

Conservation scientists 'unanimous' in expectations of serious loss of biological diversity

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The number of species being recognised as endangered is ever increasing and a new study, published in *Conservation Biology*, reveals the unanimity among conservation scientists of expectations of a major loss of biological diversity. The survey also shows a growing acceptance of controversial strategies such as triage, a decision to prioritise resources and not to intervene to save some highly threatened species.

"As with <u>climate change</u> the large level of investment needed if loss of biodiversity is to be stopped will result in an increase of public and political scrutiny of <u>conservation</u> science," said study author Dr. Murray Rudd from the Environment Department at the University of York.

"That makes it important to show how much scientific consensus there is for both the problems and possible solutions."

583 individuals who had published papers in 19 international journals took part in Dr Rudd's survey via email. The survey sought to gather opinions on the expected geographic scope of declining <u>biological</u> <u>diversity</u> before posing 16 questions to rank levels of agreement with statements that explored authors' values, priorities, and geographic affiliation and their support of potential management actions.

"The survey posed the key questions facing <u>conservation science</u>: why people care, how priorities should be set, where our efforts should be concentrated and what action we can take," said Rudd. "Scientists were



also asked about a range of potentially controversial statements about conservation strategies to gauge shifting opinions."

The results revealed that 99.5% of responders felt that a serious loss of biological diversity is either 'likely', 'very likely', or 'virtually certain'. Agreement that loss is 'very likely' or 'virtually certain' ranged from 72.8% of authors based in Western Europe to 90.9% for those in Southeast Asia.

Tropical <u>coral ecosystems</u> were perceived as the most seriously affected by loss of biological diversity with 88.0% of respondents who were familiar with that ecosystem type gauging that a serious loss is 'very likely' or 'virtually certain'.

"When considering conservation values and priorities the scientists said understanding interactions between people and nature was a priority for maintaining ecosystems," said Rudd. "However, they largely rejected cultural or spiritual reasons as motivations for protecting biodiversity. They also rejected 'human usefulness', suggesting many do not hold utilitarian views of ecosystem services."

Respondents to this survey had more unanimity on the human role in loss of biological diversity than respondents to a recent survey on climate change. In this survey, 79.1% of respondents stated that acceleration of the loss of biological diversity by human activities is virtually certain. In the other survey, by comparison, 61.9% thought climate change was underway, whereas 55.1% believed it to be accelerated by humans.

The respondents to Rudd's survey were also asked to consider conservation triage, when, given limited resources, a decision may be made not to intervene to save a highly threatened species. Triage has long been considered controversial among conservation scientists. Yet 50.3% and 9.3% of scientists agree or strongly agree that criteria for



triage decisions should be established.

"Understanding the degree of consensus within the scientific community will help policy makers to interpret scientific advice, improving the likelihood of successful of conservation initiatives," concluded Rudd. "The extremely high level of consensus demonstrated by these results underlines the urgency of preventing further damage to the natural world."

Provided by Wiley

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