 pp.
Brett Howard	2009-2010	Bio 499. Honors Thesis. Prey space use in a multi-predator system.
Patrick Jones	2008-2009	Bio 499. Honors Thesis, Areas-intensive search patterns of ungulate grazing assemblages
Barry Norbert	2008-2009	Bio 499. Honors Thesis, Habitat selection of deer in CWD areas
Crystal Riczu	2007-2008	Bio 499. Honors Thesis. Is hunter success related to wolf reintroduction in Idaho
Chelsea Flaig	2007-2008	Bio 499. Honors Thesis. Coyote diets related to deer availability

Master's Supervision:			
Name	Degree	<u>Thesis/Project Name</u>	Post-degree Position
	Date		
Madeline Trottier	2022	Winter behaviour in a new migratory	Environmental
		segment: Ya Ha Tinda elk herd	consultant
Maria Dobbins	2022	Contact models of CWD in mule deer	UA-Research
			Technician
Kelsey Gritter	2022	Modeling CWD due to artificial attractants	UA-Research analysis
Kelly Mulligan	2021	Loss of migration in B.C. elk	
Jacalyn Normandeau	2019	Parasites in elk migratory segments	Technician
			UAlberta/UMontana
Mitchell Flowers	2019	Winter predator distribution at Ya Ha Tinda	Environmental
		-	Consultant,
			Smithers, B.C.
Kara MacAulay	2019	Spatial distribution of prey in scats, Ya Ha	BC Wildlife Ministry
-		Tinda	2

Allicia Kelly	2019	Woodland caribou habitat selection	
Eric Spilker	2018	Spatial distribution of prey in scats, Ya Ha	Medicine Hat, Alberta
		Tinda	
Shantel Sparkes	2016	Elk carrying capacity since 1980 Mt. St.	Environmental
		Helens eruption	Consultant, North Shore
			Environmental
			Consultants Inc.
Kerri Krawchuk	2014	Cougars and wolves: sympatric ecology	
Celie Intering	2014	Elk grouping dynamics at Ya Ha Tinda	Wildlife Technician at
e			University of Alberta
Andrew Geary	2013	Habitat relationships of elk at Mt. St. Helens	2
Barry Norbert	2012	CWD: modeling movement corridors	Alberta Fish & Wildlife
Lindsay Glines	2011	Grassland vegetation dynamics at Ya Ha	Saskatchewan
-		Tinda.	Environment
Peter Knamiller	2011	Wolf summer predation in AB.	Wildlife Technician,
		_	University of Alberta
Tom Habib	2010	Ecology and management of white-tailed	Alberta Biodiversity
		deer and mule deer of east-central Alberta in	Monitoring Program
		relation to chronic wasting disease.	
Barry Robinson	2009	Foraging-predator avoidance trade-offs made	PhD University of
		by Migrant and resident elk (Cervus elaphus)	Alberta
		on their sympatric winter range	
Heather McPhee	2009	Kill site selection and attack rates of wolves	Environmental
		in heterogeneous environments in west	consultant
		central Alberta.	
Phil DeWitt	2008	Ungulate guild dynamics in aspen parklands	Environmental
			Consultant Matrix
	2005		Solutions
Maria Didkowsky	2007	Foraging behavior of ungulates in aspen-	Parks Canada
	2007	prairie.	
Hannah McKenzie	2007	Wolf movement responses to on linear	PhD program at
Taman Allan	2004	features.	University Alberta
James Allen	2004	RSF stratification-based survey methods.	Head Biologist, Game
			and Priority Species,
Stephen Hamilton	2004	Effects of habitat on bison in Wood Buffalo	SRD, AB. Dialogist Alberta
Stephen Hammon	2004	NP.	Biologist, Alberta Conservation
		111.	Association
Megan Watters	2003	Effects of seasonal grazing on grassland	Environmental
Megan Waters	2005	soils.	consultant, Edmonton,
			AB.
Leslie McInenly	2003	Seasonal grazing on montane rough fescue.	Minnesota Department
200110 1/101110111j	2000		Conservation
University of Wyoming	(Completed)		
Tom Kohley	1996	Habitat modeling approaches in Gap	
Tom Komey	1990	• • • •	Owner and Operator at
		Analysis	Ranch Maps, Billings,
			Montana
Greg McDaniel	1995	Deer ecology on Devils Tower National	
0 1/ 11	1005	Monument	
Sean Kelly	1995	Elk and cattle impact on riparian areas, Idaho	

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Doug McWhirter (co-advisor)	1993	Winter foraging ecology of bighorn sheep	Wildlife Biologist, Cody WY			
Doctoral Supervision:						
<u>Name</u>	<u>Degree</u>	Thesis/Project Name	Post-degree Position			
Dhilin Wallson	<u>Date</u>	Founding coolers & hobitat coloring of could as				
Philip Walker	current	Foraging ecology & habitat selection of caribou during calving				
Jodi Berg	2019	Elk calf ecology at Ya Ha Tinda	Idaho Fish and Game			
			Biologist			
Peter Smolko	2013	Fire-habitat relationships of Cervus elaphus	Slovakia			
Darcy Visscher	2010	Trade-offs between risk and reward at multiple scales: A state-dependent approach	Instructor, Kings College			
Nathan Webb	2009	Density, demography, functional response of wolf population in central Alberta, Canada.	Alberta Carnivore Biologist			
Mark Hebblewhite	2006	Wolf predation on elk foraging and migration.	Assoc. Professor, University of Montana,			
Jacqui Frair	2005	Cumulative effects of forestry on elk.	Missoula Associate Professor, SUNY, Syracuse			
Postdoctoral Supervision:						
<u>Name</u>	Date	<u>Project</u>	Post-degree Position			
	Completed					
Jingjing Xu	current	PDF: Modeling transmission of CWD				
Peter Smolko	2020	PDF: Modeling CWD spread	Slovakia			
Erin Rees	2009	PDF: Modeling CWD spread in SK & AB	Professor, Laval University, Quebec			
Daniel Fortin	2003	PDF: Foraging ecology of elk	Professor, Laval University, Quebec			
Alexei Potapov	2014	Research Associate: Epidemiological modeling of deer CWD	Research Associate University of Alberta			

