

Article

Motivations of Volunteers in Danish Grazing Organizations

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Abstract: Global biodiversity is under pressure from human activities, and the effort for nature conservation and restoration and the allocation of economic resources for biodiversity policies remain insufficient. In such a context, volunteers can play an important role as a resource in nature conservation projects if their recreational activities interact with the objectives of nature management. In recent years, the number of volunteers in conservation work has increased in Denmark, with more people volunteering to contribute to nature conservation projects. Ensuring that volunteers remain motivated and engaged is crucial for the success of such conservation projects. In this study, we evaluated the motivation among members of grazing organizations, an activity that represents the most prominent voluntary nature conservation initiative in Denmark. We applied an exploratory factor analysis (EFA) and an ordinal regression to analyze survey data from 25 Danish grazing organizations. We found that five motivational factors determine the engagement of the volunteers, namely social, nature value, instrumental, identification, and personal benefit. Whereas the social, nature value and personal benefit are factors also identified in the existing literature, the instrumental and identification factors add new perspectives to the motivation of environmental volunteers. We found that place attachment is an important driver, and that the chairpersons/coordinators of the grazing organizations especially emphasized the sharing of values and knowledge with their members as a driver. Lastly, volunteers were reluctant to support the idea of forming a more formal setup in terms of a “grazing organization union”.

Keywords: volunteers; motivational factors; nature conservation; grazing organizations



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1. Introduction

Global biodiversity is under huge pressure from human activities, and nature is declining globally at rates not seen before in human history [1]. The IPBES global assessment [2] reveals that more than a third of the world surface is devoted to crop or livestock production in 2019. Despite an increase in the numbers of protected areas [3] and global spending on nature restoration and preservation [4], funding and efforts on existing protected areas are still considered insufficient [5], and the lack of financial resources is one of the main barriers. One way of addressing the lack of resources is to increase attention to non-financial and voluntary activities to enhance biodiversity and to improve human livelihood [6]. Especially in areas close by urban settlements, urban conservation efforts matter and can be a solution to the lack of resources for nature conservation, as it offers possibilities for rerouting volunteers who devote their time and other resources to restore and conserve biodiversity for altruistic reasons and to gain socio-psychological benefits [7].

Research in sustainable nature management has mainly focused on investigating landowners' motivation or willingness to contribute to nature and landscape conservation [8,9] as well as the factors that motivate volunteers to participate in citizen science projects [10], conservation tourism, or conservation and wildlife initiatives [11,12]. Environmental volunteers were studied in various contexts, such as the conservation of

forests [13,14], freshwater [15], grasslands, and rangelands [16–18], but few studies have focused on the diversity of motivations for volunteering. Understanding what motivates individuals to participate in volunteering could play a significant role in ensuring the success of conservation projects and empower the role of volunteers in nature conservation. Therefore, citizens' motivation for participating in practical nature management in public and private areas still needs to be understood [19] and additionally understanding why they continue to volunteer [20,21].

Approximately 39% of the Danish population volunteers [22], but only about 1% volunteers in nature protection activities, although 30% expressed a wish to do so [23]. The Danish voluntary community is a combination and collaboration of nationwide organizations, funds, and public authorities (the state, municipalities, etc.), and also nature volunteer programs, such as those organized by the Danish Society of Nature Conservation (DSNC). In focusing on the management of many of Denmark's most important and recognizable natural habitats, the lack of large grazers is considered one of the largest issues [24]. Collaboration between nature volunteers and landowners (public and private) provides opportunities to establish more differentiated nature management, often in small nature areas, which can be hard to manage due to poor accessibility or difficult terrain (e.g., steepness or high soil moisture). Such areas may, however, be important for supporting threatened species that depend on open nature areas. Grazing supports the structure and composition within such habitats and is essential for a variety of plants and animals [24].

