Biodiversity conservation cannot afford COVID-19 communication bungles

Emily A. Gregg[1] (corresponding author, https://orcid.org/0000-0002-0144-7854, @SciEms)

Alexander M. Kusmanoff[1] (https://orcid.org/0000-0002-1344-1767), @AlexKusmanoff)

Georgia E. Garrard[1,2] (https://orcid.org/0000-0002-4031-9054, @GeorgiaGarrard)

Lindall R. Kidd[1] (https://orcid.org/0000-0002-4443-2572)

Sarah A. Bekessy[1] (https://orcid.org/0000-0002-0503-1979, @sbekessy)

1. ICON Science Research Group, School of Global, Urban, and Social Studies, RMIT University, GPO Box 3476, Melbourne, VIC 3001, Australia

2. School of Ecosystem and Forest Sciences, The University of Melbourne, Parkville, VIC 3010, Australia

Corresponding author: Gregg, E.A. (emily.gregg@rmit.edu.au), icon-science.org, @SciEms

26 **Abstract**

27 With COVID-19 dominating headlines, highlighting links between the pandemic and biodiversity

28 may increase public awareness of the biodiversity crisis. However, ill-considered messages that

29 frame nature as the problem rather than the solution could inadvertently propagate problematic

30 narratives and undermine motivations and individual self-efficacy to conserve nature.

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32 **Narratives of Nature and COVID-19**

33 With COVID-19 recently dominating media headlines, other ongoing global crises, such as

34 biodiversity loss have struggled to compete for attention. In response, conservationists have

35 employed new communication tactics, including **framing** (see Glossary) stories in ways that draw

36 connections between COVID-19 and nature. However, not all publicity is good publicity; while this

37 strategy aims to make nature stories topical, it risks reinforcing old **narratives** that frame nature as

38 a *threat* to humanity. Consequently, it may inadvertently suppress the appetite of the global

39 community to take action to protect, conserve and bring back biodiversity, rather than provide the

40 stimulant intended.

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42 One poignant example is a tweet from the Intergovernmental Science-Policy Platform on

43 Biodiversity and Ecosystem Services' (IPBES) Twitter account highlighting findings of their

44 Workshop Report on Biodiversity and Pandemics [1]:

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46 *"There are 1.7 million undiscovered viruses lurking in mammals and birds, half of which*

47 *may have the ability to affect people" – IPBES Twitter, 19/11/20 (344 likes, 194 retweets,*

48 *https://twitter.com/IPBES/status/1329339343840964608?s=20)*

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50   The full report details the complex relationships between human behaviour, nature and the rise of

51   pandemics [1], but with low click-through rates from social media posts (e.g. 1.3%, see:

52   https://www.statista.com/statistics/872099/social-media-advertising-ctr/), few of the Twitter

53   audience (76.9K followers at time of publication) would have followed through to read these

54   nuances. Instead, most received only the message of '1.7 million undiscovered viruses lurking' in

55   wildlife. Statistics emphasising the prevalence of viruses in nature were front and centre of the

56   IPBES' report media release (see: https://ipbes.net/pandemics) (including the byline itself which

57   states '631,000 – 827,000 unknown viruses in nature could still infect people'), suggesting a

58   strategic choice to frame the issue in this way. The many media articles about the report (see:

59   https://ipbes.net/media-watch) suggest that this framing may have successfully garnered media

60   interest. Yet it also risks generating a problematic connection between COVID-19 and nature; that

61   of nature as a threat to human health.

