



In 2017 the Monarch Butterfly Fund publicly challenged the engineering community to create a system that will track the flight of individual monarch butterflies on their migration. Our eventual goal is to collect detailed information about the paths monarchs follow, both on their fall journeys and movement in, around, and between overwintering sites. We hope the analysis of the collected data will reveal answers to questions that are unanswered and lead us to questions that have not yet been asked. For example, how do the calendar date, geographic location, topography, and weather affect monarchs? Armed with the new knowledge gained by following the data wherever it takes us, we will be able to modify existing protocols and to develop new strategies to protect monarchs. The goal of this challenge is to encourage scientists and engineers to create a ground-breaking technology that will be both practical and affordable.

Several teams took up the challenge. Although the tracking we hoped for appears to be as yet out of reach with current technology, the laboratory of Dr. David Blaauw at the University of Michigan came the closest. He and his colleagues are developing tiny sensors that can be attached to individual monarchs and record information throughout their flights. We are excited about the possibility and potential of a miniature “black box” similar to those found on commercial aircraft. To finance continuing development and nudge this concept towards reality, MBF recently awarded \$5000 to the lab.

Just imagine what the future holds. Just imagine how much more we will understand about migratory flight. Just imagine how this new knowledge will take us forward towards our common goal of making monarch butterflies safer, healthier, more plentiful.

Want to know more? Please contact us at mbf@monarchconservation.org.