Although no official census exists, it is estimated that approximately 300 grazing organizations exist distributed all over Denmark, and these contribute to the management of small-scale open nature areas. Most of the grazing organizations are located in urban surroundings and in the proximity to the place of residence of the members or volunteers. The formation of a grazing organization is often encouraged or initiated either by the municipality, the local department of the DSNC, or a local enthusiast [25]. Once formed, the organizations are usually self-driven and bottom-up managed, often in collaboration with the landowner. In this respect, the grazing organizations differ from the typical volunteer initiatives [26–28]. On the other hand, one important similarity is that the grazing organizations are highly dependent on recruiting volunteers and, thus, need to keep volunteers active in the organization.

With the above in mind, this study builds on previous research on voluntarism by exploring which factors motivate volunteers for nature conservation and sustain their motivation. To do this, we explore the motivational properties of members participating in Danish voluntary grazing organizations managing public and privately owned land. More specifically, we investigate whether volunteers are mainly driven by social factors or by their self-interest. First, we introduce the general literature of motivational research, and then we focus on the literature on motives for environmental and nature volunteering in order to identify the motivational factors to be explored in the case study. Then, we present the data and methodology used in the case study, followed by the results. Lastly, we discuss the findings and present the conclusions.

2. Voluntarism

2.1. Motivational Research on Volunteering

Volunteers' commitment and engagement are explained by various motivational processes (see Table 1). Therefore, forming a universal theory for volunteer motivation is a significant challenge [29]. Clary et al. [30] applied a volunteer functions inventory (VFI) to identify six socio-psychological benefit of volunteering: (1) understanding, (2) strengthened social ties, (3) expressed altruistic values, (4) protecting the ego from negative feelings, (5) enhancing psychological growth, and (6) career-related experience. This inventory has been used in many studies to investigate volunteers' motivation [9,27], as it offers both a guide to stakeholders and managers who need to understand what volunteers can offer, and how to create the most effective and generative network of collaboration among volunteers.

Table 1. Summary of findings regarding the link between demographic and motivational in volunteer research.

Factor	Summary of Findings	Reference
Age	People with low social capital (e.g., lower education and poorer health) are more prone to volunteer for social reasons. For those of ages above 60, the chance of volunteering increases. As age increases, motivation changes, as learning and career becomes less important.	Clary et al. [30] Einolf and Chambré [31] Dávila and Díaz-Morales [32], Alender [26]
Gender	Males and females generally volunteer the same number of hours, but females volunteer slightly more than males at the global level. In Europe, no differences in volunteering are found between males and females. Females generally put more importance into various motivational factors, while males see volunteering more as completing a task.	Wilson [33] Bussel and Forbes [34] Wilson [33]
Education	The level of education is the most influential predictor of volunteering, as it is a reflection of more awareness and resources. The level of education were correlated to to volunteering as well as to value reasons, social reasons, and for reducing negative feelings (e.g., loneliness).	Papadakis and Frater [35], Wuthnow [36] Wilson [33] Principi et al. [37]
Children	Parents with children living at home were more likely to volunteer, but people with young children volunteer fewer hours. Adults who can involve children in voluntary work are often motivated by transmitting values, the opportunity to be a role model, having fun, and spending time together with the children.	Wilson [33] Littlepage et. al. [38]
Friends	Having friends involved in volunteering positively affects an individual's own involvement. People already having friends involved in voluntary work may be motivated by the social opportunity to spend time with these friends.	Wymer [39], Einolf and Chambré [31] Ryan et. al. [40]

Although motives for volunteering are likely to show various patterns between countries due to differences in culture and institutions, the literature review discloses some general patterns, which we summarize in the following.

