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Sustainable Forest, Beautiful Forest, Well-Managed Forest: Attitudes towards Land Management and Their Influence on the Perception of a Mediterranean Agroforestry Landscape

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Abstract: Aesthetic and ecological qualities overlap and interrelate in people's attitudes towards landscapes. Additionally, the way a landscape manager is perceived, as well as the way a landscape is managed, usually play a significant role in the interpretation of these dimensions and how they are evaluated. A qualitative study was conducted in a Mediterranean agroforestry landscape (Sierra Oeste, Madrid) to understand how different components of a landscape (ecology, aesthetics, and management) influence the way that it understood and valued by local stakeholders. Based on the results of a series of semistructured interviews and focus groups, a detailed analysis of the participants' discourse was conducted. A series of guidelines for land planning and management were derived to reinforce the social perceptions of the landscape and enhance its ecological and aesthetic conditions.

Keywords: landscape; ecology; aesthetics; management; ecological aesthetics; stewardship; trust

1. Introduction

People form a perception of a landscape based on what they see and experience from an aesthetic point of view, but aesthetics encompass more than simply a preference grounded in beauty [1–3]. The evaluation of a landscape is directly linked to an affective assessment grounded in what is observable. It may also be connected, among other factors, with beliefs and values held by the observers; that is, what is considered as desirable, right, and adequate [4]. In this regard, a primary factor shaping the evaluations of a sustainable landscape is the consideration of a type of management as being appropriate [5]: what landscape management model is adopted, what and why certain methods are applied, if they fit with the landscape context, what the intentions and interests of the manager are, how they are aligned with people's own values and beliefs, and, of course, how the management impacts the ecological and aesthetic qualities of the landscape. As Carlson pointed out, since the aesthetic preferences for sustainable landscapes are grounded in large part in what they express, in light of our knowledge or beliefs about their sustainability, there is a natural alignment of our aesthetic with our ethical preferences. This happens because we typically prefer those landscapes that express things that we ethically prefer [6].

An extensive body of research has dealt with this issue, analysing different dimensions of the relationship between management and landscape evaluations. In the forest landscapes context, a paradigm shift in planning and design in North America and Great Britain occurred when the public became increasingly uncomfortable with intensive plantation and harvesting methods [7,8]. Derived from this social process, the consideration of landscape as a visual resource was introduced in many agencies' procedures, largely based on the



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Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). scenic approach [9,10]. The systems evolved towards a type of management in which ecological aspects had more weight, faced with some criticisms about the appropriateness of simply hiding actions (e.g., [11]). Since then, numerous studies analysed how different ecologically sound practices were accommodated in the visual landscape and were considered by the public, incorporating new nuances to the traditionally scenic and preference focus of the landscape perception literature [12]. For instance, people's perceptions toward a system integrating an ecologically sensitive design, and not just applying visual impacts mitigation, were compared [8]. Reactions towards some potentially conflicting forest conditions were also considered, such as forest structure, post-harvest down wood, or prescribed burns [13,14].

The inquiry gained depth by incorporating the ecology–aesthetic–management equation variables related to values, beliefs, attitudes, and behaviours [15]. The focus on the problem from the perspective of acceptability—that is, evaluating the willingness of the general public to accept or tolerate certain forest management options even if they result in a non-preferred landscape—has been an active area of research [4,16,17]. Thus, it has been repeatedly pointed out that holding ecocentric, anthropocentric, or utilitarian orientations leads the public to evaluate the appropriateness of a management condition differently, both in ecological and aesthetic terms, such as wildland fire management, silvicultural systems, commercial harvests, or rewilding processes [18–21]. A primary factor explaining the acceptability of a type of forest management is trust in managers. Social trust is the willingness to rely on those who have the responsibility for decisions and actions [22]. Although there have been different ways to define and describe trust within the social science literature, in terms of public–agencies relationships, it always involves three components: competence/ability, credibility and integrity, or salient values similarity [18,22–25].

So-called ecological aesthetics have considered this matter from the perspective of how a landscape can clearly reflect the suitability of a type of management. It is an opportunity to address public attention to the benefits of a type of management, thus improving the ecological and aesthetic qualities of the landscape [26,27]. From this point of view, the landscape is considered as a "mediator" between the actions of the manager and the public due to the enormous communication potential of forest aesthetics.

In this regard, the Theory of the Aesthetic of Care advocates that ecologically sound landscapes are more likely to be sustained if they evoke enjoyment and approval from the public. This is reached when a landscape communicates human intention, particularly intention to care for the landscape, through clear signs of proper management and conditions ("cues to care") [28,29]. This phenomenon has been observed in different landscape contexts, such as urban landscaping, agricultural landscapes, or more natural landscapes. This latter context displays, to a greater or lesser degree, signs of human intervention that indicate a condition of the landscape management rather than a condition of the ecosystem [30–32]. Even the impression of naturalness serves as a sign of an appropriate intervention grounded in a deliberate decision of no intervention [33]. Technological landscapes can also communicate environmental stewardship values. It is the case of wind farms—a sustainable energy source whose environmental benefits far outweigh the impacts—which increasingly entail a symbolic meaning of a more respectful attitude toward the earth [34].

