

## The Vulnerable Bison: Practices and Meanings of Rewilding in the Romanian Carpathians

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### Abstract

This paper discusses new conservation practices in the Romanian Carpathians, focusing on the recent reintroduction of bison in the framework of larger rewilding initiatives. It reveals the complexities of rewilding on the ground, through an empirical study that captures different local narratives, reflecting on how they emerge relationally, articulated within larger social dynamics and structures of feeling. I draw on empirical data, surveys and interviews that I collected in 2016 in two communities, one where bison were reintroduced in 2014 and one where they will be reintroduced at a later point. In the Carpathian Mountains the bison is well known among locals and its charisma works to the advantage of the rewilding project. Yet, the study reveals how rewilding raises a series of unresolved tensions, between wild and domestic, between natural selection and care, between uncertainty and security. It finds different local meanings at play around bison rewilding processes, and more broadly around wildlife conservation practices, which can be grouped into three major narratives— 1) wildlife tourism narrative; 2) intrinsic value of nature narrative; 3) bio-threat narrative. The study argues that such narratives, while questioning the possibility of co-existence of humans and animals, suggest a shared vulnerability of bison and rural communities.

**Keywords:** Rewilding, Bison, New conservation, Wildlife reintroduction, Human dimension, Europe, Vulnerability

### INTRODUCTION

Currently, the European bison is officially ‘vulnerable’. *Bison bonasus* (Rom. *zimbru*) was driven to extinction in the wild across Europe in 1927 after decades of decline from overhunting and habitat loss. In 2011, the population of free-ranging European bison was estimated at 2,371 individuals (Vlasakker 2014). The bison is threatened by genetic impoverishment, all being descendants of 12 ‘founder’ individuals (Olech and Perzanowski 2002). It has weak resistance to diseases and bleak prospects for sustained reintroduction because of poor

local acceptance (Vlasakker 2014; Hofman-Kamińska and Kowalczyk 2012).

In May 2014, the largest-ever bison reintroduction in Europe started in the south-western Carpathians of Romania, aiming to create free-roaming herds of 300 bison by 2024, after the species had been extinct in the area for more than 250 years<sup>1</sup>. The bison reintroduction is not only a species conservation initiative, but it is part of a more general move towards rewilding upland and marginal areas of Europe through experimental ‘naturalistic grazing’, an idea that is growing in popularity within European conservation (Pereira and Navarro 2015).

The idea of rewilding first emerged in the USA from a collaboration between biologist Michael Soulé and environmental activist David Foreman in the late 1980s (Jørgensen 2015; Lorimer et al 2016 (Jørgensen 2015)). In the European context, the idea of rewilding is novel, and first emerged as recently as 2010 (Pellis and de Jong 2016; Petrova 2016). Here, emphasis is put on the creation of a network of core areas and corridors for conservation, and on

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channelling forms of ecological restoration through grazing by large herbivores. Interest in grazing was inspired by Frans Vera's theory about the 'park-like' forests, as opposed to densely wooded high forests, as a benchmark of European landscapes before human intervention (Vera 2000) and by his 'wild experiments' with new nature developments (Lorimer and Driessen 2014; Lorimer 2015). The idea also gained traction in response to biodiversity decline as a result of decreasing farming activities (Beilin et al. 2014; Ceașu et al. 2015; Jepson 2016). A wealth of literature has revealed significant levels of farmland abandonment in Europe, notably the Carpathian region (Kuemmerle et al. 2008; Müller et al. 2009; Alcántara et al. 2012; Navarro and Pereira 2012; Müller et al. 2013; Munteanu et al. 2014; Pereira and Navarro 2015; Kuemmerle et al. 2016; Plieninger et al. 2016). To counteract these losses, the European Union's conservation policy promoted subsidies to encourage farmers to keep up traditional pastoral practices (subsidies provided for livestock *per capita* and also for maintaining traditional land management practices), advocating for a nature-culture hybrid model of conservation, specifically within Europe (Neumann 2014). However, this institutional model was criticised for being outdated, static (Jepson 2016), too costly and also, perversely, a 'poverty trap' that leads to a 'circle of decline', as it maintains subsistence agriculture (Navarro and Pereira 2012; Merckx and Pereira 2015). On this terrain, the novel idea of rewilding gained ground, as a holistic and dynamic ecological practice.

Eastern Europe is starting to be conceived of as a rewilding frontier, an ecological heartland of Europe (Lorimer and Driessen 2016; Petrova 2016), rich in territories where modern human ecological impact was less dramatic than in Western Europe, as a result of the less intensive agricultural practices of socialist states. These imagined geographies of the Wild East have emerged only after the fall of socialism (1990), and after tropical and sub-Saharan conservation captured the global wilderness imaginaries of the 1980s (Lorimer and Driessen 2016). Eastern Europeans' own imagined geographies follow similar trends. The rewilding frontier is created both from within and without. Recently, environmental discourses and practices of conservation of various kinds have been gaining momentum in Romania, with protected areas - Natura 2000 sites, national and natural parks - now covering 29% of the country. Recent studies (Bauer et al. 2017) show that attitudes towards wilderness and the free development of nature are positive. However, the existing protected areas, and conservation more broadly, are perceived ambivalently and are strongly associated with restrictions (Dorondel 2011; Dorondel 2016; Stahl et al. 2009; Vasile 2008; Bauer et al. 2017). Yet, several scholars argued that protected areas might not actually be effective in preventing environmental loss, i.e. forest disturbance (Knorn et al. 2012; Butsic et al. 2017).

The last seven years have seen a wave of rewilding projects across Europe. Among these, the NGO Rewilding Europe is committed to a rewilding plan at the continental scale, involving 10 different sites (Helmer et al. 2015). Two of

these sites are in Romania, one in the Danube Delta and one in the south-western Carpathians. A range of experimental mechanisms has been put in place to facilitate ecological restoration, such as the reintroduction of keystone species to drive naturalistic grazing, including wild horses, bison, ibex, red deer and back-bred Tauros cattle – as a surrogate for the mythical aurochs, the extinct ancestors of all cattle. The rewilding initiative, although taking inspiration from past natural landscapes, claims not to uphold 'authentic' historical and nostalgic references, but proposes to look into the future and venture into the unknown. It argues for rewilding as economically viable for local livelihoods, promoting a new market-based economy that attaches commodity value to the experience of wildlife encounters, thus aligning with other practices of environmental financialisation. Integration between markets and conservation is increasingly advocated by groups of conservation practitioners as part of the new conservation discourse (Sandbrook et al. 2013; Holmes 2015; Blanchard et al. 2016; Holmes et al. 2017). Yet, this trend has received critical attention from anthropologists, who have argued that instead of improving vulnerable livelihoods, nature-based tourism allows capitalism to colonise new spaces in nature and potential for elite capture (Brockington and Igoe 2007; Brockington et al. 2008; Neves and Igoe 2012).

Rewilding and reintroduction initiatives have been met ambivalently in Europe. Research in other European countries shows widespread acceptance of bison reintroduction; however, scholars show that damage to crops and property increase negative attitudes (Hofman-Kamińska and Kowalczyk 2012; Balčiauskas and Kazlauskas 2014; Balčiauskas et al. 2017), suggesting that the initial enthusiasm for rewilding among locals is prone to decline. Walet (2014) shows that the rewilding project in Western Iberia has been met with sceptical attitudes. Here, Rewilding Europe has introduced horses and cattle<sup>2</sup> (part of the Tauros programme of recreating the ancient aurochs<sup>3</sup>) to graze in two reserves. Locals seem to lack the sense that there is any gain from rewilding, perceiving mainly land-use restrictions and crop damage (Walet 2014; Pellis and de Jong 2016). Also, research in Latvia shows varied responses to reintroduction of horses, articulated mostly in terms of a relationship between new wilderness and the preservation of agrarian ethnoscaples (Schwartz 2006). The rewilding project in the Romanian Danube Delta seems to be concerned with building trust and aligning with meaningful local practice and has gained a lot of local supporters so far (Tanasescu 2017). Here, the introduction of Tauros cattle on communal lands is well liked, mainly because of the animals' aesthetic charisma. Yet, it is not clear whether the locals fully appreciate or understand the long-term rewilding plan that the reintroduction forms part of (Tanasescu 2017).