Volunteering is often more attractive to resource-rich individuals, who already have the capital and/or knowledge required for participation [31]. In general, volunteers have a job, are well educated, are wealthier and healthier, and have a large social network than non-volunteers [37,39,41,42]. Thus, the level of education is the most consistent predictor of volunteering. The higher a volunteer's level of education, the more likely they are to volunteer. This may be due to having a larger network and therefore a greater likelihood of being encouraged to volunteer; this may also be because well-educated people are more likely to be aware of problems that need attention [28,33]. High levels of education were found to be associated with volunteering for altruistic reasons but also to reduce negative feelings, such as guilt and loneliness [37]. The presence of children, especially if living at home, may affect the degree of volunteering, depending on the type of volunteer work, the civil and employment status of the parents, and the age of the children and parents. Parents with children living at home are more likely to volunteer but likely for fewer hours if the children are young [33]. If children can be involved in the volunteer activity, the parents are motivated by a desire to transmit values, be a role model, and have fun and spend time together [38]. Friends, social roles, and social networks are key factors that influence behavior and opportunities in a person's life. Having friends involved in volunteering has a positive effect on an individual's volunteer involvement [31]. Most volunteers have been encouraged to join a cause, which is why social ties are important for volunteer involvement [23]. Such individuals may be motivated to volunteer by the social opportunity of spending time with their friends [40].

Ethical and moral values are often a major motivational factor among volunteers [26,32,43]. Age has been linked to volunteering as it expresses a measure for stock of resources, which changes over a lifetime. Volunteering occurs at all ages, but certain life stages are particularly associated with volunteering. Middle-aged people between 35 and 44 years show the highest rates of volunteering [28], while people above 60 years are more likely to volunteer and continue volunteering compared to younger generations [31].

Younger people are more motivated for education and forging a career, while life existence goals become more important later in life, especially generative goals where “taking responsibility for future generations” becomes stronger [26,32]. However, the frequency of volunteering may decrease with age, which can be caused by decreasing social capital, poor health, or becoming widowed [30]. Gender may have an influence on volunteering, but the results are ambiguous. In some geographical settings, it was found that women volunteer more than men, and in other settings there is no difference [34]. It is generally found that females volunteer more when they are young, while males volunteer more when they become older [33]. It was also found that females attach more importance to the six VFI motivations than males do [35].

2.2. Exploring Motives for Environmental and Nature Volunteering

The results from the work by Strzelecka et al. from 2017 [44] suggested that environmental volunteering (travelers/tourism) is mainly driven by a belief that participation in ecological restoration is a worthwhile activity. The motivations to participate in an ecological restoration project can be strengthened or weakened depending on the promise of a pleasurable experience. This also indicated that there may be a difference between initial motivation and the motivation for long-term continuation in volunteering.

In general, the motivation of volunteers can be connected to one or more of the key elements of the VFI [30]. However, this may not always be sufficiently comprehensive to capture all the motivations for volunteering among environmental volunteers. Schroeder [45] found improved environmental outcomes to be the primary motivator for individuals becoming involved in restoring degraded habitats, preserving wilderness areas, or improving natural resources. Environmental motivations were also found to be linked to, or associated with, desired social outcomes such as a desire to be social or to fulfil economic, health, physical, or cultural needs [46]. In other words, through participation in conservation initiatives, the volunteers gain both pleasure as well as a sense that their actions are needed to defeat the increasing global environmental degradation [44]. Jacobson et al. [47] found that years of volunteering was negatively correlated with the advancement of career goals or experience but positively correlated with a motive to help the environment. Environmental volunteers’ long-term commitment was, in general, more closely associated with a motivation to protect the environment (nature values), whereas episodic volunteers were more motivated by a need to reduce negative feelings or to develop themselves personally.

Ryan et al. [40] added five factors that are important for the commitment and motivation of volunteers in environmental stewardship programs: (1) learning, which involves using the volunteer opportunity to learn new things about the environment; (2) helping the environment, which entails an opportunity to do something good for the environment; (3) social, which involves meeting new people or spending time with family and old friends; (4) reflection, with which an individual uses the volunteer experience to reflect on themselves, and; (5) project organization, which is the opportunity to participate in a well-organized project, where time is used efficiently.