In forestland, this is a central issue, since these landscapes have been traditionally valued by their ecological qualities, naturalness, and scenic aesthetics. This perception makes forest management more subject to public scrutiny [35,36]. A complementary theory that supplements the scenic or ecological theories of aesthetics has been proposed [37] for the particular case of a landscape subject to forestry practices. Forest aesthetics based on Visible Stewardship pretend to counteract adverse reactions to forestry activities grounded in the negative stereotype of an impacting practice and the mistrust of its honesty. In landscapes exploited to meet the needs for raw materials or requiring forest management, the public more easily accepts their appearance if they recognize that these practices are the evidence of an intention of sustainable management. Even more if they perceive that

someone has a stake in the land, is committed to the local community, and ensures respect for nature and the place. Correct and well-intentioned forest management, therefore, should not be hidden, but should be evidenced and explained. These considerations are also highlighted in the Tended Aesthetic: as a landscape is the most publicly accessible aspect of natural resource management, managers should expect aesthetics to provide the public with "a clear audit" of the land manager's ethics [38,39].

The interpretation that people make about the intentions of landscape managers, if they appreciate and respect a landscape, preserve its values, and act accordingly, is a relevant issue with multiple implications in ecological and aesthetic planning as well as landscape management. Therefore, we need to comprehend how people experience sustainable ecosystems and its management. This study explores these issues in a real place in order to better understand the following:

- How people interpret the ecological and aesthetic qualities of a landscape and relate them to landscape management.
- What the perceived characteristics are that trigger positive or negative judgments of landscape management.
- How these landscapes could be managed to promote the perception of a sustainable landscape.

2. Materials and Methods

2.1. StudyArea Description

The study area is located in the Sierra Oeste (Central Spain), occupying a surface area of 28,000 hectares (Figure 1). It forms a transitional system of hills and ramps located on thesouthern slope of the Sierra de Guadarrama and Sierra de Gredos that links the uplands with the great valley in the south irrigated by the Alberche River (altitudinal range of 580–1300 m). There are 6 villages in the area with a total of approximately 14,000 inhabitants. The largest village, San Martín de Valdeiglesias, has 7840 inhabitants.



Figure 1. Location and image of the area of study.

The Mediterranean landscape that characterizes the area of study is mainly occupied by agroforestry land uses. The pine forests (*Pinus pinea* and *P. pinaster*) are very extensive and its presence has been favoured since ancient times due to the interest in their wood, cones, and resin production. They are combined with oak forests and agricultural areas surrounding the villages. These agricultural areas are composed of vineyards, olive groves cereal crops, orchards, and a few pastures. The villages and crops occupy the lowlands and frequently form a mosaic with the remnants of the former Holm Oak forests that covered these lands. The land tenure is characterized by three typologies: extensive forestlands that are publicly owned or managed; scattered and numerous small agrarian plots; and large private estates owned by outsiders to the area, frequently for hunting use.

The study area is part of the SCI/SPA 'Encinares del río Alberche y Cofio'. The agroforestry ecosystems have an important role for wildlife conservation, with significant populations of several protected species (*Aquila adalberti, Ciconia nigra, Aegypius monachus, Gyps fulvus, Hieraaetus fasciatus, Circaterus gallicus,* and other). Due to the Mediterranean climate and the land-cover structure, the incidence of forest fires is high in the landscape. The county has suffered frequent and large wildfires and it has been declared as a "High-risk Area" by theregional Forest Fires Emergency and Civil Protection Plan.

The traditional activities (agriculture, extensive livestock farming, and forestry) are in decline. Farming represents the main occupation of the elderly population, with a lack of generational replacement, or a secondary occupation of a part of the population. The high-quality granites that exist in the area have been traditionally exploited. Nowadays international companies exploit the great mining areas scattered in the landscape. Due to the proximity to the big city of Madrid, the landscape has been increasingly occupied by large residential areas that accommodate the vacation population. The touristic use is also increasing, attracted by the natural values and the reservoir prepared as aplaceforwatersports.

2.2. Research Design

As this research aims to explore, in-depth, the participants' perceptions and understandings about how landscape management relates to the perception of ecological values and aesthetics, a qualitative approach was adopted. These methods are particularly appropriate to facilitate the interaction and explore the individual and group understandings as well as perceptions of selected concepts [40,41].

