ELSEVIER

Contents lists available at ScienceDirect

Forest Policy and Economics

journal homepage: www.elsevier.com/locate/forpol



"Forest property rights under attack": Actors, networks and claims about forest ownership in the Swedish press 2014–2017



Anna Sténs*, Erland Mårald

Department of Historical, Philosophical and Religious studies, Umeå university, 901 87 Umeå, Sweden

ARTICLE INFO

Keywords:
Forestry
Conservation policy
Echo-chamber
Forest property rights
Printed press

ABSTRACT

Sweden is a leading country in governance of property rights, according to global assessments, but Swedish landowners currently argue that their forest property rights are being eroded. Thus, the aim of this article is to investigate when and why the current debate on forest property rights came about, and its resemblance to discussion in an 'echo-chamber'. This refers to an arena in which information is accessed from limited sources and a small number of actors with ideological homogeneity may exert substantial influence and reinforce established opinions. Hence, it may spread disinformation, increase polemic tensions, and hamper deliberative policy processes in society. We assess the resemblance by identifying where the issue is debated in printed news media, the active actors, the interests they represent and how they problematize property rights, i.e. the claims they make and the claims' homogeneity. Our results show that the debate has intensified in recent years, but several issues are not new. The debate is mainly limited to the Swedish rural business press and rural conservative press. Moreover, the main claim-makers are representatives of land and forest owner organizations, and members of agrarian and conservative political parties, which have close organizational and individual connections, thereby forming a metaphorical 'chamber'. The 'echo' consists of repetitive claims about withdrawal and management rights, with no efforts to examine and contextualize complex aspects of private property rights in a changing society. The debate about forest ownership in an echo-chamber is problematic in several ways. It hampers efforts of claim-makers in the chamber to reach out, undermines current systems' legitimacy, and locks important questions about sustainable forestry and property rights into a narrow societal sphere.

1. Introduction

According to assessments by the International Property Alliance (led by the conservative U.S. advocacy group Americans for Tax Reform), Sweden is a leading country globally in the governance of property rights, thanks to strong judicial independence, rule of law and control of corruption (IPRI, 2018). Nichiforel et al. (2018) placed contemporary forest property rights in Sweden (gauged using a 'Property Rights Index in Forestry') in the mid-range of those in 31 compared European jurisdictions. This was mainly because despite strong formalised, private property rights Sweden has a Right of Public Access (*Allemansrätten*) which hampers forest owners' ability to exclude external users from their property (Nichiforel et al., 2018). However, several other European countries also have rights of public access to forests (Keskitalo, 2017), and clearly Swedish forest property rights are strong by international standards. Nevertheless, debate about the significance and limits of forest ownership has recently intensified in the Swedish news

media. Swedish landowners claim that private forest property rights are "under attack", due to expansion of nature conservation, other sustainability-related demands on forests, and a general shift in attitudes in urbanised society regarding private ownership of natural resources (e.g. Ek et al., 2016; Nilsson, 2017). Hence, forest property rights in Sweden are ranked as strong in international assessments, but Swedish landowners claim they are being eroded.

This raises important questions about how representative the concern about erosion of property rights is in Swedish society and the Swedish forest sector, and how it is articulated. Since the implementation of legal instruments, such as regulations regarding sustainable forest management, depends on the willingness to accept and adhere to public policy, it is important to be aware of and consider public perceptions of the legitimacy of regulations (e.g. Primmer, 2011). This is particularly true in Sweden, where the forest land is to a large extent privately owned (Statistical Yearbook of Forestry, 2014). Moreover, normative dimensions of forest conflicts are often discussed

E-mail addresses: anna.stens@umu.se (A. Sténs), erland.marald@umu.se (E. Mårald).

^{*} Corresponding author.

(e.g. Paavola, 2004; Bergseng and Vatn, 2009; Uggla et al., 2016), but connections to political ideology are rarely analysed (cf. Krange et al., 2019). Similarly, perceptions of property rights held by forest owners and other actors in society are seldom intensively addressed (but see Bergstén et al., 2018; Brukas et al., 2018), although in this case they warrant attention due to the discrepancy between international assessments and Swedish landowners' claims.

In this article we go beyond formalised law and institutions to grasp normative and ideological perceptions and expressions about forest property rights. A widely recognized and potentially important factor is that public debate is increasingly differentiated and polarized, and people tend to be entrenched in separate arenas or media communities (e.g., Stroud, 2011; Strömbäck et al., 2013). These arenas are known as 'echo-chambers', as they repetitively disseminate information generated by ideologically similar political communicators within limited social settings (Jasny et al., 2015). As Swedish forest property rights seem to be both stable and strong, it seems pertinent to consider whether the debate about the erosion of forest property rights is an example of an echo-chamber, its impact, and its relevance to the general, public sphere.

The aim of this article is to investigate when and why the current debate on forest property rights came about and to what extent it resembles an 'echo-chamber'. We do this by briefly describing the history and status of forest ownership in Sweden, then identifying where (within print news media) debate about threatened forest property rights occurs and the active actors (claim-makers). We also examine the interests they represent and how they problematize property rights, i.e. the claims they make and the claims' homogeneity. We then discuss the implications of our findings and their relevance to society.

1.1. Overview of forest ownership and policy development in Sweden

In Sweden, the distribution of forest land between private and public owners has been relatively stable since the early 20th century (Lundell, 2011), with around 50 % owned by individual forest owners, a quite large proportion in European terms (Keskitalo, 2017). In addition, ca. 25 % is owned by private companies, 17% by the state and state-owned companies and 8 % by other public and private owners, including municipalities and the Swedish church (Jansson, 2011).

This distribution is the result of land reforms and delineation (avvittring) processes by the Swedish state, mainly in the 18th to early 20th century. During these reforms, the state secured individual property rights and expanded the state-owned forests, then successively prohibited privately owned companies and other corporations from purchasing private forest land (Jansson, 2011). Land reforms varied geographically. In northernmost Sweden they were implemented much later than in southern parts and the state became a large landowner. In the processes, settled residents were ensured property rights over forest land, while other inhabitants became regarded as users of the forests based on customary rights, such as allemansrätten and reindeer herding rights (renskötselrätten) (Brännström, 2017; Lantto and Mörkenstam, 2008; Åslund, 2009).

From the early 20th century onwards, in response to the industrialisation of forestry, the state increased its influence and delimited forest owners' self-determination (Eliasson, 2002). Individual forest owners reacted by forming cooperative associations to protect their economic interests, including property rights, against both state intervention and private forest companies (Kronholm, 2016). Regional forest owner associations were established, which in turn were affiliated to the Federation of Swedish Forest Farmers and its predecessors (Lundell, 2011). Since 1999, the Federation of Swedish Forest Farmers is a division of the Federation of Swedish Farmers (LRF), a business and interest organisation also rooted in the early 20th century (Österblom, 2018).

After WWII, forestry increasingly diverged from agriculture and a distinct, tightly-knit sector emerged, composed of state bodies, forest

experts (mainly male, educated foresters), private forest companies, private forest owners and their associations (Stjernquist, 1997; Sundström, 2010). An overarching consensus shared (inter alia) by leading politicians, forest companies and trade unions, was that sustained and even timber yields, combined with industrial efficiency, would increase the sector's revenues and provide long-term stability. In return, the sector would contribute to national economic growth, employment and welfare (Mörald et al., 2017; Stjernquist, 1997). Homogenous national forest productivity was defined as the overarching objective, while non-industrial and (particularly) uneven aged forest management was suppressed (Schlyter and Stjernquist, 2010; Sijskonen, 2013; Stiernquist, 1997). To implement policy and soften criticism from the private forest owners, the government chose consultation, information and subsidies before strict enforcement of regulations (Schlyter and Stjernquist, 2010; Siiskonen, 2013; Stjernquist, 1997). The cooperation between the forest owner associations and authorities generally worked well (Lundell, 2011) since they shared the basic aim of prioritising wood production (Stjernquist, 1997).

State intervention culminated in 1979 and 1983 with a new Forestry Act followed by amendments, with detailed regulations and enforcement to enhance timber production from public and private forests (Siiskonen, 2013). Private forest owners protested against associated regeneration costs (Siiskonen, 2013; Stjernquist, 1997).

From the 1960s onwards the emergence of environmentalism and mobilisation of indigenous Sami rights challenged the production-oriented forest sector, raising doubts about the sustainability of intensive forestry and financial profits. Concurrently, in the early 1980s protests arose against the detailed production-oriented state regulations (Stjernquist, 1997). Consequently, in the 1990s forest policy took a sharp turn away from prioritising production towards promoting environmental considerations, in Sweden and many other countries (Bush, 2010; Siiskonen, 2013; Pülzl et al., 2014). In 1993, the new Swedish forest policy stated that production and environmental objectives should be considered equally important in all forestry operations (Appelstrand, 2012). Moreover, international neoliberal trends (Humphreys, 1996, 2009) inspired deregulation and decentralisation (Mårald et al., 2017). Altogether, this gave forest property owners opportunities to manage their forests under the 'freedom with responsibility' principle (Appelstrand, 2012) and changed power relationships from master-subject to 'partnership' (Siiskonen, 2013).

Concurrently, however, international environmental governance increasingly influenced national decision-making through the United Nations and European Union (Pülzl et al., 2014). Additionally, criticism of the national policy and forest sector's inability to support environmental considerations and indigenous people's rights spurred establishment of the Forest Stewardship Council (FSC) and subsequently Programme for the Endorsement of Forest Certification (PEFC) certification schemes, which imposed detailed regulations for sustainable forest management (Johansson, 2013).

