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(Re)defining Farmed Animals in Outdoor Education: An Analysis of the Pedagogical Potential of Educational Farms in Greater Poland

(Re)definicja zwierząt hodowlanych w edukacji outdoorowej. Analiza potencjału pedagogicznego zagród edukacyjnych w Wielkopolsce

KEYWORDS

outdoor education,
educational farms,
non-anthropocentric
pedagogy,
animal studies,
farmed animals,
symbiocentrism

ABSTRACT

This article examines the pedagogical potential of educational farms from the perspectives of animal studies and outdoor education. The study examined how farmed animals and human–animal relationships are represented in materials of educational farms. The analysis covered 18 educational farms in Greater Poland belonging to the National Network of Educational Farms. Farm descriptions, programmes, lesson plans, and scenarios were examined using qualitative and quantitative content analysis. The categorization framework included animal functions, language, species, references to animal products and production, human–animal relationships, and forms of interaction. The results indicate that animals were represented primarily in educational and utilitarian contexts, while care-oriented and partnership-based representations were less frequent. Objectifying language was more common than anthropomorphizing and emotional language. Alongside conventionally farmed species, alpacas and miniature goats were also represented. Interactions with animals and references to animal products and production were frequent, whereas references to slaughter or animal death appeared once. From the perspectives of animal studies, the findings indicate potential for developing outdoor education through greater attention to the ethical dimension of human–animal encounters, inspired by a sybiocentric perspective. Farmed animal sanctuaries may offer complementary educational contexts for encounters with animals outside production settings.

SŁOWA KLUCZE ABSTRAKT

edukacja
outdoorowa,
zagrody eduka-
cyjne, pedagogika
nieantropocen-
tryczna, *animal
studies*, zwierzęta
hodowlane,
symbiocentryzm

W artykule analizowany jest potencjał pedagogiczny zagród edukacyjnych z perspektywy studiów nad zwierzętami (*animal studies*) oraz edukacji outdoorowej. Celem badań było określenie sposobu przedstawiania zwierząt hodowlanych oraz relacji człowiek–zwierzę w publicznie prezentowanych materiałach zagród edukacyjnych. Analizie poddano materiały dotyczące 18 zagród edukacyjnych w województwie wielkopolskim, należących do Ogólnopolskiej Sieci Zagród Edukacyjnych. Przeanalizowano opisy zagród, programy edukacyjne oraz scenariusze i plany zajęć, stosując jakościową i ilościową analizę treści. Opracowany schemat kategoryzacyjny obejmował funkcje zwierząt, język, reprezentowane gatunki, odniesienia do produktów pochodzenia zwierzęcego i produkcji, relacje człowiek–zwierzę oraz formy interakcji. Wyniki wskazują, że zwierzęta przedstawiano przede wszystkim w kontekstach edukacyjnych i użytkowych, natomiast reprezentacje oparte na trosce i partnerstwie identyfikowano rzadziej. Częściej występował język uprzedmiotawiający niż antropomorfizujący i emocjonalny. Obok konwencjonalnych gatunków hodowlanych przedstawiano także alpaki i kozy miniaturowe. Częste były bezpośrednie interakcje ze zwierzętami oraz odniesienia do produktów pochodzenia zwierzęcego i produkcji, podczas gdy odniesienia do uboju lub śmierci zwierząt pojawiły się w jednym przypadku. Z perspektywy *animal studies* wyniki wskazują na możliwość rozwijania edukacji outdoorowej poprzez większe uwzględnianie etycznego wymiaru kontaktów między ludźmi a zwierzętami, inspirowane perspektywą symbiocentryczną. Azyle dla zwierząt hodowlanych mogą stanowić uzupełniające środowisko edukacyjne, umożliwiające kontakt ze zwierzętami poza warunkami hodowli.