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63   Other organisations have highlighted connections between nature's decline and the pandemic in

64   order to raise awareness about the biodiversity and climate crises (e.g. UN Environmental Chief in

65   The Guardian, see: https://www.theguardian.com/world/2020/mar/25/coronavirus-nature-is-

66   sending-us-a-message-says-un-environment-chief). Yet while the connections may be legitimate,

67   without a fully considered messaging strategy, these messages can backfire. For example,

68   attempts to counteract negative perceptions of bats may have reinforced negative links between

69   wildlife and disease [2,3], and communications framing the COVID-19 economic crisis as a "trial

70   run" for climate action may not increase support for mitigation strategies as hoped [4]. By taking a

71   strategic communications approach (see Figure 1) and drawing on pre-established messaging

72   evidence (e.g. see literature cited herein,

73   https://www.publicinterest.org.uk/FramingNatureToolkit.pdf,

74   https://www.frameworksinstitute.org/issues/climate-change-and-environment/), conservation

75   professionals can work to avoid such pitfalls. Here we focus on the message design stage of the

76   strategic communications process. Specifically, we focus on message framing, narratives and calls

77   to action to provide guidance on how to craft messages about nature and COVID-19 that will

78   increase support for conservation policies.

79

80   **Framing Nature as a Solution, not a Problem**

81   Message frames influence how an audience perceives a problem and what they consider to be

82   desirable solutions [5]. Messages linking COVID-19 and nature can inadvertently evoke frames that

83   cast nature as the *problem*. Some frame nature as a host for viruses (see above), while others

84   focus on animal vectors as the source of COVID-19, rather than human practices, like wildlife

85   trading, land clearing and intensive meat production, that have changed the way we interact with

86   these animals (Figure 1a,c). In addition to framing nature as the problem, such message frames

87   perpetuate outdated and problematic colonial narratives of humans as separate from nature and

88   'taming' nature [6,7]. These frames and narratives can be evoked in a message even when

89   contrary to the original source or intention, as evidenced by the framing of the IPBES tweet above,

90   which does not reflect the general findings of the report [1].

91

92   To avoid such missteps, conservation professionals must consider how different messages

93   emphasise different value systems [8], influence risk perceptions, and affect dominant social

94   narratives, all of which shape society's willingness to act [9]. For example, recent research shows

95   that narratives framing the pandemic as caused by both animals and humans (as opposed to only

96   animals or only humans) were most effective at eliciting pro-conservation policy support,

97   particularly around the wildlife trade [10]. While results may vary across different contexts, such

98   research illustrates the influence of framing and narratives on perceptions around COVID-19 and

99   nature.

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101   Alternative frames linking COVID-19 and nature exist. Narratives of 'nature in the time of COVID',

102   which frame nature as a part of the *solution*, have emerged amongst traditional news and social

103   media platforms over the past year (e.g. see: The Conversation, BBC). Stories that frame nature as

104   a source of wellbeing and health have become topical as populations find themselves in lockdown,

105   or their movement restricted to local green spaces (see Figure 1d). These stories foster a narrative

106   that 'nature is good for us', counteracting ideas that 'nature is scary and dangerous'. This narrative

107   is integral to current efforts to enhance nature in cities and underpins the growing recognition

108   that people *depend* on nature [11].

109

110   **Promoting Self-efficacy and Action, Not Apathy**

111   Messages highlighting the number of viruses in nature play a similar role to oft-quoted statistics

112   around accelerating extinction rates or habitat loss, whose usual purpose is to heighten the

113   audience's sense of urgency and risk, and evoke concern, panic or fear. Yet triggering these

114   negative emotions without providing guidance for the audience about solutions rarely promotes

115   action [12]. Instead, such messaging runs the risk of overwhelming and disengaging the audience.

116   While messages that inspire hope can increase the likelihood of action, they can also lead to

117   apathy by reducing the perceived risk [12]. A middle ground is needed. Climate change

118   communications research has shown that pairing fear-inducing messages with an achievable and

119   efficacious call to action can overcome the associated risks by enhancing **self-efficacy** [13]. Yet,

120   few messages linking COVID-19 and nature communicate a clear action or solution, leaving readers

121   with little guidance about what to do with the troubling information presented. The social media

122   quote cards provided by the IPBES (see: https://bit.ly/PandemicsReportResources) describe vague,

123   high-level and largely unactionable solutions for the typical reader, including a 'greater focus on

124   prevention', 'reducing anthropogenic global environmental change', 'transformative change', or

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125   establishing an intergovernmental pandemic prevention council. To promote citizen engagement

126   and action, suggestions for actions that can be implemented by individuals are necessary to

127   enhance self-efficacy and empower individuals to act in desirable ways for both global public

128   health and biodiversity benefits. Examples of such actions, drawn from the IPBES report, include

129   reducing consumption of intensively-farmed meat and products from wildlife trade [1] (Figure 1b).

