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BirdLife Australia Research Strategy 2023-2027

Contents

Acknowledgements: BirdLife Australia Conservation and Science Department staff for their feedback and valuable input, and BirdLife Australia's Communications Team staff.

BirdLife Australia acknowledges the Traditional Owners of the Country on which we live and work, and we pay our respects to their Elders past and present. We recognise and are grateful for the immense contribution of Indigenous people to the knowledge and conservation of Australia's birds.

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Introduction

BirdLife Australia has a proud tradition of natural history and science, and of supporting ornithological[1] research in Australia. Early last century there was an information crisis due to the lack of knowledge about Australia's birds. Fundamental questions of taxonomy, physiology and ecology were unresolved. At the time, the Royal Australasian Ornithologists Union (RAOU; now BirdLife Australia) and other bird organisations fostered the study of birds with great success. While fundamental ornithological research is still booming, by the end of the 20th century the primary avian crisis was a *conservation crisis*. Accordingly, BirdLife Australia's primary goal is now bird conservation, and the research required is more diverse. Effective conservation policies and management actions rely on research that can establish an evidence base for their prioritisation, deployment and evaluation.

BirdLife Australia's Bird Conservation Strategy 2023–2033 is our national, organisation-wide strategic plan to deliver BirdLife Australia's conservation goals. It describes our part in delivering BirdLife International's Global Strategy and will guide how we contribute to and report on the new United Nations (UN) Global Biodiversity Framework. At global, national, regional and local scales, BirdLife Australia has three strong foundations that underpin strategy and thus our work: birds, science and partnerships.

Research is one of five enabling strategies of the Bird Conservation Strategy. It will ensure we establish a strong evidence base to achieve our conservation goals, and will build upon our established, science-based approach to informing public policy, decision making and conservation programs.

BirdLife Australia will therefore support research that is essential for achieving three high-level outcomes in the Bird Conservation Strategy (2023–2033):

Strategic Goal 1 *– Stop human-driven extinction of threatened birds by 2030.*
Strategic Goal 2 *– Improve the status of 30% of threatened birds by 2030.*
Strategic Goal 3 *– Halt overall bird species population declines by 2050.*

[1] Ornithology is research and consequent knowledge of birds with all that relates to them. It has become much broader that traditional science, and BirdLife often needs research that is more than traditional ornithology, for example research on human attitudes towards birds.

The purpose of research at BirdLife Australia is to enable the Bird Conservation Strategy which, in turn, is intended to secure Australia's birds. Research at BirdLife Australia is essential for:

- Developing, trialling and delivering on-ground conservation actions through evaluation and adaptive management
- Informing the public, practitioners and policy makers about the conservation status of birds and their conservation needs
- Evaluating and refining progress towards BirdLife Australia's conservation goals in the Bird Conservation Strategy.

Although BirdLife Australia is one of Australia's largest environmental NGOs, the task of securing the future of Australia's birds is still well beyond our resources. The investment in Australia's threatened species would need to be between five and ten times larger than current funding to secure all our threatened species (Wintle et al. 2019; see also www.tsx.org.au). In addition, the overall abundance of common birds may also be in decline and the structure of bird communities is changing (Maron et al. 2013). The fact that BirdLife Australia cannot do everything has several consequences:

- We need to prioritise what research we do
- We need research partners and effective ways of both identifying and attracting these partners to enable research to occur

Thus, the purpose of the Research Strategy is to define Birdlife Australia's role and research needs, identify objectives and activities that support research goals identified in the Bird Conservation Strategy, and prioritise investment in those activities.

Our Role in Science and Research

Expectations for BirdLife Australia's research are high. Ornithological and academic communities often express ambitious requirements for information, while the knowledge required to optimally invest in the recovery of every threatened species is immense. Therefore, there is a need to set priorities for research effort and funding and to clearly define BirdLife Australia's role in research.

Research means many things to many people. It includes data assembly, monitoring and validating the Bird Conservation Strategy Theory of Change, all the way through to more fundamental and applied research. It is also interdisciplinary and uses a wide range of forms of knowledge, including Indigenous knowledge, social sciences, economics, history, psychology, mathematics and statistics, along with more traditional sciences, such as ecology, genetics, evolution, taxonomy, physiology, and health/disease. All BirdLife Australia staff are involved in research because they ask questions, collect data and form evidence-based opinions about what actions are likely to deliver outcomes.

BirdLife Australia is committed to fostering and supporting these research areas in Australia. Our constitution includes "the scientific study and research of Australian birds and their habitats, so as to facilitate their conservation and well-being". Thus, our role in facilitating, supporting, influencing and actively participating in science and research is essential to meet the ambitious goals of the Bird Conservation Strategy.