Thus, during the 1990s the priorities and balance of power in the forest sector shifted. New international policy, market-based tools and biodiversity experts influenced the sector (Bush, 2010; Siiskonen, 2013; Pülzl et al., 2014). Today, national forest policies are dictated by the national government, but restricted by international law and commitments intended to regulate sustainable forest management. The Swedish Forest Agency is responsible for the task of balancing the two values of economical production and environmental sustainability, and should consider all types of forest interests (Sundström, 2010). Moreover, the composition and connections among the forest owners have also changed in several ways. The largest forest companies have become multinationals controlling the production of goods and services in several countries. State forestry was transferred to a profit-driven company in 1992. Individual owners are no longer mainly rural farmers and are more heterogeneous. Today, many owners (32 %) do not live on their property but in urban areas, increasing numbers are women (38 %) and there is more variation in owners' economic dependence on the

property and motivations for ownership (Keskitalo, 2017). Furthermore, only around 34 % of the individual private forest owners are members of four major regional forest owner associations (Skogsstatistisk årsbok, 2014). Earlier research show, however, that despite these changes the traditional strong forest actors and their ways of thinking still dominates the forest sector (Ågren, 2009; Arora-Jonsson, 2017; Mörald et al., 2017). This includes a gendered bias seeing the forest sector as a male domain (Andersson and Lidestav, 2014; Holmgren and Arora-Jonsson, 2015).

In sum, although the distribution of forest land between categories of land owner has been stable, the tightly knit sector has been challenged. It is in the light of this background that the current debate on ownership and forest should be understood.

2. Theory and method

2.1. Theory

Throughout history, rights to land, forests and water has been the basis of wealth for people. However, there have been diverse property systems at different times and places, showing that property rights depend on social relationships and political contexts (e.g. Sikor and Lund, 2009; Ågren, 2007). Also, in western societies, where individual property rights have evolved to a norm, criteria bestowing eligibility to the rights have shifted with time, for example married women, unsettled people and minorities have not always been assigned the same agency and civic status as settled, adult men of ethnic majorities (e.g. Lantto and Mörkenstam, 2008; Ågren, 2009). Thus, the concept of 'individual property rights' is not eternal, independent or unchangeable, and the rights (if any) pertaining in a certain societal context must be empirically determined (Eliasson, 2002; cf. Mill, 1891).

Our theoretical framework is rooted in the idea that property rights consist of a bundle of legally guaranteed powers (Schlager and Ostrom, 1992; Sikor et al., 2017), some of which may be contested or in transition at a given time. Nichiforel et al. (2018) recognized four categories: rights of access (to enter forest land), withdrawal (to harvest or remove timber, firewood and non-wood forest products), management (to plan activities within and transform the forest), exclusion (to prevent external users from accessing and harvesting products from a property) and alienation (to sell forest land and forest products). All of these concepts except 'access rights' are used to structure the qualitative content analysis presented here. Access rights, as defined by Nichiforel et al. (2018), were excluded as they are irrelevant in a Swedish forest property context where property owners normally do have physical access to their own domains (Nichiforel et al., 2018; see also the problematisation of access rights in Sikor et al., 2017).

There is constant political debate about property, its bundles and boundaries, since ideas about property and power are so central to our dominant political ideologies (Freeden, 1998; Eatwell and Wright, 1999). In this study, we focus on the debate in traditional printed media, as newspapers (and associated websites) still contribute to the setting of agenda regarding political issues, thus their representations of an issue may influence both peoples' perceptions of a problem and policy development (Kleinschmit, 2012).

For decades, media researchers have been interested in the social processes "through which claims emerge, are publicised, elaborated and contested" (Hansen, 2019). An important element is often an 'echochamber', an arena in which enclosed networks of ideologically similar individuals repeat and amplify information or claims, leading to the further entrenchment of ideas and beliefs within the network (Farrell, 2015; Hansen, 2019). Echo-chambers can have either positive or negative effects in a democratic society, depending on the context and content of the communicated information (Jasny et al., 2015). They can enhance a groups' bonds, cooperation or empowerment, but circumscribe flows of information to a handful of actors and increase divergence between different groups in public debate. In worst cases, they

may foster closed communication within subcultures, gendered understandings, reproduction of false information, false certainty and an unwarranted feeling of consensus regarding particular issues (Jasny et al., 2015; Slater, 2007).

The echoes in a metaphorical echo-chamber are the repetitions of ideologically homogenous information or claims that a network's members already believe (Colleoni et al., 2014; Jasny et al., 2015). The strength of a network's ideological homogenity correlates positively with numbers of political ties among its members and negatively with numbers of ties with individuals espousing different ideologies (Boutyline and Willer, 2017). Thus, the echo is the repetitive sharing of similar claims among a homogenous group of actors who have the same outlook or opinion on a relevant issue. The chamber is the structure or arena that provides the space (intermediary communication channels) required for claim-makers' claims to reach the limited number of recipients (Jasny et al., 2015).

To decide whether the debate about forest property rights in Sweden resembles echoes in an echo-chamber we use the following criteria to define one. First, the debate takes place in a limited number of forums (here selected newspapers). Second, a limited number of claim-makers actively engage in the debate. Third, the active claims-makers are interconnected in strong networks, with fewer ties to debaters presenting opposing claims and with close-downs. Fourth, there are high rates of repetition of claims. Fifth, claims are framed by ideological homogeneity.

2.2. Method

We assessed the debate in terms of the five criteria listed above through quantitative and qualitative analyses of written texts published in Swedish daily news press and rural business press. With other methodologies, the analyses could have been expanded to social media and user comment sections in traditional media. Such fora probably amplify echoes rather than introducing contrary views (Dahlgren et al., 2019), but their inclusion would provide interesting foundations for further studies of perceptions of property rights.

The articles were collected from the Mediearkivet database – the largest full text, digital news archive in the Nordic countries, which compiles articles from all the major national and regional newspapers, and hundreds of magazines. Articles are available from 1987 onwards, but the start years for included papers and magazines vary. We analysed articles published between 1 January 2014 (the starting date for accessing full digitised texts of articles in the rural business press through the archive) and 31 December 2017.

To identify the papers (potential echo-chamber) where the debate occurred, we identified sources of all relevant articles in the database published in the selected time period, using the following search string: skog* äganderätt* (i.e. forest* property right*). To identify numbers and identities of active claim-makers in the debate, and the interests and networks they represent, we compiled articles from the five papers that published the most articles on forest and property rights in each source paper. Then we selected the op-ed articles from each compilation, ending up with 131 articles with 230 individual signatories, and examined affiliations of the authors to categorise the representation of interests in the debate. One of the 230 signatures was not a personal name and another 11 (i.e. 5%) lacked information about affiliation or interest. To further assess the debaters' representativeness (and hence their resemblance to the limited claim-makers in an echo-chamber) we calculated relative frequencies of authors of all op-ed articles in the selected newspapers.

To assess the problematization of property rights, i.e. the claims ('echoes' in the putative echo-chamber) about property rights that were repeatedly made and discussed, we subjected all editorials and op-ed articles by the 12 most active claims-makers to quantitative and qualitative content analysis.

For the quantitative content analysis, we used the open-source

program Voyant Tools to extract word frequencies from the dataset. Common Swedish words (so-called stop words) were excluded from the analysis. This identified concepts that were most commonly used in the debate, enabling deductive qualitative analysis of the main themes to deconstruct the problematization of focal rights (Schlager and Ostrom, 1992).

To investigate the claims' ideological homogeneity, i.e. the homogeneity of the problematization, we extended our qualitative analysis of the texts to assess their ideological foundations, focusing on the main claim-makers' presumptions. Inductive analysis of the texts extracted the following main themes: Presumptions about societal gains from individual forest ownership, Presumptions about a new politicised forest governance, Presumptions about forest conservation, Counter-voices and close-downs. The results of the quantitative and qualitative analyses are presented in the Results section and further addressed in the Discussion section.

3. Results

3.1. The first criterion: where the debate takes place

Forest and property rights were frequently discussed in five Swedish newspapers during the study period (Table 1). They were most often mentioned (in 488 articles) in two rural business organs: Land Lantbruk och skogsland (trans. Land, Agriculture and Forest land, hereafter Land Lantbruk) and ATL Lantbrukets Affärstidning (trans. Agricultural business magazine, hereafter ATL). Both are owned by the LRF. The other three are regional newspapers — Nya Wermlands-Tidningen, Norrbottens-Kuriren and Smålandsposten — which published 140 articles dealing with forest and property rights during the selected period. These newspapers cover regions with high shares of forest land (83% in Värmland and Kronoberg counties, 60% in Norrbotten county) and private forest owners, particularly in Värmland and Kronoberg counties (Swedish Statistical Yearbook of Forestry, 2014).'

These findings clearly indicate that both rurality and political factors affect where the debate takes place. This conclusion is supported by the low frequencies of articles on the rights in newspapers with leftwing orientation from the same regions (indicating that their writers and readers have little interest in the issue), and Sweden's two largest national newspapers (Table 2). The independent liberal newspaper Dagens Nyheter, which provides the most prominent printed arena for nationwide public debate, published a small number of articles that mentioned (but did not discuss) the topic of property rights and forests. The national independent conservative newspaper Svenska Dagbladet, published more articles, but still fewer than the papers that most frequently addressed the issue.

3.2. The second criterion: the claim-makers

3.2.1. Claim-makers represented in the debate

We categorised the debaters using information on the signatories' affiliations. The results show that the debate is dominated by politicians, more precisely members of the conservative and liberal-conservative parties represented in the Swedish Parliament, followed (in

declining order) by representatives of the LRF, representatives of regional family forest owner associations, and individual forest owners (Fig. 1).

3.2.2. Gender representation

Numbers of female and male signatories of the op-ed articles published in the daily newspapers were quite similar (approx. 40% and 60%, respectively). However, male signatories dominated the debate in the rural business press, accounting for 80 % of the total. Hence, in the rural business press, the issue of forest and property rights seems to be primarily a male concern (or there is a high bias towards male authors in commissioning or acceptance of articles on the issue), despite the high proportion of female forest owners in Sweden (Swedish Statistical Yearbook of Forestry, 2014).

3.2.3. Common individual claim-makers

Twelve individuals were most active in the debate, each being a signatory of at least three articles and 52 of the 131 op-ed articles (approx. 40 %) in total. All but two represented the most common interests in the debate: three of the four centre-right parties (not the Liberal Party), LRF and the forest owners' associations (Fig. 1). Most (8) were male, with an average age of about 55 years, and most (9) identified themselves as farmers, estate or land owners. The former Minister for Rural Affairs, a member of the Centre Party, was the most active, as sole or co-author of 13 (10 %) of the op-ed articles (e.g. Erlandsson, 2017; Erlandsson and Yngwe, 2016; Erlandsson et al., 2016). Another active claim-maker, but solely in the rural business press, was the chairman of the Federation of Swedish Family Forest Owners (e.g. Hammar, 2016). Only one of the most active individual claim-makers represented an agenda that conflicted with the majority views, a Green Party member, who authored just one op-ed article in the rural business press (Bergström, 2015a).