This article reveals the complexities of rewilding on the ground, through an empirical study that captures different local narratives of bison reintroduction in South Western Romania. As a spectacular and novel practice, rewilding has not received enough interdisciplinary attention. Thus, this study aims to enrich the existing literature by providing a thick description

of local meanings of rewilding, which foreground hopes and fears towards anticipated human-animal coexistence. This article reckons with the depths of locals' perceptions, reflecting on to how they emerge relationally, articulated within larger social dynamics and structures of feeling (Williams 1977). My research took place at the beginning of the reintroduction project, a time marked by novelty, enthusiasm and uncertainty, when bison was held in the acclimatisation enclosure. The fieldwork took place in the commune of Armeniş, where bison had already been reintroduced two years earlier in a fenced area, and in the commune of Densuş, the second proposed site, where at the time the bison had not yet been reintroduced.<sup>4</sup>

While a number of studies suggested that local responses to rewilding are negative, focusing mostly on how rewilding practices alienate people from using the land (Holmes 2014; Mackenzie 2008), the Romanian case shows how local narratives articulate also positive responses, in terms of hope and possibility. Such optimistic articulations have to be understood in a broader relational context, in which the actions of the project team play a crucial role, but also the appeal of the main character of rewilding, i.e. the bison, is important. The vulnerability of bison is intimately linked to its charisma. This study explores how the perceived features of the bison are articulated with notions of wildness, compassion, care, but also disturbance and competition. Such notions and perceptions of the animal are intertwined in the broader narratives about rewilding.

This paper discusses three main local narratives: 1) wildlife tourism narrative, favourable towards the project, focusing on the value of the bison for boosting local human activity – hopes for development, more local income and for community revival, in response to economic and demographic vulnerability; 2) intrinsic value of nature narrative, in which locals focus on the bison itself, on the need to save vulnerable species, to preserve endangered nature; 3) bio-threat narrative, in which bison is seen as a threat to vulnerable human communities, triggering feelings of injustice and resentment towards authorities. The purpose of this analysis is not to assess varying narratives in terms of means to legitimate claims to access land or as political vehicles that produce events (Fortmann 1995; Schuetze 2015). Rather, the study focuses on narratives as local ways of articulating meanings of new socio-ecological dynamics, in their early formation, at a point where they are not fully solid, but rather flexible, with a potential to change in the light of further rewilding events, or with a change of generations. I argue here that narratives of rewilding can unfold differently in the same place at the same time (as it has been shown by other recent studies as well, for ex. Deary and Warren (2017), yet they emerge similarly as reactions to questioning the possibility of co-existence of humans and animals in a realm of shared vulnerability. The local meanings, aspirations, and fears triggered by the bison rewilding project, and more broadly triggered by nature conservation, emerge, I argue, in relation to locals' own perceived precariousness; that is the vulnerability of rural dwellers facing devaluation of their rural identities, livelihoods (Fox 2011), and landscape.

## METHODS AND ANALYTICAL FRAMEWORK

Introduction of animals previously kept in captivity to rewild in the proximity of human settlements is a complex process, contending with economic, political, and emotional struggles embedded in wider fields of meaning and actual social histories. The broad topic invites eclectic approaches. In this context, I borrow across a few different disciplinary fields. The environmental humanities offer a framework for understanding the larger processes and meanings at play in the unfolding of rewilding. Several human geography and ecology studies that focus on human-animal relations and bison reintroduction have put forward valuable statistical approaches, which provide a comparative basis (Balčiauskas and Kazlauskas 2014; Balčiauskas, Kazlauskas, and Balčiauskienė 2017; Decker et al. 2010; Hofman-Kamińska and Kowalczyk 2012); a few studies also provide a more in-depth type of analysis, integrating local narratives and contexts (Tanasescu 2017; Buller 2008; Buller 2013; Pellis and de Jong 2016; Walet 2014; Dorresteijn et al. 2016). My study, while partly informed by surveys, encapsulates the statistical analysis in a deeper understanding and interpretation of local narratives. It pays particular attention to how these narratives are constituted, culturally and socially, with a focus on their complexity and variety.

This paper combines the analysis of local narratives emerging around rewilding bison with an inquiry into the 'incidents' marking the local history of reintroduction, revealing the tensions entailed by such practices. I pursue an ethnographic approach informed also by a sociological analysis of questionnaire-based surveys and interviews. The fieldwork study was carried out in March 2016, at a very early stage of the rewilding initiative. I carried out a survey which involved 131 questionnaires, conducted face-to-face with a sample drawn equally from the two reintroduction sites in the south-western Carpathians: Armeniş and Densuş.<sup>5</sup> The sample reflects the distribution of the actual population in terms of age group and gender.<sup>6</sup> The survey combined closed and open-ended questions about environmental values, knowledge and attitudes towards the bison and more specifically towards the project (a selection of quantitative findings is shown in Table 1). I also conducted a photo elicitation test, with nine perception questions.<sup>7</sup> The survey was complemented by 30 in-depth interviews with diverse local actors, from which I draw rich qualitative material. The interviewees were responsive and welcoming; even the ones who were against the project spoke freely about their grievances. I examined blog entries by project members, as well as articles and press releases revealing the encompassing rewilding vision and practice. In addition, my analysis draws on previous research in the south-western Carpathians, from 2014 and 2016, when I was involved in coordinating field studies on local perceptions of wilderness in 12 localities in the area.<sup>8</sup>

After a brief description of the project and the project area, the analysis is structured in two main parts. The first part, kept together in one large section, describes broadly local responses

**Table 1.**  
*Descriptive survey statistics (findings 2016)*

| <b>Perceptions and attitudes towards bison features and behaviour (n=131)</b>   |                               |
|---|-------------------------------|
| 81.7% consider the bison a beautiful animal   | Armeniş 84.4%<br>Densuş 78.5% |
| 91.6% consider the bison suitable for the local landscape   | Armeniş 92.4%<br>Densuş 90.8% |
| 50.4% consider the bison a friendly creature  | Armeniş 54.5%<br>Densuş 46.2% |
| 55% consider the bison NOT dangerous to humans  | Armeniş 63.6%<br>Densuş 26.2% |
| 74.8% feel sympathy towards the bison   | Armeniş 81.8%<br>Densuş 67.7% |
| 41.2% feel fear towards the bison   | Armeniş 34.8%<br>Densuş 47.7% |
| 48.1% believe the bison never inhabited the area  | Armeniş 42.4%<br>Densuş 53.8% |
| 38.9% believe that the bison might be aggressive to other animals   | Armeniş 36.4%<br>Densuş 41.5% |
| 75.6% agree with the bison reintroduction project   | Armeniş 84.9%<br>Densuş 66.1% |
| 79.4% perceive great future benefits from bison-related tourism   | Armeniş 84.9%<br>Densuş 73.8% |
| 55% consider that the reintroduction of bison will increase sources of income for locals  | Armeniş 59%<br>Densuş 50%     |
| 80.9% consider that the reintroduction of bison will enhance local pride  | Armeniş 89.3%<br>Densuş 72.3% |
| 32.1% consider that the bison will damage crops and gardens   | Armeniş 24.3%<br>Densuş 40%   |
| 22.1% consider that the bison will damage domestic herds  | Armeniş 10.9%<br>Densuş 33.9% |
| <b>Reasons for supporting the reintroduction project (n=90, persons who answered they agree with the reintroduction project) *percentages represent responses provided to open-ended questions, subsequently grouped into categories</b>      |                               |
| 37.8% of supporters provide pragmatic arguments - economic benefits, such as tourism, development   | Armeniş 38%<br>Densuş 37.5%   |
| 17.8% of supporters provide ecological arguments - 'nature will be improved'  | Armeniş 14%<br>Densuş 22.5%   |
| 14.4% of supporters provide arguments based on empathy and ethics; they like bison, bison have rights as living creatures   | Armeniş 14%<br>Densuş 15%     |
| 13.3% of supporters provide arguments based on tolerance - bison do no harm   | Armeniş 12%<br>Densuş 15%     |
| 10% of supporters provide species conservation argument   | Armeniş 14%<br>Densuş 5%      |
| 6.7% of supporters provide arguments based on their trust in supporting authorities   | Armeniş 8%<br>Densuş 5%       |
| <b>Reasons for opposing the reintroduction project (n=34, persons who answered they do not agree with the reintroduction project) *percentages represent responses provided to open-ended questions, subsequently grouped into categories</b> |                               |
| 41.2% of opponents provide arguments related to anticipated damage - to crops, to domestic herds  | Armeniş 8.3%<br>Densuş 59.1%  |
| 38.2% of opponents provide emotional, fear-based arguments  | Armeniş 41.7%<br>Densuş 36.4% |
| 11.8% of opponents provide arguments related to land restrictions   | Armeniş 33.3%<br>Densuş 0%    |
| 8.8% of opponents provide political arguments, distrust in rewilding promoters  | Armeniş 16.7%<br>Densuş 4.5%  |