GRADUATE STUDENT SCHOLARSHIPS & AWARDS

<u>Student</u>	Degree	<u>Year</u>	Award
Kelsey Gritter	MSc	2020-2021	NSERC CGS-M
			Alberta Graduate Excellence Scholarship
Madeline Trottier	MSc	2019-2020	NSERC CGS-M
		2020	Alberta Graduate Excellent Scholarship
Maria Dobbin	MSc	2020	GSA Teaching Assistant Award
		2019	Alberta Graduate Excellent Scholarship
Jacalyn Normandeau	MSc	2017-2018	NSERC CGS-M
		2017	University Admission Award
		2018	Best Poster Award - Alberta Chapter Wildlife Society
		2018	Best Student Poster: Alberta Chapter Wildlife Society
		2019	1 5
		2019	Best MSc Poster- Peters Conference, U Alberta. Edmonton, AB.
		2019	Alberta Chapter of the Wildlife Society Student Travel Grant.
Phil Walker	PhD	2018	1 5
			Certificate of Teaching Innovation
		2019	Best Student Presentation - Alberta Chapter Wildlife Society
			WCSC - W. Garfield Weston Fellowship Award
-		2017-2018 2017 2018 2018 2019 2019 2019 2019	 Alberta Graduate Excellent Scholarship NSERC CGS-M University Admission Award Best Poster Award - Alberta Chapter Wildlife Society Best Student Poster: Alberta Chapter Wildlife Society 2nd place Student Presentation - Alberta Chapter Wildlife Societ Best MSc Poster- Peters Conference, U Alberta. Edmonton, AE Alberta Chapter of the Wildlife Society Student Travel Grant. 2nd Place Poster - Alberta Chapter of the Wildlife Society Certificate of Teaching Innovation Best Student Presentation - Alberta Chapter Wildlife Society

Kelly Mulligan	MSc	2019	Teaching accommodation
Kara MacAulay	MSc	2017	UA Teaching Award
			Best oral presentation - Alberta Chapter of the Wildlife Society Bill Samuel Award
		2018	Graduate Teaching Award - Department of Biological Sciences UAlberta
			Alberta Chapter of the Wildlife Society Travel Grant
Eric Spilker	MSc	2014	NSERC-CGS- M Scholarship
			QE II
		2017	Best Poster - R.E. Peters Symposium, UAlberta, Edmonton, AB
		2018	Graduate Teaching Award - Department of Biological Sciences UAlberta
Jodi Berg	PhD	2012	Doctoral Recruitment Scholarship, UAlberta
		2015	William Wishart - Alberta Chapter of the Wildlife Society William Samuel Award, UAlberta
		2016	Best student poster - Alberta Chapter of the Wildlife Society
Shantel Sparkes	MSc	2015	University Teaching Award
		2016	William Samuel Award
Kerri Krawchuk	MSc	2014	NSERC-CGS- M Scholarship
Andrew Geary	MSc	2011	QE II
Barry Nobert	MSc	2010	NSERC-CGS-M Scholarship
			QE II
Patrick Jones	Ung	2009	NSERC-USRA summer internship
Lindsay Glines	MSc	2008	NSERC-CGS-M Scholarship
			QE-II
Heather McPhee	MSc	2008	Julia O'Hrapko Scholarship NSERC-PGS-M Scholarship
Treatmen wich liee	Wise	2008	QE-II (declined)
Tom Habib	MSc	2008	NSERC-CGS-M Scholarship
Barry Robinson	MSc	2008 2007	NSERC-CGS-M Scholarship
Darry Roomson	Wise	2007	Teaching Award, UAlberta
		2008	Teaching Award, UAlberta
Phil DeWitt	MSc	2007	Teaching Award, UAlberta
Chris Garrett	MSc	2007	NSERC: Julie Payette Graduate Scholarship
Darcy Visscher	PhD	2007	NSERC: Industrial Scholarship
Darcy Vissener	THD	2000	Teaching Award, UAlberta
		2007	Teaching Award UAlberta
Nathan Webb	PhD	2006	J Gordin Kaplan Graduate Student Award
	THD	2006	Louis D. Hyndman Sr. Award: Award for Animal Welfare in
			Research-Technical recipient
		2006	Graduate Student Award, Alberta Chapter of the Wildlife Society
		2007	Best Student Poster, Northwest Section of The Wildlife Society, Red Deer, Alberta.

Mark Hebblewhite	PhD	2002 2004 2005 2005 2005	Cannon National Parks Science Scholars Best Post Award, Alberta Chapter of The Wildlife Society Andrew Stewart Graduate Award, UAlberta NSERC Post-Doctoral Fellowship Parks Canada National Ecological Integrity Merit Award
Jacqui Frair	PhD	2006 2006 2006 2004	Martha Piper Graduate Award, UAlberta Convocation Governor General's Award, <i>Nomination</i> NSERC Doctoral award: UA Science nomination, Best student paper, Alberta Chapter of the Wildlife Society
		2005 2006	Graduate Student Award, Alberta Chapter of the Wildlife Society Outstanding Dissertation Award: <i>Nomination</i>
Hannah McKenzie	MSc	2005	Alberta Ingenuity Scholarship NSERC PGS Scholarship
Maria Didkowsky	MSc	2005 2004	Best student paper, Alberta Chapter of the Wildlife Society NSERC PGS Scholarship
Megan Watters	MSc	2001	NSERC PGS Scholarship

<u>Graduate Supervisory Committee</u> (member only)

