

Faculty Publication Achieves "Citation Classic" Milestone

Scholarly publications are the primary metric by which university faculty measure their research productivity and success in academia. A key measure of the impact of an individuals' work is the number of times a particular publication is referenced in the research contributions of others engaged in similar forms of scholarship. In the discipline of Ecosystem Science a published paper that is referenced by more than 20 other publications is considered an influential contribution to the scientific literature. Only a few publications ever exceed 100 citations and it is the truly exceptional paper that achieves "Citation Classic" status by having been referenced by over 400 other scholarly sources.

In less than a decade a paper co-authored by **Dr. William E. Rogers**, a Professor in the Department of Ecosystem Science and Management, has surpassed this Citation Classic milestone. Earlier this year, his 2005 publication entitled "Phenotypic and genetic differentiation in native versus introduced plant populations" published in the ecological journal *Oecologia* and co-authored with a group of international colleagues from several different academic institutions amassed over 400 citations according to Thompson ISI Web of Science scholarly literature search index (and over 500 according to Google Scholar). The manuscript reviews studies available prior to 2005 which demonstrate that the invasiveness of non-native plant species introduced to new geographical regions can sometimes be attributed to rapid evolutionary changes that occur in response to new selective pressures experienced in their novel environment. At the time of publication this phenomena, described as the "Evolution of Increased Competitive Ability (EICA)" hypothesis was a controversial, yet intriguing, concept. Indeed, the central support for the theory came from earlier studies performed by Dr. Rogers and his colleague Dr. Evan Siemann at Rice University using the problematic invasive tree Chinese Tallow (*Triadica sebifera*, formerly *Sapium sebiferum*). In addition to this citation classic many of their publications describing results from experimental studies using this invasive tree species have also exceeded 100 citations. Presently, rapid evolutionary changes in introduced species (or EICA) and even corresponding evolutionary changes in the recipient ecosystem in response to the species introduction are readily acknowledged as important drivers influencing invasion biology and ecological community assembly dynamics.

In addition to on-going studies examining problematic non-native species, Dr. Rogers is actively involved in a variety of studies addressing rangeland restoration, fire and grazing ecology, woody and succulent plant encroachment, non-native grass invasions, feral hog impacts, plant-mycorrhizal fungi interactions, and endangered terrestrial plant dynamics. All of these studies seek to contribute fundamental insights into central ecological processes while also providing potential conservation and management solutions for the concerns of a variety of natural resource stakeholders.

Referenced publication:

Bossdorf, Oliver, Harald Auge, Lucile LaFuma, William E. Rogers, Evan Siemann & Daniel Prati (2005) Phenotypic and genetic differentiation in native versus introduced plant populations. *Oecologia* 144:1-11.