

Chapter 2

The missing piece of the conservation puzzle:
involving Western citizens in the
conservation debate

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Abstract

Biodiversity loss is closely related to global processes of production for Western consumerist lifestyles. However, consumption patterns of affluent societies are largely absent from the conservation discussion. Although conservation of biodiversity concerns each and every one on the planet with respect to health and survival, the main activities to achieve it are largely “outsourced” to the places and communities where they may matter directly, but where perhaps the least effects can be gained. To bring the issue of biodiversity loss closer to citizens, more conservation efforts have to be directed towards reconnecting people with nature. An ideal low-threshold urban location to encourage this reconnection is the domestic garden. New tools like the Biodiversity in My Back Yard framework (BIMBY) can help citizens start to perceive biodiversity conservation as something they can contribute to in their daily lives.

2.1 Introduction: the missing piece

If one is asked to describe a conservationist, it is easy to imagine a researcher with a khaki-coloured hat and binoculars around her neck taking samples of elephant poo in the African savannahs or to imagine a sweaty person climbing trees to count insect species in the upper canopy in the rainforest of Borneo or the Amazon. In Western societies, the concept of biodiversity seems quite far removed from our daily lives and urban lifestyles. Conservation is something being done by specialist biologists, ecologists, conservationists; a task for specialised field researchers or NGOs like the WWF or the International Union for Nature Conservation (IUCN).

The history of conservation has been characterised by debates about what conservation should actually involve. Should nature be *conserved* or *preserved* (T. R. Miller et al., 2011; Minter et al., 2011; Robinson, 2011; Takacs, 1996)? The difference between these words seems futile, but in the “conservation debate” (DesJardins, 2006; T. R. Miller et al., 2011; Minter et al., 2011; Robinson, 2011; Takacs, 1996) they led to two rather divergent protective approaches: *preservation* became associated with a profound ecology discourse (Capra, 1996) where –broadly speaking – nature has intrinsic value and integrity and should be left alone, preferably without any human interference. *Conservation* became associated with a more utilitarian discourse, where nature has value to human beings and should be protected to ensure our future existence, so its resources should be managed carefully (DesJardins, 2006; Takacs, 1996). An intermediate alternative to these two ends of the spectrum was found in the trend of establishing so-called Integrated Conservation and Development Projects (ICDPs) (J. R. Miller et al., 2002). This type of project brings together the protection of nature and the human needs of (indigenous) communities in the non-Western world.

This conservation discourse has recently been pragmatically enriched with visions of a “Green Economy” where conservation becomes “mainstreamed” (CBD, 2008; Marris, 2007) into governance and business. In practice this means that conservation organisations are increasingly focused on building partnerships with companies that have a large environmental impact (Morrow, 2012; UNEP, 2011). Despite all the efforts, despite new conceptualisations, despite newly forged alliances, and despite integration and mainstreaming of biodiversity conservation in local, regional, and global governance strategies, global biodiversity loss continues at unprecedented pace. Why does this happen? Are we still missing a piece of the conservation puzzle?

An analysis of the discourse of the Millennium Ecosystem Assessment scenarios, IPCC scenarios (Beumer et al., 2010), and IUCN documents (Beumer et al., 2013) on biodiversity conservation strategies, visions, and efforts reveals that Western lifestyles and consumption patterns are largely lacking from the conservation discussion. Although conservation of biodiversity concerns each and every one on the planet with respect to health and survival, the main activities to achieve it are largely “outsourced” to the places and communities where they may matter directly, but where perhaps the

least effects can be gained. Whereas the climate and energy issue has become a part of the daily lives and choices of citizens, this is not the case with biodiversity. According to the Eurobarometer, which assesses attitudes of European citizens towards biodiversity, “[a]cross the EU, slightly less than half of Europeans have heard of the term ‘biodiversity’ and know what it means (44%) (European Commission, 2013, p.4).” Also, more than half of the European citizens feel that they are not informed about biodiversity loss (54%) (European Commission, 2013).

Biodiversity loss is closely related to global processes of production for Western consumerist culture. Eating meat, consuming products containing palm-oil, large-scale intensive farming, mining, fishing with large trawlers – just to mention a few examples – are some of the largest drivers of the loss of biodiversity (CBD, 2014; MEA, 2005; Steffen et al., 2005). It thus seems simple logic that the knowledge about biodiversity and about the causes of its loss should become just as embedded in the daily patterns and choices of citizens in affluent societies as the climate issue. How can a complex issue such as biodiversity conservation be incorporated in the minds and actions of Western citizens?

