Synthesis

### A synthesis on active citizenship in European nature conservation: social and environmental impacts, democratic tensions, and governance implications

<u>Thomas J. M. Mattijssen<sup>1</sup></u>

ABSTRACT. In this synthesis article, I discuss the meaning of active citizenship for European nature conservation based on an integrative study of existing literature. Four main knowledge gaps are addressed: (1) a lack of overview on the scope and characteristics of active citizenship across Europe; (2) a lack of systematic evidence on its impacts; (3) a lack of congruence in democratic debates related to active citizenship; and (4) the governance implications of active citizenship in context of these knowledge gaps. Empirical research shows that active citizenship is driven by a wide range of motivations and manifests in various forms. Although most active citizenship is small in scale, when added together all these groups of citizens have become a societal force to be reckoned with. Locally, active citizenship often provides important benefits to people and nature and also enriches the democratic system. However, active citizenship does not always align with policy frameworks and ecological networks and also leads to tensions between representative and direct forms of democracy. For these reasons, active citizenship should be considered as additive to other forms of governance in European nature conservation. In this, a polycentric and collaborative approach to green space governance can help authorities in achieving their own policy objectives while stimulating active citizenship.

Key Words: active citizenship; biodiversity; civic ecology; environmental stewardship; green space; nature conservation; self-governance

### **INTRODUCTION**

The roots of many nature conservation movements can be traced back to the passion and care of citizens (Van Koppen and Markham 2007). These movements started locally and out of idealism, but nature conservation increasingly professionalized into (inter)nationally operating NGOs over the course of the 20th century (Rootes 1999, Van Koppen and Markham 2007). As a result, formal responsibilities for protecting nature become increasingly detached from citizens. Although citizens across the globe remained involved in various conservation efforts, research and policy at the end of the 20th century often paid limited attention to their activities (Van Koppen and Markham 2007, Ferranti et al. 2014).

Since the early 1990s and especially in the last 15 years, there has been a revival of interest in the role of citizens in nature conservation. Originating from studies in developing countries (Ostrom 1990, Agrawal and Gibson 1999), a new focus arose on citizens' capabilities to manage natural resources. Democratic ideals of participation, empowerment, and good governance also led to increasing desires for directly engaging citizens (Smith 2009). Once more, the role of citizens is now seen as being important for tackling conservation challenges. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) highlights the involvement of local communities, citizen groups, and Indigenous people as a key element for successful conservation (Díaz et al. 2019). Other studies also show how citizens currently play a key role in protecting urban biodiversity (Colding et al. 2013). In this context, the term "active citizenship" is used to describe how citizens pursue their own interests, objectives, and ideals related to nature (Van Dam et al. 2015).

### A congruent view on the role of active citizens in nature conservation

The involvement of citizens in nature conservation has implications for biodiversity, but also for citizens and policy makers. In nature conservation, active citizenship is debated from various political and paradigmatic visions. Scientifically, it is discussed across disciplines such as urban ecology, conservation biology, political sciences, public administration, sociology, and environmental psychology. Across these disciplines, there is no overview or consensus about (1) the different forms in which active citizenship manifests; (2) the ecological and social implications of this active citizenship; (3) democratic values and tensions related to active citizenship; and (4) the governance implications of active citizenship in the context of the above knowledge gaps.

Regarding the different forms in which active citizenship manifests, there is a wide range of interesting case studies but a scarcity of broader empirical evidence and good quality baseline data across Europe (Celata and Sanna 2019, Ferreira et al. 2020). Concerning the overall impacts of active citizenship in the European green domain, there is also a lack of systematic evidence (Arts et al. 2017, Fors et al. 2015). Most European democratic discussion and research around active citizenship is either based on general observations about active citizenship in society or on specific case studies in the green domain, lacking a broader link to the scope and focus of active citizenship in the field of nature conservation (Mattijssen et al. 2018a) as well as insufficiently recognizing its diversity (Paloniemi et al. 2015, Vierikko et al. 2016). There is also much literature on (polycentric) governance of green spaces and the role of citizens in this, but the link between European green space governance and the scope of active



<sup>&</sup>lt;sup>1</sup>Wageningen Economic Research, Wageningen University and Research Centre

citizenship remains underdeveloped (Aalbers and Sehested 2018, Buijs et al. 2019). Although many relevant studies do provide important insights into the relation to these four knowledge gaps, there is an overall lack of congruence in European literature. In particular, an integrative view that links findings on these knowledge gaps is lacking.