3.3. The third criterion: the networks of claim-makers

3.3.1. Networks of interests

Strong networks of individual forest owners were represented in the debate. The four regional family forest owner associations are coordinated by the Federation of Family Forest Owners, which is a division of the LRF. Thus, these claim-makers and interests are formally interconnected.

Comparison of daily newspapers and rural business press showed that articles signed by LRF members and forest owner associations dominated in their own fora, i.e. the rural business press owned by LRF (Fig. 2). This is also where articles by private, individual forest owners appeared (Fig. 2).

The involvement of political networks was also detected by analysis of the claim-makers. The most frequent contributors to the debate, in both the daily newspapers and rural business press, were members of the Centre Party — an agrarian party with traditionally close ideological and personal links to the LRF (Thullberg, 1977) — closely followed by members of the conservative Moderate party. Both parties have strong support among Swedish landowners, and LRF members (e.g. Oscarsson and Holmberg, 2016). The political representation was

Table 1

Printed rural business organs and daily newspapers that most frequently mentioned forest and property rights during 2014–2017, according to searches of Mediearkivet (https://www.retriever.se) with the string skog* äganderätt* (forest* property rights*), their coverage, owners/political tendencies and numbers of articles they published that mentioned the rights.

Paper	Geographical coverage	Owner/political tendency	No. of articles
Land Lantbruk	National	Federation of Swedish Farmers (LRF)	393
ATL	National	Federation of Swedish Farmers (LRF)	95
Nya Wermlands-Tidningen	Regional	Conservative	63
Norrbottens-kuriren	Regional	Independent conservative	40
Smålandsposten	Regional	Conservative	37

Table 2
Regional left-wing and urban/national liberal and conservative newspapers that mentioned forest and property rights during 2014–2017, according to searches of Mediearkivet (https://www.retriever.se) with the string skog* äganderätt* (forest* property rights*), their coverage, owners/political tendencies and numbers of articles they published that mentioned the rights.

Paper	Geographical coverage	Owner/political tendency	No. of articles
Svenska Dagbladet	National	Independent conservative	22
Värmlands folkblad	Regional	Left-wing (Social democrat)	9
Norrländska socialdemokraten	Regional	Left-wing (Social democrat)	8
Dagens Nyheter	National	Independent liberal	8
Östra Småland	Regional	Left-wing (Social democrat)	5

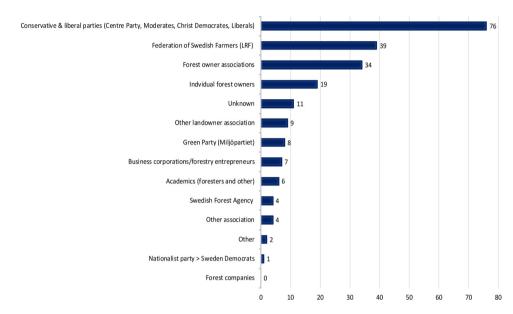


Fig. 1. Interests represented in op-ed articles regarding forest and property rights. Researched op-ed articles in Land Skogsland, ATL, Nya Wermlands-Tidningen, Norrbottens-Kuriren, Smålandsposten. Number of signatures per interest. Note that one signature may appear in several articles and one article may have multiple signatures. n = 220. Source: Mediearkivet, Retriever, https://www.retriever.se. Search string: skog* äganderätt*.

broader in the rural business press than in the daily newspapers, but dominated by conservative and liberal parties in both cases.

During the period covered, the conservative and liberal parties (also called 'the Alliance') were in opposition to a governmental coalition of Social Democrats and the Green Party. The Social Democrats were not represented in the debate at all. Thus, the government's views were only represented by the Green Party (Table 3). Representatives of the Swedish Forest Agency, who authored two articles (Tillberg, 2017; Sundqvist, 2017a), and other governmental bodies had low visibility in

the rural business press, and thus are not included in the network of property rights claim-makers.

Large-scale private forest companies were not represented at all in the debate in the examined fora (Fig. 1 and 2), although they own about a quarter of all forest land in Sweden, and are subject to the same legislation and regulations as individual private forest owners. Thus, the forest companies are not explicitly or formally included in the network of claims-makers regarding property rights, which seem to be an issue mainly for organised individual forest owners.

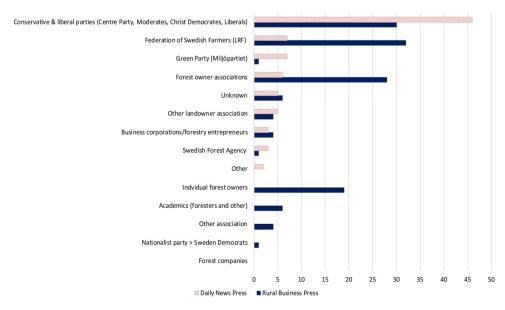


Fig. 2. Interests represented in op-ed articles regarding forest and property rights. Daily news press and rural business press in comparison. Number of signatures per interest. Note that one signature may appear in several articles and one article may have multiple signatures. n=220. Source: Mediearkivet, Retriever, https://www.retriever.se. Search string: skog* äganderätt*.

 Table 3

 Political parties represented in the Swedish parliament and in op-ed articles in the daily news press and rural business press. Signatures per political party. n = 85.

Political parties in the Swedish parliament represented in the debate	Daily News Press	Rural Business Press
Centre Party (agrarian, liberal-conservative party)	24	12
Moderate Party (liberal-conservative party)	22	11
Christian Democrats	0	6
Liberals	0	1
Social Democrats	0	0
Green Party	7	1
Left Party (socialist party)	0	0
Sweden Democrats (nationalist party)	0	1
Total	53	32

Other advocacy groups include Sveriges Jordägareförbund (*trans*. Sweden's Landowners' Union) (e.g. Grahn, 2016a, 2016b), Medborgarrättsrörelsen (*trans*. the Civil Rights Movement in Sweden) and Föreningen skogsägare för stärkt äganderätt (*trans*. Association of Forest Owners for Strengthened Property Rights). They are all claimmakers for individual property rights on a national basis. Medborgarrättsrörelsen and Föreningen skogsägare för stärkt äganderätt were only represented in the rural business press (e.g. Erixell, 2017; Klockar, 2017) during the study period, and they have no formal connections to the network of the LRF.

3.4. The fourth criterion: claims repeated in the debate

3.4.1. Focal issues

What aspects of property rights are then repeatedly problematised by the claims-makers and perceived as under attack? A quantitative analysis of the op-ed articles shows that two main actors stand out as central in the debate, the *landowners* and the *government* (including the 'State' and the Forest Agency) (Fig. 3). The European Union (EU), which is a strong actor when it comes to environmental policy is also problematised in the debate, but to a much smaller extent than national authorities (Fig. 3). Other supranational organisations, such as the UN, are mentioned but not problematised and the same holds true for the third-party certification schemes, FSC and PEFC.¹

One specific activity is of major concern, i.e. to *harvest*. Other central activities often mentioned are *forestry* and *protect* and judicial concepts such as *compensation* and *appeal against*.

A number of policies are frequently problematised, particularly the *Forestry Act*, and the *Species Protection Ordinance*.

Regarding geographical place, Sweden and the 'countryside' stand out as central in the discussion.

Other central concepts in the debate are responsibility and liberty

(freedom), i.e. a reference to the current legal principle of 'freedom with responsibility'.

3.4.2. Problematisation of withdrawal and management rights

Qualitative analysis of the articles confirmed that threats to property holders' exclusive right to harvest on their forest property was the most common theme in the debate. In terms of the theoretical bundle of rights, withdrawal rights (to extract resources) were the most frequently problematised. Management rights (to plan forest activities and transform the forest), which are closely connected to withdrawal rights, were also intensively problematised. Alienation rights received little attention apart from claims that a forest property with harvest restrictions is harder to sell (e.g. Erlandsson et al., 2017; Anon, 2017b).

In the debate, three policies were directly discussed in relation to the withdrawal and management rights: the Species Protection Ordinance (Artskyddsförordningen) (SFS, 2007:845), the national policy regarding conservation of Woodland Key Habitats (WKH) and the Aarhus Convention.

Interestingly, none of these regulations are particularly new in a Swedish context, but in recent years they have all been in a formative period, particularly regarding definitions and ways of implementation which at least partly explains their high attention in the debate over property rights.

Inventories of important habitats for red-listed species were developed by environmental non-governmental organisations in Jokkmokk, north-western Sweden, in 1987 (Karström, 1992). The government was inspired by the methods and started official national inventories in the early 1990s. According to the original Swedish definition, a key habitat is an environment where red-listed species can be expected to occur (Timonen et al., 2010), and a registered WKH should be considered in forest management. Both definitions and inventories have been adjusted several times, but continuously contested by several actors (Götmark, 2009; Hallberg Sramek, 2018). WKHs were recently described by the Swedish Forest Agency's director as "one of the most controversial concepts in Swedish forest politics" (Sundqvist, 2017b). One reason for the controversy is that a WKH is not automatically protected by law, and the forest owner is thus not economically

¹ The certification schemes Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) certify approx. 50% of the Swedish productive forest area, respectively. PEFC certification is more common among family forest owners, but forests may be dual certified.

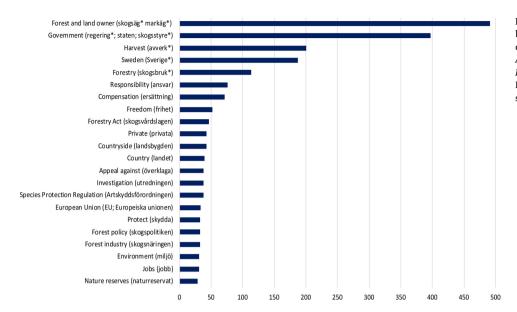


Fig. 3. The most repeated concepts in the debate over forest property rights. Researched op-ed articles and editors in *Land Skogsland, ATL, Nya Wermlands-Tidningen, Norrbottens-Kuriren, Smålandsposten.* Source: Mediearkivet, Retriever, https://www.retriever.se. Search string: skog* äganderätt*.

compensated for preserving a WKH. On the other hand, the third-party FSC and PEFC certification schemes have strong restrictions regarding harvests of WKHs (Timonen et al., 2010).

