Media portrayal of urban gulls

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# Abstract

# Introduction

* What’s known

Urban nesting gulls represent a perennial instance of human-wildlife conflict in a range of coastal cities and towns, notably, but not limited to, the UK and Ireland. Some of the chief concerns of people centre around, noise pollution, food theft, physical attacks, fouling and the potential spread of disease. Herring (*Larus argentatus*) and Lesser black-backed gulls (*Larus fuscus*) appear to be the source of this conflict and get grouped together as ‘seagulls’, in the public’s eye. This grouping also incorporates any other gull species found in and around urban environments, which has the unfortunate effect of including species not known to cause any of the above-mentioned issues. Gulls are opportunistic, intelligent, philopatric, and long lived, traits which have allowed them to flourish in urban settings, often bucking the trend at their natural, coastal colonies. Indeed, seabird surveys highlight how gulls have suffered severe population declines over the past half century, a phenomenon that can cause disbelief in an affected public given their ubiquity.

The urban ecology of gulls is a relatively nascent field. We know rooftops provide secure nesting areas which can result in dense concentrations of the birds. When this occurs on residential rooftops conflict spikes. Further, recent high-resolution tracking studies on urban gulls have revealed their movement ecology and show how adept they have become at making urban areas their home. Gulls readily forage on food derived from activities in the city and time their foraging runs to coincide with higher availability of food (e.g. when school children are on break time). Their tendency to focus on terrestrial foraging sites emphasises how out of date the term ‘seagull’ has become.

The nuisance posed by the birds has direct consequences for their conservation. In some cases residents have vociferously and successfully campaigned to have the birds removed from their rooftops effecting political derogations to international conservation commitments (e.g. the EU Birds Directive). Wildlife management of gulls remains a challenge, with non-lethal and lethal control measures all facing difficulties of resourcing as well as the behavioural plasticity of the birds. This situation also encompasses a human-human conflict, where conservation charities question and challenge the need to cull species of conservation concern and point to our lack of knowledge around gull ecology.

A knock-on effect of this issue has been a surge in media coverage of the conflict which, anecdotally, seems to spike during the summer months when gulls breed and political activity is in recess (“silly season”). Perhaps this is unsurprising given how many news values it meets. One consequence of concerted media coverage of human-wildlife conflict is a reputation for the species that can be long-lasting and hard to shake which has its own consequences for conservation. Members of the public who have never had an interaction, positive, negative or otherwise with a species can have their perspective shifted by an agenda-setting media. Consider how inflammatory discussions around pigeons (‘rats with wings’), sharks, and wolves have become. The perception of risk can be exacerbated by such coverage, often totally out of proportion with actual risk. On the other hand, mass media can play a hugely positive role in portraying a species, to its benefit. Previous investigations have underscored just how beneficial coverage can be for conservation actions like reintroductions, even for predators. And there are many calls to shift our perspective from one of conflict to coexistence.

* What’s unknown

Despite this ongoing coverage few academic studies have investigated just how the mass media cover urban-nesting gulls with some notable exceptions. It’s worth highlighting the previous literature is often outside of scientific fields which underscores how interdisciplinary the study of human-wildlife conflict has become. This scarcity of literature is a critical omission because human-wildlife conflict, and avenues for its resolution, are crucial to understand, as we stand in the midst of a biodiversity crisis. This is especially true for urban species like gulls, who attempt to adapt as humans continue to urbanise the world.

Carr and Reyes Galindo (2017) identified 2015 as a turning point in media coverage of gulls in the British press coincident with then Prime Minster David Cameron’s call for a “big conversation” about the conflict.

* Your burning question

What is the trend in coverage and does this change with country? GAMs

How is the conflict reported? Sentiment analysis, imagery.

Who is the voice of the conflict on both sides of the equation. Stakeholders

* Your approach
* Why your approach is different

# Methods

# Results

# Discussion

# References

# Notes

Smith, T. J., & Saunders, M. E. (2016). Honey bees: the queens of mass media, despite minority rule among insect pollinators. *Insect Conservation and Diversity*, *9*(5), 384–390. https://doi.org/10.1111/icad.12178

“We identified 188 stories published during the 9 year period that discussed the ecological role of insects as pollinators (mean: 21 articles per year).”

Carr, L., & Reyes-Galindo, L. (2017). ‘The Year of the Gull’: Demonisation of Wildlife, Pestilence and Science in the British Press. Intercultural communication and science and technology studies, 147-174.

we ponder on the role and aims of journalism in which scientific expertise is relevant, but remains largely ignored. As copious literature on wildlife representations in the media presented along the chapter shows, media representations of animals have played a definitive role in shaping not only public attitudes towards species seen as ‘problematic’, but also on directing public policies relating to animal ‘pest’ control.