### Active citizenship in European nature conservation

This article focuses on active citizenship in European nature conservation. Across Europe, the term active citizenship has gained prominence for describing how citizens in the public domain "organize themselves in a multiform manner, to mobilize resources and to act in the public policies in order to protect rights and take care of common goods" (Moro 2012:11). Active citizenship is a form of social innovation in which self-organizing citizens act voluntarily and autonomously (Sørensen and Triantafillou 2009, Hajer et al. 2015). This includes forms of advocacy and activism (Eizaguirre et al. 2012), environmental stewardship (Campbell et al. 2021), citizen-driven green space initiatives (Van Dam et al. 2015), co-creation (Puerari et al. 2018), community-based resource management (Ambrose-Oji et al. 2015), landscape stewardship (Horcea-Milcu et al. 2018), civic ecology (Krasny and Tidball 2015), and (pro)active participation in policy making (Fors et al. 2021). Traditional forms of volunteering are not included, as they lack a dimension of selforganization (Sørensen and Triantafillou 2009). Professional organizations and businesses are also not included. However, it is important to be aware that citizens' initiatives can develop into professional organizations or businesses.

In the field of nature conservation, active citizenship can be considered as a form of environmental stewardship (Campbell et al. 2021), but with a specific focus on self-organizing, grassrootsdriven forms. These citizens are non-professional (co)producers or (co)governors of nature and green spaces, with the term citizenship referring not to inhabitants of a specific country but to an "earth citizenship" as human beings connected to nature (Nelson 2016). In many European countries, biodiversity governance is increasingly decentralized and co-creative (Elmqvist et al. 2013). Participation in green space governance is promoted by various regulations across Europe (Fors et al. 2021), and there are also many bottom-up initiatives driven by citizens across the continent (Van der Jagt et al. 2016). Following the scope of what drives citizens in their engagement with nature, this article's focus on nature conservation is not limited to protected reserves and rare species. From here on, the term green spaces and references to nature conservation include protected reserves as well as urban green spaces and cultural landscapes where many citizens are active.

#### Aim and research questions

This article addresses debates about the contribution of active citizens toward European nature conservation as well as debates on how green spaces should be effectively and democratically governed. With this, the article adds to the literature by providing a state-of-the-art synthesis, linking different topics and perspectives to critically reflect on the implications of active citizenship. The main aim of this synthesis article is to contribute toward a critical understanding of the implications of active citizenship for the governance, management, and protection of green spaces across Europe. For this purpose, the following main research question is addressed:

What are the implications of active citizenship for European nature conservation?

This question is accompanied by four sub-questions, based on the four main knowledge gaps identified in the introduction:

- **1.** How does active citizenship manifest in green space governance?
- **2.** What are the effects of active citizenship in nature conservation?
- **3.** What democratic tensions are associated with active citizenship in nature conservation?
- **4.** What are the implications of active citizenship for the governance of green spaces?

#### **METHODS**

This article is based on an integrative study of literature. Such a study of literature aims to combine perspectives and insights from different research traditions to scrutinize a heterogeneous topic area by reflecting on contrasting and complementary research findings (Wong et al. 2013, Snyder 2019). Integrative literature studies are more suitable than structured reviews when the field of study is broad, interdisciplinary, and difficult to capture in general search queries (Wong et al. 2013). Rather than providing structured coverage to quantitatively compare evidence, an integrative study of literature aims for a cross-cutting and integral contribution in the form of a narrative, often with the purpose of overviewing the knowledge base and then critically reflecting on it (Wong et al. 2013, Snyder 2019). An integrative literature study demands creativity and flexibility in data collection, not through fixed sets of keywords, but rather as an iterative, mostly qualitative exploration of different bodies of literature (Snyder 2019).

For this article, literature was identified through scientific databases (Google Scholar and Scopus), via the reference lists of these articles, via Google web search, and also via colleagues and peers. Around 400 sources have been collected, comprising mostly peer-reviewed scientific articles. Over 90% of these articles were published since 2005, reflecting the growing attention paid to active citizenship as a research topic. Although this literature presents evidence from across the European continent, there is a dominance of literature from EU countries as well as the UK. Northern and Western European countries are somewhat overrepresented, with slightly less literature from Southern Europe (apart from Italy), or Central and Eastern Europe. In addition, research from urban and peri-urban areas is overrepresented, which is not surprising considering Europe's high degree of urbanization.