Motivation among environmental volunteers may also be associated with attachment to a local environment and sensing a need to contribute to the local community [12,28,48]. This can be seen in the work by Selinske et al. [9]. Here the willingness of private landowners to voluntarily participate in the conservation of their land were investigated and it revealed that the environmental or conservation values were the strongest motivator, closely followed by place attachment to their land.

Many of the motivational factors identified in the literature review above have been confirmed by studies that investigate motivation among environmental volunteers, both at larger and smaller scales [26–28].

3. Materials and Methods

3.1. Data Collection

This exploratory study includes survey data collected from members of 25 grazing organizations, which are geographically distributed across Denmark, but with the majority located in the Northeastern part of Zealand, supplemented by a few on Funen and in Jutland (Figure 1). All organizations allowed a questionnaire to be circulated among their members and the answers were used as the primary data in this study ($n = 347$).



Figure 1. Location of the voluntary grazing organizations participating in the study.

Data were collected using an online survey between 28 November 2017 and 14 January 2018. The language of the questionnaire was Danish as all the participants were native Danish speakers. The questionnaire was constructed using Google Form and distributed by email to the chairpersons of the organizations, who then distributed it to the members of their organization in accordance with the Danish Privacy Act law [49].

The questionnaire was structured into five sections containing questions on demographic values (gender and age), motivation, and attitudes. The questions addressing motivation were designed using inspiration from other volunteer motivation research, e.g., Asah et al. [11], Bramston et al. [12], Bruyere and Rappe [27], Clary et al. [30], Guiney and Oberhauser [50], Ryan et al. [40], and Selinske et al. [9]. Further, we specifically addressed the project organization, the management of the voluntary organizations, and the linkage to other conservation programs.

The structure of the questionnaire was as follows:

1. A compulsory section, which collected background and socio-demographic information;
2. A voluntary section with statements about the members' motivation, evaluated on a 5-point Likert scale (1 = strongly disagree, to 5 = strongly agree), including an "I don't know" option;
3. A voluntary section about the members' attitudes toward membership (including sharing of the organization's values, the reason for becoming a member, and connection to the organization), evaluated on a 5-point Likert scale similar to Section 2;
4. A voluntary section with open-ended questions that was designed to assess the participants' motivation and whether they like the idea of a union for all grazing organizations in Denmark;

5. Finally, an opportunity for them to comment on the questionnaire or share any additional thoughts.

Before conducting the full-scale survey, we tested the questionnaire in a pilot study with the Laanshoj grazing organization and in the Facebook group “Grazing organizations for nature active citizens” (Græsserforeninger for naturaktive borgere). In total, eight individuals participated in the pilot study, and their input contributed to the design of the final version of the questionnaire.

As no validated statistics exist on the number and location of voluntary grazing organizations in Denmark, we were not able to design a stratified data sampling strategy. Instead, we applied non-probabilistic convenience sampling [51] as we contacted 120 voluntary grazing organizations included in the DSNC’s nature management network [52] and asked them to participate in the survey. Twenty-five of these responded to the questioner, and their responses formed the data of the study. Most of the 25 organizations were established since year 2000 around larger cities, including Copenhagen. The locations managed by the voluntary organizations ranged from 1 to 11 ha (mean = 8.1 ha, median = 7.5 ha), and they are either fully or partially covered by a conservation order (e.g., §3 in the Danish Nature Protection Act). Municipalities own 60% of the locations in the sample, and the rest are owned by the Danish Nature Agency and private landowners. The organizations had on average 37 members, and they practiced summer grazing (May to September) with either leased or bought animals. All organizations had a dual purpose of managing and conserving nature and of producing organic meat with a high degree of animal welfare. We refer to the Supplementary Materials for a description of the questionnaire and the data.