Rather than follow more rigid and orthodox methodologies in content analysis that focus on extracting ‘hard’ quantitative data from coding (Elo et al 2008), we focused on carrying out a dialogue between sociological perspectives on wildlife representation and the empirical material.

Individual human attitudes towards animals are dependent on personal and contextual idiosyncrasies, but are also importantly shaped by cultural attitudes towards animal visual and behavioural characteristics, such as perceived attractiveness, intelligence, size, predatory nature, skin or fur texture, morphological structure, locomotion features, phylogenetic proximity to human beings, likelihood of inflicting property damage and cultural importance and these are often synergised by the media and popular culture

Actual physical distance from human to animal is an important parameter in the process of classifying animals as pests, as evidenced by a ‘grey area’ of pestilence discourse through which an animal residing in two different territories may or may not be considered ‘dirty’ based solely on proximity (Leach 1964). As we will show, though they are often grouped together as ‘seagulls’, species around the British Isles are categorised differently as either ‘pests’ or ‘wildlife’ depending on their typical contact with human populations.

A characteristic of media attention towards animals is that wildlife is most likely to make the news when boundaries between humans and untamed animals are breached, whether these be symbolic or physical (Corbett 1995).

In a similar episode, the print media played a powerful role in framing social meaning

“war rhetoric”

Scientific classifications of pests similarly hinge on this anthropocentric dimension, pests being species that negatively impact human populations (Sorace 2002). The cultural image of a pest, as Lunney and Moon (2008: 56) explain, is a powerful one, and it reflects attitudes, danger to humans and economic loss.”

Gulls as a pest that is a mere nuisance or something capable of causing harm

Also interesting is that according to Jermolack, these categorisations are historically contingent: pigeons only began to be stigmatised with the rise of contemporary urban desiderata of cleanliness and orderliness in the early 20th century that they started impacting on, while other bird species such as sparrows were the bane of public opinion at earlier times.

The earliest article in 2015 referring to gulls as pests was in the Daily Mirror on 13th January. The newspaper refers to gulls as ‘winged pests’ in Dublin city centre, quoting a minister who said “they’re not seagulls they really are vermin”. On the one level, pest-as-annoyance was part of the overarching discourse throughout the articles examined.

Gulls residing in urban areas are frequently cited as out of place

A pest in this sense is the transgressor of a cultural boundary, an outsider that inhabits a grey area between ‘natural’ and ‘human’ spaces, and therefore potentially a deviant.

As regards the figure of the monster, Foucault remarks how many classical monsters include creatures that have both human and the non-human features, but that violate a natural, human or cosmic law of the highest level (i.e. the minotaur).

A different rhetoric to the deviant framing, glimpsed from article online comments and from article headlines, was the use of war metaphors.

Patrick Barkham in a Guardian comment article on July 20th argued that humans are responsible for the rise in urban populations of gulls by removing their natural food source, providing alternative food source in urban areas through litter and food waste and providing suitable architecture for nesting in the cityscape.

An opinion column written in The Sun by Boris Johnson on July 26th shows an argument of retaliation and comeuppance after the pain humans have inflicted on animals, asking “[w]hat is a dive-bombing gull but a pitiful and ineffectual attempt by the animal kingdom to retaliate after centuries of casual slaughter and cruelty – on a scale we can barely imagine.”

View of the scientists

The overarching opinion was that understanding urban seagull behaviour through science gave a completely different picture to the media scare, and that the ‘seagull problem’ was a combination of seagull-human urban interaction rather than an intrinsic problem with evil, antisocial, etc. seagulls.

To focus on a specific case of value-laden cultural differences, we consider continuity as a key journalistic value that is clearly applied in the way gull attack made press, as they gained what scientists considered disproportionate amounts of media attention.

the above is a precise example of a clear-cut cultural mismatch between science and journalism as it played out in the seagull attacks.

In general, while it might appear as a truism that one ought to give significant status to expert judgment, it can be difficult for a non-expert to discern between different types of expertise

Moreover, this also means that scientists need to understand the cultural landscape pervading the topic to be dealt with (Irwin and Wynne 1996). In the seagull case, this would require a social understanding of the origins of animal and wildlife demonization, pest discourse and how deviance is culturally anthropomorphised into animals as we put here.

For the seagull and other animal demonization episodes, it is important for scientists, policymakers and of course journalists to understand and directly address – informedly, but without prejudice – public fears and attitudes regarding wildlife, boundary breaching, concerns about public health, amongst other intervening factors.

The perception of a conﬂict by different stakeholders is embedded in their knowledge, experience and value system, which will impact on their view of the conﬂict and its possible management and will in turn inﬂuence their interpretation of scientiﬁc information (Hodgson et al. 2019).