to the bison rewilding process in relation to wider structures of meaning and local social histories. The second part zooms into a few events that shaped the early history of bison reintroduction. It examines ethnographically particular instances of rewilding that unfold to reveal points of tension. This part is organised in three sections. The first section examines the encounter between a bison that escaped the fenced area and its encounter with Mitru,

a farmer living very close to the acclimatisation enclosure. The second analyses the incident in which four bison were chased and killed by feral dogs, event which foregrounded the vulnerability of the bison and tensions between caring and freedom, wild and domesticated. The third section points to the uncertainties of rewilding and its potential for destruction by questioning the interaction between bison and current forestry practices.



## STUDIED AREA AND THE REWILDING PROJECT, SHORT OVERVIEW

The south-western part of the Carpathians covers the Țarcu Mountains Natura 2000 Site, the Domogled-Valea Cernei National Park, and the Retezat National Park<sup>9</sup>, consisting of various ecosystems: alpine meadows, old growth forests, dramatic cliffs and canyons. Above the timberline, alpine meadows once hosted large bands of sheep, a lot of abandoned sheepfolds and stock trails still marking the landscape. Most of the area targeted for reintroducing bison is forest, beech and spruce stands, home to bears, wolves, lynxes, wild boar, deer and other wildlife.

The places now targeted by rewilding projects are lived-in places. Despite the narrative of land abandonment and depopulation, the area is fairly anthropic. Approximately 22,000 people in 8,500 households dwell near and inside the core rewilding area, the Țarcu Mountains.<sup>9</sup> Depopulation and land abandonment are noticeable yet occurring at slow pace. While the population of rural villages experienced a sharp decline in the first decade of post-socialism, in recent years this trend has slowed significantly. There are 750

households and approximately 150 abandoned houses in Armeniș commune, showing a trend towards depopulation. Indeed, in the last 25 years, the population has decreased by approximately 1/3. And despite land being left unused much more often, the mountain residents still rely on the land for subsistence farming. The existing businesses are a logging enterprise and a hydropower plant, and a few commercial enterprises; a lot of locals receive state pensions. Densuș commune has 546 households. The population is slightly older than that of Armeniș. Attracted by substantial subsidies and EU funding, a few people keep sheep herds as a business and have developed agricultural enterprises. In both areas, land acquisitions and subsidies have increased the financial value of land, while more generally, property reforms and restitution have increased its emotional value (Leutloff-Grandits 2006; Svašek 2008; Vasile 2007, 2015). Commercial logging in both state and private forests is a widespread practice.

The first action of the rewilding initiative was the reintroduction of bison in the Țarcu Mountains and the neighbouring Poiana Ruscă Mountains. The plan is to create 100,000 ha of wilderness by delineating no-hunting

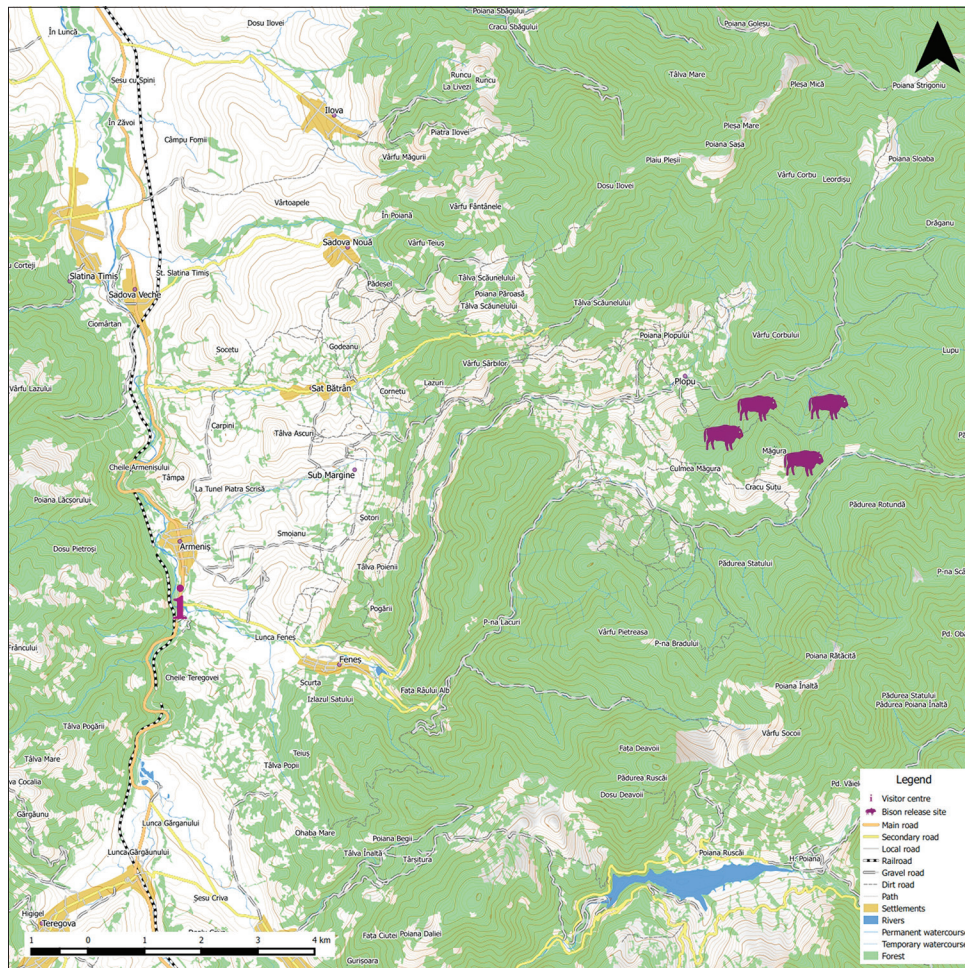


Figure 1  
Map of the Armeniș rewilding area.  
Source: WWF Project Team

zones and introducing griffon vultures and wild horses. The starting place for the initiative was the commune of Armeniș, where the support of a charismatic mayor helped. When the Romanian team from the NGO WWF (World Wildlife Fund) approached him, he was enthusiastic and saw good opportunities for development, which he conveyed compellingly to other locals. The rewilding project started out as a public-private partnership. The municipality conceded 70 ha of land, previously used as communal pasture and forest, and the local state forestry district another 90 ha of forest for the fenced acclimatisation area (Figure 1). The Romanian rewilding team leaders explicitly tried to build trust in the community, spending as much time there as possible and involving local people in the process, in contrast to previous conservation initiatives of designating protected areas, which failed to include local stakeholders in the consultation process (Guhr 2014). Rewilding Europe claims that the success of rewilding depends on local support, which in turn depends on its economic success. To this end, the project helped establish a local association, the Asociația Măgura Zimbrilor Armeniș, Engl. Bison Hillock Association (AMZA – Rom.) in charge of ecotourism, in which the former mayor and the two young rewilding rangers, Matei and Danu, take the leading roles. The Association, with 25 local members, and the local municipality are the main beneficiaries of the tourism activities around bison (WWF and Rewilding Europe continue to support their activities through partnerships). The tourism envisaged for the area is low-key wildlife tracking and watching with local tour guides, sleeping in tents and locals' houses<sup>11</sup>. As part of the market-based mechanisms, the project started rehabilitating ten abandoned huts, owned by locals, into tourist facilities; they also established a local brand of home-made products, a Bison Visitor Centre and a Research Station<sup>12</sup>. The business model established for the development of tourism by the rewilding team splits the benefits in four main streams, in order to cover various necessities, including the necessities of the community at large—1) one stream of benefits goes back to the external investors, for them to be able to recover their investment, 2) another stream goes to the local hosts and owners of the huts; 3) another stream flows into a local fund for conservation and 4) a flow of income for improving public utilities for the community.