3.2. Analysis

Data were organized and coded in Microsoft Excel 2016 to construct descriptive statistics. Initially, KMO and Bartlett’s test of sphericity coefficient were used to test the data fit for factor analysis. Then, members’ responses to the motivational questions of the questionnaire were analyzed using an exploratory factor analysis (e.g., Costello and Osborne [53]), which is a multivariate method that enables the survey information to be reduced from several statements into fewer unmeasured variables, termed factors. These statistical analyses were completed using RStudio v.3.4.2 (R Studio Team [54]) and the Psych package (Psych: Procedures for Psychological, Psychometric, and Personality Research version 1.8.10) [55]. If the p value of the model was larger than the chosen significance level ($p > 0.05$), the tested number of factors efficiently described the underlying variables. The hypothesis tested was that the number of factors were sufficient for our model.

Having determined the number of factors, their loadings were used to connect the variables to a specific factor. Factors that connected fewer than three variables were not included in the analysis [53]. Connections between demographic variables and motivation statements were analyzed using an ordinal approach. Due to the nature of the data, we applied backward reduction and a CLM (cumulative link model) to fit the data [56]. The fitted model was analyzed using ordinal regression, to find relations between motivation and background measurement, e.g., membership status. The tests were completed using RStudio 2017 [54] and the ordinal R package (Ordinal Regression Models for Ordinal Data, version 2018.8-25) [57]. As a post hoc, pairwise comparisons (EMMEANS) of the groupings within a measurement (for example the chairperson, vice chairperson, member, and supporting member) were completed using the package EMMEANS (Estimated Marginal Means, also known as Least-Squares Means, version 1.3.0) [58].

4. Results

4.1. Descriptive Results

A total of 347 members responded to the questionnaire, corresponding to approx. 38% of all possible answers. All the contacted organizations were represented, and most of the responding members were regular members. The volunteer group had an almost equal number of males (53.3%) and females (46.7%); one third of the participants were brought

up in the city, one third in suburbs, and one third in the countryside. The organizations' foundation dates span from 1990 to 2017. This is reflected in years of membership which are categorized into three groups, i.e., members active for 1–5 years, members active for more than 5 years, and members active from the foundation of their organization. Again, the respondents fall with approximately 1/3 in each group.

A typical volunteer had the characteristics of being in their middle to late adulthood with no children living at home; they also had a long education and worked full-time or was retired. Most members lived close to the area they managed, corresponding to about 5–15 min of transport from their place of residence to the nature area. They used less than one hour weekly for volunteering including time for transportation.

The descriptive analysis shows a mutual tendency across organizations, revealing a general concern and interest in nature and involvement in their organization among members, including a concern for being able to provide the next generations with a nature of high quality (87%). Two thirds of the members (63%) felt it was important to protect and improve nature. Further, sharing knowledge was highly valued by members (61%), and about 72% experienced how being a member contributed to the local community. From the descriptive analysis, we found that 75% of the respondents were part of the organization because they enjoyed spending time outdoors, whereas only one third considered meat and/or wool as their primary reason for membership. Almost all members (97%) had encounters of being personally enriched from their involvement in the organization. Two other important factors are—not surprisingly—that the member's expectations are met and that the organization's values are aligned with their personal opinions. Here, values supporting animal welfare are especially important, and 90% of the respondents identified with these values, whereas the social values were found to be the least important.

The typical point of entrance to the organizations was personal invitation by friends or family; only about 13% learned about the organization through social media or other types of media, and 17% had no prior association with the organization before joining. When asked about the need of organizing the grazing organization, more than half did not answer the question, and among members who responded, the opinions were mixed. The main reasons for not wanting a union were the concern that organizations were too diverse and the resentment towards more bureaucracy. Members who were positive towards a union stressed collaboration, knowledge, and experience sharing among the primary reasons.