Introduction

Education is recognized as important for sustainable participation in society (Holfelder, 2019; Piao & Managi, 2023; Uralovich et al., 2023; Žalėnienė & Pereira, 2021). In the context of climate change, global conflicts, and technological change, its role in addressing socio-environmental challenges of the Anthropocene is increasingly emphasized (Chutoriański, 2020). Environmental education aims to support a sustainable future (Akinsemolu & Onyeaka, 2025), while in Poland its development is shaped by institutional and pedagogical conditions, educational paradigms, and learning theories (Michalak & Parczewska, 2019; Rubacha, 2006).

This study adopts a constructivist perspective, viewing learning as active meaning-making (Bruner, 1997; Vygotsky, 1978). This aligns with outdoor education, where learning emerges through interaction with the environment, including nature (Michalak, 2020).

Contact with natural environments supports wellbeing (Martin et al., 2020; Stangierska et al., 2023; White et al., 2019), pro-environmental attitudes and behaviours (Bratman et al., 2019; Chawla, 2015; Otto & Pensini, 2017), and children's engagement, social skills and learning outcomes (Mann et al., 2022).

Nonetheless, children in urbanized societies increasingly spend less time outdoors, a phenomenon described as the *extinction of experience* or *nature-deficit disorder* (Louv, 2008; Soga & Gaston, 2016), associated with socio-cultural and technological changes, including screen time and urban lifestyles (Larson et al., 2019). Polish outdoor education remains unevenly implemented, facing institutional and practical barriers (Parczewska, 2019). Recent developments, including forest education and forest kindergartens (Łoboda, 2023; Szlauzys, 2019), increasingly draw on non-anthropocentric pedagogy, questioning conventional human–non-human relationships in education (Chutorański, 2020, 2022).

Outdoor education can be examined through animal studies, particularly in relation to farmed animals. Although non-anthropocentric and more-than-human perspectives are increasingly discussed, their application to farmed animals remains limited (Lloro-Bidart & Banschbach, 2019; Pedersen, 2010). This study draws on Albrecht's concept of the *Symbiocene*, emphasizing interdependence, mutuality, and the flourishing of diverse forms of life (Albrecht, 2016, 2019). Symbiocentrism shifts attention from human interests towards mutually sustaining relationships among humans, other animals, and ecological systems, complementing biocentric, ecocentric, posthumanist, and non-anthropocentric perspectives and providing an interpretive framework for examining representations of farmed animals.

This article examines how farmed animals and human–farmed animal relationships are represented in online materials of educational farms in Greater Poland affiliated with the National Network of Educational Farms (Ogólnopolska Sieć Zagród Edukacyjnych, OSZE). In Poland, these farms offer educational programmes involving agricultural practices and farmed animals providing an important context for such experiences (Marcysiak et al., 2023; Marcysiak, 2024). The study addresses two research questions: (1) how farmed animals are represented and (2) what types of human–animal relationships are represented in these materials. The constructivist perspective informs understanding of learning and meaning-making, while animal studies and symbiocentrism provide the basis for interpreting findings and their pedagogical implications. The study combines outdoor education and animal studies to examine farmed animals and educational farms as spaces where pedagogical, relational, and production-oriented logics intersect.

Methodology

Methods and materials

A qualitative and quantitative content analysis was conducted on publicly available materials concerning 18 educational farms in Greater Poland belonging to the OSZE. One initially identified farm was excluded because no farmed animals were represented in the available materials. The corpus comprised farm descriptions, educational programme descriptions, and lesson plans or scenarios available on the OSZE website <https://www.zagrodyedukacyjne.pl>. The materials were collected in February 2026. The unit of analysis was the complete set of materials concerning each farm, while individual statements, activity descriptions, and other meaningful content segments constituted the coding units. The analysis combined qualitative interpretation with quantitative assessment of category frequencies.

The categorization framework was developed iteratively, combining deductive and inductive approaches. It was initially informed by relevant subject literature and refined through an initial examination of the empirical material. The framework was subsequently adapted to the specific characteristics of educational farm materials.

The analysis comprised two dimensions: (1) representations of farmed animals and (2) human–farmed animal relationships.