130   Enhancing individual self-efficacy is also critical for increasing public pressure on organisations and

131   political bodies with the power to enact the transformative systemic change required.

132

133   **A Strategic Approach to Messaging**

134   As the conservation community increasingly seeks an audience through stakeholder engagement,

135   messaging and social marketing approaches [14], it is critical that this is done in a way that is

136   effective for achieving desirable conservation outcomes. We applaud organisations like the IPBES

137   for actively seeking media coverage during the time of COVID-19, and acknowledge that critiquing

138   another's messaging strategy is easier than designing an effective alternative. In Figure 1 we

139   present a range of alternative tweets; two manufactured tweets present an alternative narrative

140   that reframes the link between nature and COVID-19 and provides a call to action (Figure 1a,b),

141   and three bona fide tweets provide good examples of the concepts discussed above (Figure 1c-e).

142   These messages focus on framing human practices (rather than nature) as the problem, framing

143   nature as the solution, reinforcing supportive narratives for conservation, and including clear calls

144   to action. We do not mean to suggest that these messages will necessarily be broadly effective

145   across different audiences and contexts; organisations with capacity to engage in a comprehensive

146   strategic communications planning process, including pre-testing, should do so (see:

147   https://publicinterest.org.uk/TestingGuide.pdf).

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149   **Messaging that Makes a Difference**

150   A perfectly considered media campaign is a rare luxury. However, conservation professionals –

151   particularly within large well-resourced organisations – can influence social discourse about and

152   support for nature and conservation in both positive and negative ways. As conservation

153   messaging moves beyond its foundational discussions (e.g. fear- vs hope-inducing messaging) and

154   towards an important role in more complex and context-specific (i.e. wicked) problems, it is vital

155   that this contribution is strategic and constructive, and draws on well-established communication

156   theories and guidance.

