From: John Stella
Subject: M.S. Grad Assistantship, Landscape Beaver Habitat Modeling at SUNY-ESF

I am soliciting applications from interested candidates for the following Masters graduate research position that links landscape analysis, geospatial modeling, and riparian forest ecology (starting Summer 2017):

John Stella, Associate Professor;
Department of Forest and Natural Resources Management
State University of New York College of Environmental Science and Forestry
(SUNY-ESF in Syracuse, NY)
stella@esf.edu; Research page: https://urldefense.proofpoint.com/v2/url?u=http-3A__www.esf.edu_fnrm_stella_default.htm&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=bYwduzYemr97cB8-CQodmq6QqYY91D1vhfLkqUu2zuk&s=xUFQ2UC__gYBG59qNQsSJV_z8yOde4ZUH9WpXblWeNQ&e=

Project description: Modeling beaver habitat and impacts in the Northeastern U.S.
One of the least-studied influences on biodiversity, productivity and ecosystem function in the Northeastern U.S. is the widespread re-establishment of beaver since the end of the 19th century. As 'ecosystem engineers,' beaver create ponds, wetlands and canopy gaps that collectively increase habitat complexity, water and nutrient cycling, and ultimately biodiversity of aquatic, terrestrial and avian taxa. This project couples landscape-scale modeling with ecological relationships developed at finer local scales to (1) predict the proportion of stream network and terrestrial landscape that are potentially influenced by beaver; (2) quantify the terrestrial footprint (extent of beaver foraging) for water bodies occupied by beaver using existing spatial datasets and existing models; and (3) scale-up gradients of forest browsing intensity to predict landscape patterns of forest composition and age structure. The project is a collaboration between SUNY-ESF and the Wheaton Lab at Utah State University (https://urldefense.proofpoint.com/v2/url?u=http-3A__www.joewheaton.org&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=bYwduzYemr97cB8-CQodmq6QqYY91D1vhfLkqUu2zuk&s=eFz31xfqQXwLzJF5MsOZhwGdTkBv9w_Tp7CVvBpDWGM&e=), which has developed a beaver habitat model for western
landscapes.

The position and how to apply:
We seek a Masters student at the State University of New York College of Environmental Science and Forestry (SUNY-ESF) working with Dr. John Stella and interdisciplinary collaborators USU. The position will start in summer 2017 and will consist primarily of geospatial analysis and modeling, with some field work at ESF's research forest in the Adirondacks and training opportunities at USU. Ideal candidates will have an undergraduate degree in geography, environmental science, ecology or a related field; strong geospatial and quantitative skills and experience, good communications skills, and an interest in comparing beaver habitat in different landscapes (arid and mesic, western and eastern). The position is funded for a minimum of two years and provides a competitive stipend, tuition and benefits. Interested candidates should send a CV/resume (with GPA and GRE scores), a description of research interests and experience, and names and contact information for 3 references to stella@esf.edu. For more information on how to apply, see https://urldefense.proofpoint.com/v2/url?u=http-3A__www.esf.edu_fnrm_stella_opportunities.html&d=CwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=bYwduzYemr97cB8-CQodmq6QqYY91D1vhfLkqUu2zuk&s=U2rHqvl7cVLnauVJLocnYepwxBooHYElyWsb0WOOYF8&e=

About SUNY-ESF
Founded in 1911, SUNY-ESF is the nation's oldest school dedicated to the study of the environment, developing renewable technologies and building a sustainable future. The ESF main campus is in Syracuse, NY and has regional campuses throughout Central New York and the Adirondack Park. Providing a small-college atmosphere with a low student/faculty ratio that allows for personal attention and mentoring for students, ESF is one of nine Ph.D. degree granting campuses within the SUNY system, and is designated a Carnegie RU/H (Research University/High Activity) school. Integration of research and teaching is emphasized and the college has a strong undergraduate research program where advanced undergraduate students regularly work with graduate students and faculty. ESF has nine regional campuses/field stations and maintains nearly 25,000 acres in college properties offering unrivaled opportunities for

field-based research. On ESF's main campus, access to chemical instrumentation, advanced electron microscopy, computing clusters and growth chambers is available. In addition, the ESF campus is contiguous with that of Syracuse University and in close proximity to SUNY Upstate Medical University, giving students and faculty the added resources of a larger institution of higher education, including a wide array of courses, computer and library facilities. The City of Syracuse is uniquely situated between the Finger Lakes Region, Lake Ontario, and the Adirondacks, providing abundant opportunities for outdoor recreation.