<u>Name of Student</u>	Degree	Begin	End
Brianna Lorentz	MSc	2021	
Arlana Bennett	PhD	2020	
Alexa Macpherson	MSc	2019	
Noelle Helder	MSc	2019	2021
Maggie McDonald	MSc	2019	2020
Alex Beatty	MSc	2017	2020
Hans Martin (University of Montana)	PhD	2016	2021
April Manning	PhD	2016	2020
Amy Johnson	PhD	2015	2020
Elly Knight	PhD	2015	
Michael Peers	PhD	2015	2019
Julia Shonfield	PhD	2012	2018
Melanie Dickie	MSc	2011	2015
Meghan Anderson	MSc	2010	2014
Robert Found	MSc	2010	2014
Xiaofeng Ruan	PhD	2010	2016
Aditya Gangadharan	PhD	2009	2014
Ulrike Schlaegel	PhD	2009	2015
Tisa Bevan	MSc	2008	2011
Claudia Lopez	PhD	2008	2012
Marie Auger-Methe	PhD	2008	2014
Christine Lambert	PhD	2007	2012
Adam Blake	MSc	2007	2010
Michael Clark	MSc	2008	2010
Daniel Fitzgerald	MSc	2007	2012
John Nagy	PhD	2006	2009
Kim Dawe	PhD	2006	2011
Stephanie Nakada	MSc	2006	2009
Kerri Lappin	MSc	2006	2009

Todd Mahon	PhD	2005	2010
Holger Spaedke	MSc	2005	2009
Christy Strocel	MSc	2005	2009
Gerry Kuzyk	PhD	2004	2008
Ian Whittaker	MSc	2004	2008
Marg Glasgow	MSc	2003	2006
Emily Parks	MSc	2003	2005
Amy Hurford	MSc	2003	2005
Conrad Thiessen	MSc	2003	2006
Nathan Varley	PhD	2003	2007
Guangquan Su	PhD	2002	2004
Heather Hinam	PhD	2002	2007
Judy Muir	MSc	2002	2004
Angela Bogan	MSc	2001	2005
Evan Richardson	MSc	2001	2004
Elsebe Kloppers	MSc	2001	2004
Boyan Tracz	MSc	2001	2004
Glynnis Hood	PhD	2001	2006
Megan Colon	MSc	2000	2002
Nicole Koper	PhD	2000	2004
_			

PUBLICATIONS

<u>Peer-Reviewed Journal Publications (student, postdoc and research associate names are in **bold**):</u>

- 1. Risky Business: Relating probability of direct contact to risk of chronic wasting disease. *In review.* **Dobbin**, M. P. Smolko, L. Put, E. H. Merrill. Frontiers in Ecology and Evolution.
- 2. Berg, J., D. Eacker, M. Hebblewhite, and E. Merrill.2023. Elk calf survival in a partially migratory population. Journal of Wildlife Management. 2023;87:e22330.
- 3. Merrill, E.H., P.L. Kennedy, S.K. Skagen, and K. A. Granillo. 2022. Personal and institutional barriers to success: Challenges and solutions for women. Pages 86-112 in Women
- 4. in wildlife science: Building equity, diversity, and inclusion. C. Chambers and K. Nicholson, eds. Johh Hopkins Press, Baltimore.
- Xu, J., E.H. Merrill, M. A. Lewis. 2022. Spreading speed of chronic wasting disease across deer groups with overlapping home ranges. J. of Theor. Biol. 547: 111135 https://doi.org/10.1016/j.jtbi.2022.111135
- MacAulay, K., E. Spilker, J. Berg, M. Hebblewhite, and E. Merrill. 2022. Beyond the encounter: Predicting multi-predator risk to elk (*Cervus canadensis*) in summer using predator scat. Ecology and Evolution. 12(2): e8589 <u>https://doi.org/10.1002/ece3.8589</u>
- Normandeau, J. C Casssidy St. Clair, S. Kutz, M. Hebblewhite, and E. Merrill. 2022. What makes elk tick: winter tick (*Dermacentor albipictus*): grooming behavior in wild elk (*Cervus canadensis*). J. Mammal. 103(2): 373-382. <u>https://doi.org/10.1093/jmammal/gyab155</u>
- Smolko, P., D. Seidel, M. Pybus, A. Hubbs, M. Ball, E. Merrill. 2021. Spatio-temporal changes in chronic wasting disease risk in wild deer during 14 years of surveillance in Alberta, Canada. Prev. Vet. Med. 197(10): 105512 <u>doi.org/10.1016/j.prevetmed.2021.105512</u>
- Falcón-Cortés, A., D. Boyer, E. H. Merrill, J. L. Frair, J. M. Morales. 2021. Hierarchical, memory-based movement models for translocated elk (*Cervus canadensis*). Frontiers in Ecology & Evolution. doi: 10.3389/fevo.2021.702925.
- Berg, J., J. Reimer, P. Smolko, H. Bohm, M. Hebblewhite, and E.H. Merrill. 2021. Mothers' movements: Shifts in calving area selection by partially migratory elk, Journal Wildlife Management. 87: 1476-1489. DOI: 10.1002/jwmg.22099.

