among other flower-visitor groups, with a relatively lower rate of correct identification for wild bees (Figure 1). Participation-related benefits on observers' probability of correct identification did not depend on their self-attributed level of entomological knowledge (WebTable 1).

What made our monitoring program so innovative was that it confronted observers with a vast diversity of flower visitors, challenging them to distinguish among 593 taxa (compare with Kremen *et al.* 2011 and Ratnieks *et al.* 2016). Despite the difficulty of the task, observers appeared to be motivated by the inherent reward of discovering flower-visitor diversity. By providing observers with an online venue to share their photographs and to discuss each other's contributions, Web 2.0 tools were key to the functioning of the monitoring program and likely contributed to our results by promoting the emergence of an observer community. Between 2010 and 2013, more than 67,000 comments were written by observers having shared at least 30 photographs. We found that observers' level of social integration (measured as the number of submitted and received comments per photograph shared) was positively associated with observers' progress in accurately identifying photographed insects (WebFigure 1). This suggests that belonging to a community of observers helps meet the challenge of better knowing the tremendous diversity of flower visitors, a daunting task for someone facing it on their own. We therefore urge biologists interested in citizen science to not oversimplify their projects, allowing for greater engagement in participation and scientific outcomes. Clear scientific objectives, appropriate tutorials, and regular feedback of results to observers are essential when designing citizen-science projects (Pocock *et al.* 2015; Cornell Lab of Ornithology 2018).

A range of flying insects – including wild bees – are in critical need of conservation (Goulson *et al.* 2015; Deguines *et al.* 2016; Hallmann *et al.* 2017). Given that participation in monitoring programs appears to favor pro-conservation behaviors (Cosquer *et al.* 2012), scientifically ambitious citizen-science projects are a powerful tool that biologists and policy makers should embrace in order to achieve positive educational, scientific, and conservation outcomes.

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Supporting Information

Additional, web-only material may be found in the online version of this article at http://onlinelibrary.wiley.com/doi/10.1002/fee.1795/suppinfo

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Urban areas *do* provide ecosystem services

Locatelli *et al.* (2017) characterized how land-use trajectories affect ecosystem services (ES) in mountain landscapes. Despite acknowledging that "urban ecosystems may provide important provisioning services and a variety of cultural services" (Locatelli *et al.* 2017), their model described urban areas as "Worst-case scenarios (decrease of all services)", with a near-complete absence of provisioning, regulating, and cultural services relative to services in more natural (less developed) areas. Because Locatelli *et al.* largely focused on the capacity of areas to produce ES, we believe that the authors largely underestimated the flow and demand of ES in urban areas. In response, we wish to clarify that cities are not ecologically void, that urban ES research is rapidly expanding (Haase *et al.* 2014; Kremer *et al.* 2016; Ziter 2016), and that there are far more beneficiaries of ES in urban areas due to their greater population densities.

Cities can have rich biodiversity. For instance, McKinney (2002) demonstrated that biodiversity, when examined along rural–urban gradients, can peak in suburban landscapes because of reduced predation pressures and increased human subsidies (ie food and/or introduced species). Likewise, a global synthesis of bird species in 54 cities and plant species in 110 cities found 24–368 bird species per city and 269–2528 plant species per city, respectively, and revealed that these urban areas had a greater number of native than exotic species (Aronson *et al.* 2014). While numerically less abundant than their rural counterparts, urban biota are more abundant and more diverse than is widely recognized. For example, more than 230 native bee species, 750 plant species, and 350 bird species (as well as state-endangered species such as the little bluet damselfly [*Enallagma minusculum*]) live in ecosystems within New York City (Sanderson *et al.* 2016). Moreover, high-resolution land-cover maps derived from remotely sensed data for 35 cities and counties in the US and Canada show that urban areas have on average 31% tree canopy cover (median = 32.14), and up to 57% tree canopy cover (O'Neil-Dunne *et al.* 2014).

Urban ecosystems provide a wide variety of ES, which confer critical benefits to urban and peri-urban residents (Elmqvist *et al.* 2013). Although several critical research gaps remain for the study of urban ES (Kremer *et al.* 2016; McPhearson *et al.* 2016), three reviews have demonstrated not only the rapid growth of this field but also evidence of the importance of urban ES capacity, flows, and demand: namely, Ziter (2016), Luederitz *et al.* (2015), and Haase *et al.* (2014) found 77, 201, and 217 peer-reviewed publications on the topic, respectively (Figure 1).

