



**NORTH CAROLINA
COOPERATIVE FISH AND WILDLIFE
RESEARCH UNIT**

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Dr. Connie Woodhouse
Associate Professor
School of Geography and Development
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Tucson, Arizona 85721-0076

Dear Dr. Woodhouse,

I am writing this letter in support of Jeremy Lichstein's application for a faculty position at the Laboratory of Tree-Ring Research at the University of Arizona. Jeremy was an MS student in my lab from 1997 – 2000. During that time he showed more promise to contribute to the fields of ecology and conservation biology than any of the students I have known in 25 years of mentoring graduate students. He has continued to fulfill that promise in the years since. His outstanding undergraduate record, NSF and Fulbright fellowships, and three academic awards at NCSU attest to his abilities and intellect, but when I accepted Jeremy as a graduate student, I was uncertain how well his obvious talents would transfer to his new found interest in ecology.

In retrospect, I can now appreciate that Jeremy's relatively late blooming interest in ecology was an asset rather than a hindrance to his professional development. His intensely inquisitive nature, and the intellectual maturity he brought to his new passion for ecology, provided him with fresh perspectives on ecological questions, and a depth of understanding that is seldom seen in young graduate students. I watched Jeremy's level of professional sophistication grow almost week by week during his time in my lab. He has clearly continued on that path at Princeton, to what I am confident will be a truly exceptional scientific career. Jeremy's abilities are complemented by a clarity of direction and commitment that is very rare in young scientists. I have worked with graduate students who were as bright as Jeremy, some who worked as hard, and a few who shared his ambition to excel professionally. But, I have never known a student who combined these attributes as effectively as Jeremy. I have no doubt that he will make lasting contributions to ecology and become a leader in his field. Jeremy's personal qualities will contribute substantially to his accomplishments. His generosity, natural good will, and easy going nature, made him a favorite with both the faculty and fellow graduate students in our department. He was frequently sought out by other graduate students, and he willingly provided help and advice whenever asked.

Jeremy produced an outstanding Master's Thesis at NC State which could easily have met the requirements for a Ph.D. His analysis of landscape effects on breeding songbird abundance in southern Appalachian forests is at the cutting edge of landscape and wildlife ecology. The insights provided by his findings are helping forest managers understand how the distribution and abundance of forest habitats on the landscape affect biodiversity. The quality of his thesis research is apparent from the resulting publications in top ecological journals; "Spatial autocorrelation and autoregressive models in species-environment analysis" (*Ecological Monographs* 2002), and "Landscape effects on breeding songbird abundance in managed forests" (*Ecological Applications* 2002). These are major

contributions that were highly praised by both editors and reviewers. Productivity at this level from a Master's Thesis is remarkable. Jeremy's achievement was recognized by the University when his thesis was selected as NC State's nominee for the Conference of Southern Graduate Schools' Master's Thesis Award for 2001. A single thesis in the natural sciences is nominated by the University each year.

Jeremy followed his Master's research with a Fulbright Fellowship in Argentina, where in spite of my protests, he abandoned his interest in birds to follow the path of many great ecologists exploring questions in plant community ecology. As usual, the questions he framed were carefully crafted, and the goals he set were ambitious.

Jeremy's research statement and CV provide ample evidence of how his interests, current research, and scholarly accomplishments contribute to interdisciplinary approaches for understanding the interaction of climate and ecosystem dynamics. His work has required the synthesis of data from natural resource management agencies, academic colleagues and his own field studies. His research requires a high level of competence in several highly technical disciplines, including the management and synthesis of massive data sets from multiple sources, and the development of sophisticated quantitative skills including hierarchical Bayesian methods, spatial statistics, and both simulation and mathematical modeling of dynamic systems. I might add that although Dr. Lichstein now works in the area of forest ecology he is an accomplished ornithologist and his MS work on forest bird communities in the Southern Appalachians is one of the best theses ever produced at NCSU. He has the knowledge, skills, and experience to understand and collaborate with a wide range of plant and animal ecologists.

It is clear from the publications emerging from his Ph.D. and post-doc research at Princeton, all substantial contributions in top tier journals, that he is fulfilling the tremendous promise he showed ten years ago as a young Master's student. I look forward to his future contributions in ecology with great expectation.

Sincerely,



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