The rewilding story in the second proposed location, Densuș, started differently. Bison had not yet been brought in at the time of my study (reintroduction forecasted for 2018). Many locals, including local authorities, complained they had not had enough information about the project. In Densuș, it was a local Association of Private Landowners, who first contacted WWF, inquiring about possibilities for collaboration. The landowners pledged support for nature conservation and opposed wildlife poaching by members of a Hunting Association that leases land in the area;<sup>13</sup> this attracted the WWF team. A few local landowners from the mentioned association donated 134 ha, forests and pastures, for creating a rewilding enclosure.

## VULNERABLE BISON, VULNERABLE HUMANS: SUPPORTING AND OPPOSING REINTRODUCTION

In the South Western Carpathians, local narratives surrounding bison reintroduction mostly converge in asserting the possibility of coexistence between humans and animals in a shared realm of vulnerability. The various stances can be grouped into three major narratives. One narrative strand focuses on the economic and demographic vulnerability of local communities, which experience ageing population, expressing nostalgia for good old times when “there were more people, more singing and dancing”. In the context of present economic depression and boredom - not ecological boredom as in Monbiot's (2014) argument, but backcountry boredom - people anticipate that the bison project will bring about an enlivenment. However, the perceived vulnerability of rural households also triggers an adverse narrative, who see the authorities prioritising ‘beasts’ over humans, inflicting more disturbances into the precarious lives of marginal farmers. Yet, a third narrative strand focuses on the vulnerability of nature, the abandoned lethargic landscape and its vulnerable species. Rural inhabitants, living equally precarious lives, are seen to be caring for the bison.

For the ecologists, the European Bison is a species in danger of extinction, with a “vulnerable” status on the IUCN Red List, a keystone, flagship and umbrella species. For the locals in Armeniș, the commune where it has already been reintroduced, the bison is an animal in danger of extinction that was brought there to be saved. The bison that were brought to Armeniș looked rather wretched, skinny, with ragged furs and shy, gloomy gazes. This vulnerability added to its charisma; the shortfalls prompted locals' fondness and care. Across the mountain, for the locals in Densuș, the arrival of the bison is a rumour; an animal they have seen in captivity and taken their children to marvel at in the nearby bison reserve. The bison is fairly well known among the locals<sup>14</sup>. The presence of a bison reserve in the area, as well as country-wide legends and heraldic images, make the bison familiar. For the most part, I found a positive perception of the bison as impressive, fairly gentle, worthy of being cared for and protected (Table 1)<sup>15</sup>. It inspires sympathy, a mixture of liking with understanding and caring for a proud and beautiful, yet vulnerable, animal.

A close analysis of the content of local narratives surrounding the Carpathian bison project reveals a few types of supporting arguments (a quantitative appraisal of arguments occurrence presented in Table 1<sup>16</sup>). The most popular account is that the community will benefit from enhancing tourism, which will eventually stop rural exodus. Imagining tourism mostly as mass-tourism, locals also anticipate infrastructure improvement, such as building roads: “Bringing in the bison would enhance tourism, bring further projects, one thing after another, repair the roads; the area will be made more accessible” (*Armeniș, man, age 53*). In Armeniș inhabitants believe that the bison, a very special attraction, will make a difference in raising the tourism profile of the area. Yet, while such hopes are an



expression of general positive feelings, many informants in fact doubt that they will directly benefit economically from the project. Despite the efforts of the rewilding team to include as many locals as possible, the new economic opportunities are to be seized mainly by the locals registered in the AMZA association, who meet standards for hosting tourists or have certificates for selling organic products. Also, local political factionalism has to be taken into account, as villagers with certain group affiliations do not want to associate with other local groups.<sup>17</sup> Yet, the project explicitly aims at including everyone to some extent in the flow of benefits; in this sense, part of the stream of revenues flows into the municipality budget, aimed at improving community utilities.

Nonetheless, local hopes of tourism and development articulate a deeper, and somewhat less idealistic longing for 'liveliness', for community revival. A few farmers voiced skepticism about tourism or increasing incomes, yet they were thrilled at the idea that something is finally happening in their surroundings. One farmer from Poieni village (Densuş municipality), 60 years old, just sold his 200 sheep. He thinks he is too old and frail to keep up with the hard work, which is made even harder as forest and wolves are encroaching the farmers. He sees farming becoming obsolete, the pastoral landscape changing to his dislike, abandoned to weeds: "the area has become useless". Yet, he sees a hope in the bison project:

"It is good when people start to do something; it is like an impulse for things to happen. At least we will see some bison, if there are no more people to see [laughing]. May be a few tourists will come, well, it will not be much income, only for those directly involved, a few. Just you know... some excitement around here, more young people coming and going, like in the old days."

Eco-centric arguments are present in the narratives surrounding bison reintroduction to the same extent as utilitarian motivations. The vulnerability of nature has recently become a powerful narrative in Romania, focused on forest and biodiversity loss. Classical conservation, based on protected areas, and targeted policy towards maintaining species levels is understood and supported in the area<sup>18</sup>. Predicated countrywide on institutionalised ideas of law and science, conservation is perceived as a predictable practice, with measurable outcomes. These perceptions extend to rewilding. Understanding rewilding as just another type of conservation, locals fail to fully grasp the experimental, thus unforeseen, nature of it. In this context, they see a vulnerable nature, an 'abandoned' nature, which the bison can enhance aesthetically and ecologically: "Nature would be made more beautiful with bison roaming free" (Densuş, man, age 54); "The ecosystem will be more complete, nature more diverse" (Armeniş, man, age 65). A few imagine that the bison will restore lost qualities to a landscape facing abandonment: "These pastures were left prey to the forest. Forest and weeds are encroaching on us. Bison will at least eat some grass, prevent forest growth" (Densuş, woman, age 63). These

arguments align with the meanings of rewilding among conservationists, in terms of opening the landscape through grazing and restoring past ecological conditions. However, the temporal baseline is different; locals do not think about restoring pristine landscapes from before human intervention, as in the rewilding vision, but quite the contrary: they rather imagine maintaining a human-made, pastoral nature; a nature that has been rendered vulnerable by abandonment. Touched by the vulnerability of bison, a number of locals put forward the moral right of the bison to roam freely, as any living creature and speak about reintroduction in empathic and moral terms: "Just as other animals roam free, the bison has the right to as well" (Armeniş, woman, age 48).

Opposition to reintroduction is much less present among locals than support. About one fourth of the people I interviewed do not agree with the reintroduction. Most locals who oppose the project anticipate disturbance to farming practices, believing that the bison will attack cattle and sheep, produce damage to their farms, eat the hay, and tear down fences or drive herds away from pastures<sup>19</sup>.