# MANIFESTATIONS IN THE FIELD OF NATURE CONSERVATION

Millions of European citizens play an important role in the conservation, management, and governance of nature (European Union 2019). Although most descriptions of European active citizenship are from Western and Northern Europe, it has been studied all over Europe, also in former socialist states such as Poland, Romania, Estonia, Slovenia, and Hungary. The literature offers plenty of examples. Cvejić et al. (2015) show how citizens transformed a dormant construction pit in the city of Ljubljana, Slovenia, into an urban agricultural hotspot. In Berlin, Germany, Rosol (2010) describes different forms of community gardening

and green space maintenance with an important role for active citizens. Across the Netherlands, Van Dijk and Van der Wulp (2010) found many forms of civic activism for protecting green spaces. As these examples show, citizens are not only "users" of green spaces, they are also agents capable of influencing green space governance.

### Motivations and drivers for active citizenship

Although citizens are active in nature conservation, their activities are equally motivated by social, cultural, and economic objectives (Admiraal et al. 2017, Raymond et al. 2017). Dobson et al. (2020) talk about "the magic of the mundane" to illustrate the importance of citizens' everyday experiences of nature. Scholars' recent attention to relational values of nature also shows how personal connections and cultural relationships with nature are important drivers behind action for biodiversity (West et al. 2020, Riechers et al. 2021). Besides concerns for biodiversity, citizens' aims for personal development, social involvement, enjoyment of outdoor activities, and learning about nature are also motivations to become active (Ganzevoort and van den Born 2020). Citizens' motivations are thus not reflective of sectoral approaches to conservation but much more inspired by personal experiences, often crossing borders between nature and culture (Admiraal et al. 2017).

That being said, not all motivated citizens become active citizens. The move to action often requires a "trigger." Active citizenship often arises as a response to policy developments or (projected) changes in the environment such as the biodiversity crisis (Hajer et al. 2015). An invitation from a neighbor or a personal experience of nature might equally be a reason to become active. Relational values and emotional bonds with the landscape can be particularly strong triggers for active citizenship (Mattijssen et al. 2020), especially when a specific area to which people feel deeply connected is involved (Buta et al. 2014, Storie et al. 2019). Citizens also need to be able to put their motivations into action. Citizens with fewer resources, such as social and financial capital, are often less able to do so (Igalla et al. 2020). Demographically, it has been documented that active citizens are often highly educated, relatively rich, and older (Ganzevoort et al. 2017), although there are also many examples of active citizenship by immigrants, people with lower incomes, or youth (e.g., Rosol 2010, Wals and van der Waal 2014). Legal frameworks that are in place also matter. This includes land ownership and regulations related to, for example, species protection, water management, or accountability for policy objectives. It has been documented how in Natura 2000, the EU's network of protected areas, strict conservation objectives often limit the potential for citizens to become involved in management of these areas through forms of self-organization (Apostolopoulou et al. 2014, Ferranti et al. 2014).

## Physical, cognitive, political, and spatial dimensions of active citizenship

When citizens become active, they employ a wide variety of activities toward an equally diverse spectrum of objectives. There is no overview on the numbers and characteristics of groups of active citizens across Europe (Celata and Sanna 2019), but it seems clear that most groups engage in concrete management activities. This includes activities such as waste removal, pollarding willows, maintaining paths, removing invasive plant species, mowing grass, creating and maintaining suitable habitats for species, planting trees, or protecting the nests of birds. In this way, active citizens contribute to the management of existing green spaces, the transformation of green spaces, and the realization of new green spaces (Dennis and James 2016, Mattijssen et al. 2018a). A number of studies highlight how active citizenship also has a cognitive dimension and that various groups of citizens employ activities related to knowledge and education (Measham and Barnett 2008, Bendt et al. 2013, Ganzevoort et al., 2017). This manifests in various forms of environmental citizen science, but also in forms of environmental education.

Although many groups of citizens focus on physical management of green space, active citizenship in the green domain also has an important political dimension (Blanc 2019, Celata and Coletti 2019). Some active citizens aim for a transformation in how people engage with their environment and thus aim to promote changes in existing regimes (Hajer et al. 2015, Wagenaar et al. 2015, Blanc 2019). To exercise political influence, citizens can employ a combination of physical and political activities or exclusively focus on the latter. In this, it is observed that many groups of active citizens employ activities such as protesting, lobbying or participating in decision making (McClymont and O'Hare 2008, Van Dijk and Van der Wulp 2010). Through such activities, active citizens often find cooperation and a contribution of resources from others, but they also come into conflict with other citizen groups, authorities, nature conservation organizations, or business actors (Eizaguirre et al. 2012, Mattijssen et al. 2018a). Active citizenship should therefore not be treated as an apolitical phenomenon. In fact, it is often a political act, given that many citizens become active in a public environment where varying actors pursue different interests (Isin 2009, Hajer et al. 2015).