4.2. Members' Motivation

Initially, the factorability of the 22 motivation questions (items) were examined. The Kaiser–Meyer–Olkin measure of sampling adequacy (0.82) and Bartlett's test of sphericity ($X^2 = 1877.9$, $df = 231$, $p < 0.05$) both indicated good factorability, thus supporting the explanatory power of the explanatory factors. Following the test of factorability, the EFA (exploratory factor analysis) confirmed that the items in the questionnaire could be grouped into nine factors ($p = 0.19$), of which 4 were excluded due to a low number of explanatory items (<3) and low loadings (<0.30), making them unqualified to be considered factors [53,59]. However, if an item had a strong theoretical fit, it was kept despite low loadings.

The five remaining factors related to 18 of the 22 items (questions) and were termed according to the items that described them. In Table 2, the five factors are presented together with the questions representing the factors and the loading of each question.

The first factor is the social factor, as all its explaining items concerned with meeting or associating with other people. The second factor is the personal benefit factor, as relates to items all revolved around membership benefits. The third factor is the nature value factor, relating to items describing the concern for degradation of nature and the will to conserve it. The fourth factor is the identification factor, which encompasses items describing connectivity (or place attachment) to the group of volunteers and the local community. The last is the instrumental factor representing the items connected with obtaining rewards, through meat, wool, storytelling, or social recognition.

Table 2. Results from the exploratory factor analysis (EFA).

Factors	Loadings	Mean	SD
Social			
The organization is, for me, a way to meet new people	0.71	3.05	1.02
The organization's social arrangements are important to me	0.75		
I am a member of the organization in order to associate/be with others	0.8		
Personal benefit			
Participating in the grazing organization gives me a new perspective on things	0.38	3.75	0.88
I can share and pass on my knowledge and opinions about nature and animals	0.55		
By being a member of the organization I can pass something on to other people	0.73		
I find that, in the organization, we contribute to the local community	0.37		
Through the organization, I have been able to make a difference	0.56		
Nature value			
I am concerned about the loss of nature and biodiversity in Denmark	0.84	3.59	1.43
I feel it is important to take care of/protect/improve nature	0.44		
I feel that we today do enough to protect nature	−0.31		
Identification			
People close to me support my decision to be a member of a grazing organization	0.31	3.73	0.99
I expect to be a member of the organization for at least the next 5 years	0.45		
I considered joining another organization within the next 5 years	0.32		
My experiences with the organization are personally enriching	0.50		
Instrumental			
I am a member of the organization primarily for the meat and/or wool of the animals	0.56	3.22	1.06
I am a member of the organization because it provides good stories to tell family, friends, and acquaintances	0.38		
The opinions of the people in my circle are important to me	0.28		

Besides the motivational factors, the distance of the location of the nature area relative to the place of residence, and thus the time spent on transportation when doing the voluntary work appears to have a strong impact on the motivation. Transportation time is an indicator of a cost-benefit mentality, which characterizes a typical modern person's lifestyle where time is equally important as money. People who spent the least time on transportation and had the strongest connection to the local community expressed that the organization contributed to the local community. These members were typically local residents living in the vicinity of the grazing area, which is why they would be most likely to hear about or notice any positive feedback. People living close to the area also expressed high place attachment. This suggests that people receive more joy and are more willing to volunteer in their local community due to the first-hand experiences and feedback they receive about the effect of their efforts. The members who spent more time on transportation were less likely to consider the enjoyment of outdoor activities as a primary reason for membership. Similar results were found by The Danish Economic Councils [60], showing that people who visit recreational areas mostly travel one to three kilometers from their homes. This emphasizes the importance of local nature in enjoyment, active involvement, and recreational use.

Last, a close connection between the scope of the conservation and the commitment of the volunteers leading the organizations. We found that individuals who volunteered for the position of chairperson expressed higher place attachment/connection to the managed areas and felt they could pass on and share their knowledge about nature and animals with the members of their organization.

4.3. Interorganizational Differences

After having identified the five overall motivational factors for volunteering (social, personal benefit, nature value, identification, instrumental), we conducted a CLM (cumulative link model) and performed Kruskal–Wallis tests as well as ordinal ANOVA and regressions for the CLM to investigate the differences in the members' motivation between the organizations. For tests showing a significant difference ($p < 0.05$), post hoc tests were

performed to pinpoint significant differences. A full table of the test results are shown in the Supplementary Materials, whereas the main findings are outlined in this subsection.