An elder from Poieni bitterly complained about the idea of bison reintroduction. He used to be a forest worker in his early days, and as a young man he had an accident and injured his hips badly. Now he has a small pension and he keeps animals, two cows, one horse and five goats that he herds everyday. Feeling old, powerless and forsaken, he was very disturbed by the idea that bison will be brought close to his home:

"When there is no food in the forest, they will come down into my backyard (*ograda*) and eat my corn. I have land here; I have a house. I am half-invalid [hip problems] and my livelihood is the few goats and cows that I have. When I herd the animals, shall I always walk in fear?! [...] In winter bison don't hibernate, they eat, they come out looking for food all the time, I know it. A wild animal is never gentle, nor friendly, rather aggressive."

Bitter concerns around the bison reflect the farmers' own sense of precariousness. Stressing his own vulnerable material condition, the farmer also hints at the bison's vulnerability to food shortage. He gives a sense of shared and in the same time antagonistic condition of humans and animals.

Farmers are still numerous in both field sites, yet there is a shared understanding that pastoralist practices are declining, pastures and hayfields being largely underutilised. According to statistics, in the last 20 years the numbers of cattle and sheep have drastically reduced, by more than half.<sup>20</sup> EU subsidies brought about a slight increase in livestock; however, numbers are still low compared to 20 years ago<sup>21</sup>. But, most locals own agricultural land, which they cultivate with crops or use as gardens. However insignificant the pastoral or agricultural practices may be from an economic point of view, locals still invest financial and emotional value in owning and using the land.

Thus, restriction on land use is a powerful argument expressed by several locals against the project. Emphasising that land is 'private', 'our own', they understand the rewilding

project as an imposition from state-like officials and perceive it as an expropriation of recently regained property. The recent history of land ownership is different in Densuş and Armeniş. While Armeniş was not collectivised during socialism and people kept their land plots, in Densuş people had to hand their land over to collectives. In Armeniş the attachment to land is long standing, while in Densuş recent restitution triggered intense feelings of possessiveness. Thus, in both locations land issues generate strong emotions, which in turn lead to defensiveness and resentment towards new practices of rewilding. In Armeniş, the bison acclimatisation enclosure was placed on what used to be the communal pasture, owned by the municipality, where a few farmers claimed to have grazed animals. However, the former mayor claimed that locals did not use that land for more than two years. Thus, considering it 'useless' land and being far away from individual property, the mayor of the time together with the local council considered that it was suitable for rewilding and voted in favor of bringing the bison with only two dissenting votes (Guhr 2014). The presence of the bison is also perceived to limit the interests of the hunting associations, as the whole area will be under surveillance and protection. Hunting is practiced as a beloved sport by a number of locals, who voice concerns and generally do not agree with the reintroduction project.

Alongside the practical and symbolic logics of disturbing rural existence, a few locals also voice political concerns. They point at inequalities, interests of accumulation and power relations at the roots of the rewilding project, which they perceive to have unfair consequences upon marginalised local populations. Such political and material interests 'at the top' are seen to be the same ones that render rural residents vulnerable in the first place, rewilding being only one more piece in the puzzle of disenfranchising the rural marginals. A few locals voiced their resistance towards the project, believing that there are hidden agendas behind the project, either on the part of the NGO staff, or on the part of local supporters: "These NGOs are all part of a bigger scam. They do not have genuine interests. They handle a lot of money for doing dodgy, unprofessional, things that don't help people in the end" (*Armeniş, man, age 44*); "Other interests are at stake. Some local guys attracted these NGOs here to defend their interest and take revenge on their enemies... power struggles..." (*Densuş, man, age 57*). These concerns touch upon the economic and political vulnerability of the Romanian countryside. Against this background, rewilding is perceived as one more blow, struck by self-interested elites in power. It is to be noted here that the community of Armeniş appears to be politically divided into two major camps of political interest, and as one group (supporting the mayor at the time of fieldwork, 2016, which changed by the time of writing, 2017) became affiliated with the rewilding project in the process, the opposition group was thus prone to criticize the project as a result of local political struggles.

Adding to these instances of insecurity, there is one more reason for resistance: a fear of the wild and of the unknown. Many fear that the bison might be aggressive to other animals,

and to humans, and feel seriously worried about walking in the forest in the future. Thus, the event of bringing in bison triggers an affect of uncertainty and threat to local livelihoods, to local biosecurity (Buller 2008). In the Densuş area, where reintroduction has not yet begun and the general perception towards the rewilding project is more negative, people also tend to feel more afraid. Similarly, other studies from Europe have demonstrated how, before reintroduction, attitudes are more negative and people are more fearful (Decker et al. 2010) and how living in proximity to bison correlates with lower levels of fear<sup>22</sup> (Balčiauskas and Kazlauskas 2014; Balčiauskas, Kazlauskas, and Balčiauskienė 2017).

To wrap up, these various supporting or opposing arguments can be grouped into three major narratives. The narratives have in common an understanding of a shared vulnerability of rural communities and bison. This suggests that hopes and fears generated by rewilding in the Romanian countryside should be understood in close connection to how people relate to neoliberal market logics and state actors and policy, which are seen to be the driving forces (or culprits, depending on the perspective) behind both rewilding and local livelihoods.

The dominant local narrative about the bison project revolves around tourism and development. This is not surprising given that Rewilding Europe's framing of the project stresses on furthering the economic interests of the local community through nature-and-bison based tourism. Furthermore, tourism and development are keywords frequently brought to locals' minds and lips by omnipresent media discourses. Yet, beyond luring capitalist discourses, easy to absorb and reproduce by locals, at a closer look I found informants acknowledging that probably eco-tourism will not improve everybody's livelihoods and that only some people will have access to reap the economic benefits<sup>23</sup>. Yet, for locals this is not entirely disheartening. Their economic vocabulary of tourism and development implies local activity more broadly, and suggests a deeper wish, for villages to be enlivened, with more buoyancy in their daily lives, which will eventually keep the youth in place. It thus addresses economic vulnerability and demographic vulnerability, while casting the bison in a rather passive position of an animal out there, capable of no harm. The bison is thus to some extent objectified in this narrative; its agency consists in its exerted charisma. This narrative alignment is rather unidirectional in its anthropocentrism; it does not really problematise the new human-animal relation. Thus, on one side, the narrative bridges the views of the rewilding team with those of the locals in acknowledging the vulnerabilities of the local community. Yet, on the other side, despite helping the project with acceptance, it distances the values of locals from those of the rewilding team concerning the role of the bison and perceptions of nature, formatting locals' appreciation of nature and conservation practices around ideas of commoditisation.

Nevertheless, perceived vulnerability of human communities also elicits resentment towards the bison project, which is casted as a narrative of marginalising rural



inhabitants at the profit of ‘wild beasts’. Furthermore, behind the undesired wild beasts lie the interests of political actors, perceived as the ultimate beneficiaries of such initiatives. The narrative of opposition to reintroduction posits the bison as a biothreat, triggering traditional biosecurity concerns (Henry Buller 2008), which problematise socio-natural accommodations. The bison is vulnerable, hungry, fighting for its own survival, thus competing with rural residents. Fear and danger are elements that play an important role in people’s perceptions. The bison generates disquiet, stemming from uncertainty and its impressive size and looks. Research in other places in Europe has shown the same concerns, as reintroduced bison damaged crops and generated conflicts (Hofman-Kamińska and Kowalczyk 2012; Balčiauskas et al. 2017), showing a preference for roaming in inhabited areas, especially in winter (Kowalczyk et al. 2013; Ziółkowska et al. 2016). Nevertheless, the Romanian case is different in terms of biophysical characteristics of the landscape, attributes of bison groups, and rewilding management measures and therefore might not lead to the same pattern of bison movement<sup>24</sup>.

Justice is also an important element in this narrative. Equally vulnerable in subsistence, humans and bison are not equal in their entitlement to using the land. Locals perceive to have the right to the land, while wild animals are poachers on farms and human-made nature. Yet, the feelings of injustice are not directed towards bison or other wildlife, but towards state authorities (with private interests) in charge with various measures that control wildlife. Research in other parts of Romania has also shown that distrust in authorities and feelings of being treated unfairly potentially influences attitudes concerning human-wildlife coexistence (Dorresteijn et al. 2016). Thus, the narratives of anticipated damage and land restrictions are paired with anxious discourses of farmers’ precariousness and reflect a sense of neglect towards, and unfairness experienced by, rural residents.

