

# Media Representations of Nature in the City

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## **Abstract:**

The news media exerts significant influence on what issues and events are given prominence in public discourse and how they are represented. The changing media landscape however is altering the way people receive daily news and resources available for investigative news journalism. Despite these changes, demand remains for quality titles, where news reporting is well researched and edited. An example is the recent entry of *The Guardian* into the Australian market. The topics these 'quality' titles choose to cover, the way the stories are framed and sources used influences how readers might perceive an issue and its relevance to them. This is particularly so in construction of stories about the natural environment. Drawing on the broadsheets of Sydney and Canberra, this study uses content analysis to examine news, feature stories and opinion pieces that cover nature and human interaction with nature. Specifically, it examines how articles for the period January 2011 to June 2013 represent nature and the messages being communicated to readers. This lens is of particular interest in Sydney and Canberra, where the urban structure is defined by the natural landscape and many suburbs interface with the bush. It is also of interest given the urban disconnect with nature, particularly children. The findings reveal nature is consistently framed in terms of risk and potential loss – risks to nature from human activities and risks to lives and homes from bushfire and other natural events. This representation serves to delimit the scope of urban experience and the opportunity to challenge the ways people think about the place of nature in their urban lives.

## Introduction

The news media exerts significant influence on what issues and events are given prominence in public discourse and how they are represented (Corbett 2006). Newspapers 'set the agenda' by telling readers not what to think but what to think about (McCombs & Shaw 1972). This explains why some issues are more prominent in the public's mind. Kahneman (2012) observes that people assess the importance of issues by the ease they are retrieved from the memory and this is largely determined by news coverage.

In turn what journalists report as news corresponds to their view of what is in the public's mind, a process described as reflecting society back to itself (Simons 2007). What becomes news is a constructed version of social reality as the journalist decides what issues and facts to portray (or leave out), what sources are used and what frame of reality is presented (Muller 2013, Corbett 2006).

Generally newspapers do not have a good record on reporting on the environment and nature (Dennis 1991) despite most having specialist reporters assigned for this task (Corbett 2006). Reporting tends to be superficial, focusing on specific environmental events in isolation rather than systemic problems and the social forces in play (Beder 2004). This failing has become more critical in the face of growing evidence about global ecological decline, raising questions about the news 'values' and 'significance' criteria used to construct the daily news (Matthews 2012).

This paper examines how two metropolitan newspapers represent nature. The intent is to understand how news portrayal might influence public perceptions about nature and contribute to understanding about and engagement with nature. This is an important area for study in an urbanising world with more limited opportunities for physical connection and direct experience of nature, particularly for children (Louv 2005, Monbiot 2012). Continuing urban growth also means some infill developments and new suburbs at the edge will interface with nature reserves and remnant vegetation within and bordering our cities. This urban-bush interface requires active management to maintain biodiversity values and human access while also protecting property and people from bushfire. Uncovering how these issues are represented in the media will be of interest to practitioners involved in urban planning and development, biodiversity management and healthy communities. The analysis forms part of a broader social study about ways to foster beneficial relationships between urban people and nature.

## Methodology

Content analysis is widely used to examine 'what' is being communicated in news content (Krippendorff 1980) and to interpret substantive meanings in that content (Spencer *et al* 2009). It provides a technique to critique the way the media represents important issues and whether information is communicated in an accurate and meaningful way (Bowles 2006, Berger 1998).

This study uses content analysis to review 195 newspaper articles about nature from two metropolitan daily newspapers, the Sydney Morning Herald (SMH) and the Canberra Times (CT) over the period 1 January 2011 to 30 June 2013.

These newspapers were selected because they have a reputation as 'quality' titles (Barr 1983), publish six editions per week and have regular readership in cities noted for their natural landscapes. Both newspapers employ specialist science and environment reporters, and the SMH is particularly recognised for its investigative and independent journalism (McClymont 2013, SMH 2013, 2012b).

Articles were identified for analysis on the basis that the content was primarily about the natural environment and elements of nature likely to be understood by most readers. This included stories about plants and animals and their habitat, and nature reserves, national parks and bushland that interface with urban areas. Articles that reported on benefits for human health and well being, and nature-based volunteering and engagement were also selected for analysis.

