Urban kittiwakes: victims, villains or heroes?

Local news framing of novel human-wildlife conflict in Norway

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Abstract

This study examines the frames used by Tromsø news outlets in articles about urban black-legged kittiwakes (*Rissa tridactyla*). In just seven years, the urban population of kittiwakes in this Norwegian coastal city grew from zero to around 800 individuals, sparking hundreds of news articles on conflicts between birds and people. The coverage was characterized by frequent identification of kittiwakes more broadly as seagulls.

Mixed-methods frame analysis of relevant articles uncovered three primary frames: hero, victim and villain. Stories about urban kittiwakes primarily used the villain frame, but use of the name "kittiwake" instead of "seagull" was associated with more positive framing. The number of articles published correlated closely with the number of kittiwake nests in the city centre. Non-kittiwake seagulls were also framed more negatively and featured more often in news articles after kittiwakes arrived.

The arrival of kittiwakes in Tromsø presents a unique opportunity to study how local media create and modify the framing of wildlife conflict, and how existing frames for a broader group, like seagulls, are affected by the arrival of a new species.

Preface

Acknowledgements

Many thanks to:

The author

I have worked in wildlife and conservation communications for nearly 20 years. Much of this work has focused on attitudes towards wildlife among different stakeholder groups and across borders. I currently work at the Framsenter in Tromsø, which became a nesting spot for dozens of kittiwakes in Spring of 2021.

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Definitions

Kittiwake: *Rissa tridactyla,* black-legged kittiwake, krykkje in Norwegian. A small, threatened seagull that spends most of its life at sea. Kittiwakes began nesting in urban Tromsø in the spring of 2015, but their numbers exploded in the city in 2020 and have continued to grow to almost 800 individuals in 2022 (Benjaminsen, 2022).

Larus **gull***:* In urban Tromsø, common non-kittiwake gulls are in the genus *Larus*: the European herring gull (*Larus argentatus*, gråmåse or gråmåke) and the Common gull (*Larus canus*, fiskemåke or fiskemåse). These species have nested in the city for far longer than kittiwakes. Unlike kittiwakes, they may approach people and eat human food and garbage.

Seagull or gull: The broader group of birds to which both kittiwakes and *Larus* gulls belong. In the source material, "seagull" (måse/måke in Norwegian) is used to refer to *Larus* gulls, and often kittiwakes as well. When an article distinguishes between the two, kittiwakes are more specifically identified (krykkje).

1 Introduction

1.1 Aim and research questions

In this study I explore the framing of conflict with urban kittiwakes in Tromsø's media. Through frame analysis of news articles, I address:

1. what frames are used for urban kittiwakes in Tromsø;
2. how the framing of urban kittiwakes in Tromsø has changed over time;
3. and how the identification of these birds as "kittiwakes" or "seagulls" relates to the frames used.

Urban kittiwakes present an interesting case study in the development of wildlife conflict framing. This species is threatened in mainland Norway (Artsdatabanken 2022). However, due to a mass movement into coastal cities, it has also become a nuisance to people. These small seagulls are frequently confused with other, more aggressive seagull species (*Larus* spp.) that swoop at residents and eat garbage and human food. This confusion is apparent in the legion of *Larus* gull and kittiwake-focused articles in Tromsø media each summer, when both groups of birds nest in the city.

The phenomenon of urban kittiwakes is relatively new. Accordingly, there is very little published material on the subject, and no journal articles at time of writing from a pure communications perspective. It is an ongoing situation, with solutions being discussed regularly in Tromsø media. An exploration of the media frames around kittiwakes, and the implications for proposed solutions, can be a timely and useful contribution to the issue. In addition, this study can contribute to global knowledge on how animals become "pests" by exploring the influence of existing seagull discourse on media portrayals of kittiwakes, as well as the effect of the kittiwakes' arrival on framing of *Larus* gulls.

1.2 A short history of Tromsø's urban kittiwake conflict

1.2.1 Arrival in the city

Kittiwakes generally nest far from human habitation on sea cliffs, but this is changing on the Norwegian coast (Benjaminsen et al., 2022). In just the past few decades, researchers have noted a massive decrease in cliff-nesting kittiwake populations, which is thought to be due to climate changes, overfishing, and loss of habitat (Sandvik et al., 2014). The species is now

considered vulnerable globally and endangered on mainland Norway (Artsdatabanken 2022, IUCN 2022). The remaining birds are increasingly seeking out safer nesting spots in coastal cities (Benjaminsen et al., 2022, p.7).

In 2015, a University of Tromsø professor commented to *Nordlys* on the first kittiwake nest he had seen in the city, wondering if they would return (Johansen, 2015). Since then, the urban population in Tromsø has increased each year as the birds build their nests on the city's windows, ledges and roofs instead of sea cliffs. By 2018 there were 14 pairs of kittiwakes, and in 2020, 160 nesting pairs made their home in the city. In 2022, there were nearly 400 pairs (Benjaminsen et al., 2022, p. 16).

1.2.2   Conflict with kittiwakes

Unlike urban *Larus* gulls in Tromsø, kittiwakes do not eat garbage or human food (Fremstad and Næss, 2022). However, they do build their nests in large, conspicuous colonies (Sandvik et al. 2014) that concentrate smell, droppings and noise. A spike in Tromsø news coverage of kittiwake conflicts each summer indicates that residents have an uneasy relationship with their new neighbours.

A study from the Norwegian Institute for Nature Research, NINA (Benjaminsen et al., 2022) provides an overview of Tromsø's urban kittiwakes. Since the authors began following Tromsø's urban kittiwakes in 2017, the birds have shown a surprising tenacity in their nesting habits. Kittiwakes have high site fidelity, that is, they will return to the same spot to nest each year. If the site owner has attempted to ward them off with nets, spikes or sloping surfaces, they will keep attempting to access the old nest for some time before moving to nearby buildings to build a new colony (Benjaminsen et al., 2022, p. 9).

The significant amount of noise and droppings produced by a colony is a summer-long challenge for residents. Interviews with the building owners who host kittiwakes (Thuen, 2022a and 2022b) are often characterized by frustration with noise, cleanup and costs of repair. However, once kittiwakes begin nesting each spring, they cannot be disturbed under national law. Despite this, building owners in Tromsø and beyond have been known to remove the new nests. The municipality of Hammerfest received a fine of 120,000 NOK for illegally washing kittiwake nests off the town library (Jakobsen, 2021), while an art museum in Tromsø was criticized for hanging nets after nesting had already begun (Hotvedt, 2022).

The task of communicating with affected stakeholders often falls to municipalities. In Tromsø, a kittiwake "council" has been formed to help address concerns and implement solutions (Wangensteen, 2022). In addition, there are two non-governmental kittiwake projects underway: Fuglan Veit is based at the University of Tromsø and focuses on humans' relationship with seabirds. The Urban Kittiwake Project is a multi-disciplinary project based at the Fram Centre, a building housing many scientific agencies in the city.

To provide more appropriate nesting locations in Tromsø, two "kittiwake hotels" were built in 2021 near the previous year's kittiwake colonies (Benjaminsen et al., 2022, p. 9). One successfully lured the birds away from a neighbouring building, while the other remained empty — the kittiwakes found a way around the netting on their previous colony, and built their nests again (Olsen, 2022).

In spring of 2023, multiple new kittiwake hotels were built in cooperation with local architects and artists. As of May 2023, all five hotels contain active kittiwake nests.

1.2.3   Broad and specific identification

Tromsø news outlets reported on *Larus* gull conflict each spring and summer long before kittiwakes arrived; at least since the mid-nineties, with the first article in *Nordlys* to describe attacks on people (Nygård, 1996, translation mine):

> I have long wondered if it has been scientifically described, this latest mutation of the gull genus, but I cannot find it anywhere. [...]Since most of them by appearance look like the herring gull (lat.: *Larus argentatus*), I will hereby solemnly baptize the creature *Larus argentatus urbaniensis* — for the sake of brevity, city gull.
>
> [...T]he worst feature of the city gull is its aggressiveness. Anyone who has shopped at fast food outlets late at night can't help but notice. They hang around you, sitting on the edge of the garbage can while they send stinging glances at your hot dog, and are happy to follow on your heels when you leave, just waiting for you to make a small mistake so they can strike.

In reviewing media articles, I noted that conflict coverage in Tromsø's media is complicated by frequent confusion between the kittiwake and *Larus* gulls: the larger European herring gull (*Larus argentatus*, gråmåse or gråmåke in Norwegian) and the similarly sized common

gull (*Larus canus*, fiskemåke or fiskemåse). These gulls differ from kittiwakes in their behaviour and interaction with people (Table 1.1).

Kittiwakes do not eat trash, feed only at sea and do not approach people (Fremstad and Næss, 2022). However, they are a type of seagull and thus subject to wider mental frameworks about how seagulls interact with humans. Indeed, stories in Tromsø media frequently confuse the behaviours of the two species, use a photo of one species to illustrate a story about the other, or assign conflict blame to the broader category of "seagulls".

Table 1.1 Conflict with urban seagulls in Tromsø

Species	Kittiwakes	*Larus* gulls
Main sources of conflict with people	Conspicuous groups of nests Concentrated droppings / damage to buildings Offensive smell from nests Noise from groups	Swooping toward people "Stealing" and begging for food Eating and spreading garbage

Note: based on Fremstad and Næss (2022).

Negative attitudes towards seagulls in the media seem to match public opinion. In August 2022, *NRK* and *Nordlys* commissioned a poll of Tromsø residents on seagulls in the city (NRK, 2022). Of 1,009 respondents, 43% said urban seagulls and kittiwakes were "a very big problem[1]", while 11% said they were "completely unproblematic". 68% agreed that measures were necessary to reduce the number of seagulls and kittiwakes in Tromsø centrum, and 21% disagreed[2].

1.3   Disposition

The study begins with an overview of the theoretical approach used in this study, framing. In the literature review, the global context of wildlife conflict communications studies is

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[1] The question: "Hvor stort problem er måker og krykkjer i Tromsø sentrum?", or "How big a problem are seagulls and kittiwakes in Tromsø sentrum?"

[2] The question: "Mener du det er nødvendig å sette i verk tiltak for å redusere antall måker og krykkjer i Tromsø sentrum?", or "Do you think it's necessary to put measures in place to reduce the number of seagulls and kittiwakes in Tromsø sentrum?"

considered, along with the methods and theories used. This is followed by a review of materials on Norwegian local media and an overview of current scholarship on kittiwakes, urban and otherwise. The methodology section outlines in detail the method used to define, collect and analyze newspaper articles on the subject, and addresses limitations. The results section summarizes the coded articles, which is further explored in the discussion section. Finally, the conclusion presents final thoughts, practical applications and areas for further study.

2 Theoretical approach

2.1 *Framing*

This study relies primarily on framing theory, which holds that people use frames to organize information about the world and define problems (Entman, 1993). Influencers use frames to shape public opinion and policy. In this case, news organizations with a large local readership shape opinion and policy on urban kittiwakes through the text and images they choose.

I begin by summarizing major studies of framing and models of framing as a process. I then consider how frames and images intersect, and how one frame can win out over another. Finally, I apply framing theory to my research questions.

2.1.1 What is framing?

Robert Entman's 1993 article "Framing: Toward clarification of a fractured paradigm" is often cited as a foundational document in modern frame analysis studies. He outlines a structured, rigorous way to analyze the framing of content while minimizing assumptions and bias.

Framing, according to Entman, is the act of (1) selecting "some aspects of a perceived reality" to promote, and (2) making them salient, that is, by "making a piece of information more noticeable, meaningful, or memorable to audiences" (p. 53). Scheufele (1999) adds that the term "salience" has been used in other framing research to refer to accessibility, that is, how easily the frame is retrieved by the listener and associated with existing frames (p. 116). In other words, not all frames are equal; some are "stickier" than others.

Entman proposes that frames typically have four elements (p. 53):

1. Defining a problem: What is the issue, and what are the costs and benefits? This may be influenced by cultural assumptions.
2. Diagnosing a problem: What's behind the problem as defined? The definition of the problem will influence the audience's understanding of solutions.
3. Judging the problem: An interpretation of the problem, with further cultural assumptions.
4. Suggesting remedies to the problem: What can be done, and what outcome is expected?

These elements taken together create a narrative.

Schema theory (Crocker, Fiske & Taylor, 1984) underlies the framing process. It describes how people use their pre-existing opinions and knowledge (schemata) to incorporate new information. Both readers and journalists have their own schemata, and this influences which photos and words journalists choose, how readers understand and respond, and how journalists react to that response in turn.

Framing theory is also closely related to agenda setting theory. Scheufele and Tewksbury (2007) differentiate the two thusly: agenda setting focuses on the media's selection of issues, which influences how important the audience believes those issues to be. Framing considers how the selected issue is reported, and how the audience understands it as a result. In other words, agenda setting considers whether we think about the issue and framing considers how we think about the issue. Seagulls are an inescapable part of summer for everyone who lives in Tromsø, so it is difficult to argue that residents only think about them due to media prompting. However, the way conflict with birds is covered relates to how the audience perceives the issue.

2.1.2   The framing process

Scheufele (1999) illustrates frames not as a static concept, but as a circular process. Audience feedback and cultural frames influence how journalists frame a story, how media sets the frame to the audience, and then how the audience incorporates the frames into their schemata, or individual concept of the issue. The incorporation may be measured by attitudes, behaviours, and attribution of responsibility (Scheufele, 1999, p. 115).

Entman (1993, pp. 52-55) further details how the process of communicating frames affects how they are perceived:

Communicators (e.g., journalists) create the frames, but not necessarily with awareness, according to Entman. They are influenced by their own cultural assumptions and existing schemata (Entman, 1993, p. 52). Communicators choose which aspects to promote and which to discard — that is, they set the agenda. Pan and Kosicki (1993) write that some conventions of journalism also function as framing devices, for example using experts, data and/or official sources to assert validity, or quoting negatively perceived sources to discredit a point of view. Key events can cause journalists to shift which frames they select (Van Gorp, 2007). A key event could be anything from a natural disaster to a positive reader response to a conflict frame.

Text (e.g. a newspaper article) uses particular phrases, metaphors, images, quotes and sources that set and strengthen the frames. In applying frame analysis to news articles, Pan and Kosicki (1993) write that the relative importance of article elements in framing mirrors that of the standard inverted pyramid news structure. The headline is the most powerful, followed by the lead, episodes, background and closure (p. 59). Notably, they do not include images in this list. The importance of images in framing analysis is explored in chapter 2.1.3. Pan and Kosicki describe lexical choices that push readers to categorize the story's subject. In this study, choices such as "kittiwake" versus "flying rat" guide how the reader understands the story.

Receivers (e.g., Tromsø residents) do not simply receive information passively. They apply their own perceptions and schemata to the text, which in turn influence their reactions, attitudes and behaviours, as illustrated by Scheufele (1999). Entman (1993) notes that on topics where the receiver is not particularly knowledgeable, media frames are more influential (p. 56).

Culture can be considered the pre-existing frames in a society, which can be strengthened or weakened as a result of the communication. Media frames that reinforce cultural attitudes may increase salience, while those that conflict with existing schemata may be more difficult to incorporate (Entman 1993, p. 53). The culture that influences frames in this study is likely a mix of local, Norwegian, international and ingrained human attitudes towards wildlife.

According to Van Gorp (2010, p.87), cultural frames "are appealing for journalists because they are ready for use". The author notes that they tend to contain the elements of a good narrative: winners and losers, heroes and villains, problems and blame. This can lead to an event being "over-problematized", where the response is outsized compared to the actual risk (p. 87). The author identifies three benefits of identifying the cultural frames at work in a study: First, that the researcher can gain further insights into news coverage, second, to show journalists that they are influenced by frames rather than the actual events; and finally, to find constructive ways to create alternate frame packages and redefine the issue.

Van Gorp also suggests a benefit to being an "outsider" researcher. Researchers who share the culture of the content writers may not recognize the cultural frames being employed, whereas external researchers may be able to apply more objectivity (Van Gorp 2010, pp. 93-94).

Pan and Kosicki (1993) question whether it's possible to analyze news frames without cultural biases. Van Gorp (2010) recommends looking at older articles to see how dominant cultural framing has shifted over time, as I do in this study. However, he acknowledges that it is impossible to avoid all subjectivity; there is always some interpretation from the researcher. I consider this further in Chapter 4.3.1, Objectivity.

2.1.3   Framing and images

There is ample evidence that visuals are key to understanding the frames used by a news article. The messages contained in visuals, particularly those that evoke emotion and depict conflict, stay with news readers long after the text is forgotten.

Coleman (2018) writes that news readers process text and visuals together; thus images are a key part of an article's framing and should not be ignored. Coleman argues "it's never enough to study framing in one mode of communication and not the other" (p. 237), but regardless, notes that visuals are not as well studied as text in the field of framing, and that it is rare for one study to consider both.

Like the questions of what to publish and what words to use, photos are also a journalistic choice. Visuals can contain stereotypes that are missing from the text and can make some interpretations of problems more salient than others (Coleman, 2018). The choice, size, and cropping of photos can influence how the issue is perceived. I therefore consider the framing elements of both text and photos to get a fuller picture of journalistic choices.

2.1.3.1   Images are noticed and remembered

Scheufele and Tewksbury (2007) argue that for a framing effect to occur, the audience must first pay sufficient attention to the story. Images are attention-grabbing. The picture superiority effect (Gibson and Zillmann, 2000) holds that people remember the photo better than the words of a story: if there's a discrepancy between photo and text, the photo wins out, even if the info in the picture is missing from the text.

Furthermore, Graber (1990) writes that people remember stories better when they contain images. Emotional images are better than non-emotional, unusual images are better than commonplace in helping people to retain information from the story. Coleman (2018) cites the elaboration likelihood model, which suggests that photos, more so than verbal content, elicit emotional responses over logical ones. Photos can linger in the reader's memory after they have forgotten the details of the text (if indeed they ever read it in the first place). As

further explored in chapter 3.3, emotional responses play a key role in wildlife conflict communications and resolution.

2.1.3.2   Conflict and risk images are salient

Conflict images are frequently found in stories about seagulls. Gibson and Zillmann (2000) show that photos impact perceptions of risk, particularly when they include victims. Image choice is a particularly interesting and confounding part of articles on kittiwakes. Frequently, the wrong species is pictured, or a photo showing conflict or unwanted behaviour is used for a positive story.

Coleman (2018) suggests that photos are not necessarily chosen with an agenda in mind but are influenced by the journalistic tendency towards active over passive photos, which can highlight conflict (p. 238). In addition, Coleman and Wu (2006) found that negative photos have an agenda-setting effect, while positive photos do not. The more conflict is shown, the more likely readers are to assess the event negatively.

Gibson and Zillman's study (2000) also found a correlation between the chosen image and perceptions of risk. They showed participants articles about a tick-borne illness, where the accompanying photo was either ticks alone, ticks and their victims or no photo. The text was the same for all participants (p. 358). They found that the participants' estimate of risk was lowest when there was no photo, somewhat higher with pictures of ticks but no victims. When victims were shown, the estimate of risk was highest (pp. 360-363). This study suggests that photos including human "victims" may increase readers' perception of risk.

2.1.3.3   Challenges in assessing visual frames

Coleman (2018) acknowledges the challenges of interpreting frames from images. A visual is open to more interpretation, by both readers and coders, than text. A strong coding system for visual frames should rely as much as possible on objective rather than implied elements of the photo, which could be open to the coder's interpretation.

2.1.4   Which frame wins?

When multiple frames are presented in media and elsewhere, what determines the prevailing frame? Ihlen and Allern (2008) are among the scholars who describe this as a "contest". The authors explore an environmental case study where a new frame successfully supplanted an existing one. Environmental advocates exploited the media's requirement for short content, interesting and high-quality images and exclusive content to gain coverage. The advocates

presented their side of the story in simple and concrete terms, but also used controversy to strengthen an opposing conflict frame.

We can also consider the "winning" frame not just by whether media employ it, but whether readers share and engage with it. Johannessen (2011) examined the most shared opinion articles in major Norwegian newspapers, identifying frames such as metaphor, satire, justice, deliberation/debate and personal account. As over 70% of Norwegians use social media daily (Statistics Norway, 2022), these sharing-friendly frames are also relevant to consider.

2.2   *How framing applies to the research questions*

Because framing effects only occur when audiences pay sufficient attention to the story (Scheufele and Tewksbury, 2007), I have chosen to focus on the most attention-catching parts of a story: the headline, summary and lead image. This is particularly relevant for digital stories, where viewers can see the image and headline, but may not click on (or have access to) the full story.

