

Box 1. Summary of recommendations for guiding species conservation efforts

1. Assessing Extinction Risk beyond the Red List

- Conduct spatially-explicit assessments at the population level ^{1, 2, 3}
- Develop integrative approaches of multiple relevant factors ⁴
- Use modern statistical modeling frameworks ⁵
- Include multiple dimensions of biodiversity ⁶ such as functional traits ⁷, evolutionary distinctiveness ^{8, 9} and current genetic diversity ¹⁰
- Incorporate climate change impacts ^{11, 12, 13.}

2. Assessment Process

- Support regional initiatives for extinction risk assessments ¹⁴
- Communicate with researchers and partner networks ^{15, 16}
- Increase equal collaboration with local and regional experts ¹⁷
- Enhance integration and coordination among conservation stakeholders ¹⁸

3. Setting Conservation Priorities

- Consider species' ecological functions ¹⁹ and relative ecological importance ²⁰
- Include social considerations such as culturally important species ²¹
- Define frameworks for resource allocation and logistical and financial trade-offs ^{22, 23}
- Evaluate the potential for success of the prioritizations ²⁴
- Recognize and make explicit ethical values to inform priority setting through community dialogue and co-produced indicators ²⁵

4. Decision-making

- Root decision-making in local contexts ²⁶
- Incorporate and center the expertise, voices, and perspectives of diverse conservationists, indigenous peoples, and local communities in decision-making ²⁷
- Recognize local knowledge, both traditional and scientific ²⁸
- Balance priorities between conservation measures, scientific research, and monitoring ²⁹
- Increase collaboration, synergies ³⁰, and bottom-up approaches ³¹

¹ Fremout et al. 2020 ² Ceccarelli et al. 2022 ³ Gaisberger et al. 2022 ⁴ Button & Borzée 2021 ⁵ Pollock et al. 2020, ⁶ Brum et al. 2017, ⁷ Griffith et al. 2023 ⁸ Isaac et al. 2007 ⁹ Gumbs et al. 2023 ¹⁰ Schmidt et al. 2023 ¹¹ Akçakaya et al. 2006; ¹² Trull et al. 2017 ¹³ Peng et al. 2023 ¹⁴ Bachman et al. 2019 ¹⁵ Böhm et al. 2022 ¹⁶ Cazalis et al. 2022 ¹⁷ Armenteras 2021 ¹⁸ Echeverri et al. 2023 ¹⁹ Brodie et al. 2018 ²⁰ Natsukawa & Sergio 2022 ²¹ Reyes-García et al. 2023 ²² Salzer & Salafsky 2006 ²³ Wiedenfeld et al. 2021 ²⁴ Joseph et al. 2009 ²⁵ Muhl et al., 2022 ²⁶ Chaplin-Kramer et al. 2022 ²⁷ Ocampo-Ariza et al. 2023 ²⁸ Braga-Pereira et al. 2022 ²⁹ Buxton et al. 2020 ³⁰ Oberhauser et al. 2017 ³¹ Wyborn & Evans 2021