A two-step process was used to code the news sample. The articles were read and a coding sheet developed based on the most commonly occurring topics ( $n=11$ ) and themes ( $n=10$ ) in the sample. Key words, lead content, quotes and headlines were used to identify assertions or 'obvious and manifest' meaning of the article (Bowles 2006). As assertions recurred they become a theme. The articles were then re-read and coded against the topics and themes. The type of news article, the reporter/s and source/s were also recorded. Any letters to the editor published following a news article were recorded along with observable trends and patterns in coverage over the period of study.

## Content Analysis

### *Type of news articles and front pages*

The majority of articles sampled (85%) were news stories (Table 1). Of these articles, 10% were front-page stories, 8 (7.2%) articles in the SMH and 12 (14%) articles in the CT.

**Table 1: Number and type of articles reviewed 1 January 2011 to 30 June 2013**

Article	The Sydney Morning Herald	The Canberra Times
News	92 (83.6%)	74 (87%)
Feature	3 (2.7%)	8 (9.4%)
Editorial/Opinion	10 (9.1%)	5 (4.9%)
Investigative/Analysis	5 (4.6%)	0
<b>Total</b>	<b>110</b>	<b>85</b>

### *Topics covered by news articles*

The topics covered by the newspapers closely reflected the parameters identified for initial sampling purposes. Articles about wildlife and their habitat were coded against two categories - urban and rural. This was done to determine the amount of coverage about wildlife and human interactions in urban environments and the wildlife people might encounter. Stories about national parks and nature reserves managed for conservation were coded separately to articles about urban open spaces.

Bushfire management was the most reported topic at the SMH (16.4%) followed by national park management (15.5%) and urban wildlife and habitat (14.6%). The same topics were the top three at the CT but in a different order (Table 2). When combined, stories about bushfire management accounted for 17.4% of the sample, national parks (17%), urban wildlife (17%), management of urban open spaces (8.2%) and scientific research about nature, 7.7% of sampled articles.

Every story has a human dimension (articles about national parks for example covered human access, funding decisions and introduced pests) but very few stories focused on the opportunities and beneficial effects of engaging with nature. Articles about citizen science projects and nature volunteering accounted for 5.3% of articles and stories about the benefits of outdoor recreation for health and well-being, 3% overall. Reporting about community awareness covered both declining levels of public concern about nature as well as stories about programs to increase awareness and interest (6.7% of total).

News content about regulations and policies to protect nature was often embedded in the article rather than the primary topic and accounted for 6.1% of sample. Stories about wildlife and habitat outside of urban areas made up 7.1% of articles and management of pests, 4.6%. Stories coded under pests were about introduced species whereas articles about native species causing nuisance were coded under urban wildlife.

**Table 2: Topics of news articles**

Sydney Morning Herald			Canberra Times		
Topics	No of articles	% of SMH articles	Topics	No. of articles	% of CT articles
Bushfire management	18	16.4	Urban wildlife and habitat	17	20
Management of national parks and reserves	17	15.5	Bushfire management	16	18.9
Urban wildlife and habitat	16	14.6	Management of national parks and reserves	16	18.9
Management of urban parks, trees and beaches	10	9	Wildlife rural	8	9.4
Scientific research about nature	10	9	Scientific research about nature	5	5.9
Community awareness	10	9	Regulation and policy to protect nature	5	5.9
Regulation and policy to protect nature	7	6.4	Management of urban parks, trees and waterways	6	7
Wildlife rural	6	5.5	Citizen science and nature volunteering	4	4.7
Management of pests	6	5.5	Management of pests	3	3.5
Citizen science and nature volunteering	6	5.5	Community awareness	3	3.5
Nature-based recreation, health and wellbeing	4	3.6	Nature-based recreation, health and wellbeing	2	2.3
Total	110			85	

The time span of the study allowed for patterns to be identified in the coverage. Stories about bushfires were filed from the start of the fire season with communication about threats and then warnings and actual events. This analysis coincided however with the 2 wettest years in southeastern Australia for a decade, which affected both the quantum of stories about fire threats and events, opinion and analysis.<sup>1</sup>

Other patterns in news coverage related to seasonal wildlife activity (Wingate-Pearse 2011), the annual ACT kangaroo cull (Page 2013, CT 2012a) and wildflowers (Thistleton 2012f, Cook 2011a).