In-depth group and semistructured interviews provided a discursive approach in the analysis. An initial focus group was held primarily in 2015 (lasting 3 h), with 5 participants representing different roles regarding the management of the area: political, environmental/technical (from the local administration), forest officers, farming, and environmental education. Then, a series of individual interviews were conducted with 25 respondents that were intended to represent different situational contexts and social groups (interviews lasting 45–75 min).

The group and individual interviews followed the same structure: the participants were asked to indicate, on a simple map, locations representing landscapes of high and low ecological and aesthetic quality (a binary qualitative scale: high/low or good/bad). They then explained the characteristics of these places and the reasons for their choices. This interview guide was complemented by an open question related to their perceptions of the influence of the management on the aesthetics and ecology of the landscape, as well as their perception of the landscape change in the future. The semistructured interview was designed to provide a flexible framework for the participants to discuss freely and at length the three concepts under analysis: descriptions and evaluations of ecology, aesthetics, and how they relate to the type of management in the study area. The map was used as a conversational stimulus and to facilitate thinking about and selecting specific landscape areas or physical traits.

2.3. Data Analysis

All of the sessions were digitally recorded and subsequently transcribed. Data analysis was conducted by coding statements and searching for patterns in the participants' discourse. All of the identified themes were labelled (open coding), organized into categories (axial coding), and finally interrelated to draw connections between ideas. Because these categories emerged from participant responses and not from a predefined theory or coding pattern, the analysis allow us to form a meaningful framework to comprehend the phenomenon [42].

2.4. Participant Sampling

A purposive sampling strategy [40] was used to select the participants, who were chosen to reflect a representative variety of social backgrounds and livelihoods of those living in the landscape. The composition of the group of participants allowed for a series of information-rich cases covering a wide range of roles and perspectives relevant to the phenomenon of interest. In Table 1, 30 participants were compiled under general characteristics that were structured via the following dimensions:

Table 1. Population survey selection (30 stakeholders in total).

Typology of Personal Experience with the Landscape/Knowledge on Environmental Issues	Non-Established 14 Interviews	Formal 16 Interviews	
Insiders working outside the county 6 interviews	2 members of environmental group 1 resident environmentally sensitive	1 environmental consultant 1 environmental stakeholder 1 environmental officer (another county)/environmental group	
Insiders working in agroforestry within the county 10 interviews	1 farmer 3 wine makers 3 livestock keepers 1 pinecone collector + farmer (complementary occupation)	1 large state landowner 1 hunting guard in a large state	
Working in land management 4 interviews	2 rural development agents	1 rural development agent 1 technician from the Farming Management Office	
Working in natural protected areas management 7 interviews	1 environmental politician	3 environmental/forestry officers 1 municipal environmental technician 2 conservationists	
Working in environmental awareness/tourism 3 interviews	-	3 environment technicians in regional environmental centres	

The first dimension was characterized by stakeholders' knowledge of the natural environment:

- Non-established knowledge: knowledge comes from managing farms and forestland, practical experiences, as well as landscape observation.
- Formal knowledge: technical-scientific training in environment (biology, environmental sciences, agronomy, and forestry).

The second dimension was characterized by stakeholders ´ involvement in the landscape (way of living or working):

- Insiders working outside the county: high environmental awareness despite not working in landscape management.
- Insiders working in agroforestry in the county: participants who live in the region and are involved in farming or forestry activities.
- Working in land management: participants related to rural land management but not to ecological or environmental management itself.
- Working in environmental/ecological management in the county: stakeholders involved directly in the management of natural protected areas or environmental issues.
- Working in environmental awareness/tourism in the county: stakeholders who work in activities related to environmental awareness and tourist promotion.

3. Results

The Table 2 summarizes the landscapes contexts identified by those interviewed, the frequency of selection of these types of landscapes, and the attributes or themes that emerged, as well as their frequencies.

 Table 2. Summary of the results.