2.2.1   What frames are used for urban kittiwakes in Tromsø?

I explore this question by examining the frames used in articles that explicitly mention or picture kittiwakes. Van Gorp (2005) describes a method for uncovering culturally embedded frames and validating the results. These can be rooted in archetypes, such as hero, villain or refugee, and can shift over time and location. For example, a kittiwake could be framed as a victim on a failing bird cliff, a villain when it nests on a house, and a victim again when injured by spikes on a house. The archetypes can themselves be frames with embedded assumptions. In my work, a victim frame could evoke emotions like pity, and assumptions like a lack of other options.

2.2.2   How has media framing of urban kittiwakes in Tromsø changed over time?

Scheufele (1999)'s depiction of framing as a feedback loop between journalists and readers is relevant to exploring changes over time. A media content analysis focuses on one element of the loop: journalists and their chosen frames. In this case, journalists and readers are both residents of the same small city, and we can reasonably assume that they have many cultural frames in common.

Because frames are embedded in culture, they tend not to change very much over time (Van Gorp 2007, p. 63). The dynamic nature of framing is thus the choice of frame rather than the frame itself. Therefore, I look at changes in frame choices over time. Because I am

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particularly interested in the conflict narrative, I use Entman's four frame elements (1993) — defining, diagnosing, judging and suggesting remedies — to examine how the story about kittiwakes is created and modified.

2.2.3   How does the identification of kittiwakes relate to the frames used?

Schema theory (Crocker, Fiske & Taylor, 1984) suggests that news readers and producers will tend to fit new information about seagulls into their existing schemata rather than creating an entirely new mental category for kittiwakes. The "diagnosis" element of Entman's four frame elements (1993) can reveal to what extent existing frames for *Larus* gulls affect reporting on kittiwakes.

3   Literature review

3.1   *Scope of the literature review*

My literature search was conducted using the search engine Oria, which provides an overview and access to books, articles, newspapers and other media held by universities in Norway. The terms used include "kittiwakes or krykkj*", "herring gulls or gråmåse* or gråmåke*", "seagulls or måse* or måke*", "wildlife conflict", "local media or lokale medier" and "norwegian media or norske medier". I found many more relevant studies in the citations of these articles and used a "snowball" approach to find new and foundational research.

Searches for "måser or måker" and konflikt returned no results in Norwegian. Relevant papers on seagull conflict are from a United Kingdom perspective. These may not fully align with conflict experiences in Norway.

Newspaper articles for the literature review were found in the Retriever Archive of Norwegian newspapers using the terms "krykkj* or måse* or måke*" (kittiwakes or seagulls), limited to Tromsø outlets. The full search process for articles used in coding is described in 4.4.1: Assembling the source documents.

Because urban kittiwakes are a new phenomenon, there is very little published material on the subject. Three people researching the topic — Ingeborg Solvang of UiT, Tone Reitersen of NINA and Helen Wilson of Durham University — have provided invaluable feedback and unpublished information in personal communications.

3.2   *Organization of the literature review*

The literature review first explores framing in the context of global wildlife conflict communications, including theories and methods used in similar studies. I then consider the role and importance of the Norwegian local newspaper ecosystem as it relates to this study. Finally, I review the limited material available on the phenomenon of urban kittiwakes, with some context from studies on non-urban kittiwakes.

3.3   *Wildlife conflict and framing*

IUCN (2022b) defines human-wildlife conflict as "struggles that emerge when the presence or behaviour of wildlife poses an actual or perceived, direct and recurring threat to human

interests or needs, leading to disagreements between groups of people and negative impacts on people and/or wildlife".

Human-wildlife conflict, including its sociological and communications aspects, has been extensively studied. I begin by looking at the theories used in conflict communications regardless of species. I then explore how seagulls and other animals have become pests or "trash animals" in the public eye. Finally, I summarize studies exploring communications-based solutions to human-wildlife conflict.

3.3.1 Theories in wildlife conflict communications

Conservation biologists are at the forefront of mitigating human-wildlife conflict. However, a flawed understanding of risk perception can lead to less-than-ideal conservation results. Dickman (2010) is a zoologist yet considers wildlife conflict mitigation an issue of risk perception and attitudes. He notes that conservation biologists often make three incorrect assumptions about the conflict response: (1) that it relates directly to the amount of damage caused by the species; (2) that the response is proportional to the damage; (3) that changing the response will improve the species' status.

Of particular interest to my study, Dickman describes a "hyper-awareness of risk" (p. 461) that can develop when people who are directly affected negatively communicate about their losses in a way that elevates the perception of risk for those who have not experienced it. He notes this is particularly true for those whose livelihood is directly affected (in this case, restaurant owners whose patios are forced to close by kittiwake colonies or aggressive *Larus* gulls). Furthermore, mitigation of damage (for instance by building alternate nesting spots or using nets and spikes to deter nesting) may have surprisingly little impact on the perception of conflict — he notes that "antagonism often remains robust over time" (p. 462). Dickman proposes a theoretical framework where environmental and social risk factors, combined with the actual and perceived costs, create the observed response.

Because seagulls almost never cause physical harm, and economic harm is felt mainly by affected individuals, this study sheds light on the intense response in Tromsø. Dickman argues that social influences play a far larger role than actual risk in determining the level of conflict response (p. 462). In this study, cultural norms, stories, and perceptions of seagulls as a "trash bird", and expectations around wildlife behaviour in an urban setting all play a role in determining the response. He calls for a multidisciplinary approach that considers not only species, but societies.

Hudenko (2012) applies multiple theories of risk and decision making to understand the emotional shortcuts present in wildlife conflict response. The author points out that cognitive theories of decision making, which hold that people make rational decisions based on evidence, have shortcomings in this field of study: biases and framing can affect how conflict is perceived (pp. 18-19). Hudenko notes that people use mental shortcuts — heuristics and biases — when making decisions. The more easily a heuristic comes to mind, for example the idea of aggressive seagulls, the more likely it is to be considered true. Hudenko writes that the relative number of negative stories about a species can make that heuristic more easily available (p. 19).

Hudenko also draws upon the representativeness heuristic, which describes decision making based on the group to which the subject belongs: "If one then knows that a bear is a predator, using the representativeness heuristic, one may think that a bear has all the characteristics of a predator" (p. 20). This is quite relevant to my work, as people who are not well-acquainted with kittiwakes specifically will nonetheless have opinions on seagulls more generally. This is closely tied to accessibility, in which similarity and ease of recall is used as a mental shortcut to gauge risk.

Framing is mentioned by Hudenko as a powerful influence on how people perceive a species and whether they assess an interaction as conflict. She notes that emotional frames are more salient than non-emotional frames (p. 21). Thus, loaded language — pest, nuisance, war, ruin — can be very effective at evoking conflict.

Hudenko concludes by assessing integrative theories that combine cognitive and emotional aspects of decision making to predict behaviour, suggesting that high emotional arousal causes people to make emotion-dominated, rather than cognition-dominated responses (pp. 22-23). In the conclusion, the author calls for further research into the effectiveness of emotionally charged communications to influence human responses to wildlife conflict (pp. 25-26).

3.3.2   Seagulls and the creation of the "trash animal"

Conflict with seagulls is not unique to Tromsø, and several authors have explored public portrayals of these birds and other species that have acquired a poor reputation in urban settings.

Carr and Reyes-Galindo (2017) argue that media framing of seagulls in the United Kingdom had an outsized effect on the demonization of gulls in the nation's discourse. By comparing scientific responses to media characterizations, the authors describe how gull behaviours were "anthropomorphised and then demonised" (p. 2); and how the predominant discourse became one of "boundary-breaching" (p. 3). They found that media articles consistently portrayed seagulls as pests, and rarely included the perspectives of scientists. When scientific perspectives were included, they were sometimes misrepresented.

The authors lay some blame on the scientific illiteracy of journalists, noting that they are put in the position of judging what scientific and expert viewpoints are worthy of reporting on (p. 13). It may be difficult, for example, to judge whether an expert on pest control has a full understanding of different gull species and their behaviours. Journalist perceptions can therefore further skew the reliability of the scientific information that is reported.

Jerolmack (2008) asks, "how do animals become problems?" The study combines a sociological perspective with a media analysis methodology to understand how pigeons became demonized in the New York City press. By analyzing discourse on pigeons in the New York Times over more than 150 years, Jerolmack traces the transformation of the pigeon from innocuous to nuisance, to pest and then an identified threat to public health: a so-called "rat with wings'", as the New York Times wrote in 1965. True to the disconnect between actual risk and emotional response described by Dickman (2010), the thorough cultural disgust towards pigeons seems wholly unrelated to the fact that there are no substantiated claims of disease transmission from pigeons to people, according to Jerolmack. The phrase "rat with wings" has become standard rhetoric in American English when referring to pigeons, placing pigeons in the same category as rats, a pest to be eradicated (p.85). The phrase has even appeared in Tromsø media in reference to seagulls.

Trotter (2019) studied how negative portrayals of gulls in British media lead to legal ramifications, such as fines for individuals who feed gulls. In the United Kingdom as well, media reports on the bad behaviour of gulls proliferate each summer. "It is in fact not possible to convey[...] the sheer extent and number of negative headlines about 'seagulls' that abound on an annual basis come the breeding season" (p. 7), according to Trotter, and these articles do not necessarily distinguish between different types of gulls and their behaviours. Instead, the study found that the articles tended to focus on risks to tourism, health and safety and the well-being of residents. Trotter found that media coverage "tightened" the narrative that seagulls are not just a part of urban coastal life, but a problem. As in Tromsø, the barrage

of media coverage encouraged politicians to respond. Unlike in Tromsø (so far), political responses reached the federal level and have focused on regulating people, who are cast as encouraging the bad behaviour by feeding gulls. Trotter documents the transformation of "bird" behaviour — feeding, defending a nest, calling — to anthropomorphized "bad" behaviour in the media — stealing, attacking, screaming.

3.3.3   Towards conflict solutions

If human-wildlife conflict is largely an issue of perception, it stands to reason that solutions may include communications techniques. While this study focuses on how kittiwakes are framed vis-à-vis other seagulls, the conclusion provides framing suggestions for kittiwake advocates based on related research into framing contests.

Jerolmack (2008) describes how a species' reputation can be improved by using the emotionally laden rhetorical devices that led to its downfall in the first place. For example, pigeon advocates in the UK anthropomorphize the birds as "heroes" who carried messages in war, as monogamous, and a symbol of peace (p. 87).

Guenther and Shanahan (2020) study how text and images motivate supporters in wildlife conflict situations. They find that narratives with characters effectively tap into emotions, affect the perception of risk, and increase support for conservation measures. Interestingly, the pre-existing attitudes towards the species type (in this study, bats) influenced the emotional response of receivers towards the target species (fruit bats). Narratives (victim or villain) with an image evoked negative emotions about fruit bats in people who already had positive feelings towards bats in general, but dampened negative affect in people who did not like bats. The authors suggest further research into the effectiveness of the "hero" archetype in wildlife conflict communications, particularly in audiences with negative feelings towards the species type. The study suggests value in targeted communication to warm and cool audiences.

McKiernan and Instone (2016) trace the transition from pest to partner of another urban avian, the Australian white ibis. Like kittiwakes, the bird began appearing in cities in recent decades to headlines that started neutral and increasingly portrayed the species as a pest. However, the tide began to shift around 2010, when headlines were more likely to portray the animal as an environmental refugee from drought (p. 483). Interest in this media angle appeared to increase with coverage of droughts, opening the possibility of making refuges

part of the urban landscape (p. 489). Unlike kittiwakes, the ibis is rather unique in appearance and not easily confused with existing "pest" species.

If pests are simply "matter out of place" as Mary Douglas described dirt in the book *Purity and Danger* (1966), advocates can also redefine a species' current residence as the right place for it to be. Jerolmack (2008) describes the efforts of pigeon advocates to define the birds as homeless, with a right to exist in public places.

Carr and Reyes-Galindo (2017) call for scientists who are interviewed by journalists to better understand the cultural landscape they are working in, writing that seagull experts:

> "...require a social understanding of the origins of animal and wildlife demonization, pest discourse and how deviance is culturally anthropomorphised into animals... While science typically ignores these dimensions in favour of simply communicating 'objective knowledge', the media, which relies on its resonance with cultural representations to kindle public favour, exploits these representations to their fullest potential."
>
> Carr and Reyes-Galindo (2017, p. 17)

3.4 **The role and importance of local news in Norway**

I have chosen to focus on local newspapers in this study largely because of the role that they play in Norwegian society. Conflict with kittiwakes is a highly localized issue, and thus news coverage and debate play out in local outlets. Several researchers have found that local newspapers play an unusually large role in the shaping of public opinion in Norway, particularly among "elites".

3.4.1 <u>Norway's unusual relationship with local newspapers</u>

Syvertsen et al. (2014) provide a thorough overview of the role of Nordic media in a changing and increasingly digital news landscape. The authors argue that the Nordic media landscape is unusual in a global context, and a significant part of the Nordic welfare state model. Of particular relevance, they point out Norway has among the highest daily newspaper readerships in the world (p. 26). In addition, local newspapers constitute the majority of Norway's news outlets (p. 55).

The high readership appears to correlate with a high degree of influence of Norwegian local media on society. Bartholosen (2020) writes that 207 of Norway's 227 newspapers remain local, and this "traditional daily delivery of opinions has potentially had a strong influence on the general opinion in these communities, including on the development of local identity" (p. 137). Skogerbø and Karlsen (2021) argue that the strong local nature of Norwegian media remains a defining feature of the changing media landscape.

3.4.2   Transition to digital news

This study takes place over a time period of change in the news landscape. In 2011, Skogerbø and Windsvold stated that local newspapers were a primary source of information. That does not appear to have changed significantly during the study period. News readership has remained high as printed papers have given way to digital. Skogerbø and Karlsen (2021) describe the Norwegian media landscape of today as digital and hybrid — that is, multi-platform in nature, arguing that "local media structures have remained remarkably stable in spite of the technological and economic shifts that have seriously altered media production, distribution, and consumption" (p. 99).

One limitation in consulting older media studies is the role played by paywalls. Høst (2019) documents a move to hard paywalls among Norwegian newspapers. By 2018, 184 newspapers had moved to paywalled access, mostly a "hard" paywall where it is not possible to access news without a subscription. However, Skogerbø & Karlsen's (2021) assertion that newspaper relevancy has remained consistent despite the shift is backed up by data collected by Statistics Norway and reported by Media Norway (2022): while there has been a drop in overall newspaper readership nationally, there has been a moderate proportional increase in online readership with significant overlap between the two platforms. In 2014, 75% of Norwegians read newspapers (49% print / 54% online). In 2021, the last year reported, 68% of Norwegians read newspapers (22% print / 59% online). In the same year, 42% of Norwegians reported reading other, non-newspaper news sites. Among these, Skogerbø finds that national broadcaster NRK has strengthened its role as a provider of local news in this emerging ecosystem (p. 98).

3.4.3   The media landscape in Tromsø

In Tromsø there are two main daily newspapers: *iTromsø* and *Nordlys*. As of 2017, the latest year with statistics for both print and online, *Nordlys* had a circulation of 43,000 print and 48,000 online readers. *iTromsø* had 18,000 print and 28,000 online readers (Medianorway, 2022). In addition, *Nordlys* has hosted a debate platform, *Nordnorsk Debatt*, since 2014.

Morlandstø and Mathisen (2020) analyzed the content on *Nordnorsk Debatt*, and found it was largely a platform for the region's elites, such as politicians and business owners. Because all relevant articles from *Nordnorsk Debatt* are also on *Nordlys*, I have treated them as a single source.

In addition to print/online newspapers, local news is also available from NRK in online, radio and TV formats. As Medianorway (2022) shows an increase in news consumption from non-newspaper news sites, I have included the *NRK Troms and Finnmark* site (previously *NRK Troms*), in my analysis as well.

3.5 **Urban kittiwakes**

Two journal articles on urban kittiwakes were available at time of writing. Wilson (2021) takes an ethnographic approach to public discourse around the increasing numbers of kittiwakes on the Tyne River in the United Kingdom. She also discusses the influence of seagull frames on public perception, noting "...as a member of the gull family, kittiwakes are subject to competing systems of devaluation that render them out of place and draw attention to the challenges that they pose for coexistence" (p.4). Wilson notes a difference in approach between animals that represent climate changes but also inspire awe, such as polar bears; and those considered "trash animals", like seagulls.

In addition to media analysis that considered both kittiwakes and gulls more generally, Wilson conducted interviews with a wide range of stakeholders. Perhaps because the Newcastle nests are primarily situated in industrial areas, the individual sense of frustration and call for immediate solutions is less palpable in Newcastle than in Tromsø. The study focuses instead on higher-level questions of "understandings of public space, urban belonging and oceanic boundaries" (p. 1), and the challenges of finding modes of coexistence.

Benjaminsen et al. (2022) focus on the growing urban population of kittiwakes in Tromsø, specifically the early results from kittiwake "hotels" being built in the city to draw the birds away from buildings. They find that the hotels can be an effective solution, but not an immediate one. Thus, the city will need to plan for short- and long-term coexistence with this species.

This study also dealt with the researchers' communication with stakeholders, noting that it required a great deal of effort. There was high interest from the media in 2022, and the resulting articles were polarized but nonetheless kept the topic on the agenda, according to

the authors. The researchers were also able to develop positive partnerships with local building owners and a tourism company and were invited to share their perspective with the municipality. The study recommends an informational campaign focused on cooperative measures that help both people and birds, if time and resources allow.

The literature on kittiwakes in their traditional sea cliff habitat is far more robust and varied. Most relevant to this study is a paper by Tromsø-based researchers on the decline of Norway's kittiwake populations (Sandvik et al. 2014). This article sets the stage for the appearance of kittiwakes in cities, outlining the decline in oceanic populations in much of the north Atlantic, and steep declines in Norwegian coastal colonies.

3.6 **Discussion and conclusion to the literature review**

Although the aim of this study is to inquire how kittiwakes are framed rather than why, understanding the emotional and cognitive reasons behind the conflict will shed light on the choices journalists have made on this topic. Studies on how people apply pre-established heuristics when thinking about wildlife conflict, and the influence of emotion in assessing risk, suggest that some aspects of seagull conflict are a framing problem rather than a wildlife problem. While the framing and vilification of seagulls has been explored in the United Kingdom, this study explores a new angle where the vilified species is not actually responsible for some of its attributed "crimes".

Studies on Norwegian local media agree that local news outlets remain important in forming opinions and influencing local elites, despite a move to paywalled material and shift to digital consumption. I am therefore confident in assuming that local media reporting on this issue is relevant to my study. Data on readership and studies on the influence of *NRK* and *Nordnorsk Debatt* have further helped me to refine my list of relevant media to the most read and influential sources locally.

Finally, the lack of literature shows a gap in knowledge of urban kittiwakes, and limited resources for campaigns to support coexistence. By increasing our understanding of local media's approach to this conflict, I hope to provide guidance for effective conservation-focused communications.

4 Research method

4.1 Framing, from theory to method

The theory of framing can be applied in a systematic way to convert qualitative content, like news articles, into reliable and valid quantitative data through coding.

Advantages of content analysis include the applicability to longitudinal analysis and the unobtrusive nature; that is, the content of the documents is not influenced by the researcher as it may be in live interviews (Bryman, 2012). According to Hsieh & Shannon (2005), qualitative analysis works well for a discrete phenomenon that does not already have an existing body of literature. The benefit of this approach is that it avoids preconceived categories, allowing coding systems to be derived from the text (p. 1279).

Bryman (2012) describes a structured approach to analyzing written and visual content. The author defines the two key characteristics of content analysis as (1) objectivity, that is, clear rules and transparency and (2) a systematic approach, applying rules consistently to reduce researcher bias. Ideally, any researcher could apply the rules to the same material and come to the same results.

When analyzing content, Entman (1993) cautions that it is not enough to simply count the frames, identify them as positive or negative, and draw conclusions. Rather, he calls on coders to consider the salience — how does the framing relate to the audience's pre-existing schemata? This can help coders identify the frames that will be most influential. This study considers both cultural archetypes and the way that conflict is used to increase salience.

4.2 Operationalizing the questions

This study begins by considering how to answer the research questions with the selected source material, newspaper articles from Tromsø media.

4.2.1 What frames are used for urban kittiwakes?

This analysis will uncover what frames are used in articles focused on kittiwakes. Few articles mentioned kittiwakes before they began nesting in the city in 2015, so I focus on the period 2015-2022. Relevant questions include:
- What problem is identified?
- What/who is the problem attributed to?

- What actors are mentioned?
- What do the images show? (e.g., people, birds)
- What solutions are suggested?

4.2.2 How has media framing of urban kittiwakes in Tromsø changed over time?

This section considers the balance of frames used each year for kittiwakes from 2015 to 2022. Relevant questions include:

- Has the balance of frames changed?
- Has the definition of the problem changed?
- Has the attribution of the problem changed?
- Have the actors changed?
- Have the types of images used changed?
- Have the suggested solutions changed, or become more prominent?