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158   **Acknowledgements**

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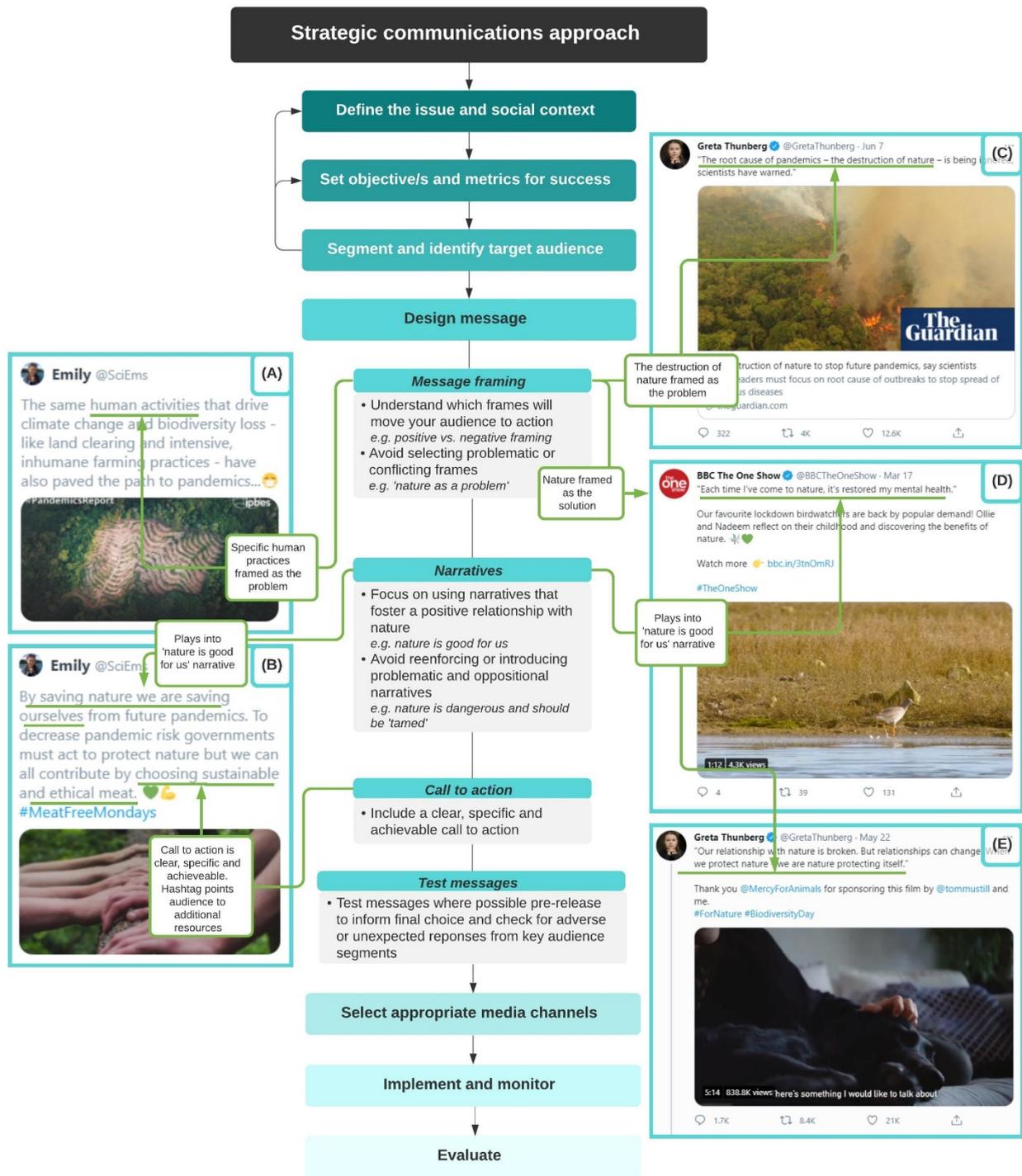
Figure 1. Outline of a strategic communications approach with a focus on the message design phase. Note that while outlined as a linear process, there are stages at which an iterative process is recommended, such as in the first three stages. Tweets are presented as preferred examples of message framing, narratives and calls to action when discussing COVID-19 and nature: (a) Tweet created by authors, image by IPBES, (b) Tweet created by authors, image by Unsplash/Shane Rounce, (c) Greta Thunberg,

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209 https://twitter.com/GretaThunberg/status/1401808533562273793?s=20, (d) Greta Thunberg,

210 https://twitter.com/GretaThunberg/status/1396058911325790208?s=20, (e) BBC The One Show,

211 https://twitter.com/BBCTheOneShow/status/1371908588025823233?s=20. The communications

212 approach is adapted from [15].

213

214 **Glossary**

215 **Framing:** The way an issue is described or how a problem is conceived, articulated and

216 approached. Framing can be identified or defined at different scales, from semantic framing (e.g.

217 referring to wildlife as 'biodiversity' versus 'nature'), to the framing of entire issues (e.g. framing

218 biodiversity conservation as a sustainability issue, an environmental justice issue, or a 'caring for

219 nature' issue, [8]). These different frames can result in different interpretations of what is the

220 problem and solution, and which 'characters' or 'objects' are relevant to the issue and which are

221 not.

222 **Narrative:** A story that links particular facts, evidence and events in a consistent way that helps us

223 to create meaning and understanding. Different narratives can generate alternative

224 representations of the same objective 'reality'.

225 **Self-efficacy:** The self-perceived ability of an individual to engage in a specific behavior, or how

226 empowered they feel to carry out the action. Self-efficacy can be influenced by how difficult the

227 individual perceives the action to be (i.e. efficacy), and belief in the effectiveness of the action

228 itself (i.e. response efficacy).

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