Stories were predominantly one-off reports with the exception of contentious topics like national parks in NSW. Urban wildlife generated a series of articles, some negative in terms of property damage and nuisance (Elliot 2011b, Munro 2011c, Cook 2011d) and a positive article about Sydneysiders using Facebook to track cockatoo movements (Phillips 2013a).

#### **Topics featured on the front page, in opinion and analysis**

Stories featured on the front page of the SMH tended to be about contentious policy decisions. These included proposals for hunting (Nichols 2013b), mining (Cubby & Nichols 2011) and logging in NSW national parks (Nichols 2013a), and the outcomes of NSW State of Environment report (Cubby 2013d). Possums made the front page after devouring the pansies at Kirribilli House (Elliot 2011b).

The CT front page stories covered an inquiry into management of Canberra's Nature Parks (Towell 2011a), the annual kangaroo cull (Knaus *et al* 2013), cut-backs to the Parks service (Beeby 2011e,g),

<sup>1</sup> A comparison with SMH reporting on the spring bushfires in NSW on 11 September, and from 14 to 25 October 2013 supports this finding. A total of 78 articles about bushfires were filed over this period, over four times as many as in the study sample, including 8 front pages, 5 editorials and 5 opinion/comment pieces. Reporting on these events elicited 35 letters to the editor.

myrtle rust impacts (Beeby 2011c), impacts of new urban development on endangered species (Thistleton 2013a) and the Cooma district bushfires in January 2013 (Knaus *et al.* 2013).

Opinion pieces covered topical issues like declines in biodiversity and natural capital (Gittens 2012) the assault on national parks (Gall 2013), the species extinction crisis (Flannery 2012) and youth disengagement with nature (Brown 2012). The SMH also sourced Opinion from The Guardian about urban disconnection with nature (Griffiths 2012, Monbiot 2012). Investigative articles covered bushfire management and recovery and the adaptation of urban wildlife (Cubby *et al.* 2013, Howden 2013a, Phillips 2013b). Editorial comment (4 in total) covered the fate of the koala (CT 2011a), the kangaroo cull (CT 2012a), the new Arboretum in Canberra (CT 2013b) and a light-hearted commentary about the white cockatoo (SMH 2011b).

### **Reporters writing about nature**

The employment of specialist reporters has expanded both the number and quality of environmental articles in newspapers (Hansen 1991). This was borne out in the analysis where environmental, science, urban affairs and rural reporters generated the largest number of nature stories (Table 3). The SMH specialist science and environment reporters are responsible for almost half of all articles in the SMH sample and also filed the investigative stories about nature (Cubby *et al.* 2013, Phillips 2013b, Cubby 2012a,). This was also the case at the CT before the retirement of specialist reporter, Rosslyn Beeby, following the re-structure of Fairfax media in mid 2012. The SMH has retained its specialist reporters and their stories are now regularly reproduced in the CT. The SMH also has regional specialists with the Hobart correspondent filing stories about marine research (Darby 2013a,b) and the Tasmanian bushfires (Darby & Ralston 2013). The specialist crime reporter at the SMH filed stories about the NSW bushfires in January 2013 (Ralston 2013b,c,d).

**Table 3: Type of reporter in news sample**

Byline of Reporter	Sydney Morning Herald		The Canberra Times	
	No: of stories	% of total	No: of stories	% of total
Science and environment	45	41	21	24.7**
Urban Affairs	8	7.3	7	8.2
Rural and Indigenous Affairs	5	4.5	0	0
General	13	11.8	40	47
Crime	8	7.3	5	5.9
Political	6	5.4		
Economics	2	1.8	1	1.2
Opinion/Editor	11	10	3	3.6
Other*	12	10.9	8	9.4
<b>Total</b>	<b>110</b>		<b>85</b>	

Notes:

\* Reporters include Social Affairs; Education; interstate reporters, AAP or articles where no reporter/source is identified.

