

SR685 Brown Crab Industry Insight

Gorkana Group

June 2014

ISBN no. 978-1-906634-91-9

Summary

This report provides an in-depth review of brown crab issues as reported in the media. Issues covered include; ethics of production (clawing and harvesting); contamination (cadmium); misrepresentation of pack messaging and stock status.

ACRUNET

Brown Crab Industry Insight

2009 - 2014

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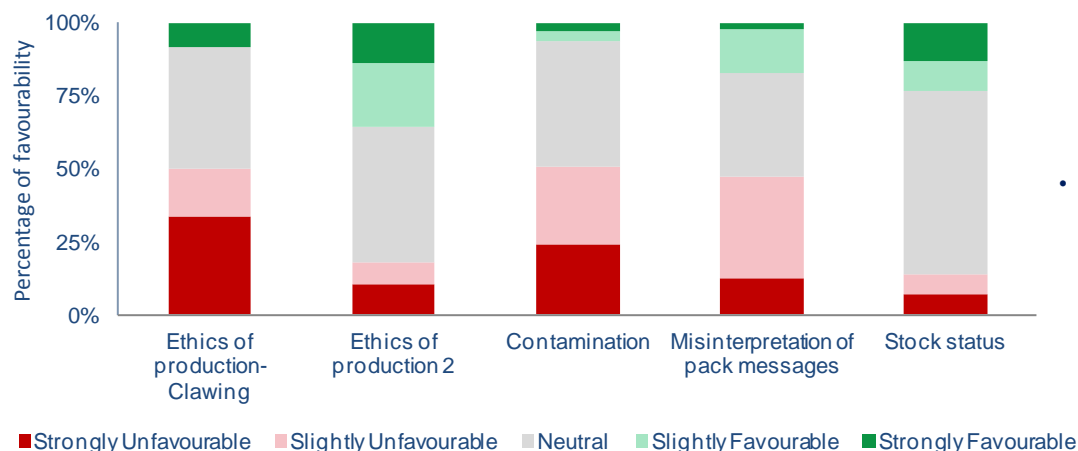
Gorkana, Winner of the 2014 Grand Prix Platinum Award

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Volume of articles over time

	Clawing	Harvesting	Contamination	Packaging	Stock status
2009	1	26	5	1	19
2010	3	78	37	2	49
2011	0	67	20	9	94
2012	0	62	10	7	139
2013	5	114	12	8	55
2014	4	81	7	13	46

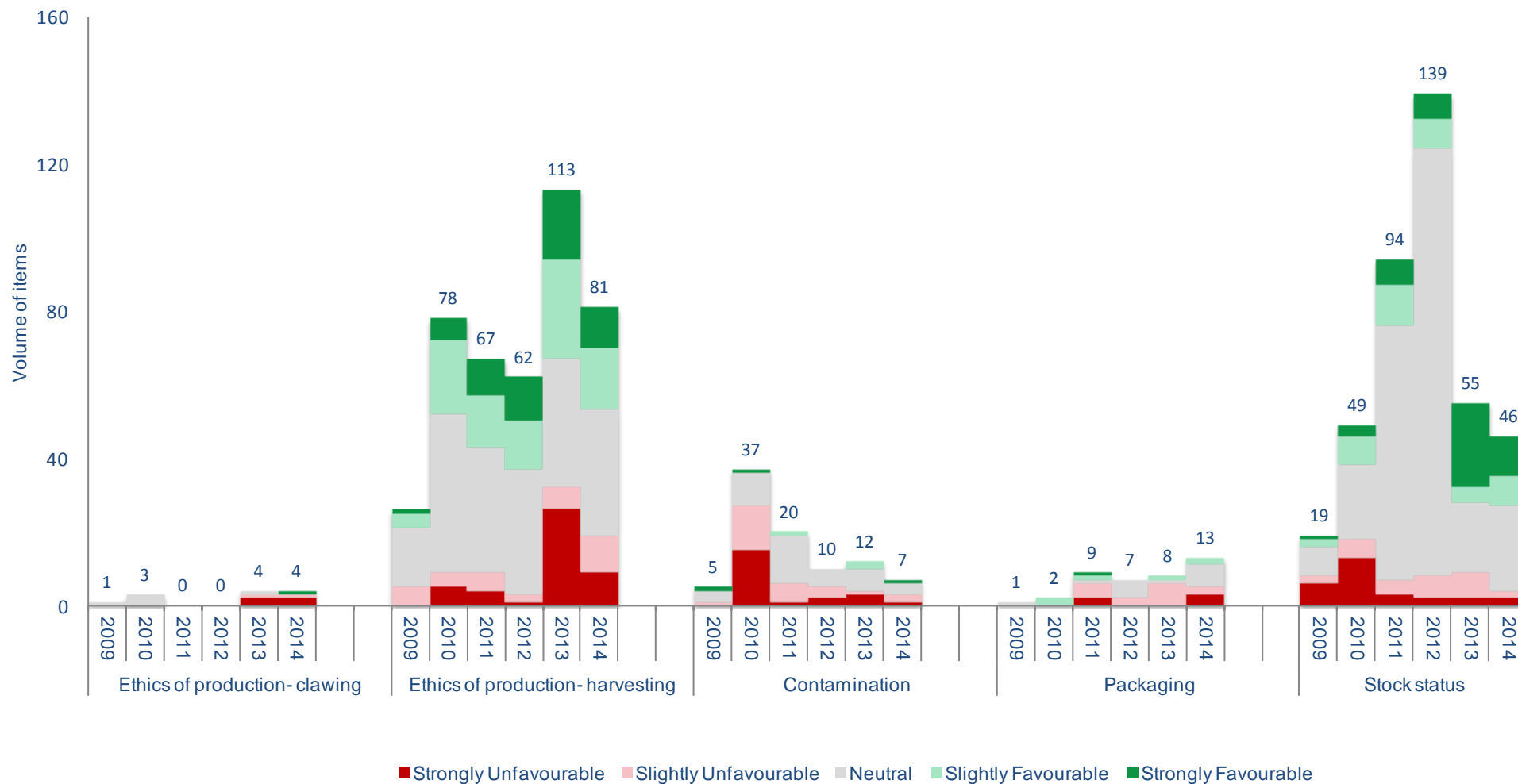
Favourability by issue



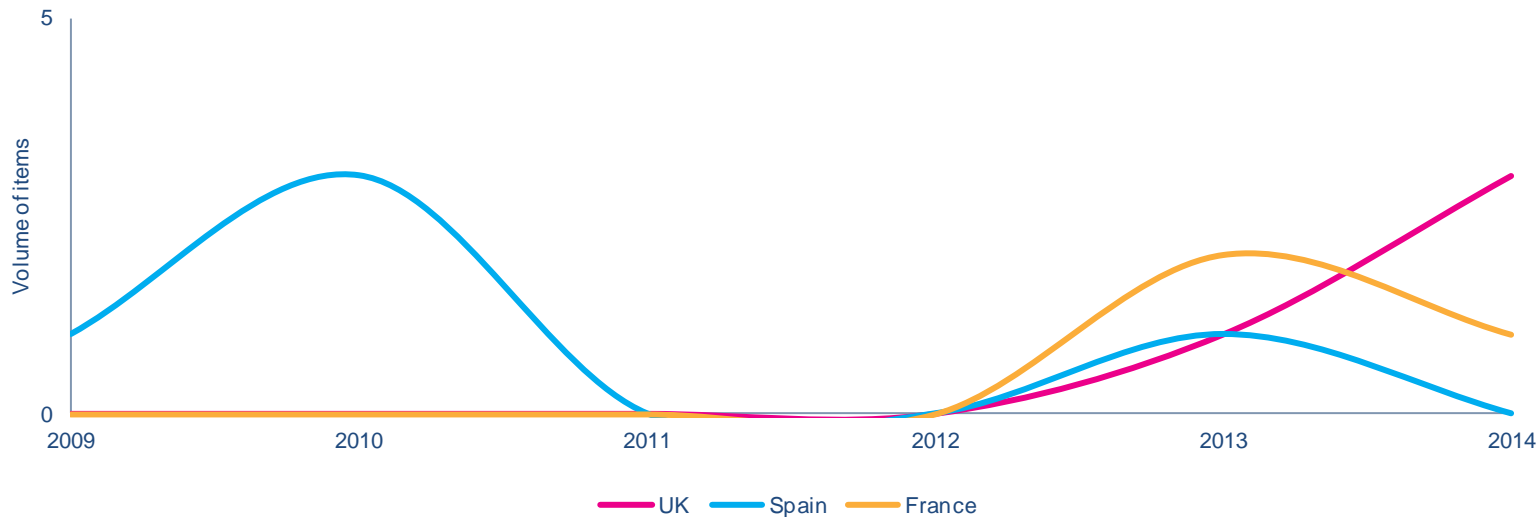
Key insight

- Ethics of production- clawing**
 Clawing had the fewest number of articles of any issue. Half of these articles were unfavourable, with the message 'crabs feel pain' delivered in three quarters (75%) of all Clawing content. The UK and Spain generated five articles each over the reporting period while France delivered three.
- Ethics of production- harvesting**
 Harvesting generated the highest number of articles than any other issue. It also had the highest proportion of favourable coverage (18%). This result was aided by the delivery of the message 'the crab industry uses ethical methods which appeared in 103 Harvesting articles, (24%).'
- Contamination**
 The 2010 BP oil spill drove articles relating to contamination over the whole reporting period. Volumes peaked at 37 items in 2010, but decreased over time. 50% of all coverage was unfavourable, with a large quantity of articles commenting on the impact the oil spill had on crabs, as well as general health concerns in relation to crab meat. 22% of all articles contained the message, 'crabs post health threat from contaminants'.
- Misinterpretation of pack messages**
 Misleading packaging received a relatively low volume of coverage (39), these were frequently passing references to the use of surimi in 'crab sticks' (17), often used as a shorthand for other industries' issues with mislabelling and only occasionally mentioned in relation to major topics such as the horsemeat scandal.
- Stock status**
 This was the second most prolific topic with 402 articles in total. Coverage mainly focussed on conservation organisations and their efforts to either maintain or increase current sea life stocks. Stock Status had the highest proportion of neutral articles than any other issue (63%) aided by discussion of stock levels regarding a diverse range of crabs species which were largely reported factually.