High Landscape Ecological Quality					
Type of Landscape	Number of Participants Who Selected the Type of Landscape	Number of Places Selected		Frequency of Referred Attributes/Themes	
Forestlands	27/30 PART.—90%	36	16 14 10 10 8 3	Good state of conservation, maintenance, care, natural protected area status Biodiversity Naturalness, low human presence Presence of wildlife, protected species Mature forest, vigorous, old trees Uniqueness of some forest ecosystems	
Large-scale private properties	15/30 PART.—50%	19	9 7 6 6 1	Good state of conservation, adequate management, maintenance, care Naturalness, low human impact, limited accessibility Biodiversity Presence of wildlife, protected species Productive, vigorous	
Rivers and some wetlands	7/30 PART —23%	8	4 3 2 2 1	Biodiversity Good state of conservation, protected area status Low human presence, quietness Ecological balance Presence of wildlife, protected species	
	Higl	h Landscape Aesthe	tic Qua	lity	
Forestlands	24/30 PART.—80%	33	19 7 6 5 4 3 2 1	Scenic beauty, colour, variety Freshness Good state of conservation, neatness Mature forest, vigorous, old trees Biodiversity Naturalness Presence of wildlife, protected species Accessibility	
Unique elevations, top of hills, and viewpoints	13/30 PART.—43%	26	5 5 1 1	Scenic beauty Panoramic views Presence of vegetation and rocks Remoteness Variety	
Agricultural area	8/30 PART.—27%	9	5 3 4	Productivity Maintenance, well cared-for countryside, cultural continuity Scenic beauty, colour, variety	
Rivers and some wetlands	8/30 PART.—27%	7	6 2 1 1	Scenic beauty, variety Quietness Biodiversity Accessibility	
Large-scale private properties	4/30 PART.—13%	4	3 2 1 1 1	Scenic beauty, colour, variety Panoramic views Naturalness, low human presence Adequate management, maintenance, care Presence of wildlife, protected species	

Low Landscape Ecological Quality						
Type of Landscape	Number of Participants Who Selected the Type of Landscape	Number of Places Selected		Frequency of Referred Attributes/Themes		
Areas subjectto intensive recreational use	15/30 PART.—50%	18	10 7 6	Intensive use Rubbish and pollution Lack of care, disrespectfulbehaviours		
Agricultural area	13/30PART.—43%	15	6	Lack of maintenance, lack of use, spontaneous reforestation		
			6	Poormanagement practices, lack of grazing benefits Bracome of law, quality		
			3 1	inharmonious constructions Low diversity		
Urban areas	10/30 PART.—33%	12	11 1	Artificiality, impact on ecosystems Presence of rubbish		
Forestlands		10	6	Effects of forest fires: loss of vegetative cover and vigour, lack of an effective environmental restoration, unhealthy forests		
	8/30 PART.—27%		4	Risk of forest fires: shrub encroachment, extensive and continuous pine forests, lack of maintenance and surveillance		
Mining areas,	7/30 PART.—23%	7	7 2	Impact on ecosystems Noise impact		
quarries	.,	·	1	Lack of environmental restoration		
Large-scale private properties	5/30 PART.—17%	4	5 2	Poormanagement practices, hunting overuse, risk of fire False naturalness		
Rivers and some wetlands	2/30 PART.—7%	2	1 1	Low biodiversity Lack of management		
	Low	v Landscape Aesthe	tic Qua	lity		
Agricultural area	13/30 PART.—43%	16	8	Appearance of neglect and abandonment, shrub encroachment, rewilding process Bracopae of low, quality		
Agricultural area			4 4	inharmonious constructions		
			1	Flat relief		
Areas subjectto intensive recreational use	10/30 PART.—33%	10	10 4	Intensive use Disrespectful behaviours		
Urban areas	10/30 PART.—33%	7	11 3 2	Artificiality Poor aesthetic of buildings Sensation of disorder and lack of control		
Forestlands	8/30 PA RT	11	8	Effects of forest fires: loss of vegetative cover and vigour, visual impact of burnt areas, lack of an effective environmental restoration		
	07 00 11 MI.—27 70		2 2	Loss of vigour due to aridity and denuded land Risk of forest fires: shrub encroachment, dense forests		
Mining areas, quarries	6/30 PART.—20%	6	5 3	Visual impact Noise impact		
Other (landfills, infrastructures)	3/30 PART.—10%	3	3	Visual impact		

Table 2. Cont.

3.1. Landscape Contexts Identified and Comprehensive Framework

From the analysis of the participants' responses, three relevant contextual situations emerged that were related to three different types of landscapes linked to specific managers and to particular processes with a prevailing impact on the landscape and its perception. These categories are summarized as follows:

- Extensive public forestlands, in which the public administration is responsible for their conservation and regulation.
- Large-scale private properties. Closed large estates under the control of a sole landowner, with an agroforestry or forested character and usually subject to hunting combined with agricultural or livestock use. The access to these properties is restricted, and frequently the landowner lives outside the county and does not participate in the local social dynamics.
- Agroforestry landscapes composed of a smallholder agricultural mosaic that is more or less combined with patches of seminatural vegetation or in contact with extensive forests. The farming use is in decline.
- Some other landscape types were identified and commented, but these three contexts
 were directly and clearly related to the evaluation of the landscape management.

The categories identified and the relevant dimensions of the perception forms the framework to comprehend how the participants understood and viewed the landscape management (Figure 2).