4.2.3 How does the identification of kittiwakes relate to the frames used?

Because kittiwakes and *Larus* gulls behave quite differently, it is possible to note the species identified in each unit and compare the ascribed behaviour to the actual behaviour. The study's timeframe ranges from 2010 to the present day, allowing for a five-year baseline of framing before kittiwakes arrived. Relevant questions include:

- What behaviours and conflicts were attributed to seagulls before the arrival of kittiwakes?
- How often are kittiwake behaviours attributed to seagulls (i.e., the broader group)?
- How often are *Larus* gull behaviours attributed to kittiwakes?
- Does misattribution change over time?

4.3 Ensuring the quality of data and methodology

Potter and Levine-Donnerstein (1999) place particular importance on the validity and reliability of content analysis, particularly when the results will be used to inform action. First, they ask researchers to consider the nature of the content. Is it manifest (words, actions, or other concrete signals) or latent (the meaning behind the signals)?

This study focuses on manifest content because it deals largely with independent variables that are not subject to interpretation — the actual behaviour of a species, its numbers and presence in a city, and whether the interpretation of those facts is objectively correct. In addition, coding latent content requires a deeper understanding of how individuals in the

culture will interpret messages. In order to improve intercoder validity, the code matrix requires minimal interpretation.

At the same time, Potter and Levine-Donnerstein (1999) warn against coding systems that are so literal that items are grouped together in nonsensical ways, using the example of humorous slapstick violence and lethal violence in television shows being coded simply as "violence" (p. 261). In this study's articles, satire is sometimes used to suggest humorous "solutions", such as shooting troublesome birds or abandoning the city. This can be addressed through norm-based coding, where the accurate code is the one that most coders agree upon (p. 270). In this study I tested my codes in two rounds with a group of volunteers and amended the codes accordingly for greatest reliability.

4.3.1   Objectivity

While no researcher can be completely objective, it is possible to reduce subjectivity and cultural bias, and to be aware of one's own biases. Van Gorp (2005) outlines a procedure to reduce cultural bias in coding and interpreting frames.

First, Van Gorp suggests looking beyond the news to identify broader cultural frames in other source material (p. 488). Although this study includes only news articles, it integrates cultural archetypes (villain/victim/hero) that are common to cultures around the world.

To develop objective codes, Van Gorp (2005) suggests an open approach that considers not just facts, but what the journalist has chosen to include (p. 487). These codes should then be arranged around overarching ideas. My study's system is based on Entman's (1993) four frame elements, which comprise a standard narrative structure of problem, diagnosis, judgement and solution. This allows for simpler coding that requires less interpretation. Per Matthes and Kohring (2008), this largely deductive approach can reduce bias, but has the downside of inflexibility. Because this is an emerging topic, some inductively produced categories (e.g., types of conflict, mentions of kittiwakes or other species) add flexibility without sacrificing reliability. From the resulting grouping of these frame elements, frames can be deduced.

4.3.2   Validity

To establish validity in a coding system, Potter and Levine-Donnerstein (1999) recommend two steps: First, the coding scheme should be designed with clear rules and categories. These rules can be guided by a theory. If content requires interpretation beyond simply counting

words, it should be clear how the coders should interpret the code and how it's judged to be significant enough to include. Van Gorp (2010) also advises limiting the frame matrix to items that are mutually exclusive.

Secondly, Potter and Levine-Donnerstein (1999) write that there should be a standard against which data can be compared. Manifest content is objective, while pattern content is more subjective. The coding scheme must make the standard clear, and the codes should be the same whether an expert or a layperson uses the system (p. 261).

My study takes validity into account by (1) developing simple codes with clear rules and categories, guided by theory; (2) keeping the units of coding clear: one article consisting of headline, lead and main image; and (3) analyzing manifest rather than latent content wherever possible. I have developed the codes from an open process, identifying simple and unique possibilities. For example, what species is identified or pictured? Is there a person in the picture?

4.3.3   Reliability

Reliability refers to the consistency of the method. Potter and Levine-Donnerstein (1999) describe three elements of reliability: (1) stability, that is coders should have the same results if they return to the same material after a long period; (2) reproducibility, that is, getting the same results with different coders using the same code scheme; and (3) accuracy, comparing the codes of average coders to experts (pp. 270-271). The authors note that a full measure of accuracy is not always feasible, so reproducibility is the standard.

According to Potter and Levine-Donnerstein, coder fatigue and mistakes in applying coding rules threaten the reliability of codes (p. 271). Van Gorp (2005) suggests minimizing coding interpretation with mutually exclusive categories. In my study, for example, coders answer yes/no to a question such as "does the story mention kittiwakes"?

This study addressed reliability by using clear, simple codes and limiting coding sessions to reduce fatigue, having as many people as possible re-code a subset of the work, and re-assessing codes that are seldom used or often confused. The coders were not subject matter experts, and two of ten had previous experience in social science research.

4.4   Systematic approach

There are three steps to the qualitative content analysis process as described by Hsieh &
Shannon (2005): (1) assembling the source texts; (2) developing codes; and (3) analyzing the
texts.

4.4.1   Assembling the source texts

Using the AText/Retriever archive of Norwegian newspapers, I selected articles using the
search term intros:(krykkje OR krykkja OR krykkjene OR måse OR måser OR måsene OR
måke OR måker OR måkene) for titles and leads from 2010 to 2022 in *iTromsø*, *Nordlys /
Nordnorsk debatt*, and *NRK Troms og Finnmark* (previously *NRK Troms*). After noting some
articles that did not appear in this search, I added the search terms intros:(måse*) and
intros:(krykkj*), which yielded additional results.

I selected this timeframe because kittiwakes began nesting in the city in 2015, and this allows
for a multi-year baseline of media framing of both kittiwakes and other seagull species. The
chosen media outlets have the highest readership in Tromsø (see Chapter 3.4.3, The media
landscape). Print and digital versions sometimes cover the same story with different headlines
or images. Where this is the case, the digital version is preferred due to higher readership and
ease of sharing.

After I discarded those articles that did not mention seagulls or kittiwakes and accounted for
duplicates, 293 articles remained. Each article's unique ID, title, date and source was
recorded. (see Annex 2: Coding matrix).

4.4.2   Developing and refining codes

Several researchers offer methods for developing a reliable coding system. Hsieh and
Shannon (2005) write that letting frames "flow from the data" is appropriate when there is
little pre-existing research. Tankard (2001) outlines a method for defining entire frames,
allowing an entire article to be coded at once. Tankard's method entails a small, clear set of
overall frames that coders can choose between, while symbols and keywords help coders
choose reliably.

I use a mix of the approaches suggested by Entman (1993), Hsieh and Shannon (2005), and
Tankard (2001). A primary set of codes (Table 4.1) breaks down Entman's (1993) frame
elements into mutually exclusive options that together suggest a narrative approach. The
options "flow from the data" (Hsieh and Shannon, 2005), and include stakeholder types,

definition and attribution of the problem, and the solution presented, if any. Entman's (1993) suggested frame element "Defining a problem" is the type of conflict, drawn inductively from the source material. "Diagnosing a problem" is the blame for the problem attributed in the article. "Suggesting remedies to the problem" is the suggested solution, if any. Entman's fourth frame element, "Judging the problem", is not included because a moral aspect was not clearly apparent in most articles. For each element, the code categories were grouped by similarity, or in the case of problem diagnosis, by the species (kittiwake or other gull) to which they are relevant.

From the groupings of these elements, groups of broader frames emerge. It is possible to attribute groupings to frames such as "victim" and "villain", and code entire articles in this way as described by Tankard (2001). This process is detailed in chapter 4.4.3.

The unit of study is the headline, lead, and main image of each article. Prior research (Pan and Kosicki, 1993; Gibson and Zillmann, 2000) shows that these are the most salient parts of an article. Information that evokes emotion and influences risk response is the focus of this study because these responses affect support for mitigation measures and conservation (Hudenko, 2012). In addition, the rise of paywalls means that the photo and headline are often the only elements available to non-subscribers. Even readers who engage with the article may only be reacting to the headline, title and summary: a large-scale study of social media (Gabielkov et al., 2016) found that a majority of links shared on social media were not clicked by the sharer. Conflict decision making has been identified as primarily emotional (Hudenko, 2012), thus lead images are a key focus of this study. Manifest elements of the photo were chosen as indicators for the likely emotional response and latent meaning to improve the reliability of the data.

Table 4.1 Initial coding matrix

Source

1	*iTromsø*
2	*Nordlys / Nordnorsk Debatt*
3	*NRK Troms (og Finnmark)*

Sections A-E apply to the text only.

A. ACTOR: Is this group (or a member of this group) mentioned?

a.1 Researcher/Scientist/museum/university

a.2 NGO / organization / naturvernere

a.3 Business / building owner

a.4 Politician / Municipality

a.5 Journalist/Editorial/Media

a.6 Police/Fire

a.7 Other resident

B. Are kittiwakes mentioned by name?

  b.1 Kittiwake (krykkje) mentioned

C. Is a problem mentioned?

  c.1 Economic (tourism loss, fines, damage to property)

  c.2 People's attitudes or opinions

  c.3 General presence of gulls (includes "måseproblemet")

  c.4 Smell / noise / mess / droppings

  c.5 Attacking / taking food / eating garbage

  c.6 Physical harm to birds / threats to populations

D. Is a cause of the problem mentioned (e.g., the seagulls are damaging..., the media is overstating...)

  d.1 Seagulls / kittiwakes

  d.2 Residents / people (non-media)

  d.3 Media

  d.4 Municipality

  d.5 Loss of habitat / climate / predation

E. Is a solution to the problem mentioned?

  e.1 cooperate / avoid conflict / pay fine / legal or financial ramifications / change policy / secure garbage (passive)

  e.2   create alternate nests/hotels / help or advocate for birds (actively help)

  e.3 remove or scare away birds / stop them from nesting or breeding (actively hinder)

F. If Image: Are there people?

  f.1 Yes, expression unclear / not visible / mixed

  f.2 Yes, expression positive (smile, laugh)

  f.3 Yes, expression neutral

        f.4   Yes, expression negative (anger, alarm, annoyance)

  G.   If Image: Are kittiwakes or their nests/droppings depicted? *
        g.1   kittiwake or its nests/droppings depicted
        g.2   other seagull depicted

HOW TO ID KITTIWAKES: A kittiwake has black legs and black wingtips with no white spots. Alternatively, they are the only urban gulls in Tromso that nest in groups on the sides of buildings and concentrate droppings in one place.
NOT KITTIWAKES: gulls with white or checkered wingtips, with brown markings, with a red or black dot on the bill, with yellow eyes, with yellow, pink or grey legs, a single nest on a flat roof
IF UNCLEAR: code as other seagull

4.4.3   Analyzing the texts

Finally, I applied the coding system to each unit, amending codes as needed to reduce overlap between categories. I read the source materials first in Norwegian, then with Google Translate to confirm meaning and unfamiliar terms in English.

4.4.3.1   Coding

If codes were rarely used, I adjusted those codes either by combining similar codes or creating new ones, and then testing and re-coding the affected articles.

4.4.3.2   Re-coding, round one

To reduce researcher bias, I followed the example of Carey et al. (1996) by having others re-code a subset of the work once my coding of all articles was complete. Using a random number generator, I selected 10% of the articles found at the time (22) for the first round of re-coding. Four coders, including two fluent in Norwegian and two with advanced degrees in social science, were given a brief explanation of the coding system, a visual guide on identifying kittiwakes, and the headline, lead and image from each article in the subset in both Norwegian and English. The coders recorded answers in a matrix.

I compared the coders' answers to mine to check reliability by calculating rate of error. Most categories had a high rate of relative reliability (>0.8). The low reliability of a few code categories prompted changes to the coding system:

- The category Actor: a2 NGO / organization / naturvernere was not reliably identified (.6). This category was clarified for the second round of re-coding to "[a2] Non-profit organization (e.g., an environmental or wildlife group)".
- Few coders (.33) identified "Problem: c3 General presence of gulls (includes måseproblemet)", even when no other specific conflict was identified. However, for the two categories most important to this study, which indicate the species behaviour being discussed, agreement was high: c4 (.9) and c5 (1). For the second round of re-coding, this category was amended to [c3] General presence of birds (no other specific problem mentioned) so it would be clearer that it functions as an "other conflict" category.
- The coding of facial expressions in photographs proved to be particularly unreliable. The question was condensed to simply whether people were in the image.
- The category "Solution: e2 Create alternate nests/hotels / help or advocate for birds (actively help)" was also low in reliability (.48). In the second round of re-coding this was rephrased as "[e2] Help birds (e.g., create alternate nests/hotels / help or advocate for birds / save birds)" to make it clearer that the examples are not an exhaustive list, and that "help" is the key definition.

Based on the first round of re-coding, I updated the coding matrix to improve its reliability (Table 4.2) and had another group recode a smaller selection of articles.

Table 4.2 Revised coding matrix

- A.   ACTOR: Is this group (or a member of this group) mentioned?
  - a1   Researcher/Scientist/university
  - a2   Non-profit organization (e.g., an environmental or wildlife group)
  - a3   Business / building owner
  - a4   Politician / Municipality
  - a5   Journalist/Editorial/Media
  - a6   Police/Fire
  - a7   Other resident

- B.   Are kittiwakes mentioned by name?
  - b1   Kittiwake (krykkje) mentioned

- C.   Is a problem mentioned?
  - c1   Economic (tourism loss, fines, damage to property)

       c2   People's attitudes or opinions

       c3   General presence of birds (no other specific problem mentioned)

       c4   Smell / noise / mess / droppings

       c5   Attacking / taking food / eating garbage

       c6   Physical harm to birds / threats to populations

D.   Is a cause of the problem mentioned (e.g., the seagulls are damaging..., the media is overstating...)

       d1   Seagulls / kittiwakes

       d2   Residents / people (non-media)

       d3   Media

       d4   Municipality

       d5   Loss of habitat / climate / predation

E.   Is a solution to the problem mentioned?

       e1   Passive (e.g., cooperate / avoid conflict / legal, policy or financial outcomes)

       e2   Help birds (e.g., create alternate nests/hotels / help or advocate for birds / save birds)

       e3   Hinder birds (e.g., remove or scare away birds / stop them from nesting or breeding)

F, G   Image

       f5   There is a person or people in this image

       g1   There is a kittiwake or its nest/droppings in this image

       g2   There is another type of gull — not a kittiwake — in this image (or not sure)

HOW TO ID KITTIWAKES: A kittiwake has black legs and black wingtips with no white spots. Alternatively, they are the only urban gulls in Tromsø that nest in groups on the sides of buildings and concentrate droppings in one place.

NOT KITTIWAKES: gulls with white or checkered wingtips, with brown markings, with a red or black dot on the bill, with yellow eyes, with yellow, pink or grey legs, a single nest on a flat roof

IF UNCLEAR: code as other seagull

4.4.3.3 Re-coding, round two

In re-coding round two, eight new coders were presented with a new, random selection of 11 articles (5% of the total) and the revised code matrix. All coders were provided with brief training on how to identify kittiwakes with visual aids, and the text, photos and questions in the form of a survey (Google forms). The absolute and relative error of the coders' choice relative to the author's were calculated and found to be overall more reliable than in round one. The lower number of articles in this round presented some challenges in calculating reliability:

The low reliability (.38) of code a5 (actor: journalist/media) appeared to be related to low recognition of the newspaper *Nordlys* as a media outlet (none of the coders in this group lived in Norway). Only one article in this category was included in this round. This code was little used overall, and not relevant to the conclusions in any case.

Code c4 (Problem: smell / noise / mess / droppings) had low reliability in this round (.44), with most re-coders choosing the less specific c.3, Problem: general presence of gulls. This appeared to relate to the word "kakler" or "cackling", which was not perceived by the coders as relating to noise. Because c.4 had a reliability of .9 in the first round, and the text manifestly refers to noise, this category was still considered reliable.

4.4.3.4 Finding frames from frame elements

Finally, I converted the coded elements to overall frames. Matthes and Kohring (2008) outline a methodological approach to finding frames from clusters of frame elements. They included only variables that appeared at least 5% of the time and they separated the analysis into time periods. This is also relevant for this study, where kittiwakes did not nest in the city before 2015. Therefore, the articles can be divided into three groups:
1. 2010-2014 *Larus* gulls
2. 2015-2022 *Larus* gulls (kittiwakes are not mentioned or pictured)
3. 2015-2022 kittiwakes (kittiwakes are mentioned or pictured)

Per Van Gorp (2005), the frame categories reflect common cultural archetypes with a narrative element. This approach works well with Entman's frame elements (1993), as they follow a narrative order as well: the problem, the cause and the solution. Johannessen (2011) examined the most shared opinion articles in major Norwegian newspapers, identifying additional frames such as satire/humour and deliberation/debate. I have defined frames for this study thusly:

- In the Villain frame, the blame for conflicts between people and birds is assigned to birds.
- In the Victim frame, the blame for conflicts between people and birds is assigned to people.
- In the Hero frame, birds are the focus of the story and there is no conflict mentioned.
- In the Debate frame, more than one perspective on the blame for conflict is included.
- In the Satire frame, the approach is predominantly humorous. Although it is difficult to identify satirical articles in a standardized way because humour is relative, those that criticized media coverage and suggested obviously outlandish solutions (shooting all the seagulls in the city with a handgun, firing fishcakes from a cannon to attract more seagulls) were assigned a Satire frame for further consideration. These generally had elements of the Victim frame as well.

All articles were covered by the conversion table (Table 4.3). I reviewed each manually. Because of the smaller number of frames used compared to Matthes and Kohring's study (2008), only results with more than 20% of a given cause attributed to a conflict have been included.

Table 4.3 Converting frame elements to frames

Conflict	Cause	Framing of birds
c1. Economic	d1. Seagulls / kittiwakes	Villain
c2. Human attitudes	d2. Residents or d3. Media	Victim
c3. Presence of gulls	d1. Seagulls / kittiwakes	Villain
c4. Smell, noise, mess, droppings	d1. Seagulls / kittiwakes	Villain
c3. General presence of birds	d1. Seagulls / kittiwakes	Villain
c5. Attacking / taking food / eating garbage	d1. Seagulls / kittiwakes	Villain

c6. Physical harm to birds / threats to populations	Any	Victim
No conflict	N/A	Hero
Human and bird	d2. Residents or d3. Media AND d1. Seagulls / kittiwakes	Debate
Any, satirical	Any	Satire

The identified frames were then used to answer the study questions (See Chapter 6: Discussion).

4.5   Limitations

4.5.1   Limitations of language and culture

I am not a native Norwegian speaker, and thus consider this issue as an external observer, albeit one with professional communications experience regarding wildlife conflict in Europe and North America. To overcome limited innate understanding of Norwegian social structures or media context, I draw upon research on the role of local media in Norway to put the work in context. In addition, fluent Norwegian speakers re-coded a subset of the articles.

4.5.2   Limitations of content analysis

Bryman (2012) discusses potential challenges with content analysis. First, the documents must be credible and exhaustive. While local news remains a powerful force for opinion shaping in Norway, social media is undeniably growing in influence. Because this issue is purely local, local newspapers remain a credible source for this study. However, the choice to focus solely on traditional media limits the generalizability of the results somewhat. In locations where local news plays little role in opinion formation, researchers should consider other content for analysis.

Bryman (2012) also writes that content analysis is better suited to answer *what* has occurred rather than *why* something has occurred. Particularly because of limitations in culture and language, this study does not make assumptions about why the media chose particular frames. Instead, it is concerned with identifying the frames they have chosen.

4.6 Ethics

No individuals were contacted other than the volunteer coders. There are no human subjects, and all statements have been collected from public sources. Information gained from personal communication is used with permission.

5   Results

5.1   Frames and cultural archetypes — overall

The following tables give an overview of the five frames and their proportions by group and by media outlet. To determine significance compared to the baseline of *Larus* gulls from 2010-2014, I have noted which frames vary by more than 20%. Where there is no set control group, as in Table 5.2, I instead have noted frame proportions that vary 20% from the mean. Although this method may not pick up slightly significant results, I am most interested in exploring larger shifts. Discussion follows in chapter 6.

Table 5.1 Frames by group, overall

	Larus gulls 2010-14 (n=51)	*Larus* gulls 2015-22 (n=134)	Kittiwakes 2015-22 (n=100)
Victim	0.39	0.40	0.36
Villain	0.30	0.47*	0.48*
Hero	0.20	0.10*	0.12*
Debate	0.00	0.03	0.03
Satire	0.02	0.05	0.01

* Greater than 20% variance from *Larus* gulls 2010-2014

Table 5.2 Frames by media outlet

	iTromsø (n=88)	Nordlys (n=170)	NRK (n=35)
Victim	0.48	0.32*	0.46
Villain	0.42	0.47*	0.29*
Hero	0.08*	0.14	0.17*
Debate	0.01	0.02	0.09
Satire	0.01	0.04	0.00

* Greater than 20% variance from frame mean, N/A for satire and debate due to low sample size (7 of each).