Hence, the harvesting of a WKH is perceived as strictly forbidden by the main claim-makers in the debate, and this is deemed deeply unfair: "The property is in principle confiscated for free (i.e. without compensation/author's comment), which is a challenge to property rights." (Karlsson, 2016). Frequencies of relevant articles peaked in 2017 (Fig. 4), primarily in response to the forest authority's decision to stop all inventories of WKHs in north-western Sweden (Hallberg Sramek, 2018), where the inventories had begun. They started again in 2018, in parallel with a joint consultation process about WKHs, introduced by the authorities, aiming for "increased transparency, objectivity, predictability and improved communication" (SFA, 2018a).

The Species Protection Ordinance was introduced in Sweden in 1999 and amended in 2007 (SEPA, 2009; SFS, 2007:845). It integrates the European Union's birds and habitats directives, introduced by the EU in 1992, into Swedish environmental legislation (Council Directive 92/43/EEC, 1992). The regulation attracted greater attention in the news media in 2011 and 2012 due to a number of criticised exploitations of forest resources in various parts of Sweden (Eklund, 2012; Persson, 2012; Abresparr, 2012; Johansson, 2012). It started to gain

attention from a property rights perspective in 2014, when the regional county administrations and Forest Agency began to apply the Ordinance more strictly to prohibit forest owners from harvesting their forests in areas with rare species without a granted right to compensation (Segerstedt, 2014). Two precedent cases prohibiting harvesting in areas hosting witches cauldron fungus (Sarcosoma globosum) and Siberian jay (Perisoreus infaustus), were taken to court by private forest owners in 2015 and 2016, fueling the debate (Fig. 4). In 2017, one landowner won his case, with the result that the authorities either have to redeem the area at stake and offer compensation or accept a final harvest. However, implementation of the Ordinance was still perceived as being unpredictable, and thus legally uncertain by the main claimmakers (Henningson, 2017). Claim-makers also accused the authorities of "extreme interpretation" of the Ordinance (Perers, 2017). They continuously advocated an official investigation of its implementation (Anon, 2017a) and one was commissioned by the government in 2018 (Regeringen, 2018).

The UN's Aarhus Convention, which provides guidelines for increasing public influence on environmental issues, entered into force in 2001 and was ratified by Sweden in 2005. Media attention to the Convention and its consequences for withdrawal rights rose in 2011, when the Swedish Society for Nature Conservation successfully

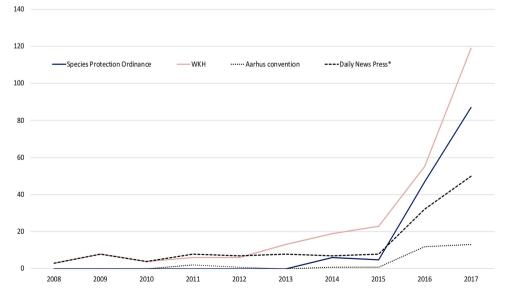


Fig. 4. Quantitative content analysis of daily news press (Norrbottens-Kuriren; Nya Wermlands-Tidningen; Smålandsposten) and rural business press (ATL; Land Lantbruk) articles mentioning the Species Protection Ordinance, WKHs and the Aarhus Convention, respectively in combination with harvest, 2008–2018. Source: Mediearkivet, Retriever, https://www.retriever.se. Search strings: Århuskonven* avverk*; Nyckelbiotop* avverk*; Artskydds* avverk*. *Articles in daily news press are presented separately as a reference to all articles combined.

appealed against a decision by the Forest Agency to approve final felling in a privately-owned mountain forest in north-western Sweden (Andersson, 2011; Hardselius et al., 2011; The Supreme Administrative Court, 2014). The controversy increased in 2016 when the Swedish Forest Agency officially published all their final fellings decisions on the agency's website. In the debate, it was claimed that environmental organisations, or "activist groups" (Oscarsson, 2017) were now provided with ideal tools to search a specific forest with a "fine-tooth comb" for red-listed species to stop planned final harvests (Anon, 2016a). One private forest owner appealed against the Agency's practice in 2016, claiming that it threatened his "sovereignty and ownership" of his forest (Rolfsson, 2016). In 2018, the court determined that the Forest Agency had the right to publish their decisions on the web. since the information could not be considered to violate forest owners' personal integrity (SFA, 2018b). In the debate it has been continuously claimed that the Aarhus Convention will lead to "public appeals against every harvest and other silvicultural operation that a forest owner needs to conduct" (Persson, 2016). When the public investigation of the Swedish Forestry Act and the convention was presented in 2017, the former Minister of Rural Affairs claimed that "The proposals in the investigation threaten private ownership in a way we have not seen before [...] ownership and protection of property are jeopardized when more people, with no local affiliation, can stop small forest owners final felling." (Erlandsson, 2017).

Besides the problematisation of the policies and regulations mentioned above, other, older policies and regulations were repetitively problematised in the debate. These include regulations regarding hunting (e.g. Lidén, 2016), shoreline protection and management (e.g. Ekman, 2016b), the government's procedures regarding the establishment of new nature reserves (Eriksson, 2017c; Gunnarsson, 2016). The issues raised are all connected to perceptions of landowners' right to manage their properties independently of other interests, including the state.

3.4.3. Problematisation of exclusion rights

Problematisation of the Right of Public Access (the freedom to roam, 'Allemansrätten') has been a recurring theme in the debate (e.g. Sidenvall, 2016; Svensson, 2016). It is connected to exclusion rights (legal prescriptions to prevent external users from accessing and harvesting resources from the property). The most frequently problematised aspects are the allegedly unlawful abuses of the old customary right of public access by 'commercial interests', such as berry harvesters and tourism entrepreneurs: "...the neat idea behind Allemansrätten has become exploited by commercial interests to the disadvantage of forest owners. When berry companies and adventure tourists have overused and destroyed forests and land, the property owners are usually powerless." (Söderström, 2016). It is claimed that there is "a legal imbalance in the relationship between landowners and [berry and tourism] companies." (Anon, 2016b).

The landowner's right to evict "illegal settlers", which has been perceived as an increasing problem following the immigration of EU-migrants, has also attracted attention. The claim-makers have pleaded with the authorities to modernise legislation to make it easier for forest owners to exclude squatters from their properties (Davidson, 2016a). Regulations regarding this issue were revised in 2017 and since then the debate has diminished. However, the boundaries of the custom of public access are continuously questioned, particularly by rural conservative actors (e.g. Widegren, 2017). This is not a novel phenomenon, but something that has recurred from time to time since the late 19th century (Sténs and Sandström, 2013).

Another issue connected to the forest owners' right to exclude others from their property regards the right of the indigenous Saami to herd reindeer in Sápmi (their traditional lands). Conflicts between reindeer herding, forestry and forest owners are common in the northern parts of Sweden where reindeer herders and forest owners have parallel rights to the same land (Brännström, 2017). In our selection of sources these

relations were not problematised much and the claim-makers did not explicitly take sides (Eriksson, 2017d), but some mentioned it as a 'silent' societal conflict (Selstam, 2014).

3.5. The fifth criterion: Degree of ideological homogeneity

To assess the presence of ideological homogeneity we sought signs of the reinforcement of established presumptions, and a community of people who reaffirmed each other's opinions.

3.5.1. Presumptions about societal gains from individual forest ownership

A salient historical narrative evident in many of the articles closely connects development of the modern Swedish welfare system with Sweden's rich forest resources and successful forestry (Persson, 2017). In this context, a long tradition of freeholders and private forest owners is declared to have played a vital, and globally rare, role:

"Unlike many other countries, Sweden has a long history of independent farmers. ... This has not only strengthened our democracy, but also led to Sweden, with a range of orientations and management methods, managing to cope with natural resources like nowhere else." (Eriksson, 2017a; and b).

It is claimed that "over the generations" private forest owners have tended and developed the forest resources, thereby creating individual profits and promoting local development, industrial growth and national welfare (Erlandsson, 2017; Hollertz, 2017; Jacobsson Gjörtler et al., 2016; Yngwe, 2016). It is also stated that this long-term responsibility and careful, independent and individualistic management has created great environmental values, and resources that now can also be used to mitigate climate change. Private property rights and private forest ownership are described as the "backbone" of this desirable development (Ekman, 2016a; Erlandsson and Yngwe, 2016). The old liberal device "What you own, you also care for and develop" recurs in the debate (e.g. Erlandsson et al., 2016). The opposite of private property rights is framed as "socialism", with increased state control over forests, associated with less care for the resources, and a tragedy for both the economy and environment (Anon, 2017a).

3.5.2. Presumptions about a new "politicised" forest government

"Freedom with responsibility", a buzz phrase in the debate, is framed as an "invisible contract" between the state and forest owners (Tunström, 2016; Thyselius, 2016). The claim-makers are pleased with this mutual relationship, which they consider has proved to be beneficial for both parties over the years. Hence, they want to sustain the status quo and do not advocate revision of the Forestry Act (Perers, 2016). Nevertheless, the main claims-makers imply that the state has started to undermine this relationship, mainly through the Forest Agency and county administrative boards, by expanding its efforts to protect natural values and biodiversity (Anon, 2017b). Thus, the claim-makers share concern about what they perceive as politicized forest governance, regarding county boards and the Forest Agency, as being increasingly steered by "environmental activists" who do not accept current forest policy or even the constitution, which protects private property rights (e.g. Hammar, 2016; Jacobsson Gjörtler, 2016).

Two particular events spurred the presumptions of a "politicised" forest government during the covered period. First, the appointment of two members of environmental organisations to the Forest Agency board was criticised for compromising the Agency's intended impartiality (Hammar, 2016). Second, a visit to forests in north-western Sweden to assess trade-offs between competing interests in forests led to a claim that "activist civil servants" aspired to establish an "Amazon in Jokkmokk" (i.e. to establish vast forest reserves resembling protected areas in the world's largest rainforest, the Amazon) (Gunnarsson, 2016). The county administration board and Forest Agency countered these accusations from 2016 onwards, criticizing the claim-makers for spreading false information (Antti and Norin, 2016), but the rhetoric about activist civil servants, ongoing forced expropriation of private

forests and the "vision" of an "Amazon in Jokkmokk" still persists in the debate (Eriksson, 2017c, 2018; Gunnarsson, 2016).