Volume and favourability over time by issue

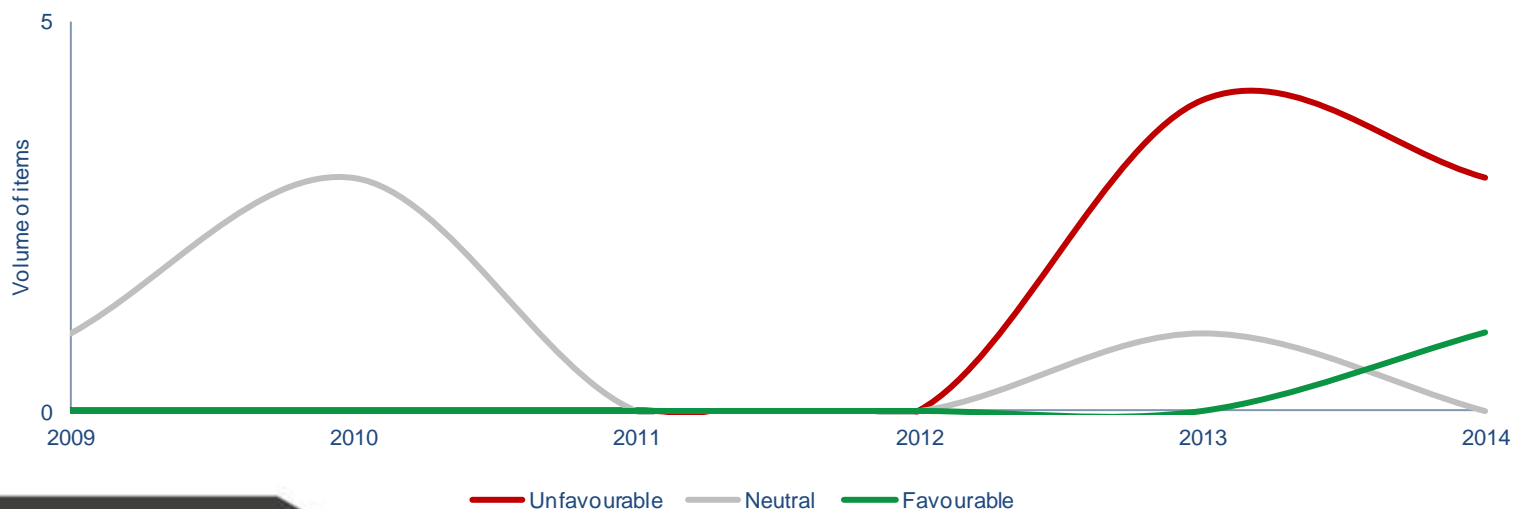


Country coverage over time



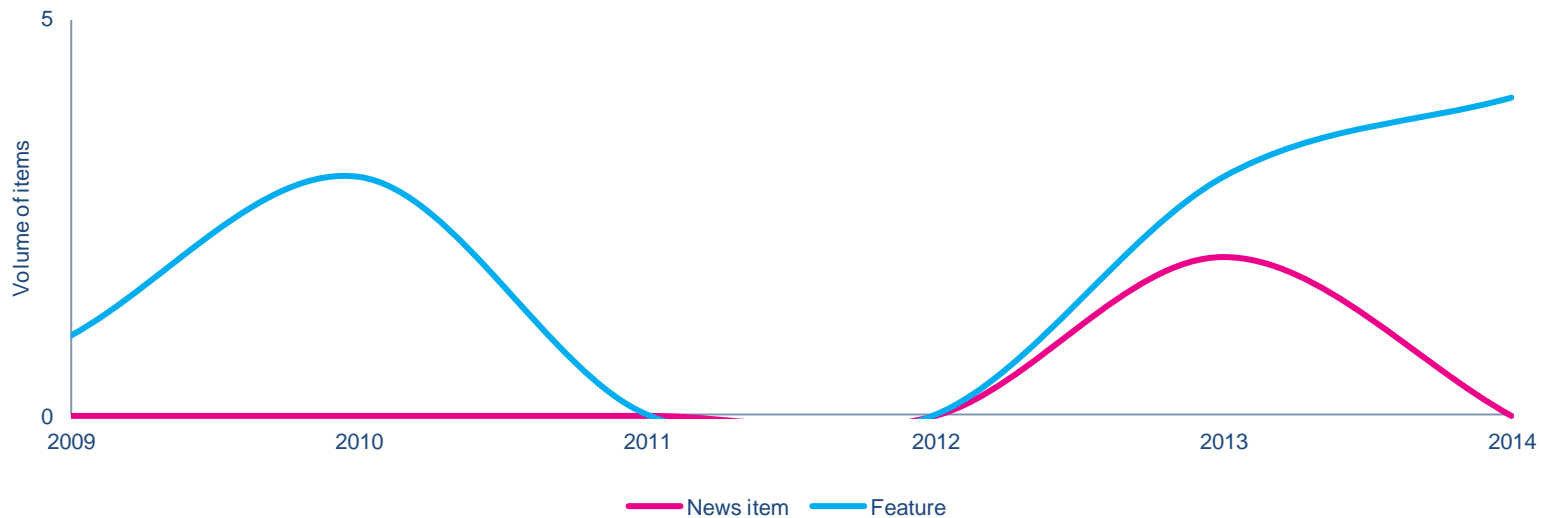
- The clawing issue appeared in 12 articles during 2014, five of which featured in UK titles. The topic was mentioned in a number of prominent publications, including *New Scientist*, with most media items specifically referring to clawing in relation to brown crabs. One article appeared in *Le Matin*, referencing research by Queen's University in Belfast which looked into unethical fishing practices in the crab industry and deduced that crabs may feel pain.

Volume and favourability over time

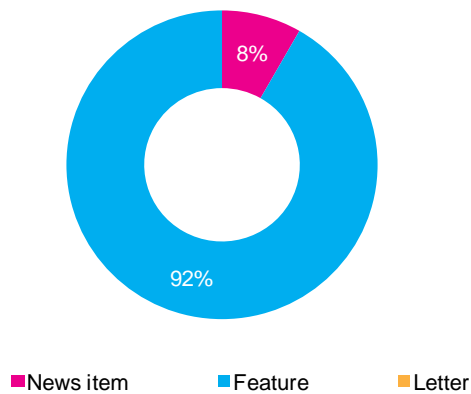


- Negative articles appeared in 2013 and 2014 and carried the message 'Crabs feel pain'. The articles appeared in French and UK publications including *New Scientist* and *Le Matin*. An article was published in *Le Telegramme* in 2013 which discussed an interactive web documentary that showed a girl who was shocked to witness a fisherman clawing a crab. The article acknowledged that a fisherman's daily life is not always understood by the public.

Article type over time

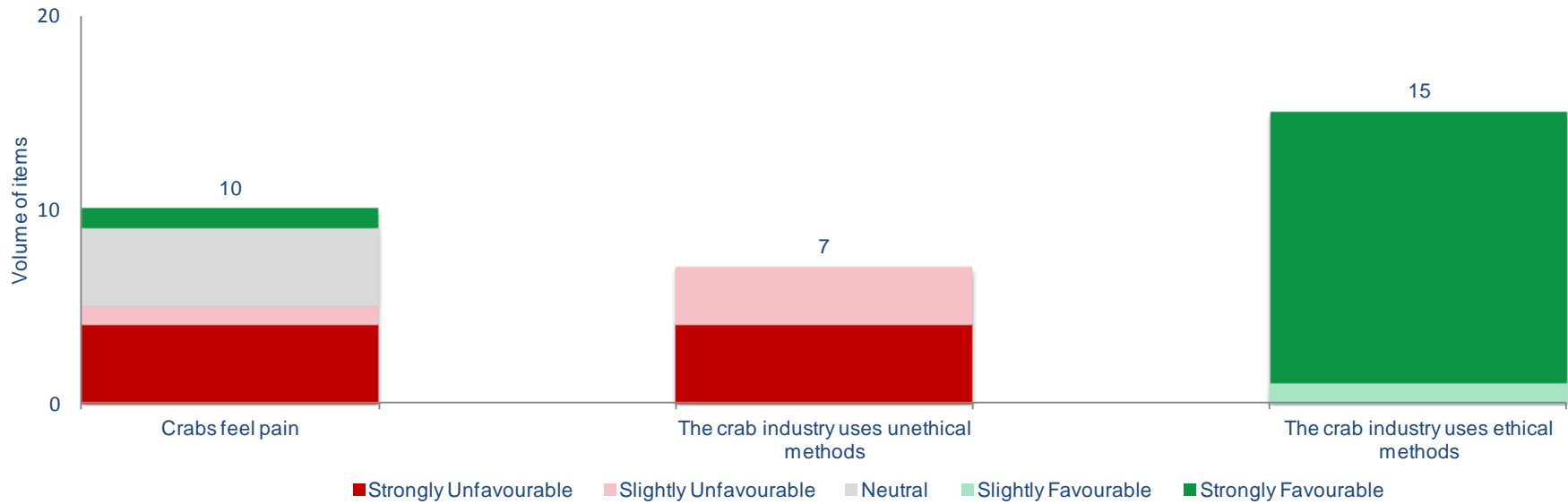


Article type

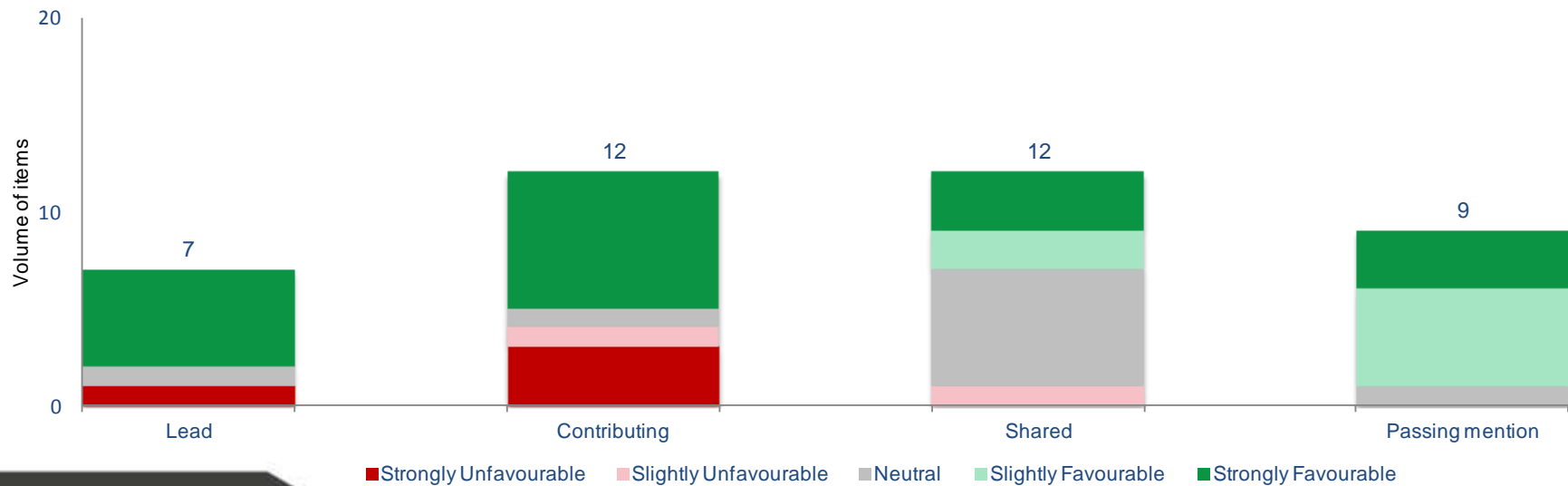


- Feature articles accounted for 92% of all coverage, 45% of which was unfavourable in tone. In 2014, *New Scientist* published an article discussing whether crabs and lobsters feel pain. The piece noted that brown crabs are shown to pick at clawing wounds.
- In 2013, the *Mail Online* published a series of photographs and videos that had been provided by animal rights group Peta, revealing the unethical treatment of lobsters and crabs at a seafood factory in Maine, United States. The article included a quote from Queen's University Belfast researcher Robert Elwood, who commented, "the crab behaviour in the Petra footage was 'consistent with that of animal feeling pain'".