\*\* Canberra Times Science and Environment reporter Rosslyn Beeby retired from Fairfax Media in July 2012.

News articles about scientific research were predominantly written by the specialist reporters at the SMH and CT (Smith 2011a,b,d, Smith, D. 2012, Smith, B. 2012, Phillips 2013c,e, 2012a,b, Beeby 2012e,k, 2011a). These articles often quote the academic researcher and draw on findings in published journals. A few articles explore how the findings might be applied by wildlife and land managers (Phillips 2011c, Beeby 2012k). This is significant given the crucial (but rarely exercised) role the media can play in linking science, policy and management practice (Boykoff 2009).

Opinion and comment pieces were written by senior journalists and guest writers (Gittens 2012, Wyndham 2012 and Duffy 2011) and present nature through the writer's lens of interest. Very few comment pieces (2 in total) were authored by scientists, and one of these was an edited excerpt about the species extinction crisis from the *Quarterly Essay* (Gall 2013, Flannery 2012).

### **News Sources**

The origin of news and sources of information has a significant influence on content (Corbett 2006). The increasing use of communication and public relations material from government agencies and businesses to trigger news impacts on both quality and accuracy of news content (Mann 2006). An independent study examined over 2000 articles in 10 daily newspapers over five days in 2009. The researchers found that the SMH was the least likely to rely on media releases and public relations as

compared to its competitor, *The Daily Telegraph*, where 70% of articles were triggered by public relations material (Bacon *et al.* 2010).

These findings are supported by this analysis that found over 70% of articles in the SMH drew on 2 or more sources and 37% of articles, 3 or more (Table 4a). Where one source was used, 38% of articles used government sources, 27.5% used academics and 20% drew on community sources (Table 4b). It is worth noting that many fire alert/update stories quoted a single authoritative source, the Rural Fire Service or Bureau of Meteorology (Andrews 2013, Hannan 2013, Ralston 2013b,d, Knaus 2011)

The higher number of single source stories in the CT may be attributed to publication of more local stories which draw on a local informants such as rangers or community groups (Anderson 2013a, CT 2012c, Thistleton 2012b).

**Table 4a Number of sources used**

Sources	Sydney Morning Herald		Canberra Times	
	No: of articles	% of SMH articles	No: of articles	% of CT articles
1 source	29	26.3	32	37.6
2 sources	40	36.4	31	36.5
3 sources	22	20	10	11.8
4 sources	12	10.9	7	8.2
5 sources (+)	7	6.4	5	5.9
<b>Total</b>	<b>110</b>		<b>85</b>	

**Table 4b. Breakdown for single source stories**

Single source	Sydney Morning Herald		Canberra Times	
	No: of articles	% of SMH articles	No: of articles	% of CT articles
Not identified	3	10.3%	1	3.1%
Government only	11	38%	15	46.9
Scientists only	8	27.5%	9	28%
Community only	6	20.7%	7	22%
Other politician	1	3.5	-	
<b>Total</b>	<b>29</b>		<b>32</b>	

A number of patterns were observed about sources in this news sample. Where government sources were used, on-ground employees were used including rangers, wildlife, weed and fire managers, biodiversity and threatened species officers as well as agency-based scientists like meteorologists and entomologists. This gives the content a level of authority that would not be achieved using unnamed spokespeople, a practice routinely used in other content areas (Corbett 2006).

Government ministers were used as sources for new policy announcements or to defend a contentious decision, often with their opposition counterpart, Greens MP or a peak environment group also providing comment (Cubby 2013a,d, 2012a, Cubby and Tovey 2012, Robins 2011). Peak environment groups were sources where government policy and/or performance was under the spotlight (Arup 2013, Nichol 2013b, Thistleton 2012h, Patty 2011, Elliot 2011b) or where the group manages engagement and nature recovery programs (Towell 2013, Thistleton 2012c, Cook 2011c).