Altogether, the claims about the "politicized state" have led to the melodramatic presumption that "forest owners are pressed by so many regulations that it is barely possible to talk about property rights anymore" (Persson, 2016) and that "property rights to forest and land are relatively weak in Sweden" (Söderström, 2016; see also Eriksson, 2017b; Söderström, 2017; Tunström, 2016).

3.5.3. Presumptions about forest conservation

The claim-makers also share presumptions about conservation values and governance, which engender distrust of the intentions of both authorities and the environmental movement. For example, they claim that it is wrong for legislation to protect species with viable populations in Sweden, such as the Siberian jay (Gunnarsson, 2016; Hollertz, 2017; Jacobsson Gjörtler et al., 2016; Persson, 2016), and that red-listed species can be found in many forests, if you know where to look (Hammar, 2016). The environmental movement is also criticised for "hunting red-listed species", not because of concerns for the environment, but merely to prevent harvests (Söderström, 2016). The authorities are similarly criticised for abusing, exaggerating and over-implementing regulations, particularly regarding WKH and the Species Protection Ordinance (e.g. Gunnarsson, 2016).

Another common claim is that red-listed species appreciate the forests where they are found, implying that there is no need for the individuals who own them to change their management practices (e.g. Eriksson, 2017a). Hence, the claim-makers do not explicitly acknowledge any loss of, or threat to, biodiversity in Swedish forests. Instead, they focus on how society should achieve a balance between conservation and production that will not pose risks to individual property rights. They laud individual Swedish forest owners for acting responsibly, conserving and protecting their forests in accordance with the political buzz phrase "freedom with responsibility" (e.g. Hammar et al., 2017).

Illustrative elements of the debate are the diverse views regarding how much forest is conserved in Sweden. According to some claimmakers, 25% of the forest area is already set aside from production (Anon, 2016a; Hammar et al., 2017), while opponents stress that much is left to do before Sweden's environmental objectives are reached, including the target to conserve 20% of land and freshwater (Bergström, 2015a).

The presumed success of private forest stewardship is typically described from a sustained yield perspective, focusing on the conservation of timber rather than species:

"The forest is one of the most renewable resources we have. For every tree harvested in Sweden, we plant three new ones. Swedish forests are indeed growing more than ever. What threatens the forest is not final harvests. It is the state-led, illegal exploitation." (Gunnarsson, 2016).

In line with the framing of property rights and conservation outlined above, some claim-makers adhere to the anthropocentric view that forest owner's property rights should be decisive for conservation, rather than vice versa. Thus, a proclaimed solution to governance is that the authorities should act pragmatically and implement conservation measures where there is local acceptance among property holders, instead of starting from the inventories of important habitats and threatened species (Eriksson, 2017c). Policy instruments based on forest owners' initiatives are, therefore, sometimes promoted as solutions in this context (e.g. Hammar, 2014; Karlsson, 2017).

The claim-makers thus show great distrust not only in methods of biodiversity conservation but also the underlying intentions. If appropriate financial compensation is not provided for nature conservation, the claim-makers presume that owners may cut down their forests rather than risk "confiscation" (Davidson, 2016b), which would be bad not only for the owners, the forest sector and society, but also for maintenance of natural diverse forests (Svensson, 2016). Their

conclusions are clear: "No civilized society can afford to compromise with such a fundamental principle as property rights" (Anon, 2016b) and "leave forestry alone" (e.g. Persson, 2017).

3.5.4. Counter-voices and close-downs

As mentioned above, only one of the authors of examined editorials and op-ed articles published in the five papers expressed contrary opinions – the Green Party's female spokesperson on forest issues – who advocated stronger regulations to support society's conservation targets (Bergström and Jones Fur, 2015; Bergström, 2015b). This author also stressed that private forest ownership is essential for society, and preservation of "freedom" is important, but should also entail freedom for the owner to manage the forest for values other than maximization of production (Bergström, 2015a).

There are few direct responses to this dissenting view of forests and property rights (e.g. Ek and Örlander, 2016). Thus, in the debate different opinions are mainly met with silence from other claim-makers.

An event at the Politician's Week in Almedalen in 2016, one of the most important political fora in Sweden, further illustrates a close-down in the debate. In a seminar the appointed investigator of the Forestry Act commented on whether it is reasonable "to allow such extensive private ownership of a natural resource of such importance [as forest], which is not only of great national interest, but also of global interest environmentally" (Riberdahl, 2016). This speculation induced a storm of condemnations in social and traditional media (e.g. Anon, 2016c; Ekman, 2016a; Erlandsson and Yngwe, 2016; Tunström, 2016) and a couple of days later, the social democratic Minister for Rural Affairs, dismissed the investigator as he had "insufficient confidence" in her, based on her statements in Almedalen (Regeringen, 2016).

During the event in Almedalen, the Green Party spokesperson tweeted that it was "fun and courageous" of the public investigator to question the private ownership of the forest (Ingman, 2016). This tweet also induced strong reactions (Anon, 2016d; Erlandsson et al., 2016; Persson, 2016) and the spokesperson had to apologize and acknowledge that she had no intention of questioning private property rights (Ingman, 2016).

4. Discussion

This article highlights the importance of going beyond formalised law and institutions to grasp the changing boundaries of property rights by, in this case, including normative and ideological perceptions of, and expressions about, forest property rights. Although Sweden is a leading country in governance of property rights, according to global assessments, Swedish landowners argue that forest property rights are being eroded. This discrepancy demonstrates that property rights are increasingly framed by a polarized public debate.

In accordance with the five characteristics of an echo-chamber, our findings show that: 1) the Swedish debate on forest property rights is limited to few distinct forums, 2) there are limited numbers of leading claim-makers; 3) the leading claim-makers are clearly parts of a network who acknowledge each other and exclude other opinions and claim-makers; 4) claims are strongly repeated, with a few recurrent arguments and themes, and 5) the leading claim-makers share a similar worldview with a narrow focus on "property rights under attack". Hence, our results show that the debate on forest property rights, during the covered period, shared fundamental similarities with an echo-chamber, with both a clear 'chamber' and distinct 'echo'.

Regarding *when* the echo-chamber formed, both long and shorter term processes seem to have been involved. As shown in the results section, the current debate about property rights is partly driven by controversies that have lingered for a long time in public and political debate, such as issues regarding conservation and boundaries of the freedom to roam (Sténs and Sandström, 2013; Zachrisson, 2009). Some of these issues apply most strongly to the north-western part of Sweden, particularly regarding state-led conservation projects. This is one of few

locations in Sweden where there are still forests of long continuity, i.e. that have not been affected by modern forestry and thus are highly valuable for biodiversity, reindeer herding and tourism (Beland Lindahl, 2008). Much of the land in the region is also already formally protected, but conflicts over natural resources, usufruct and property rights, rural development, conservation and production values and relations between local inhabitants and central power have been present for a long time (Beland Lindahl, 2008; Beland Lindahl et al., 2018; Lisberg Jensen, 2002).

Within a much shorter time frame, the current debate on forest property rights clearly escalated from 2014 onwards, mainly due to some specific and context-bound events, raising questions about why the debate has intensified. Our analyses show that it was particularly fuelled by responses to ongoing processes regarding the implementation of a number of conservation policies where deliberation had failed, at least according to media reports.

Some of the activity centred on property rights can also be attributed to the agrarian and conservative political parties being in opposition to the Swedish government during the covered period. Furthermore, since 2014 the LRF has actively used the debate about property rights in efforts to rejuvenate their organization and please their members (e.g. LRF, 2014, 2016; Simonsson, 2017). Perhaps their engagement in the debate has also been driven by a need to counter competition from other membership associations, who are predominantly focused on property rights. During the period, the forest associations, who strive to optimise their members' financial outcomes also played more active roles as lobbyists, framed as a service to their members (Kronholm, 2016). As corporate associations depending on the forest industry they are also motivated by a need to access forest resources (Kronholm, 2016). Thus, it is not surprising that the current Swedish debate on forest property rights is mainly driven by agrarian and conservative party members and professionals, together with trustees connected to the forest owners associations and LRF. Together. they withhold the ideal of the active, in principle male, self-employed forest farmer who rely on income from forestry.

Among the claim-makers, forest property rights are treated as absolute and uncontested. This is typical of conservationist thinking, where such a right is considered extra-human, i.e. as something so fundamental to the ordering of the world that it should be regarded as a natural law rather than something that should be controlled or politically regulated (Freeden, 1998). This understanding is reproduced through the dominant historical narrative, which describes private forest ownership as the fundament for generations of forest farmers which over time created individual and collective benefits. That the current idea and legal status of individual property rights to forest resources are quite recent and have constantly changing boundaries (e.g. Brännström, 2017; cf. Koch and Perreault, 2018) is not problematised in this discourse.

Governance is always a political project. It is thus interesting that the claim-makers accuse current governance by the Forest Agency to be "politicized", as if the agency's agenda was not previously based on political decisions and directives. The political landscape has changed during the last decades. Since the early 1990s it has been stated that all sectors in society, including forestry, are obliged to implement environmental policy goals. Policy making has concurrently shifted from government to governance (e.g. Mörald et al., 2017; Keskitalo, 2017). The Swedish state is a member of the EU and has ratified international conventions which ought to be implemented in national legislation (Mårald et al., 2017). Also, to achieve established societal goals, including biodiversity targets, the present-day deregulated and marketoriented governance system depends on voluntary commitments which extend beyond requirements in formal law (Forsberg, 2012). Furthermore, the freedom to manage a property is restricted by voluntary commitments to market-based certification schemes (FSC and PEFC), rather than the government.