Landscape context	Identified manager	Perception		
		Evaluation of the landscape	Perception of the management/process in the landscape	Perception of the manager
Forest lands	Public administration	Highly valued landscape	Threaten by forest fires, Mainly due to a management perceived as • Insufficient • Inadequate • Ineffective/non-meaningful	Manager viewed as a distant, non-engaged agent
Large-scale private properties	A single landowner	Landscape valued mainly for its ecological qualities	 The development of its ecological potential depends largely on Limited access Attachment/involvement/ interests of the owner 	Manager viewed as a key agent, with full economic and decision-making capacity
Agriculture-forest mosaic	Local small holders, traditional users (farmers, livestock keepers, forest traditional exploitation)	Valued landscape, associated to cultural continuity	Landscape in regression because of the abandonment of traditional activities	Manager considered as a wise, key agent Loosing its beneficial influence Traditional uses as non-valued activities by the public administration

Figure 2. Comprehensive framework of the perception of the landscape management in the three different contexts.

3.2. Forestlands, Public Managers, and Forest Fire Risk

Ecological and aesthetic values were mostly associated with forestry landscapes. These values were related to the well-managed, mature, and vigorous forest ecosystems, suggesting qualities related to biodiversity, a good conservation status, scenic beauty, freshness, naturalness, and the presence of wildlife.

The participants who commented on the forestry landscapes identified forest fires as the main threat to this highly valued landscape. The ecological and aesthetic impacts of forest fires were weighted by the participants according to two dimensions: the perception of their effects and the consideration of the risk of their happening. Thus, there was a negative evaluation of the areas affected by fires due to the loss of precisely those values most sought after in this type of landscape: loss of tree cover, loss of the fertility, vigour, richness of the ecosystem, and aridity. The simple fact of seeing forest structures considered to be at a high risk of fire (very dense, with a continuous and abundant shrub layer, and generally more associated with the presence of pine trees) suggested a poor vegetative state and poor aesthetics. This negative perception was not simply linked to the perception of the threat, but also understood as a notorious sign of the lack of care for the forest by the manager.

(Environmental consultant, Biologist) "Perhaps people do not realize it, but the impact of numerous wildfires, which have occurred over many years, has made the mature forests disappear or being unhealthy."

(Farmer) "There is a lot of pines, so dense with shrubs, they should do some cleaning [referring to silviculture]"

(Large estate landowner, forestry engineer) "There was such a beautiful pine forest and now there is . . . in the end a continuum of shrubs that is going to cause another fire. I believe that the land and the forests have to be worked on."

The regional forest/environmental services were identified as the manager in charge, given that these forestlands are municipally owned, but the basic protection, regulation of their use, and forest fire risk management fall largely on the regional administration. The general perception of the manager was expressed in negative terms, denoting a crisis of confidence and legitimacy in its performance. This was structured around the consideration that the management was insufficient and that the actions observed were inadequate or inconsistent.

The majority of the interviewees commenting on this type of landscape argued that they perceived public forest management as insufficient and even non-existent for practical purposes, and that this resulted in a poorly conserved forest, underestimated and underused, with inadequate ecological dynamics, and under a clear risk of suffering a catastrophic forest fire. Likewise, many interviewees referred in their comments to the perception of the inappropriateness or inconsistency of some of the actions taken by the public managers. Opinions revolved around the consideration that there are no well-thought-out or truly meaningful actions, *"There is no real management of the forest"*; decisions are not always linked to technical criteria, *"Interventions to pleasure voters"*; and there being a lack of practical and direct knowledge of the dynamics and needs of the area, *"It is managed from the office"*.

Most of them claimed that the fundamental origin of this situation was the lack of interest or commitment of the public administration, which was perceived as a generic and inconcrete entity that was not sufficiently concerned with achieving adequate land-scape conditions.

(Farming manager from the public administration, forestry engineer) "Forest management is terrible, well, let's start from the assumption that it doesn't exist. Forestry services work from the office and there are no on the field. Most of the forestry work is done without any planning, none is preventive, and the forestry service is conspicuous by its absence. I believe it is not coordinated."

(Farmer/pine collector-complementary occupation) "[referring to forest administration] They do not know what a rosemary or a lavender or a pine is. They know the species but they do not really understand, they do not really understand the land scape."

To explain this fact, it is particularly interesting to profile the image of the figure of the technicians responsible for the forest administration, the forest and environmental officers, and the fire rangers. Both the officers and rangers were perceived as figures present in the landscape and close to the people, although the effects of their work received both criticism and recognition (six comments about it). The technicians, however, were not perceived in this way. They were not recognized as being sufficiently linked to and in direct contact with the landscape, such that on numerous occasions they were judged as a manager far removed from reality and without sufficient knowledge of the functioning and needs of the environment.

(Wine producer) "But there are technicians who are always in the office and don't know what the countryside is like. You have to live in the countryside to know what it is [...]"