The third narrative prioritises eco-centric views, focusing on the vulnerability of nature and the vulnerability of bison. In the area, people value ‘nature protection’ and appreciate the idea of wilderness. Local narratives of wilderness are reminiscent, to some degree, of the romantic sublime (Cronon 1996), as locals perceive the beauty of their surroundings, but in a more tamed way, as something lived in and intimately known. Quite differently to the Western ways of appreciating nature, it is not a recreational place or a spectacle to be looked at; it is not exterior to the social; nature in the Carpathians is part of daily life (see also Bauer et al. 2017). In this vein, the idea of nature encapsulates also the rural way of life, which is seen as more pure and wholesome than the urban. Thus, what I called the eco-centric narrative entails not only thinking about ecological justice, but also social justice. In this narrative, the bison is seen as a part of nature, and as wildlife; its return, a sign of nature revitalisation. Yet, the bison is perceived as not fully wild, and more vulnerable than other wildlife, in need of care and protection, as it will become more evident in the next sections.

## **POOP AND CARE: FINE LINES BETWEEN WILD AND DOMESTICATED**

Bison poop is important. It proves the presence of the animal in an area, in the absence of the shy bison itself. Finding dung while tracking into the woods is a large part of the ecotourism experience, keeping the tourists hopeful. A fresh poop is sometimes the most rewarding encounter a visitor will have with the species they are seeking. Conservationists emphasise that bison dung creates opportunities for other organisms to feed, contributing to the thriving of a ‘buzzing population of flies and bugs’ (Bison Hillock Blog 2016). It also enhances nitrogen turnover, which is a way to recycle plants and redistribute them through faeces and urine (Hobbs 1996, cited in Vlasakker 2014).

The man who met the first free-roaming bison close to his house, Mitru, also analysed its poop. For him, it was an indicator of the animal’s wildness, actually of its absence. Mitru observed that it is not firm like horse or deer poop but is that of an animal not used to running, rather just to walking, like cows. Mitru concluded that bison don’t run; they stay put; they are quite gentle. This puzzled and worried him: “How are they going to survive winter, then?!” Mitru perceives running as crucial for a wild animal that has to defend itself from predators and has to travel long distances to search for food especially in winter. Matei the ranger explained to Mitru that the bison is quite domestic in its current form, but that it will evolve and the next generations will be wilder. Mitru did not seem convinced by the idea of evolution, as to him the poop provided solid proof of a rather tamed character.

Caring for the bison means not letting them starve. But feeding them is at odds with letting them rewild and sharpen their survival skills. The rangers in charge of taking care of the bison are trapped in a dilemma: if they don’t feed the bison, the animals might not survive; if they do feed them, they will keep them dependent on human care. The two rangers are young local guys whose role in rewilding is crucial. They are at the interface between bison and humans, whether locals, researchers or tourists. Matei and Danu negotiate their behaviour towards the bison everyday between caring and letting them be. They are caught in the tension between care for the individual bison and care for the species. How to balance these two impulses? They try to stay as far from the bison as they can, but also come close enough to monitor their behaviour and health. They use various strategies to mitigate the rewilding in caring terms. For example, they don’t put hay in the feeders, but they spread the hay on the ground and gradually place it further away from the main areas, so that the bison have to make an effort to find it, learn vital skills, and eventually will become less and less accustomed to the main acclimatisation area.

Mitru, the farmer, is not challenged by dilemmas of rewilding. He is 69 years old and has two houses, one in the main village where he lives with his wife, and one closer to his hayfields, at ‘the hut’ (*sălaș*), where he stays here over the summer and tends to his animals and to the garden and mows

the fields. He owns a lot of land. He used to get seven tonnes of hay from his fields, but he does not need that much anymore. He keeps 12 sheep, two cows, five pigs and two horses. His encounter with the bison was friendly; the female bison spent almost all summer near his garden. Used to domestic animals, he is accustomed to caring for them and feeding them regularly. When he saw the bison, it seemed wretched and lonely to him; he felt pity and wanted her to stay near the house and to feed on his hay as his own cows do. The encounter with the bison melted his heart; and he has enough spare hay that would otherwise rot. Seeing it with the eyes of someone used to cows, Mitru found the bison 'beautifully made' and intelligent. He appreciated the curvature of their backbones; he could see the beauty of their bodily architecture, despite the skinniness of the one he saw.

### **NATURAL SELECTION, UNNATURAL PREDATORS, BISON, DOGS AND WILDNESS**

In January 2015, the rangers found several wolf tracks inside the fenced bison area. A question then arose: "If a wolf pack were to attack the bison, would we celebrate a rebalance in the food chain or would we mourn?" (Bison Hillock Blog 2015). To celebrate dynamic ecologies or mourn the individual bison, reintroduced with effort and care? This question would take a tangible turn in the course of the next year.

Two years after the first reintroduction, in January 2016, four of the 30 bison in Armeniş were found dead. The analysed data, the tracks around the bodies, as well as the videos from the camera traps mounted in the area demonstrated that the cause was a mixture of weakness, natural selection and predation by feral dogs. The explanation provided was that the herd naturally discarded some of the weakest bison, which thus became easier prey. According to the necropsy report, one bison was killed by another bison, interpreted by the report as competition for scarce food. At least two of them were chased by a pack of stray dogs until exhaustion (WWF Romania 2016). The project team appeared devastated by this loss, and questions arose about how 'natural' the event was.

Restoring trophic levels and ecological dynamic processes is an important part of the rewilding vision. In rewilding, the 'initial support' is followed by a hands-off, passive management, which aligns with allowing nature to take its own course. However, the rangers are confronted with a challenge: when does the initial support provided by humans for restoration end and when does the hands-off management begin? When does nature begin to take its own course? Were the deaths a part of natural selection or an undesired accident? To some extent, the project team regarded it as a 'natural loss', a sacrifice in the name of wilderness and of minimal intervention. They explicitly stated that winter tests the survival skills of the bison and natural selection is at play within the herd (WWF Romania 2016; Rewilding Europe 2016). To view the event as entirely 'normal' could turn into a public relations disaster, as animal welfare campaigners could have accused the project of starving the animals, as it happened

in other rewilding experiments (Lorimer and Driessen 2014; Lorimer 2015). On the other hand, to see it as an accident would mean partly denying natural selection. The project team found a middle ground and framed it as an accident caused, in fact, by humans: the predator stray dogs are a by-product of human intervention. They are the offspring of sheep dogs abandoned by shepherds, born in the wild. Conservationists see them as 'wilded' (WWF Romania 2016), not rewilded, and not as natural predators, but opportunistic predators, who prey on anything on offer. Feral dogs, the 'unnatural' predators created by careless humans, are seen as a danger not only to the vulnerable bison, but also to other wildlife, 'unfair competition to wolves'. In this sense, not all 'wild' is the same. For conservationists, wild species like the bison and the wolf are 'good wild'; feral dogs are 'bad wild', because they have too much human influence and are opportunistic predators. While conservationists think in terms of behaviour and genetics, local residents think in terms of threats to their security. For them, the bison is 'good wild', inspiring awe and not highly threatening; 'bad wild' is what threatens them, wolves and dogs. There is a distinction between these species as well: wolves are 'noble bad wild', dangerous, but respected; dogs are degenerates.

From the local perspective, the vulnerable bison is somewhere between domestic and wild, between cattle and wolves. The feral dogs are an interesting example of hybridity as well, but for different reasons than the bison. As predators, fit for survival, living in the forest, they are actually thought of as wilder than bison in some sense. They are not vulnerable: quite the contrary. Yet, they are perceived as incomplete, wild by accident. They were domestic pets two generations ago, and in this way, they are seen as more domestic than bison, despite the fact that the bison has been in captivity for far longer. Seemingly at stake here is the powerful cultural imaginary of species. Dogs are a domestic species, serving human needs of providing security against wildlife (shepherds' dogs) or warning householders against thieves, while bison are a wild species; their captivity is not figured in terms of usefulness and serving human needs, but in terms of curiosity and conservation. The word 'wild' suggests unpredictable, threatening behaviour.

