

Aaron Iverson in the field in Puerto Rico

intensification and biodiversity – ecosystem service management" (2005, *Ecology Letters* 8:857–874).

This seminal synthesis paper contributed greatly toward uniting the fields of landscape ecology and agroecology and propelled me and many others into a new path of understanding ecosystem services and biodiversity in agricultural landscapes. From our current perspective, it is easy to overlook the significance of this contribution. However, it was a watershed moment for the field, as we realized we could no longer consider individual agroecosystems apart from their landscape context. Indeed, many times the landscape in which a field is embedded is even more important in predicting the community of organisms than is the local management.

I was initially drawn to agroecology due to its applied focus, particularly in relation to the benefits to farmers and to biodiversity. Teja's paper therefore fell onto fertile ground, as it went on to explain the nuances of taking a landscape perspective, with clear management implications. For example, they described under what landscape conditions we might expect local management to have the most impact on biodiversity, and how the most influential spatial scale depends on the trophic position, specificity, or body size of the organism in question.

With this paper tucked into my back pocket, I sought to make a contribution to the field on the steep, slippery slopes of the Mexican coffee farms. I quickly learned that the extremely biodiverse tropical backdrop was maybe not the easiest arena to observe landscape effects. But that, in and of itself, was an interesting finding.

The ripples of Teja's 2005 paper and related research extend across the globe, and fortuitously managed to reach me at a critical point in my academic career. Fittingly, within a couple weeks of earning my doctorate degree, I met Teja for the first time. I was struck by his kindness and approachability, as well as his willingness to invest time in younger, up-and-coming scientists. It seems that his ability to think big extends to scales beyond the ecological realm.

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## The Established Researcher

When I started my Ph.D. in 1981, ecology as a biological discipline in Germany was in its infancy and still stuck in traditional ecophysiology, faunistics/floristics, and phytosociology approaches. While my enthusiasm for insects and, in particular, parasitic wasps had been aroused by inspiring university teachers, I found the interactions between organisms and their resources to be much more interesting and key to understanding ecosystem functioning than sheer estimates of patterns in species richness and distribution.



Teja Tscharntke

Organisms' lives are not independent of their biotic and abiotic environment, but are interwoven with many parts of their habitat, which determines ecological functions. That is why I started reading the book, "Insect Ecology" by Peter

W. Price, together with my Ph.D. colleague Stefan Vidal. As we went carefully through all the pages and chapters, we were introduced to a new world of building and testing ecological hypotheses related to the functional role of biodiversity and the complexity of multitrophic interactions. Peter and his colleagues wrote a seminal paper on "Interactions among three trophic levels: influence of plants on interactions between insect herbivores and natural enemies" (Price et al. 1980), which embodied the main focus of his work on tritrophic plant-herbivore-predator/ parasitoid interactions and greatly influenced my choice to study *Phragmites*-consuming gall midges and their rich parasitoid complex for my doctoral thesis. I was particularly interested in how trophic interactions are shaped by plant growth and other insects in Phragmites stands. Later, I expanded my studies to include the trophic interactions of insect communities of 10 additional grass species, following Price's method of using comparative approaches.

Unfortunately, both my doctoral thesis in 1986, and later my habilitation, an independent peerreviewed postdoctoral thesis in 1992, were written as monographs in German. At that time, writing in German was expected by the university and German was the language for professional meetings in ecology or entomology. As a result, publishing in English was very unusual for German ecologists in the 1980s (and still in the 1990s), due to not only language problems but also a simple lack of experience with the scientific writing style. This is why most of this research has been never recognized internationally. Starting in 1993, I got the chance to establish my agroecology laboratory with a new focus on how landscape structure affects local patterns and processes. However, all doctoral theses were still written in German, but since 2000, theses are composed of a series of chapters or manuscripts in English. Colleagues outside of Germany are now aware of our work.

Many smart colleagues have influenced my research, which has shifted during my career from sociology to biology, from faunistics to multitrophic interactions, from a local to the landscape perspective, from temperate to tropical ecology, and from pure ecology to socioeconomicecological trade-offs. My approach to science has been most influenced by Peter Price and his hypotheses-driven view of how to best understand complex interactions. In 1993, I met him for the first time during a challenging Trans-Siberian Railway trip to a gall maker conference in eastern Siberia. I realized then that he is not only a keen thinker, but also has a most hospitable, entertaining, open-minded, and sympathetic personality.

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## Literature Cited

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