The spatial dimension of active citizenship is also important. For many people, nature is not only something that needs to be protected in faraway designated areas but also part of their daily life (Dobson et al. 2020). Active citizenship on the European continent is therefore often found in (peri)urban areas, which does not always spatially coincide with the strictest policy objectives for nature conservation (Mattijssen et al. 2018a). Groups of active citizens can often be typified as "communities of interest" where people from across and beyond a specific locality join forces on the basis of a common interest in relation to nature and biodiversity (cf. Ojha et al. 2016). Concerning the scale of these initiatives, it is important to be aware most active citizenship in the green domain is small in scale (Buijs et al. 2019). Although case study research often highlights relatively large groups of citizens, those case studies are not representative of the scope and scale of active citizenship in a general sense (cf. Uitermark 2015). That being said, specific active citizenship initiatives can eventually become professional organizations or have a large impact through processes of upscaling and outscaling (Fisher et al. 2012).

## THE IMPACT OF ACTIVE CITIZENSHIP ON NATURE CONSERVATION

Concrete evidence on the outcomes and impacts of active citizenship is scarce and mostly based on specific case studies, but cross-case analyses in the UK (Lawrence and Ambrose-Oji 2015, Dennis and James 2016, Dennis and James 2017), the Netherlands (Mattijssen et al. 2018b), and several European cities (Van der

Jagt et al. 2017), show how active citizenship is beneficial to biodiversity in a majority of sites where citizens become active. This is in line with evidence from case studies in other European countries and underlines how many active citizens have a positive impact on the environment (see also Vierikko et al. 2016), ranging across various biomes from taiga to Mediterranean areas and from wetlands to mountains. Political activities can also lead to important results, protecting green spaces against threats such as development of new infrastructure (Van Dijk and Van der Wulp 2010) and promoting greening movements (Aalbers and Sehested 2018). Active citizenship can also lead to indirect effects that might benefit biodiversity in the long term. This includes ecological knowledge development or policy changes (Bendt et al. 2013). By tailoring management to a site-specific context, active citizenship can also play an important role in aligning management activities with local ecosystem functions (Enqvist et al. 2019), often resulting in more diverse green spaces (Vierikko et al. 2016).

Although the ecological effects of active citizenship are often positive, we should be realistic about the scope of these effects. Effects of individual practices are usually limited to a local scale (Arts et al. 2017). Krasny (2018:1) observes that "these practices are small, perhaps even insignificant, while the problems facing the planet, its people, and other organisms loom large." Although many citizens are engaged in a large number of practices, the area of public green space managed by European citizens does not add up to anywhere near the amount of land managed by authorities and large environmental NGOs (Arts et al. 2017). Many groups of citizens can and do have a broader impact (Aalbers and Sehested 2018), but we should not forget that citizens are not always successful in achieving their objectives (Aalbers et al. 2019); that the effects of active citizenship are usually limited to a local scale (Arts et al. 2017); and that there might also be (unintended) negative ecological impacts and trade-offs, such as increased disturbance of vulnerable areas or conversion of wildlands into cultivated gardens leading to biodiversity loss (Dennis and James 2017, Raymond et al. 2017). Considering the spatial dimension of active citizenship in Europe, most of its value for nature and biodiversity is likely to be found outside of protected areas and more in the peri-urban sphere.

#### The social benefits of active citizenship

Although active citizenship in the green domain often leads to positive ecological effects, it also benefits people through social, economic, and cultural outcomes (Bain et al. 2016, Raymond et al. 2017). This includes learning and education (Bendt et al. 2013), strengthening of social networks (Van Dam et al. 2014), recreation and leisure (Mattijssen et al. 2018b), food production (Van der Jagt et al. 2017), provision of employment or income (Raymond et al. 2017), and health benefits (Raymond et al. 2017). Although ecological and socioeconomic interests are sometimes seen as conflicting in conservation, citizens often seek synergies between the two. Social benefits like education, environmental awareness, and recreation can promote people's connection with nature, leading to increased support and willingness to pay for measures to protect the natural environment (Soga and Gaston 2016). Social benefits thus provide a stepping stone toward the realization of ecological effects and might in fact be a primary reason to become active (Bain et al. 2016). Considering citizens' priorities as well as authorities' increasing needs to balance conservation objectives with economic and social interests (Beunen and De Vries 2011), the social benefits of active citizenship should be taken into account.

