

Five Game Changing Paradigms: A NABCI Call to Action to Address the Three Billion Birds Crisis

5 Game Changing Paradigms

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We are facing an unprecedented crisis, with nearly three billion North American birds lost since 1970 despite myriad conservation efforts. A crisis of this magnitude calls for an equally unprecedented response to bring back the birds we've lost. Birds are core to our natural heritage and the legacy we are leaving for the future. Without abatement of these declines, several species will no longer grace our skies and landscapes for future generations to enjoy. The losses we are seeing span from backyard birds to forests, grasslands, shores, and oceans. Birds are indicators of healthy places, fresh water, and clean air, and thus their declines are symbolic of the decline in the sustainability of the places we live.

NABCI's [National Bird Conservation Priorities](#) and other national strategies provide frameworks that highlight **what** we must do to reverse these declines. The loss of three billion birds despite our efforts makes it clear that "business as usual" is not enough. To focus and amplify these conservation efforts, NABCI recognizes *5 Game Changing Paradigms* to transform **how** we do bird conservation.

Each *Game Changing Paradigm* offers a provocative challenge for us to do better. NABCI acknowledges that bold actions will be difficult, but we also recognize their necessity to make real progress in bringing back the birds we love.

The *Game Changing Paradigms* are not mutually exclusive, nor are they sequential – they must operate simultaneously and synergistically as elements of a new framework for addressing our most critical bird conservation needs. Below, we apply each *Paradigm* to one of NABCI's conservation priorities – grassland birds – to demonstrate how these *Game Changers* can serve as a model to advance conservation.

1. Unprecedented Diverse, Equitable, and Inclusive Coalitions to address the Bird Crisis

After the [Science report](#), major bird conservation organizations representing the paper's authors and their other partners came together to sound the alarm about the bird crisis and sustain momentum from the national attention received by the report. NABCI is in a unique position to nurture new and existing partnerships that cross organizational and geographic boundaries to

keep the bird crisis coalition strong. Only through collaboration, cooperation, and coordination, can we achieve conservation at a scale and scope necessary to reverse bird declines and sustain healthy human communities.

Collaboration will be most effective if focused on shared interests, mutual trust, and fostering collaborative learning. Collaborations must expand outside traditional bird conservation partnerships to include new partners, such as social scientists, community organizations, indigenous communities, and advocacy groups focused on social or environmental justice efforts. The conservation community must strive to avoid power imbalances (e.g., placing local communities on equal footing with national and international organizations) and recognize cultural and individual differences in people's relationship with and interest in birds.

2. Advancing “Road to Recovery Science” to identify the limiting factors causing bird declines

Only through a systematic and coordinated effort to understand where and when priority bird species are limited across their full annual cycle will we be able to target effective conservation to reverse declines and keep additional species from needing legal protections. Although some threats to birds and drivers of habitat loss are well known, we do not yet know the specific limiting factors that are causing population declines for most bird species. Technological advances and novel scientific approaches will help us find the key pieces of evidence necessary to identify these limiting factors. To discover the identity and timing of limiting factors, we must first understand human behavior and structural constraints (e.g., legal, regulatory, political will) as they are often at the root of the limiting factors driving bird populations. Further, conservationists must carefully consider social and economic feasibility of conservation actions in order to promote human behavior change and the cultural appropriateness and ethics of promoting the target behavior (e.g., will it harm livelihoods or clash with cultural practices). Understanding the social and ecological causes of the current situation in these complex human-natural systems, as well as the capacity to create change, is essential. Developing a framework and proof-of-concept for integrating social science information with limiting factors biological science is a necessary first step.

3. Road Maps for Population Recovery and full life cycle conservation

A new generation of Conservation Investment Strategies have emerged that combine the latest science with a business planning approach to ensure a strong return on investment for effective conservation. As new science becomes available through the limiting factors approach, these strategies will serve as Road Maps to Recovery for species most in danger of future listing or steep declines. To enhance the effectiveness of these strategies, human behaviors tied to limiting factors (see above) and the drivers of those behaviors, which may be individual-level, community-level, or structural, need to be identified. Once the drivers are known, the best strategies for changing or reinforcing behavior (e.g., behavior change, policy tools) can be identified, through literature review or new research, as needed. Selecting a strategy (or strategies) requires consideration of the likelihood of change of human behavior, as well as organizational and financial capacity, impacts on human livelihoods and well-being, and impacts on birds and their habitats. The many existing plans (e.g., state Wildlife Action Plans, Joint Venture implementation, Partners in Flight, Shorebird Conservation Plan, Flyways, Bureau of Land Management, Forest Service, etc.) share many priorities, objectives, and geographies. NABCI partners can help achieve a seamless integration of state, regional, and hemispheric

objectives into coordinated, deliverable strategies using common language and open standards. NABCI's Relevancy Toolkit and 'human well-being targets' can help guide the conservation investment strategies.

4. Bold, new policy agenda (Recovering America's Wildlife Act, North American Grasslands Conservation Act)

As bird populations continue to decline and protections for birds are weakened, novel policies and legislation are needed that will ensure sustainable bird populations for generations to come. As highlighted in the [2019 *State of the Birds*](#) report [companion insert](#), the Recovering America's Wildlife Act would provide a dedicated, sustained funding stream for bird conservation, as well as increased protections for migratory birds and priority habitats. Bold new policies are needed to stop the dramatic loss of grassland habitats and the birds they support. Policy changes for bird and habitat conservation can be achieved through enterprising efforts building political will and coalitions, and identifying policy windows (i.e., opportunities for change). Being able to articulate the economic implications of policy alternatives may be useful when communicating with policymakers. Additionally, NABCI should be cognizant of the role of regulatory change and ensure that rulemaking processes provide human benefits while supporting continued bird and habitat conservation.