5.2   What frames are used for urban kittiwakes?

The following tables delve into the frame elements used in articles where kittiwakes were explicitly named, pictured, or referred to via their unique characteristics, such as colonial nesting, from 2015-2022. Because of the low sample size of the debate and satire frames, they are not included here.

Table 5.3 Who is mentioned in articles dealing with kittiwakes?

	Researcher	NGO	Business / building	Politician / Munic.	Media	Police/Fire	Other resident
Victim (n=38)	0.33*	0.11	0.08	0.17	0.06	0.06	0.17
Villain (n=48)	0.13	0.02	0.21	0.25*	0.06	0.00	0.21
Hero (n=12)	0.33*	0.08	0.00	0.25	0.08	0.00	0.25

* Most frequent in this frame

Table 5.4 Is a problem mentioned in articles dealing with kittiwakes?

	Economic (tourism loss, fines, damage to property)	People's attitudes or opinions	General presence	Smell / noise / mess / droppings	Attacking / taking food / eating garbage	Physical harm to birds / threats to populations
Victim (n=38)	0.03	0.42	0.00	0.06	0.00	0.56*
Villain (n=48)	0.06	0.00	0.54*	0.44	0.02	0.00

* Most frequent in this frame.

N.B. The hero frame does not include a problem by definition.

Table 5.5 Is the cause of the problem mentioned in articles dealing with kittiwakes?

	Seagulls / kittiwakes	Residents / people (non-media)	Media	Municipality	Loss of habitat / climate / predation
Victim (n=38)	0.14	0.36*	0.08	0.14	0.03
Villain (n=48)	0.96*	0.00	0.00	0.00	0.02

* Most frequent in this frame

Table 5.6 Is a solution to the problem mentioned in articles dealing with kittiwakes?

	Passive	Help birds	Hinder birds
Victim (n=38)	0.19	0.31*	0.00
Villain (n=48)	0.10	0.25	0.31*

* Most frequent in this frame

Table 5.7 What images are used to illustrate articles dealing with kittiwakes?

	People only	Birds only	People and birds
Victim (n=37)	0.05	0.68*	0.27
Villain (n=45)	0.13	0.53*	0.33
Hero (n=10)	0.10	0.60*	0.30

* Most frequent in this frame

5.3 How has media framing of urban kittiwakes in Tromsø changed over time?

Although kittiwakes began nesting in Tromsø in 2015, the media did not take much notice until 2020. There were fewer than ten articles about kittiwakes per year from 2015 to 2019, and so I have omitted those years from this section.

Table 5.8 Frames used for kittiwakes by year

	Victim (n=39)	Villain (n=50)	Hero (n=12)
2020	0.65*	0.25	0.05
2021	0.44*	0.44*	0.06
2022	0.18	0.55*	0.20

* Most frequent frame by year

N.B. Years with fewer than 10 articles omitted.

Table 5.9 Most frequent frame element for kittiwakes by year

	2020 (n=20)	2021 (n=18)	2022 (n=49)
Actor	Business / building owner (.25) Politician / Municipality (.25)	Researcher (.28)	Politician / Municipality (.25)
Problem	People's attitudes or opinions (.35)	General presence of birds (.28)	General presence of birds (.37)
Cause	Seagulls / kittiwakes (.35)	Seagulls / kittiwakes (.39)	Seagulls / kittiwakes (.63)
Solution	Passive (.35)	Passive (.28) Help (.28)	Help (.29)
Image	Kittiwake (.93)	Kittiwake (1.00)	Kittiwake (.90)
ID	Seagull (.75)	Seagull (.66)	Seagull (.51)

N.B. Years with fewer than 10 articles omitted.

5.4   How does the identification of kittiwakes relate to the frames used?

In the preceding results regarding kittiwakes, I have included all articles where kittiwakes were named, pictured, or referred to through unique behavioural characteristics. In this section, I divide the results for kittiwakes by whether the name kittiwake (krykkje) was used in the article, or if instead they were considered "seagulls". The goal is to understand if specific identification is related to the article's framing.

Table 5.10 How frequently kittiwakes were identified by name (krykkje), by year

Year	2020 (n=20)	2021 (n=18)	2022 (n=49)
% units using the word krykkje	0.25	0.33	0.49

Overall, kittiwakes were specifically identified as kittiwakes in 38% of articles, and more broadly as seagulls in the remaining 62%.

Table 5.11 How frequently kittiwakes were identified by name (krykkje), by frame

Frame	Specific (kittiwake)	Broad (seagull)
Victim	0.41*	0.39
Villain	0.46	0.50*
Hero	0.14*	0.11

* Most frequent frame

6   Discussion

The discussion begins with an exploration of the frames and frame elements that have arisen from this study, with interpretation based on the literature reviewed in earlier chapters. The following subchapters answer each of the research questions in turn. I conclude with a summary of the study findings.

6.1   General frames for Larus gulls and kittiwakes

Three dominant frames and two minor frames emerged from the frame elements used in coding, each with a characteristic pattern of actors, problems, causes, solutions, and image choices. In this section, I explore each frame in greater detail, with trends and examples.

6.1.1   Birds are the problem: the villain frame

Figure 6.1 A typical villain-framed article

> "This is how the municipality will fight the seagull problem in the city" [Translation mine]. *Nordlys*, 21 April 2019

The villain frame is characterized by a focus on problems attributed to seagulls, particularly the impacts of seagull conflict on the people in the city.

Some common themes in this frame include:
- interviews with residents and business owners who are affected by seagulls, either due to droppings, attacks, or damage to buildings;
- a broad focus on the "seagull problem", or the number of seagulls present in the city. The words used in this theme often invoke high emotion: "pure nightmare"[3], "battle"[4], "terror in the streets"[5], "tormentors"[6] and "like something out of a horror film"[7]. Seagulls are accused of destroying the city center[8], keeping an elderly woman captive in her home[9] and attacking a right-wing politician[10]. Tromsø's nickname, "the Paris of the North", is invoked as a standard to be upheld. One article is titled "Paris is full of rats, but in Tromsø they fly"[11] [all translations mine].

Overall, residents, business or building owners, and politicians or the municipality are featured most often. These groups are impacted by, or required to deal with, the presence of seagulls.

Interestingly, the most common problem cited in the villain frame is not specific, but the general presence of seagulls in an urban setting (46%). These articles often lead with novel compound words, including måseproblem (seagull problem), måseplage (seagull plague), måseterror (seagull terror) or måsekaos (seagull chaos). These words rarely seem to be used in a satirical way and suggest a shared understanding between author and reader that urban seagulls are inherently a problem. When more specific problems are mentioned, 27% of articles feature behaviours like attacking, stealing food and eating garbage. This behaviour is exclusive to *Larus* gulls in Tromsø. A further 18% mention noise, mess or droppings — problems that are associated with kittiwakes. Economic concerns are less common but focus on the impact of urban seagulls on city businesses.

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[3] "Naboene mener de blir syke av fuglenes «øredøvende leven»: - De siste somrene har vært et rent mareritt" *Nordlys*, 27 April 2019.

[4] "Skolen er dekket av måskeskitt: - Vi tapte kampen". *Nordlys*, 14 July 2018.

[5] "Bygde måse-hotell for å få slutt på terror i gatene". *Nordlys*, 27 July 2020.

[6] "Må se etter nytt hjem - slik skal de bli kvitt plageåndene". *Nordlys*, 20 November 2020.

[7] "Fant flere døde fugler og mengder av skitt på fortauet ved kjøpesenter: - Det var som tatt ut av en skrekkfilm". *iTromsø*, 1 July 2022.

[8] "Frykter bymåsen ødelegger sentrum - Folk tør ikke spise is utendørs lenger". *NRK*, 16 July 2020.

[9] "Måsene holder Dagmar (98) "fanget" i eget hus". *Nordlys*, 14 June 2015.

[10] "Høyre-politiker angrepet av måse: - Trodde jeg ble påkjørt av en bil". *iTromsø,* 19 June 2018.

[11] "Flertall vil ha måkene vekk: - Paris er full av rotter, men i Tromsø flyr de". *NRK*, 10 August 2022.

Despite the negative tone, the suggested solutions are fairly evenly distributed between passive approaches like policy changes, actively helping birds, or actively hindering them.

Of the three common frames, villain articles were most often accompanied by photos of people alone, without birds. Articles with a villain frame were more likely than victim frames to include a picture of a person (a marker of conflict images), but only somewhat less likely to show a bird.

6.1.2   We are the problem: The victim frame

Figure 6.2 A typical victim-framed article

FOTO: BÅE, TORSTEIN

"Why are we so mean to the seagulls?" [Translation mine]
iTromsø, 22 May 2019

The victim frame is characterized by a focus on harm to seagulls, or the negative attitudes of people towards these species.

In this frame, actors speak up for better cooperation or care for birds. The most common actors mentioned in victim-framed articles are residents, organizations and police or firefighters. The latter are generally in the context of rescuing birds or investigating human abuse of birds. When organizations are mentioned, in most cases it is an editorial by a representative of that organization. Business owners and media are rarely mentioned.

Several themes emerged in the victim frame:
- Human-caused injuries and killing of *Larus* gulls, and the resulting police involvement. These were among the most common articles prior to 2020.
- Kittiwakes denied access to their nests because the building owners have put up deterrents, or physical harm to seagulls from deterrents. Here, firefighters or police officers may be involved in the rescue effort.
- Criticizing criticism: generally in the form of editorials, these articles criticize the media or residents and urge compassion towards urban seagulls.

Surprisingly, the climate and habitat loss messages championed by researchers in interviews only appeared twice in any of the samples, and once in victim-framed articles. Instead, the cause of the problem is overwhelmingly identified as people (68%), either in attitude or action. The birds themselves are the cause 15% of the time, for example when they become trapped and are later rescued.

Articles that suggest a solution are split 50-50 between passive action and active help for birds. Active help includes the building of kittiwake hotels and rescuing injured or trapped birds, while passive action includes greater cooperation or policy change. Compared to the villain frame, victim articles are much less likely to encourage hindrance of birds.

Of all the frames, victim articles were least likely to show people alone (6%). About a third (36%) of victim articles included people in the images, compared to 72% picturing birds, alone or with people. This result aligns with the tendency of these articles to focus on impacts to birds rather than people.

6.1.3 Co-existence: Birds as heroes

Figure 6.3 A typical hero-framed article

Forskere vil at du skal telle alle måkene du ser

Hvor mange måker lever egentlig i norske byer? Norsk institutt for naturforskning ønsker en oversikt, og oppfordrer deg til å bli med på en telle-dugnad.

> "Researchers want you to count all the seagulls you see" [Translation mine]
> *NRK*, 14 April 2016

Articles using the hero frame are characterized by a conflict-free focus on *Larus* gulls and kittiwakes. Despite the name, this frame does not always raise seagulls to the status of icon. Rather, they become part of the city, worthy of media coverage that doesn't skew negative.

Hero stories cluster around several general themes:
- humour and viral videos, including a nest-cam and contest to name the nest's inhabitants[12], nests in unusual places, a tug of war on a piece of bread between two

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[12] "Du kan bestemme hva bymåsen heter". *Nordlys*, 26 May 2014.

herring gull chicks[13], and the famous "spy" beluga Hvaldimir teasing a seagull with a fish[14];

- positive stories about people who have befriended or even adopted seagulls as pets[15];
- work to help kittiwakes, particularly the building of hotels[16];
- and researchers sharing information and tips about seagulls and their life cycle[17].

Researchers are mentioned more often than in other frames (25%). Otherwise, residents are the most common actors.

Unsurprisingly, images in the hero frame focus on birds. As a proportion of images, hero articles were most likely to show one or more birds alone, without people (72%), and least often showed people and birds together.

6.1.4   Both sides: the debate frame

The debate frame was little used and was characterized by multiple contrasting viewpoints in the headline and lead. Only 2% of articles used this frame. In many other articles, opposing viewpoints were included within the body text, but only one viewpoint was used in the headline and lead.

The low number of results makes conclusions challenging, but three of the seven articles referred to business or building owners. These articles dealt largely with the problems of economic concerns or the general presence of birds in the city. Most pinpointed birds as the cause of the problem. Solutions tended to be passively helpful, such as policy changes or better cooperation.

The focus of these articles was on people, and accordingly people were pictured more frequently than the satire frame. No debate articles showed birds without people.

6.1.5   The satire frame

The satire frame was also rarely used, applying to fewer than ten articles in the study. While it is difficult to make statistical determinations with so few units, one exchange is interesting

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[13] "Sjekk den måsekampen - vinneren vil overraske deg!" *Nordlys*, 20 August 2022.

[14] "Denne hvalvittige videoen må du se! Hvaldimir leker sei med måse". *Nordlys*, 3 September 2019.

[15] "Måseungen falt ut av reiret - nå har han blitt en del av familien Øynes". *iTromso*, 3 August 2018.

[16] "Her bygger kommunen måsehotell". Nordlys, 25 February 2022.

[17] "Forskere vil at du skal telle alle måkene du ser". NRK, 14 April 2016.

for its meta-commentary on the extremes of negative framing. Responding to a featured editorial from *Nordlys* suggesting the eradication of seagulls in the city (Fjellheim, 2022), an iTromsø journalist countered with an article titled "A gun is easiest" (Holstad, 2022):

> Now the seagulls have taken over Tromsø city. We have switched places in the food chain. They are upon us now. It doesn't matter that they are endangered, because now they threaten the city and the people who live here. So we have to kill them. It is the seagulls or us now [translation mine].

The author later comments in earnest:

> When a political editor in *Nordlys* advocates the public killing of seabirds that are red-listed, i.e. where the species itself is threatened, I can hardly believe what I am reading. In any case, it is difficult to spot a subtle sense of humour in the statement. Therefore, it must be taken seriously [translation mine].

Other articles in this frame are less serious, playing off the food-seeking behaviours of *Larus* seagulls. A restaurant owner received coverage for a mobile game where the player is a seagull in Tromsø stealing burgers, in a playful version of the villain frame (Johansson, 2021). In another story, an artist was interviewed by both *Nordlys* and *iTromsø* for his proposed cannon that would shoot fishcakes over the fjord to create art in the form of screaming clouds of seagulls (Viken, 2021). As the artist portrayed the birds as a benefit rather than downside of the installation, this could perhaps fit within the hero frame as well.

The solution in a satirical article can be difficult to define in literal terms. However, satirical articles can act to strengthen other frames indirectly. For example, Holstad (2022) could be seen as a satirical use of the victim frame to combat the villain frame.

6.1.6   Frames and images

The images chosen varied by frame. Although photos of seagulls attacking people and their food were common in the villain frame, photos of birds and people together were used about as frequently as in the victim frame. The hero and victim frames were mostly likely to use pictures of birds only, without people.
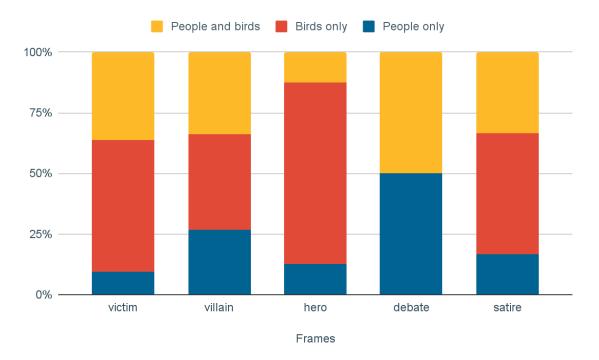
Coleman (2018) found that conflict images are more salient than other photos, and that is likely true for the articles studied here. Unfortunately, the low reliability of coding facial

expressions prevents a direct analysis in this study of how birds and people are portrayed together. Frequently, photos portrayed *Larus* gulls waiting near outdoor dining areas, or taking food directly from surprised diners. Whether such photos evoke laughter or frustration may be in the eye of the viewer. The research of Coleman and Wu (2006) suggests that if the reader perceives the photo as portraying conflict, it is likely to reinforce negative views.

Figure 6.4 Images by frame

Variance in the proportion of images used that showed birds only, people only, or both together.

6.1.7   Frames and news outlets

It must be noted that the peak of seagull nesting activity and newspaper coverage on the topic coincide with the journalistic "silly season". Known as "agurktid" (literally: "cucumber time") in Norwegian, this is the summer period where government agencies slow down and residents are on holiday, and less urgent stories may be featured in the news. In other words, most seagull articles appear at the time when readers are paying least attention (Figure 6.5).

However, these articles do have an impact on attitudes, as seen in the survey conducted by *NRK* and *Nordlys* last summer (NRK, 2022) An increase in local kittiwake knowledge can modify how residents incorporate these frames into their own views. As previously noted, people receive information actively, applying their previous knowledge and experience to new information.
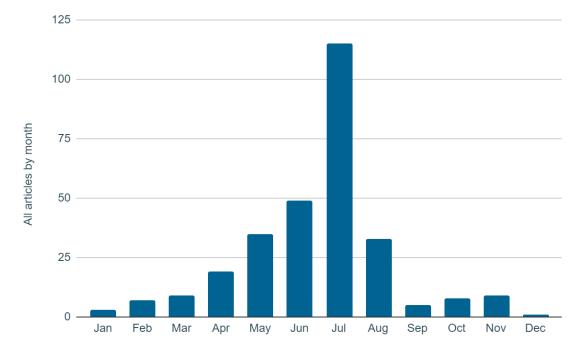
Figure 6.5 Distribution of all seagull articles in Tromsø local media by month, 2010-2022

The results suggest a slant to seagull-related stories that varies by outlet. The newspaper *Nordlys* skewed negative towards seagulls, employing a villain frame more often than the other outlets, and the victim frame least often. The negativity may be related to the relatively large percentage of commentary, editorial and debate articles in Nordlys. *iTromsø,* which features fewer commentaries than *Nordlys*, used the victim and villain frames roughly equally, and were least likely of the three to use the hero frame. *NRK* used the villain frame least often and was most likely to use the hero and debate frames. This could be related to *NRK's* role as a public broadcaster - they do not need to sell subscriptions, so there may be less editorial pressure towards eye-catching headlines.
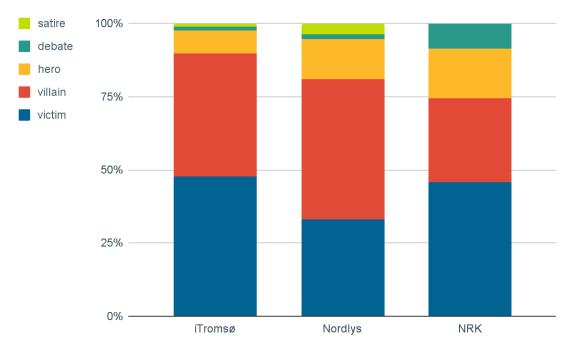
Figure 6.6 Framing of seagull articles by source

6.2   *What media frames are used for urban kittiwakes?*

In this section I look specifically at the frames used for kittiwakes and how they compare to those used for *Larus* gulls, both before and after urban kittiwakes began nesting in the city.
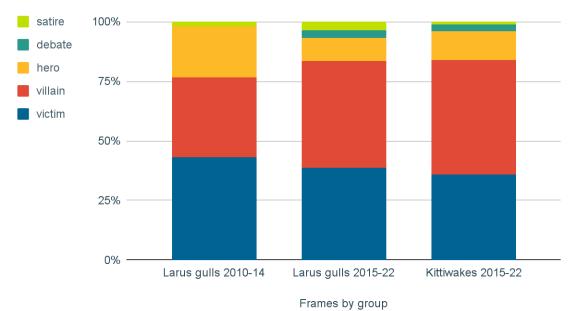
6.2.1   Overall frames for kittiwakes

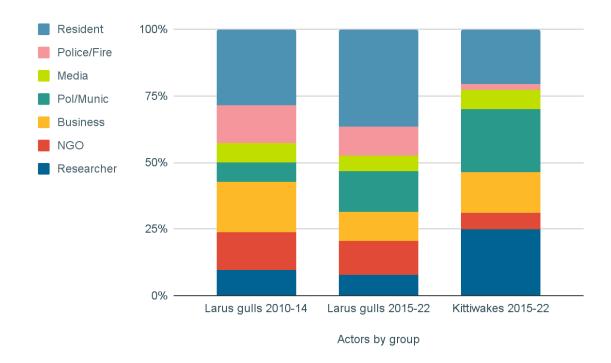**Figure 6.7 Frame proportions for kittiwakes and *Larus* gulls**

Compared to earlier reporting on seagulls, a significantly higher percentage of articles about kittiwakes used the villain frame, and fewer used the victim and hero frames. It is worth noting that the framing of *Larus* gulls changed as well after kittiwakes arrived, with more villain and less hero framing. With *Larus* gulls, however, the victim frame's frequency remained about the same after 2015.