Park managers were used as sources in both science and management stories (Cubby 2013a, 2012c, Cook 2011a, Beeby 2012i, Doherty 2012). Academics were the primary source in wildlife stories, particularly where research is underway and/or findings reported (Darby 2013a,b, Howden 2013b, Phillips 2013a, 2012b, 2011c, Smith (D) 2012, 2011a,b, Beeby 2012e,k, 2011a, Cook 2011b, Thistleton 2012i). Scientists were also the main source in stories about bushfire research (Cubby *et al* 2013, 2012b, Thistleton 2012d).

The views of local residents were sourced in reports about human interactions with nature including nuisance wildlife and tree damage (Munro 2011a,c,d, Jacobsen 2011) Business owners were quoted in stories about nature-based business including whale-watching, outdoor recreation and tourism,

green developments and pest control (Howden 2013a, Power 2013a, Arlington 2012, Anderson 2012, Stevenson 2012, Elliot 2011).

On some topics, certain officials and scientists were regularly used as sources; suggesting specialist reporters have a network of trusted, reliable sources within agencies and academia. Prior to the retirement of the CT environment reporter, there were periodical features about research underway in universities as well as profiles of Canberra-based scientists (Beeby 2012b,c).

### ***How are news messages interpreted by readers***

Tracking letters to the editor is one means of assessing how readers interpret news content. About 8% of articles in the sample generated letters, mainly from individuals (22) and also conservation groups (2). A common response was to defend native wildlife portrayed as a nuisance and to present additional perspectives about drivers of habitat loss and potential solutions. This suggests many readers are ecologically literate and fact-check news content. The letters also suggest readers enjoy observing and interacting with wildlife in the city. SMH readers compete with each other to report the seasonal arrival of migratory species like the Koel cuckoo. In the CT, wildlife photos taken by readers often feature in the Gang-Gang column.

**Table 5 News stories generating letters to the editor**

<b>Article topics</b>	<b>No: of letters</b>	<b>Reader sentiment</b>	<b>Articles (n=15)</b>
Urban wildlife and habitat	12	Strong support for volunteers guarding Manly Cove penguins from dogs (3) More humane to relocate penguins to zoo (1) Possums behaviour due to loss of habitat and proposes backyard solutions (1) Cockatoos smart and having too much urban fun (2) Leave flying fox colonies in peace, solutions that replace lost habitat needed not colony destruction (3) Kangaroo numbers in reserves need managing (1) Cull is cruel and not based on credible evidence (1).	Elliot 2011, Jacobsen 2011, SMH 2011, Cook 2011d, Maley 2011, Phillips 2013a, Page 2013a
Non-urban wildlife	5	Distressed about shameful treatment of Fraser island dingoes, conservation action needed not hysteria (4) Recovery of vulnerable species like greater glider needs statutory regional/landscape conservation plans	Robson 2011a,b Cubby 2012f
Disconnection with nature	4	Kids need chance to observe nature first hand to understand its diversity (1) Lamenting low levels of concern about the natural environment and disconnect from everyday lives (2) Low concern due the effect of distorted media portrayal about what's important in society (1)	Monbiot 2012, Cubby 2012e, Flannery 2012
Fire management	3	Beauty and danger of fire in image about Leura fire (1) More hazard reduction in Blue Mountains to minimise risks to people (1) Spend money used to fight fires on promoting property protection and home owners responsibilities (1)	Lewis 2011, Ralston 2011 Bonges & Martin (2013)

### ***News representation and discussion***

Framing is a method of representation used to construct news stories using a particular set of facts and values that create a dominant meaning or social reality (Castillo 2008, Robbins *et al.* 2010). While framing is an active process, journalists tend to reconstruct the world in similar ways, reflective of news-making norms and practices and existing social structures (Corbett 2006, Lumby 2006). This was borne out by the analysis where a recurring set of meanings (themes) were identified from reading the articles and used to code the sample.

Table 6 sets out these themes and provides some illustrative examples of how headlines and language are used as a framing device. Articles that represented nature as threatened by human activities and as an arena of battle and conflict between groups in society, accounted for the most stories in the sample (22.5%). The next most frequent assertion is that nature is dangerous, an unpredictable force posing threats to people and property from bushfire, as well as health risks (18.5%

of stories). Battle metaphors are often used in headlines and reiterated through storylines. The scale of the disaster is quantified in terms of losses of lives, property, or stock. Where disaster is averted the narrative suggests a lucky escape. Only a few articles covered the social impacts and community-based regeneration efforts post the Vic and ACT fire events (Howden 2013a, Thistleton 2012c).