The first included animal functions, language, species representation, and references to animal products and production. Animal functions were coded as *educational*, *productive*, *therapeutic*, or *recreational*. Species representation distinguished conventional livestock species in the Polish agricultural context from less conventionally represented species in contemporary educational-farm settings. References to production included explicit or implicit descriptions of obtaining animal-derived products and references to animal use, production, and slaughter. Language was categorized as *objectifying*, *anthropomorphizing*, *emotional*, or *neutral*. Objectifying language framed animals as resources, products, instruments, attractions, or means of achieving human goals; anthropomorphizing language attributed specifically human characteristics, intentions, emotions, or roles; emotional language expressed affection, attachment, sympathy, or tenderness; and neutral language remained descriptive or informational.

The second dimension concerned human–farmed animal relationships, categorized as *educational* (animals as elements of learning), *care-oriented* (emphasis on animals' care and wellbeing), *partnership-based* (mutual engagement and recognition of animals as active participants), or *utilitarian* (animals presented in terms of human use or benefit). Human positioning was categorized as *dominant* (control), *paternalistic* (protection combined with human authority), or *egalitarian* (greater mutuality and recognition of animal agency). Interactions included observing, feeding, petting,

care, walking, playing, riding, production, purchasing or consuming animal products, and animal-assisted activities.

Categories were not necessarily mutually exclusive; multiple codes were assigned where segments contained more than one feature. The framework was operationalized before coding and applied to all materials from the 18 farms by one researcher.

Limitations

The study has three main limitations. First, publicly available OSZE materials capture representations rather than actual practices or experiences. Second, the 18-farm sample was not statistically representative; frequencies should therefore be interpreted descriptively. Finally, single-researcher coding precluded assessment of inter-rater reliability and may involve interpretive bias.

Results

The analysis of 18 educational farms' online communication in Greater Poland reveals recurring patterns in representations of farmed animals and human–farmed animal relationships. Most farms are rural ($n = 17$), targeting primarily preschool and early school-aged children ($n = 18$), with substantial inclusion of adolescents ($n = 14$), adults ($n = 14$), and groups with special needs ($n = 9$). Animals fall into two main groups: traditionally farmed species (cows, pigs, chickens, ducks, geese, horses, etc.) and less conventionally represented in contemporary farm settings (e.g., alpacas and miniature goats; $n = 3$). All analyzed farms had farmed animals, though some species were unspecified or inconsistent across program descriptions.

Functionally, animals serve educational roles universally ($n = 18$), alongside production-related ($n = 14$) and recreational functions ($n = 14$). Therapeutic roles are present in the majority of farms ($n = 10$). Correspondingly, human–farmed animal relationships are mainly educational ($n = 18$) and utilitarian ($n = 16$), with care-oriented ($n = 8$) and partnership-based ($n = 2$) relations being less frequent. Humans are consistently positioned as dominant actors ($n = 18$), while some farms ($n = 10$) incorporate elements of paternalistic care, egalitarian positioning was not identified.

Linguistic analysis shows neutral language is used across all farms, but objectifying ($n = 13$), emotional ($n = 10$), and anthropomorphizing expressions ($n = 6$) also appear. In six cases ($n = 6$), animals are explicitly described as *teaching aids*, underscoring their instrumental role within learning. Human–farm animal interactions identified in the analyzed materials are summarized in Table 1.

Table 1. *Types of Activities Regarding Farmed Animals in Educational Farms in Greater Poland*

Type of activity	n
Observing	16
Feeding	9
Petting/hugging	7
Horse/pony-riding	6
Animal-assisted therapy	6
Participation in production of animal products	5
Possibility to purchase animal products produced on the farm	4
Cleaning and basic animal care	3
Walk with animals	3
Tasting animal products	2
Milking	2
Egg collection	1

Source: *Own materials.*

Regarding engagement with production, explicit references to slaughter appeared in only one case (n = 1), while indirect production-related activities and references to animal-derived products were more common.

Educational, emotional, and utilitarian framings frequently coexisted within the analyzed materials.