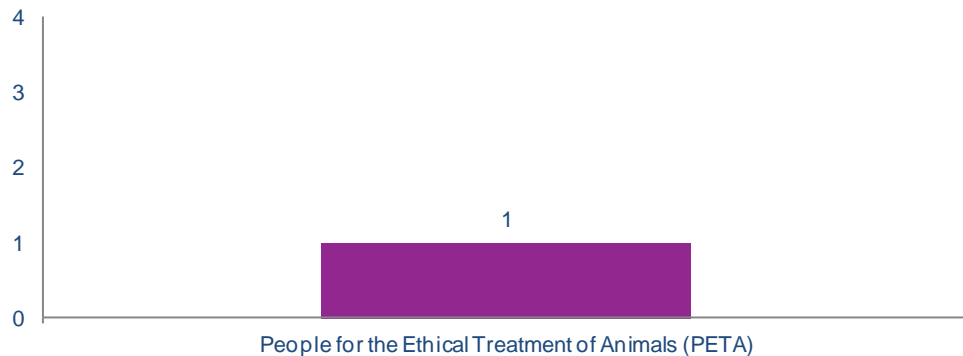
Messages by favourability



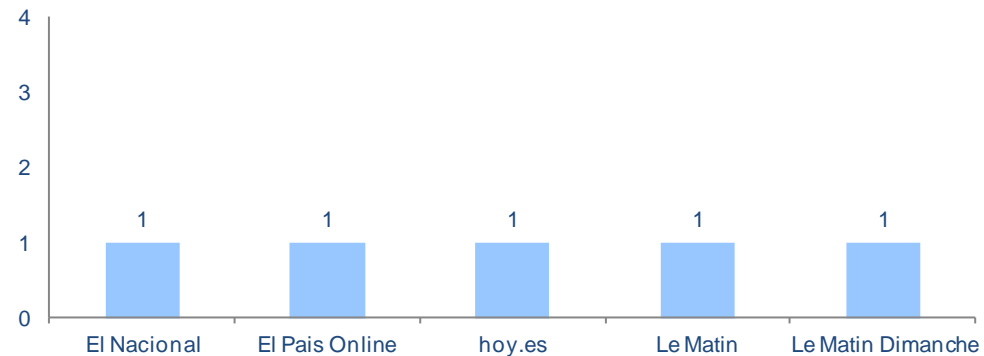
Prominence by favourability



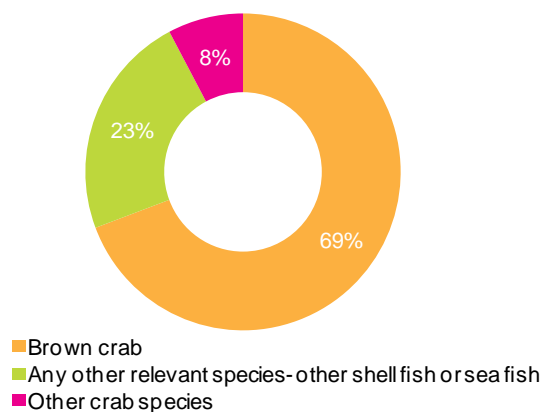
Top organisation



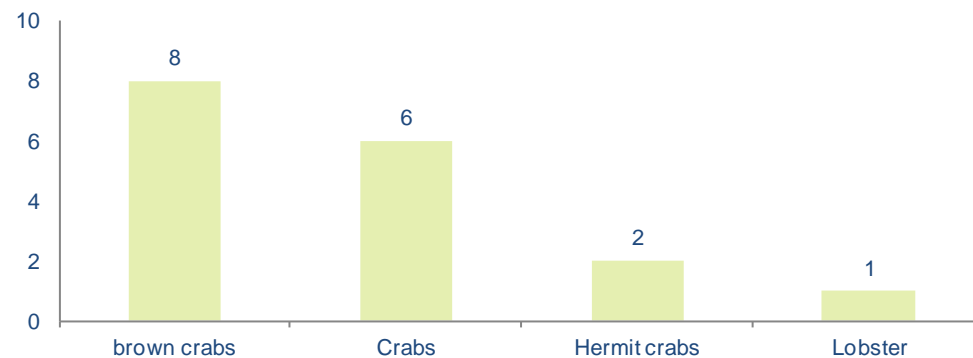
Most prominent titles



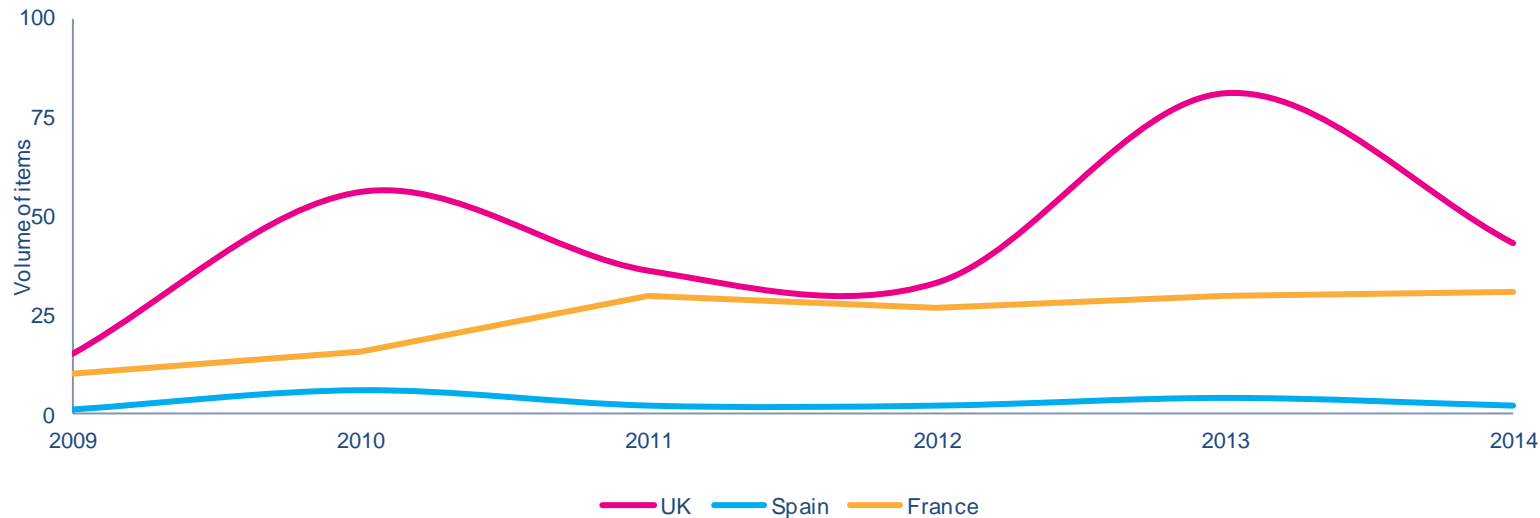
Species breakdown



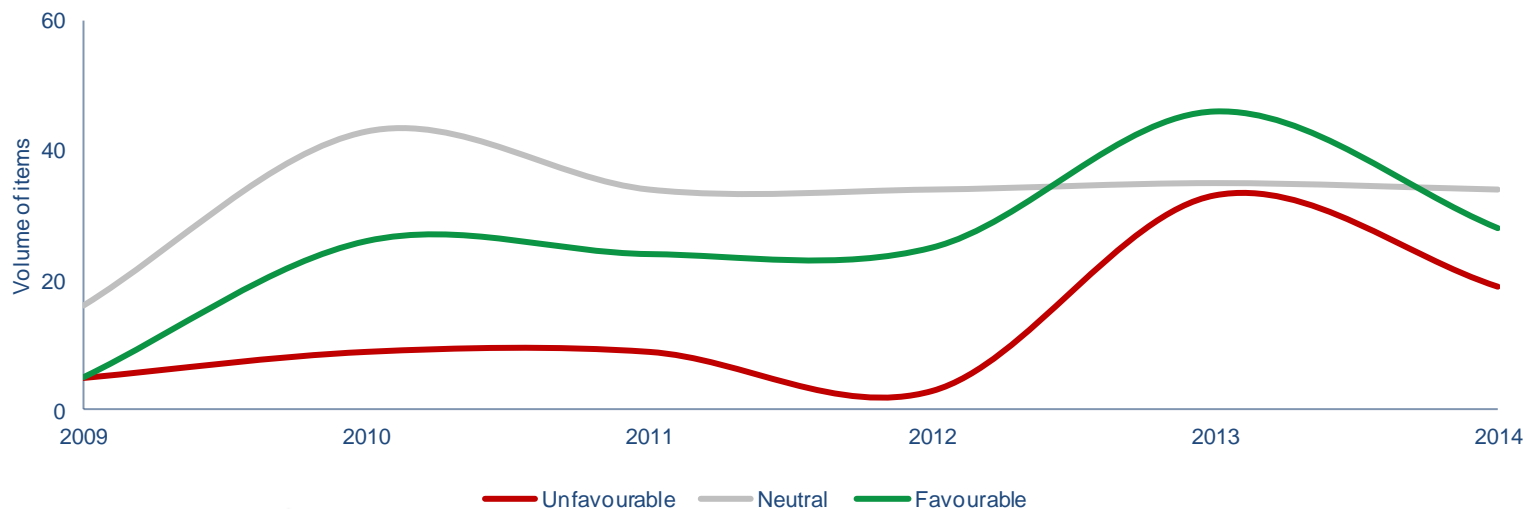
Most prolific species



Country coverage over time



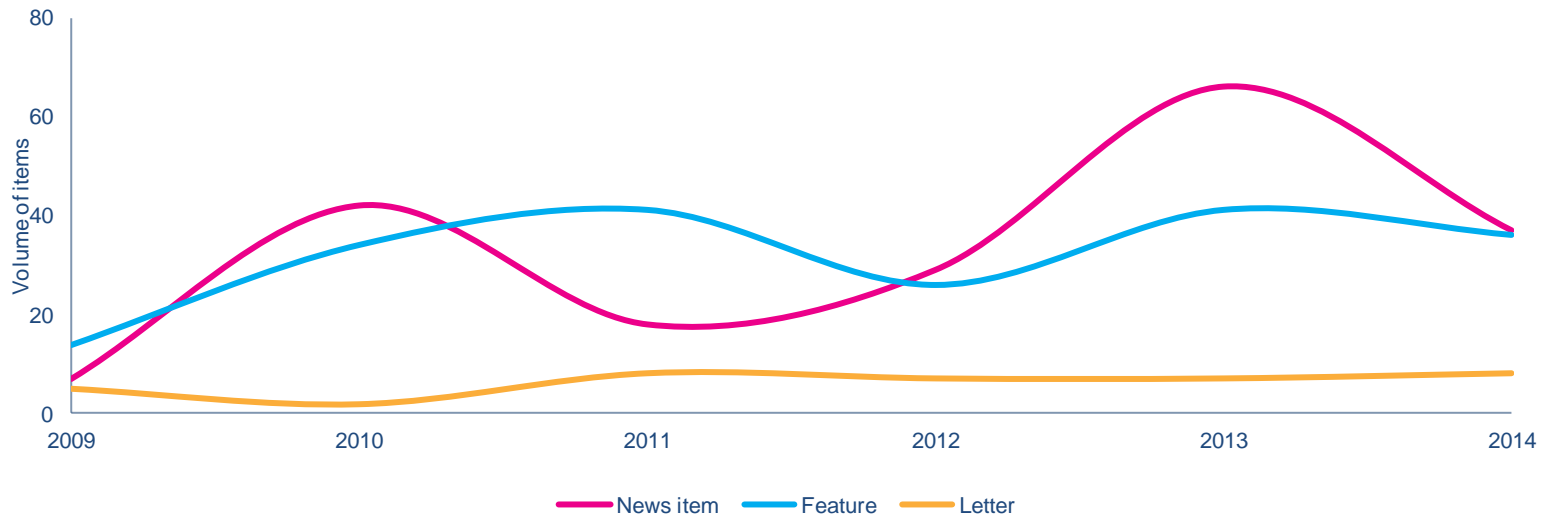
Volume and favourability over time



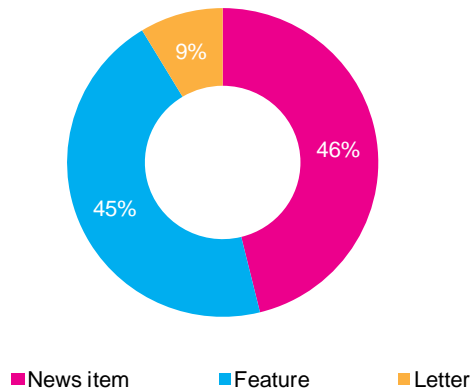
- The harvesting issue appeared in 195 articles during 2013 and 2014, 128 of which featured in UK titles. Volumes of coverage saw a sharp rise compared to previous years and the topic was mentioned in a number of high readership publications, including *The Independent*, *Daily Mirror* and *Mail Online*, with more than half of the coverage referring to the painful killing methods the crab industry uses. Many articles in French media refer to a study published in *Journal of experimental biology*, referring to unethical treatment in the crab industry.

- A sharp increase in negative coverage was seen in 2013, with articles carrying the message that “crabs feel pain”. The coverage appeared mostly in UK publications, including *The Observer* and *Daily Mirror*. However, there was a significant rise in favourable coverage during that year, with articles reporting on the alternative and ethical methods that the UK crab industry uses. A strongly favourable piece in *Time Out* refers to the Queen’s and Prince Charles registered fish supplier James Knight, who takes ethical sourcing seriously, and even runs the odd workshop for customers at Selfridges Food Stall.

Article type over time

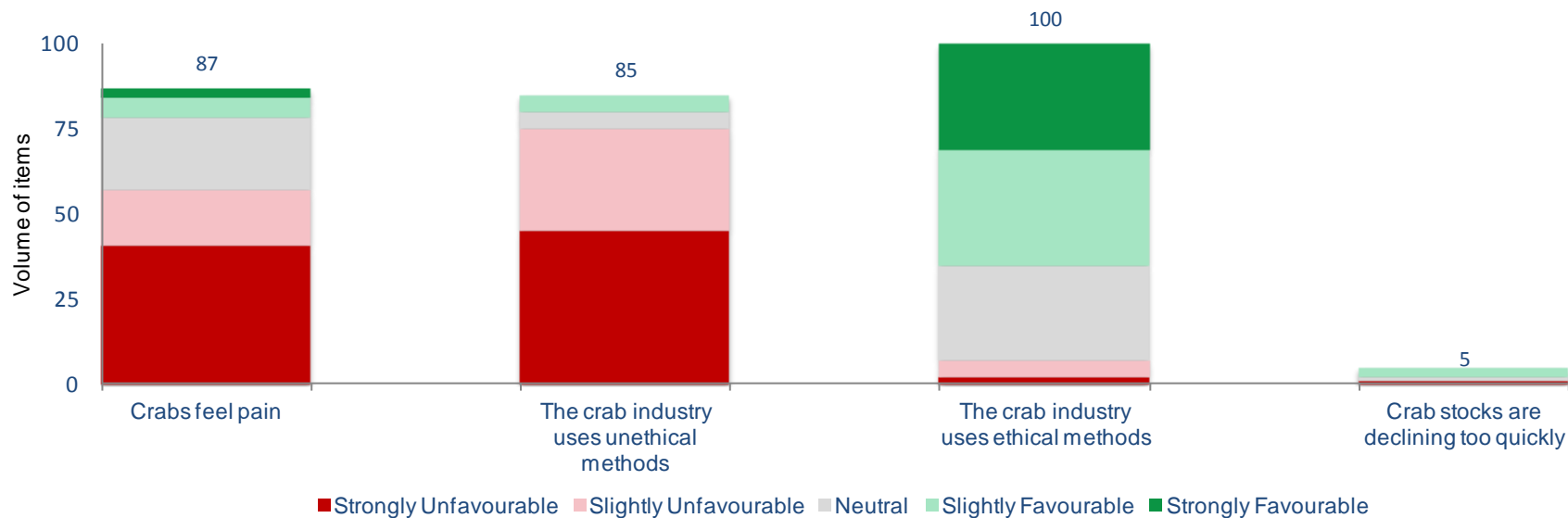


Article type

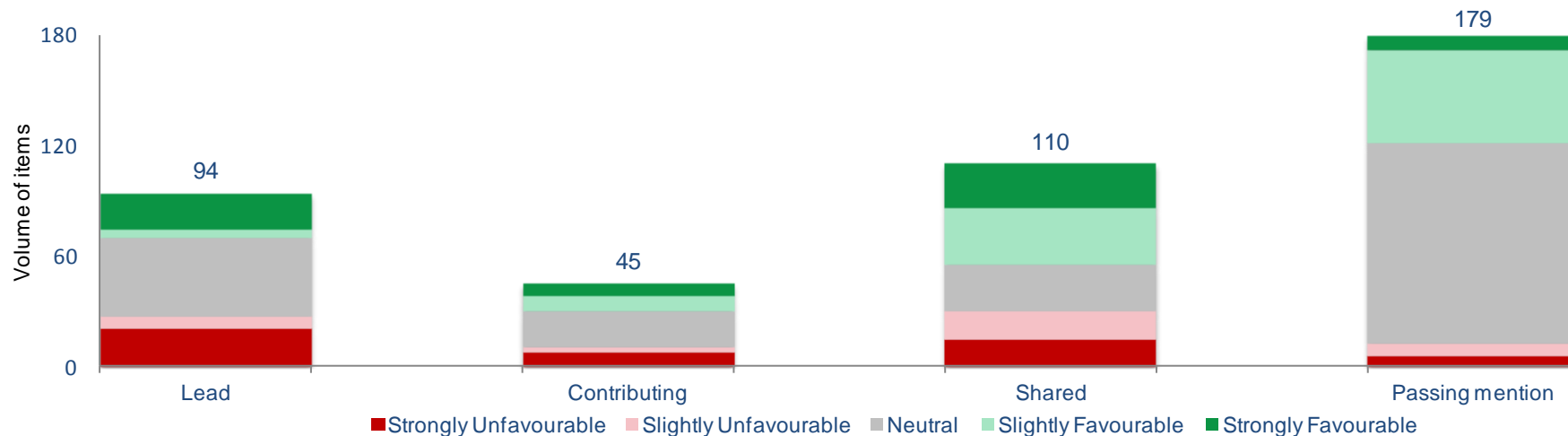


- There was a sharp increase in news items and features, relating to harvesting in 2013, with the topic generating coverage in high readership publications such as the *Evening Standard*, *Daily Telegraph* and *Time Out*.
- In 2013, the *Independent Online* published a news item, reporting on a study that involved exposing crabs to mild electric shock and scientists saying it raises ethical implications for the food industry. Professor Bob Elwood commented: “*In contrast to mammals, crustaceans are given little to no protection as the presumption is they cannot experience pain. Our research suggests otherwise*”.
- News items contributed for 46% of all coverage, almost equal to feature pieces, with 60% of coverage being neutral in tone. In 2014, a study, concentrating on whether crabs feel pain, was carried out by Queen’s University in Belfast and was widely discussed in the UK and French media with articles being published in publications like *Daily Mirror* and *Observer Online*.