That governance takes place on multiple levels, seem to confuse the

claim-makers. The claim-makers persistently perceive the regulation of property rights as a direct relation between the state and its individual subjects, similar to a Hobbesian or Lockean social contract (cf. Boucher and Kelly, 1994; Skyrms, 1996). Their perspectives resonate with 'resource nationalism', i.e. fetishising natural resources, like oil, coal or forests, as discreet and unchanging objects within an essential national realm with a unity between state and national territory and ethnic and gendered frame (Koch and Perreault, 2018). In this context, private ownership becomes a core element of not only the national forest sector but also maintenance of desirable order in a changing world.

Closer examination of the debate indicates that the claim-makers do not perceive (or are not concerned about) threats to forest property rights as a whole, but rather problematise certain bundles of rights (Schlager and Ostrom, 1992). More precisely, they raise concerns about restrictions on rights of withdrawal (to harvest the forest), management (to plan forest activities and transform the forest) and exclusion (to prevent external users from accessing and harvesting resources from a property).

Claiming that "property rights are under attack" could thus be regarded as a populist call for attention, where one group of people, the individual forest owners, are perceived as worse off than other groups in society, and where complex political issues are reduced to an allencompassing binary divide between "good", ordinary forest owners and a "corrupt "government (cf. Hameleers et al., 2018).

Thus, we argue that the heated debate opposes deliberative processes regarding the management of natural resources. During the covered period, there was a slight change of tone in the debate which we see as an expression of a shift towards more intolerant views. In 2014 and 2015, more optimistic views were put forward regarding the development of forest and conservation policy (Hammar, 2014), and more divergent opinions about conservation and forest policy were visible (e.g. Bergström, 2015a), while in 2016 and 2017 the debate became more critical with use of more polemical wording.

5. Conclusion

Regarding the consequences of debates developing into echo-chambers - as mentioned in the theory section, eco-chambers may have both positive and negative effects (Jasny et al., 2015; cf. Young, 2001). They have positive effects as they unite and mobilize people with similar interests, which in many cases empowers them. In our case, it is apparent that the debate caused engagement, indignity and stronger connections between forest owner organizations and the inter-connected claim-makers. It has also been shown to be successful, from the perspective of the main claim-makers. For instance, the rapid dismissal of the investigator after the event in Almedalen, and the authorities' handling of woodland key habitats, show that forest ownership claimmakers have indirect, but strong, influence on the government. Strengthening of forest property rights was also a key element of the Centre Party's demands in return for supporting formation of the social democratic government in 2019 (SAP, 2019). Thus, despite the changing composition among forest owners (more urban, female and heterogenous motivations) the traditional actors, networks and perspectives still have the power to influence national politics.

There are, however, several negative aspects of echo-chambers. inter alia, the desirability of empowering groups with similar interests by uniting and mobilizing them depends on the highly subjective desirability of particular groups (e.g. anti-vaccinators and conspiracy theorists) being empowered. Echo-chambers also tend to shape closed groups with sharply prescribed sets of views, which exclude other perspectives (as clearly occurred in the case we studied). This may greatly reduce reflexivity and understanding of other ways of thinking, thereby hampering abilities to seek common ground. Instead, echo-chambers may contribute to the destructive escalation of a conflict. This may also undermine the legitimacy of current systems and the will to preserve valuable nature (Brukas et al., 2018). The increased alarm

within the echo-chamber we studied has so far generated limited interest in national fora and media, and it is clearly restricted to regional and rural settings and conservative domains. This is also problematic from the perspective of the forest property rights claim-makers, since it constrains efforts to extend their messages outside the echo-chamber, to gain respect, acceptance and find legitimate and functional policy solutions.

From that perspective, it is an infelicitous development that the echo-chamber tended to become stronger during the covered time period. Locking in important questions about property rights, nature conservation and forestry, and reproducing the uniform claims within a narrow chamber, is not an ideal strategy for identifying optimal sustainable forestry and property rights for the future.

Thus, the debate about forest ownership taking place in an echochamber is problematic. However, an echo-chamber is not only shaped from the inside. It is also a result of indifference and lack of communication on the part of other actors. Several studies of forest policy and conflicts have emphasized the importance of participation and dialogue between competing interests and stakeholders connected to forests and forestry (Bäckstrand et al., 2010; Dietz et al., 2003; Götmark, 2009). Building on deliberative democracy as an ideal, understanding of institutional and structural factors, as well as thoroughly balanced discussions and dialogue are important to represent divergent interests, power relations and fair trade-offs (Sandström et al., 2013). In other words, to open up the echo-chamber, groups with other opinions, in addition to the current claim-makers, must engage in the debate and take responsibility for the issues, including representatives of governmental bodies and forest companies, certification agents, claim-makers with other ideological positions, and national media.

Funding

This work was supported by the Swedish Forest Society Foundation (Stiftelsen Skogssällskapet) [grant number 2017-223-Steg 2 2016].

Declaration of Competing Interest

The funding source had no involvement in the study design, collection, analysis or interpretation of data; in writing or decision to submit the article for publication. The authors declare no conflict of interest.

Acknowledgment

We thank the audience at the 2nd International Forest Policy Meeting (2IFPM) in Wageningen 2018 for valuable input to an early version of this paper. A special thanks to Kathrin Böhling, Technical University of Munich, and Vilis Brukas, Swedish University of Agricultural Sciences, for providing us with essential new research on the topic. We also thank two anonymous reviewers for their useful comments.

References

Abresparr, S., 2012. Vänta på Högsta domstolen! Gotlands Allehanda 2012-09-01.

Andersson, E., Lidestav, G., 2014. Gendered resource access and utilisation in swedish family farming. Land 3, 188–203. https://doi.org/10.3390/land3010188.

ramny tarming. Land 3, 188–203. https://doi.org/10.3390/land3010188.
Andersson, L., 2011. Vi bevakar allmänhetens intressen. Norrbottens-Kuriren 2011-12-05.
Anon, 2017a. Rimlig ersättning för naturvård. Nya Wermlands-Tidningen 2017-05-22.

Anon, 2017a. Rimlig ersattning for naturvard. Nya Wermlands-Hdningen 2017-05-Anon, 2017b. Åt skogen med skogen. Nya Wermlands-Tidningen 2017-07-26.

Anon, 2016a. Hur mycket skog ska skyddas? Nya Wermlands-Tidningen 2016-08-01.

Anon, 2016b. Våga värna äganderätten. Nya Wermlands-Tidningen 2016-06-01.

Anon, 2016c. Respektera äganderätten. Nya Wermlands-Tidningen 2016-07-08.

Anon, 2016d. Låt ägarna bruka skogen. Nya Wermlands-Tidningen 2016-07-14. Antti, J., Norin, S., 2016. Alla tjänar på en saklig debatt. Norrbottens-Kuriren 2016-10-28.

Appelstrand, M., 2012. Developments in Swedish forest policy and administration: from a "policy of restriction" toward a "policy of cooperation". Scand. J. For. Research. 27, 186–199. https://doi.org/10.1080/02827581.2011.635069.

Arora-Jonsson, S., 2017. Development and integration at a crossroads: culture, race and

- ethnicity in rural Sweden. Environ. Plan. A 49, 1594–1612. https://doi.org/10.1177/0308518X17701130.
- Beland Lindahl, K., Johansson, A., Zachrisson, A., Viklund, R., 2018. Competing pathways to sustainability? Exploring conflicts over mine establishments in the Swedish mountain region. J. Environ. Manage. 218, 402–415. https://doi.org/10.1016/j. jenvman.2018.04.063.
- Beland Lindahl, K., 2008. Frame Analysis, Place Perceptions and the Politics of Natural Resource Management: Exploring a Forest Policy Controversy in Sweden. Diss. SLU, Uppsala.
- Bergseng, E., Vatn, A., 2009. Why protection of biodiversity creates conflict: some evidence from the Nordic countries. J. Forest Econ. 15, 147–165.
- Bergstén, S., Stjernström, O., Pettersson, Ö., 2018. Experiences and emotions among private forest owners versus public interests: why ownership matters. Land Use Policy 79, 801–811
- Bergström, S., 2015a. Vi behöver en ny skogspolitik. Land Lantbruk 2015-08-21. Bergström, S., 2015b. Moderater på miljömässigt villospår. Nya Wermlands-Tidninger
- Bergström, S., 2015b. Moderater på miljömässigt villospår. Nya Wermlands-Tidningen 2015-09-17.
- Bergström, S., Fur Jones, C., 2015. Dags för en ny och modern skogspolitik. Smålandsposten 2015-08-04.
- Brukas, V., Stanislovaitis, A., Kavaliauskas, M., Gaizutis, A., 2018. Protecting or destructing? Local perceptions of environmental consideration in Lithuanian forestry. Land Use Policy 79, 1014–1023. https://doi.org/10.1016/j.landusepol.2016.05.006.
- Brännström, M., 2017. Skogsbruk och renskötsel på samma mark: en rättsvetenskaplig studie av äganderätten. Diss. Umeå university, Umeå.
- Boucher, D., Kelly, P.J., 1994. The Social Contract From Hobbes to Rawls. Routledge, London.
- Boutyline, A., Willer, R., 2017. The social structure of political echo chambers: variation in ideological homophily in online networks. Polit. Psychol. 38, 551–569.
- Bush, T., 2010. Biodiversity and sectoral responsibility in the development of Swedish forestry policy, 1988–1993. Scand. J. Hist. 35, 471–498. https://doi.org/10.1080/ 03468755.2010.528249.
- Bäckstrand, K., Khan, J., Kronsell, A., Lövbrand, E. (Eds.), 2010. Environmental Politics and Deliberative Democracy: Examining the Promise of New Modes of Governance. Edward Elgar, Cheltenham/Northampton.
- Colleoni, E., Rozza, A., Arvidsson, A., 2014. Echo chamber or public sphere? Predicting political orientation and measuring political homophily in Twitter using big data. J. Commun. 64, 317–332. https://doi.org/10.1111/jcom.12084.
- Council Directive 92/43/EEC, of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri = CELEX:31992L0043 (Accessed 5 Oct. 2018).
- Dahlgren, P.M., Shehata, A., Strömbäck, J., 2019. Reinforcing spirals at work? Mutual influences between selective news exposure and ideological leaning. Eur. J. Commun. 34, 159–174. https://doi.org/10.1177/0267323119830056.
- Davidson, K., 2016a. Moment 22 för markägaren. Land Lantbruk 2016-02-19.
- Davidson, K., 2016b. Ta oron på allvar. Bucht. Land Lantbruk 2016-12-23.
- Dietz, T., Ostrom, E., Stern, P.C., 2003. The struggle to govern the commons. Science. 302, 1907–1912. https://doi.org/10.1126/science.1091015.
- Eatwell, R., Wright, A. (Eds.), 1999. Contemporary Political Ideologies, second ed. Continuum, London/New York.
- Ek, L., Örlander, G., 2016. Varför svartmålar ni det svenska skogsbruket? Smålandsposten 2016-01-15
- Ek, L., Perers, K., Heibring, G., 2016. Naturvården i skogen bygger på förtroende. ATL 2016-08-09.
- Eklund, N., 2012. Bolaget bakom malm
gruvan i Pajala polisanmält. Sveriges Radio Ekot 2012-09-18.
- Ekman, G., 2016a. Mångfalden ökar med fler skogsägare. ATL 2016-07-15.
- Ekman, G., 2016b. Det är inte sjötomter som saknas. Nya Wermlands-Tidningen 2016-10-05.
- Eliasson, P., 2002. Skog, makt och människor: en miljöhistoria om svensk skog, 1800–1875. Diss. Lund University. Kungl. Skogs- och Lantbruksakademien, Stockholm.
- Eriksson, J., 2017a. Förtjänar inte också skogsägare ett skydd? Norrbottens-Kuriren 2017-09-15.
- Eriksson, J., 2017b. Även skogsbrukare är värda rättssäkerhet. Norrbottens-Kuriren 2017-06-17.
- Eriksson, J., 2017c. Vårda tilliten mellan staten och människan. Norrbottens-Kuriren 2017-09-29.
- Eriksson, J., 2017d. Varför är det så tyst i Norrbotten om ILO 169? Norrbottens-Kuriren 2017-11-06.
- Eriksson, J., 2018. Skogen är ett arv som enskilda förvaltar väl. Norrbottens-Kuriren 2018-08-16.
- Erixell, L.V., 2017. Vilken rätt har skogsägarna? Land Lantbruk 2017-04-14.
- Erlandsson, E., 2017. Förslagen hotar landets skogsbruk. Land Lantbruk 2017-10-27. Erlandsson, E., Gjörtler, J., Tysklind, L., Oscarsson, M., 2017. Har skogen en framtid med rödgrönt styre? ATL 2017-01-10.
- Erlandsson, E., Yngwe, K., 2016. Hur ser egentligen regeringen på skogen? Smålandsposten 2016-07-22.
- Erlandsson, E., Yngwe, K., Mörtberg, T., 2016. Ett landsbygdspolitiskt manifest. Norrbottens-Kuriren 2016-05-26.
- Farrell, J., 2015. Echo chambers and false certainty. Nat. Clim. Change. 5, 719–720. https://doi.org/10.1038/nclimate2732.
- Freeden, M., 1998. Ideologies and Political Theory: a Conceptual Approach. Clarendon, Oxford.
 Grahn, A., 2016a. Fel att förbjuda all utfodring av vilt. Nya Wermlands-Tidningen 2016-
- 08-13.
- Grahn, A., 2016b. Utfodringsförbud kräver eftertanke. Land Lantbruk 2016-09-02.

