

VALUING NEW HAMPSHIRE'S LANDSCAPE USING BENEFIT TRANSFER METHODS

*Sydoriak, Jamie L. and Shannon Rogers
Center for the Environment, jamiesydoriak@gmail.com
Faculty Advisor: Dr. Shannon Rogers

Ecosystem services are the benefits people receive from the environment in the forms of provisional goods such as timber and food, regulatory services such as carbon sequestration, cultural services including recreational opportunities, and landscape supporting services such as pollination. Researchers integrating the fields of environmental science, economics and social science are developing and modifying methods of ecosystem service valuation to mitigate the loss of ecosystems and the services they can provide. A benefit transfer valuation is the process of applying ecosystem service values calculated for one “study site” in a given time and place to a “policy site” in another, similar given time and place. No New Hampshire state-wide ecosystem service valuations are known to have been completed yet. Using previously derived ecosystem service values for the state of Maine, we performed a benefit transfer exercise to generate a very rough estimate of the annual total ecosystem service flow value from the landscape cover of New Hampshire. The total estimated ecosystem service flow from the landscape of New Hampshire is approximately \$13.1 billion per year. Based on these results, the landscape of New Hampshire could provide an estimated average ecosystem service value of \$2,325.87 per acre per year. Forested cover types and water resources contributed largely to the state's total value estimate. Performing benefit transfers can produce baselines in solving contemporary environmental problems and stimulate the recognition of natural capital. We hope our report stimulates research efforts that aid natural resource conservation in New Hampshire or elsewhere in New England.