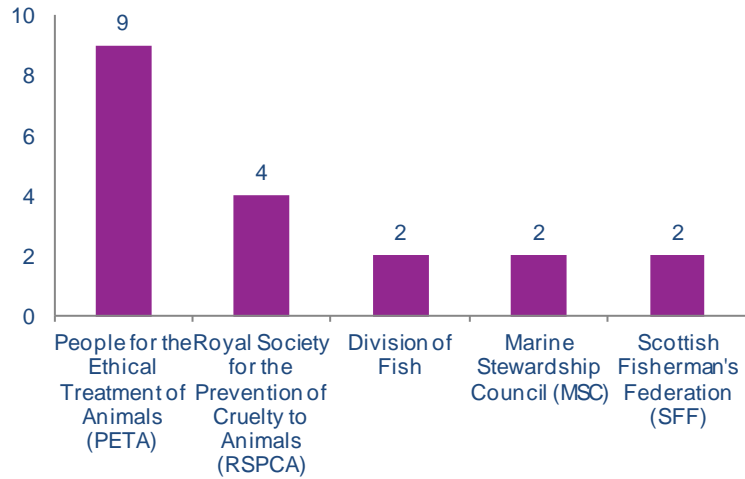
Messages by favourability



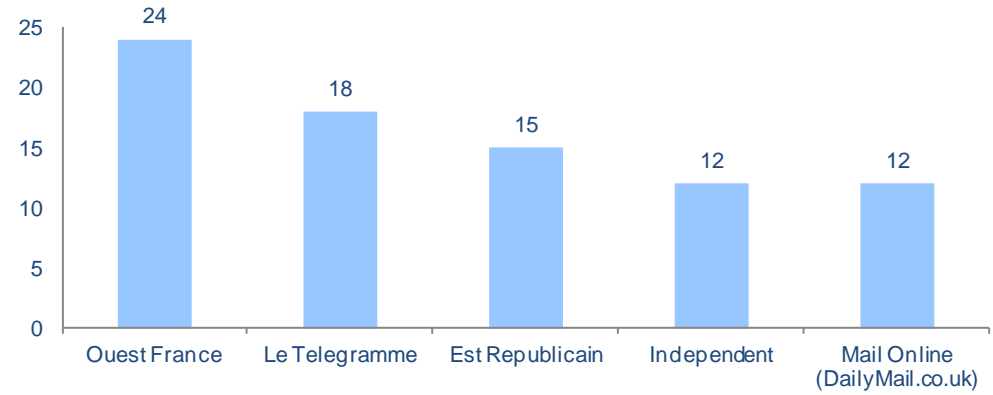
Prominence by favourability



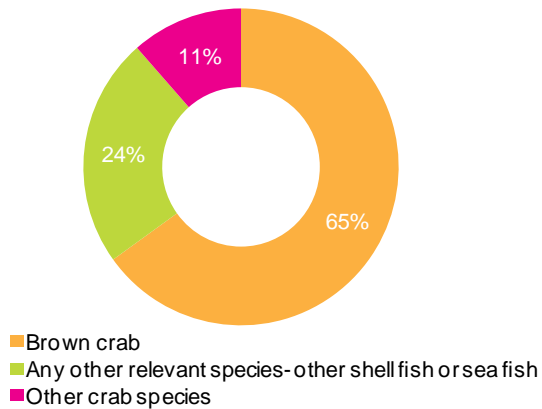
Top five organisations



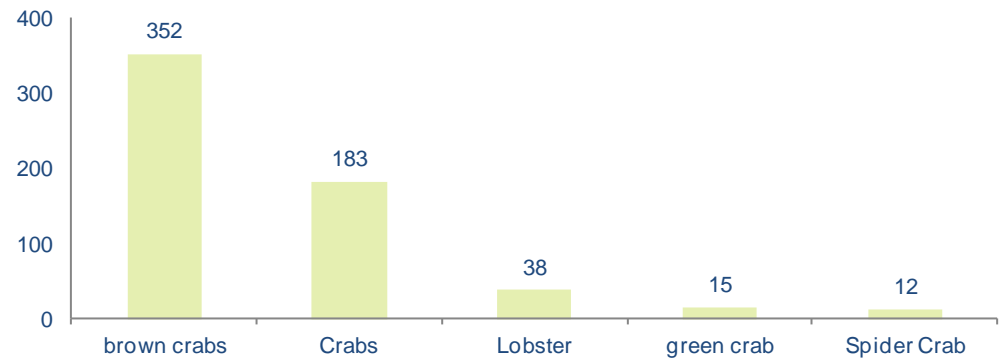
Most prominent titles



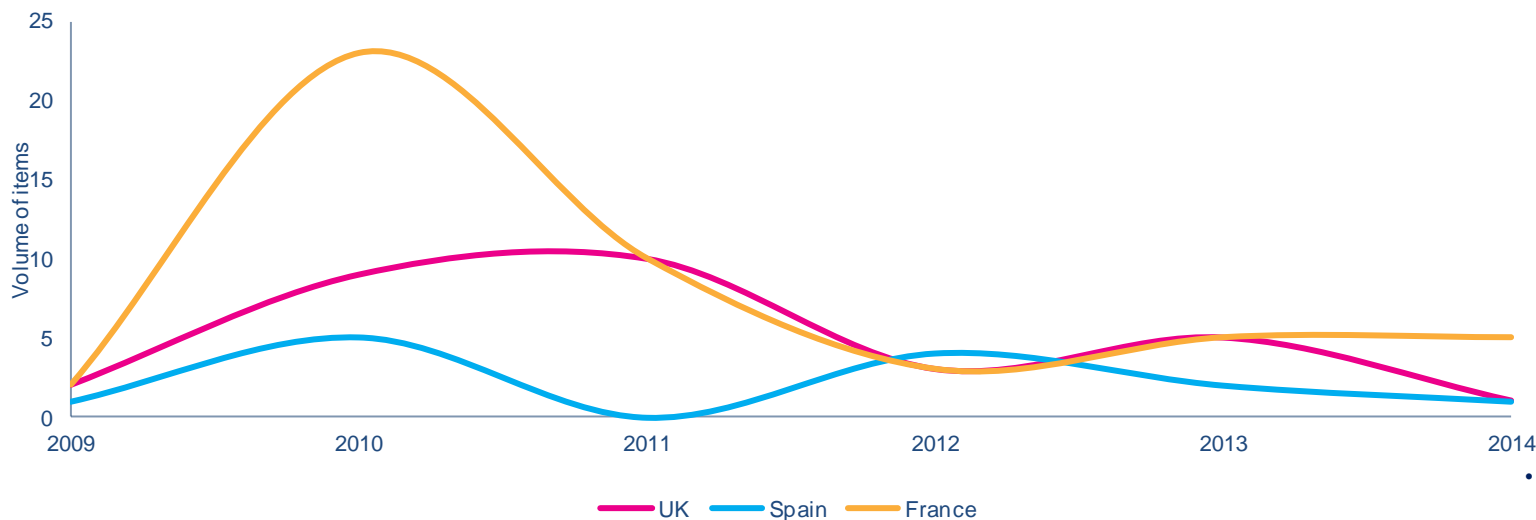
Species breakdown



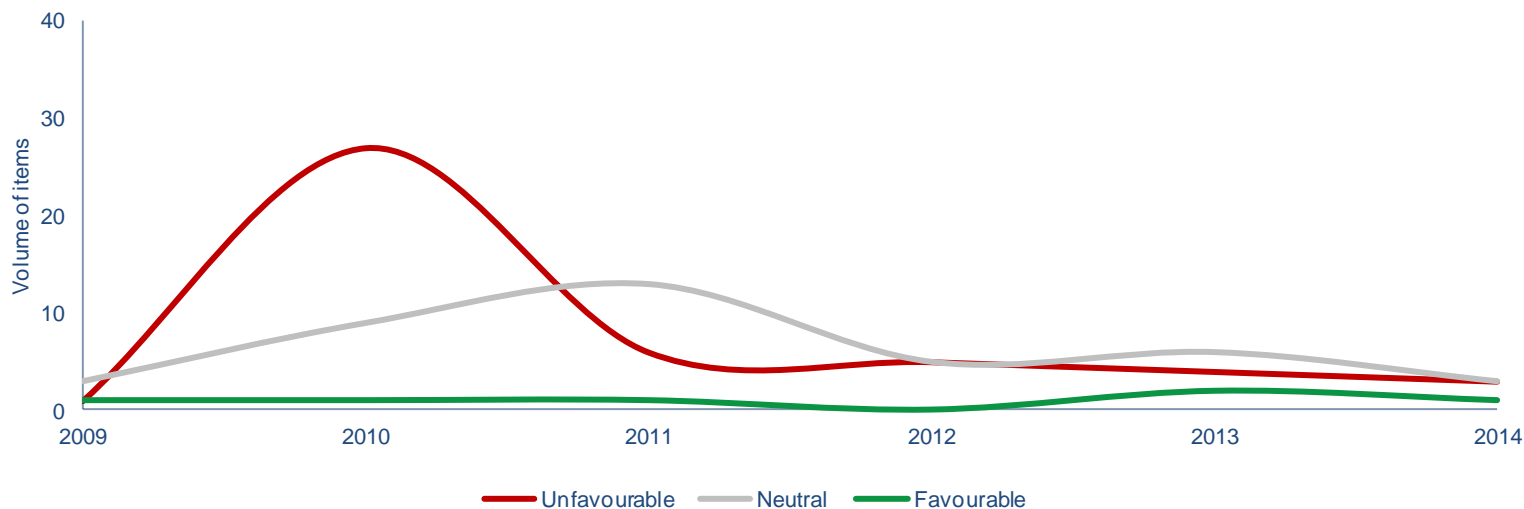
Most prolific species



Country coverage over time

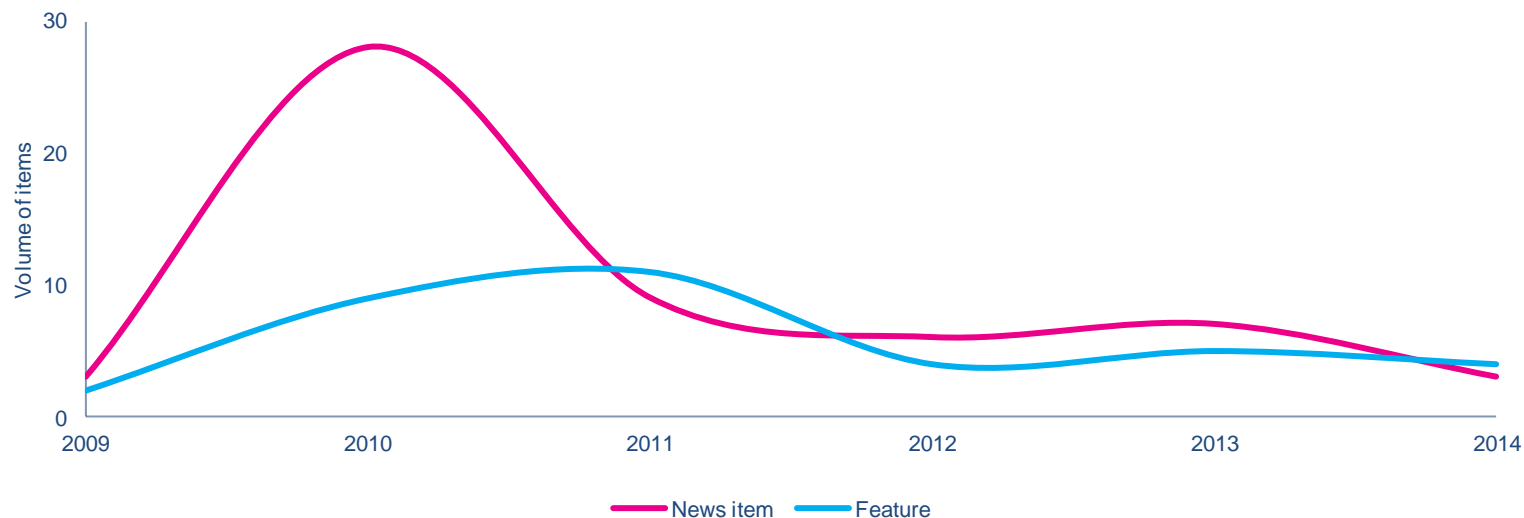


Volume and favourability over time

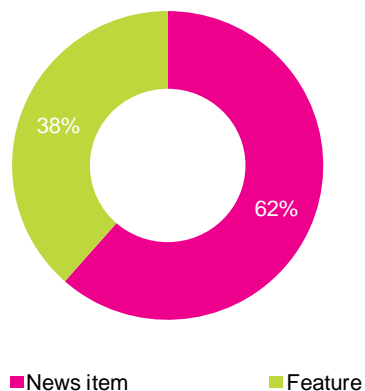


- Reports related to contamination peaked in 2010, particularly across French media, following the BP oil spill off the coast of Louisiana. High readership publications including *BBC Online*, *Sunday Mirror* and *El Norte* reported on the issue. Many articles commented that the spillage was posing a serious threat to fishing communities, who relied on shrimp and crab fishing industry to support their local economy.
- The BP oil spill and reports on its impact drove unfavourable coverage. *The Guardian Online* noted that crabs had been found to contain toxic chemicals which presented a health hazard to humans. Other food contamination stories also contributed to unfavourable mentions. *Paris Normandie* reported that the French Agency for Food, Environmental and Occupational Health and Safety had imposed a ban on crab fishing between Houlgate and Fécamp as crabs were found to have high levels of polychlorinated biphenyl.