Discussion

Outdoor Education Through the Lens of Animal Studies as an Answer to Contemporary Challenges

The findings from the analysis of educational farms can be considered in the broader context of contemporary human–nature and human–animal relations. Around 83 billion land animals were slaughtered for meat worldwide in 2022 (Food and Agriculture Organization of the United Nations, 2024). Humans together with farmed animals now constitute 95% of mammalian biomass (Ritchie & Spooner, 2025). Despite their environmental impacts, animal products provide only 18% of global

calories (Poore & Nemecek, 2018), while contributing substantially to greenhouse gas emissions and environmental degradation (Benton & Bailey, 2019; O'Mara, 2011). These trends highlight tensions between current food systems and sustainability goals (UNESCO, 2020).

The present findings indicate that educational, affective, care-oriented, and utilitarian representations coexist in educational farm materials, consistent with research highlighting human-centred perspectives in different educational contexts (Chutorański, 2020; Michalak & Parczewska, 2019). The coexistence of care-oriented and instrumental representations also reflects the *entangled* nature of human–animal relations described by Haraway (2003) and Braidotti (2013). The limited visibility of slaughter and animal death, alongside more frequent references to production-related activities, is noteworthy. While this absence does not demonstrate that death is deliberately concealed, it indicates that the life cycle of farmed animals is referred to selectively, with production and animal-derived products more visible than slaughter or death.

At the same time, frequent direct interactions with animals indicate the educational potential of these settings (Mann et al., 2022). Research suggests that children's developing understanding of farmed animals may provide opportunities for educational engagement with questions of animal use and moral consideration (McGuire et al., 2023), while direct contact with farm animals may support empathy and concern for their welfare (Burich & Williams, 2020). The limited emphasis on animal individuality identified in the present materials may indicate an area for further pedagogical development (Rabinovitch et al., 2024). From an animal-studies perspective, these findings raise the question of whether outdoor education can extend beyond contact with animals towards reflection on the different roles and meanings assigned to them within human societies.

The distinction between conventional and less conventional species, such as alpacas and miniature goats, warrants attention. Their presence may reflect recreational, therapeutic, and commercial uses rather than a shift away from utilitarian relations. Thus, species novelty does not necessarily imply less instrumental representation.

Educational Values and Risks of Contact With Farmed Animals in Outdoor Learning

Direct contact with farmed animals can support hands-on learning, practical knowledge, and engagement with animals and agricultural processes, particularly for children with limited previous experience of farmed animals (Marcysiak, 2024; Veen et al., 2023). Educational farms may also provide alternative learning environments for neurodivergent children, school dropouts, and children experiencing difficulties in conventional educational settings (Hassink et al., 2020; Rich et al., 2023;

Veen et al., 2023), while outdoor activities can support collaborative learning and peer relationships (Andrzejewska, 2020).

At the same time, contact with animals requires careful pedagogical and organisational planning, including consideration of safety, logistics, seasonal and behavioural variability, and access to structured materials (Michalak & Parczewska, 2022). The educational value of contact depends not only on the presence of animals, but also on how encounters are structured and interpreted. Anthropomorphizing may have both potentially beneficial and problematic consequences: while some forms may influence attitudes towards animal consumption (Mishra & Mehta, 2023), they may also obscure animals' specificity, agency, and intrinsic value (Kozłowska & Czapla, 2023). A reflexive approach should therefore combine direct engagement with attention to animals' needs, agency, and the diverse meanings of human–animal relationships.

Recommendations

The following recommendations are theoretically informed propositions rather than direct empirical conclusions from the content analysis, intended as directions for pedagogical reflection and future research. One possible direction is the inclusion of farmed animal sanctuaries, which provide care for animals outside productive systems, potentially creating opportunities to engage with farmed animals as individuals whose agency and relational value can be recognised (Donaldson & Kymlicka, 2015; Blattner et al., 2020), as complementary educational spaces. From a symbiocentric perspective, such spaces may offer opportunities to foreground interdependence and relationality beyond animals' productive functions (Albrecht, 2016; Bała et al., 2024). Although empirical research on sanctuary-based education remains limited, studies in primate sanctuaries suggest potential educational value (Feliu et al., 2023). Further research could compare educational farms and farmed animal sanctuaries in terms of their educational practices, representations of animals, and participants' learning and attitudes.

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