Guiding Principles

We will use guiding principles to help us make decisions about how to best enable effective research to achieve our conservation goals. These guiding principles include:

Collaborations/Partnerships - Ensure strong collaboration among internal and external stakeholders, including national and international partners (Appendix B).

Open science and data sharing - Ensure scientific processes are transparent, and results and data are more accessible with the goal of building more replicable, accessible and robust science, while respecting Indigenous IP.

Relevance - Research should offer the prospect of improved outcomes for conservation, as guided by the Bird Conservation Strategy, and comply with principles of good governance, accountability and value for money.

Innovation - Research that leads to novel solutions to bird conservation problems.

Leadership - Seek to influence and proactively drive research questions based upon annual priorities.

Evidence - Use the best available evidence to plan, implement and prioritise our programs.

Research Areas

Applied research underpins conservation action planning. It helps us to: set objectives; develop credible indicators; build conservation campaigns, alerting the public and decision-makers to the plight of biodiversity; develop theories of change that link actions to outcomes; identify new conservation actions, choosing and trialling the best actions and evaluating their outcomes; guide prioritisation of conservation investments; and set the overall direction of the organisation.

Basic research and monitoring also delivers important outcomes for conservation. For example, effective communication of the Threatened Species Index has contributed to and influenced state and federal environmental policy (Samuel 2020; Creswell et al. 2021). This type of research encourages public engagement in action for birds, which, in turn, lends weight to policy actions (Luther et al. 2016; Larson 2020). There is also still much to be learned about the basic natural history of Australian birds that is essential knowledge should they ever become threatened. This type of base knowledge and monitoring allows us to be proactive because, in conservation, prevention is far more cost-effective and likely to succeed than cure.

Moving roughly from basic to applied science and research, not in order of importance, there are five classes of research. Defining the research classes and understanding our role in them allows us to develop objectives (see next section), define activities and prioritise actions.

A) Fundamental Research

Fundamental Research includes research about birds with no obvious short-term application. However, almost all fundamental research is eventually integrated into management and policy, and can also inspire a love of birds through popular culture and science communication.

BirdLife Australia's investment in fundamental research occurs through our support of the journals (*Emu— Austral Ornithology*, *Australian Field Ornithology* and *Stilt*) and other publications, the Australasian Ornithological Conference, and research awards/funding. Contribution to fundamental research provides indirect benefits to BirdLife Australia through ensuring the organisation has scientific credibility in policy and management discussions and inspiring future generations and the community. BirdLife Australia support for fundamental research also gives such research a legitimacy within government and advocacy groups. Fundamental research occurs with many partners and our direct contribution may be relatively small, but the outcomes for our scientific credibility and conservation outcomes are significant.

BirdLife Australia should ensure that fundamental research supports research priorities from the Bird Conservation Strategy and Conservation & Science Programs to deliver impact. These include:

- Continuing the current level of investment in student grants and prizes, which build student engagement, support talent and publicise BirdLife Australia's activities.
- Actively managing research partnerships to maximise benefit to Australian birds. This can be done by leveraging additional resources through external funding applications and drawing on academic expertise. BirdLife Australia should identify a range of funding sources (for example, Australian Research Council Discovery and Linkage grants) which can be targeted to increase joint research activities. This should include Honours and PhD studentships jointly funded and supervised by academics and BirdLife Australia staff.
- Increasing the involvement of BirdLife Australia staff in the production and publication of research outputs, realised through staff co-authorship on peer reviewed publications and reports.

B) Enabling or Platform Science

Enabling or Platform science includes the assembly and curation of basic data that is not always targeted to a specific research question or applied conservation problem. This includes broadscale monitoring and reporting, the primary purpose of which is to inform policy and conservation investment, and to answer the frequently asked question, "How are Australia's birds doing (and why)?" Enabling Science forms the backbone of BirdLife Australia's volunteer base (via citizen scientists) and is the main 'product' we curate and produce for research collaborations.

Birdata is a powerful online platform and database which brings together information for many specific projects that are essential to targeted knowledge acquisition and adaptive management (see Sections C and D). It also generates huge volumes of citizen science data that ultimately finds its way to the Atlas of Living Australia and state databases. Birdata enables any member of the public to explore the distribution and reporting rate, in time and space, of all of Australia's birds. BirdLife Australia curates and vets the data to maintain high quality and reliability, setting the Birdata platform apart from state biodiversity databases.