Domination view Vs mutualism view

More broadly, value systems may inﬂuence the place of biodiversity in societal priorities, and thus potentially in policy design or implementation (Manfredo et al. 2020)

Media and social media can have a strong inﬂuence on the dynamics of conﬂicts by allowing people to transmit their mood and feelings to others, generating massive-scale contagions(Kramer et al. 2014). Media, including social media, can fuel conﬂicts but can therefore also potentially contribute to reducing or solving them, often by framing information positively or negatively (Arbieu et al. 2021, Correia et al. 2021).

A recent review showed that the way a conﬂict is framed also inﬂuences management recommendations, with enforcement correlated with illegal resource use and stakeholder-based intervention correlated with human–human conflict framing

hen decisions about wildlife management in conﬂict situations are taken based solely on ecological criteria, this may exacerbate the conﬂict if it is seen by other sectors as the result of a power battle among groups rather than arising from ecological need

Education is not always successful as an intervention – see the following points:

These programmes, however, may have varying levels of success(Bridson 2000), because knowledge by itself may not always have a direct or consistent effect on changes in beliefs, attitudes or behaviour (Heim-lich et al. 2013, Ardoin et al. 2015), and it rarely affects values, which also inﬂuence attitudes and behaviour.

 To minimize conflicts, it is important that uncertainty is presented to all parties in a transparent way by setting out the full set of possible outcomes incorporating uncertainty that is propagated through all steps in a conflict situation.

Indeed, managing a deep-rooted conflict with a technical solution may exacerbate the conflict, with stakeholders perceiving their concerns to be slighted

Effective integration of all stakeholders and explicit considerations of social aspects of the conflict may be more important, in most cases, than the technical solutions to address the ecological aspects of the conflicts

 Indeed, if a conflict is acute and involves participants with important power asymmetries, it might be useful to start with smaller meetings with separate groups of stakeholders before embarking on a multi-stakeholder process

stakeholder modelling

Tilting at wildlife: reconsidering human–wildlife conflict

Stephen Mark Redpath, Saloni Bhatia and Juliette Young

This widely used framing of human–wildlife conflict has been criticized. Peterson et al. (2010) pointed out that the portrayal of animals as ‘conscious human antagonists’ and ‘combatants against people’ is problematic as it masks the underlying human dimension

Conflicts over biodiversity: situations that arise when two or more parties have strongly held views [over biodiversity objectives] and one of those parties is attempting to assert its interests at the ex pense of the other

Using the human–wildlife conflict frame may label nature as threatening, leading to misunderstanding and ultimately negative consequences for nature (McComas, 2006).

For example, the way that the news is framed by the media is believed to influence the political agenda as well as prime readers to think in a certain way (McCombs & Shaw, ; Scheufele, ). So we may hypothesize that presenting wildlife as antagonistic may alter the way people perceive those species.

So just because a particular technical solution may be effective at reducing impacts does not mean that conflicts between conservation and livelihood objectives are addressed.

In the majority of cases human–wildlife conflicts are between conservation and other human interests. In these cases, we suggest that it may be more productive to stop hiding behind the wildlife and be clear that those who are defending the conservation objectives are the antagonists.

It may be problematic to have a party who is an antagonist in the conflict leading the search for solutions as this party will not be an independent arbiter in the conflict. Conservationbiologists mayfocusontop-downapproaches, such as enforcing legislation on unwilling stakeholders or tokenistic participatory approaches in which false expecta tions are raised within a legislative context that cannot be changed. In addition, conservation biologists are naturally going to focus on delivering conservation outcomes, such as an increase in species number, rather than striving for outcomes that seek to benefit both parties.

Ainsworth, G. B., Redpath, S. M., Wilson, M., Wernham, C., & Young, J. C. (2020). Integrating scientific and local knowledge to address conservation conflicts: Towards a practical framework based on lessons learned from a Scottish case study. Environmental Science & Policy, 107, 46-55.

Conservation culturomics

Richard J Ladle, Ricardo A Correia, Yuno Do, Gea-Jae Joo, Ana CM Malhado, Raphaël Proulx, Jean-Michel Roberge, Paul Jepson

Words are symbolic representations of concepts, places, or objects (Carlston 2013). Thus, the frequency with which words and phrases are used within a language provides information about their cultural saliency or visibility (see Correia et al. 2016), generating insights into human cultures and how they change.

The study of human culture through the analysis of changes in word frequencies in large bodies of texts (termed “corpora”) is known as culturomics (Michel et al. 2011).

Culturomic trends are driven by cultural change and linguistic change. The former occurs in cases where there is some cultural shift, e.g. an idea is discredited, or something becomes viral. The latter occurs as a result of the evolution of language. This can be linked to cultural change or it may be more neutral.

The power of culturomics resides in its ability to provide novel insights into the functioning of society, passively crowdsourcing and locating the tone and mood of societies and other social groups. Such insights are potentially valuable to conservation as it strives to maintain its relevance in an increasingly globalized and data-rich world.