- 11. Kauffman, M.J., et al. 2021. Mapping out a future for ungulate migrations. Science. 372(6542):566-569. (many authors). DOI: 10.1126/science.abf0998
- Normandeau, J., H. Martin, E. Merrill, and M. Hebblewhite. 2020. Potential case of hermaphroditism in elk (*Cervus canadensis*) in Alberta, Canada. The Canadian Field Naturalist. 134:241-247. https://doi.org/10.22621/cfn.v134i3.2481
- Sperling, J., Z. MacDonald, J. Normandeau, E. Merrill, F. Sperling, and K. Magor. 2020. Within-population diversity of bacterial microbiomes in winter ticks (*Dermacentor albipictus*). Ticks and Tick-Borne Diseases 11:101535. https://doi.org/10.1016/j.ttbdis.2020.101535
- 14. Aikens, E.O., et al. 2020. Wave-like patterns of plant phenology determine ungulate movement tactics. Current Biology 30: 1–6. (many authors) https://doi.org/10.1016/j.cub.2020.06.032
- Normandeau, J., S.J. Kutz, M. Hebblewhite, E.H. Merrill (2020). Living with liver flukes: Does migration matter? Internatl. J. Parasitology: Parasites and Wildlife. 12:76-84. https://doi.org/10.1016/j.ijppaw.2020.05.002
- Merkle, J.A., N.J. Anderson, D.L. Baxley, M. Chopp, L.C. Gigliotti, J.A. Gude, T.M. Harms, H.E. Johnson, E.H. Merrill, M.S. Mitchell, T.W. Mong, J. Nelson, A.S. Norton, M.J. Sheriff, E. Tomasik, K.R. Vanbeek, (2019) A collaborative approach to bridging the gap between wildlife managers and researchers. J. Wildl. Manage. 83:1644-1651. doi: 10.1002/jwmg.21759
- Muhly, T.B.; C.A. Johnson, M. Hebblewhite, E.W. Neilson, D. Fortin, J.M. Fryxell, A.D.M. Latham, M.C. Latham, P.D. McLoughlin, E.H. Merrill, P.C. Paquet, B.R. Patterson, F. Schmiegelow, M. Musiani, (2019). Functional response of wolves to human development across boreal North America. Ecol. Evol. 18:10801-10815. DOI: 10.1002/ece3.5600
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<u> Major Reports</u>

- 1. Hebblewhite, M. and E. Merrill. 2021. Mechanisms driving facultative switching in partially migratory species and population dynamics consequences. Five-year Summary report to National Science Foundation.
- 2. Hebblewhite, M and E. Merrill 2020. Testing for facultative switching between migratory strategies in a partially migratory, long-lived large herbivore population. Annual report to National Science Foundation. Long-term Environmental Biology program. 34pp
- 3. Merrill, E., **M. Dobbin, P. Smolko, J. Xu, J. Thalmann, L. Horne,** 2019. Quantifying contact rates for modelling transmission of chronic wasting disease. Annual Report. University of Alberta, unpublished report. 66pp.
- 4. Hebblewhite, M and E. Merrill 2019. Testing for facultative switching between migratory strategies in a partially migratory, long-lived large herbivore population. Annual report to National Science Foundation. Long-term Environmental Biology program. 34pp.
- Merrill, E., T. Habib, B. Nobert, E. Brownrigg, P. Jones, C. Garrett, A. Bertrand, J. Wachowski, M. Pybus, M. Ball, and J. Allen. 2014. Alberta Chronic Wasting Disease: North Border Deer Study Final Report. University of Alberta, unpublished report. 45pp
- 6. Nobert, B; Pybus, M (Alberta ESRD), Merrill, EH (University of Alberta) 2013. CWD Surveillance in Alberta 2005-2012: Literature Review and Initial Data Analysis. 109 pp
- 7. Demarais, S., L. Cornicelli, R. Kahn, E. Merrill, C. Miller, J. M. Peek, W. F. Porter, and G. A. Sargeant. 2012. Ungulate management in national parks of the United States and Canada. The Wildlife Society Technical Review 12-05. The Wildlife Society, Bethesda, Maryland, USA

- Merrill E. and M. Lewis. 2012. Decision support models for managing CWD in wild deer populations in Alberta. Final Report. Alberta Prion Research Institute, BioInnovates, Edmonton, AB. 16 pp
- Glines, L; Bohm, A; Spaedtke, H; Merrill, EH (Department of Biological Sciences University of Alberta); Eggeman, S; Deedy, A; Hebblewhite, M (Wildlife Biology Program, College of Forestry and Conservation, University of Montana) 2011. Ya Ha Tinda Elk Herd and Red Deer River Valley Ecotone Study: Final Report. 111pp
- Carbyn, L. E. Merrill, and A. Hubbs. 2008. Assessment of an alternative wolf management strategy: Experimental reduction of wolf pack sizes and predation. Science Committee Report. 9pp.
- Habib, T., C. Garrett, J. Stevens, D. Visscher, and E. Merrill. 2008. Report on the activities of the Border deer study in the province of Alberta: 30 April – 31 March 2008. University of Alberta, Edmonton, AB.
- 12. Coltman, D., E.H. Merrill, and M. Pybus. 2008. Albert Prion Research Institute, Annual Rept. 10pp.
- 13. **Habib**, **T**., C. Garrett, J. Stevens, and E.H. Merrill. 2008. Border deer study annual report. Submitted to Alberta Sustainable Resource Development. 34pp.
- 14. Merrill, E.H and C. Garrett. 2007. Border deer study annual report. Submitted to Alberta Sustainable Resource Development. 34pp.
- Boyle, E., N. Webb, C. Thiessen, M. Hebblewhite, and E.H. Merrill. 2006. Feasibility of using scats for determining wolf pregnancy rates: Implications for harvested wolves. Yellowstone to Yukon Conservation Initiative. Final Report. 27 pp.
- 16. Hebblewhite, M., R. Munro, and E.H. Merrill. 2005. Effects of post-fire logging on elk habitat during the first 3 years post-fire: a case study of the Dogrib Creek Fire in the east slope of Alberta. Report prepared for: Foothills Model Forest. Chisholm-Dogrib Fire Research Initiative. Hinton, Alberta. 76 pp.
- Merrill, E.H., J. Allen, J. Frair, D. Visscher, H. Beyer, N. Webb, D. Fortin, L. McInenly, and M.S. Boyce. 2005. Population monitoring, translocation, and the cumulative effects of industrial activities on elk (*Cervus elaphus*) in the Central Eastern foothills of Alberta, Canada. Completion Report. 40 pp.
- 18. Hamilton, S., E.H. Merrill, and J. Wilmshurst. 2005. Estimates of winter carrying capacity for bison in Wood Buffalo National Park. Report prepared for: Wood Buffalo National Park. 75 pp.
- Bollinger, T., P. Caley, E.H. Merrill, F. Messier, M. Miller, M. Samuel, and E. Vanopdenbosch. 2004. Chronic Wasting Disease In Canadian Wildlife: An Expert Opinion On The Epidemiology And Risks To Wild Deer. Final Report submitted to the Canadian Cooperative Wildlife Health Centre, University of Saskatchewan, Saskatoon.
- Merrill, E.H., H. Beyer, J. Frair, D. Visscher, D. Fortin, M.S. Boyce, and J. Allen. 2004. Vegetation mapping and dynamics of elk forage in the central east slope of Alberta. The Central East Slopes Elk and Wolf Study. University of Alberta, Edmonton. 37 pp.
- 21. Merrill, E.H., E. Anderson, J. Hardin, and N. Neimuth. 2000. Prairie Chicken Management : course GIS exercises. Lab manual. University of Wisconsin-Stevens Point, 148 pp. completion as part of 1999 University of Wisconsin Undergraduate Teaching Grant: *Integrating GIS into the Wildlife Program*.
- 22. Merrill, E.H. 1998. Prairie Chicken Surveys in Central Wisconsin. University of Wisconsin-Stevens Point. Stevens Point, WI. 25 pp.
- Merrill, E.H. 1997. Avian diversity in the Bighorn Mountains of Wyoming in relation to monitoring scale. University of Wisconsin-Stevens Point, WI. 96 pp. Final Report. Submitted to: Environmental Protection Agency, Washington, D.C. 65 pp.
- Merrill, E.H., T. Kohley, M. Herdendorf, W. Reiners, K. Driese, R. Marrs, and S. Anderson. 1996. Wyoming Gap Analysis: A geographic information system. University of Wyoming, Laramie, WY. 245 pp. Final Report. Submitted to: National Biological Service. 242 pp.