Most locals deemed the accident regrettable. To Mitru, this event was yet another confirmation of his bison poop analysis; the bison can't run, so it cannot defend itself from predators; he felt sorry for them, but suggested that this is the fate of the hybrid creatures, not wild enough, yet not protected either. The local perception of the incident suggests that the locals incline towards a caring and involved attitude, similar to how they treat their own domestic animals. For them, rewilding means tending to the well-being of the vulnerable animal in a free environment.

### **UNCERTAINTY AND FOREST FUTURES**

The interaction between bison and the surrounding vegetation and the triggering of dynamic ecological processes are central

to rewilding. However, what exactly is expected from the dynamic is uncertain. Research concerning outcomes of rewilding remains thin. Unlike classical conservation, which is based on systematic and targeted policy, rewilding projects are less predictable, more experimental, and associated with uncertainty and ecological surprises, as it has been reported by several scholars (Lorimer and Driessen 2014; Lorimer et al. 2015; Seddon et al. 2011; Pellis and de Jong 2016), therefore considered more dynamic and future-oriented (Jepson 2016), albeit risky.

The conservationists posit the bison as a rewilding agent, a 'nature engineer' that will create glades in the forest, 'modelling the landscape into a mosaic' of grassland and forest, in which biodiversity is enhanced (Rewilding Europe 2016). But, 'environmental engineering' by large herbivores can mean economic loss for local land users. Forming mosaic landscapes in high-forest areas means preventing the regeneration of trees and undergrowth by bison feeding on bark and seedlings. Tree damage and debarking can also lead to the proliferation of the bark beetle that affects standing trees. These envisaged transformations pose a question: will the bison 'destroy' forests, as Romanian foresters have grown them to be?

Will the bison, and rewilding more broadly, render forests and forestry practice vulnerable? In other Carpathian areas, debarking of trees by bears is perceived as a major problem; also, in protected areas with zones of non-intervention, the damage caused by the bark beetle is a central concern to foresters. Generations of foresters managed the Carpathian forests for re-growth and maintained density for sustained yield. As I have found during previous research in the South Western Carpathians, foresters do not seem to come to terms with the idea that natural processes involve the death of standing trees; neither do professional foresters hold clear technical norms on how to proceed with dead wood in forest stands (Drăgoi 2018).<sup>25</sup> The role of foresters, as it is currently conceived, is to prevent waste and to promote a clean, productive, growing stand. Similarly, other studies from Eastern Europe show that 'natural' processes have divergent meanings. In a study of Czech protected areas Petrova (Petrova 2016) recounted how conservationists see the bark beetle as an agent for creating resilient forests in complex socio-ecological dynamics. In contrast, for foresters, the little *Ips typographus* is an evil parasite, the destroyer of historically and culturally valuable forests (2016: 147). In the South Western Carpathian rewilding zone (Țarcu Mountains) there are several spruce patches, the forest being mostly deciduous; thus, the areas susceptible to be 'attacked' by the *Ips* are small but exist nevertheless. Ready to embrace changes towards more ecological conceptions of forest management, the state forestry district has donated land for the bison acclimatisation area. However, rewilding is still at its very beginning; it remains an open question, once confronted with damages, how the 'damage' will be conceptualized, and whether the foresters would fully embrace ecological restoration.

For the moment, foresters, administrators and farmers do not fully envisage the transformative effect of rewilding on

the forest landscape. Nor do they seem to uphold consistent narratives about what nature was in the past or what it can/should be in the future. However, a strong narrative of sustained yield forestry and dense, regulated and 'clean' forests dominates among both foresters and local dwellers. In this context, can uncontrolled ecological processes be regarded as legitimate in forests that were, and still are, tended for productive purposes? Or would they be understood as yet another disturbance of vulnerable local economies?

## CONCLUSION

From the outset, rewilding engenders a conceptual tension, as it locates itself within an ontological confidence in the autonomy of nature, while its very practice implies human intentionality, enculturating nature at every turn (Buller 2013). Beyond the philosophical issue, the study of local understandings of rewilding practices opened up a myriad of other unresolved tensions on the ground, between wild and domestic, between natural selection and care, between uncertainty and security.

In the Carpathian Mountains of Eastern Europe, the bison is well known among locals and its charisma works wonders for the rewilding project. Locals perceive the bison as a big and furry 'wild cow'. They perceive it as wild in the sense that it is not fully domestic: it is not husbanded by farmers or cared for in human households. However, as in the doubts Mitru expressed, the bison in its current form, does not seem to be wild, i.e. strong and agile enough to survive a heavy winter alone. Locals are mostly attracted to their gentle, domestic appearance, the resemblance to cattle. Bison are less feared as wildlife and thus considered less wild than wolves, but wilder than the degenerated feral dogs. It is a huge, beautiful mammal, with a strong presence. Moreover, the bison's status as an endangered species and its previous captivity and wretched condition invited compassion. This revealed that the imperative to conserve is predicated (locally) not upon science or a moral primacy of the natural and the wild, but upon a human commitment to valuing shared vulnerability to contingency (Heise 2016).

The tension between uncertainty and security is also salient in how the future of the rewilding project is envisioned. The rewilding vision celebrates uncertainty, suggesting a new ecological paradigm of non-equilibrium. However, this vision is not necessarily shared locally in terms of experimentation and uncertainty, but in vague terms of the 'dynamic development of new nature'. In the absence of further information, locals' imagination of rewilding draws on known traditional models of conservation. The rhetoric of traditional conservation is quite reassuring, putting forward the certainty of law, science, measurement, and planning. It is understood that the bison is vulnerable, threatened with extinction, and was brought in to maintain a certain species pattern in a suitable free environment. Such conservation is seen statically, rather than in terms of restoring wider ecosystem processes. Thus, the conflation of various conservation visions in people's perception leads to the reduction of uncertainty and ultimately to acceptance.



However, the rewilding model remains poorly understood locally, almost concealed. The envisaged transformations that lie beneath quick formulas like ‘letting nature take its own course’, such as creating no-hunting areas where wildlife can develop freely, naturalistic grazing, hands-off management and enabling dynamic ecological processes, are not fully grasped locally, an issue that was also reported in the Western Iberia rewilding case (Walet 2014). Nor are locals aware of the potential consequences of changing the composition of forest canopy, such as the proliferation of insects commonly perceived as destructive. Allowing for constant negotiation, the terms and actions of rewilding are open to situational interpretation. However, this study captures the state of the art at the beginning of the reintroduction process, it remains to be seen how the socio-ecological relations will unfold.

I suggest that three major ways of thinking about bison reintroduction and rewilding in the South Western Carpathians can be distinguished: 1) the wildlife tourism narrative; 2) the intrinsic value of nature narrative and 3) the biothreat narrative.

In the first narrative, bison reintroduction fuels hope for tourism based on wildlife marketing, addressing local economic and demographic vulnerabilities. It reflects trust in what was communicated by the project team and in the local actors involved, aligning with new conservation discourses. Embedded in long-preached national discourses of tourism as a universal remedy for the depressed Romanian countryside, locals’ imaginations were sparked by the uniqueness of bison-safaris, the special attraction-commodity that will make their community known all around the world. I found that to some extent locals seize the vocabulary of tourism and development from popular narratives and reproduce it casually in their own narratives, and while such terms are used for their economic meaning, the deeper promise that they carry is that of community revival in a broad sense. Yet, these accounts are not without problems. The focus on the possibility of capitalising on wildlife, coupled with the focus on the bison, obscures the larger practice of rewilding and its envisaged ecological transformations. In addition, as a local embodiment of the new conservation narrative, it encapsulates the critiques of shadowing the intrinsic value of nature in favour of its market value and it casts a doubt on whether capitalist market mechanisms can resolve the environmental problems they have helped create (Büscher 2014).