Citizen science data from Birdata and other BirdLife Australia projects provide a general overview of the state of Australia's birds. Projects have included, for example, The Action Plan for Australian Birds, Key Biodiversity Areas (and associated monitoring), the State of Australia's Birds (SOAB) report, the Australian Bird Index (ABI) and the Threatened Species Index (TSX). They also include species-specific projects that track trends, such as the Beach Nesting Birds Program and the annual shorebird counts, monitoring progress and seeking to improve our understanding of conservation status. As well as passive reliance on general bird surveying, bespoke monitoring design for difficult, cryptic or rare birds seeks to overcome data deficiencies and improve understanding.

Their general purpose is to inform management and policy at federal, state and regional levels and provide data that can be used in advocacy for the conservation of Australian birds. BirdLife Australia is a major driver in these projects and has traditionally encouraged more consistent and structured data collection (such as wader counts, 20-minute/2 hectare surveys), as well as credible and repeatable threatened species surveys. Data curation, preparation and analysis is a large, technical and expensive task. However, continuing to release more data to research organisations would accelerate analysis. Research questions include how do we improve our understanding of the value of different types of monitoring protocols for answering strategic questions? And how do we ensure the return on investment in structured versus unstructured monitoring. Encouraging systematic data collection is an important and ongoing challenge.

BirdLife Australia also stewards the official Australian taxonomy of birds, following the BirdLife International working lists. We also curate official common names, and champion Indigenous names. These globally relevant lists are curated by staff in collaboration with voluntary committees and researchers. They are essential for operation.

BirdLife Australia should establish long-term monitoring goals which will allow robust determination of change and effective planning of conservation priorities. We need to use the data from *The Action Plan for Australian Birds 2020* (eds Garnett, S.T. & Baker, G.B., 2020) to ascertain which species require relevant broadscale monitoring and then undertake a prioritisation exercise (see Sections C and D). To achieve this, BirdLife Australia should lead on:

- Stewarding the official Australian taxonomy and other lists to ensure consistency in naming convention and influence change (for example, decolonisation of bird names).
- Actively encouraging data collection and providing supporters with protocols and advice about how that citizen science data collection could be improved.

BirdLife Australia should also support activities that will maximise the likelihood that Birdata and derived products will influence management and policy. These include:

- Forming an Enabling Science subcommittee of RACC to advise on Birdata (and related monitoring projects) and supporting it to prosper. This committee would deal with data accessibility, integration and transferability, and advise where appropriate and requested on outputs.
- Expanding productive research partnerships, scientific publications and outputs from monitoring data, while ensuring that BirdLife Australia's contributions are acknowledged so that reach and reputation in conservation science improves.
- Ensuring that there is continuing investment in digital technology to support Enabling Science activities and outputs (for example, Birdata, ABI reporting) and ensure Birdata base operations are funded.

C) Targeted knowledge acquisition leading to improved conservation planning and implementation

Before conservation actions can be implemented at scale, targeted research must be undertaken. These research activities include discovering where threatened birds live and why they occur there, determining threats to species and communities, understanding the ecology of threats, understanding bird community change, understanding how people are engaging with birds, influencing their populations, responding to conservation measures and developing innovative and effective conservation measures. For many of our avian taxa, communities and threats, there are knowledge gaps that need to be filled before conservation interventions can be undertaken.

For example, improved knowledge of some species' dietary and nesting requirements is necessary to ensure that management actions are targeted towards recovering preferred habitat and resource needs. Total population counts for many threatened birds are highly uncertain, with many being mere estimates which may not have been updated for some time; improved estimates would enable more accurate listing processes. Thus, targeted knowledge acquisition can lead to on-ground interventions, better legislative protection or planning overlays, or even improved behaviour change strategies.

BirdLife Australia should undertake an annual and as-needed review of research required to save threatened birds (and expand this to non-threatened where appropriate) using data from the *Action Plan for Australian Birds 2020*. The list of priority research needs should be made public to enthuse researchers, partners and allies, and BirdLife Australia should take a leading role in coordinating and ensuring the outputs are applied and evaluated to have maximum impact for birds. Indigenous knowledge and practice should be embedded within the research needs. Ideally, incentive funds should be made available for the highest priorities.

D) Adaptive management associated with on-ground interventions

Delivering and facilitating delivery of on-ground conservation outcomes over long timeframes and appropriate spatial scales are essential to secure Australia's birds. Evaluation and continual adaptation of on-ground interventions at scale is essential for a conservation organisation.