Regarding the social factor, significant differences were found among the organizations. For example, members of the Saerloose Grassland Forest Boar and Grazing Organization were three times as motivated when associating with other persons compared to members of the Soellerod Nature Conservation and Grazing Organization. Demographics also influenced the members' motivation with respect to the social factor. The oldest and the youngest members mostly saw the organization as an opportunity to meet new people. Males were more likely to associate with others than females, and independently of the gender of the members' interest for social association increased with age.

The personal benefit factor did not show strong differences among organizations, and neither did the demographic variables interact with the personal benefit factor. However, the time spent volunteering influenced how member felt regarding passing something on to others. The chairpersons of the organizations found sharing knowledge about nature and grazing activities about twice as important compared to ordinary members. The time spent on transportation to the enclosure are correlated with members' view on their organization's contribution the local community. Thus, members living close to the enclosure were more likely to agree that they contributed to the local community. Members' level of education also affected their view on the organization, as skilled members were twice as likely to feel they made a difference compared to members with a lower education.

The nature value factor did not show significant differences depending on the organization, whereas demographics and the nature factor interacted clearly with one another. Females were more likely to think it was important to protect nature than males. Even though all generally agreed with the importance of nature protection and disagreed that enough effort was put into nature protection, members who were brought up in the city were more likely to express that not enough effort were put into nature protection, especially compared to members brought up in the countryside. Besides gender, members' educational level also affected their preference for protecting and improving nature, as members with an intermediate and higher education shared this position most strongly.

Members of different organizations found different motivations attached to the identification factor. Members of the organizations attaching the most importance to this factor were more than four times as likely to express that their experiences had been enriching compared to members who attached the least importance to this factor. Females were more likely to be concerned if other people supported their decision of being part of the organization compared to males. Further, the chairpersons were more likely to believe their decision was supported by others.

The production of meat and/or wool represented by the instrumental factor seemed to be a key factor for most of the organizations except for one. Members' age, membership status, educational level, and the time used per week all influenced their motivation in connection to the instrumental factor, as the oldest and youngest members expressed the least interest in the production of wool and meat. The members putting the most effort into the organization also showed a strong motivation for meat and wool production, except for the chairpersons. Members with a lower education were three times as likely to see meat and/or wool as the primary reason for membership compared to members with a higher education.

5. Discussion and Conclusions

From a European perspective, citizens have increasingly become engaged in associations that carry out practical nature conservation such as tree and woodland management [61], the establishment and supervision of grazing activities, or the conservation of existing and degrading habitats [62]. However, in Denmark, nature management and protection is mainly funded and organized by public organizations such as municipalities or the Danish Nature Agency. Therefore, there is no tradition in involving volunteers in nature management and conservation. Furthermore, many areas in Denmark with high bio-

diversity are small and fragmented [63] and therefore, management on a commercial basis (e.g., in terms of low input livestock grazing) is typically connected with high costs [64].

In recent years, voluntary nature management and conservation initiatives have increased in Denmark and are considered to have great potential for contributing to the improvement of natural habitats and biodiversity. The current study contributes to the existing literature on volunteering and practical nature conservation initiatives by exploring the motivation of voluntary nature managers outside the scope of stewardships in a Danish context.

Prior studies of environmental volunteers have revealed that concern for nature is a major motivation [9,45]. However, we find that the opportunity to learn, socialize, reflect, belong to a community, or obtain career benefits are important motivational factors as well. This is supported by several studies that have identified the following three main categories of motivational factors among environmental volunteers: (1) nature enjoyment or concern, (2) social motivation, through social activities or expansion of network, and (3) learning motivation [9,27,40,45]. These three categories of motivational factors are also reflected in the current study in terms of the nature value factor, the social factor, and partly the personal benefit factor (including reflection and teaching motivations). This reveals that volunteers in Danish citizen-driven organizations share three dominant motivations with other environmental volunteers and volunteers who are part of larger volunteer programs.