25. Merrill, E.H. and R.W. Marrs. 1995. Remote sensing of grassland vegetation recovery after the 1988 fires in Yellowstone National Park. University of Wyoming, Laramie, WY. Final Report. Submitted to: Yellowstone National Park, Mammoth, WY. 22 pp.

Popular Articles

- 1. **Krawchuk, K.,** E. Merrill, and M. Boyce. 2014. Aboriginal consumptive use. Alberta Outdoorsman. Winter 2014:18-20.
- 2. Berg, J., E. Merrill, M. Hebblewhite, and M. Boyce. 2014. Ya Ha Tinda elk herd: Persistence or Doom? Alberta Outdoorsman. Fall 2013: 6-9.
- 3. **Frair, J.L.,** E.H. Merrill, J. Allen, and M.S. Boyce. 2010. Experience influences success of elk translocations. Fair Chase. Boone and Crockett. April 2010 pp.
- 4. Merrill, E.H., M. Pybus, and M.S. Boyce. 2010. Chronic wasting disease--the big unknown. Alberta Outdoors. Sept 2010: 10-12.
- 5. Merrill E. and M. Boyce. 2010. Predator perspectives from down under. Alberta Chapter- The Wildlife Society. Newsletter 22:2-3.
- 6. **Frair, J.L.,** E.H. Merrill, J. Allen, and M.S. Boyce. 2009. How to translocate elk in risky landscapes. Alberta Outdoors. Fall 2009.
- 7. Merrill, E.H. 1990. Ashes to elk: Mount St. Helens elk recolonizing elk herds. Bugle 7:75-80.

Published as Editor-in-Chief: Editors Messages in Journal of Wildlife Management, 2013-2015

- 1. Merrill, E.H. A. Cox, and A. Knipps. 2015. The time has come and gone. *Journal of Wildlife Management* 7:1211-1212.
- 2. Merrill, E.H. 2015. A word about supplemental materials. *Journal of Wildlife Management* 7: 1039-1040.
- 3. Merrill, E.H. 2015. Bibliographic databases: Is the *Journal of Wildlife Management being found*? Journal of Wildlife Management 7: 693-694.
- 4. Cox, A. and E. H. Merrill. 2015 What taxa are appropriate for the Journal? *Journal of Wildlife Management* 79: 527-528.
- 5. Merrill, E.H. 2015. Where we go wrong: Issues of dual publication and self-plagiarism. *Journal of Wildlife Management* 79: 355-356.
- 6. Merrill, E.H. 2015. Sensitivity and integrity of authorship. *Journal of Wildlife Management* 79:171-173.
- 7. Merrill, E.H. 2015. Are management implications for the *Journal* ceremonial? *Journal of Wildlife Management* 79: 1-2.
- 8. Merrill, E.H. 2014. Time flies when there is no downtime. *Journal of Wildlife Management* 78:1321.
- 9. Merrill, E.H. 2014. Assassin or zealot: What makes a good manuscript review? *Journal of Wildlife Management* 78:1129-1130.
- 10. Merrill, E.H. and A. Cox. 2014. Reviewer overload and what can we do about it? *Journal of Wildlife Management* 78:961-962.
- 11. Merrill, E.H. and A. Knipps. 2014. What's in a title? *Journal of Wildlife Management* 78: 761-762.
- 12. Merrill, E.H. 2014. Should we be publishing more null results? *Journal of Wildlife Management* 78:569-570.
- 13. Merrill, E.H. 2014. Data sharing and reuse: What are the issues? *Journal of Wildlife Management* 78: 381-382.
- 14. Merrill, E.H. 2014. Why Publish in the *Journal of Wildlife Management? Journal of Wildlife Management* 78:181-182.
- 15. Merrill, E.H. 2014. The time had come. Journal of Wildlife Management 78:1-2.