For example, what is most important? Should we drive the recovery of Malleefowl, undertake predator control or manage vegetation? What on-ground interventions will arrest the declines of shorebirds? Is captive breeding a viable, long-term option for critically endangered birds? How can we control the spread of Noisy Miners in woodland bird refugia of national significance? Adaptive management over long timeframes and at relevant spatial scale should be the pinnacle of BirdLife Australia's work.

BirdLife Australia should embrace adaptive management for species, communities and threats where we monitor the impact of our work (with appropriate baseline and control data) to determine its success (or failure) and iteratively adapt that management accordingly. This will ensure that bird recovery actions have improved effectiveness and probability of success due to improved knowledge of which actions and where they should be implemented will maximise outcomes for species recovery. This is achieved by:

- Empowering Conservation & Science Programs to work with researchers to evaluate and refine their strategies. Not only will this improve outcomes for birds, but it will also facilitate fund-raising off the back of on-ground success.

- Assessing the parts of the Bird Conservation Strategy's Theory of Change where evidence is weak and carry out research to strengthen that evidence, and to measure progress.

BirdLife Australia's Conservation Action Plans and equivalent program plans should:

- Build evaluation needs into actions.
- Apply three fundamental principles of good design: (1) assembling baseline data where possible (section B); (2) having appropriate control sites and replicates (standard multi- "before-after-control-impact" or BACI design); and (3) trialling new interventions where needed (see Section C).

E) Horizon scanning and innovation

Horizon scanning is a multi-disciplinary affair that should occur every five to ten years. It allows us to look far into the future and envisage unexpected opportunities, new species requiring interventions, and threats (which, once predicted, ironically cease to be unexpected) and then determine if any immediate actions are necessary to mitigate the threat or take advantage of the opportunity.

Innovation in conservation includes trialling new technology, improving methods, embracing change and taking measured risks. These include promising new field-based methods, such as camera trapping, acoustics, satellite technology, eDNA and artificial intelligence. All of these can reduce labour and time, reduce stress on study species and increase scientific robustness. Metrics such as Accounting for Nature (AfN) and tradeable biodiversity metrics that move from simple trends to community measures of health are also worth exploring.

BirdLife Australia's current approach to horizon scanning in research is ad hoc. Some new field-based technology has been trialled. Most of it has been in acoustics, manipulating predator learning behaviours, artificial hollows, artificial shelters and artificial floating roost trials.

BirdLife Australia should undertake a horizon scanning exercise every five years that explores two broad areas:

(1) Keeping an eye on new technology (for example, acoustics, satellite, eDNA; environmental accounts, tradeable biodiversity metrics; Artificial Intelligence).
(2) Imagining the diversity of unexpected events that could alter the Bird Conservation Strategy's Theory of Change.

Objectives and Actions

Given the many research needs and suggested roles that BirdLife Australia should play in research, a set of objectives and high-level actions have been included in this Research Strategy. An annual workplan will be developed under a decision science framework that will prioritise investment in the activities required to achieve these objectives.

The **objectives** of the Research Strategy are to:

1. Establish, support and expand an active and collaborative research network to increase collective impact in bird conservation outcomes:
    a. Establish and increase participation in strategic research partnerships with academia, industry, government, civil society and other non-profits.
    b. Review and publish research priorities from the Bird Conservation Strategy and Conservation & Science Programs annually.
    c. Dedicate funds to support research priorities as identified in 1b.

2. Leverage BirdLife Australia's ornithological assets, awards and science-based activities (Appendix A) to deliver the outcomes of the Bird Conservation Strategy:
    a. Align all research awards to research priorities (in 1b).
    b. Embed Traditional Knowledge into research activities and priorities.
    c. Manage journals (*Emu—Austral Ornithology*, *Australian Field Ornithology*) and other publications (for example, the *Handbook of Australian, New Zealand and Antarctic Birds*) at cost-neutral or profit generating model. This is essential for maintaining a resilient and diverse fundamental ornithological research community in Australia.
    d. Use journals to highlight (inter)national conservation-relevant findings for austral birds and increase scientific outputs and recognition for BirdLife Australia's conservation programs.
    e. Create structures and foster culture to make reports and publications produced by staff accessible.
    f. Ensure conferences (Australasian Ornithological Congress) support BirdLife Australia's strategic conservation aims by giving a voice to research findings, networking staff and bringing in the next generation (student cohort) to bird research and conservation.