The second narrative focuses on eco-centric elements, on the beauty and value of natural landscapes and wildlife, and also on the moral value of conservation as caring for other living beings. The bison is imagined as a grazer similar to domestic herds, and thus as a way of maintaining a declining pastoral-like ethno-scape. However, the bison is imagined less as an active part of the ecosystem and more as an endangered species, a vulnerable treasure that deserves a chance in a free environment, seen as more nurturing than the confined spaces of reserves. As with other reintroduced species, the bison is an emblematic herald of a newly revitalized naturalness (Buller 2008). There is a certain romantic-nostalgic reference at play, centred on the ‘pure’, and also on the ‘authentic’, as opposed to polluted, artificial, urban natures. The concern is however with

the present and not with a past lost paradise. At its core, this narrative it is as much about nature as it is about an imagined countryside, the rural landscape and lifestyle.

The third narrative of bison as biothreat centres rewilding and bison reintroduction around their negative impact on social and economic practices. It raises issues of safety and human well-being more generally, and questions of boundaries between human and non-human species and their transgression. This narrative communicates a resistance on the part of traditional mechanisms of spatial distancing to new, troubling rhetoric and practices of integration between humans and wildlife. In this understanding, rewilding brings new ‘monsters at the door’ (Davis 2005), in addition to boar, wolves and bears, which are more common to Carpathian residents. The bison is perceived as a vulnerable, hungry animal, seeking to survive. Thus, it is to some extent seen as similar, and thus as competition, to humans. Farmers also perceive themselves as vulnerable; residents of the backcountry, living precarious lives, neglected by the authorities, they see the bison as an affront to forsaken citizens. This narrative entails a paradox: humans are ethically superior to bison, having the moral right over the lands they work; but to some extent they are ontologically equal - equally vulnerable, equally fighting for survival.

To some extent, all of these narratives are as much about rewilding and the bison, as they are about the humans themselves. The hopes and fears reflect their concerns with a vulnerable rural world, seen either through the anthropic lens - as characterised by economic depression and precariousness, depopulation, aging and backcountry boredom - or as a loss of the natural world.

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## NOTES

1. The reintroduction targets the Bison *Bonanus* Lowland-Caucasian line, one of the two genetic lines of Bison *Bonanus*.

2. 87 Garrano horses, 35 Sayaguesa cows and 27 Maronesa cows.
3. The Tauros foundation is back-breeding certain breeds of European domestic cattle, and hopes through genetic manipulation to recreate the aurochs, which have been extinct in the wild since 1627. A complicated issue is how to understand what the auroch is - that is, what are they trying to achieve - or how to establish 'what resembles an auroch'. So far, the programme is trying to get the genome right. For more information, see the website <http://taurosprogramme.com>
4. While there are some differences between the two sites, the main narratives do not differ significantly and thus the two cases can be coherently treated together.
5. Most surveys assessing local attitudes draw on postal questionnaires distributed to large samples (Balčiauskas et al. 2017; Balčiauskas and Kazlauskas 2014; Decker et al. 2010). However, in rural areas of Romania posting the questionnaire would yield a very low rate of responses (estimated below 3%), thus conveying a bias towards more educated people with liberal professions.
6. The proportions of individuals from different age-groups, as well as the gender distribution within each age-group, in our sample match their respective distribution in the actual population, as given in the dataset from the National Institute of Statistics.
7. To maintain a balance, I included images of the bison from closer up and also from further away, showing groups and individuals, males and females, etc.
8. The studies involved a qualitative pretest and surveys of 300 random persons and 80 local officials, foresters and administrative elites. Part of the findings are presented in (Bauer et al. 2017; Bauer and Mondini 2014).
9. For more details and map, see Rewilding Europe's website <https://www.rewildingeurope.com/areas/southern-carpathians/conservation-setting/>. Accessed on May 14, 2017. Also, the Rewilding Europe vision is laid out in (Helmer et al. 2015).
10. Six neighbouring settlements have part of their territory in the Țarcu Mountains protected area; one of those is Armeniș, the first reintroduction site. The second reintroduction site is Densuș, and there are three localities surrounding it. In total I counted nine settlements, Armeniș, Densuș, Teregova, Slatina-Timiș, Zăvoi, Bolvașnița, Turnu Ruieni, Râu de Mori and Băuțar. If we include the settlements surrounding the larger proposed rewilding area, we can count at least 37,000 people (13,000 households).
11. Bison safaris are not necessarily aimed at a rich elite, as the facilities offered are not high-end, and the prices are comparable with, say, basic mountain tourism in the Swiss Alps. The prices would be approximately 100 euros per person per day, including lodging, meals and the tour guide.
12. The research and visiting centers feature a holodeck, a holographic projection installation, and an interactive game based on dynamic ecosystem approach to food chains. The information collected in the field by researchers in residence is fed directly into the applications at the centers.
13. According to the media, the Hunting Association has had major management and financial problems, as well as poaching issues in the past. They have an active lawsuit against the Landowners Association, which took on the bison initiative.
14. I gave a test during the survey with eight questions ranging from very easy (e.g. the colour of the bison) to more difficult (e.g. "Does the bison female usually give birth to three or more calves at a time?"). On a scale from 1 to 5 (1 represents "very poor knowledge" and 5 "very good knowledge"), the respondents scored an average of 3.7, with 69% percent scoring above the average and 29% providing correct answers to all questions.
15. For survey results on perceptions of the bison please see table 1.
16. The distribution of arguments based on survey results given in table 1. Arguments provided as answers to open question "Why do you support/oppose the reintroduction? Please provide your main reasons."; answers were subsequently grouped in categories and coded.
17. Thus, the hopes of locals and the discourses of Rewilding Europe regarding reversing the process of land abandonment and rural exodus are to be treated with caution, as recognised also by local members of the rewilding team (Guhr 2014).
18. According to my survey, 85.5% agree with the hypothetical idea of forming a protected area in the immediate vicinity of their inhabited space. In Armeniș they agree more strongly. However, previous studies in the broader region show that where such protected areas are in place, the level of acceptance drops, as local communities perceive restrictions on their land use (Bauer et al. 2017).
19. At the time of fieldwork, the project was just starting and damage was just a matter of expectation. Later on, at the time of advanced writing, nearly two years after the bison have been released from the fenced area in Armeniș, the level of damage remains low, with three bison showing a preference for braking households' garden fences and two reported crop damage cases.
20. I analysed animal husbandry numbers from 1997 to 2016. I compiled a few data sources: data from National Statistics Institute, which stops in 2003; for 2010 I rely on data from the General Agricultural Census and for 2016 on information from local municipalities.
21. My survey indicated that 40% of the households do not keep animals, a fairly high percentage for rural areas in Romania.
22. The studies from Lithuania (Balčiauskas, Kazlauskas, and Balčiauskienė 2017), where bison was reintroduced forty years ago, mention higher levels of fear than we found in Armeniș. The Lithuanian study measured fear of the European bison, characterised as 'worried about family safety if animals are present in the forest' and found that 6.6% of respondents were 'seriously worried' in 2008–2009, and 3.6% in 2014; 29.6% of respondents were 'slightly worried' in 2008–2009, and 25.2% in 2014.
23. There are numerous skeptical political ecologists showing critically that the emergence of eco-tourism as a capitalist fix does not necessarily equitably improve conditions for all residents, but reinforces inequalities enabling elites to access financial means (Brockington, Duffy, and Igoe 2008; Brockington and Duffy 2011; Büscher 2014; Büscher et al. 2014).
24. According to the Romanian rewilding team members, the Polish case was not ideal for reintroducing megafauna, as the landscape is fragmented, housing sites and agricultural plots being spread out across the land, which favors human-bison interactions; also, the various groups of reintroduced bison are separated from each other, which prevents migration away from initial acclimatisation areas; in addition, the rewilding management

avored artificial feeding, which kept bison used to humans. In all of these aspects, the Romanian reintroduction was different.

25. According to Romanian forestry technical standards all dead trees should be harvested as soon as possible in order to prevent pests from propagating (Drăgoi 2018).

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