<u>Theses</u>

- 1. Merrill, E.H. 1987. Population dynamics and habitat ecology of elk in the Mount St. Helens blast zone. Ph.D. Thesis. Univ. Washington, Seattle, Washington. 204 pp.
- 2. Merrill, E.H. 1978. Nutrient cycling in a vegetation-ungulate complex. M.Sc. Thesis. University of Idaho, Moscow, Idaho. 103 pp.

Manuscripts of students while under my supervision but not co-authored

- 1. MacAulay, K., J. Normandeau, and M. Boyce. 2016. The hairy truth: investigating predators and prey. Alberta Outdoorsman. Nov.
- Moorter, B.V., D.Vissher, S. Benhamou, L. Borger, M.S. Boyce, and J-M Gaillard. 2009. Memory keeps you at home: a mechanistic model for home range emergence. *Oikos* 118:641-652.
- Gillies, C.S., M. Hebblewhite, S.E. Nielsen, M.A. Krawchuk, C.L. Aldridge, J.L. Frair, D.J. Saher, C.E. Stevens, and C.L. Jerde. 2006. Application of random effects to the study of resource selection by animals. *Journal of Animal Ecology* 75:877-898.
- 4. Hurford, A., M. Hebblewhite, and M.A. Lewis. 2006. A spatially explicit model for the Allee effect: why wolves recolonize so slowly in Greater Yellowstone. *Theoretical Population Biology* 70:244-254.
- 5. Visscher, D.R. 2006. GPS measurement error and resource selection functions in a fragmented landscape. *Ecography* 29:458-464.
- 6. Jerde, C.L. and D.R. Visscher. 2005. GPS measurement error influences on movement model parameterization. *Ecological Applications* 15:806-810.

ORAL PRESENTATIONS (co-author presented) since 2010 (student presentations not listed) 2023

- Risky business: relating probability of contact to disease on the landscape. Saskatechwan Chapter of the Wildlife Society, Feb 3 2023. (Merrill/Dobbin)
- Bridging the gap between wildlife and science. Alberta Fish and Wildlife: Wildlife Community of Practice Meeting. Jan 19 2023 (Merrill)

<u>2022</u>

- Taking the long view: Rewards and challenges in long-term research. The Wildlife Society Annual Conference, Spokane, WA Nov 6 2022. (Merrill/Hebblewhite).
- International Engagement in The Wildlife Society. Norway Student Chapter of the Wildlife Society, Inland Norway University of Applied Sciences, Evanstat, Norway.
- CWD Marching on in Alberta. Alberta Innovates Clean Resources Team, Alberta Innovates. 16 Nov 2022 (Merrill)
- Models for managing wildlife diseases. Inland Norway University of Applied Sciences, Evanstat, Norway, 27 Aug 2022 (Merrill)

<u>2021</u>

- Modeling CWD spread: CWD Research Update, Alberta Prion Research Institute, Edmonton, AB (virtual) 27 April
- Alberta CWD Risk Modeling: final application demonstration. Alberta Environment and Parks. Edmonton, AB (virtual), 21 Jan. (Put/Merrill).

<u>2020</u>

- Alberta CWD Risk and Spread Modeling, Alberta Environment Scientific Series, Edmonton, AB, virtual) Dec 6.
- Alberta CWD Risk Modeling: progress and update. Alberta Environment and Parks. Edmonton, AB (virtual), Jun 18. (Put/Merrill).

<u>2019</u>

- <u>Invited speaker</u>: Long-term research at the Ya Ha Tinda, AB. Alberta Trail Riding Association, Edmonton, AB 20 Jan 26.
- <u>Invited speaker</u>: Research, training and Career Opportunities, Second Training Conference, University of Alberta, Nov 13 (Merrill)
- <u>2018</u>

• <u>Invited speaker</u>: Twenty years of predators and prey in Alberta. BC Wildlife Federation Convention,

Fort St John, BC, 8 May 2019. (Merrill)

- <u>Invited speaker</u>: Women in Wildlife: Advocating for yourself. *Alberta Chapter of the Wildlife Society Annual Meeting*, Canmore, AB 23 Mar (Merrill).
- <u>Invited speaker</u>: Ontario Fish and Anglers General Meeting: Two talks: Chronic Wasting Disease the basics; 14 Mar.; CWD management and research in Alberta, Mississauga, ON Mar 15. (Merrill)
- <u>Invited speaker</u>: Winter Get Away, Challenges to Chronic Wasting Disease, Manitoba Chapter, Pinawa MB, 8 Feb. (Merrill)
- <u>Plenary Speaker: Six degrees of separation: Looking North at Wildlife Management in Canada</u>. *The Wildlife Society Annual Meeting, Cleveland, OH, USA,* 10 Oct (Merrill)
- <u>Invited Speaker</u> Using Animal Movement and Network Models to Understand Disease Transmission

and Spread. 9th International Deer Biology Congress Estes Park, CO. USA - 7 Aug

- <u>Invited</u> Speaker From animal movement to management: predator-prey interaction, US *Regional*
- Assoc. of the International Association for Landscape Ecology (US IALE) Chicago, IL. USA 9 April
- <u>Invited Speaker</u> Prions, wolves and elk movements in heterogeneous landscape. *University College*,

Dublin. Dublin, Ireland - 5 Apr (Merrill).

- <u>Invited Speaker</u> CWD: field studies in support of management. *Alberta Prion Research Institute*
- Scientific Meeting Calgary, AB 28 Feb (Merrill).
- <u>Invited Speaker</u> Animal movements in heterogeneous landscapes. *Dep. Zoology, Oxford University*.

Oxford, England - 19 Feb (Merrill)

<u>2017</u>

• <u>Invited Speaker</u> - CWD: An update from Alberta. *International Workshop on Chronic Wasting Disease:*

Emerging Questions in Science and Policy (November 8-9, 2017) Canmore, AB - 9 Nov (Merrill).

• <u>Invited Speaker</u> - Migratory elk herds at Ya Ha Tinda, *B.C. Government, Cranbrook, BC* - 23 Oct.

