1989 Ph.D. Zoology (Behavioral Ecology), Colorado State University, Fort Collins, CO.
Dissertation title: The Effects Of Time And Metabolic Requirement On Foraging Behavior Of
Captive Gray Jays.

Scientific Publications, Crows

- Ha, J.C., P.N. Lehner and S.D. Farley. 1990. Risk-prone foraging behavior in captive gray jays (Perisoreus canadensis). Anim. Behav. 39:91-96.
- Ha, J.C. and P.N. Lehner. 1990. Notes on gray jay demographics in Colorado. Wilson Bull. 102:698-702.
- Ha, J.C. 1991. Risk-sensitive foraging: the role of ambient temperature and foraging time. Anim. Behav. 41:528-529.
- Luhring, K.A., J.C. Ha and P.N. Lehner. 1992. Gray jay (Perisoreus canadensis) agonistic displays. Northwestern Naturalist 73:22-24.
- Robinette, R.L. and J.C. Ha. 1997. The significance of fishing behavior by Northwestern crows. Wilson Bulletin 109:748-749.
- Robinette, R.L. and J.C. Ha. 2000. Beach-foraging behavior of Northwestern crows as a function of tide height. Northwestern Naturalist 81:18-21.
- Robinette, R.L. and J.C. Ha. 2001. Social and ecological factors influencing vigilance by Northwestern crows (Corvus caurinus). Animal Behaviour 62:447-452.
- Robinette, R.L., P. Bentzen, J.L. Marsh and J.C. Ha. 2003. Kin discrimination in food stealing by Northwestern Crows (Corvus caurinus). Bird Behavior 15: 65-75.
- Ha, R.R. and J.C. Ha. 2003. Effects of prey type, prey density and energy requirements on the use of alternative foraging tactics in crows. Animal Behaviour 66: 309-316.
- Ha, J.C., A. Butler, and R.R. Ha. 2010. Age-specific survival and population viability of the Mariana Crow (Corvus kubaryi) on Rota, CNMI. Bird Conservation International, 20:335-342.
- Ha, R.R, J. Morton, J.C. Ha, L. Berry, and S. Plentovich. 2011. Nest site selection and the consequences for reproductive success for the endangered Mariana crow (Corvus kubaryi). Wilson Journal of Ornithology, 123:236–242.
- Ha, J.C., J. Buckley, and R.R. Ha. 2012. The potential for typhoon impact on bird populations on the island of Rota, Northern Mariana Islands. Micronesica, 43:214-224.
- Mates, E., R. Tarter, J. Ha, A. Clark, K. McGowan. Acoustic profiling in a complexly social species, the American crow: caws encode information on caller sex, identity, and behavioral context. Accepted: Bioacoustics.

Research Grants, Crows

- 1984 Research grant: Harris and Eliza Kempner Foundation (with S.D. Farley) for "Risk-sensitive foraging by gray jays in a closed economy."
- 1987 Colorado Mountain Club Foundation Research Fellowship for "Foraging behavior in free-ranging gray jays."
- 2005 Co-PI, USFWS Contract Awarded 2005-2006 Study Endangered Avian Species on N. Mariana Islands (\$110,000)
- 2005 Co-PI, USFWS Supplemental Awarded 2005-2006 Study Endangered Avian Species on N. Mariana Islands (\$179,808)
- 2006 Co-PI, USFWS Contract Awarded 2006-2007 Study Endangered Avian Species on N. Mariana Islands (\$205,000)
- 2006 Co-PI, USFWS Supplemental Awarded An updated census of the current Mariana crow pairs on the island of Rota (\$32,000)
- 2007 Co-PI, USFWS Contract Awarded 2007-2008 Study Endangered Avian Species on N. Mariana Islands (\$172,000)
- 2008 Co-PI, USFWS Contract Awarded 2008-2009 Study Endangered Avian Species on N. Mariana Islands (\$247,000)

- 2009 Co-PI, USFWS Contract Awarded 2009-2010 Study Endangered Avian Species on N. Mariana Islands (\$201,000)
- 2009 Co-PI, USFWS Supplemental Awarded Radiotracking the Mariana crow on the island of Rota (\$89,200)
- 2010 Co-PI, USFWS Contract Awarded 2010-2011 Study Endangered Avian Species on N. Mariana Islands (\$199,184)
- 2011 Co-PI, USFWS Contract Awarded 2011-2012 Study Endangered Avian Species on N. Mariana Islands (\$196,000)
- 2011 Co-PI, USFWS Supplemental Awarded Rehabilitation of Injured Birds and Control of predators on Rota (\$119,600).
- 2011 Co-PI, USFWS Supplemental Awarded Public Perception Survey of Native Peoples on Rota, Northern Mariana Islands (\$36,800).
- 2012 Co-PI, USFWS Contract Awarded 2012-2013 Study Endangered Avian Species on N. Mariana Islands (\$262,669).
- 2013 Co-PI, USFWS Contract Awarded 2013-2014 Study Endangered Avian Species on N. Mariana Islands (\$116,685).
- 2013 Co-PI, USFWS Contract Awarded 2013-2014 Study Endangered Avian Species on N. Mariana Islands (\$178,491).