TAMANI Project : Publication summary

How to decide what wildlife to monitor in the Arctic: Should extinction risk matter?

Wildlife observation and recording (monitoring) is needed to detect change in arctic wildlife species and their environment and make decisions about how to best manage wildlife populations. Given there is limited time and money available for monitoring, decisions have to be made about *what* to monitor, *where* and *how*.

'Monitoring triage' is a specific way of deciding how to prioritise monitoring resources between species (or sometimes locations). It would mean spending less time and money monitoring species where there is high likelihood of extinction in the near-future and instead focussing on species where monitoring activities may produce greater conservation benefits.

Our aim was to evaluate whether monitoring triage would be a good approach for deciding what wildlife species to monitor in the Arctic. To decide how to prioritise monitoring in the Arctic, it is important to know the views of the people who produce, use or are affected by the decisions resulting for monitoring information. We interviewed representatives from indigenous organisations, non-governmental organisations (NGOs), scientists and decision makers to gather opinions on monitoring triage.

Key findings:

The majority (56%) of our participants were mainly opposed to triage, 26% were in support of triage and 17% were undecided. Representatives of Indigenous organizations were more likely to be opposed to triage than scientists, and decision-makers showed greatest support for triage amongst the scientist participants.

Some of the key objections to monitoring triage were:

- The idea of triage focusses on species, whereas it is important to think about interconnected systems when making decisions about *what* to monitor
- Monitoring threatened species is necessary to improve understanding of the drivers of change, responses and ecosystem consequences
- There is an obligation to try to monitor and conserve threatened species
- Monitoring needs to address local people's needs, which may be overlooked under triage
- We cannot afford to give up on any species as there may not be any species to replace their role in the ecological system
- It is important to highlight the threat to species, as if there is no or little information it might be assumed the species is not under threat

Some of the key statements that might support of triage were:

- Abundant species have a major ecological role in the Arctic, and it is important to monitor them
- Given how rapidly the Arctic is changing, some species may be destined to go extinct and greater conservation benefits may be gained by focussing attention on other species

Participants also highlighted that assessments of wildlife change across the Arctic could cover more locations by better including community observations (Indigenous and local ecological monitoring and community based monitoring). This may reduce the need to prioritise decisions about monitoring so strongly.

Different people will want different conservation benefits from monitoring. Where we monitor can affect the perception of *who* and *what* is affecting wildlife and who is responsible for reducing impacts on wildlife. Local people must be consulted to identify their priorities when coordinating and designing monitoring plans across the Arctic.

Overall we found that it is unlikely that simple rules will be enough to guide monitoring decisions. To decide how to best decide *what*, *where* and *how* to monitor a clearer vision of a desirable future for the Arctic is needed. This will help identify *what* priorities should be used to decide *what* to monitor.

We thank everyone who participated in interviews for their contributions to this research

For the full publication see:

Wheeler, H. C., Berteaux, D., Furgal, C., Parlee, B., Yoccoz, N. G. & Grémillet, D. 2016. Stakeholder perspectives on triage in wildlife monitoring in a rapidly changing arctic. Frontiers in Ecology and Evolution, 128(4): doi: 10.3389/fevo.2016.00128

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