(Environmental officer, focus group) "The issue is that they want people to see that there are [fire fighting] checkpoints. So they only allow work on roadsides, tracks or cattle trails. Then everybody can see it. People go with the car and think: great! They don't let you work in the middle of the forest. All the projects there, they are thrown away. [...] As there are politicians in the technical positions, it doesn't work. [...] It's not like before, when the forestry engineer came and knew as much or more than you. Now, that has been forgotten".

3.3. Large Estates, the Commitment of Landowners, and the Potential for Landscape Conservation

A large part of the evaluations related to the ecological approach of the landscape was devoted to large estates under the management of a landowner. These private owners were identified as key stakeholders in the ecological management of the landscape. The private large estates were valued because of their good state of conservation, limited human impact, biodiversity, and the presence of wildlife. The comment below illustrates that the evaluations were generally made on the basis of two conditions: restricted access to the area and its state of conservation, depending on the responsibility or sensitivity of the landowner.

(Environmental officer, member of ecological organization) "In this area the Finca [name undisclosed] is located. Private property prevents us from accessing it, for better or worse. If those who run the farms are consistent, they have had black storks and Iberian imperial eagles there in the same year."

Indeed, the limited accessibility to these private estates was mostly understood as the factor defining the differentiated ecological quality in the large estates, given the minimization of human disturbance. In this sense, the presence of emblematic protected species (Iberian imperial eagles—*Aquila adalberti*, black vultures—*Aegypius monachus*, or black storks—*Ciconia nigra*) was used as an indicator of the ecological quality of these spaces, which were considered as a kind of biological reserve. Considerations of the attractiveness of their landscapes were limited due to lower contact with the areas because they were enclosed. This was equally recognized as positive.

Having established the limitation of access as one of the keys to their ecological and aesthetic quality, the evaluations of the development of its high ecological potential automatically fell on the involvement of the owners in the conservation of the properties. The interests that drive their values on management were also evaluated. In those cases in which active and adequate use of the land was perceived, the evaluations were very positive. Many participants even reflected on the better conditions that were achieved in these areas compared to these managed by public entities. Negative assessments were based on the effects caused by the intensification of hunting production and the lack of silviculture (mainly due to the perceived risk of forest fires).

(Farmer) In [name undisclosed], the owner cares, it is well exploited, they harvest firewood and cork and have cattle; it is ok, it is clean."

(Member of an environmental group, administrative assistant in the public administration) "Depending on the owner on duty, it is well cared for or it is a powder keg. There are owners, new owners, who are taking good care of the areas that could be sensitive to a fire, managing the undergrowth; and there are others who honestly... There is a historical owner in the county, he didn't buy the estate, he inherited the land, and the other day I was there and I was scared to death. There were pine trees there with branches sticking out of the ground, all closed, in an area that is very windy and I thought, what is here! [...] But cleanliness, maintenance, conservation, a minimum of prevention... there is zero. ... the summers are catastrophic." (Environmental educator, biologist) "Here the private farms, not all of them, there are exceptions, but some are animal shooting ranges, that is, they don't exactly care. Or they have such a density of deer in some areas that they have finished with everything, because the animals eat everything."

A perception that added weight to this judgment was that the landowners were identified as specific persons, locally known, and evenpopular at a national level, whose relationship with the property could be traced;that is, even if they were often distant from the local social dynamics, these landowners were not perceived as undetermined figures, and they were connected with the land by hiring the local population for the management of their properties.

3.4. Agriculture–Forest Mosaics, the Abandonment of Small-Plot Farming, and Their Effects on the Landscape

The values of the agricultural area were recognized but placed as secondary to forest landscapes. Its aesthetic qualities were more associated with the emotional dimension of the historical uses of the landscape and its cultural continuity. What is interesting in this area is to note how local small holders are considered to be responsible for this landscape, the evaluation of their contribution to its condition, and their capacity for action.

The maintenance of crops and of the traditional uses of the forest (livestock, collection of firewood and pinecones, etc.) were considered as key to the good ecological functioning of the landscape. Therefore, the perception of the lesser presence of a traditional manager, together with the already-mentioned insufficient action on the part of the administration, led to an interpretation of the landscape as being in progressive abandonment, unstable, and with a loss of richness. This was the generalized idea, although some participants found positive effects in this fact.

(Rural development agent, agronomic engineer) "I think there is very little management, including forestry. And there is no maintenance of activities, which generates problems. Livestock has decreased a lot in extensive farming and there is no management to ensure a good condition of the forest. [...] I am very upset by the abandonment of crops, although you also have the perception that one world is dying and another one is coming. It depends on how things happen, because on the other hand you think that where there is no great economic interest, naturalized areas are gaining their space."

[Livestock keeper] "That area is very clean, the forest and the crops, because there are sheep there. They should let us graze everywhere, because we know how to do it and the land is more clean, more accessible."