The increased negativity towards *Larus* gulls as well as kittiwakes may be explained by the representativeness heuristic (Kahneman & Tversky, 1972). The authors posit that people tend to make judgements based on the group to which a subject belongs. Because kittiwakes and *Larus* gulls look very similar and can be difficult to distinguish, it holds to reason that the increase in conflict with kittiwakes affects attitudes towards all seagulls. Availability, a related concept coined by the same authors (Tversky & Kahneman, 1973), may also play a role. The high rate of coverage of seagull issues in local media make this conflict top of mind for news readers. The availability heuristic suggests that we tend to treat easily recalled information as more important. The recency of the information can also affect the strength of this bias. As most articles appear in peak nesting season in the summer, it can be assumed that conflict stories are more "available" at this time.

6.2.2 Actors and kittiwakes

Media showed a willingness to seek out experts and political representatives for articles about kittiwakes. These articles were significantly more likely to mention researchers and politicians/municipality than articles about *Larus* gulls or all seagulls. They were much less likely to mention organizations or police / fire services.

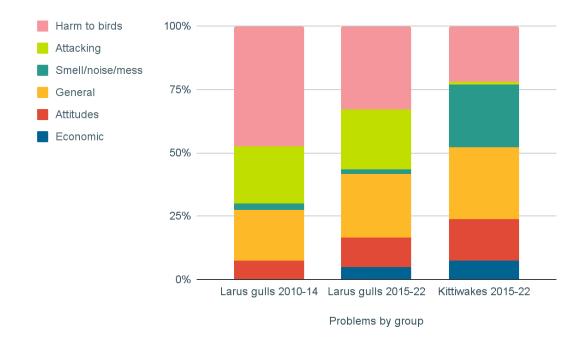**Figure 6.8 Actor frequencies by group**

6.2.3 Problems and kittiwakes

The predominant message shared by kittiwake researchers with the municipality is that kittiwakes are climate refugees in need of protection (T. Reitersen, personal communication, February 2023). Surprisingly, this message is nearly absent from the primary frame elements in kittiwake media articles.

Instead, articles focused on the attitudes or opinions; smell/noise/mess/droppings and the general presence of birds as the primary problems compared to earlier seagull coverage. Harm to birds was mentioned less often. When kittiwakes were named or pictured, the problem was rarely attributed to attacking or stealing food — correctly, as kittiwakes do not exhibit this behaviour. However, both *Larus* gulls and kittiwakes were more often framed as a problem of general presence after kittiwakes arrived. The economic element appeared for both *Larus* gulls and kittiwakes after 2015.

Figure 6.9 Problem frequencies by group

6.2.4   Solutions and kittiwakes

Compared to earlier *Larus* gull articles, the solutions proposed in kittiwake articles were significantly more likely to advocate active help for birds, such as building alternate nesting places. However, they were also more likely to advocate hindrance, such as preventing birds from nesting or removing them from the city. This result is expected, given the sudden increase in birds nesting in the city centre (Figure 6.13). There was not a notable difference in passive solutions such as policy change.
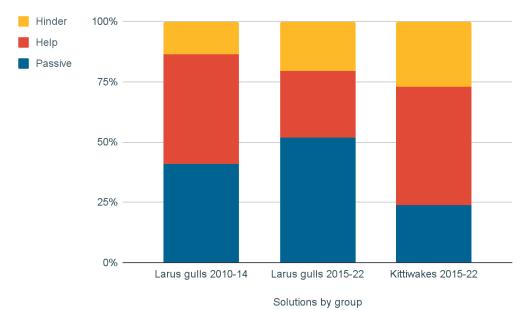
Figure 6.10 Solution frequencies by group

6.2.5   Use of images and kittiwakes

Kittiwake images tended to focus either on the birds, or people helping birds through the building of nesting sites or caring for chicks. Compared to the 2010-2014 sample, both *Larus* gull and kittiwake articles were significantly more likely to use photos of birds and people together. Kittiwake articles were much less likely to show pictures of people alone, without birds. This is likely because kittiwakes rarely interact with people and tend to nest high off the ground.
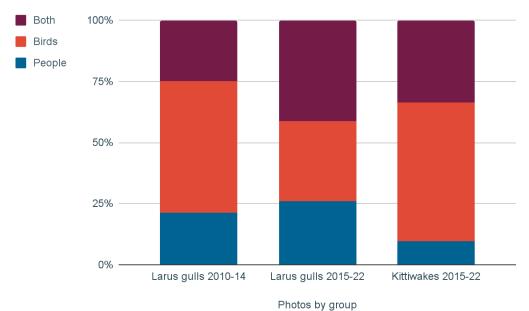
Figure 6.11 Image usage by group

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6.3   How media framing of urban kittiwakes in Tromsø has evolved over time

As noted by Van Gorp (2007), the frames themselves do not change much over time, but their frequencies do. Although kittiwakes arrived in the city in 2015, their numbers didn't skyrocket to hundreds of nests until 2021. We see a large increase in the number and proportion of villain articles that appear to correlate to the number of nests (Figure 6.12). This increase applies both to the articles about kittiwakes and other seagulls with more stable populations. Along with the increase, the villain frame became more common while the victim frame was used proportionally less often.

As will be discussed further in section 6.4, this frame is also characterized by the broad identification of kittiwakes as seagulls. While there was a clear trend in these articles towards more specific identification of kittiwakes, 51% of kittiwake articles in 2022 still referred only to seagulls.
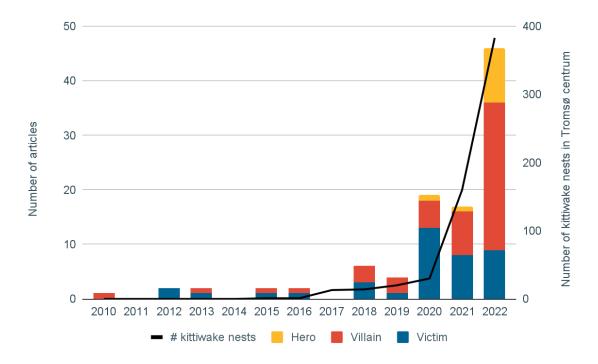
Figure 6.12 Number of articles and frames used for kittiwakes by year, and number of kittiwake nests in Tromsø centrum

Note: Series adapted from Benjaminsen et al. (2022).

Early articles about kittiwakes featured experts on the species and were less likely to refer to kittiwakes as seagulls than later articles. Similarly, Van Gorp (2005) noticed a tendency for journalists to accept frames from interviewees on novel topics, but to replace those frames with their own as the topic became more familiar.

Scheufele (1999) described a feedback loop of framing between journalists and readers that could explain the variations we see over time. Negative articles (villain frame) drive feedback in the form of letters to the editor and submissions from researchers and advocates (victim frame, the emergence of the hero frame). However, the attractiveness of a conflict-filled villain frame can also provide feedback to the media outlets in the form of clicks, comments, social media engagement and subscriptions. The hero frame, in which conflict is not readily apparent, could become more common as kittiwakes become part of the "fabric" of the city and no longer drive discussion to such an extent.

We may also be seeing a framing contest at work, as described by Ihlen and Allern (2008). The victim, villain and hero frames are competing for space in local reporting. While the villain frame is currently dominant, the victim and hero frames are increasing in proportion. To fully understand why, we would need to know more about the factors behind journalistic choices, such as web and social media engagement, newspaper and subscription purchases, editorial interests and other agendas that may not be easy to see. One factor for the increasing prevalence of the victim frame is backlash to the numbers and intensity of negative articles, and the willingness of the media outlets to share dissenting views.

6.4 How does the identification of kittiwakes relate to the frames used?

Kittiwakes were specifically identified as kittiwakes (krykkje) in about a third of articles, and as seagulls in the remaining two-thirds. The proportion of articles that specifically identified kittiwakes grew steadily from 2020 to 2022, suggesting a growing awareness of kittiwakes as a species unique from *Larus* gulls.

Identification of kittiwakes as seagulls is correlated with more negative framing overall. There are also notable differences in the frame elements used, depending on identification (Table 6.1). In those where kittiwakes were specifically named, the frame was more likely to be victim or hero.

Table 6.1 When kittiwakes are identified specifically, vs when they are referred to as seagulls

Most common	Kittiwakes called kittiwakes	Kittiwakes called seagulls
Frame	Victim	Villain
Actor	Researcher	Resident
Problem	Risk or harm to birds	Noise/smell/mess/droppings
Cause	Birds	Birds
Solution	Actively help birds	Actively help birds
Image	Kittiwake	Kittiwake

Journalists and residents may have been primed by earlier reporting to react more negatively to kittiwakes as a subset of seagulls, but the opposite effect seems to be in place as well: reporting on *Larus* gulls used the villain frame more often after kittiwakes arrived. Schema theory (Crocker, Fiske & Taylor, 1984) may help to explain this trend. People tend to fill in details about a new situation based on their existing understanding. Thus, it is not surprising that the reporting shows a tendency to add new information about kittiwakes (their increasing numbers and more visible nests) to the existing schema for *Larus* gulls (aggression, eating trash), and apply the whole schema to all seagulls. Meanwhile, people who already had a separate kittiwake schema, such as the researchers interviewed, were more likely to draw a clear separation when talking about related problems and solutions.

The chosen sources for news articles can reinforce the overall seagull schema if they are not aware of the differences. Carr and Reyes-Galindo (2017) noted that journalists are not always able to determine which experts are best suited for accurate and nuanced commentary. For example, two *Nordlys* articles featured interviews with a pest control specialist who suggested garbage control as a method to reduce kittiwake nesting (Andersen, 2022), even though kittiwakes feed only at sea.

Although none of these seagull species are dangerous to people, there is still a perception of risk due to swooping behaviour and the economic and quality-of-life impacts from nesting birds. The work of Hudenko (2012) suggests that cultural and media frames increase the ease with which information about a risk can be recalled, and representativeness describes how the risks of a broad type of animal like seagulls can be applied to a member of that group. The

prevalence of the villain frame for seagulls, combined with the application of the seagull schema to kittiwakes, reinforce and strengthen perceptions of risk from bird conflict.
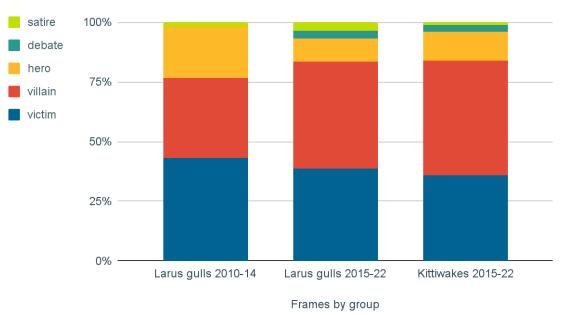
Figure 6.13 The increased kittiwake population is correlated with an increase in villain framing for both kittiwakes and *Larus* gulls

6.5   *Summary of research results*

In this section, I summarize the frames used, and the answers to the research questions.

6.5.1   Frames

I found three primary frames that applied to the great majority of articles studied: the villain frame, with a focus on problems caused by birds and their impacts on people; the victim frame, where birds were negatively impacted by people, and the hero frame, where there was no conflict between people and urban seagulls.

Two additional frames, debate and satire, were too uncommon to include in analysis. Nonetheless, they offer a window into the discussion of co-existence between people and wildlife.

The hero and villain frames stood out in their use of images. Hero articles were most likely to show only birds, and least likely to show birds and people together, a common category for conflict images. The victim frame was least likely to show people alone, without birds. Because of the low reliability of facial expression coding, I can only use "people and birds together" as a rough indicator of conflict imagery. A closer analysis of the latent content of

the photos, to better understand how conflict is portrayed, would be a good topic for further study.

Finally, the three media sources studied varied in their approaches. *Nordlys* used the villain frame most often, while *NRK* used victim or hero frames extensively. Coverage from *iTromsø* used a more even mix of victim and villain.

6.5.2   What media frames are used for urban kittiwakes?

Stories about urban kittiwakes primarily used the villain frame. The proportion of frames used for kittiwakes and *Larus* gulls after 2015 were quite similar to each other, suggesting that the increase in kittiwakes drove increased villain framing and decreased victim and hero framing of both kittiwakes and *Larus* gulls.

This result supports my original hypothesis that articles about kittiwakes would use frames similar to those used for *Larus* gulls. However, I was surprised that the negativity towards all types of seagulls increased in correlation with the number of kittiwake nests. It seems that kittiwakes drove the increased negative framing of *Larus* gulls, and not vice-versa.

6.5.3   How has media framing of urban kittiwakes in Tromsø changed over time?

Perhaps the most interesting result of this study is how closely media coverage and negative framing tracks to the number of kittiwake nests in Tromsø centrum (Figure 6.13). In both proportion and number, villain framed articles exploded when the nest count increased from under 150 to nearly 400 in a year. At the same time, the emergence and growth of the hero frame suggests that kittiwakes could become an accepted part of the background in the media and urban landscape.

6.5.4   How does the identification of kittiwakes relate to the frames used?

When I began this study, I suspected that the confusion between kittiwakes and *Larus* gulls would play a large role in how kittiwakes were framed. This was indeed the case. While a greater proportion of articles each year correctly identifies kittiwakes, those that call these birds seagulls primarily use the villain frame and focus on their impacts on people. However, both groups of articles were most likely to suggest actively helping birds as a solution. Perhaps this is a sign that the threatened status of these birds is understood, even if they are seen as just another seagull.

7   Conclusion

My goal in this investigation was not only to identify framing trends, but to provide practical information to the researchers, municipality employees, artists, and many others in Tromsø working towards the sustainable co-existence of kittiwakes and people. My informal communication with a number of these advocates suggests that the outsized media coverage has not blocked efforts to decrease conflict and find a solution.

7.1   Research into action

Benjaminsen et al. (2022) report that kittiwakes are here to stay, and Tromsø municipality is currently looking at long- and short-term options to decrease conflict. These urban kittiwake researchers in Tromsø define an ideal goal as "nature-based solutions that ensure well-being of both people and birds" (p. 29, translation mine). To accomplish this, the authors recommend a wide-ranging information campaign on urban kittiwakes. This section outlines recommendations from my study and other literature that could increase the effectiveness of such a campaign in shifting public frames for kittiwakes.

7.1.1   The real-world impact of local media framing

Research shows that local media matters in Norway (see Chapter 3.4), but does it matter equally to everyone?

As Entman (1993) finds, the media is more influential on topics where the receiver has little knowledge. Two members of the Urban Kittiwake Project who grew up on the northern Norwegian coast reported that they recognized the call of kittiwakes from a young age and associated them with coastal bird cliffs. When kittiwakes arrived in Tromsø, those with this experience immediately recognized that they were not the usual urban seagulls (T. Reitersen & I. Solvang, personal communication, February 2023). Meanwhile, the Tromsø-based but non-local volunteers who coded my articles were generally unable to distinguish kittiwakes from other seagulls before receiving training. It is possible that media framing has a greater impact on Tromsø's urban and international population, and less on lifelong coastal residents.

7.1.2   Branding kittiwakes, shifting frames

Wilson (2021) has written a detailed account of urban kittiwakes in Newcastle-on-Tyne, United Kingdom, where urban kittiwakes have nested for decades. Some of Newcastle's challenges match Tromsø's; for example, public frustration with noise and droppings. But there too, the perception of kittiwakes has shifted to some extent over time. It appears that the

climate aspect of the victim frame, nearly absent in Tromsø media, has gained a foothold through the efforts of local advocacy groups. However, Wilson finds that efforts in the region to promote urban kittiwakes contribute to the demonization of seagulls in general by emphasizing the kittiwakes' behavioural, and even moral, superiority to other seagulls.

This study clearly shows that the name "kittiwake" is associated with more positive framing than "seagull", at least in media coverage. If kittiwake advocates do wish to take on the challenge of improving public attitudes towards all seagulls, a reasonable goal is to strengthen the conflict-free hero frame. Indeed, Guenther and Shanahan (2020) suggested further research into use of the hero frame after finding that the victim and villain frames could increase negative viewpoints.

Choice of image is an important aspect of counter framing. O'Neill and Nicholson-Cole (2009) warn against negative imagery as a tool for motivation. They found that while negative photos of climate impacts attracted attention, positive photos that addressed people's concerns and emotions were more effective at motivating viewers over the long term. Victim-framed images of kittiwakes trapped in nets have effectively garnered attention in both Norway and the UK (Wilson, 2021), but photos of solutions and the birds in their urban and natural habitats may be more effective in promoting positive frames over the longer term (Figure 7.1).

Figure 7.1 Positive imagery of kittiwakes

Courtesy Delphin Ruché / wildlabprojects.org

However, countering an appealing, drama-filled frame with a neutral to positive frame is much easier said than done. Ihlen and Allern (2008) suggests that advocates can more easily capture media interest by tapping into news frames that are already commonly used. For

example, the most shared opinion articles in major Norwegian newspapers used frames such as metaphor, satire, justice, deliberation/debate, and personal account (Johannessen, 2011). Semetko & Valkenburg (2000) identified additional positive frames that could be relevant, such as human interest, morality and responsibility.

Satire and debate are already in use in seagull discourse, though uncommon. Responsibility for the well-being of urban wildlife may be effective. The successful strengthening of positive frames over the victim frame could evoke emotions like pride, amusement and acceptance rather than pity.

7.1.3   Strategies for media

Because local news outlets are so influential in Norway (see chapter 3.4), advocates can focus their efforts on providing information to journalists in an appealing, easy-to-use package. Per Van Gorp (2005), identifying cultural frames can even help convince journalists that they are influenced by frames rather than the actual events.

There is a precedent for conflict-free framing, even in *Nordlys*. Before kittiwakes arrived, the newspaper hosted a live seagull camera and held a contest to name the nest's inhabitants.[18] However, the vastly increased numbers of urban seagulls since then have made amused acceptance a more difficult approach to promote. Successful communication must acknowledge the reality that living next to an urban bird cliff is challenging, and potentially expensive. As Wilson (2021, p. 25) cautioned, it is "important to recognise that kittiwakes and other non-humans are not always easy to live with and can require a variety of compromises that aren't always equally borne." Thus, successful framing today might benefit from a focus on solutions that improve life for people and birds.

7.2   *For further study*

This study considers only one community in one country and is limited to the frames used in traditional media. I have noted several interesting directions for further study:
- How does framing of Tromsø's urban kittiwakes continue to change over the years?
- What policy and/or behavioural effects can be attributed to media coverage of kittiwakes?
- Do these findings hold true in other Norwegian cities with growing kittiwake populations?

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[18] "Nå har bymåsene blitt døpt på Facebook". *Nordlys*, 27 April 2014.

- How does media framing in the United Kingdom compare to that in Norway, and how do differing habits in news consumption affect public views?
- How are conflict images used, and how do they shape the reader's perception of the text?
- What effect does media framing of seagull conflict have on residents' perception of risk?
- What role do non-news sources, like social media, play in shaping understanding of kittiwake conflict in Norway?

7.3 Towards the future

While kittiwake populations continue to increase rapidly in Tromsø, a kittiwake population biologist says the urban situation is the opposite of what is happening with the species overall. (S. Descamps, personal communication, February 2023). Many thousands of nests have been lost on bird cliffs, and only 380 pairs have found their way here — so far. However, kittiwake numbers continue to increase in cities and towns along the Norwegian and UK coasts each year, along with media and public interest.

This study is only a snapshot of a new and fast-changing situation. At time of writing, the kittiwakes have begun their return to Tromsø, and the first seagull articles of spring have appeared in local media. All seven correctly identify kittiwakes.

A new set of kittiwake hotels were built in early 2023 with a special conflict-reduction feature: mobility[19]. Each year, they can be moved closer to the sea and further away from residences and businesses. This is of course a long-term project, while the news articles of the "silly season" are short-term observations. The media trends and public attitudes of the next few years — and the efforts of researchers to communicate their work publicly — will be fascinating to follow.

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[19] "Her blir det nye krykkjehotellet åpnet i Tromsø: – Fuglan veit!" *Nordlys*, 23 February 2023.