3. Collect, share and manage bird and associated data:
    a. Apply best practice project/monitoring design to ensure we: adapt with changing approaches; have the most effective monitoring programs; and produce high quality datasets.
    b. Invest in data vetting, curation, management, sharing and analysis for conservation projects and reporting (including technology — Birdata, Australian Bird Index, Threatened Species Index).
    c. Invest in digital technology to support inputs and outputs of enabling science (including Birdata, Australian Bird Index, Threatened Species Index, other publications).
    d. Empower our citizen scientists by increasing training, coordination, support and reporting outcomes.
    e. Develop and regularly review an 'Open Science Framework' outlining our commitment to open science, data and knowledge sharing, research ethics, and Indigenous Knowledge.
    f. Continue to steward the official Australian taxonomy and other lists to ensure consistency in naming convention and influence change (such as decolonisation of bird names).
    g. Establish long-term monitoring goals which will allow robust determination of change and effective planning of conservation priorities.
    h. Facilitate research which identifies the threats to birds, population trends and methods for reversing downward spirals in population abundance or diversity.

4. Review, develop and apply evidence-based solutions for active adaptive management of conservation interventions:
    a. Empower the conservation programs to work with researchers to inform, evaluate and refine their strategies — active adaptive management.
    b. Guide the development of priority research questions to deliver outcomes in the Bird Conservation Strategy Theory of Change.
    c. Guide the development of priority research questions to deliver conservation outcomes for BirdLife Australia's Programs (Conservation Action Plans and other plans) for management interventions (aligned with the Bird Conservation Strategy Theory of Change).
    d. Evaluate, apply and communicate best available decision-support tools, methods and standards with key stakeholders, and, where necessary, develop new ones.
    e. Undertake a horizon-scanning exercise every five years that explores two broad areas: (1) new technology (such as acoustics, satellite, eDNA; environmental accounts, tradeable biodiversity metrics; Artificial Intelligence); and (2) imagining the diversity of unexpected events that could alter the Bird Conservation Strategy Theory of Change.

Links to Enabling Strategies

The Research Strategy is also underpinned by the fundamental principles and objectives in BirdLife Australia's suite of enabling strategies. Details on how we will achieve inter-related goals will be detailed in Annual Work Plans.

References

Cresswell, I.D., Janke, T., and Johnston, E.L. (2021). Overview: Biodiversity. In: Australia State of the environment 2021, Australian Government Department of Agriculture, Water and the Environment, Canberra. https://soe.dcceew.gov.au/overview/environment/biodiversity, DOI: 10.26194/f1rh-7r05, ISBN: 978-0-646-86427-3

Larson, L.R., Cooper, C.B., Futch, S., Singh, D., Shipley, N.J., Dale, K., LeBaron, G.S., and Takekawa, J.Y. (2020). The diverse motivations of citizen scientists: Does conservation emphasis grow as volunteer participation progresses? Biological Conservation, 242. https://doi.org/10.1016/j.biocon.2020.108428.

Luther, D.A., Brooks, T.M., Butchart, S.H., Hayward, M.W., Kester, M.E., Lamoreux, J., and Upgren, A. (2016). Determinants of bird conservation-action implementation and associated population trends of threatened species. Conservation Biology, 30: 1338–1346. https://doi.org/10.1111/cobi.12757

Maron, M., Grey, M.J., Catterall, C.P., Major, R.E., Oliver, D.L., Clarke, M.F., Loyn, R.H., MacNally, R., Davidson, I., and Thomon, J.R. (2013). Avifaunal disarray due to a single despotic species. Diversity and Distributions 19 (12): 1468–1479. https://doi.org/10.1111/ddi.12128

Samuel, G.A.C. (2020). Independent Review of the EPBC Act – Final Report, Department of Agriculture, Water and the Environment, Canberra. https://epbcactreview.environment.gov.au/

Wintle, B.A., Cadenhead, N..CR., Morgain, R.A., Lgge, S.M., Bekessy, S.A., Cantele, M., Possingham, H.P., Watson, J.E.M., Maron, M., Keith, D.A., Garnett, S.T., Woinarski, and J.C.Z.,Lindenmayer, D.B. (2019). Spending to save: What will it cost to halt Australia's extinction crisis? *Conservation Letters*. 2019 12:e12682. https://doi.org/10.1111/conl.12682

Appendix A: Overview of BirdLife Australia's Science Assets, Awards and Activities

An audit of BirdLife Australia's assets, awards and activities that are currently managed within the Conservation and Science Department was undertaken with Department staff. A cost-benefit analysis that considered whether the outcomes of each item in the table supported the goals of the Bird Conservation Strategy was applied to the development of objectives in the Research Strategy. It also considered which items should receive reduced support and where we should invest further or leverage partnerships and allies.

The items below are tools that could be used to undertake activities to achieve Research Strategy objectives. An annual workplan will prioritise investment in those activities.

This table is a simplified version. For further information, please contact research@birdlife.org.au.