Article type over time

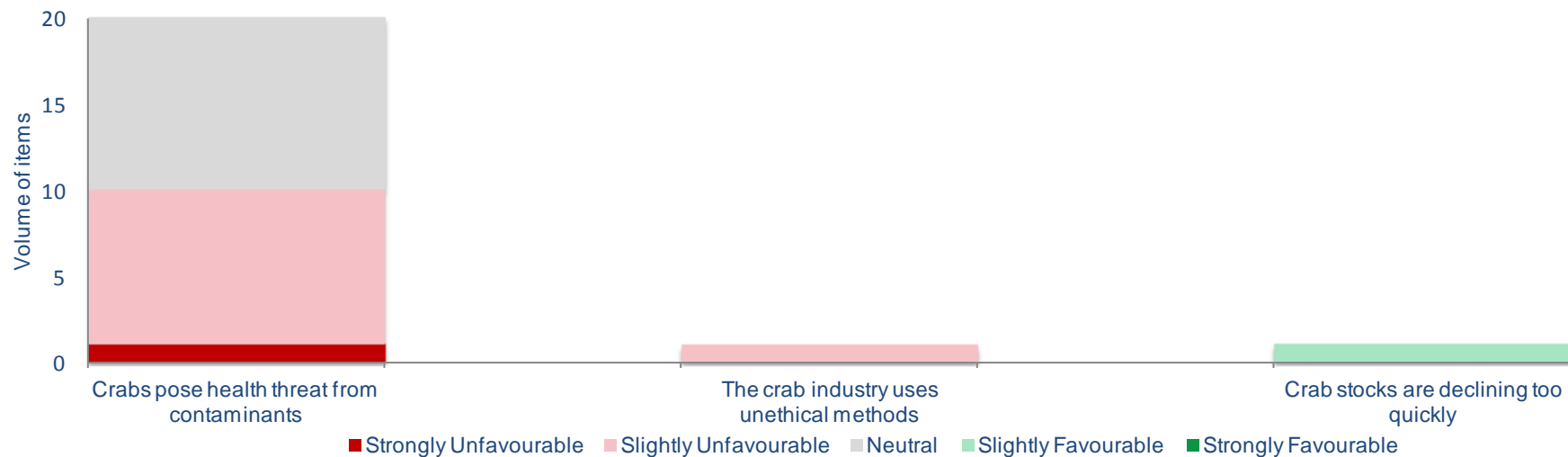


Article type

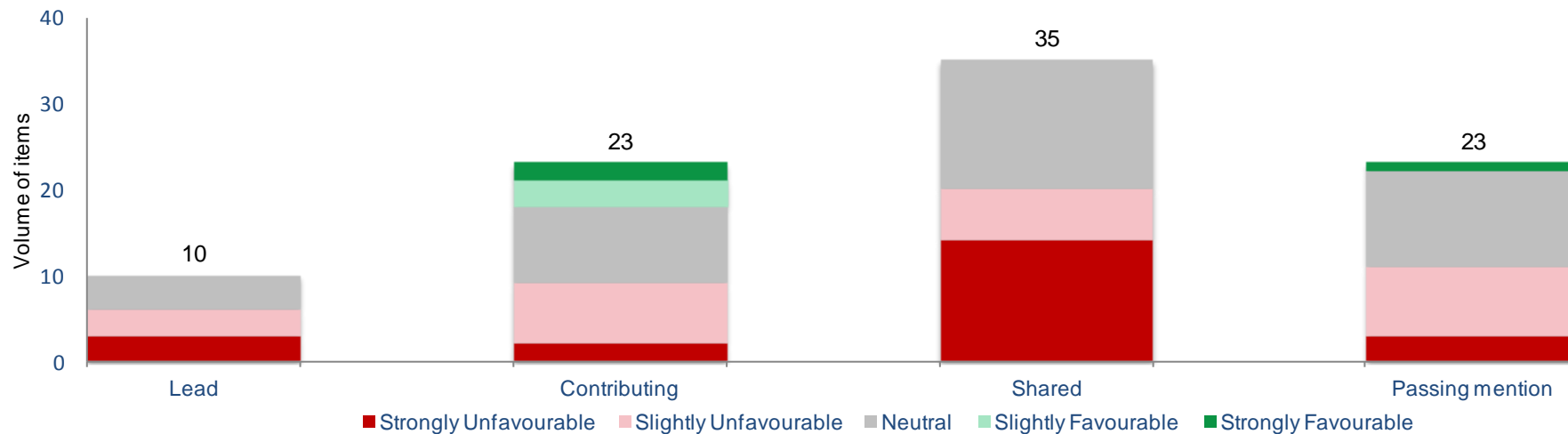


- News items, which accounted for 61% of overall coverage, were mostly related to the BP oil spill and the impact it had on fishing communities, and sea-life itself. In 2013, *Le Monde* commented that crabs and shrimps were among the most affected commercial species, and that nurseries were being built to enable the renewal of certain species.
- A range of different health and safety issues drove coverage, with 20 news items containing the message ‘crabs pose health threat from contaminants’. *Mondaq* reported in 2014 that “bacterial contamination was the primary reason behind most food recalls recently”, going on to say that “crab meat was recalled for listeria contamination”.
- Feature articles also discussed the various harmful bacteria that can be transmitted by consuming crab meat. *El Periodico de Catalunya* noted that cadmium, which is naturally present in crabs, can be harmful to certain people.