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9   Annex

9.1   Annex 1: Year series of data

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All articles	8	5	10	11	22	18	14	9	20	13	50	53	60
Number of kittiwake pairs in the city	0	0	0	0	0	1	1	13	14	20	30	160	383
Source: iTromso	6	2	2	5	4	5	0	3	12	4	13	15	17
Source: Nordlys	1	3	7	6	15	10	10	4	5	8	30	34	37
Source: NRK	1	0	1	0	3	3	4	2	3	1	7	4	6
KW: all	1	0	2	2	0	2	2	0	6	4	20	18	49
KW: id'd correctly	0	0	0	0	0	0	1	0	2	2	5	6	24
KW: Victim n	0	0	2	1	0	1	1	0	3	1	13	8	9
KW: Villain n	1	0	0	1	0	1	1	0	3	3	5	8	27
KW: Hero n	0	0	0	0	0	0	0	0	0	0	1	1	10

9.2   Annex 2: List of articles

Nordlys	2010-06-06	Måkeflokk gikk til angrep
iTromsø	2010-06-30	Måker klaget inn for fylkesmannen
iTromsø	2010-07-07	Måkehater bekymrer seg for fuglene
iTromsø	2010-07-09	Uten bakkekontakt
iTromsø	2010-07-23	Lei av måseklaging
NRK	2010-07-27	- Vår feil at måsen kommer til sentrum
iTromsø	2010-08-08	Besvimte i karusell etter å ha fått måke i hodet
iTromsø	2010-08-12	Har Viking endelig løst måkeproblemet?
Nordlys	2011-06-25	Skjøt måser på kaia
Nordlys	2011-06-28	Nye måsedrap
iTromsø	2011-06-29	Frykter måsehatet
Nordlys	2011-06-29	Fortell din kråke- og måse-historie
iTromsø	2011-07-18	Søppelkaos ved Burger King
NRK	2012-05-02	- La måkene få hekke i fred
Nordlys	2012-05-04	- La måsen være i fred
Nordlys	2012-05-06	Måke ble kjørt i politibil
Nordlys	2012-05-15	Politiet ba måsene rydde opp selv
Nordlys	2012-06-18	Måkeskytter med ulovlige våpen
iTromsø	2012-07-06	Skjøt på måser
Nordlys	2012-07-06	Skjøt måser med luftgevær
iTromsø	2012-07-12	Høysesong for måseplagen

Nordlys	2012-08-01	Høytflyvende rednings-aksjon
Nordlys	2012-08-26	Nå flyr de på vinterferie
Nordlys	2013-02-15	Her dør fugler i hopetall
Nordlys	2013-05-03	Lekeslanger mot måker
Nordlys	2013-05-07	Flere flyplasser tar i bruk laser for å unngå birdstrikes
Nordlys	2013-06-09	Måse spiddet og pint til døde
iTromsø	2013-07-01	Nå angriper måsene
Nordlys	2013-07-04	Denne karen sørger for måsefritt tak
iTromsø	2013-07-27	Politiet på måsejakt
Nordlys	2013-07-30	Måke til frokost i 15 år
iTromsø	2013-07-31	Høy skadestatistikk blant byens måser
iTromsø	2013-08-02	Måsefest på universitetet
iTromsø	2013-11-11	Matet måker - måtte flytte
NRK	2014-03-01	Måseplage i Skjervøy
Nordlys	2014-04-10	Bymåkene bæsjer ned huset
iTromsø	2014-04-25	Hentet skadet måke
iTromsø	2014-04-27	- Søppelkassene er som fuglebrett
Nordlys	2014-05-16	Slik skal de skremme bort måkene med genial løsning
Nordlys	2014-05-21	Når klekker eggene?
Nordlys	2014-05-26	Du kan bestemme hva bymåsen heter
Nordlys	2014-05-27	Nå har bymåsene blitt døpt på Facebook
Nordlys	2014-05-27	Videoen du må-se...!
Nordlys	2014-05-28	Her jobber de tett på kjendis-måsene
Nordlys	2014-06-02	Se hva som endelig titter frem
Nordlys	2014-06-04	Ungutter skyter på måser
Nordlys	2014-06-11	Se måsen sabotere på lammenes fôringsstasjon
Nordlys	2014-06-24	Se måken kjempe for livet
Nordlys	2014-06-26	NOAH: Dette må vi finne oss i
iTromsø	2014-07-02	Nå er tiden for hissige måser
Nordlys	2014-07-09	De ble angrepet av måser, brakk to årer og kom fram først etter tre timer i lekebåtene
Nordlys	2014-07-10	Tove tordner mot skyting av måser
iTromsø	2014-07-18	En tidlig død
Nordlys	2014-07-23	Sto på hodet til måsen og sendte video for å skryte av det
NRK	2014-07-23	Gutter mishandlet og drepte måse - sendte snap
NRK	2014-08-30	Randis bestekompis vender alltid tilbake
Nordlys	2015-04-24	- Vi kan ikke sitte sitte på verandaen uten at måsene hakker på oss
Nordlys	2015-05-12	Snart står Kystens hus ferdig. Gjestene har allerede begynt å ta seg til rette..
NRK	2015-05-23	Sliter med plagsomme måker
Nordlys	2015-06-14	Måsene holder Dagmar (98) "fanget" i eget hus
iTromsø	2015-06-25	Derfor elsker jeg måker
Nordlys	2015-06-30	Har du sett to måker så rolige før?
Nordlys	2015-07-09	Måke kastet ut av Vinmonopolet: - Den var under 18
NRK	2015-07-10	- Å si at måker er mannevonde kan føre til ulovlige handlinger
iTromsø	2015-07-16	Måsene flytter til byen
iTromsø	2015-07-24	Plukket opp måse i fylla
NRK	2015-07-30	Jakter på verdens eldste måke
iTromsø	2015-08-07	Her kjører bileføreren rett over måsen

iTromsø	2015-08-20	Måse sto fanget i lukket butikk
Nordlys	2015-08-20	Sjokkerte turister ble vitne til lystdrap med hagle fra speedbåt
Nordlys	2015-11-08	Ida gjorde sjokkfunn: Fant over 40 døde måker i fjæra i Tromsø
Nordlys	2015-11-11	- En mulighet er at alle måsene har druknet
Nordlys	2015-11-18	Ingen forstår hvorfor dette skjedde
Nordlys	2015-12-26	Nå er konklusjonen klar etter sjokkfunnet i fjæra
Nordlys	2016-03-04	Vil du fly som en måke? Nå har du sjansen
NRK	2016-04-05	Fjernet russeknute om å jage måke
Nordlys	2016-04-14	Nå er det den tiden på året igjen...
NRK	2016-04-14	Forskere vil at du skal telle alle måkene du ser
Nordlys	2016-05-05	Måsene har latt seg lure
Nordlys	2016-05-19	Politiet pågrep måsemorder
NRK	2016-05-19	Pågrep måkemorder i Harstad
Nordlys	2016-05-23	Måse stakk av med Memonas iPhone: - Aldri hørt om lignende
Nordlys	2016-05-23	Med dette trikset får Roger bukt med måseplagen i Tromsø
Nordlys	2016-05-31	Etter å ha funnet båten full av måsedrit, fikk Oddgeir nok
Nordlys	2016-06-11	Et litt annerledes oppdrag for brannvesenet: Berget måse ned fra tre (!)
NRK	2016-06-11	Reddet måse fra grantre
Nordlys	2016-07-03	Disse fuglene er i ferd med å forsvinne fra kysten: - Dramatisk situasjon
Nordlys	2016-07-08	Stina ble vitne til at en mann vred hodet av en måse
NRK	2017-01-08	- Jeg vasset i døde måser på stranda
iTromsø	2017-03-17	Dette er lov i kampen mot måsen
Nordlys	2017-04-22	Kråke-Christer om måse-angrepet: - Jeg ble redd. Det er flaut.
NRK	2017-05-22	Får ikke hekke i fred: - Reir fjernes og måseunger slås ihjel
Nordlys	2017-06-07	En måsunge er kommet - når klekker resten? Se Måse-TV her!
iTromsø	2017-06-23	Skulle kaste ut måse fra Jernbanen - ble hakket til blods
Nordlys	2017-06-30	Anne-Lise så tre måser stupe ned på plenen. Så var Tzik og Tzak borte
Nordlys	2017-06-30	Finnmarking fikk måse inn i stua
iTromsø	2017-08-02	Manglende toleranse for dyr
iTromsø	2018-01-26	Vil bygge kunstige reir i sentrum for å berge truet fugleart
Nordlys	2018-01-26	Forskere vil bygge kunstig fuglefjell for måser i Tromsø
iTromsø	2018-04-06	Her kan krykkja hekke uforstyrret
iTromsø	2018-04-30	Med denne skal kommunen skremme vekk måsene
iTromsø	2018-05-02	Sank måse-egg med varsomhet
Nordlys	2018-05-20	Dette billige trikset har gitt Linda og familien nattesøvnen tilbake på Sommarøya
iTromsø	2018-05-25	Tips og triks til et bedre naboskap med måsen
NRK	2018-05-25	Ekspert: - Fuglene skjønner at disse ikke er ekte
iTromsø	2018-06-19	Det er ingen hemmelighet at jeg kan styre min begeistring for måser
iTromsø	2018-06-19	Høyre-politiker angrepet av måse: - Trodde jeg ble påkjørt av en bil
iTromsø	2018-06-19	Skriver årlige «hatbrev» om måsene
iTromsø	2018-06-27	Det er vi som har satt måsene i en vanskelig situasjon
NRK	2018-07-10	Slik takler du nærgående måker
NRK	2018-07-11	Her stjeler måken pølsa rett ut av hånda hans
Nordlys	2018-07-14	Skolen er dekket av måkeskitt: - Vi tapte kampen
iTromsø	2018-07-15	Må oftere rykke ut til skadde måser: - Måsen har livets rett og vi har ikke råd til å miste dem
Nordlys	2018-07-16	Hyllest til måsen

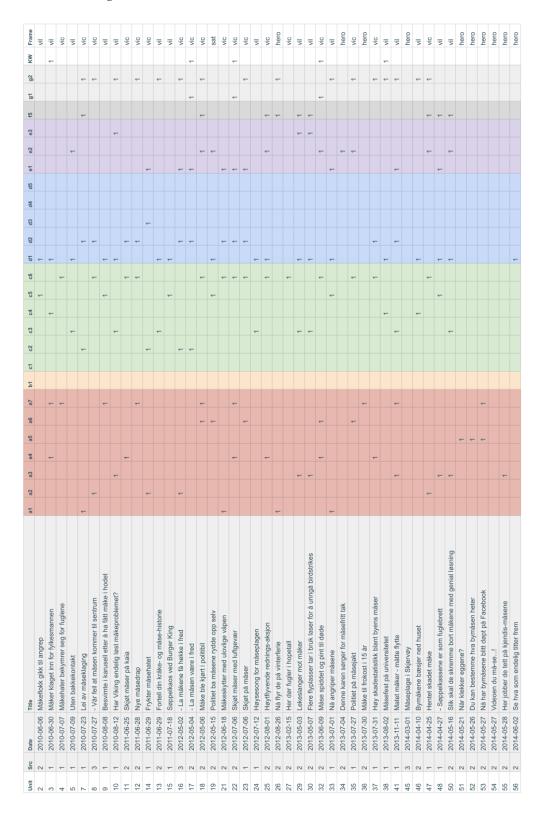| iTromsø	2018-07-20	«Fugler i tilbakegang nektes optimale hekkeplasser»
Nordlys	2018-07-27	Trolig måse som ødela planter
Nordlys	2018-08-03	Måseungen falt ut av reiret - nå har han blitt en del av familien Øynes
Nordlys	2019-04-27	Naboene mener de blir syke av fuglenes «øredøvende leven»: - De siste somrene har vært et rent mareritt
iTromsø	2019-05-06	Derfor vil forskerne merke by-krykkjene
Nordlys	2019-05-21	Beboer frykter måse-koloni
iTromsø	2019-05-22	Hvorfor er vi så slemme mot måsene?
iTromsø	2019-06-20	Fortvilet gutt ringte 112 etter måseangrep. Politiet responderer med dikt
Nordlys	2019-06-20	Måse stjal maten - da ringte gutten 112
NRK	2019-06-20	Burgerdikt fra politiet på Twitter:
iTromsø	2019-07-04	Redd for måser? Da er dette det dummeste du kan gjøre
Nordlys	2019-07-24	Hvert år må brannvesenet redde måser fra bakgården: - Det er jo blitt en fast, dårlig tradisjon
Nordlys	2019-07-31	- ANGRIPER NÅR MAN GÅR LANGS GATA
Nordlys	2019-08-15	- Måsene går ofte går til angrep når gjestene er ferdige med maten
Nordlys	2019-09-03	Denne hvalvittige videoen må du se! Hvaldimir leker sei med måse
Nordlys	2019-10-11	De har nærmest overtatt bygget, men nå varsler gårdeieren ny kamp
Nordlys	2020-03-03	Huseieren har tatt omstridt metode i bruk mot Tromsø-måsene. Dette er resultatet
iTromsø	2020-05-27	Skjøt på måser med luftgevær
Nordlys	2020-05-27	Mann skjøt måker med luftgevær. Så dukket politiet opp
NRK	2020-05-27	Skjøt etter måker med luftgevær
iTromsø	2020-05-28	Når måsereiret først er bygd, er det totalfredet
Nordlys	2020-06-02	Her angriper måsene hver dag: - De har blitt hissigere
NRK	2020-06-02	Hammerfest kommune «oppfordrer» innbyggerne til å bryte loven
iTromsø	2020-06-03	Her nektes måsene adgang til reirene sine, men ansvarlig hevder fugleekspert tar feil: - Alle ser at det der ikke er reir
Nordlys	2020-06-03	Her angriper måsene hver dag: - De har blitt HISSIGERE
iTromsø	2020-06-05	Nekter måsene adgang til reirene på Nav-bygget
iTromsø	2020-06-06	Dette får du i straff hvis du forstyrrer hekkende måser
Nordlys	2020-06-09	Måse prøvde å ta over fiskeridirektoratets kontrollbil
iTromsø	2020-06-12	Har ikke vi mennesker det i oss å vise empati og toleranse for måkene?
Nordlys	2020-07-04	LØFT I NORDBYEN
Nordlys	2020-07-15	Mener Tromsø sentrum har et måseproblem: - Vi er nødt til å gjøre noe - og det må være lov å si høyt
Nordlys	2020-07-16	Her er fugleforskerens beste tips mot måser: - De er glupske og de lærer fort
Nordlys	2020-07-16	Måsemare(d)ritt i Nordens Paris
NRK	2020-07-16	Frykter bymåsen ødelegger sentrum - Folk tør ikke spise is utendørs lenger
Nordlys	2020-07-17	- VI ER NØDT TIL Å GJØRE NOE - OG DET MÅ VÆRE LOV Å SI HØYT
Nordlys	2020-07-17	Vi ødelegger måkenes livsgrunnlag, nå er det vi som får føle på konsekvensene. Vi har ikke enerett på denne kloden.
iTromsø	2020-07-18	En kystby uten måser i sentrum er en død by
iTromsø	2020-07-18	Mediene må slutte å fremstille måker som terrorister
Nordlys	2020-07-18	Tromsø sentrum - reservat for måsen?
iTromsø	2020-07-20	Måseredningsaksjon utenfor Tromsø kunstforening
Nordlys	2020-07-20	Måseredningsaksjon i Tromsø: - Kjempet en desperat kamp for livet
Nordlys	2020-07-20	EKSPERTENS MÅSETIPS

Nordlys	2020-07-21	Reddet fra dødsgrep
Nordlys	2020-07-21	Mann og måse
Nordlys	2020-07-21	Maks for måsen, best for byen
Nordlys	2020-07-22	Torgcenter-sjefen nekter å ta opp kampen mot måsene: - Folk finner alltid noe å klage på
NRK	2020-07-22	Flere måser i Tromsø i år
iTromsø	2020-07-23	Måker i byene er kommet for å bli
Nordlys	2020-07-23	Plages du av innpåslitne måker? Da er det én ting som gjelder, ifølge eksperten
iTromsø	2020-07-24	Forslag til konfliktdempende tiltak overfor måser
Nordlys	2020-07-24	Kebab-kongen har null tro på forbud mot mating av måsene
Nordlys	2020-07-24	Dekk-, miljø- og nå kanskje måseskitt avgift
Nordlys	2020-07-24	Måseplagen
Nordlys	2020-07-24	Måkene fortjener bedre
Nordlys	2020-07-25	Måser til besvær
iTromsø	2020-07-27	Måtte tilkalle politiet for å få fjernet måke fra hotell
Nordlys	2020-07-27	Bygde måse-hotell for å få slutt på terror i gatene
Nordlys	2020-07-28	Måseplage
iTromsø	2020-07-29	Måser som hater folk
NRK	2020-07-31	Katastrofe for krykkjene
Nordlys	2020-08-03	Her kan Veronica nyte fiskesuppa si helt i fred. Og «luftvernet» er nesten helt usynlig
Nordlys	2020-08-05	Effektivt måse-hinder
Nordlys	2020-10-08	Jørn ble utsatt for et bakholdsangrep: - Jeg ble sjokkert
Nordlys	2020-11-24	Må nekte hjelp til skadde fugler i Tromsø: - Vi er forberedt på at det vil komme en del kritiske henvendelser
NRK	2020-11-24	Bot for å ha spylt bort reir
NRK	2020-11-25	Spylte reirene til kritisk truet fugl - nekter å vedta boten
NRK	2021-02-01	Kommune dømt for å fjerne fuglereir
iTromsø	2021-04-15	Forsker frykter for truet fugleart etter fjerning av reir og montering av hinder: - Byen er krykkjas siste håp
Nordlys	2021-04-19	Slik skal kommunen bekjempe måseproblemet i byen: - Kan ikke understreke det nok
Nordlys	2021-04-28	Her har Kim reddet måsen: - Sesongen har begynt
Nordlys	2021-04-28	Måse i NAV-drama
Nordlys	2021-05-20	Du vil ikke tro hvor måsene fant seg til rette: - Jeg tviler på at eieren oppdaget reiret
iTromsø	2021-05-31	Planker med pigger skulle skremme vekk måsen, men de brukte det som massasjebord istedenfor
Nordlys	2021-05-31	- Begrenset hva vi kan gjøre
Nordlys	2021-06-02	Vi må tenke nytt om måsen
iTromsø	2021-06-05	Det merkes at måkenes hekking er i gang
iTromsø	2021-06-07	Elvis ble funnet etter måseangrep. Nå leter Celine og Amanda etter eieren
Nordlys	2021-06-09	reddet nymfeparakitt fra sinte måser
Nordlys	2021-06-10	Må rykke ut for å hjelpe skadde måser
Nordlys	2021-06-13	Vigdis og Marit har ansvaret for å hjelpe de skadde måsene. - Det er et voldsomt omfang på dette
Nordlys	2021-06-16	Fjernet 400 egg fra måsekoloni
Nordlys	2021-06-29	Nå skaper måsene trøbbel for det nye 5g-nettet: - Vi må vente til de forsvinner
Nordlys	2021-07-05	Feil å kritisere budbringeren