Recently, Robert Dunn examined the mechanism of the “pigeon paradox” (Dunn et al., 2006). This mechanism entails that if people get in touch with nature in their immediate living environment – be it wild, rural, or urban nature – they are more inclined to adopt a positive attitude towards nature and conservation on larger scale levels as well (Dunn et al., 2006; Müller et al., 2010). Positive experiences and encounters with nature in the individual sphere of life increase the potential for a love of nature and biodiversity in a broader, more global sense (Beatley, 2011). This has also been confirmed by the work of a number of other researchers (Austin, 1894; Cilliers, 2010; IUCN, 2010, 2012; Millard, 2010; Müller et al., 2010).

Considering these research results, experiencing nature close to home may provide a good start to increasing conservation awareness in affluent societies. And where can nature be found closer to home than in one’s own front- or back-yard?

In many parts of the Western world, individual citizens have complete – or at least considerable – autonomy with regard to the way their domestic gardens can be designed and used. We have considerable power in our small private outdoor spaces. All these small urban green spaces together take up a large part of urban space in many cities, sometimes up to 40% (Zwaagstra, 2014). Therefore, if domestic gardens are designed with concerns for nature and biodiversity in mind, all the little patches make up quite a large surface benefiting nature (Kettunen et al., 2007; Mitchell et al., 2013; Rudd et al., 2002).

Domestic gardens can also be “experimental and experiential learning centres” on urban and regional flora and fauna for citizens, researchers, policymakers, designers, and even commercial parties: what works well in a garden in a specific biome and what does not? How do various species relate to each other? What is a pleasant level of flora and fauna in a home garden? What ecosystem services does a garden deliver? What

kinds of disservices are encountered (Lyytimäki et al., 2008)? How are the services provided by gardens mediated to people by cultural contexts, assumptions, and traditions? How can gardens help citizens become more self-sustaining, for example by providing food? What does such self-sustenance mean for the (global) economy and agricultural food production? How far do the environmental, social, and economic impacts of a garden reach? These are just a few questions that could be discussed in the lounge seats of the home garden. The domestic garden provides great potential for putting biodiversity on citizens' agendas. However, the dialogue may need to be stimulated, as not a lot of people are aware of this potential (Beumer, 2014).

In order to encourage a societal dialogue on such questions, the BIMBY framework (*Biodiversity in My Back Yard*) has been developed (Beumer et al., 2015). The aim of this indicator framework is to stimulate an inclusive and participatory approach to building a body of knowledge about the benefits of domestic gardens for biodiversity, ecosystem services, and a sustainable environment. Citizens can walk around their gardens with a questionnaire that asks them about the things they encounter there (biotic and a-biotic), about the way they keep their gardens, special values they attach to their gardens, nuisances and pleasures their gardens provide (ecosystem services), and the relations between their gardens and the outside world. BIMBY is designed to increase awareness and to stimulate dialogue and knowledge co-production on the values, uses, and small-scale biotic and socio-cultural features that enhance or impede the quality, variety, and abundance of biodiversity in and beyond the home garden and in and beyond urban areas. BIMBY may facilitate efforts to include cities *and* citizens in conservation practices, which is also reflected in strategic goal A of the *Aichi* Biodiversity Targets: it aims to “[a]ddress the underlying causes of biodiversity loss by mainstreaming biodiversity across government *and* society (CBD, 2011)”.

2.2 Lessons to be learned

BIMBY may be able to support the emergence of new sustainable “design paradigms” (Felson & Pickett, 2005). It may help the public learn about ways to combine aesthetic pleasure and practical functionality with ecological integrity and awareness of wider ecosystem processes and relations. Much can be learned by comparing the assessment results of gardens in various cities around the world and their meaning for nature, at scale levels that reach far beyond cities (regional, cross-regional, global). Much can also be learned in gardens about the connections between biological and cultural diversity. How do gardens reflect the perspective that people have on nature? Do garden cultures around the world indeed reflect cultural diversity? Or is there a globalised garden culture? What is “sustainable gardening” and how can gardening discourse, design, and practice be best integrated in the conservation debate? And more practically: what is the potential of domestic gardens to contribute to global biodiversity conservation?

Such a novel urban-based approach to conservation may contribute to awareness of global biodiversity loss, and may encourage citizens to look at their own consumption patterns in a different way. BIMBY can help citizens perceive global biodiversity issues in the same manner as global climate change has come to be perceived: as something we all contribute to, and as something we all can help do something about. Of course it remains to be seen if gardens can indeed provide the crucial missing pieces in the puzzle that is the conservation of global biodiversity.

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