The visible signs of this process were identified as the advance of the forest in the agricultural area, the thickening of the undergrowth, and the homogenization of the landscape. The predicted ecological consequences were an increase in the risk and intensity of forest fires. The aesthetic evaluation was negative, since it suggested a poorly cared-for landscape that was inaccessible and unbalanced.

(Farmer)" For example, in [name undisclosed], where there are a lot of pine trees, they should do some cleaning or something, there are a lot of them. In the past there were not so many, people say there were not so many. There have always been cattle there. There used to be vineyards in between, but now all the pine has invaded it, people have left it abandoned and there are big pines now."

The interviewees found the cause of the landscape quality change to be the low profitability of the forestry and agricultural uses, which ends up leading to the abandonment of activity. Likewise, the local managers perceived that the public administration (regional and national) exercises excessive and unnecessary control over their activity. They also thought that, at the same time, the traditional management suffered a lack of recognition and promotion. (Wine producer, firefighter) "I am one of those who think that fires are extinguished in winter. There are many forests where cattle ranchers are not allowed to enter with their cattle because they say they eat the young shoots. When cattle have always lived in the forest, the forest was clean and there were no fires in summer. There they swing a bit too much. If you enter with cattle, they report you. Throughout the year. And they are mistaking. Look, 12 years ago there was a fire in San Martín, I was in the fire station, in fact we saw it, we were the first ones to go after the San Martín fire station. That fire was the fault of the foresters. That year they forbade the goatherd to put the goats in the pine forest and that prohibition meant that more than 4000 hectares of land were burned. And as soon as the fire started, it was a canopy fire, there was grass over 2 m high. And the following year, when the forest recovered a little, they allowed the goatherds to enter again. But they have always lived together! The pines release their pine cones and there are ranches of 15 or 20 little pines and the animals will eat 5 or 6, it is a natural selection, the strongest one is the one that is going to pull up."

(Rural development agent, geographer) "Here almost all the forest is managed by the regional government, you can't do anything. [...] Environmental problems? The lack of use, the spaces that are being abandoned, basically. The cleaning of the forest using contracted enterprise that create a detachment of the inhabitant of the forest, which has always been theirs, they have always kept it. The system of exploitation by public auction are things that distance you from the community. And I don't think that an external contract is useful to take better care of the forest [...] Almost everything goes through the regional government, that is to say, to cut a simple pine tree! You have to ask permission for everything. So there is a great distance. I imagine that the objective is to protect the environment as much as possible, and the idea is a good one, to avoid that each one makes of his own cloak a cloak, but it has resulted in exactly the opposite. The countryside no longer belongs to the people of the municipality and that is how they live the process. It is the other who comes to take care of it and another who comes to enjoy it, the visitors."

4. Discussion

This study examines how the way that landscape managers are considered interrelates with the ecological and aesthetic qualities perceived in the landscape in addition to how these interpretations shape stakeholders' attitudes towards the landscape and its management. The context in the case study falls into a Mediterranean agroforestry landscape subject to obvious human intervention, both in the past and in the present. This context explains why the assessment of the landscape made by the local stakeholders was inextricably related to the evaluation of managers and the management alternatives, and not so much in the search for natural conditions [42]. This management judgment expressed by the participants focused on three different types of landscapes related to the actions of three management systems that can be summarized in the following three statements:

- Public forestlands: valued landscape but subject to insufficient, ineffective, and undermined management.
- Large-scale private properties: areas with great ecological potential depending on the involvement of the landowner.
- The local smallholder agroforestry mosaic: loss of recognition of and influence on the landscape.

In the forestland context, the identified characteristics contributing to the landscape quality were aligned with the general results encountered in the landscape perception literature [12,43]. Despite being a landscape valued for its ecological and aesthetic qualities, the judgment of its conditions faced a problem associated with the perception of the inadequate action of the public administration. The considerations about this management and its negative effects revolved around the perception that it was not always significant or sufficient, nor thoughtfulor technically justified, and that it lacked practical and direct knowledge of the area. The landscape thus lacks one of the key components to achieve adequate management: trust in the manager. Substantial prior research has proven the

importance of confidence in agency managers for the successful implementation of any forest management program, as well as for the acceptance or valuation of landscape conditions [18,24,25,44–46]. In the case study, the public forest management lacks the components that [23] framed to achieve a public–agency relationship based on trust, which are competence, credibility, and consensual values. In the case analysed, the mistrust in the competence of the public administration was grounded in the idea of ineffective interventions. The lack of credibility unfolded mainly through the perception of an unfair decision-making process for the sake of politicians or external companies. The consideration of not sharing values was also mainly based in the perception that the lack of active management was resulting in the degradation of cherished landscapes that the responsible manager did not value and protect enough. The authors of [47] found that, whereas the perception of shared values was a significant predictor of trust, the effect was moderated by the consistency of action with values.

