

Joint Ventures / NABCI / NSST/ Partners in Flight / U.S. Shorebirds /Waterbirds of the Americas

## Unified Science Team

### STATEMENT OF PURPOSE

#### Background:

At the NABCI / JV / Bird Conservation Plan Partnership (BCPP) Bird Partnership Workshop (hereafter Workshop) held at South Padre Island in January 2015, there was wide agreement that better coordination and collaboration among entities providing the science support for bird conservation would result in reduced redundancy of effort and increased insight, focus, economy, and efficiency across all bird taxa and scales of conservation planning and implementation. At the conclusion of the Workshop, TriST (originally the Tri-initiative Science Team) and Partners in Flight Science Committee members attending the Workshop met for an additional half-day to discuss and sketch out the next steps needed to implement this desired collaboration. The following presents the results of that discussion with additional modifications emanating from subsequent discussions and a joint four-day TriST and PIF Science meeting held at Gulf Coast Bird Observatory in April 2015.

#### Mission:

To provide the science support necessary for successful implementation of coordinated and full life cycle bird conservation actions across all taxa and geographic scales by maximizing creative synergy and efficiency through increased communication and collaboration on projects of shared priority.

#### Process and Organization:

The North American Waterfowl Management Plan (NAWMP) and Partners in Flight (PIF) both have active science support in the form of the NAWMP Science Support Team (NSST) and the PIF Science Committee, respectively. The U.S. Shorebird Conservation Partnership has a less organized science team, and Waterbirds for the Americas currently has virtually no organized technical support in the U.S. TriST was organized in 2009 as a forum for Joint Venture Science Coordinators to share ideas and work on collaborative projects in a national context represented primarily by the three nongame bird initiative coordinators (the NAWMP Coordinator was also officially a member of TriST).

A January 2015 post-Workshop TriST and PIF Science Committee meeting resulted in a shared desire for a **staged and exploratory approach toward unified science**—initially inclusive of the Joint Ventures and the four major BCPPs (waterfowl, landbirds, shorebirds, and waterbirds). Other groups (e.g., upland game birds) would be considered for formal participation subsequent to the establishment of the initial relationships. Since NSST, PIF Science, and TriST already had specific science projects and work plans underway, the group decided that they should continue to function independently while at the same time exploring potential areas of synergy and organizational consolidation during a **two-year trial period**. The NSST in particular viewed this experimental collaboration opportunity among the science teams representing the NSST, TriST, and PIF as "separate and additive to extant waterfowl-centric planning responsibilities as reflected in mandates and relationships with NAWMP's Plan Committee and other waterfowl conservation partnerships across multiple geographies (i.e., flyways and regions)."

The two-year trial period effectively began in October 2015 with the first joint meeting of the NSST and TriST in Fort Collins, Colorado; a report on the success of the trial period—as well as a recommendation for possible organizational structures for advancing progress on science issues of concern to the entire bird conservation community—is therefore expected by October 2017. Since October 2015, NSST and TriST have held joint face-to-face meetings on three occasions, with progressively increasing integration of agenda topics as well as increasing joint attendance for the meeting duration. At the last meeting in Port Aransas, Texas, in December

2016, the group decided to informally refer to itself as TrUST (Transitional Unified Science Team) and agreed to be guided by an expanded TrUST Executive Team which would replace the existing TriST Executive Committee. That TrUST team was charged with advancing action items arising from TrUST meetings.

Over the last 18 months, TrUST has engaged in several exercises designed to generate a prioritized list of projects of mutual concern. At each stage, members participated in face-to-face meetings or responded to open invitations to all individuals on the NSST/TriST email membership lists. The effort began with existing workplans and then incorporated structured brain-storming of activities that might be of mutual interest. Ideas were then grouped and consolidated to form discrete categories of common themes. TrUST then engaged in two prioritization exercises. A decision matrix (head-to-head rankings of each pair of ten theme categories) was used to create a profile of the group's preferences for discussion in April 2016. TrUST then agreed on a set of five ranking criteria, and individuals then scored each of the ten themes independently on the five criteria. The results of the criteria ranking were presented and discussed in December 2016, and TrUST then adopted the following list of themes of mutual interest, presented in order of prioritization. (The first theme—population objectives—ranked out well ahead of the others; the others showed less separation in preference, although themes 2-4 were ranked higher than the remainder.)

### **Prospectus: Unified Science Themes of Mutual Interest:**

#### **1. Population estimates and objectives**

- continue the development, maintenance, and expansion of the TriST Population Objectives Database to publish and track progress toward realistic population targets for all focal species
- share information and insights relevant to effective conservation planning (e.g., translating population objectives into habitat objectives and landscape design)
- develop more accurate population estimates at all scales

#### **2. Vulnerability assessment**

- unite waterbirds, shorebirds, landbirds, and waterfowl under a common Species Vulnerability Assessment framework and database: the Avian Conservation Assessment Database (ACAD)

#### **3. Landscape change**

- develop standardized and repeatable methodology relevant to key habitat for specific bird taxa to assess landscape change at continental and regional scales at sufficient resolution to facilitate and evaluate bird conservation progress
- develop a consistent land cover (and vegetation) classification that crosses international borders
- identify bird taxa-specific key landscape features to be monitored in order to better estimate changes in vital rates over time

#### **4. Full annual cycle**

- develop usefully accurate full life cycle distribution maps for all species
- refine approaches and tools (including objectives) for the conservation of non-breeding populations (both in migration and stationary non-breeding season)

#### **5. Communication**

- develop a unified message: shared conservation goal(s) that all can agree upon to broadcast broadly
- share communication expertise and tools

#### **6. Monitoring**

- design integrated and multi-scaled monitoring programs—and include monitoring in the initial process of conservation design and implementation

- develop tools for (realistically and effectively) sharing responsibility for the conservation of wide-ranging species across space and time
- develop full life cycle (annual) models that will enable targeting conservation action to season and location where it will be most effective
- identify limiting factors for priority species (tied to full life cycle modeling)

**7. Climate change**

- develop a more systematic and practical assessment of climate change effects across species focused on the design and development of habitat-specific management/adaptation actions

**8. Human dimensions/ Social Science**

- develop needed social science / human dimensions capacity in order to more effectively target conservation delivery for all bird groups

**9. Decision support tools**

- develop relevant and useful decision support tools (DST) for conservation planning and delivery
- collectively develop innovative decision support tools for optimizing landscape conservation design across species

**10. Operational**

- develop a process for making decisions and using the joint body as a unified voice for consensus-driven recommendations