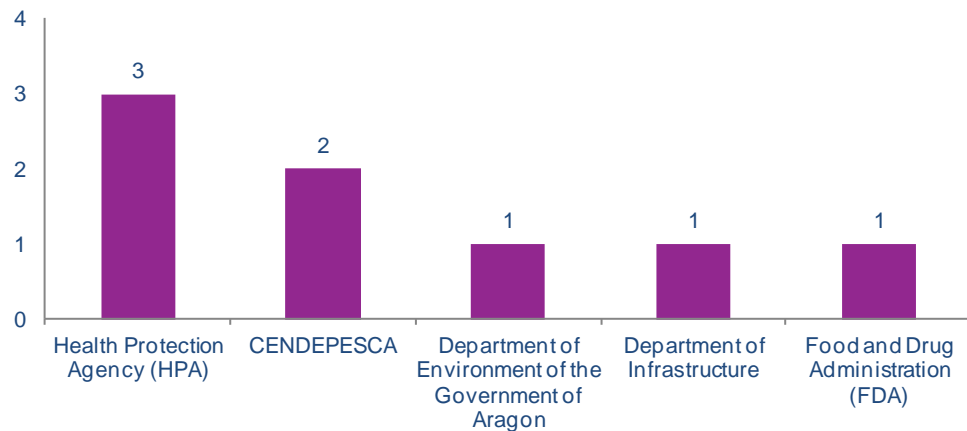
Messages by favourability



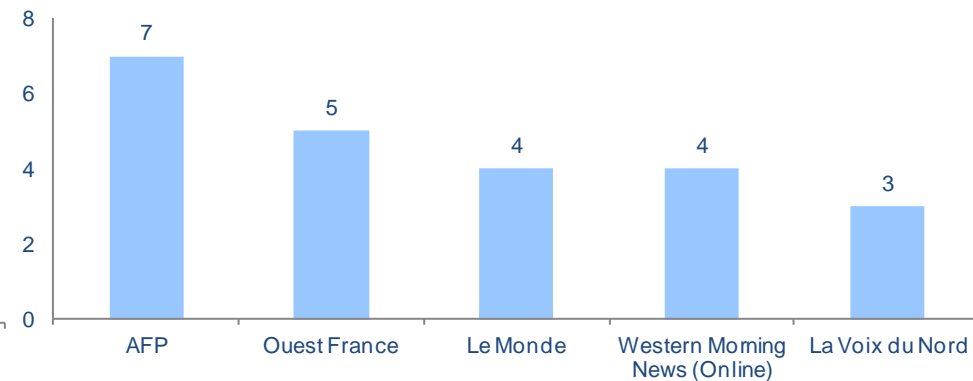
Prominence by favourability



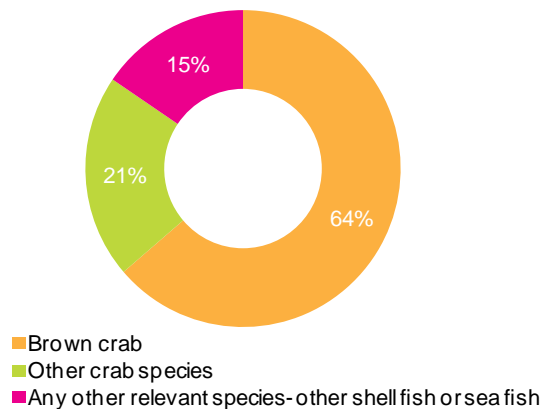
Top five organisations



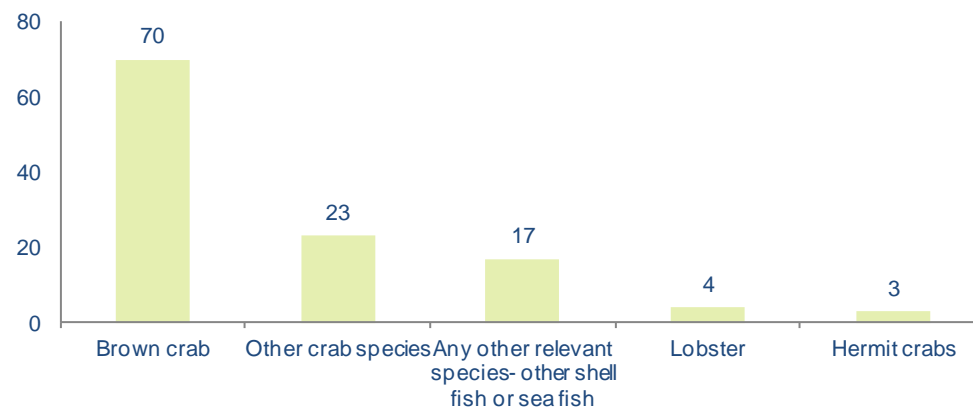
Most prominent titles



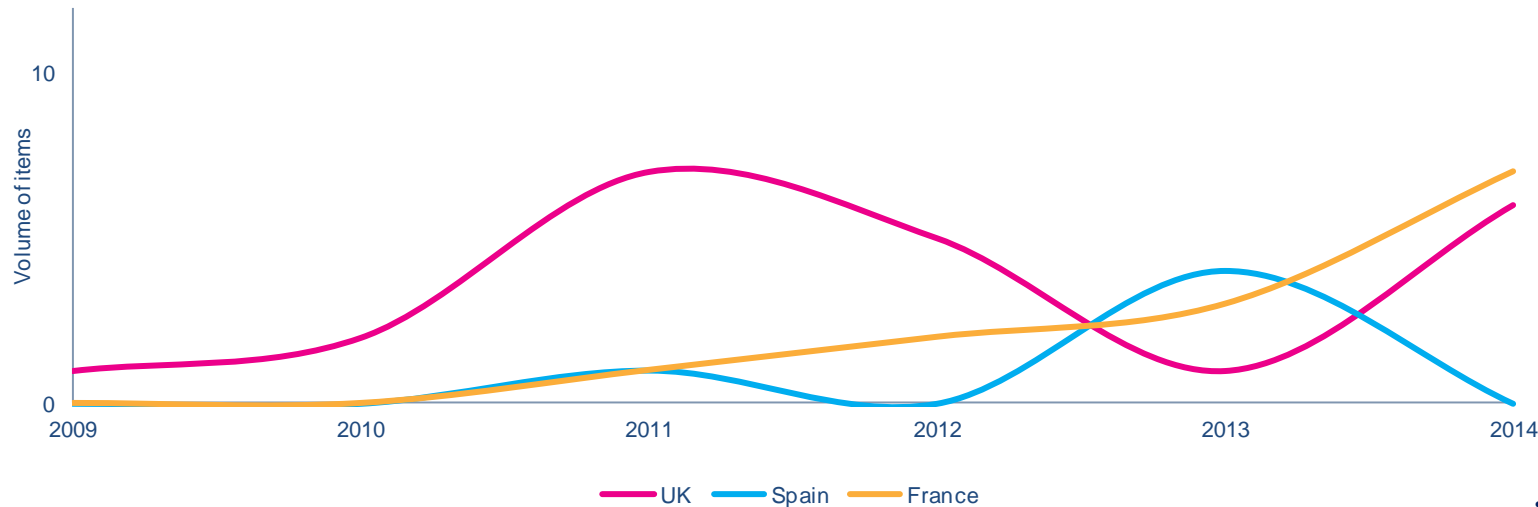
Species breakdown



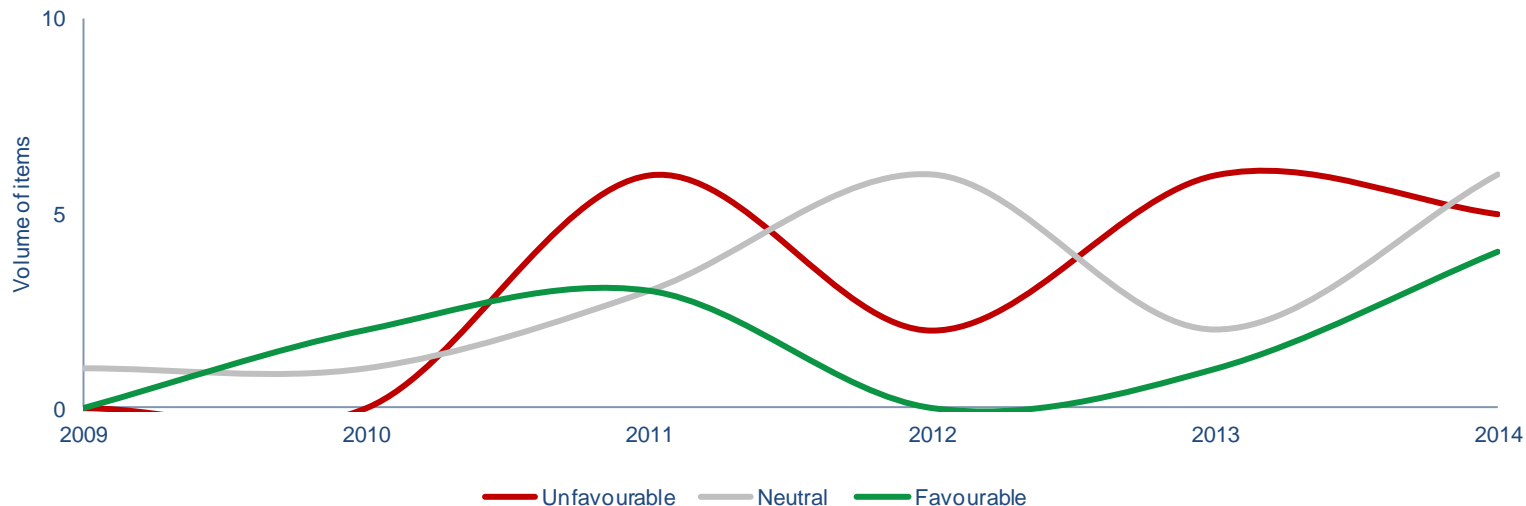
Most prolific species



Country coverage over time



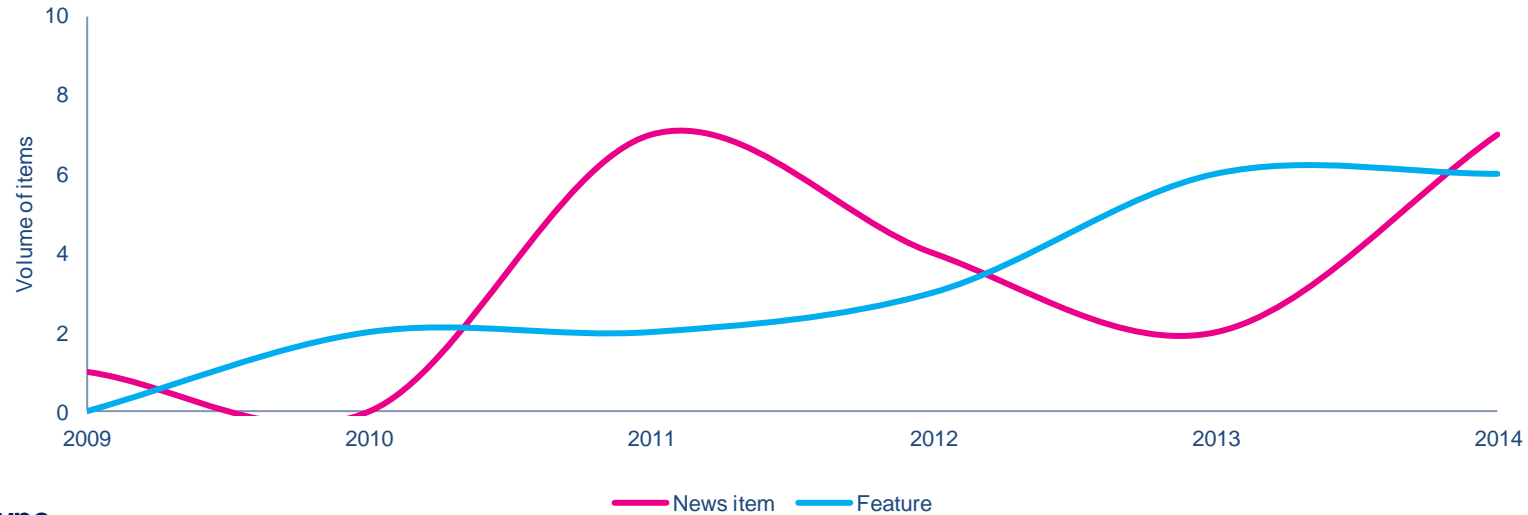
Volume and favourability over time



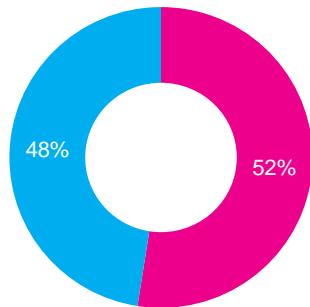
- Packaging was a topical issue across UK media, particularly in relation to surimi, a meat substitute often used in 'crab sticks' or other crab-related products. In 2014 it was reported in UK titles including *Evening Post* and the *Guardian* that restaurant Frankie and Benny's had been using a mix of surimi and real crab meat in one of their menu items, while claiming the dish contained fresh, shredded crab. Another case was discussed in the *Daily Telegraph* and *Daily Mail*, involving John West's Crab Plate, which only contained 30% crab meat.

- A large share of mentions of the issue were passing, with the example of the use of surimi used as a reference point when discussing other industry's misleading packaging, these examples tended to position crab industry practice as either neutral or slightly negative. A notable mention of the subject appeared in *Le Monde* (France) in an article highlighting how the horsemeat scandal had increased focus on labelling and the doubts raised in consumers' minds. Ingredients were not the sole focus of discussion around mislabelling, as a number of articles mentioned calls for improved identification of the origin of the crab, such as Cromer or Cornwall (*Cornishman*, *Eastern Daily Press*).

Article type over time



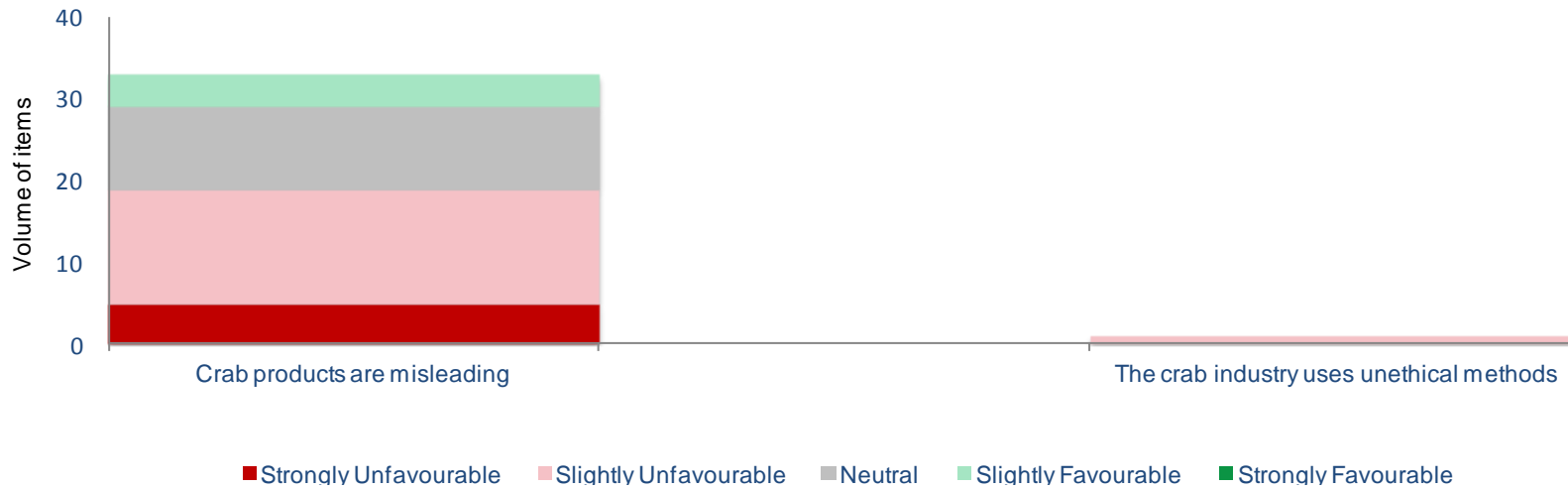
Article type



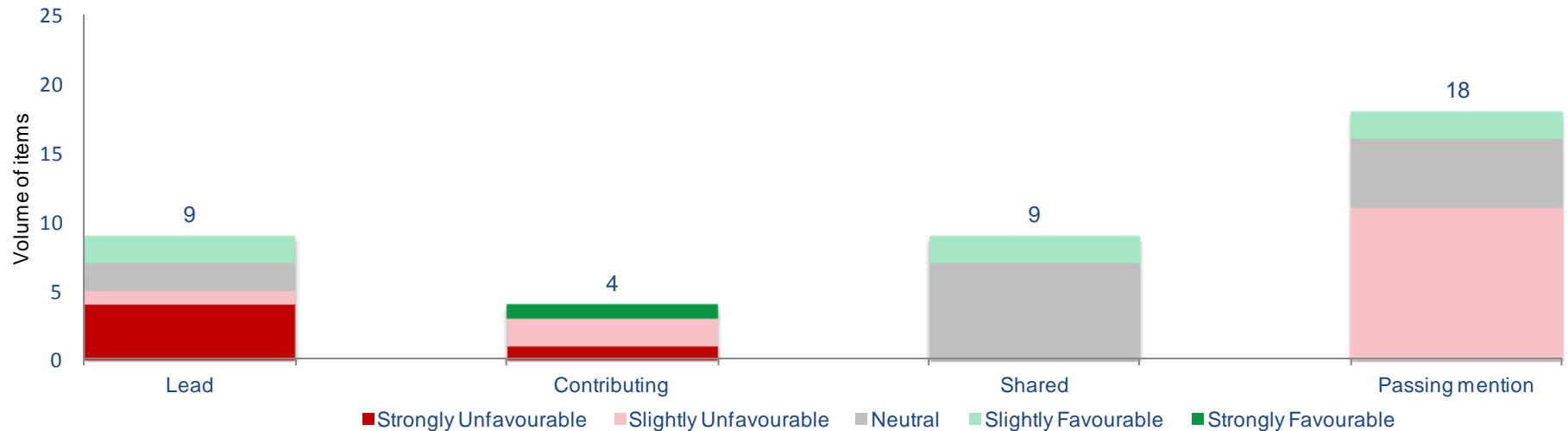
■ News item ■ Feature

- Mentions within news items tended to be neutral in tone with many mentions passing references to the use of surimi. An example of a more negative story is one reported in the *Daily Telegraph* and *Daily Mail* of a man who bought John West Crab Pate and was surprised to find only 31% crab content, the remainder made up of hoki.
- Appearances within features tended to be more negative, with 56% unfavourable in tone. Features also tended to be the primary article type in Spain and France, as UK coverage was led by news items. Coverage in these French and Spanish pieces was generally unfavourable, with focus on the use of surimi in products labelled as crab positioned as misleading and dishonest (*El norte de Castilla, L'Express, Ouest France*).
- Several articles delivered the 'Crab products are misleading' message but still presented a favourable picture of the use of such products and the crab industry as a whole, for example an article in the Mail Online the use of surimi as a crab substitute was mentioned, however this was positioned within the context of comment on the crab industry efficiently using leftovers from the production process for things such as fish meal for the aquaculture industry