The conspicuous signs that underpinned this perception corresponded to forest landscapes denoting a situation of abandonment, forest structures entailing a risk of wildfires, already-affected areas that have not been restored or failed to be, and interventions for fire management judged as cosmetic, useless, or inducing major ecological and aesthetic impacts. In a fire-prone area exposed to large and dramatic wildfires, it is common that the community expresses deep concerns about the wildfire management methods. It is also frequent that they search for signs of ecosystem recovery or identify risky conditions or notorious impacts on the landscape aesthetics [45,48].

These results reveal that forest management has a deficit in trust. The outcomes in the landscape do not reveal that it is wise, well-intentioned, and for the sake of the community. In this case study, the public administration was perceived as an abstract and distant entity that was not committed and concerned enough about attaining a healthy and sustainable landscape. This opinion was supported by acknowledgingthe landscape conditions reflecting it.

This situation contrasts with the attitudes towards the landscapes of large private properties. These areas have a particular status, since private properties with restricted access means that the evaluations fell largely on the perception of a single manager, a specific and identifiable landowner assumed to have full economic and decision-making capacity. Again, the perception of landscape conditions denoting active and responsible management was central. Consequently, in the participants' eyes, the landowner's attachment to their own land made the difference between a beautiful and well-cared-for landscape, sustaining the so-called "aesthetic indicator species" [49], a property that does not fully develop its ecological and aesthetic potential, or simply an ecological problem affecting the aesthetics of the landscape.

Another aspect related to the trust and engagement in landscape management is the consideration given to the role of the traditional managers. This manager was identified as being important for the proper ecological functioning and attractiveness of the landscape. The beneficial influence of local farmers, livestock raisers, or traditional forest activities is progressively decreasing due to the abandonment of rural practices. In numerous developed countries the rural landscapes are subject to population decline, land abandonment, and a rewilding process, whose effects translate into non valued changes in environmental, socioeconomic, and landscape perception terms [50-53]. It is significant to outline how the interaction between the traditional managers and the public administration operates in this case. There is a general impression, especially expressed by local actors, that the natural resource management agencies impose too many restrictions and do not adequately value the role of local activities. Furthermore, it is a reciprocal process, in which the lack of trust towards the public administration is fed back with the idea that the agencies have a lack of trust in these traditional managers. This perception has been extensively encountered in studies analysing the attitudes of local communities. In the local population a feeling of being undervalued may lead to a disconnection of the traditional managers towards the care of the landscape [41,54–56]. This seems not to be the case in large private lands, where

the landowner does not participate in the local social dynamics but connects with the local management of the landscape by hiring field staff from the community.

5. Management Implications. Conclusions

These findings are useful for managers, since they identify a series of deficits in the social impacts of their decisions. They also provide orientations about the factors and areas that may need attention to develop improved management.

In the case study, the lack of confidence in the public agency management advocates for a trust-building strategy to reinforce the perception of its competence, credibility, and values. Several studies have proposed a myriad of methods to establish and maintain trustworthy relations, always revolving around increased and significant communication (e.g., through trust-building activities such as agency–public meetings, small-group discussions, face-to-face communication, fieldtrips, etc.). The benefits of participation of key stakeholders in the decision-making processes, or a meaningful engagement in the practical management, have been equally highlighted [14,45]. In this case study, these are all methods that would reinforce the transparency of the decisionmaking as well as counteract the perception of a public land manager with limited practical knowledge and competence. Importantly, there is a need to make the technical staff visible in the landscape to reinforce the perception that real persons, working on the field, actually are sensitive to the needs of the local community and care for the landscape, demonstrating relevant knowledge of the land [37,57].

A very effective measure in landscape contexts where the traditional managers feel undervalued is to incorporate this "local force" into the active management. It would effectively acknowledge their contribution to ecological functioning, the cultural dimension on the aesthetics of naturally appearing landscapes, and their contribution in providing ecosystem services.

There is also the strategic opportunity to communicate the appropriateness of the management via the landscape design [26]. In this sense, this study derived a series of landscape conditions and structures with the potential to reflect it. There are two distinct situations: landscapes that look to be neglected, not showing active management; and landscapes that need improved restoration practices. In the first case, it would be necessary to increase the visible signs that this intervention exists and of the goodness of its effects, following, for instance, the design guidelines derived from the theory of the Aesthetic of Care or Visible Stewardship [28,58]. In those spaces in need of an improved restoration, it would be necessary to carefully decide on a few strategic places to apply a successful solution that would act as a kind of demonstration space.

Of course, the starting point should be thoroughly analyse whether the public management of the land is sufficient and for the sake of the landscape, the local community, and society. If this is not the case, all these methods would result in being ineffective, discouraging, or even detrimental. Rectifying the situation or supporting this "revealing process" depends largely on a political decision.

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