- Gunnarsson, T., 2016. Skogstokiga myndighetsövergrepp. Norrbottens-Kuriren 2016-10-19.
- Götmark, F., 2009. Conflicts in conservation: woodland key habitats, authorities and private forest owners in Sweden. Scand. J. Forest Res. 24, 504–514. https://doi.org/10.1080/02827580903363545.
- Hallberg Sramek, I., 2018. Nyckelbiotoper i allmänhetens blickfång: en analys av svensk medierapportering 1991–2018. Examensarbete. SLU, Umeå.
- Hameleers, M., Bos, L., Fawzi, N., Reinemann, C., Andreadis, I., Corbu, N., et al., 2018. Start spreading the news: a comparative experiment on the effects of populist communication on political engagement in sixteen european countries. Int. J. Press. 23, 517–538. https://doi.org/10.1177/1940161218786786.
- Hammar, S.-E., 2014. Tre viktiga trendbrott i det svenska skogliga miljöarbetet. Land Lantbruk 2014-03-21.
- Hammar, S.-E., 2016. Uppseendeväckande val av ledamöter i Skogsstyrelsen. Land Lantbruk 2016-05-13.
- Hammar, S.-E., Ek, L., Perers, K., Hardselius, T., Heibring, G., 2017. Skogsgårdens lönsamhet viktigast. Land Lantbruk 2017-03-10.
- Hansen, A., 2019. Environment, Media and Communication, second ed. Routledge, New York.
- Hardselius, T., Lindfors, N.-O., Lindström, A., 2011. Beslut som får konsekvenser. Norran 2011.11.07
- Henningson, M., 2017. Det är en stor seger för oss. Land Lantbruk 2017-10-13. Hollertz, E., 2017. Äganderättens sista vers? Nya Wermlands-Tidningen 2017-05-03.
- Holmgren, S., Arora-Jonsson, S., 2015. The Forest Kingdom with what values for the world? Climate change and gender equality in a contested forest policy context. Scand. J. Forest Res. 30, 235–245. https://doi.org/10.1080/02827581.2014. 1002216.
- Humphreys, D., 2009. Science, knowledge, values and forest policy. J. Integr. Environ. Sci. 6, 157–161.
- Humphreys, D., 1996. Forest Politics: the Evolution of International Cooperation. Earthscan, London.
- The Supreme Administrative Court, 2014. Mål nr 5962-12. (Accessed 5 Oct. 2018). http://www.hogstaforvaltningsdomstolen.se/Domstolar/regeringsratten/Avg%c3%b6randen/2014/Februari/5962-12.pdf.
- Ingman, H., 2016. Vill du avskaffa privat skogsägande? Nya Wermlands-Tidningen 2016-
- IPRI, 2018. International Property Rights Index. (accessed 5 Oct. 2018) Country. Sweden. https://www.internationalpropertyrightsindex.org/country/sweden.
- Jacobsson Gjörtler, J., 2016. Skogsägarna förtjänar besked om äganderätten. Land Lantbruk 2016-08-19.
- Jacobsson Gjörtler, J., Holm Barenfeld, C., Jonson, P., 2016. Främja det svenska lantbruket. Nya Wermlands-Tidningen 2016-12-10.
- Jansson, U. (Ed.), 2011. National Atlas of Sweden: a Cartographic Description. Agriculture and Forestry in Sweden Since 1900. Norstedt, Stockholm.
- Jasny, L., Waggle, J., Fisher, D.R., 2015. An empirical examination of echo chambers in US climate policy networks. Nat. Clim. Chang. 5, 782–786. https://doi.org/10.1038/ nclimate2666.
- Johansson, S.L.-O., 2012. Skogsägare struntade i sällsynt svamp? Värmlands folkblad 2012-05-12.
- Johansson, J., 2013. Constructing and Contesting the Legitimacy of Private Forest Governance. Diss. Statsvetenskapliga institutionen, Umeå universitetet, Umeå.
- Karlsson, T., 2017. Glöm inte bort vem som äger skogen. ATL 2017-12-15.
- Karlsson, T., 2016. Lös oredan med nyckelbiotoperna. ATL 2016-10-07.

 Karström, M., 1992. Steget före: en presentation. Svensk botanisk tidskrift 86, 103–114.
- Keskitalo, E.C.H. (Ed.), 2017. Globalisation and Change in Forest Ownership and Forest Use: Natural Resource Management in Transition. Palgrave Macmillan Limited. https://doi.org/10.1057/978-1-137-57116-8 1.
- Kleinschmit, D., 2012. Confronting the demands of a deliberative public sphere with media constraints. Forest Policy Econ. 16, 71–80. https://doi.org/10.1016/j.forpol. 2010.02.013
- Klockar, L.-E., 2017. Helt fel åtgärder för klimatet. Land Lantbruk 2017-01-13.
- Koch, N., Perreault, T., 2018. Resource nationalism. Progress in Human Geography. pp. 1–21. https://doi.org/10.1177/0309132518781497.
- Krange, O., Kaltenborn, B., Hultman, M., 2019. Cool dudes in Norway: climate change denial among conservative Norwegian men. Environ. Sociol. 5, 1–11.
- Kronholm, T., 2016. How are Swedish forest owner' associations adapting to the needs of current and future members and their organizations? Small-scale For. 15, 413–432. https://doi.org/10.1007/s11842-016-9330-5.
- Lantto, P., Mörkenstam, U., 2008. Sami rights and sami challenges. Scand. J. Hist. 33, $26\text{--}51.\ https://doi.org/10.1080/03468750701431222.$
- Lidén, S., 2016. Dags att reformera viltförvaltningen. Land Lantbruk 2016-03-24.
 Lisberg Jensen, E., 2002. Som man ropar i skogen: modernitet, makt och mångfald i kampen om Njakafjäll och i den svenska skogsbruksdebatten 1970–2000. Diss. Lund University, Lund.
- LRF, 2014. LRFs verksamhetsberättelse. (Accessed 5 Oct. 2018). https://www.lrf.se/om-lrf/organisation/verksamhetsberattelse-2015/verksamhetsberattelse-2014/.
- LRF, 2016. LRFs verksamhetsberättelse. (Accessed 5 Oct. 2018). https://www.lrf.se/om-lrf/organisation/vb2016/.
- Lundell, S., 2011. Familjeskogsbruket i förändring: tider av frihet, ansvar och ökad kunskap. In: Antonson, H., Jansson, U. (Eds.), Agriculture and Forestry in Sweden Since 1900: Geographical and Historical Studies. Royal Swedish Academy of Agriculture and Forestry, Stockholm, pp. 386–401.
- Mill, J.S., 1891. 2009. Chapters on Socialism. Floating Press, Auckland.
- Mårald, E., Sandström, C., Nordin, A., et al., 2017. Forest Governance and Management Across Time: Developing a New Social Contract. Routledge, London/New York.
- Nichiforel, L., Keary, K., Deuffic, P., et al., 2018. How private are Europe's private forests?