This study also revealed motivational factors that distinguish, at least partly, this group of environmental volunteers from others. Prior studies have shown environmental volunteers to be motivated by working and or belonging to a well-organized project, where time is spent efficiently [40]. This is partly confirmed in our study where the identification factor revealed that members who shared expectations of long-term commitment (five years) to the project also stated strong attachment to their “own” project. The voluntary or democratically elected chairpersons expressed the greatest project attachment and a strong agreement with the ideals of sharing and passing on knowledge, which establishes a strong basis for the organizations to continue into the future. However, volunteers were reluctant to support the idea of forming a more formal setup in terms of a grazing organization union.

The identification factor included several elements of social norms and enhancement [30], and members stated the importance of receiving support from people in their close circle and experiencing personally enriching experiences. The identification factor adds a new perspective to the motivation for volunteering, as commitment and enriching experiences load the highest. This suggests that wanting to be a part of environmental voluntary initiatives is driven by obtaining enriching experiences.

The instrumental factor included elements of enhancement [30]. Volunteers basically volunteered for personal benefits and often expressed that they participated for the sake of their personal development, thus supporting the idea that volunteers also may be motivated by an opportunity to gain certain enhancements, e.g., knowledge or skills [65,66]. In addition, participating with other environmental volunteers reduces emotional discomfort from feeling guilt toward human impact on the environment; it may also be seen as a way to improve career goals [27,30,37]. We also found that the the opportunity for receiving meat or wool from the animals is an important motivational factor. This is supported by the result that 84.5% of the members expected a tangible outcome of their membership efforts, supporting the findings in other studies [26,45,47,67].

Turning to the characteristics of the volunteers, we found that the level of education is the most consistent predictor of volunteering. This is in accordance with prior studies showing that the higher a volunteer’s level of education, the more likely they are to volunteer. This is explained by the fact that higher degree of education often correlates with a larger network, thus, leading to a higher likelihood of being encouraged to volunteer [28,33], and also because well-educated people tend to be aware of problems that need attention. Having high levels of education was also found to be associated with

volunteering, not only for altruistic reasons but also for reducing negative feelings, such as guilt and loneliness [37].

We also found that the scope of the conservation drives the commitment of the volunteers leading the organizations, as members who volunteer for the board and/or are elected by the other members distinguish themselves significantly from commercial initiatives and expressed higher place attachment. Thus, our results supplement observations by Jacobson et al. [47], who found that the effort in volunteering negatively correlated with the advancement of career goals but positively correlated with the expected environmental outcome.

In conclusion, this study adds a new perspective to the understanding of motivation among environmental volunteers in the context of citizen-based nature management on private and public lands. Volunteers play a crucial role in nature management, and thus it is essential to recruit future volunteers and to maintain their motivation. If nature conservation projects are to have a long-term effect on grassland biodiversity, a continuous effort is necessary. Therefore we suggest, that future studies investigate how voluntary organizations can contribute to larger nature initiatives driven by municipalities or other public authorities, and explore how authorities responsible for nature management can support and encourage the involvement of voluntary organizations in nature conservation projects.

Supplementary Materials: The following are available online at <https://www.mdpi.com/article/10.3390/su13158163/s1>, Figure S1: The likelihood of agreement with the motivation statements between members with different membership status, Figure S2: The likelihood of agreement with motivations statements between members with different transportation time, Table S1: Demographic data from the online questionnaire, complete sample ($n = 347$), Table S2: Membership data from the online questionnaire, complete sample ($n = 347$), Table S3: Responses to all opinion and attitude questions for the total sample, complete sample ($n = 347$), Table S4: Result from the post hoc test for the Kruskal Wallis tests and ordinal ANOVA and regressions for the CLM (Cumulative Link Model).

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