## DEMOCRATIC TENSIONS ASSOCIATED WITH ACTIVE CITIZENSHIP

Active citizenship can contribute to democratic values, but also leads to democratic tensions in nature conservation. It positively contributes to local democracy (McClymont and O'Hare 2008), promoting a direct involvement of citizens with their environment and democratic system (Hajer et al. 2015). It also has the potential to contribute to the empowerment of marginalized groups or local communities (Bailey 2010) and to the (re)connecting of citizens with democratic institutions (Demidov 2018). However, active citizenship in green space governance also leads to tensions between direct and representative forms of democracy. It can contribute to land-use conflicts, and clashes amongst citizens or between citizens and other stakeholders. Active citizenship often means that authorities will be confronted with demanding citizens (Hajer et al. 2015) and in extreme circumstances it can lead to threats, vandalism, and violence (White et al. 2005, Olafsson et al. 2021). Expecting that active citizens and authorities will have similar aims in nature conservation is therefore a dangerous assumption. Active citizenship can lead to outcomes that are positive for both citizens and authorities. But citizens' objectives also regularly clash with responsibilities and preferences of authorities (Apostolopoulou et al. 2014).

#### The active citizen and the state

Institutions do not determine active citizenship. Even so, official policies and rules have a guiding influence on what citizens can do in green space governance (Mattijssen et al. 2019). Active citizens often need to "craft their own institutions" (Colding et al. 2013:1042) to match with legal frameworks. Formalization helps citizen groups to increase their legitimacy and qualify for subsidies, but often results in less autonomy. To be successful in self-organizing, citizens thus often need to connect with authorities (Van Dam et al. 2015). Alternatively, citizens might adopt confrontational strategies such as protesting, or deliberately choose to operate outside of regulatory frameworks through management activities like guerrilla gardening (Adams et al. 2013).

Although the role of citizens as active agents in nature conservation has been emphasized in recent years, the shifting role of authorities also deserves scrutiny. In several European countries and on different levels of scale, austerity and neoliberal ideals have resulted in a less active role of authorities in green space management (Apostolopoulou et al. 2014, Paloniemi et al. 2015). In debates on "Big Society" and "Localism" in the United Kingdom (Buser 2013), "Kallikratis" in Greece (Apostolopoulou et al. 2014), "Participation Society" in the Netherlands (Verhoeven and Tonkens 2013), or other European debates on active citizenship (Hoskins 2009), notions of responsible, active, and empowered citizens are often linked to discourses on a retreating state and public budget cuts. Because of the close link between those discourses, scholars have been critical of the attention given to active citizenship by politicians and authorities (Turnhout et al. 2010, Buser 2013, Crossan et al. 2016). It is suspected that authorities' appeal to citizens to become active is intended to replace previous governmental efforts (Verhoeven and Tonkens 2013) and is in fact an instrumental approach for the realization of policy goals (Tonkens et al. 2013, Klein et al. 2017). In this light, policy makers' current focus on active citizenship is sometimes associated with authorities' evasion of their own responsibilities in nature conservation (Blanco et al. 2014).

#### Active citizens and the broader population

What active citizens do is often valuable for nature and also for other citizens, but they are not necessarily representative of the broader population. Although there are interesting case studies that highlight the involvement and empowerment of underrepresented groups (Bailey 2010, Rosol 2010), it is known that immigrants, lower income groups, disabled people, and youth are sometimes less represented as active citizens in the green domain (Ganzevoort et al. 2017, European Union 2019). It has also been highlighted that active citizens with more social capital or financial resources are often more successful (De Wilde et al. 2014, Igalla et al. 2019). In a representative democratic system, authorities have a responsibility to represent the entire population of their governing districts. Active citizenship therefore cannot be an excuse for a passive government: authorities should also represent non-active citizens, which means that they might sometimes feel the need to intervene with active citizenship (Milana 2008). The risk here is that authorities will erroneously perceive their own policy objectives as "broader public interest" and ignore or even hinder forms of active citizenship that have different aims. It has been observed how authorities frame forms of active citizenship that do not align with policy as NIMBY-ism (Not In My BackYard; McClymont and O'Hare 2008). This is a strong and usually unjustified disqualification of active citizenship (McClymont and O'Hare 2008).