(Merrill)

• Do winter elk densities influence elk movement and trade-offs in winter habitat selection. *The Wildlife*

Society Animal Meeting, Albuquerque, NM, USA - 24 Sep. (Merrill)

• <u>Invited Speaker</u> - Long-term research reveals unexpected flexibility in migratory behaviors: its drivers

and population consequences in a large herbivore *Ecological Society Annual Meeting, Portland, OR, USA* - 8 Aug (Hebblewhite)

• <u>Invited Speaker</u> - Modeling animals' movements in heterogeneous landscapes. *University of Melborne*,

Melborne, Australia - July 29. (Merrill).

• <u>Invited Speaker</u> - Changing migration in the Ya Ha Tinda elk population: When where and why to

migrate? *12th International Mammalogical Congress, Perth, Australia* - 14 Jul. (Merrill & Hebblewhite)

• <u>Keynote</u> - Chronic wasting disease: where is it leading us? Natural resources and environment program,

University of Northern British Columbia, Prince George, BC - 24 March. (Merrill)

• <u>Invited Speaker</u> - Chronic Wasting Disease – updating the situation in Alberta. *Alberta Prion Research*

Institute Scientific meeting, Edmonton, AB - 28 Feb. (Merrill)

• <u>Keynote</u> - Mount St. Helens: a story of recovery. *Alberta Wilderness Association, Calgary, AB* - 2 Feb.

(Merrill)

<u>2016</u>

• <u>Invited Speaker</u> - Bridging the gap between wildlife research and management: where do we stand?

Special Symposium, Annual Meeting of The Wildlife Society, Raleigh, NC, USA - 19 Oct. • Compensation and density dependence, Columbia Mountains Institute of Applied Ecology, Revelstoke,

BC - 6 Apr. (Boyce)

• <u>Keynote</u> - From movement to management. *R.E. Dick Peter Biology Conference, Edmonton, AB* -10

Mar. (Merrill)

• <u>Invited Speaker</u> - Chronic wasting disease in Alberta: an update. *Alberta Prion Research Institute*

Scientific Mtg, Calgary, AB - 3 Feb. (Merrill)

• <u>Invited Speaker</u> - Mount St. Helens: The power of nature. *Alberta Wilderness Association, Speaker*

series. Edmonton, AB - 13 Jan. (Merrill)

<u>2015</u>

• <u>Invited speaker</u> - Which habitat model for elk? *Canadian Society of Ecology & Evolution, Saskatoon,*

SK - 22 May (Merrill)

• <u>Invited speaker</u> – Cumulative effects of industrial development and wolves on elk habitat. University of

Idaho, Moscow, ID 8 Apr (Merrill)

• <u>Invited speaker</u> – Perspectives on Canadian Wildlife Management, University of Idaho, Moscow, ID

7 Apr (Merrill)

• <u>Invited Speaker</u> - Experimental harvest for CWD control. *AB Prion research Institute, Edmonton,*

AB - 26 Jan (Merrill)

<u>2014</u>

• <u>Invited Speaker</u> - Understanding gender bias. *Idaho Chapter of The Wildlife Society, Boise, ID,* USA - 6 Mar (Merrill)

<u>2013</u>

• Invited Speaker - Advocating for your career. Women's symposium: The Wildlife Society.

Milwaukee,

WI, USA - 26 Oct (Merrill)

• Invited Speaker - Mechanisms of CWD transmission in deer. The Wildlife Society. Milwaukee, WI. USA - 26 Oct (Merrill) • Invited Speaker - Deer and CWD in Alberta. Alberta Prion Research Institute Symposium. Edmonton. AB - 19 Nov (Merrill) • Incorporating movement-based landscape connectivity into assessments of chronic wasting disease. Western States and Provinces Deer and Elk workshop. Missoula, MT, USA - 8 May (Merrill) • Invited Speaker - Status of Chronic Wasting Disease in Alberta. Alberta Prion Institute. Banff, AB - 28 May (Merrill) • Invited Speaker - Long-term studies of the Ya Ha Tinda elk herd. Northern Alberta Chapter of the Safari Club, Edmonton, AB - 8 Jan. (Merrill) 2012 • Invited Speaker - Loss of more than migration: Is the Ya Ha Tinda elk herd imperiled? The Wildlife Society, Portland, OR, USA - 15 Oct. (Merrill) • Invited Speaker - Connecting the dots: Chronic wasting disease in Alberta's wild deer. Alberta Innovates and Bio Solutions Impact Innovation Speakers Series with Jay Ingram. Edmonton, AB - 16 May; Calgarv, AB - 17 May (Merrill) Mark • Cumulative effects of wolves and industrial activities on habitat effectiveness for elk in the Rocky Mountains of Alberta. National Fish and Wildlife Conservation Congress, Ottawa, ON - Mar 23 (Merrill) • Invited Speaker - Dynamics of the Ya Ha Elk herd: What research has taught us. Sundre Trappers Association, Sundre, AB - 20 Mar. (Merrill) • Predicting the spread of chronic wasting disease in east-central Alberta. Annual Mtg. Alberta *Chapter of* The Wildlife Society. Medicine Hat, AB - 16 Mar (Merrill) • Invited Speaker - Ya Ha Tinda research and next steps. Parks Canada Research Mtg., Sundre, *AB* - 10 Mar. (Merrill) • Dynamics of the Ya Ha Elk herd: What research has taught us. Alberta Fish and Game Association. Sundre, AB - 11 Dec. (Merrill) 2011 • Cumulative effects of wolves and industrial activities on habitat effectiveness for elk in the Rocky Mountains of Alberta. Dep. Biology, Univ. Calgary, Calgary, AB - 2 Dec. (Merrill) • Spread of chronic wasting disease: Did mule deer draw the short straw? Annual Mtg. The Wildlife Society, Waikoloa, HI, USA - 9 Nov (Merrill) • Industrial activities and elk in the eastern slopes of Alberta. GIS Day. Univ. Alberta, Edmonton, *AB* - 18 Nov (Merrill)