**Table 6 Themes in representation of nature**

Themes	SMH N=110		CT N=85		% of sample n=195	News headlines (from sample)
	No:	%	No:	%	%	
Nature is threatened and disappearing	27	24.5	17	20	22.5%	<i>Bushland doomed for more apartments; Mining threatens national Park plan; Logging looms in national parks; State emblem under threat from wildflower poachers; Capital nature parks go to seed; Myrtle rust biggest threat to ecosystems; Unmourned death of sole survivor; Whale of time over for monsters of the deep; Battle over fate of Fraser island dingoes</i>
Nature is dangerous and threatening	18	16.4	18	21.2	18.5%	<i>Anger flares on fire frontline; Red alert on bushfire threat; Nature's fury kept at bay for now; Day of danger; Bushfire battles in four states after soaring temperatures; Summer stalks capital again; Man feared dead, at least 80 properties lost; Fire trap fears for Molonglo suburbs.</i>
Nature is rampant and troublesome	12	10.9	7	8.2	9.75	<i>Not even PM's pansies safe from city's possum plague; Sex and the city numbers rise as rabbits hop to it; Wet weather entices slippery customers inside; Geckos become reptile rulers with successful invasion; Beak hour traffic destroying heritage buildings.</i>
Nature is a source of new knowledge and discovery	11	10	8	9.4	9.75	<i>ANU professor cracks mystery of dead parrots; Amateurs discover Namadgi's tiny dancer; Research has native moth world flutter; True blue experience for scientists tracking world's biggest mammal; Woodland birds return to farms.</i>
Nature is place for engagement and connection	11	10	8	9.4	9.75	<i>Blood sweat and volunteers keep park as nature intended; Botanist leaves trees to do the talking; Planting seeds of love; Give a hoot and find a tree-dwelling neighbor.</i>
Nature is resilient and can recover with/without human agency	7	6.4	12	14.1	9.75	<i>Amazing bush recovery follows 2003 firestorm; Nature takes its course; Native rats go wild in a return to the city; Native flowers bloom after firestorm; Park sightings suggest glider is back.</i>
Nature can be left on the back-burner	11	10	5	5.9	8.2	<i>Park hunt bags O'Farrell an F; Priorities askew when parks get pushed aside; Parks go unstaffed as environment jobs slashed; Secret plan to muddy the waters, Environment committee falls victim to O'Farrell cuts.</i>
Nature is becoming disconnected from everyday lives	6	5.5	2	2.4	4.1	<i>Save the environment -what's the point; Nation 'indifferent' to environment; Rich capital no green zone; What young people fear most and its not the environment.</i>
Nature is amazing and unexpected	5	4.5	3	3.5	4.1	<i>Rare majestic little creature spotted; One will really amaze you, the other eats his mates, Red beaches glow dark; A day for deep blue bonding; Red-bellied black fury in snake pit.</i>
Nature is valuable and worth saving	2	1.8	5	5.9	3.6	<i>Malabar headland becomes national parkland; Parks, pests take priority; O'Farrell shuts out mining colossus; Grand plans for Jerrabomberra wetlands.</i>

The successful adaptation of some native species and the spread of introduced species often lead to conflicts with urban residents. These stories are framed to imply nature is rampant and controls are needed to stem the invasion, to battle the plague. This storyline accounted for over 9% of the sample but the headlines often soften the narrative with the use of puns around the pesky wildlife and witty cartoons by Cathy Wilcox (Phillips 2013d, Cook 2011d, Elliot 2011b, Munro 2011c).

A suite of articles frame nature in terms of human interest and engagement, an exciting place for scientific discovery and also community connection, each accounting for 9.75 % of sampled articles. Articles represented the beneficial role of urban citizens monitoring wildlife including, flying foxes (Cubby 2013c), cockatoos (Phillips 2013a, Huxley 2012, Cook 2011d) and powerful owls (Cook 2011c). Articles that represented nature as resilient and recovering (9.75% of articles) often presented a human dimension where volunteers have been active participants in the recovery process (Thistleton 2011, 2102c).