#### **Environmental justice**

Regarding the burdens and benefits of active citizenship, one needs to be aware that active citizenship leads to important debates. The concept of environmental justice comes up in various European studies around the fair sharing of environmental benefits and burdens (Rutt and Gulsrud 2016, Haase et al. 2017, Kronenberg et al. 2020). This concept has three dimensions: (1) a procedural dimension underlining equality in involvement and contribution; (2) a distributive dimension scrutinizing the equal distribution of costs and benefits; and (3) a recognitive dimension valuing the needs and preferences of all stakeholders (Kronenberg et al. 2020).

All these dimensions are important in relation to active citizenship. For procedural justice, it has been shown how certain societal groups are less represented or less successful as active citizens. This can concern groups with a lower socioeconomic status or ethnic minorities such as Roma in Slovakia, Czech Republic, Romania, and Hungary (Kronenberg et al. 2020) or the Indigenous Sámi people in Norway, Sweden, Finland, and Russia, who sometimes struggle with non-equal power relations in governance processes (Vitikainen 2021). Regarding distributive justice, socioeconomic as well as spatial differences come up as a consequence of active citizenship. In urban areas, studies show that more green is realized by active citizens in relatively well-off neighborhoods (Haase et al. 2017), which are usually greener to begin with (de Vries et al. 2020). In this way, active citizenship may result in a reinforcement of social inequalities. Citizeninitiated greening projects can also lead to gentrification (Haase et al. 2017). This might invoke resistance to greening, giving rise

to forms of active citizenship which challenge greening efforts (Pearsall and Anguelovski 2016). Concerning recognitive justice, it has been highlighted how homeless people, drug users, and ethnic minorities are negatively impacted or excluded by greening efforts (Kronenberg et al. 2020). Sometimes, these groups are explicitly framed as unwanted users of green spaces, but it is important to note that they are also stakeholders impacted by active citizenship.

Although active citizenship raises issues in relation to environmental justice and can reinforce inequalities, it is important to note that active citizens also combat inequalities and contribute toward inclusiveness and equality. It is a government's mission to ensure an equitable distribution of resources amongst the population as well as to protect nature and biodiversity, but this is not always achieved by authorities. Some active citizens are taking inequalities into account by combatting environmental injustices (Privitera et al. 2021) or representing the interests of underrepresented or disadvantaged citizens (Pearsall and Anguelovski 2016). In this way, active citizenship can also contribute toward environmental justice.

#### **GOVERNANCE IMPLICATIONS**

The findings from the previous section have implications for the governance of European green spaces. These findings are now reflected upon from a governance perspective.

#### Roles and responsibilities

In the context of neoliberalism and state retrenchment, policy makers often assume that active citizens can take over public responsibilities (Verhoeven and Tonkens 2013). Yet, official policy does not determine if, when, where, and how active citizenship manifests. Active citizenship arises autonomously and unpredictably, driven by what citizens consider important. As a result, it may promote activities that are neither connected to nor aligned with official policy (Buijs et al. 2019) or with green space management by NGOs or businesses. The local scope of most active citizenship also means that its contribution to nature and biodiversity is generally of a different order of magnitude than the large-scale conservation efforts that are required to protect our planet's biodiversity. As IPBES emphasizes (Díaz et al. 2019), citizens have an important role in nature conservation. But if the history of conservation is teaches us anything, successful largescale conservation generally requires strategic planning, embedding in policy frameworks, and a coordinated effort from various stakeholders including citizens but also authorities, NGOs, and businesses (Van Koppen and Markham 2007).

In the green domain, activities of self-organizing citizens are often not accounted for in spatial planning (Adams et al. 2013, Andersson et al. 2014). Even when they are, there is a risk that authorities only support citizens working within existing policy frameworks. Klein et al. (2017) illustrate how municipal authorities in Finland and Denmark strongly focus on citizens operating within the framework of their own policies to tackle storm water management through nature-based solutions, and Kronenberg et al. (2015) highlight how Polish authorities downplay the role of citizen groups and local NGOs in green space governance, mostly aiming to delegate responsibilities rather than acknowledging stakeholders' views and activities. These are questionable developments, given that citizens with alternative views also play an important democratic role in nature conservation and might still produce important environmental and societal values. Critical citizens also function as an important thermometer keeping policy makers and various landowners in touch with societal preferences (Frantzeskaki et al. 2016, Enqvist et al. 2019).