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
Emu – Austral Ornithology	Journal publishing high-quality science articles on many aspects of bird research and conservation in the Southern Hemisphere and adjacent tropics. Topics range from the global scale, such as the effects of climate change on our birds, to the microscopic, such as DNA analysis of various species, as well as detailed studies of the ecology and morphology of a wide variety of Australasian birds.	High quality science is communicated with the academic/research community across a focal region. As the flagship of BirdLife Australia for over a century, supports our purpose as a science based conservation organisation.	Editors, publisher, academics, authors, staff, end users
Australian Field Ornithology	Journal that provides a vehicle for non-researchers to contribute to the ornithological literature. Captures significant content outside of other 'scientific' literature, including methodology, life history and taxonomy. Also provides a vehicle for BirdLife Australia to publish internal work, grey literature and reports in a peer reviewed publication.	Knowledge base for all Australian birds is increased. Improved communication/dissemination of BirdLife Australia research.	Editors, publisher, academics, authors, staff, end users

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
Handbook of Australian, New Zealand and Antarctic Birds (HANZAB)	Open access online resource of the most comprehensive text of bird information for the region globally.	Improved connection with a range of stakeholders for whom this resource is valuable. Provides a platform for up-coming researchers to contribute to the content of the platform, improve working relationship with international partners (Birds NZ, BirdLife International). Improve transparency of working relationship and connection with BirdLife International. Scientific reputation and credibility as the go-to knowledge curators and brokers for birds.	Academics, general birders, nature lovers, staff, government, other conservation agencies, broad BirdLife Australia scientific community, BirdLife International, Birds NZ
State of Australia's Key Biodiversity Areas (KBAs)	Report to inform decision makers, global Partnership, feedback to KBA Guardians and BirdLife Australia members and volunteers.	High level assessments, including publicising KBAs in Danger for conservation advocacy, citizen science and research needs.	Global KBA Partnership
BirdLife Australia library (hard copy at National Office, Melbourne; e-library KOA)	Comprehensive collection of knowledge, including rare and hard-to-find resources. Archives of all BirdLife Australia publications, communications and history.	Australia's only ornithological library curating a history of content produced by BirdLife Australia is available to staff and BirdLife Australia Network, providing the ability to track research outputs and impact.	Volunteer librarians, staff
State of Australia's Birds (SOAB)	Report to collate and analyse information on trends in the conservation status of bird populations in Australia, including Red List Indices and Australian Bird Indices.	Comprehensive review of status and trends of birds in Australia, and conservation issues that need acting upon are highlighted.	Editors, authors, staff, academics, end users, government

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
State of Tasmania's Birds	Report on regular tracking of key conservation issues faced by Tasmanian birds.	Comprehensive review of status and trends of birds in Tasmania, and conservation issues that need acting upon are highlighted.	Editors, authors, staff, academics, end users, government
Stilt	Journal to disseminate scientific information on shorebirds.	Better shorebird conservation and advocacy thanks to scientific papers.	Editors, publisher, academics, authors, staff, end users
Boobook	Journal to disseminate scientific information on raptors.	Better raptor conservation and advocacy thanks to scientific papers.	Editors, publisher, academics, authors, staff, end users
Australian Bird Indices	Long-term trends for individual taxa as well as regional, bioregional and national level to enable reporting and response.	Species trend models that enable knowledge of how all species are tracking, informing decision making on need for conservation response. An indicator at all scales — from Bird Conservation Strategy to programs.	Branches, staff, academics, RACC, BirdLife Australia Board, program partners
Threatened Species Index	Tool to measure and report on the benefits of conservation investments, as well as justify and design targeted responses and raise the profile of threatened species.	Reliable and robust measures of change in the relative abundance of Australia's threatened and near-threatened species at national, state and regional levels.	TERN, academics, developer (Planticle), government (policy makers), DCEEW, staff, other conservation practitioners
Beach-nesting Birds Hub	Online hub for people with a general interest or who want to participate in Beach-nesting Birds conservation, including volunteering, newsletters, training, research outputs, events and contacts.	Volunteers, land managers, academics and general beach users have access to all Beach-nesting Bird information, training, resources and registration as BirdLife Australia Volunteers.	Volunteers, members of the public, land managers, academics