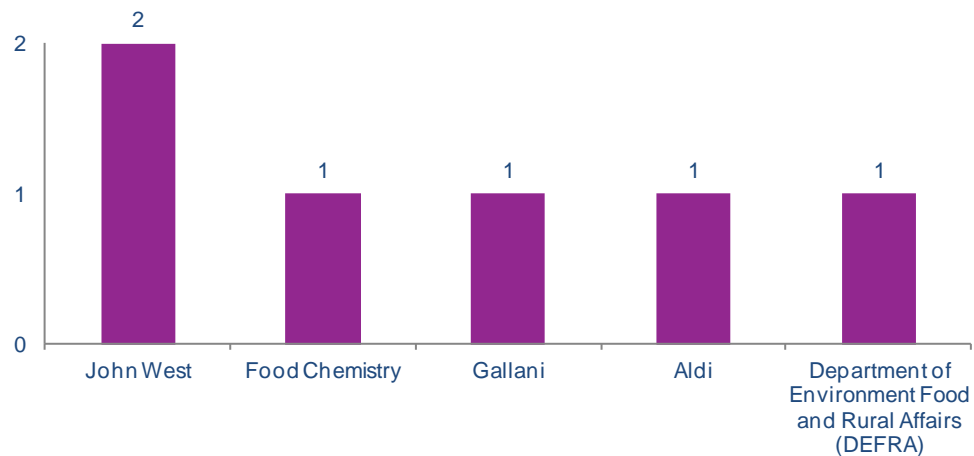
Messages by favourability



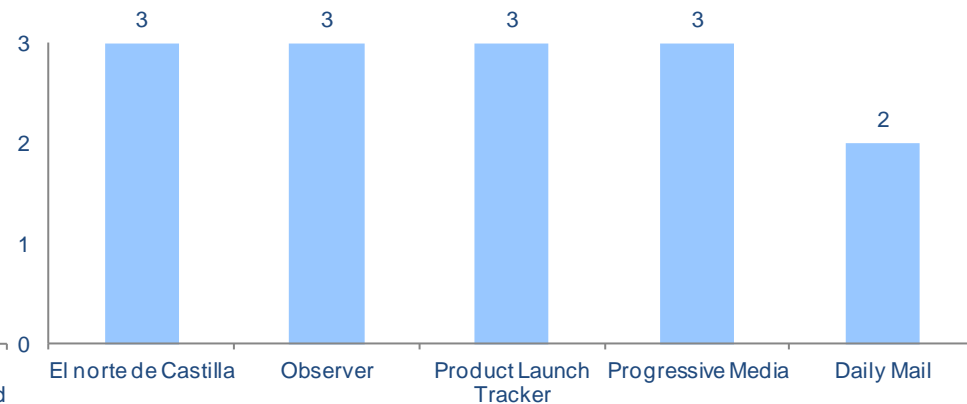
Prominence by favourability



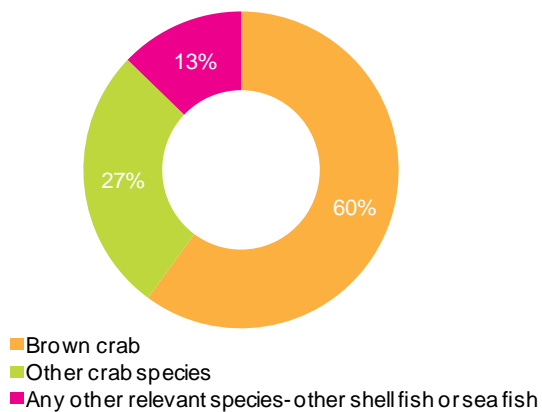
Top five organisations



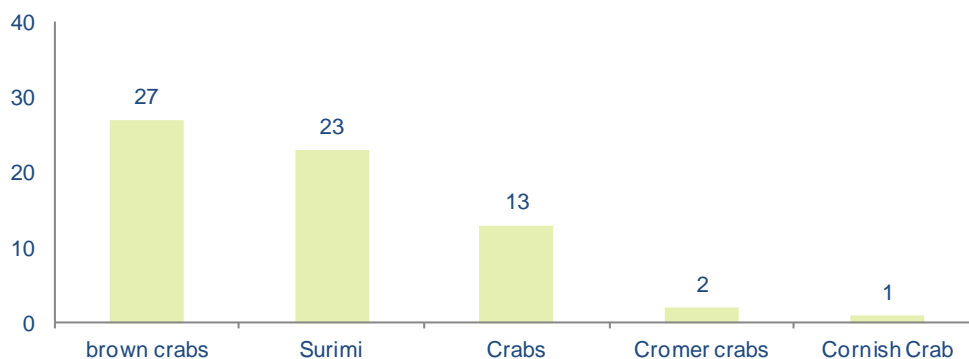
Most prominent titles



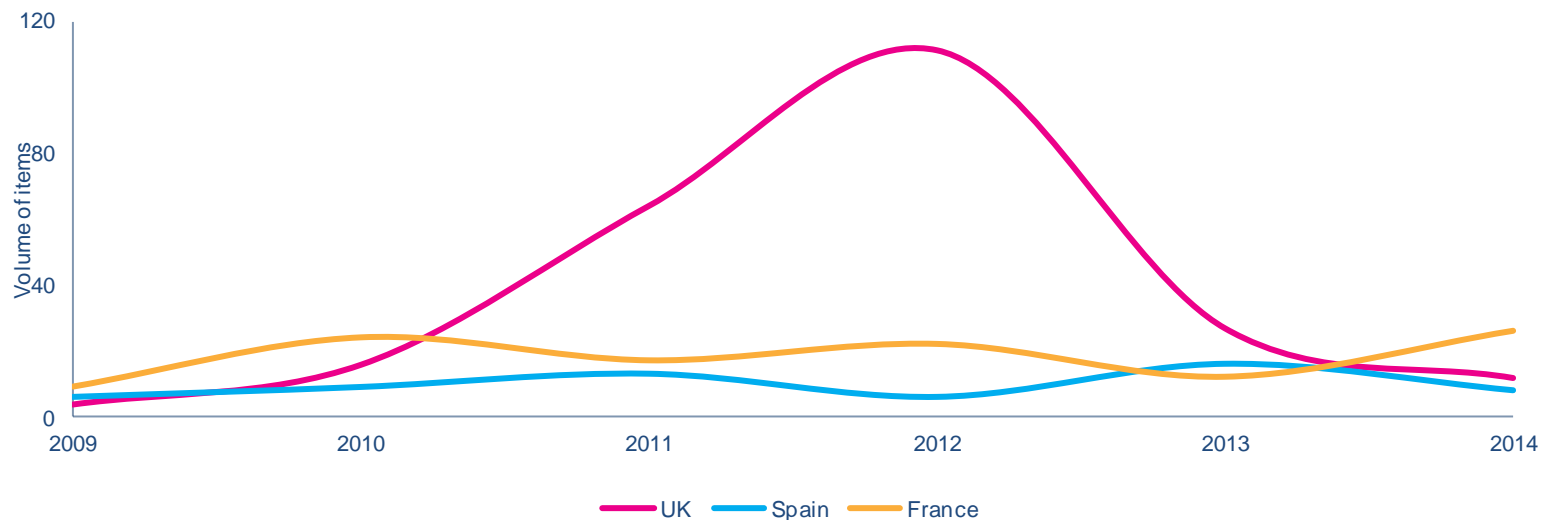
Species breakdown



Most prolific species

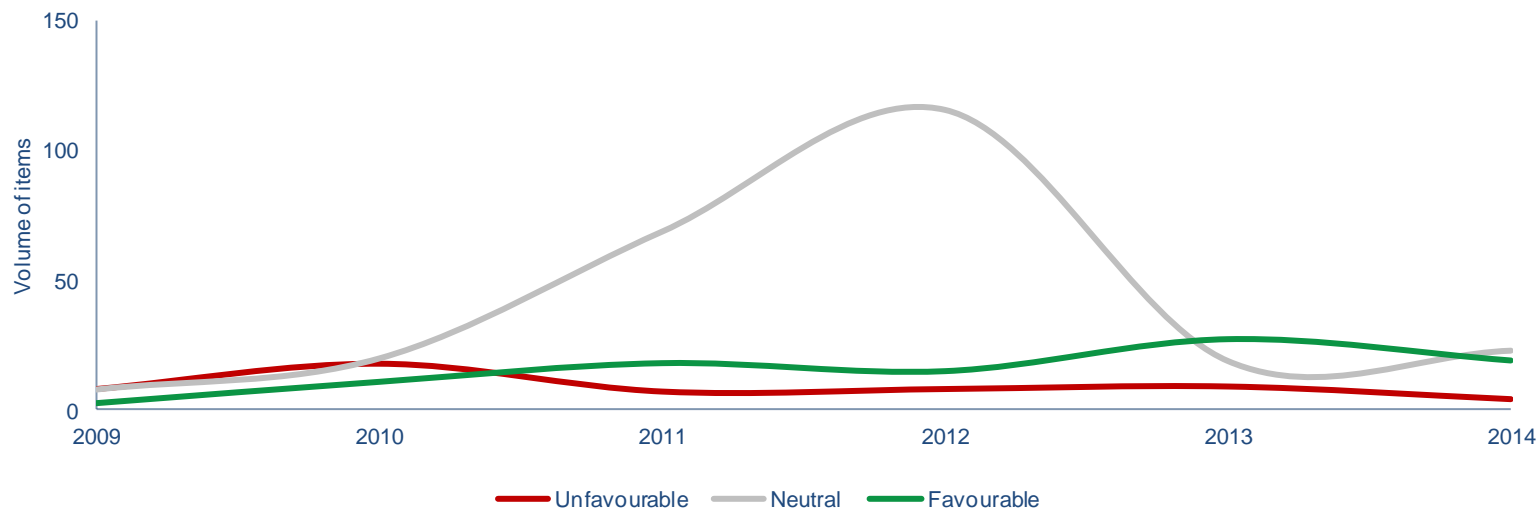


Country coverage over time



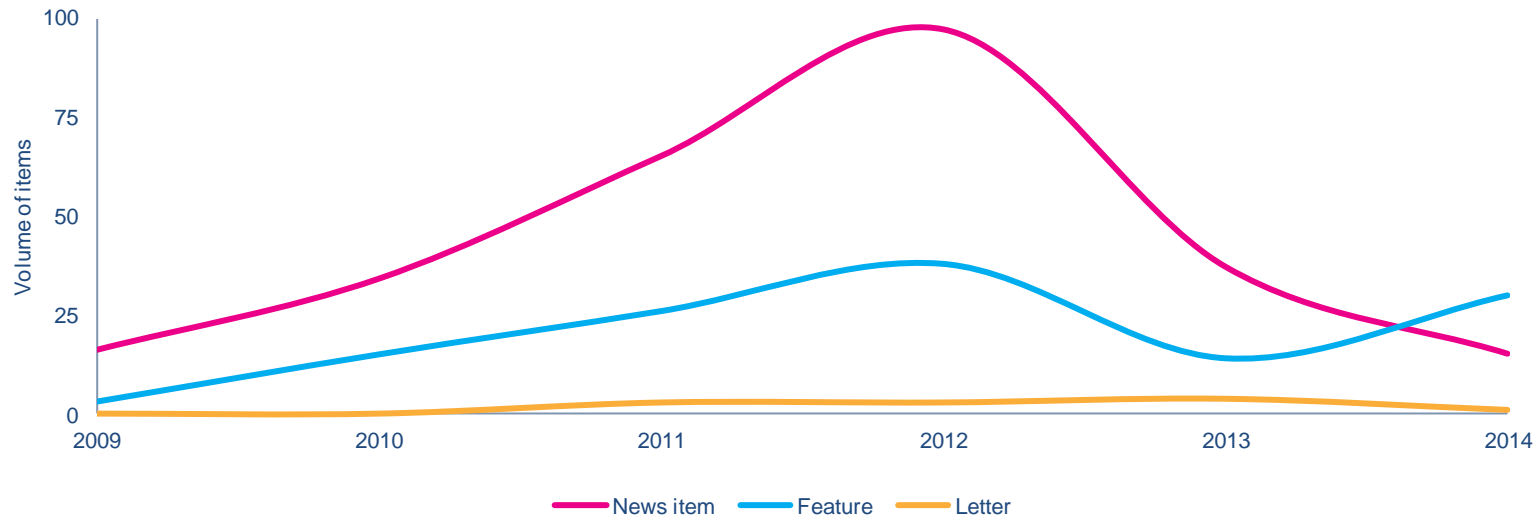
- Coverage peaked in UK titles in 2012 with many discussing conservation issues. The most prolific region of origin was Cornwall. The *Cornish Guardian* noted the actions of the Cornwall Wildlife Trust in protecting the region's marine wildlife and the concerns of Newquay's fishermen who feared static gear including crab pots could be outlawed under new legislation. The *Western Morning News* and *Western Daily Press* reported the fact the rare maerl bright red crab had been accidentally caught in Cornwall and taken to the local aquarium.

Volume and favourability over time

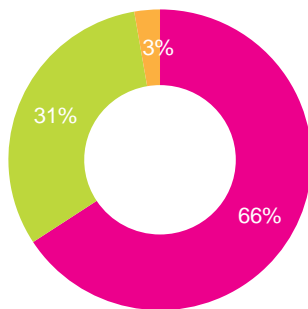


- Stock Status had the highest proportion of neutral articles than any other issue (63%). The state of stock levels of a diverse range of crabs species were largely reported factually. *BBC Online* reported on a deal agreed between Russia and Japan to prevent overfishing and combat illegal crab fishing in the Far East while *Mail Online* noted that deformities, diseases and sudden shifts in fish numbers are regular occurrences in nature.

