

## Our NSAS Board has voted to participate in the California Breeding Bird Atlas.

What is a Breeding Bird Atlas (BBA)? And why is it so important? A Breeding Bird Atlas (BBA) is a large-scale, multi-year project that documents the breeding distribution and activity of bird species within a specific geographic area, such as a state or county. It provides crucial data for understanding changes in bird populations and their habitats, informing conservation and management efforts. This current State-wide project, being coordinated by the California Bird Atlas organization, with well-known birder, Van Pierszalowski serving as the Executive Director, is especially important, as California is one of only 6 states that has never engaged in a state-wide atlas. In fact, only 16 of our 58 counties have ever published a BBA. We are proud of the work by our many volunteers who completed 2 of the 16 state-wide atlases in both Napa and Solano Counties in years past.

However, it has been 32 years since NSAS completed the field work for the first Napa Breeding Bird Atlas in 1993. The information was published 10 years later in 2003. The field work for the first Solano County BBA was held from 2005-2010 more than 15 years ago and was published in 2014. Many changes have occurred in our area during the past 15–30 year span as a result of housing and urban development that are sure to have impacted birds and their habitats since our last BBAs were completed. A new BBA would be of huge value to document the changes to birds, our landscape, and consequential conservation needs and priorities.

The field work process involves dividing up our counties (and similarly the state) into geographic blocks and further into smaller survey grids that are usually 5 by 5 Kilometers (3 by 3 Mile grids) to ensure comprehensive coverage. The survey grids are then the centers for volunteers to visit regularly completing bird surveys during the breeding season which begins as early as December-January for early nesting species like owls and hawks and runs through August and into September for late nesting species like goldfinches.

By co-sponsoring and supporting the newly formed, California Bird Atlas organization, our Chapter is able to gain access to Cornell Universities' Breeding Bird Atlas Platform that instantly records breeding data when birders submit their surveys using eBird lists coded for breeding behaviors. Like other Breeding Bird Atlas endeavors, Cornell's Breeding Bird Atlas criteria involve observers identifying bird species and documenting observed breeding behaviors within the survey grids using a tiered system of codes to signify the certainty of breeding. These criteria and data are uploaded through the Cornell Lab of Ornithology's eBird Platform and include codes for possible, probable, and confirmed breeding. These criteria range from "possible" as in observing a bird in suitable breeding habitat during the breeding season; to "probable" as in observing a pair of birds in suitable habitat, or a bird carrying food or nesting materials; to "confirmed" such as finding a nest with eggs or locating young.

The goal of a BBA is to understand and update the distribution and abundance of breeding birds for conservation purposes. Our original BBAs established a baseline of the breeding species. In Napa our NSAS Volunteers documented 145 known and 11 possible breeding species, eventually confirming all 156 species. The atlases established an important baseline dataset for future comparison studies. Since its completion, naturalists have already noted declines in certain species, such as the Loggerhead Shrike and Burrowing Owl, emphasizing the value of this early data. They also documented the presence of several endangered species including: Ridgway's Rail (formerly Clapper Rail), Black Rail, Snowy Plover, Least Tern, and Swainson's Hawk. Species of Concern included Grasshopper Sparrow, and both Burrowing Owl and Tricolored Blackbirds which are now considered endangered.

The Atlases led to or informed conservation efforts to protect certain species by identifying conservation concerns and highlighting the importance of certain habitats. The data from these original atlases provides an essential baseline for conservationists, policymakers, and agencies like the California Department of Fish and Wildlife (CDFW) to make informed decisions about protecting vulnerable species and their habitats. They have also led to areas which are rich in bird diversity that are currently protected including the Suisun Marsh, Montezuma Wetlands, Grizzly Island Wildlife Area, and the hill environments near Vacaville and Benicia. Additionally, restoration efforts which have taken place along some streams, like Putah Creek, were informed, in part, by the atlas's findings that these waterways were in poor condition for supporting breeding bird populations.

The Solano County Water Agency has also worked to protect and manage habitat for endangered species like the Burrowing Owl. This work also led to more attention for Rangeland Conservation. Regional Audubon initiatives, such as the Conservation Ranching Program, work with ranchers to implement bird-friendly practices including planting native grasses and stopping or reducing the use of pesticides, which have had a profound impact on grassland species, including a number highlighted in the atlas.

We hope to launch into our surveys during the next five years. This project will require many, if not hundreds of volunteer birders to complete the observations and data submissions. Analysis will take up to an additional five years, but we are excited by the potential conservation actions that may take place as a result of determining how bird species are faring and which areas of our counties are critical for their survival.

In order to support this endeavor, we are attempting to raise \$10,000 to contribute to the success of this project. We are hoping that our members will value this project as much as our Board of Directors and support us during the coming months both as volunteer birders, and in or efforts to raise these funds. We would like to thank our members in advance for their incredible support over the years. We are hopeful this BBA Project will continue our important work of supporting birds and protecting critical habitats throughout our region and across our state.