

Rate My Land: a property rating program that fosters private landowner engagement in biodiversity inventories and management.

By Derek Shiels

As a result of anthropogenic pressures on natural systems and habitats, our planet is losing species at alarming rates and we will be witness to a mass extinction event in a century's time span if these pressures are not relieved (Rockström et al. 2009, Barnosky et al. 2011). We have only described an estimated 20% of the biodiversity that exists on our planet (Wheeler 2010) and even with what has been described, we know far too little. To successfully turn the tide and conserve biodiversity we need to know the number and condition of populations, the ranges occupied by species, population trends and dynamics, and we need to be able to identify threats from non-native associates. In the United States this foundational biological data, crucial to species conservation and land management, is lacking because the majority of land is not being formally surveyed as a result of being privately owned (Sanford 2006). Many species of special conservation concern freely roam on or entirely depend on privately owned land (Bean and Wilcove 1997); in the United States more than 90% of federally listed species have some habitat on nonfederal land, and up to half depend entirely on nonfederal land (Brook et al. 2003). We are losing biodiversity and want to practice conservation, but we lack the information to define boundaries for conservation areas or conservation targets, and we do not have baseline information available to judge how well our conservation efforts are preserving biodiversity (Cameron 2010, Wheeler 2010).

Acquiring biological data from private lands may be one of the most pressing concerns facing conservationist (Bean and Wilcove 1997). The common generalization that private landowners will not allow biologists to inventory their land was supported by the respondents to a survey conducted by Brook et al. (2003) where 56% of private landowners had not or would not allow a biological survey for the endangered Preble's Meadow Jumping Mouse. Private landowners are hesitant to allow surveys on their properties because of the perceived risk that data collected could be used to regulate their property and from their distrust in the government or conservation organization biologists who would be conducting the survey (Sheldon 1998; Brook et al. 2003). The U.S. Endangered Species Act (ESA) has been successful when considering how few of the listed species have been lost to extinction (Schwartz 2009), but the regulatory threat of the ESA has led to resistance from private landowners (Lueck and Michael 2003) and it remains largely ineffective for protecting species on private lands (Olive and Raymond 2008; Schwartz 2008).

It is not just private landowners with distrust in government that are not having their lands assessed for their biological diversity. Private landowners with conservation easements have spread rapidly throughout the country leading to the preservation of many acres of private land, but conservation of these lands through biological monitoring and acquiring quantitative data is lagging far behind (Keincker et al 2007). The problem therefore seems to be twofold: one, concerns about regulations that are held by landowners have not been alleviated (Norton 2000), and two, landowners with or without these concerns are not receiving the information about the importance of conserving biodiversity and do not have access to the resources to engage in that conservation (Miller and Hobbs 2002).

The 1982 amendment to the ESA regarding Habitat Conservation Plans (HCP), the Safe Harbor Agreements (SHA), and various federal and state Landowner Conservation Assistance Programs (LCAP) have all helped to alleviate regulatory burdens and provide incentives for conservation. However, these programs have not turned the tide; private landowners remain disengaged, species restricted to public lands are more likely to be improving than those with some individuals found on private lands (Schwartz 2008). New incentives are

needed to confront the challenge of maintaining the right to confidentially manage private property with the need to protect species from extinction and properly steward an interconnected and interdependent landscape (Norton 2000; Olive and Raymond 2009). New incentives must include economic motivations that reward landowners who restore or enhance habitats, increase collaborations, be voluntary and motivating, reach wider, more diverse audiences, communicate through social networks, and be supported by social norms (West et al. 1988; Sullivan et al. 1996; Shogren et al. 1999; Norton 2000; Miller and Hobbs 2002; Brooks et al. 2003).

These suggestions are incorporated into a social website media company, Rate My Land (RML). The mission of RML is to create a social norm for private property landowners to engage in conservation (biodiversity inventory, management, and restoration). The objectives of RML are to 1) create incentives for acquiring biological inventories and developing and enacting land management plans, 2) connect landowners with biological consultants, 3) communicate the value and importance of biodiversity and conservation to a wider, more diverse audience, 4) be an advocate for private landowners desiring to improve nature, and 5) award land restoration and conservation.

How it works

Rate My Land popularizes surveys of biodiversity on private property by raising awareness about the need for surveys, facilitating access to biological consultants, and then displaying the top rated properties that received scores from standardized inventory forms designed by RML. Additionally, Rate My Land fosters a social norm for conservation by running an award program that recognizes land conservation measures implemented on private lands[NOTE: this has not been implemented yet!].

The biodiversity survey forms are completed by a recognized biological consultant; only the consultants can submit the entry forms. This means the landowner is required to pay for a biological consultant to complete the biodiversity survey necessary to complete the form. Recognized biological consultants are those registered with RML; a running list of all environmental and biological companies interested in participating in Rate My Land are listed with their contact information on the website. Consultants who are hired to complete the RML forms must pay a set percentage of the fee they are charging the customer (the private landowner). The amount and type of information about the property that is displayed to the public on the top property lists is completely the prerogative of the landowner. A property can be listed by county name only or a landowner could choose to display more detailed location and contact information, photographs, links to real-estate listings, social media webpages, and even admission policies.

The Rate My Land biodiversity assessment forms

The goals of the RML biodiversity survey forms are to be user friendly and universal; they utilize straight forward metrics that are not too specialized and are applicable to all types of natural communities. The forms come with instructions for consultants and can be adjusted based on the region in the country where the survey is conducted. There are four survey categories: Plant Diversity, Bird Diversity, Herpetofauna Diversity, and Invertebrate Diversity. The surveys are not designed to statistically compare one site to the next but rather are meant to be a mechanism for gathering biological data from private lands. They could be used to create baseline biological data for a site to track changes in biodiversity over time and assess conservation efforts.

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