

# WISCONSIN FROG AND TOAD SURVEY

## SURVEY MANUAL

The Wisconsin Frog and Toad Survey (WFTS) is a volunteer-based program coordinated by the Bureau of Endangered Resources and the Bureau of Science Services at the Wisconsin Department of Natural Resources (WDNR), in cooperation with the U.S. Geological Survey (USGS) and the North American Amphibian Monitoring Program (NAAMP). The primary purpose of the WFTS is to determine the status, distribution, and long-term population trends of Wisconsin's thirteen frog species. The WFTS was initiated in 1981 in response to known and suspected declines in several Wisconsin species, particularly northern leopard frogs (*Rana pipiens*), Blanchard's cricket frogs (*Acris crepitans blanchardi*), pickerel frogs (*Rana palustris*), and American bullfrogs (*Rana catesbeiana*). The WFTS began annual statewide surveys in 1984 and is now one of the longest running amphibian monitoring projects in North America.

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## INTRODUCTION

In recent decades, researchers have become concerned with the apparent rarity, decline, and/or population die-offs of amphibians throughout the world. This concern is not only for the species themselves but also for the ecosystems on which they depend. Frogs and toads, like many other aquatic organisms, are sensitive to changes in water quality and adjacent land use practices, and their health undoubtedly serves as an index to environmental quality.

Wisconsin is home to 13 native species of anurans (frogs and toads). Observers have noted declines in several of these species in recent decades as well. The Blanchard's cricket frog was once considered one of the most abundant and widespread frogs in southern Wisconsin, having been reported in 31 counties. However, over the past several decades this species has rapidly declined for unknown reasons, and breeding populations are now found in only Grant, Iowa, and Lafayette Counties in southwestern Wisconsin. In 1982, the cricket frog was placed on Wisconsin's endangered species list. The northern leopard frog, a species popular with medical laboratories and biology classes, has also experienced significant declines in Wisconsin over the past several decades. The leopard frog is still found throughout most of Wisconsin, however this species is not as abundant as it once was and populations continue to decline for unknown reasons. Several other Wisconsin anurans have experienced local declines as well.

As a result of these declines, the Wisconsin Frog and Toad Survey was initiated in 1981 to increase our knowledge of anuran abundance and distribution, and to monitor populations over the long term. Permanent statewide survey routes began in 1984. Each route consists of 10 wetlands that are visited 3 times annually (early spring, late spring, and summer) by a volunteer observer. At each listening site, the observer identifies the species calling and records an estimate of abundance using a call index value of 1, 2, or 3. This long-term cooperative survey, the first of its kind, has and will continue to provide us with valuable information on the status of Wisconsin frog and toad populations, and help us monitor the quality of our environment.