• <u>Invited Speaker</u> - Cumulative effects of wolves and industrial activities on habitat effectiveness for elk in

the Rocky Mountains of Alberta. *Annual Mtg. Canadian Section of The Wildlife Society. Thunder Bay,*

ON - 24 Sept. (Merrill)

• The Alberta Advantage: integrated surveillance, management, and research during the early stages of

CWD intrusion- look early, act quickly, learn as you go. *Annual Mtg. Wildlife Disease Association* -

Aug 23 (Pybus)

• <u>Invited Speaker</u> - Wolf predation in heterogeneous landscapes of Alberta, Canada. *Norwegian* University

of Science and Technology, Tronheim, Norway - 15 Aug (Merrill)

• <u>Invited Speaker</u> - Cumulative effects of wolves and industrial activities on habitat effectiveness for elk in

the Rocky Mountains of Alberta. Hedmark University, Evanstad, Norway - 10 Aug (Merrill)

• Chronic wasting disease in Alberta: Did mule deer draw the short straw? *The Wildlife Society Meeting*,

Waikoloa, HI, USA - 7 Nov. (Merrill)

• Of large herbivores and men: Long-term studies at Ya Ha Tinda, *A.R.E Sinclair Symposium, Vancouver,*

BC - 17 Sep (Merrill)

- Time and CWD marches on. *Wildlife Disease Association 60th Annual International Conference*,
- Quebec City, QC 15 Aug. (Pybus)

• Chronic wasting disease in Alberta: Did mule deer draw the short straw? *Elk and Deer Workshop*,

Albuquerque, NM USA - 18 May. (Merrill)

• Partial migration at Ya Ha Tinda: Do residents have the home advantage? *Elk and Deer Workshop*,

Albuquerque, NM USA - 16 May (Merrill)

• Resource selection, use and choice: modeling the differences. *Grismo, Sweden* - 27 Mar (Merrill)

• <u>Invited Speaker</u> - Wolf selection and predation: models for time-to-kill. *Grismo, Sweden* - 26 Mar.

• Landscape heterogeneity and predation: Time-to-kill models. *Imperial College, Silwood Park, England* - 21 Mar. (Merrill)

<u>2010</u>

- <u>Invited Speaker</u> Implications of wolf movements for functional responses. Dep. Biological Sciences *Univ. Adelaide, Adelaide, Australia* - Nov 20 (Merrill)
- <u>Invited Speaker</u> Habitat selection: confusing terminology, *Univ. Queensland, Brisbane, Australia* Nov 14 (Merrill)
- <u>Invited Speaker</u> Influence of landscape heterogeneity on wolf path selection and time-to-kill. *Society for Behavioral Ecology, Perth, Australia* - 29 Sep. (Merrill)
- <u>Invited Speaker</u> Wolves moving in heterogeneous landscapes with human disturbance. *Landcare, Lincoln, New Zealand* 6 Oct (Merrill)
- <u>Invited Speaker</u> Translocating wildlife species: elk in Alberta. *CSIRO, Brisbane, Australia* 12 Oct (Merrill)
- Modeling elk movements in heterogeneous landscape, *Univ. Queensland, Brisbane, Australia* 21 Sept. (Merrill)

- <u>Invited Speaker</u> Modeling CWD spread using hunter surveillance data from SK: implications for Alberta. *Alberta Chapter of The Wildlife Society, Annual Mtg, Plenary session, Red Deer, AB* 13 Mar
- <u>Invited Speaker</u> Risk of CWD in mule deer and white-tailed deer populations in Alberta and Saskatchewan, *Alberta Chapter of The Wildlife Society, Annual Mtg, Plenary session, Red Deer, AB* 13 Mar (Merrill)

• <u>Invited Speaker</u> - Field studies in support of CWD studies: *Alberta Fish and Game Association Youth Group. Edmonton, AB* - Feb 23 (Merrill)

- <u>Invited Speaker</u> Modeling the cumulative effects of industry and wolves on habitat effectiveness for elk. *Institute for Complex Data Structure statistical workshop, Montreal, QC* 4-5 Mar. (Merrill)
- <u>Invited Speaker</u> Landscapes of fear: Wolf-elk behavioral responses in the Canadian Rocky Mountains. *Univ. Washington, WA, USA* 25 Jan (Merrill)

Recent Media Outlets

- 1. CWD Podcast, Rude Corporation, 20 May 2021
- 2. Women in Wildlife: Interview, Oregon Chapter of The Wildlife Society: Personal history
- 3. Featured research: Ya Ha Tinda Elk project: Oulett, N. 2019. Fading migrations: historic migrations have dwindled sharply over the past 20 year. Bugle July:93-105.
- 4. Featured talk on The Wildlife Society Newsletter: Do winter densities influence trade-off. in the movements and habitat selection of elk.
- Faculty of Science news: From wild boars to elephants, mammals move less in human landscapes
 Katie Willis, Jan 2018
- 6. TWS Newsletter: RMEF honors TWS member: Evelyn Merrill, Aug 15, 2017
- 7. CKUA Radio FM- Genotypes of deer and modeling CWD risk, Jul 2017
- 8. Safari Club International: First Big Bulls in N. American's longest running elk study, Jan 4, 2017
- 9. Rocky Mountain Foundation Bugle Magazine: Wildlife Researcher Award Interview, 2017
- 10. Science News Eggeman et al. 2016: Behavioural flexibility in migratory behavior in a longlived large herbivore, 2016
- 11. Craig and Canyon Changing elk migration at Ya Ha Tinda, 2016

Technical Contributions

Beyer, H. Hawth's Analysis Tools for ArcGIS: GIS spatial tools initially developed in response to research and teaching efforts associated with my lab from 2003-2005. These tools are now used world-wide. See: <u>http://www.spatialecology.com/htools</u>.