Article type over time



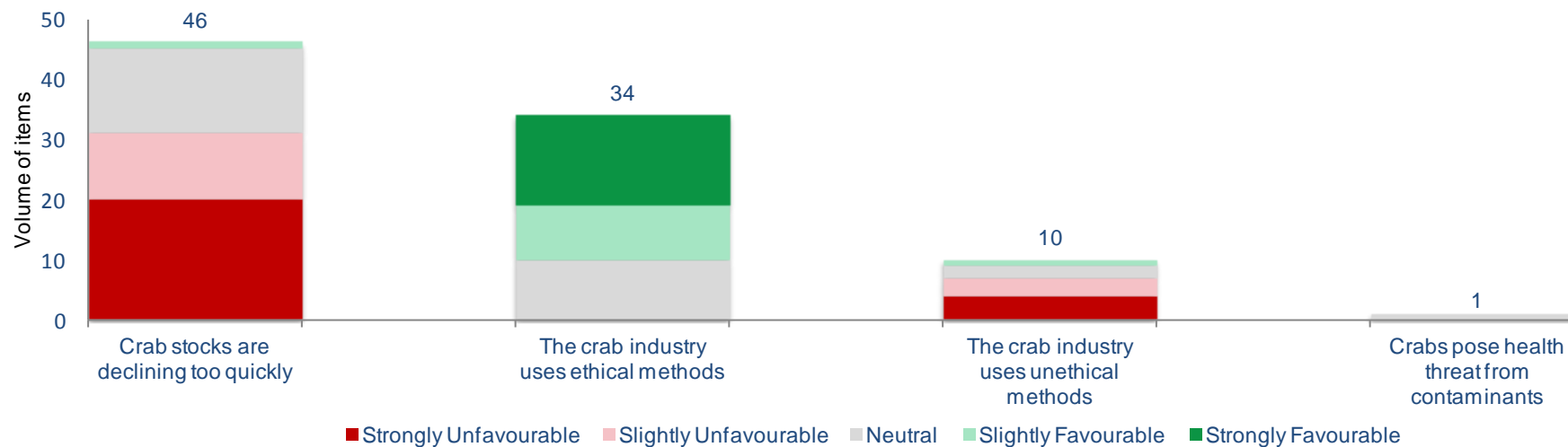
Article type



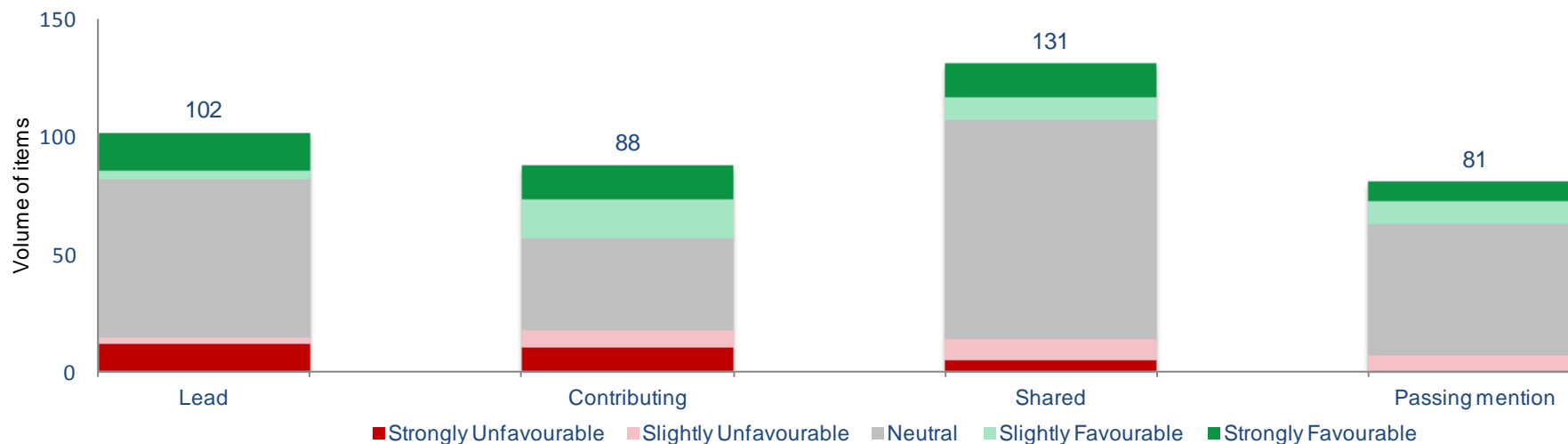
■ News item ■ Feature ■ Letter

- News items accounted for two thirds (66%) of Stick Status content. In 2013 Scottish titles including *The Scotsman*, *The Herald* and *Glasgow Evening Times* reported favourably on a four-year project in which crabs and lobsters will be tagged in the sea surrounding Orkney in an effort to maintain stock levels in the country.
- Features were more likely to be published in French titles, with *Ouest France* the most prominent publication. *Ouest France* focussed on shellfish picking but reinforced the rules surrounding the practice including the size of the tools used and the size of the catch. The publication also focussed on tourist organised trips that ensured all sea life was returned to the ocean, and noted they observed a healthy amount of green crabs.
- A *Channel 4* documentary was broadcast in early 2011 which showed cod being thrown back into the sea to feed crabs because of EU quotas and the programme was criticised in a letter to the *Grimsby Telegraph*. Another letter sent to the *Eastern Daily Press*, expressed concern over the decline of the crab population in Cromer, possibly due to over fishing.

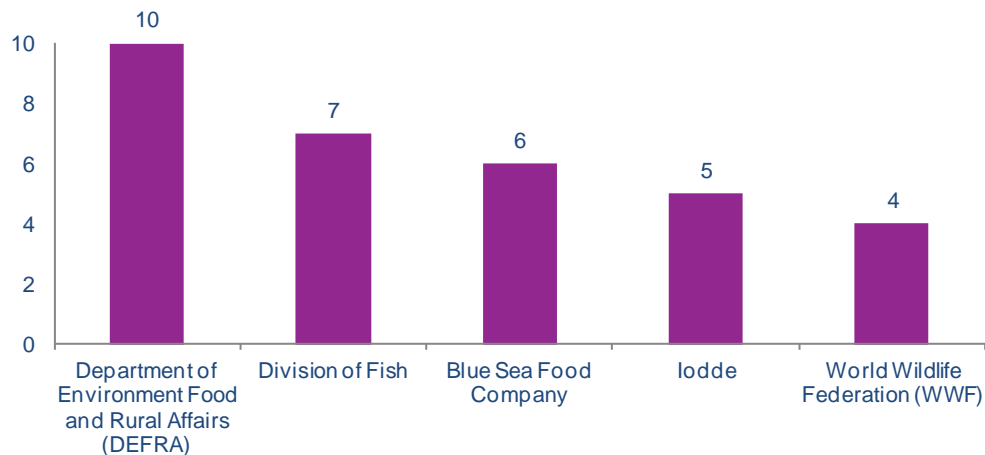
Messages by favourability



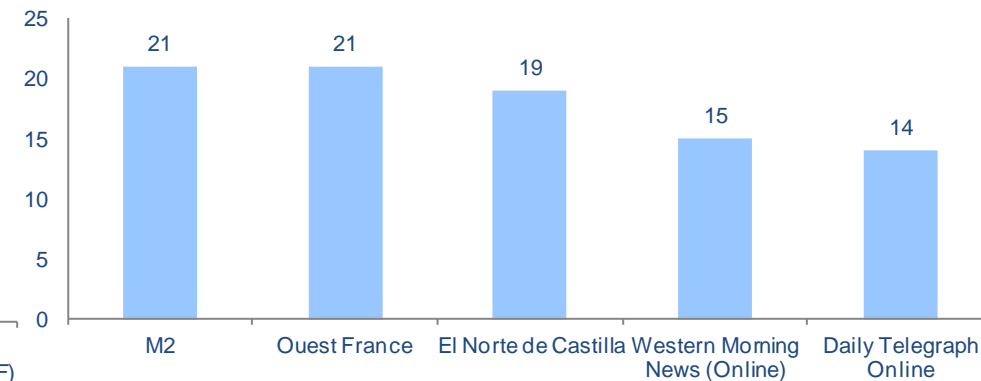
Prominence by favourability



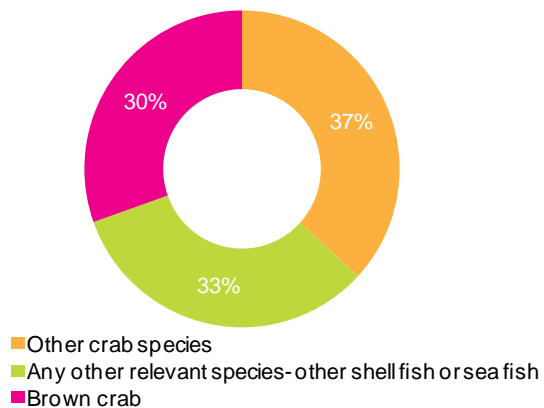
Top five organisations



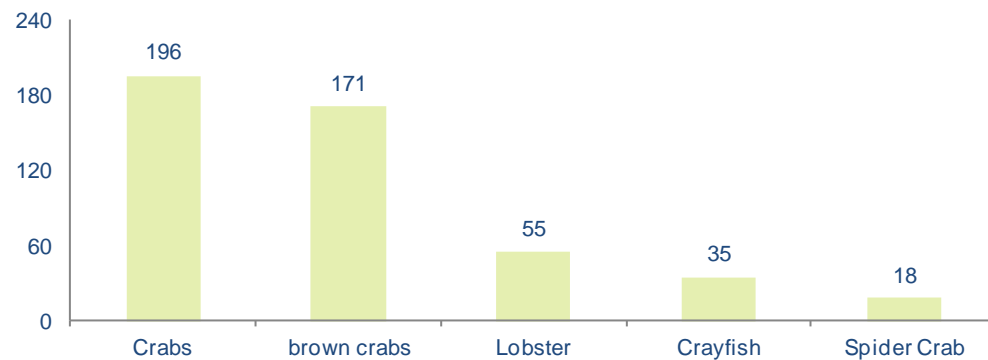
Most prominent titles



Species breakdown



Most prolific species



Appendix of all titles coverage appeared in split by year and country

Favourability

Favourability measures the overall balance of an article. The analysis is carried out by breaking the article down into smaller '**context units**', which are then individually assessed for tone. This reduces the subjective errors apparent in other favourability systems. Favourability can be tracked **independently** for individual entities (such as companies or products) and attributes (such as product attributes or industry issues). Favourability can be presented in a variety of ways using three, four or five point rating scales which we will recommend based on your individual needs.

Messages

Unlike more automated systems based on exact key word matching, Gorkana's analysts look for broader **inferences** of key messages and are therefore able to cut through the nuances that often appear in media coverage. Gorkana recommends not only measuring how strong message delivery is within coverage but whether these messages are reaching the **appropriate audiences** by combining message delivery with audience reach and frequency (explained below).

Opportunities to see (OTS) and audience reach and frequency

Opportunities to see (OTS) are defined as the sum total of each article's readership. Although a valid measure and one commonly used by PR professionals, OTS is commonly misinterpreted as the 'reach' of media coverage. This is not the case since OTS does not take into account an individual's cross-readership habits. For example OTS would 'count' a person who reads coverage separately in The Sun, BBC Online and Radio 4 three times (when of course he / she is one person).

Gorkana's reach analysis shows the estimated number of people reached by your coverage and the average frequency of their exposure to this coverage. This measure is more sophisticated than basic OTS since it disaggregates cross-readership by using omnibus surveys cross-referenced with data from data bureaux such as including NRS, JICREG, BARB, RAJAR and Nielsen.

It is recommended to combine **reach** with **frequency** of exposure as marketing theory demonstrates that the effectiveness of a message or campaign is highly dependent on the number of times that a person sees it. Reach and frequency can further be refined by focusing on a specific **target audience** in order to demonstrate how well targeted a PR activity has been.

Reach and frequency is a commonly used metric in many marketing communications disciplines and is therefore useful to show the overall effectiveness of an integrated marketing programme and to show the relative effectiveness of the individual channels.

Quality assurance

Gorkana believes that it is essential that customers trust the information that is presented to them in our reports. Gorkana has a four stage quality control process to maximise the quality of the analysis and minimise opportunities for errors. These processes have been developed and refined using industry leading Six Sigma principles*

- 1) **Briefing.** A successful analysis programme starts with the right brief. Gorkana's experienced analysis consultants will advise on the most appropriate metrics for your organisation's overall mission and communications objectives. A detailed description of how key metrics such as favourability and message delivery should be interpreted together with proof point examples are agreed and are written into the overall **customer brief** and our specific **analyst guidelines**
- 2) **Analyst quality control.** Our dedicated team of **head analysts** continually assess the article coding done by individual analysts to ensure that they match the agreed analyst guidelines. Each analyst is required to meet minimum quality targets. Head analysts also follow an additional series of data checks in order to ensure data integrity
- 3) **Report quality control.** Each report goes through two rounds of proof reading before being sent to a customer and at each stage there are a predefined list of active proof reading checks based around data, grammar and spelling, formatting and the appropriate level of insight. Delivery times of reports are also tracked and measured against targets for on-time delivery
- 4) **Customer feedback.** In our experience, the most successful analysis programmes are a two-way partnership between Gorkana and the customer. We recommend having a pre-report call before we write the report to ensure that we focus on the most appropriate areas and that the report is as relevant as possible. We also recommend having a post-report call to get feedback that will feed into the next reporting cycle.

*At Gorkana we use Six Sigma as a process improvement and quality control methodology in our operations across all product lines. Our staff are independently certified based on a programme accredited by the Fisher College of Business at Ohio State University and the CPD. We use a disciplined, data-driven approach and methodology for eliminating quality defects and have spent many years establishing and refining our production processes to ensure that each of our projects is unique in its output but standard in its operational approach, resulting in a team which is highly skilled and flexible.

In June 2010, at the AMEC European Summit on Measurement in Barcelona, Spain the leading communication measurement companies agreed a set of principles to govern best practice. These 'Barcelona Principles' are at the heart of Gorkana's approach to media analysis.

Principle 1: Importance of goal setting and measurement

Gorkana believes in tailoring analysis metrics to your organisations overall mission and communications objectives. Our consultants work with you up front to get the brief right and to get ongoing feedback to ensure that the analysis is always relevant and providing maximum benefit.

Principle 2: Measuring the effect on outcomes is preferred to measuring outputs

Gorkana recommends that in addition to metrics that measure media content, that we measure whether this content has reached the right audience and what effect it has had. To do this we recommend combining content metrics (such as favourability and message delivery) with audience reach and frequency together with end-user market research. Gorkana can offer integrated market research as part of the service as well as the ability to integrate third party research where necessary. Additionally, monitoring and interpreting social media channels can complement market research as a gauge of audience opinion and engagement.

Principle 3: The effect on business results can and should be measured where possible

Gorkana can demonstrate the effect of media coverage on business results in a variety of ways from simple correlations between media coverage and business metrics (such as share price, sales and website hits) through to more sophisticated econometrics and market-mix modelling.

Principle 4: Media measurement requires quantity and quality

Gorkana recommends a combination of quantitative and qualitative metrics. Over 20 years of working with the world's leading organisations, we have evolved our methodology to enable us to capture the nuances in measuring complex and subjective metrics such as favourability or message delivery.

Principle 5: AVEs are not the value of public relations

Although Gorkana is able to provide Advertising Value Equivalents, we recommend that alternative metrics such as Cost Per Thousand (CPM) are used wherever possible. Above all we recommend that AVEs should not be used in an attempt to demonstrate return on investment.

Principle 6: Social media can and should be measured

Gorkana has a variety of products and services to monitor and measure social media from standalone social media dashboards to daily summaries of social coverage through to in-depth reporting. Gorkana recommends that where possible social media measurement should be integrated alongside mainstream media measurement.

Principle 7: Transparency and replicability are paramount to sound measurement

This has been a driving principle of Gorkana's measurement services for more than 20 years. Gorkana believes that 'opaque' methodologies are confusing, lock customers in, and do not allow benchmarking both within the PR space and across marketing disciplines. Gorkana's methodology is designed to be simple to understand and flexible yet robust and credible.