Nordlys	2021-07-07	Her er tromsøværingens meninger om måsene:
Nordlys	2021-07-07	Høyre-politiker foreslår å gi måsene p-piller: - Vi kan ikke la oss terrorisere
NRK	2021-07-07	Politiker vil gi p-piller til måkene i Tromsø - det mener Noah er en forferdelig idé
Nordlys	2021-07-08	Måseterroristene
Nordlys	2021-07-08	- Kan ikke la oss terrorisere
iTromsø	2021-07-10	Urbane måker blant urbane mennesker
Nordlys	2021-07-13	- De har tatt litt overhånd over byen
Nordlys	2021-07-14	Fugleforsker om «problem-måsene» i Tromsø: Så lenge er det til de roer seg
Nordlys	2021-07-14	Nå kan du spille deg gjennom Tromsø fra måsens perspektiv: - Jeg har blitt helt hekta
iTromsø	2021-07-15	Politiet ber om vitner etter måseplageri
Nordlys	2021-07-15	Derfor har måsen flytta til byen
iTromsø	2021-07-16	Politiet har ikke mottatt noen tips i måseplage-sak. Og sier det er uaktuelt å fjerne eller minske sladden av mennene
iTromsø	2021-07-16	Vi kan ikke fremskynde utryddelsen av utrydningstrua arter
Nordlys	2021-07-16	- Jeg har blitt hekta
Nordlys	2021-07-16	- De roer seg snart ned
iTromsø	2021-07-19	Den urbane måsen
iTromsø	2021-07-19	- Det er ikke det at vi ikke bryr oss om måsen, tvert imot
NRK	2021-07-20	Den rødlistede krykkja «eier» Hammerfest sentrum i Finnmark. Kommunen vil nå be om hjelp utenfra
iTromsø	2021-07-21	Irene (24) elsker måser - nå lager hun en dokumentar om dem
Nordlys	2021-07-29	Måsebyen Tromsø
Nordlys	2021-07-30	Måse funnet skutt i Bodø - måtte avlives
iTromsø	2021-08-03	Måsene på fylkeshuset påvirker Arctic Race
Nordlys	2021-08-04	Irene (24) starter restaurant for måser i Tromsø: - De som virkelig hater måser vil nok fyre seg litt opp
Nordlys	2021-08-06	Måseplagen i Tromsø utgjør en helserisiko
Nordlys	2021-08-07	Sjokkert over det tidligere praktbygget
Nordlys	2021-08-11	Forslag fra Bodø i måsedebatten: - Bygg glasstak over hele Tromsø
Nordlys	2021-08-11	- Bygg glasstak over hele tromsø
Nordlys	2021-08-17	Dette synet møtte Grethe ved det populære turområdet: - De manglet hode
Nordlys	2021-08-25	Nå skal fuglefasaden ryddes: - Blir deilig å få det rent
iTromsø	2021-08-31	I år baseres min stemme på hvilket parti som viser handlingskraft mot måsene
NRK	2021-09-02	Kommune fikk krykkje-bot på 120.000 kroner
iTromsø	2021-09-22	Hva kan gjøres med måseproblemet i Tromsø?
iTromsø	2021-10-10	Siden 2017 har det blitt 11 ganger flere krykkjer i Tromsø sentrum - og flere skal det bli til neste år
Nordlys	2021-10-16	Ønsker spektakulær løsning på måseproblemet i Tromsø: - Jeg håper på en enorm sky av skrikende måser
Nordlys	2021-10-19	Vil lage måsefontene
Nordlys	2021-11-20	Må se etter nytt hjem - slik skal de bli kvitt plageåndene
Nordlys	2022-02-13	Innfører gips-måser
iTromsø	2022-02-22	Her bygger krykkja rede i veggene på Kunstforeninga: - Herregud, er de allerede i gang? Da er vi for sent ute
iTromsø	2022-02-25	Krykkja er tilbake i byen. Hva gjør Tromsø nå?
Nordlys	2022-02-25	Her bygger kommunen måsehotell
NRK	2022-02-27	Bygger eget fuglehotell for nærgående måser og krykjer
Nordlys	2022-03-08	Lavt belegg på det nye måsehotellet: - Må se om vi må vurdere ekstra tiltak

iTromsø	2022-03-10	«Jævlig lavt belegg» på byens nye måsehoteller - slik skal forskerne lokke krykkja til å sjekke inn
Nordlys	2022-03-10	Krykkje rulle 1
Nordlys	2022-03-11	Kunstner om krykkjene på Kunstforeninga: - Jeg gråt da jeg kom på jobb i morges
Nordlys	2022-03-11	- noen ganger er vi nødt til å kutte noen svinger
iTromsø	2022-04-13	Her har krykkja slått seg til ro på Kunstforeninga - akkurat som i fjor
NRK	2022-04-15	Suksess for fuglehotell i Tromsø som skal redde måsearten krykkje
Nordlys	2022-04-26	måse-rulle
NRK	2022-04-26	Invaderes av måker: Her vil de legge «krykkjefiendtlige» tak for å hindre nye reir
Nordlys	2022-06-18	Måse med flaks
Nordlys	2022-06-19	Måsene har invadert ærverdig bygård: - Ikke særlig hyggelig
iTromsø	2022-06-23	Her har krykkjene har funnet seg et nytt hjem - det byr på flere utfordringer
iTromsø	2022-06-28	Slik er de nye planene for universitetsmuseet
iTromsø	2022-07-01	Fant flere døde fugler og mengder av skitt på fortauet ved kjøpesenter: - Det var som tatt ut av en skrekkfilm
Nordlys	2022-07-01	«Skitstor» kontrast på de to trappene - men eksperten advarer mot måsepigger
Nordlys	2022-07-02	Måsebæsj og døde måseunger
iTromsø	2022-07-09	Se videoen: Her får Mo besøk av en ubuden gjest: - Hva i helvete skal jeg gjøre?
iTromsø	2022-07-13	Tromsø-forsker etterlyser bedre samarbeid om måser: - Det nytter ikke bare å sette opp et hotell
Nordlys	2022-07-13	Ingrid fortviler over måsen: - Det lukter så dårlig og brosteinen utenfor butikken er helt ødelagt
iTromsø	2022-07-14	Ingeborg (49) tar doktorgrad i by-krykkjer: - Vi som art er midt i en krise, en sjette masseutryddelsen
Nordlys	2022-07-14	Fugleterroren i Tromsø kan stanses, men det krever at gårdeiere og kommunen tar ansvar.
Nordlys	2022-07-14	Måsene regjerer i Tromsø sentrum
Nordlys	2022-07-15	Når ble utrydningstrua måker skadedyr, Nordlys?
Nordlys	2022-07-15	Søker tiltak mot måseproblemet
Nordlys	2022-07-15	Kanskje vi bør justere måsefredningsbestemmelsene?
NRK	2022-07-15	Raser mot måkehåndtering - mener byen ser ut som et fuglefjell
iTromsø	2022-07-16	Det enkleste er pistol
Nordlys	2022-07-17	Kan det heller være at det er vi som er er skadedyrene?
Nordlys	2022-07-17	På tide å bytte ut kommunevåpenet?
Nordlys	2022-07-18	Måsen er ingen sangfugl
iTromsø	2022-07-19	Gunn berger foreldreløse krykkjer: - Dette er de heldige
Nordlys	2022-07-19	Måsenes by
iTromsø	2022-07-20	Måsen har inntatt rådhuset: «Er ordføreren gjort rede for?»
iTromsø	2022-07-20	Trakassering av trua arter
Nordlys	2022-07-22	Årsaken til måseproblemet
Nordlys	2022-07-22	- helt forferdelig!
Nordlys	2022-07-22	Fjellheims ekstreme løsninger
iTromsø	2022-07-25	Krykkjene på Aunegården er blitt turistattraksjon: - Sjøgata Krykkjepensjonat
Nordlys	2022-07-26	Åpner for å bøtelegge gårdeiere i sentrum: - Vi må se på muligheten
Nordlys	2022-07-30	Hør hva naboene til Kunstforeningen må høre på - døgnet rundt: - Folk i byen som klager vet ikke hva de snakker om
Nordlys	2022-08-01	Kommer med kontroversielle forslag mot krykkja: - Kan ikke ha samme diskusjon til neste år

Nordlys	2022-08-02	Måsene har tatt over terrassen
iTromsø	2022-08-03	Gunnar ble vitne til en måseunges kamp på liv og død: - Dreper mer enn de trenger
Nordlys	2022-08-03	Forslag til måsetiltak
NRK	2022-08-03	Fuglepiggar kan gi alvorlege skadar på måker
Nordlys	2022-08-10	Sju av 10 i Tromsø vil ha tiltak mot måser. Bjørn mener måsen har kostet ham 350.000 kroner
NRK	2022-08-10	Flertall vil ha måkene vekk: - Paris er full av rotter, men i Tromsø flyr de
iTromsø	2022-08-11	Mener politikerne gjør for lite med krykkjeplagene: - Det er ikke snakk om sameksistens lenger
Nordlys	2022-08-16	Her har måsa satt seg fast i en lyktestolpe: - Den hang lenge og sprellet
Nordlys	2022-08-20	Sjekk den måsekampen - vinneren vil overraske deg!
Nordlys	2022-09-13	Vil ha krykkjetiltak før det bygges nytt museum
Nordlys	2022-09-15	I 2017 hekket 14 par krykkjer i Tromsø sentrum. I år var det nesten 400
Nordlys	2022-10-10	Fraråder pigger mot måser - frykter at måsunger spiddes
Nordlys	2022-10-12	Smarte tiltak mot måseplagen
Nordlys	2022-10-28	Gir huseiere ansvar
Nordlys	2022-11-02	sier nei til krykkjehotell på tromsøbrua

Unit	Src	Date	Title	a1	a2	a3	a4	a5	a6	a7	b1	c1	c2	c3	c4	c5	c6	d1	d2	d3	d4	d5	e1	e2	e3	f5	g1	g2	KW	Frame
2	2	2010-06-06	Måkeflokk gikk til angrep	1												1		1												vil
3	1	2010-06-30	Måker klaget inn for fylkesmannen				1								1			1											1	vil
4	1	2010-07-07	Måkehater bekymrer seg for fuglene							1								1													vic
5	1	2010-07-09	Uten bakkekontakt	1										1				1						1						vil
7	1	2010-07-23	Lei av måseklaging										1						1								1			vic
8	3	2010-07-27	- Vår feil at måsen kommer til sentrum		1												1		1									1		vic
9	1	2010-08-08	Besvimte i karusell etter å ha fått måke i hodet							1								1												vil
10	1	2010-08-12	Har Viking endelig løst måkeproblemet?			1								1				1							1			1		vil
11	2	2011-06-25	Skjøt måser på kaia														1		1											vic
12	2	2011-06-28	Nye måsedrap							1							1		1									1		vic
14	1	2011-06-29	Frykter måsehatet	1									1										1							vic
13	2	2011-06-29	Fortell din kråke- og måse-historie											1				1		1								1		vil
15	1	2011-07-18	Søppelkaos ved Burger King													1		1												vil
16	3	2012-05-02	- La måkene få hekke i fred	1									1						1	1			1					1		vic
17	2	2012-05-04	- La måsen være i fred										1						1	1			1			1			1	vic
18	2	2012-05-06	Måke ble kjørt i pollibil						1	1								1		1				1	1		1			vic
19	2	2012-05-15	Politiet ba måsene rydde opp selv	1					1							1		1	1								1			sat
21	2	2012-06-18	Måkeskytter med ulovlige våpen				1			1						1		1	1				1							vic
22	2	2012-07-06	Skjøt måser med luftgevær						1							1		1	1				1				1		1	vic
23	1	2012-07-06	Skjøt på måser													1		1	1				1					1		vic
24	1	2012-07-12	Høysesong for måseplagen											1				1												vil
25	2	2012-08-01	Høytflyvende rednings-aksjon				1										1	1					1	1						vic
26	2	2012-08-26	Nå flyr de på vinterferie	1														1					1	1						hero
27	2	2013-02-15	Her dør fugler i hopetall							1							1													vic
29	2	2013-05-03	Lekeslanger mot måker		1									1				1					1		1	1				vil
30	2	2013-05-07	Flere flyplasser tar i bruk laser for å unngå birdstrikes		1									1				1					1	1	1	1				vil
32	2	2013-06-09	Måse spiddet og pint til døde				1		1								1	1					1			1		1	1	vic
33	1	2013-07-01	Nå angriper måsene	1												1		1					1				1			vil
34	2	2013-07-04	Denne karen sørger for måsefritt tak					1							1		1							1				1		hero
35	1	2013-07-27	Politiet på måsejakt					1									1							1						vic
36	2	2013-07-30	Måke til frokost i 15 år							1								1							1					hero
37	1	2013-07-31	Høy skadestatistikk blant byens måser			1								1			1		1					1			1			vic
38	1	2013-08-02	Måsefest på universitetet												1								1				1	1	1	vil
41	1	2013-11-11	Matet måker - måtte flytte			1								1				1	1				1	1			1			vil
45	3	2014-03-01	Måseplage i Skjervøy					1							1															hero
46	2	2014-04-10	Bymåkene bæsjer ned huset					1		1							1		1					1		1				vil
47	1	2014-04-25	Hentet skadet måke	1																										vic
48	1	2014-04-27	- Søppelkassene er som fuglebrett			1												1		1			1	1			1			vil
50	2	2014-05-16	Slik skal de skremme bort måkene med genial løsning			1								1				1					1	1	1		1			vil
51	2	2014-05-21	Når klekker eggene?					1																						vil
52	2	2014-05-26	Du kan bestemme hva bymåsen heter					1																						hero
53	2	2014-05-27	Nå har bymåsene blitt døpt på Facebook					1		1																				hero
54	2	2014-05-27	Videoen du må-se...!																											hero
55	1	2014-05-28	Her jobber de tett på kjendis-måsene		1																									hero
56	2	2014-06-02	Se hva som endelig titter frem															1												hero

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57	2	2014-06-04	Ungutter skyter på måser						1	1							1		1				1							vic
59	2	2014-06-11	Se måsen sabotere på lammenes fôringsstasjon			1										1		1	1									1		vil
60	2	2014-06-24	Se måken kjempe for livet						1								1	1						1				1		vic
61	2	2014-06-26	NOAH: Dette må vi finne oss i		1												1			1			1					1		vic
62	1	2014-07-02	Nå er tiden for hissige måser													1		1										1		vil
63	2	2014-07-09	De ble angrepet av måser, brakk to årer og kom først etter tre							1						1	1	1								1		1		vil
64	2	2014-07-10	Tove tordner mot skyting av måser							1							1		1							1		1		vic
65	1	2014-07-18	En tidlig død														1	1										1		vic
66	3	2014-07-23	Gutter mishandlet og drepte måse - sendte snap		1				1								1	1					1					1		vic
67	2	2014-07-23	Sto på hodet til måsen og sendte video for å skryte av det														1	1	1											vic
69	3	2014-08-30	Randis bestekompis vender alltid tilbake							1																1		1		hero
70	2	2014-04-24	- Vi kan ikke sitte på verandaen uten at måsene hakker på oss							1						1		1								1				vil
71	2	2015-05-12	Snart står Kystens hus ferdig. Gjestene har allerede begynt å ta se		1										1			1								1		1	1	vil
72	3	2015-05-23	Silter med plagsomme måker																											hero
73	2	2015-06-14	Måsene holder Dagmar (98) "fanget" i eget hus							1						1		1						1		1		1		vil
74	1	2015-06-25	Derfor elsker jeg måker			1																				1		1		hero
75	2	2015-06-30	Har du sett to måker så rolige før?							1															1			1		hero
76	2	2015-07-09	Måke kastet ut av Vinmonopolet: - Den var under 18			1								1				1						1		1		1		vil
77	3	2015-07-10	- Å si at måker er mannevonde kan føre til ulovlige handlinger										1	1					1									1		vic
78	1	2015-07-16	Måsene flytter til byen	1														1								1		1		vil
79	1	2015-07-24	Plukket opp måse i fylla		1												1		1							1		1		vic
80	3	2015-07-30	Jakter på verdens eldste måke																											hero
82	1	2015-08-07	Her kjører bilføreren rett over måsen							1							1	1	1											vic
84	2	2015-08-20	Sjokkerte turister ble vitne til lystdrap med hagle fra speedbåt							1			1				1	1	1					1			1		1	vic
85	1	2015-08-20	Måse sto fanget i lukket butikk					1		1							1													vic
86	2	2015-11-08	Ida gjorde sjokkfunn: Fant over 40 døde måker i fjæra i Tromsø							1							1										1		vic
87	2	2015-11-11	- En mulighet er at alle måsene har druknet					1									1											1		vic
88	2	2015-11-18	Ingen forstår hvorfor dette skjedde														1									1		1		vic
89	2	2015-12-26	Nå er konklusjonen klar etter sjokkfunnet i fjæra							1							1											1		vic
91	2	2016-03-04	Vil du fly som en måke? Nå har du sjansen	1													1									1		1		hero
92	3	2016-04-05	Fjernet russeknute om å jage måke	1	1												1		1				1							vic
93	3	2016-04-14	Forskere vil at du skal telle alle måkene du ser	1															1					1				1		hero
94	2	2016-04-14	Nå er det den tiden på året igjen...	1															1				1					1		hero
95	2	2016-05-05	Måsene har latt seg lure			1								1				1						1		1				vil
96	3	2016-05-19	Pågrep måkemorder i Harstad					1	1								1	1	1				1							vic
97	2	2016-05-19	Politiet pågrep måsemorder						1	1							1	1												vic
98	2	2016-05-23	Måse stakk av med Memonas iPhone: - Aldri hørt om lignende						1	1					1		1	1								1		1		vil
99	2	2016-05-23	Med dette trikset får Roger bukt med måseplagen i Tromsø						1	1					1			1						1	1	1				vil
100	2	2016-05-31	Etter å ha funnet båten full av måsedrit, fikk Oddgeir nok				1											1				1		1					1	vil
101	2	2016-06-11	Et litt annerledes oppdrag for brannvesenet: Berget måse ned fra				1																							vic
102	3	2016-06-11	Reddet måse fra grantre				1										1													vic
103	2	2016-07-03	Disse fuglene er i ferd med å forsvinne fra kysten: - Dramatisk situ					1			1						1										1		1	vic
104	2	2016-07-08	Stina ble vitne til at en mann vred hodet av en måse							1							1	1	1							1				vic
106	3	2017-01-08	- Jeg vasset i døde måser på stranda	1																								1		vic
108	1	2017-03-17	Dette er lov i kampen mot måsen				1							1				1						1				1		vil

Unit	Src	Date	Title	a1	a2	a3	a4	a5	a6	a7	b1	c1	c2	c3	c4	c5	c6	d1	d2	d3	d4	d5	e1	e2	e3	f5	g1	g2	KW	Frame
109	2	2017-04-22	Kråke-Christer om måse-angrepet: - Jeg ble redd. Det er flaut.					1										1								1				vil
110	3	2017-05-22	Får ikke hekke i fred: - Reir fjernes og måseunger slås ihjel		1												1		1									1		vic
111	2	2017-06-07	En måsunge er kommet - når klekker resten? Se Måse-TV her!																											hero
112	1	2017-06-23	Skulle kaste ut måse fra Jernbanen - ble hakket til blods					1		1						1		1												vil
113	2	2017-06-30	Anne-Lise så tre måser stupe ned på plenen: Så var Tzik og Tzak							1				1		1														vil
114	2	2017-06-30	Finnmarking flikk måse inn i stua				1							1		1														vil
115	2	2017-08-02	Manglende toleranse for dyr		1								1						1									1		vic
116	2	2018-01-26	Forskere vil bygge kunstig fuglefjell for måser i Tromsø	1													1						1				1	1	vic
117	1	2018-01-26	Vil bygge kunstige reir i sentrum for å berge truet fugleart								1						1						1					1	vic
119	1	2018-04-06	Her kan krykkja hekke uforstyrret								1		1				1	1					1		1			1	vic
120	1	2018-04-30	Med denne skal kommunen skremme vekk måsene				1	1						1	1			1						1			1	vil
121	1	2018-05-02	Sank måse-egg med varsomhet	1													1	1				1						1	vic
122	1	2018-05-02	Dette billige trikset har gitt Linda og familien nattesøvnen tilbake p							1				1			1		1				1		1		1		vil
125	1	2018-05-25	Tips og triks til et bedre naboskap med måsen	1										1			1		1			1			1				vil
124	3	2018-05-25	Ekspert: - Fuglene skjønner at disse ikke er ekte									1			1		1												vil
126	1	2018-06-19	Det er ingen hemmelighet at jeg kan styre min begeistring for mås	1											1	1	1						1		1			1	vil
127	1	2018-06-19	Høyre-politiker angrepet av måse: - Trodde jeg ble påkjørt av en b				1								1	1	1						1		1				vil
128	1	2018-06-19	Skriver årlige «hatbrev» om måsene	1										1										1	1		1		vil
129	1	2018-06-27	Det er vi som har satt måsene i en vanskelig situasjon	1												1			1							1	1		vic
130	3	2018-07-10	Slik takler du nærgående måker														1		1		1					1	1		vil
131	3	2018-07-11	Her sjeler måken pølsa rett ut av hånda hans						1							1	1	1				1			1		1		vil
132	2	2018-07-14	Skolen er dekket av måkeskitt: - Vi tapte kampen												1	1	1										1	1	vic
133	1	2018-07-15	Må oftere rykke ut til skadde måser: - Måsen har livets rett og vi ha													1	1						1		1		1		vic
325	2	2018-07-16	Hyllest til måsen							1			1				1						1		1				vic
134	1	2018-07-20	«Fugler i tilbakegang nektes optimale hekkeplasser»														1			1					1		1		vic
324	2	2018-07-27	Trolig måse som ødela planter				1					1						1									1		vil
323	1	2018-08-03	Måseungen falt ut av reiret - nå har han blitt en del av familien Øy						1	1													1		1		1		hero
137	2	2019-04-27	Naboene mener de blir syke av fuglenes «øredøvende leven»: - D						1	1					1								1	1	1			1	vil
138	1	2019-05-06	Derfor vil forskerne merke by-krykkjene	1							1						1						1			1			vic
322	2	2019-05-21	Beboer frykter måse-koloni				1		1				1											1			1		vic
140	1	2019-05-22	Hvorfor er vi så slemme mot måsene?		1								1			1		1	1							1		1	vic
141	3	2019-06-20	Burgerdikt fra politiet på Twitter.					1								1		1				1				1		1	vil
142	1	2019-06-20	Fortvilet gutt ringte 112 etter måseangrep. Politiet responderer me						1	1						1	1					1				1		1	vil
143	2	2019-06-20	Måse stjal maten - da ringte gutten 112						1	1						1						1				1		1	vil
144	1	2019-07-04	Redd for måser? Da er dette det dummeste du kan gjøre	1									1		1		1									1		1	vic
146	2	2019-07-24	Hvert år må brannvesenet redde måser fra bakgården: - Det er jo					1	1							1	1						1		1		1		vic
320	2	2019-07-31	- ANGRIPER NÅR MAN GÅR LANGS GATA		1						1				1	1							1		1	1	1		vil
319	2	2019-08-15	- Måsene går ofte går til angrep når gjestene er ferdige med mater						1							1	1	1						1	1		1		vil
147	2	2019-09-03	Denne hvalvittige videoen må du se! Hvaldimir leker sei med måse																						1			1	hero
148	2	2019-10-11	De har nærmest overtatt bygget, men nå varsler gårdeieren ny kar			1								1											1		1	1	vil
149	2	2020-03-03	Huseieren har tatt omstridt metode i bruk mot Tromsø-måsene. De			1								1			1								1			1	vil
150	2	2020-05-27	Mann skjøt måker med luftgevær. Så dukket politiet opp					1	1							1	1		1			1							vic
151	3	2020-05-27	Skjøt etter måker med luftgevær					1	1							1	1		1			1							vic
152	1	2020-05-27	Skjøt på måser med luftgevær						1							1	1		1										vic
318	1	2020-05-28	Når måsereiret først er bygd, er det totalfredet	1						1			1				1			1						1		1	vic

