

Background

Over the past 24 years, the North American Pollinator Protection Campaign (NAPPC) has been an international force driving interest in the vital role and fragile status of native and managed pollinator species. NAPPC's mission is to encourage the health of resident and migratory pollinating animals in North America. These pollinators are responsible for one-third of global food production. A yearly conference brings together experts from across the world to share knowledge, raise public awareness, promote constructive dialogue, and develop key partnerships to support research on pollinator species. Through the creation of specific task forces, NAPPC encourages experts and interested parties to come together and work on complex issues facing pollinators. One such task force is the Imperiled *Bombus* Conservation Task Force. Learn more at www.napppc.org.

The Imperiled *Bombus* Conservation Task Force is seeking proposals for research related to improving the recovery and persistence of imperiled *Bombus* species. Proposals should focus on evaluating the effects of stressors on bumble bees, enhancing knowledge of bumble bee historical/current geographical distribution, biology and ecology, contributing to improved monitoring practices, or utilizing emerging techniques to best conserve imperiled bumble bees.

Imperiled *Bombus* includes species currently defined by the International Union for Conservation of Nature (IUCN) as critically endangered, endangered, or vulnerable. Imperiled North American species currently include *B. affinis*, *B. ashtoni/bohemicus*, *B. caliginosus*, *B. crotchii*, *B. fervidus*, *B. franklini*, *B. fraternus*, *B. morrisoni*, *B. occidentalis*, *B. mckayi*, *B. mexicanus*, *B. pensylvanicus*, *B. suckleyi*, *B. terricola*, *B. variabilis*, *B. brachycephalus*, *B. haueri*, *B. medius*, *B. steindachneri*, and *B. diligens*.

Research Needs

We anticipate supporting four proposals, for a maximum of \$5,000 (USD) each. Funds must be used within a 1-year period. Targeted research projects with a high likelihood of providing tangible results that directly inform actions to improve the recovery, persistence, and conservation of bumble bees are preferred. Proposals providing valuable additions to externally funded projects will be considered, but must demonstrate clearly how they are supplementing the shortcomings of the external funding. Recipients of project funds are encouraged to present results/partial results at the 2025 NAPPC meeting and to serve on the Imperiled *Bombus* Conservation Task Force in the future.

Eligibility

We encourage the four following categories to apply: **1.** Non-for-profit NGOs, **2.** MSc candidates, **3.** PhD candidates, and **4.** Principal Investigators/Post-doctoral fellows. Government agencies and for-profit organizations are not eligible. Previous Imperiled *Bombus* Conservation grant awardees are not eligible. Proposals that focus on political efforts such as lobbying, litigation, and petitions are not eligible.

Priority Areas/Foci

The Imperiled *Bombus* Conservation Task Force has identified five priority areas for funding; however, other areas will also be considered. If the subject of your research is

not an imperiled bumble bee species, please provide an explanation of how the results of your research could benefit imperiled bumble bee conservation or address project area foci. Projects may fall in more than one area.

1. Analysis/modeling of **individual and/or interacting stressors** (e.g., pathogens and disease, pesticides, small populations, competition and disease transmission from managed bees, habitat fragmentation and degradation, and climate change) on imperiled bumble bee species abundance, distribution, and health.
2. Assessment of imperiled bumble bee **colony-level factors**, including habitat requirements, foraging, colony growth, overwintering, and nesting.
3. Assessment of imperiled bumble bee **population-level factors**, including population health, geographical distribution, dispersal ecology of reproductive males and gynes, mating biology, population genetics, and pesticide registration to guide recommendations for long-term recovery practices.
4. Contributions to **improve monitoring techniques** to document or increase detection probability, document population health and occupancy, and improve data quality standards of imperiled bumble bee species.
5. Development of novel, **emerging techniques** to improve conservation of imperiled bumble bees, such as nest detection, pathogen sampling, the collection of genetic materials, modeling approaches, and/or use of molecular technologies.

Proposal Requirements

Proposals that fail to follow the directions established in this section will not receive further consideration from the review committee. Please review these carefully.

1. Maximum 3-page project proposal in English, French, or Spanish (Arial, 12-pt font, single spaced, 0.5 " margins, with page numbers); references and resumes are not included in this page limit. This should include:
 - a. Proposal title and research team/individual with contact information, including email(s), physical mailing address, and telephone number(s).
 - i. Include in separate lines under the title:
 1. Category (i.e.: Non-for-profit NGO, MSc or PhD candidate, or Principal Investigator/post-doctoral fellow);
 2. Priority area focus/foci.
 - b. Sufficient background with a concise description of the problem(s) being addressed; the rationale and significance behind the proposed project with an explanation of how the research will directly inform actions to improve the recovery, persistence, and conservation of bumble bees; an overview of the methods used to carry out the proposed project; and expected outcomes/project deliverables.
2. Detailed budget and justification for the use of the Imperiled *Bombus* Conservation grant (budget template [here](#)). Budget+timeline (see below) should not take more than one page. Note: the Pollinator Partnership/NAPPC does not pay overhead/administrative fees on funded research grants.

3. Approximate research timeline by month from March/2024 to February/2025. Timeline+budget (see above) (max. 1 page).
4. Additional documentation:
 - a. Principal Investigator/Post-doctoral fellow - Resume (max. 2 pages) AND list of references to their last publications (up to 5) relevant to the proposal
 - b. Non-for-profit NGOs - Copies/links to their last achievements (e.g., scientific papers, social media, reports, educational material) relevant to the proposal (max. 2 pages)
 - c. MSc and PhD candidates - Resume (max. 2 pages) AND copies/links to publications their last achievements (e.g., scientific papers, social media, reports, educational material) relevant to the proposal
5. Brief statement with details on whether the proposal is under consideration by other funding organizations/is supplementing a project funded elsewhere OR that the proposal is not being considered elsewhere/is not yet funded.

Assessment of Proposals

The proposals will be reviewed based on the following criteria: defined objectives, conservation impact, budget, feasibility, potential to establish a framework for future actions/projects, and merit.

Submission

Email your proposal packets as a single PDF file to bombus@pollinator.org by 5 PM EST on January 31, 2024. Include in the subject of your e-mail: Category (i.e.: Not-for-profit NGO, MSc or PhD candidate, or Principal Investigator/post-doctoral fellow) AND Priority area(s) focus/foci.

Funding Decisions

The proposals will be evaluated, and funding notifications will be made by mid-March, 2024.