Ecosystem services are the benefits that people derive from nature (Gómez-Baggethun *et al.* 2013). Because most people reside in cities, it is reasonable to assume that there are more ES beneficiaries in cities than elsewhere. Although provisioning services like food and timber may be produced primarily in rural areas, other services – including provisioning services such as local food and water, regulating services such as stormwater absorption, and cultural services such as recreation – are provided within urban and peri-urban areas (Gómez-Baggethun *et al.* 2013). Indeed, some cultural services may even be more prevalent and more valuable in urban areas precisely because they are densely settled (Andersson *et al.* 2015). Likewise, since ES value is driven by who benefits as well as by where the service is produced and consumed, regulating services may also be greater in value in urban areas. For these reasons, the cost–benefit ratio of restoring or conserving some types of urban ecosystems was estimated to be greater than that of selected coastal ecosystems (Elmqvist *et al.* 2015). Even if there is greater capacity for ES in non-urban areas as compared with urban areas, people residing in cities benefit from both types of flows.

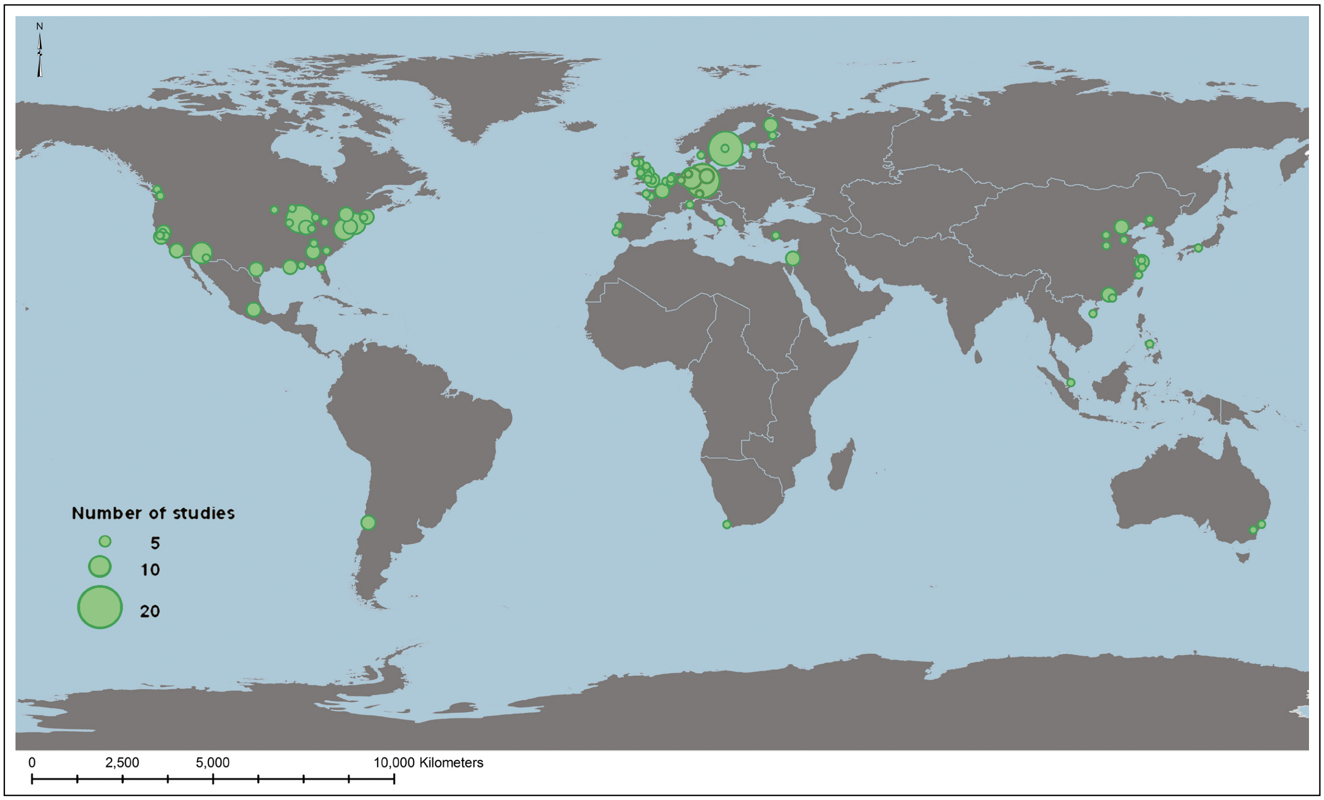

Figure 1. *Geographic distribution of urban ES studies; there are at least 217 published peer reviewed papers (Haase* et al. *2014).*

While Locatelli *et al.* (2017) focused on mountain systems and used a stylized model developed by Braat and Ten Brink (2008) and De Groot *et al.* (2010), they neglected to mention the large body of research that demonstrates the importance of urban ES. Moreover, their model suggests that "natural areas" are ideal for many services. Given that 70% of humanity will soon reside in cities (UN 2014), we argue that seeking "ideal" natural areas in rural locations is misguided because these future urban-dwellers will require a wide variety of ES produced in the cities where they live.

In summary, urban ecosystems provide important ES, urban areas are where most beneficiaries of ES live, and urban decision making is already incorporating ES into planning, policy, and development (Hansen *et al.* 2015). The broader research community should recognize the services that people from around the world derive from urban ecosystems

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