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
Birdata (the database)	The most comprehensive database of birds in Australia. Home to BirdLife Australia project and volunteer datasets, providing a resource for scientists and conservationists inside and outside BirdLife Australia.	Invaluable and unique resource for threat listings and conservation actions. This asset is one of BirdLife Australia's unique features in the Australian eNGO space.	State agencies, other eNGOs, Atlas of Living Australia, IUCN, BirdLife International , KBA Partnership, Branches, academics
Birdata (the interface)	Bespoke web and app tool for staff, volunteer citizen scientists and partners to contribute to the Birdata database in an easy, efficient and reliable way.	Expanding dataset collected from structured monitoring protocols with outputs relevant to conservation teams.	eNGos, academics, developer (Planticle)
Birdly App	Bird identification app to engage and train citizen scientists.	More expert volunteers. Plus 10% of funds raised go to BirdLife Australia.	Developer (Sunbird Images)
Miscellaneous datasets not (yet) incorporated into Birdata, such as Nest Record Scheme, Seabird Atlas and Historical Atlas	Specific project data, mostly historic and for taxa of particular concern.	Important reference data.	Australian Museum's digivol platform may help us incorporate these data into Birdata
Aussie Bird Count	Engagement, recruitment and nationwide citizen science survey which generates the largest snapshot for Australian wildlife annually.	Overview dataset and the basis for citizen science recruitment.	General public, LGAs, media
KBA Health Checks	Collecting annual pressure state response data for Australia's KBAs to inform BirdLife Australia conservation actions and to feed into global KBA database.	Data on threats and conservation actions in KBAs, including the basis for KBA in Danger Listing. Potential measure for Site Pillar in the Bird Conservation Strategy.	Global KBA Partnership

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
Taxonomic Lists	Provide regular, considered and comprehensive taxonomic updates for all known species of Australian birds, following a long-standing standardised approach. Also provides structure to the conservation aims of BirdLife Australia.	A stable, consistent list of long-established common names for Australian Birds is produced.	Taxonomists, academics, staff, government
Australasian Seabird Group	Special interest group to improve knowledge and conservation of seabirds in Australia and New Zealand.	Successful conservation projects for seabirds.	Birds NZ
Australasian Wader Studies Group	Special interest group to improve knowledge and conservation of shorebirds in Australia and New Zealand and the East Asian–Australasian Flyway.	Successful monitoring conservation projects for shorebirds.	Wetlands International, VWSG, QWSG, Birds NZ
BirdLife Australia Raptor Group	Special interest group to improve knowledge and conservation of raptors in Australia	Successful conservation projects for raptors.	Academics, general birders, nature lovers
BirdLife Photography	Special interest group that provides a photo library of birds and their habitats for enjoyment of members and use by BirdLife Australia for conservation and communications work.	Better advocacy for bird and habitat conservation. Ethical Photography standards.	BirdLife Australia Network, group members, general public
Recovery Teams	To provide expert input into the management and recovery of Australian birds.	On-ground action: species management and recovery, legislative changes	Academics, government, other conservation organisations
Broome Bird Observatory	Reserve or observatory that provides opportunities for education, engagement, volunteering, research and tourism.	Contributes to bird conservation, improves conservation awareness, expands on ground learning.	Staff, volunteers, committees

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
Eyre Bird Observatory	Reserve or observatory that provides opportunities for education, engagement, volunteering, research and tourism.	Contributes to bird conservation, improves conservation awareness, expands on ground learning.	Staff, volunteers, committees
Gluepot Reserve	Reserve or observatory that provides opportunities for education, engagement, volunteering, research and tourism.	Contributes to bird conservation, improves conservation awareness, expands on ground learning.	Staff, volunteers, committees
Clarkesdale Bird Sanctuary	Reserve or observatory that provides opportunities for education, engagement, volunteering, research and tourism.	Contributes to bird conservation, improves conservation awareness, expands on ground learning.	Staff, volunteers, committees
BirdLife Australia Discovery Centre	Center that provides opportunities for education, engagement, volunteering. Operating centre for BirdLife Southern NSW Branch.	Contributes to bird conservation, improves conservation awareness.	Staff, volunteers, committees, local branch, Sydney Olympic Park Authority
Stuart Leslie Bird Research Grant & Stuart Leslie Conference Travel Grant	Annual grants to support student research and travel to conferences.	Students are empowered to tackle BirdLife Australia research priorities for bird conservation, and partnerships are formed.	Students and academics, staff, research community, Stuart Leslie Foundation
Prof Allen Keast Research Award	Annual grant to support most meritorious applicants for student research grants.	Students are empowered to tackle BirdLife Australia research priorities for bird conservation, and partnerships are formed.	Students and academics, staff, research community
Indigenous Grant for Bird Research and Conservation	Grant to support activities that protect birds on Country throughout Australia, and also specifically in the Northern Territory.	On ground conservation and monitoring for birds Indigenous managed land.	Indigenous groups