- A comparative property rights analysis. Land Use Policy 76, 535-552.
- Nilsson, Å., 2017. Skogen dominerade debatten. Land lantbruk 2017-12-22. Oscarsson, H., Holmberg, S., 2016. Svenska väljare. Wolters Kluwer, Stockholm.
- Oscarsson, H., Holmberg, S., 2016. Svenska valjare. Wolfers Kluwer, Stockholm. Oscarsson, M., 2017. Äganderätten i skogen hotas. Land Lantbruk 2017-09-29.
- Paavola, J., 2004. Protected areas governance and justice: theory and the European Union's Habitats Directive. Environ. Sci. 1, 59–77.
- Perers, K., 2017. Skogsstyrelsen gör en extrem tolkning. Nya Wermlands-Tidningen 2017-01-02.
- Perers, K., 2016. Ge skogsägare fortsatt frihet under ansvar Land Lantbruk. 2016-05-20. . Persson, H., 2012. Kraftig attack mot planerat storprojekt. Länstidningen 2012-04-12. Persson, D., 2016. Skogen sköts bättre i privat än i statlig regi. Norrbottens kuriren 2016-07-15.
- Persson, K., 2017. Historien visar att enskilt ägande är bäst för skogen. Land Lantbruk 2017-04-14.
- Primmer, E., 2011. Analysis of institutional adaptation: integration of biodiversity conservation into forestry. J. Clean. Prod. 19, 1822–1832. https://doi.org/10.1016/j.jclepro.2011.04.001.
- Pülzl, H., Kleinschmit, D., Arts, B., 2014. Bioeconomy an emerging meta-discourse affecting forest discourses? Scand. J. Forest Res. 29, 386–393. https://doi.org/10. 1080/02827581.2014.920044.
- Regeringen, 2016. Landsbygdsminister Sven-Erik Bucht har beslutat att entlediga Charlotta Riberdahl. (Accessed 29 Sept. 2019). https://www.regeringen.se/ pressmeddelanden/2016/07/landsbygdsminister-sven-erik-bucht-har-beslutat-att-entlediga-charlotta-riberdahl/.
- Regeringen, 2018. Regeringen ser över artskyddet. (Accessed 29 Sept. 2019). https://www.regeringen.se/pressmeddelanden/2018/05/regeringen-ser-over-artskyddet/.
- Riberdahl, C., 2016. En ny skogspolitik på väg. Vem sätter agendan? Region Västerbotten/Youtube. https://youtu.be/8Z8r0iIE788.
- Rolfsson, H., 2016. Han överklagar digital publicering. Land Lantbruk 2017-02-03.
- Sandström, C., Eckerberg, K., Raitio, K., 2013. Studying conflicts, proposing solutions towards multi-level approaches to the analyses of forest conflicts. Forest Policy Econ. 33, 123–127. https://doi.org/10.1016/j.forpol.2013.05.002.
- SAP, 2019. Socialdemokratiska arbetarpartiet. Januariavtalet. (Accessed 29 Sept. 2019). https://www.socialdemokraterna.se/globalassets/aktuellt/utkast-till-sakpolitisk-overenskommelse.pdf.
- Schlager, E., Ostrom, E., 1992. Property-rights regimes and natural Resources: a conceptual analysis. Land Econ. 68, 249–262. https://doi.org/10.2307/3146375.
- Segerstedt, R., 2014. Ingen ersättning för stoppad avverkning. Land Lantbruk 2014-11-28. Selstam, P., 2014. Rent populistiskt. Norrbottens-Kuriren 2014-02-06.
- SEPA, 2009. Handbok för Artskyddsförordningen. 2009:3. http://www.naturvardsverket.se/Documents/publikationer/978-91-620-0161-2.pdf?pid = 2588. (Accessed 29 Sept. 2019)...
- SFA, 2018a. Dags att ta ansvar i nyckelbiotopsfrågan. (Accessed 5 Oct. 2018). https://skogsstyrelsenherman.wordpress.com/2018/09/13/dags-att-ta-ansvar-i-nyckelbiotopsfragan/comment-page-1/.
- SFA, 2018b. Skogsstyrelsen får publicera avverkningsanmälningar på nätet. (Accessed 5 Oct. 2018). https://skogsstyrelsen.se/nyhetslista/kammarratten-skogsstyrelsen-far-publicera-avverkningsanmalningar-pa-natet/.
- SFS, 2007. Artskyddsförordning. 845 (Accessed 5 Oct. 2018). https://open.karnovgroup. se/jordbruk-jakt-och-fiske/artskyddsforordningen.
- Sidenvall, J., 2016. Landsbygdsfrågor utan markkänning. Smålandsposten 2016-05-01.
 Siiskonen, H., 2013. From economic to environmental sustainability: the forest management debate in 20th century Finland and Sweden. Environ. Dev. Sustain. 15, 1323–1336.
- Schlyter, P., Stjernquist, I., 2010. Regulatory challenges and forest governance in Sweden. In: Bäckstrand, K., Khan, J., Kronsell, A., Lövbrand, E. (Eds.), Environmental Politics and Deliberative Democracy: Examining the Promise of New Modes of Governance. Edward Elgar, Cheltenham/Northampton, pp. 180–196.
- Sikor, T., Lund, C., 2009. Access and property: a question of power and authority. Dev. Change 40, 1–22. https://doi.org/10.1111/j.1467-7660.2009.01503.x.
- Sikor, T., He, J., Lestrelin, G., 2017. Property rights regimes and natural resources: a conceptual analysis revisited. World Dev. 93, 337–349. https://doi.org/10.1016/j worlddev.2016.12.032.
- Simonsson, J., 2017. Kurvorna pekar uppåt, Anders Källström. ATL 2017-05-30. Skyrms, B., 1996. Evolution of the Social Contract. Cambridge University Press, Cambridge.
- Slater, M.D., 2007. Reinforcing spirals: the mutual influence of media selectivity and media effects and their impact on individual behavior and social identity. Commun. Theor. 17, 281–303. https://doi.org/10.1111/j.1468-2885.2007.00296.x.
- Sténs, A., Sandström, C., 2013. Divergent ideas around property rights: the case of berry harvesting in Sweden. Forest Policy Econ. 33, 56–62. https://doi.org/10.1016/j. forpol.2012.05.004.
- Stjernquist, P., 1997. Skogen och brukarna: skogens behandling i enskilt skogsbruk. Bokbox, Lund.
- Strömbäck, J., Djerf Pierre, M., Shehata, A., 2013. The dynamics of political interest and news media consumption: a longitudinal perspective. Int. J. of Public Opin. R. 25, 414–435. https://doi.org/10.1093/ijpor/eds018.
- Stroud, N.J., 2011. Niche News: the Politics of News Choice. Oxford University Press, Oxford, New York. https://doi.org/10.1093/acprof:oso/9780199755509.001.0001. Svensson, M., 2016. Naturvården hotad. Smålandsposten 2016-03-14.
- Swedish Statistical Yearbook of Forestry, 2014. Skogsstyrelsen, Jönköping. (Accessed Sept. 29 2019). https://www.skogsstyrelsen.se/globalassets/statistik/historiskstatistik/skogsstatistisk-arsbok-2010-2014/skogsstatistisk-arsbok-2014.pdf.
- Sundström, G., 2010. In search for democracy: the process behind the Swedish forest-sector objectives. In: Sundström, G., Soneryd, L., Furusten, S. (Eds.), Organizing Democracy: the Construction of Agency in Practice. Edward Elgar, Cheltenham/

- Northampton, pp. 79-93.
- Sundqvist, H., 2017a. Skogsstyrelsen ifrågasätter inte äganderätt. ATL 2017-01-31. Sundqvist, H., 2017b. Vi pausar inventeringen av nyckelbiotoper i Nordvästra Sverige. Dagens Nyheter 2017-03-10.
- Söderström, J., 2016. Varför inte fråga vad skogsägarna tycker? Norrbottens-Kuriren 2016-12-09.
- Söderström, J., 2017. Regeringen politiserar utnämningarna. Norrbottens-Kuriren 2017-07-07.
- Thyselius, E., 2016. Värna Skogsägarnas integritet. Smålandsposten 2016-08-03.
- Tillberg, E., 2017. Så respekterar vi äganderätten i skogen. Norrbottens-Kuriren 2017-
- Timonen, J., Siitonen, J., Gustafsson, L., et al., 2010. Woodland key habitats in northern europe: concepts, inventory and protection. Scand. J. Forest Res. 25, 309–324. https://doi.org/10.1080/02827581.2010.497160.
- Thullberg, P., 1977. Bönder går samman: en studie i Riksförbundet Landsbygdens folk under världskrisen 1929–1933. Diss. Stockholms universitet, Stockholm.
- Tunström, M., 2016. Stoppa skogssocialismen. Smålandsposten 2016-07-08.
- Uggla, Y., Forsberg, M., Larsson, S., 2016. Dissimilar framings of forest biodiversity preservation: uncertainty and legal ambiguity as contributing factors. Forest Policy

- Econ. 62, 36-42.
- Widegren, J., 2017. Allemansrättens framtid. Skriftlig fråga 2017/18:543. (Accessed 5 Oct. 2018. https://www.riksdagen.se/sv/dokument-lagar/dokument/svar-pa-skriftlig-fraga/allemansrattens-framtid_H512543.
- Yngwe, K., 2016. Regeringen vill urholka äganderätten. Nya Wermlands-Tidningen 2016-04-01
- Young, I.M., 2001. Activist challenges to deliberative democracy. Polit. Theory 29, 670–690. https://ojs.education.illinois.edu/index.php/pes/article/viewFile/1868/579
- Ågren, M., 2007. Asserting one's rights: Swedish property law in the transition from community law to state law. Law Hist. Rev. 19, 241–282. https://doi.org/10.2307/744130
- Ågren, M., 2009. Domestic Secrets: Women and Property in Sweden, 1600–1857. University of North Carolina Press, Chapel Hill, NC.
- Åslund, Å., 2009. Allemansrätten och markägaren. In: Åhman, K. (Ed.), Äganderätten: dess omfattning och begränsningar. Iustus, Uppsala, pp. 143–165.
- Österblom, U., 2018. Skogsägarnas riksförbund: roll och verksamhet. LRF Skogsägarna,