Considering the formal responsibilities of authorities in terms of safeguarding policy goals, for example on Natura 2000, their continued central role makes sense. There is a risk that active citizenship leads to authorities' withdrawal from their own responsibilities (Rosol 2010, Verhoeven and Tonkens 2013). But the small scale and local focus of active citizenship, its somewhat ad hoc and fragmented nature, differences between objectives of citizens and authorities, unequal distributions of capital amongst citizens, and the observations that active citizens are usually not representative of the wider population all point to the need for a continued central role of authorities in the governance and management of green spaces. Still, authorities and environmental NGOs would do well to recognize that citizens can locally play an important role in governing and managing green space, as highlighted by many case studies cited throughout this article. In this respect, the ecological value of active citizenship is not necessarily found in protected areas, where strict regulations might better align with more traditional forms of volunteering, but usually in the urban or peri-urban sphere close to where many citizens live.

#### Active citizenship as an addition, not as a substitution

The work of active citizens generally does not replace that of authorities or other nature conservation stakeholders. From an ecological perspective, the local focus of most active citizenship means that the activities of these citizens are fragmented if one looks at them from a bird's eye view. Although many active citizens cooperate with other stakeholders to achieve their objectives, an ecological network requires a level of central coordination which cannot be expected from local groups. We should also be aware that the continuity of management is not safeguarded through active citizenship, which can spontaneously arise but just as quickly disappear (Van Meerkerk et al. 2018). Also, not all green space management (for instance management which requires heavy machinery) can be easily implemented by citizens. From a democratic point of view, a focus on active citizenship to justify a retreating role for authorities can lead to an exclusion of nonactive citizens (Milana 2008). Also from this perspective, authorities should continue to be involved in green space management. In fact, an additional effort might be required to be more inclusive, given that it is mostly highly-educated groups of citizens who succeed in building constructive relationships with authorities (De Wilde et al. 2014). Active citizenship can promote democratic values, but authorities are needed to represent the interests of everyone, mediate conflicts, and safeguard environmental justice.

For these ecological and democratic reasons, active citizenship should be considered as an addition to what authorities, businesses, and NGOs do, and not as a substitution. Active citizens can provide important local contributions to the regime for nature conservation, potentially realizing important environmental and social benefits. When authorities support active citizens, this can increase the social and environmental impacts of their activities (Aalbers et al. 2019). But there is a need for a government that also upholds its own responsibilities and prioritizes between different interests. It is inevitable that critical citizens will not always get what they want, but simply framing citizens as "NIMBY," "emotional," or "not understanding" is not the way to go forward (McClymont and O'Hare 2008). Authorities should not force citizens into a straight jacket, "cherry-pick" among citizen groups, or hide behind active citizens (Turnhout et al. 2010). In a democratic system, authorities have an important role to represent the interests of everyone, including non-active citizens or citizens who lack the tools to successfully accomplish their objectives (Milana 2008). For the realization of ecological networks, this role is often evident. But also on the street level, municipalities have the important task of safeguarding the presence of sufficient, properly maintained, accessible green space for everyone.

#### **Opportunities for collaboration**

Active citizens often seek a connection with other stakeholders to accomplish their objectives (De Wilde et al. 2014, Hajer et al. 2015). Collaboration with other citizen groups or NGOs can offer opportunities to increase the impact of their activities (Franklin and Marsden 2015). Collaboration between citizens and authorities can lead to important mutual benefits (De Wilde et al. 2014, Franklin and Marsden 2015) and active citizens also expect authorities to be responsive toward their activities (Mattijssen et al. 2019). Through providing subsidies or practical support and through developing supportive policies, authorities regularly play an important role in the success of active citizenship (Aalbers et al. 2019). Responsive authorities can stimulate the active involvement of people with nature, and also contribute to the realization of their own public policy objectives (Klein et al. 2017, Buijs et al. 2019).

The adoption of a polycentric, context-sensitive approach to green space governance can help authorities achieve their policy objectives while also stimulating active citizenship and the involvement of other stakeholders in nature conservation (Brousseau et al. 2012). This requires governance that is sensitive to the diversity and dynamics of active citizenship, but also demands a level of central steering (Buijs et al. 2019). In many European countries, national and international conservation directives imply strict regulations related to protected areas (Ferranti et al. 2014), but outside of those areas there is often more regulatory space for citizens to pursue their own objectives. Literature on "nested" approaches to nature conservation highlights how local priorities can be aligned with or additive to national and international conservation duties (Kabat et al. 2012). Much active citizenship is happening in peri-urban areas outside of the formal conservation regime (Mattijssen et al. 2018a), and in these areas it might be more difficult for authorities to promote biodiversity because of a lack of formal directives. Especially in those areas, active citizenship can bolster conservation efforts while authorities have more regulatory space for engaging in collaboration.