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
Gavin Jackson Memorial Prize (administered by Network)	Biennial grant to support a student to attend and present research at the Australasian Ornithological Conference.	Students network, disseminate research findings, and awarded.	BirdLife Australia Network
Raptor Grant 1	Fund research and conservation projects for raptors.	Better knowledge and conservation of raptors and owls.	External funder
Raptor Grant 2	Fund research and conservation projects for raptors.	Better knowledge and conservation of raptors and owls.	External funder
Peter Edwards Award (Administered by Gluepot Reserve)	Award that recognises a significant contribution to conservation efforts in the field at Gluepot Reserve.	Students are empowered to tackle BirdLife Australia research priorities for bird conservation, and partnerships are formed.	Gluepot Reserve
Graham Harrington Award (Administered by BirdLife Northern Queensland Branch)	Student grant for bird research undertaken in North Queensland.	Contributing to science, engagement with local Branch.	Graham Harrington
BirdLife Shoalhaven's Student Research Grant (Administered by BirdLife Shoalhaven Branch)	Student grant for bird research undertaken in Shoalhaven.	Contributing to science, engagement with local Branch.	Shoalhaven Branch
DL Serventy Medal	Scientific award for outstanding published work on birds in the Australasian region. All supporters can apply.	Promoting scientific contributions and efforts in the field.	
JN Hobbs Memorial Medal	Scientific award for outstanding contributions to Australasian ornithology by an amateur ornithologist. All supporters can apply.	Promoting scientific contributions and efforts in the field.	

Asset, Award, or Activity	Purpose	Outcome	Partners / Allies
W Roy Wheeler Medallion	Award to honour individuals who have been outstanding contributors, innovators and leaders in field ornithology in Australia and its territories.	Recognition to those individuals who have made significant contributions to Australian ornithology.	A one-off award on the occasion of 100 years of BOCA (2005)
Community Grants (formerly Australian Bird Foundation)	Grants to empower local communities and the BirdLife Australia Network to protect birds and restore their habitats through on-ground conservation efforts and advocacy, with a focus on BirdLife Australia priorities at the local level.	Community champions are resourced and empowered to deliver conservation.	BirdLife Australia Network, supporters
BirdLife Australia Conservation and Science Staff	People employed to undertake a range of conservation focused programs to meet organisational aims.	Ongoing expertise, knowledge in key areas of Australian avifauna. Conservation of Australian birds.	Staff
Australasian Ornithological Conference (AOC)	Biennial scientific event for knowledge exchange and networking.	More effective and targeted bird conservation.	Sponsors, Birds NZ, Forest & Bird, academics, students, bird science lovers
Beach-nesting Birds Conference	Biennial event for knowledge exchange and networking.	More effective and targeted Beach-nesting Birds conservation.	Sponsors, academics, other conservation organisations
BirdLife Photography Conference	Biennial event for knowledge exchange and networking.	Engagement and skill development for a special interest group members and the general public.	Sponsors, special interest groups, nature lovers

Appendix B: Improving our Partnerships

BirdLife will develop its strategic external partnerships in accordance with meeting the key aim of enabling the Bird Conservation Strategy. In order to meet this aim, BirdLife may actively seek external partners to provide essential research data. These partners should have time, skills or expertise not already available at BirdLife Australia.

Research investment may be direct or as a proposal to leverage funds from third parties, for example ARC, State or local government, trusts.

When approached by external partners for investment in joint research projects, proposals should be assessed in relation to:

1. their central value to the Bird Conservation Strategy and/or Program Conservation Action Plans (CAPs) and equivalent plans
2. their alignment with BirdLife Australia's annual research priority list
3. their novel contribution to the knowledge base
4. the past successes of the external partner and nature of any on-going relationship
5. the nature of investment by BirdLife Australia in terms of in-kind or financial support
6. the likelihood of success of the project/partnership in delivering valuable information within the proposed time and financial budget.
7. a monitoring and evaluation plan
8. data sharing and accessibility
9. the potential for funding source to generate a conflict of interest (see BirdLife Australia's Conflict of Interest Policy, and Corporate Partnerships Policy)

Research proposals should be drafted on a 1–2 page application addressing these guidelines. They will be assessed on a rolling basis and managed promptly, and in accordance with BirdLife Australia's policy for funding requests, particularly where urgent information is required for species conservation. Proposals may include student (PhD/MSc/Honours) research projects. In such cases, BirdLife Australia staff should be involved in the design and student supervision.

For further information or to submit a proposal, please contact research@birdlife.org.au.

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Thank you

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