5. Unified messaging to bring back 3 billion birds

The coalition of bird organizations that came together around the *Science* publication implemented a highly successful media and outreach campaign that sounded the alarm and garnered worldwide attention for the bird crisis. Phase 1 was to share the scientific results of the report; phase 2 was to promote the [7 Simple Actions to Help Birds](#). What is needed now is a sustained phase 3 communications strategy that will provide a unified voice for bringing back 3 billion birds. NABCI is helping to create a new conservation movement that ensures birds thrive in our communities and landscapes, by incorporating our *Why Care About Birds* campaign and relevancy messaging tailored to diverse target audiences and designed to promote engagement and action. Strategic communications and effective community engagement tied to the 7 Simple Actions, as well as the limiting factors research and roadmaps for recovery, require input from the best available social science. For example, social scientists can partner with experienced communication professionals to identify audiences, predict which messages will cause various audiences to act, and distinguish trusted messengers. Evaluation of the social and ecological outcomes of these efforts will ensure their effectiveness.

Grassland Conservation Case Study

According to the 2019 study in *Science*, more grassland birds have been lost than any other guild. The National Bird Conservation Priorities highlight grasslands as a Habitat in Crisis, and two of the Top 10 Priority Actions focus on actions that would specifically support grassland conservation. The grassland bird crisis has inspired a variety of collaborative conservation efforts to reverse these declines. This presents a unique opportunity to unite partners and elevate our work through the upcoming summits, coalitions, and other efforts focused on advancing grassland conservation.

1. Unprecedented Diverse, Equitable, and Inclusive Coalitions to address the Bird Crisis

Grassland bird conservation needs to span a tri-national geography that requires unprecedented collaboration that operates at local, regional, national, and international scales to be successful. Opportunities include:

- Increasing collaboration and partnerships among diverse stakeholders to ensure plans, assessments, databases, etc., are coordinated and applied to direct conservation action. This could occur through a variety of venues, including:
 - Uniting the multiple grassland conservation initiatives and coalitions (e.g., Native Grasslands Alliance, Grassland Bird Trust, etc.).
 - Reinforcing and strengthening the Joint Venture grassland efforts (JV8, 5 JV Murmuration) to ensure the JVs have the capacity needed to deliver conservation on the ground; integrate these efforts w/ science and policy.
 - Using the Central and Mississippi Grassland Summits as catalysts for unprecedented collaboration and platforms for informing the other 4 *Game Changers*.

2. Advance “Road to Recovery Science” to identify the limiting factors causing bird declines

Limiting factor science is a priority for grassland birds. From the *Science* paper, 1 in 4 lost are grassland birds, emphasizing the need to identify, through sound science, how to effectively prioritize conservation needs at a tri-national scale. This science can be used to develop a framework for taking the results from the *Science* paper and step it down to conservation-applicable scale for grasslands.

- For a given grassland species, we have the opportunity to design conservation and monitoring efforts at scale in an experimental way that
 - Quantifies how many acres need to be restored or protected in order to restore the function of grassland systems and benefit the associated bird populations in a meaningful way
 - Aggregates site level bird responses to restoration and protection activities to the population relevance of such actions.

- Integrates geographically varying habitat needs and resulting population responses across the full life cycle.

3. Road Maps for Population Recovery and full life cycle conservation

Approach a grasslands conservation investment strategy as a framework that builds from and can integrate smaller scales or “project-level” efforts and builds up to regional and national level plans.

- Look at existing plans (e.g., SWAPS, etc.), integrate that information with smoking guns outcomes, and combine that into a collective tri-national grassland business plan that creates a framework for more regionally-focused investment strategies that aligns with the JVs.
 - Regional strategies break actions down to a target number of birds we need to recover, how many acres need restored or protected, and defines the conservation investments needed to accomplish that.
 - The plan would include human well-being and socio-economic goals, integrate grassland policy, and consider economic impacts to farmers and ranchers.
 - Strategies will be built around an adaptive management framework.

4. Bold, new legislative agenda

Elevate grasslands to be the next wetlands so they receive the same level of legislative and funding resources that ensure no net loss and native grassland restoration. One of the Top 10 Priority Actions in the National Bird Conservation Priorities is to “develop and implement a native grassland policy equivalent to the current “no net loss” policy for wetlands that would preclude federal agencies from providing public subsidies for practices harmful to native grassland habitats.” NABCI partners are exploring options for a “North American Grasslands Conservation Act” and changes to the Farm Bill that would protect and restore our nation’s grasslands into the future. These policy conversations should proactively consider the socioeconomics of any policy, how changes would impact farmers and ranchers, and the role for novel approaches like regenerative and precision agriculture.

5. Unified messaging to bring back 3 billion birds

Identify the communications priorities, capacity needs, and target audiences for grassland conservation. This includes (but is not limited to) communications that support:

- New Coalitions– messaging that unites partners and provides clear direction and defined roles for each partner organization.
- Smoking Guns Science – emphasizing the need for and importance of this type of science (gaining support/buy-in from bird conservation community) as well as translating the outcomes to conservation actions that are easily integrated into implementation and policy.
- Conservation Investment Strategies – articulating the need for/benefit of these strategies; develop strategies so they are applicable to target audiences.

- Policy – Communicate the need for/benefit of policy changes. Relevancy is likely key here – how improved grassland policies will benefit more than birds, benefits to human well-being, economics, etc.