Collaboration with citizens requires an open mind from authorities and NGOs. Active citizens are generally not motivated by strict ecosystem types (Admiraal et al. 2017), whereas authorities often have a blind spot for relational values of nature (Mattijssen et al. 2020). Forcing citizens into a strict policy framework can lead to conflict or disengagement. Instead, stakeholders engaging with active citizens should recognize the plurality of meanings and values that citizens attribute to green space (Vierikko and Niemelä 2016). When governance is inclusive of the variety of human–nature relations, it is more effective in meaningfully connecting with citizens (Horcea-Milcu et al. 2018). To really build a bridge with the citizen, nature conservation stakeholders therefore need to be open to other views of nature. But citizens also need to adapt to the policy context for successful cooperation, which requires learning from both sides (Puerari et al. 2018). Dealing with active citizens can take a lot of time, effort, and flexibility (Rosol 2010), and even then, it will not always be successful. Still, there is a large potential for mutual benefits when citizens and authorities, NGOs, or businesses join forces in nature conservation.

#### CONCLUSION

The four main knowledge gaps outlined above have been discussed separately and in turn. These discussions can now be related to the main research question: What are the implications of active citizenship for European nature conservation?

#### Main findings

Looking at how active citizenship manifests in nature conservation (sub-question 1), we have seen that it is driven by a wide range of motivations that relate to biodiversity, but also by social factors and personal connections to nature. Active citizenship has an important physical, political, cognitive, and spatial dimension and manifests in a wide variety of practices. Although most active citizenship is small scale, together all these groups of citizens have become a societal force to be reckoned with in nature conservation. The effects of active citizenship (subquestion 2) are often small scale, but can locally be positive for nature and biodiversity. It is clear that active citizenship can be important for nature conservation, but its social, cultural, and economic impacts matter as well. However, one needs to be aware that active citizenship is not always successful and can also lead to negative ecological effects.

Looking at democratic debates (sub-question 3), active citizenship can positively contribute to democracy but also leads to tensions. Critical scholars have highlighted how a political focus on active citizenship is closely associated with authorities' evasion of their own responsibilities in conservation. Furthermore, the issue of environmental justice leads to ongoing debates around the fair sharing of environmental benefits and burdens across the population. Concerning the governance implications (sub-question 4), active citizenship should not be considered as a substitute for governmental action for nature, but it can provide important local additions to regulated nature conservation efforts. A polycentric, responsive, collaborative, and context-sensitive approach to green space governance can help authorities in achieving their policy objectives while also stimulating active citizenship.

#### Directions for future research

Evidence presenting a comprehensive overview of the characteristics of active citizenship in Europe is scarce. In addition, most of the quantitative work cited in this paper is cross-sectional. Observations about shifts regarding active citizenship are thinly supported by empirical evidence and long-term

monitoring of trends. In this context, there is a need for longitudinal research, systematic knowledge (Celata and Sanna 2019), and comprehensive insight into effects (Mattijssen et al. 2018b). Another knowledge gap concerns the costs and benefits associated with active citizenship in European conservation. Furthermore, there is little research conducted on citizens' activities on private land, including household gardens and land owned by companies, farmers, and estates.

Lawrence and Ambrose-Oji (2015) highlight how less-tangible outcomes of active citizenship, such as community empowerment, are often overlooked. For outcomes related to biodiversity there are similarly few, mostly peri-urban references. Here, additional fieldwork across different biomes/ecosystem types would be welcome, in order to better understand the impacts of active citizenship across different political and geographic contexts. The relationship between active citizenship and societal change also remains a focus area for future research (Kenis et al. 2016): to what extent does active citizenship relate to transitions? Few strong conclusions can currently be drawn on this. Topics such as environmental justice and polycentric governance will remain relevant across different socioeconomic and political contexts, given that there are usually no "one size fits all" steering approaches in this respect. In this context, I want to re-emphasize the importance of interdisciplinary approaches linking these topics with empirical evidence on the scope and characteristics of active citizenship.

In this paper, I have discussed active citizenship in European nature conservation, but the European continent comprises different countries, ecosystems, cultures, and political systems. Hardly any literature from non-EU former socialist countries such as Belarus, North Macedonia, Russia, or Albania was found, which would have broadened the scope of the paper. Here, additional research would be welcome. There is of course also much more to be said about active citizenship in other continents. An expansion of this work to other democratic and nondemocratic parts of the world would be a welcome addition to the literature as well.

*Responses to this article can be read online at:* https://www.ecologyandsociety.org/issues/responses. php/13336

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#### Data Availability:

Data/code sharing is not applicable to this article because no data/ code were analyzed in this study.

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