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154	3	2020-06-02	Hammerfest kommune «oppfordrer» innbyggerne til å bryte loven								1																			vic
155	2	2020-06-02	Her angriper måsene hver dag: - De har blitt hissigere			1																			1	1	1	1	1	vil
156	1	2020-06-03	Her nektes måsene adgang til reirene sine, men ansvarlig hevder			1										1		1						1		1		1	vic
317	2	2020-06-03	Her angriper måsene hver dag: - De har blitt HISSIGERE			1											1		1										vil
316	1	2020-06-05	Nekter måsene adgang til reirene på Nav-bygget	1		1							1			1		1				1			1	1	1		vic
157	1	2020-06-06	Dette får du i straff hvis du forstyrrer hekkende måser				1					1					1	1				1				1		1	vic
315	2	2020-06-09	Måse prøvde å ta over fiskeridirektoratets kontrollbil				1							1				1									1		vil
159	1	2020-06-12	Har ikke vi mennesker det i oss å vise empati og toleranse for må		1												1		1				1			1			vic
314	2	2020-07-04	LØFT I NORDBYEN				1											1				1				1		1	vil
160	2	2020-07-15	Mener Tromsø sentrum har et måseproblem: - Vi er nødt til å gjøre			1								1				1						1		1	1		vil
161	2	2020-07-16	Her er fugleforskerens beste tips mot måser: - De er glupske og d												1		1	1								1	1	1	vil
259	3	2020-07-16	Frykter bymåsen ødelegger sentrum - Folk tør ikke spise is utend		1							1				1		1				1				1	1	1	vil
313	2	2020-07-16	Måsemare(d)ritt i Nordens Paris												1			1								1	1		vil
312	2	2020-07-17	Vi ødelegger måkenes livsgrunnlag, nå er det vi som får føle på k														1	1	1							1	1	1	vic
311	2	2020-07-17	- VI ER NØDT TIL Å GJØRE NOE - OG DET MÅ VÆRE LOV Å S			1								1				1								1	1		vil
163	1	2020-07-18	Mediene må slutte å fremstille måker som terrorister		1								1							1						1	1	1	vic
162	1	2020-07-18	En kystby uten måser i sentrum er en død by					1					1					1								1	1	1	vic
310	2	2020-07-18	Tromsø sentrum - reservat for måsen?											1		1							1		1	1	1	vil
309	2	2020-07-20	EKSPERTENS MÅSETIPS	1																								1	hero
164	2	2020-07-20	Måseredningsaksjon i Tromsø: - Kjempet en desperat kamp for liv				1									1	1	1					1		1	1	1	vic
165	1	2020-07-20	Måseredningsaksjon utenfor Tromsø kunstforening						1							1	1	1					1					vic
308	2	2020-07-21	Maks for måsen, best for byen							1																			other
307	2	2020-07-21	Reddet fra dødsgrep						1								1	1					1		1	1	1	vic
307	2	2020-07-21	Mann og måse							1			1					1										vic
166	3	2020-07-22	Flere måser i Tromsø i år		1							1	1					1									1	mix
305	2	2020-07-22	Torgcenter-sjefen nekter å ta opp kampen mot måsene: - Folk finn			1				1			1		1			1	1						1	1	1	vic
167	1	2020-07-23	Måker i byene er kommet for å bli		1								1					1								1	1	vic
168	2	2020-07-23	Plages du av innpåslitne måker? Da er det én ting som gjelder, ifø	1												1		1									1	vil
169	1	2020-07-24	Forslag til konfliktdempende tiltak overfor måser		1	1	1											1					1			1	1	hero
301	2	2020-07-24	Kebab-kongen har null tro på forbud mot mating av måsene			1						1		1					1				1			1		mix
302	2	2020-07-24	Dekk-, miljø- og nå kanskje måseskitt avgift				1					1									1							other
303	2	2020-07-24	Måseplagen										1							1								sat
304	2	2020-07-24	Måkene forijener bedre					1					1						1									vic
300	2	2020-07-25	Måser til besvær						1	1			1															vic
299	2	2020-07-27	Bygde måse-hotell for å få slutt på terror i gatene							1				1				1					1			1	1	vil
170	1	2020-07-27	Måtte tilkalle politiet for å fjernet måke fra hotell			1			1					1				1					1			1		vil
298	2	2020-07-28	Måseplage						1	1						1		1								1		vil
171	1	2020-07-29	Måser som hater folk										1		1				1							1	1	vic
172	3	2020-07-31	Katastrofe for krykkjene								1						1				1		1					vic
173	2	2020-08-03	Her kan Veronica nyte fiskesuppa si helt i fred. Og «luftverne» er							1						1		1						1		1	1	vil
297	2	2020-08-05	Effektivt måse-hinder			1										1		1								1		vil
174	2	2020-10-08	Jern ble utsatt for et bakholdsangrep: - Jeg ble sjokkert							1						1		1								1		vil
175	3	2020-11-24	Bot for å ha spylt bort reir					1	1		1					1											1	mix
176	2	2020-11-24	Må nekte hjelp til skadde fugler i Tromsø: - Vi er forberedt på at de														1				1		1				1	1	vic
177	3	2020-11-25	Spylte reirene til kritisk truet fugl - nekter å vedta boten			1	1				1	1					1				1					1	1	vic

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Unit	Src	Date	Title	a1	a2	a3	a4	a5	a6	a7	b1	c1	c2	c3	c4	c5	c6	d1	d2	d3	d4	d5	e1	e2	e3	f5	g1	g2	KW	Frame
178	3	2021-02-01	Kommune dømt for å fjerne fuglereir				1																			1	1			vic
179	1	2021-04-15	Forsker frykter for truet fugleart etter fjerning av reir og montering								1						1		1								1	1		1	vic
180	2	2021-04-19	Slik skal kommunen bekjempe måseproblemet i byen: - Kan ikke				1							1				1									1	1			vil
182	2	2021-04-28	Måse i NAV-drama				1										1							1		1	1	1	1	vic
181	2	2021-04-28	Her har Kim reddet måsen: - Sesongen har begynt				1										1	1						1		1	1			vic
183	2	2021-05-20	Du vil ikke tro hvor måsene fant seg til rette: - Jeg tviler på at eiere							1																	1		hero
295	2	2021-05-31	- Begrenset hva vi kan gjøre			1								1				1								1	1		1	vil
294	1	2021-05-31	Planker med pigger skulle skremme vekk måsen, men de brukte d			1								1				1							1	1			vil
291	2	2021-06-02	Vi må tenke nytt om måsen												1						1		1						vic
184	1	2021-06-05	Det merkes at måkenes hekking er i gang		1								1							1			1			1	1		1	vic
185	1	2021-06-07	Elvis ble funnet etter måseangrep. Nå leter Celine og Amanda ette							1						1		1								1		1		vil
292	2	2021-06-09	reddet nymfeparakitt fra sinte måser							1						1	1									1				vil
293	2	2021-06-10	Må rykke ut for å hjelpe skadde måser							1						1							1			1				vic
186	2	2021-06-13	Vigdis og Marit har ansvaret for å hjelpe de skadde måsene. - Det							1						1							1			1				vic
290	2	2021-06-16	Fjernet 400 egg fra måsekoloni							1				1											1	1				vil
188	2	2021-06-29	Nå skaper måsene trøbbel for det nye 5g-nettet: - Vi må vente til d									1		1				1					1			1	1		1	vil
189	2	2021-07-05	Feil å kritisere budbringeren							1							1	1								1		1		vic
192	3	2021-07-07	Politiker vil gi p-piller til måkene i Tromsø - det mener Noah er en f				1										1	1								1		1		vic
190	2	2021-07-07	Her er tromsøværingens meninger om måsene:							1						1		1								1				vil
191	2	2021-07-07	Høyre-politiker foreslår å gi måsene p-piller: - Vi kan ikke la oss te				1							1				1						1		1		1		vil
288	2	2021-07-08	Måseterroristene							1							1									1				vic
289	2	2021-07-08	- Kan ikke la oss terrorisere							1				1				1							1	1				vil
193	1	2021-07-10	Urbane måker blant urbane mennesker		1									1				1										1		vil
287	2	2021-07-13	- De har tatt litt overhånd over byen							1				1				1												vil
195	2	2021-07-14	Nå kan du spille deg gjennom Tromsø fra måsens perspektiv: - Je			1											1	1								1	1			sat
194	2	2021-07-14	Fugleforsker om «problem-måsene» i Tromsø: Så lenge er det til d	1									1					1								1	1		1	vic
286	2	2021-07-15	Derfor har måsen flytta til byen				1															1	1			1	1		1	vic
196	1	2021-07-15	Politiet ber om vitner etter måseplageri						1	1			1						1							1		1		vic
285	2	2021-07-16	- De roer seg snart ned	1													1	1	1							1	1			vic
197	1	2021-07-16	Politiet har ikke mottatt noen tips i måseplage-sak. Og sier det er u				1		1		1			1			1	1					1			1	1		1	vic
283	1	2021-07-16	Vi kan ikke fremskynde utryddelsen av utrydningstrua arter		1								1				1	1			1			1		1		1		vic
284	2	2021-07-16	- Jeg har blitt hekta			1							1					1								1				vil
282	1	2021-07-19	- Det er ikke det at vi ikke bryr oss om måsen, tvert imot			1	1							1				1					1			1	1			mix
281	1	2021-07-19	Den urbane måsen							1				1				1												vil
198	3	2021-07-20	Den rødlistede krykkja «eier» Hammerfest sentrum i Finmark: Kc	1			1							1				1						1		1	1		1	vil
199	1	2021-07-21	Irene (24) elsker måser - nå lager hun en dokumentar om dem							1			1					1						1		1	1	1	1	hero
280	2	2021-07-29	Måsebyen Tromsø							1			1					1								1		1		vil
201	2	2021-07-30	Måse funnet skutt i Bodø - måtte avlives		1												1	1												vic
202	1	2021-08-03	Måsene på fylkeshuset påvirker Arctic Race			1								1				1						1		1	1		1	vil
203	2	2021-08-04	Irene (24) starter restaurant for måser i Tromsø: - De som virkelig							1				1				1						1			1		1	vic
279	2	2021-08-06	Måseplagen i Tromsø utgjør en helserisiko				1							1				1					1							vil
278	2	2021-08-07	Sjokkert over det tidligere praktbygget			1								1				1								1	1		1	vil
277	2	2021-08-11	- Bygg glasstak over hele Tromsø				1										1	1							1			1		sat
204	2	2021-08-11	Forslag fra Bodø i måsedebatten: - Bygg glasstak over hele Troms				1							1				1					1				1	1		vil
205	2	2021-08-17	Dette synet møtte Grethe ved det populære turområdet: - De man							1				1				1		1							1			vic

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Appendix data table (landscape orientation).

Unit	Src	Date	Title	a1	a2	a3	a4	a5	a6	a7	b1	c1	c2	c3	c4	c5	c6	d1	d2	d3	d4	d5	e1	e2	e3	f5	g1	g2	KW	Frame
206	2	2021-08-25	Nå skal fuglefasaden ryddes: - Blir deilig å få det rent				1				1				1			1					1				1	1	1	vil
207	1	2021-08-31	I år baseres min stemme på hvilket parti som viser handlingskraft									1				1		1					1			1	1	1	1	vil
208	3	2021-09-02	Kommune fikk krykkje-bot på 120.000 kroner							1	1	1				1					1					1	1		1	mix
276	1	2021-09-22	Hva kan gjøres med måseproblemet i Tromsø?				1							1				1					1			1	1	1		vil
209	1	2021-10-10	Siden 2017 har det blitt 11 ganger flere krykkjer i Tromsø sentrum	1										1									1							vil
211	2	2021-10-16	Ønsker spektakulær løsning på måseproblemet i Tromsø: - Jeg hå							1				1				1					1				1	1		sat
275	2	2021-10-19	Vil lage måsefontene																						1		1	1	1		sat
213	2	2021-11-20	Må se etter nytt hjem - slik skal de bli kvitt plageåndene		1						1				1			1					1			1	1		1	vil
273	2	2022-02-13	Innfører gips-måser				1				1							1									1		1	hero
214	1	2022-02-22	Her bygger krykkja rede i veggene på Kunstforeninga: - Herregud,				1				1			1				1			1				1		1		1	vil
215	2	2022-02-25	Her bygger kommunen måsehotell				1				1							1						1		1	1		1	hero
216	1	2022-02-25	Krykkja er tilbake i byen. Hva gjør Tromsø nå?	1							1			1				1					1			1	1		1	vil
217	3	2022-02-27	Bygger eget fuglehotell for nærgående måser og krykjer				1							1				1					1			1	1		1	vil
218	2	2022-03-08	Lavt belegg på det nye måsehotellet: - Må se om vi må vurdere ek															1					1			1	1		1	hero
219	1	2022-03-10	«Jævlig lavt belegg» på byens nye måsehoteller - slik skal forsker													1	1						1			1	1		1	vic
220	2	2022-03-10	Krykkje rulle 1							1	1								1								1		1	vic
221	2	2022-03-11	Kunstner om krykkjene på Kunstforeninga: - Jeg gråt da jeg kom p							1	1		1													1	1		1	hero
274	2	2022-03-11	- noen ganger er vi nødt til å kutte noen svinger				1				1	1								1						1	1		1	other
222	1	2022-04-13	Her har krykkja slått seg til ro på Kunstforeninga - akkurat som i fj				1				1			1				1					1				1		1	vil
223	3	2022-04-15	Suksess for fuglehotell i Tromsø som skal redde måsearten krykkj				1											1								1	1		1	hero
225	2	2022-04-26	måse-rulle	1																				1			1		1	hero
224	3	2022-04-26	Invaderes av måker: Her vil de legge «krykkjefiendtlige» tak for å l			1					1			1				1					1	1		1	1		1	vil
272	2	2022-06-18	Måse med flaks							1						1								1				1	1	vil
226	2	2022-06-19	Måsene har invadert ærverdig bygård: - Ikke særlig hyggelig			1	1				1			1				1						1		1	1		1	vil
227	1	2022-06-23	Her krykkjene har funnet seg et nytt hjem - det byr på flere utf								1							1					1			1	1		1	hero
228	1	2022-06-28	Slik er de nye planene for universitetsmuseet					1			1							1					1			1	1		1	hero
265	2	2022-07-01	«Skitstor» kontrast på de to trappene - men eksperten advarer mo	1		1								1		1			1				1		1		1	1	1	mix
229	1	2022-07-01	Fant flere døde fugler og mengder av skitt på fortauet ved kjøpese							1	1			1		1							1				1		1	vil
271	2	2022-07-02	Måsebæsj og døde måseunger					1						1		1										1	1		1	vil
230	1	2022-07-09	Se videoen: Her får Mo besøk av en ubuden gjest: - Hva i helvete	1						1					1		1						1				1	1	1	vil
232	2	2022-07-13	Tromsø-forsker etterlyser bedre samarbeid om måser: - Det nytter								1					1					1		1			1	1		1	vil
231	2	2022-07-13	Ingrid fortviler over måsen: - Det lukter så dårlig og brosteinen ute			1					1					1							1			1	1		1	vil
234	1	2022-07-14	Ingeborg (49) tar doktorgrad i by-krykkjer: - Vi som art er midt i en	1							1		1					1					1	1		1	1		1	vic
233	2	2022-07-14	Fugleterroren i Tromsø kan stanses, men det krever at gårdeiere								1			1				1					1		1		1		1	vil
235	2	2022-07-14	Måsene regjerer i Tromsø sentrum					1						1		1											1	1	1	vil
236	1	2022-07-15	Når ble utrydningstrua måker skadedyr, Nordlys?	1										1				1			1		1				1		1	vic
237	3	2022-07-15	Raser mot måkehåndtering - mener byen ser ut som et fuglefjell				1									1							1		1		1		1	vil
269	2	2022-07-15	Søker tiltak mot måseproblemet													1							1		1		1		1	vil
270	1	2022-07-15	Kanskje vi bør justere måsefredningsbestemmelsene?													1							1	1			1		1	vil
238	1	2022-07-16	Det enkleste er pistol					1																			1		1	sat
239	2	2022-07-17	Kan det heller være at det er vi som er er skadedyrene?							1					1							1				1	1		1	vic
240	2	2022-07-17	På tide å bytte ut kommunevåpenet?							1					1		1						1					1	1	vil
268	2	2022-07-18	Måsen er ingen sangfugl										1							1	1									vic
266	1	2022-07-19	Gunn berger foreldreløse krykkjer: - Dette er de heldige							1	1		1							1	1				1		1		1	vic
242	1	2022-07-20	Trakassering av trua arter	1																	1						1		1	vic

Unit	Src	Date	Title	a1	a2	a3	a4	a5	a6	a7	b1	c1	c2	c3	c4	c5	c6	d1	d2	d3	d4	d5	e1	e2	e3	f5	g1	g2	KW	Frame
241	1	2022-07-20	Måsen har inntatt rådhuset: «Er ordføreren gjort rede for?»				1							1				1													vil
326	2	2022-07-22	Fjellheims ekstreme løsninger					1						1														1		mix
264	2	2022-07-22	- helt forferdelig!							1				1				1								1	1		1	vil
263	2	2022-07-22	Årsaken til måseproblemet							1				1				1								1	1		1	vil
243	1	2022-07-25	Krykkjene på Aunegården er blitt turistattraksjon: - Sjøgata Krykkjé							1																1	1		1	hero
244	2	2022-07-26	Åpner for å beteleege gårdeiere i sentrum: - Vi må se på mulighet				1								1										1	1		1	1	vil
245	2	2022-07-30	Hør hva naboene til Kunstforeningen må høre på - døgnet rundt: -								1				1			1								1	1		1	vil
246	2	2022-08-01	Kommer med kontroversielle forslag mot krykkja: - Kan ikke ha sa			1					1			1				1						1		1	1		1	vil
262	2	2022-08-02	Måsene har tatt over terrassen							1				1				1					1			1				vil
260	1	2022-08-03	Gunnar ble vitne til en måseunges kamp på liv og død: - Dreper m														1									1		1		vic
247	3	2022-08-03	Fuglepiggar kan gi alvorlege skadar på måker		1						1						1		1				1				1		1	vic
261	2	2022-08-03	Forslag til måsetiltak											1				1										1		vil
248	3	2022-08-10	Flertall vil ha måkene vekk: - Paris er full av rotter, men i Tromsø fl							1	1			1				1						1		1		1	1	vil
249	2	2022-08-10	Sju av 10 i Tromsø vil ha tiltak mot måser. Bjørn mener måsen har			1						1						1							1	1			1	vil
250	1	2022-08-11	Mener politikerne gjør for lite med krykkjeplagene: - Det er ikke sn				1				1			1				1							1		1		1	vil
251	2	2022-08-16	Her har måsa satt seg fast i en lyktestolpe: - Den hang lenge og sj														1	1							1	1	1		1	vic
252	2	2022-08-20	Sjekk den måsekampen - vinneren vil overraske deg!																									1		hero
253	2	2022-09-13	Vil ha krykkjetiltak for det bygges nytt museum	1							1							1						1			1		1	hero
254	2	2022-09-15	I 2017 hekket 14 par krykkjer i Tromsø sentrum. I år var det nester	1							1						1									1	1		1	vic
255	2	2022-10-10	Fraråder pigger mot måser - frykter at måsunger spiddes														1		1				1			1		1	1	vic
256	2	2022-10-12	Smarte tiltak mot måseplagen				1							1				1					1				1		1	vil
258	2	2022-10-28	Gir huseiere ansvar								1			1										1		1			1	vil
257	2	2022-11-02	sier nei til krykkjehotell på tromsøbrua								1			1				1						1					1	vil