Citizen scientists: 16% of eastern monarchs have OE

In the past seven years, *Monarch Health* citizen scientists have collected thousands of samples to test monarchs for the parasite *Ophryocystis elektroscirrha* (OE). In spring and summer 2012, 16.6% of all monarchs sampled in eastern North America were infected with OE. This is slightly higher than in 2011, when 11.2% of eastern monarchs sampled were infected with this debilitating parasite. *Monarch Health* data show consistent annual trends in OE prevalence, which tends to increase from early to late in the summer-breeding season and to decrease in the spring after migration (see top graph). In the western U.S., 15.3% of monarchs were infected with OE in 2012. The western samples also show a trend of increasing OE prevalence later in the year (see bottom graph). Monarchs found in the Gulf region (not shown) consistently show a very high OE prevalence throughout the entire breeding season. For 2012, 62.8% of all Gulf monarchs sampled were heavily infected with OE.

Recent awards and research in the Altizer lab

Our research assistants, Hannah Blakeslee (L), Jennifer Kukharchuk (M), and Han Nguyen (R) presented a summary of Monarch Health data from 2006-2012 at the Odum School of Ecology Graduate Student Symposium and won second place for their research poster!

In February, the Altizer lab collaborated with scientists at WWF-Mexico and the University of Minnesota to sample 1450 overwintering monarchs in Mexico for OE. We found that 7.8% were infected with OE, in contrast to the 16.6% (above) found to be infected before migration.