On policy and governance of nature, 8% of stories framed nature as an area of government inaction and neglect (Nichols 2013b, Cubby and Tovey 2012, Beeby 2011b,d, Patty 2011) and fewer than 4% of stories represented nature receiving positive attention from government.

6% of articles framed nature in terms of the growing disconnect with urban communities, including young adults and children (Brown 2012, Cubby 2012e, Ruppert 2012). Two opinion pieces sourced from the Guardian (Griffiths 2012 Monbiot 2012) suggest this disconnect is of greater public concern in the UK. Disengagement may in part be attributed to the prominence given by the media to other issues (particularly the national economy) and the tendency of journalists to represent reality in a way that maintains the social and political status quo (Corbett 2006, Lumby 2006).

Stories about the state of the economy and indices like interest rates, share prices, employment figures, and business surveys hit the news every day, along with the SMH *Business Day* for investors (also in the CT) and the weekly *Money* supplement. In contrast, there is only a handful of stories about nature in a good week, an annual report (if published) about the state of the environment (Cubby 2013d) and grabs in gardening and lifestyle articles (Maddocks 2012a,b, Anderson 2012).

The pervasiveness of economic messaging and superficial discourse about nature (Beder 2004, Matthews 2013) translates to low levels of public understanding about how our human futures are bound to the health of natural systems. This is borne out by articles that reveal young people are more concerned about jobs and their economic future than the protection of nature (Ruppert 2012) and the existence of widespread indifference to the natural environment across the community (Cubby 2012e). Only a few articles in the news sample directly challenge the economic narrative in the face of growing evidence about ecological decline (Gittens 2012, Moncrief 2012, Beeby 2012h).

## **Conclusion**

The news is a socially constructed product and plays an agenda-setting role in elevating certain social concerns and issues over others (Corbett 2006). How people perceive the importance and value of nature in their everyday lives is influenced by the messages conveyed in the news. These messages are critical in an urban world, where people have less direct experience and contact with nature. Moreover, the bushland that remains in urban areas will require active management, community advocacy and care to maintain its values for wildlife and humans.

This study has revealed that nature is most often portrayed as under threat, battling the human forces driving habitat and species loss. On the other hand nature is represented as a force to be battled and controlled because of the danger and risk posed to humans and property (bushfires at the urban edge) and the nuisance occasioned by some urban wildlife. These risk, danger and control narratives present a reality where nature is perceived outside the realm of everyday experience apart from the odd wildlife encounter.

Representing nature in an arena of battle and conflict fits most neatly with the sort of news values that drive construction of the news but ignores the complex issues underlying our relationships with nature (Hull 2013, Barr 1983) and the urgency to re-cast the news narrative (Matthews 2013). This narrative would be one that links our own health and survival with that of the natural world, building societal understanding about interdependence that challenges the ways people currently think about the place of nature in their lives. Social change is unlikely unless this relationship is given greater prominence and thoughtful attention in the media. Stories that may inspire greater public understanding and

connection are too few in number to counter the prevailing discourse, and few scientists chose to communicate about these issues in the 'quality' titles reviewed in this sample.

Changes in the media landscape may well provide the resources and quality mediums to present new socio-ecological narratives particularly with global growth in philanthropic, not-for profit journalism (Beecher 2013, Houston 2013, Knott 2013). New online platforms, which are less news driven and more about mapping knowledge, provide a means to present complex stories using global networks of sources (Heemsbergen 2013, Summers 2013, Simons 2007).

Overall, this study sought to provide insights into what topics the media covers and how the meanings conveyed might influence how people think about nature and its place in their lives. While there are some limitations due to the Fairfax sample, it is expected the findings will be of interest to urban practitioners, biodiversity managers and community groups seeking to understand prevailing community values and the implications for how we manage biodiversity within and bordering our cities. It may also stimulate thought about new ways of communicating with a growing city-based audience about the valuable ecological systems upon which their urban lives depend (Gittens 2012).

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