Culturomic methods can be thought of as a form of polling, albeit one that does not involve the direct questioning of individuals.

Moreover, culturomic techniques can quantify and link contemporary public interest in nature with trending issues in culture and politics, invigorating and widening public participation in discussions about nature and conservation.

Culturomics provides a systematic means of assessing the relative saliency of species and to identify traits associated with cultural visibility

Another critical challenge for culturomics research is dealing with semantic complexity. Language is inexact: it may contain multiple terms for the same thing and many words have multiple meanings and associations.

Myths and assumptions about human-wildlife conflict and coexistence

Adrian Treves, Francisco J. Santiago-Ávila

Test 4 assumptions

1. governments and scholars are neutral and objective about HWCC;
2. participatory, consensus-based decisions provide just and fair means to overcome challenges in HWCC;
3. wildlife threats to human interests are getting worse; and
4. wildlife damage to human interests is additive to other sources of damage.

Addition of coexistence to the shorthand HWCC presents a more objective, balanced approach. However, those who might omit conflict entirely from their communications to emphasize coexistence express an alternative non-neutral position.

Experts from natural resource agencies or those with affiliations to groups with utilitarian worldviews of wildlife differed significantly from experts from academic institutions or those with affiliations with animal rights groups, respectively (Karns et al. 2018). That variability among experts undermines the assumption that experts provide neutrality on decisions relevant to HWCC.

Should scientists be asked to make ethical judgments if they are not trained to do so? And, how would anyone respond when scientific judgments are not clearly disentangled from ethical judgments?

No matter how expert one might be in grizzly bear poaching, for instance, that does not make one an expert on whether the government ought to expose grizzly bears to higher levels of legal killing and poaching, just as we are not experts on unrelated scientific topics.

We perceive that experts are asked to go far beyond their often-narrow expertise about a species to address a complex problem involving both humans and wildlife and then to make a recommendation that is at least partially an ethical one. Those who like the recommendation may call it objective science, or a neutral recommendation, and defend the process, which can enshrine expert opinion in an unwarranted position; whereas opponents of the decision will view the expert with skepticism or suspect the motives of the decision maker who accepted the expert opinion. In this way, the assumption of neutral objectivity becomes an invidious one that sows mistrust.

“Wickedness in public policy is not an issue of evil. Rather it reflects policy debates rooted in a strong divergence of outlook, values, and goals, and over which there are no technical solutions that solve the problem outright” (Lynn 2018:224).

We are not opposed to participation and deliberation in governance; on the contrary, we endorse it. We are concerned with how such groups are constituted (Clark & Milloy 2014) and whether they are advisory or determinative on decisions to preserve nature or use it. Determinations and decisions to preserve or use nature should not be simply participatory in our view but rather based on trusteeship (Sand 2014; Wood 2014; Treves et al. 2017, 2018a, 2018b). The following are essential attributes of trustees: personal disinterest and neutrality toward diverse beneficiaries.

we hypothesize that few (if any) such decision processes in the use or preservation of nature are fair anywhere in the world because they do not include a legitimate representative of nonhumans or even a legitimate representative of future humans.

Humans typically attempt to minimize or preclude any risk from animals, and may reflect little to no tolerance for it (Treves & Bruskotter 2014), while ignoring the multitude of risks imposed by humans on animals (e.g., increased mortality through collisions or poaching, lack of natural prey or habitat destruction), many of which are invisible (Santiago-Avila et al. 2018; Finn & Stephens 2019). Acceptance of some risk without resorting to lethal management if the risk materializes and equitable mitigation of negative effects are as essential for fairness in human-wildlife relationships as they are in human-human relationships, perhaps even more so given the power asymmetry. Might does not make right in HWCC or most other ethical questions.

the inference that conflict has increased need not reflect any change in wildlife actions or human perceptions of those actions, but in the actor's behavioral reactions. Indeed, there might be very strong scientific reasons to conclude that conflict with wild animals has become less frequent or severe in aggregate because large, dangerous wildlife have been restricted to smaller and smaller areas of the globe and been replaced by smaller, less threatening animals

First, we recommend that scholars of HWCC only be asked to weigh evidence not to make normative recommendations. Second, we recommend that neutral trustees hear arguments about ethics, law, and values offered by legitimate advocates for at least 3 interest groups in an HWCC situation: current humans, nonhumans, and futurity of involved organisms.

We predict the wicked problem of the entanglement of value judgments and evidence will be very slow to disentangle without the alternative we recommended.

Treves A, Artelle KA, Darimont CT, Lynn WS, Paquet PC, Santiago-Avila FJ, Shaw R, Wood MC. 2018a. Intergenerational equity can help to prevent climate change and extinction. Nature Ecology & Evolution 2: 204–207.